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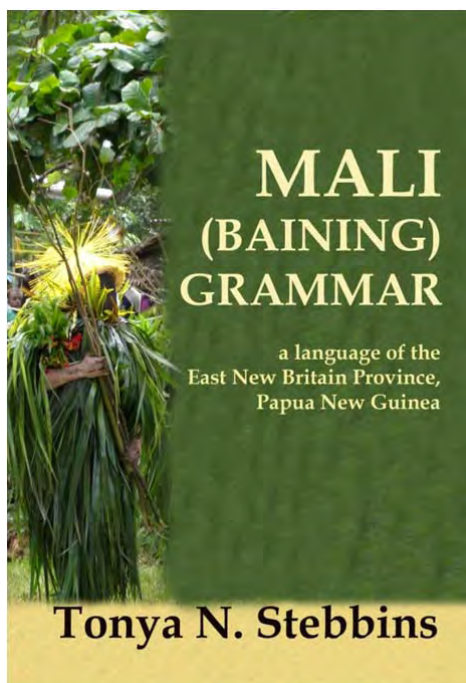
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623 Mali (Baining) grammar

Tonya N. Stebbins

Mali (2,200 speakers) is a Papuan language spoken on the Gazelle Peninsula, East New Britain Province Papua New Guinea. It is a member of the Baining language family. The family is comprised of five languages: Kaket, Mali, Simbali, Ura and Kairak. Baining people share a common non-Austronesian ancestral language and similar cultural practices (such as fire dances). An interesting feature of these languages is that they show a great deal of influence from their early Austronesian neighbors. As detailed in the grammar, Mali has characteristics of both the Western Oceanic branch of Austronesian and Trans New Guinea.

This is the first comprehensive grammar for a language from the family and provides a framework for further comparative and descriptive research in the region. The grammar was produced in cooperation with members of the Mali (Baining) community and has been published alongside a dictionary and text collection (also available from Pacific Linguistics).

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Mali (Baining) grammar: a language of the East New Britain Province, Papua New Guinea

Tonya N. Stebbins



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For Julius Tayul.

Ai, gumamēk, ngu tu gusnēng bange.

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List of abbreviations

[]	phonetic representation (in IPA)
/ /	phonemic representation (in IPA)
< >	orthographic representation
{ }	morphemic representation (in orthography)
\$	syllable boundary
.	phonological word break within grammatical word
-	affix
=	clitic
1, 2, 3	first, second, third person
I, II, III	class one, two, three concordial pronoun
A	A argument in transitive clause
ADJ	adjective
ADV	adverb
ADV	adverbial
ART ₁	unmarked NP article
ART ₂	NP article that marks inherently uniquely identifiable referents
ART ₃	NP article that marks referents whose unique identity is established by the discourse
ASSOC	associative marker
BEN	benefactive
CN	count neutral
CONTR	contrastive
DEM	demonstrative
DER ₁	directional derivational prefix meaning ‘away’
DER ₂	directional derivational prefix meaning ‘vicinity’
DER ₃	directional derivational prefix meaning ‘back to deictic centre’
DESID	desiderative
DETR ₁	transitivity decreasing suffix may also decrease valency
DETR ₂	transitivity decreasing suffix does not decrease valency
DIM	diminutive
DIST	distal
DL	dual

EMPH	emphatic
EXC	excised
EXT	extended
F	feminine
FLAT	flat
FUT	future
GOAL	goal
H	human
INDEF	indefinite
IRR	irrealis
IRR.FOC	irrealis focus marker
LOC	locative
LONG	long
M	masculine
MIR	mirative
NEF	new event frame marker
NEG	negator
NEG.IMP	negative imperative
NH	non-human
NI	non-inflecting
NP	noun phrase
NPAST	non-past
NPRES	non-present
NSPEC	non-specific
O	O argument of transitive verb
PAST	past
PATH	path
PL	plural
POSS	possessive
PRES	present
PROX	proximate
PURP ₁	basic purposive
PURP ₂	intentional purposive
PURP ₃	controlled purposive
RCD	reduced
RECIP	reciprocal
REFL	reflexive
REL.FOC	realis focus
REL ₁	relator that introduces clauses or NPs that have the same syntactic status as their head
REL ₂	relator that introduces clauses or NPs that provide additional information about their head
REL ₃	relator that introduces clauses or NPs that describe or refer to one particular characteristic of their head

S _A	subject of active intransitive verb
SG	singular
S _O	subject of stative intransitive verb
SPEC	specifier article
SVC	serial verb construction
TERM	terminal end point
THEME	theme (entity displaced by an event)
V	verb

Note on orthography and glossing conventions

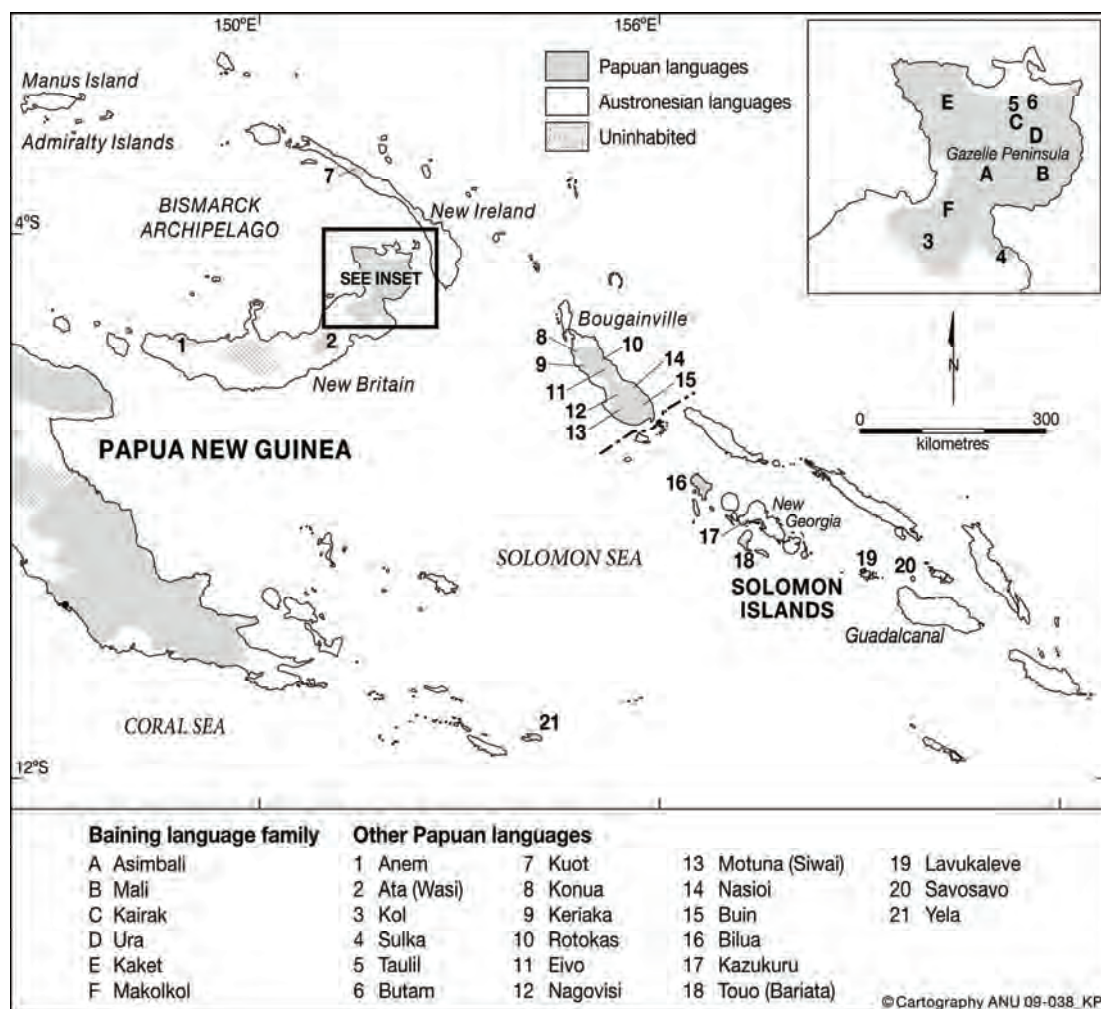
The following graphemes are used to represent Mali: /b/ , /p/ <p>, /β/ <v>, /m/ <m>, /t/ <t>, /d/ <d>, /ɬ/ <th>, /n/ <n>, /s/ <s>, /l/ <l>, /r/ <r>, /j/ <y>, /g/ <g>, /k/ <k>, /ɥ/ <ch>, /ŋ/ <ng>, /i/ <i>, /ɛ/ <e>, /ə/ <ē>, /a/ <a>, /ɔ/ <o>, /u/ <u>, /ai/ <ai>, /au/ <au>, /ɔi/ <oi>. An apostrophe is used to signal a break in the sequence of an alveolar nasal followed by a voiced velar stop <n'g> in order to distinguish it from the digraph representing a velar nasal <ng>. The orthography is introduced more fully in §3.8.

In the example sentences, mismatching between phonological and grammatical words is dealt with as follows: phonological breaks across single grammatical words are marked by a full stop <.> in the first line of an example; distinct grammatical words treated as single phonological words are indicated by an equal sign <=> in the second and third lines of an example. Suffixes are indicated by hyphens <-> in the second and third lines of the example.

In regards to examples and the glossing, the reader should note that there are a number of very high frequency phonological changes that apply in different ways to virtually all word and morpheme types. These phonological changes are described in Chapter 3, particularly in §3.4 and §3.7. Since most of these changes represent morphological contrasts in some contexts, writers of Mali always represent them in the orthography—a practice also followed here in the first line of each example. This first line is a representation of how the utterance in question would be written by a literate speaker of Mali.¹

As a result of this set of practices, the first line of each example reflects the phonetic values of the morphemes in context. In the running text words and morphemes are referred to by their citation form unless the discussion makes reference to the specific form of a word as it appears in the context of the example. As a result there is often a mismatch between the first line of an interlinearised example and the form mentioned in the running text. The reader is advised to refer to the second line of interlinearised examples to identify the relevant morphemes mentioned in the running text. In order to assist the reader in navigating the examples, underlining is used to indicate specific words or phrases that are referred to in the text where this is relevant.

¹ The vast majority of the material included here was initially transcribed into the Mali orthography by Mr Julius Tayul or his daughter Ms Julien Tayul, both of whom were highly proficient in the orthography.



Map 1: Area map of East Papuan languages



Map 2: Local map of Papuan languages in East New Britain Province

1 *Introduction: the language and its speakers*

Mali (2,200 speakers) is a Papuan language spoken on the Gazelle Peninsula, East New Britain Province (ENBP), Papua New Guinea. It is a member of the Baining language family. Baining people share a common non-Austronesian ancestral language and similar cultural practices (such as fire dances). Other members of the language family are Kaket (6,350 speakers), Simbali (350 speakers), Ura (1,900 speakers), and Kairak (750 speakers), and possibly Makolkol (extinct) which is locally understood to have been a ‘mixed language’ combining Simbali and Nakanai (an Austronesian language on the northern side of New Britain).

This grammar represents the first comprehensive description of a Baining language. An overview of the language is set out in Chapter 2. In this section background information about the Mali speech community and their circumstances is provided. Section 1.1 is a description of the geographic location and history of the community, §1.2, a summary of previous writing on the Baining people; §1.3, a description of the dialects of Mali; §1.4, an overview of ethnographic background and language contact; §1.5, an assessment of language vitality; §1.6, a brief description of social organisation in the community; and §1.7 comments on the economic situation of Malis. Section 1.8 is a description of the fieldwork situation, and §1.9 gives information about the corpus used in preparing the grammar. Section 1.10 describes the theoretical orientation of the grammar.

1.1 Geographic location and history

Mali Baining people live on the Gazelle Peninsula of the island of New Britain in Papua New Guinea. The island of New Britain is ruggedly mountainous, with active volcanoes. Although there are no active volcanoes on Mali territory, the people are affected by eruptions. Ash from volcanoes near Kimbe falls on Mali territory while eruptions near Rabaul impact on the delivery of basic services for the whole of East New Britain Province.

The Gazelle Peninsula was traditionally covered in dense tropical forest, although much of the coastline was turned over to coconut plantations in the early 20th century and much of the rest of the Peninsula has been logged in more recent decades. The coconut plantations are gradually being converted to cocoa. Vanilla and cocoa plantations are also being established at higher altitudes. One of the few remaining tracts of undisturbed forest is on Mali land. The coastline is fringed by coral reef, and passages for boats tend to be associated with the mouths of rivers and creeks.

The research for this grammar was conducted in a village called Marunga. Marunga was settled as a Catholic Mission station in the years after the Second World War. The original mission had been in the mountains at Lamin'gi. The war and the relocation of the mission resulted in the movement of many mountain families down to the coast eventually settling around Marunga. However, people from the mountains already had connections to the coast before the move took place. In traditional times, it was normal for people who dwelt in the interior of the island to make regular trips to the coast in order to collect salt-ash (for cooking), lime (for chewing with betel nut), and fish.

1.2 Previous writing on the Baining people

The first ethnographic studies on the peoples of the Gazelle Peninsula in East New Britain (previously known as New Pomerania) were made by German missionaries, ethnographers and anthropologists (see also Laufer 1959a:215, fn.3, 4). It appears that there is a considerable degree of cultural similarity across the non-Austronesian peoples of the area. Schnee (1904), Kleintitschen (1906), Parkinson (1907), and Burger (1913) provided basic descriptions of conditions, lifestyle, social relationships, and rituals of the autochthonous population of the Gazelle peninsula. Burger (1913:44ff.) provided a particularly detailed account of the north-west Baining groups, with some reference to the (non-Baining) Taulil. More recent anthropological works on the Baining include those by Fajans (for example, 1997), Pool (1984), and Rohatynskyj (2000). References to the Baining people may also be found in the more extensive literature on the Tolai. For sources see Neumann (1992).

Some recordings of the Mali language, with accompanying notes, were made by Professor Scheller (Department of Linguistics, University of Zürich) in late 1965. Early mission texts in Mali include a hymn book and catechism, prepared by Fr Mayerhofer in the late 1920s. There is some suggestion that Fr Mayerhofer also prepared a grammar and dictionary of the language, but unfortunately these appear to have been lost during the Second World War.

I prepared an in-depth analysis of the gender and noun class systems of Mali (Stebbins 2005) following fieldwork in ENBP during 2002. A story collection for the community was published in 2004 (Tayul and Stebbins 2004) and a text collection for research purposes is also available (Stebbins 2009).

Early descriptions of Kaket (referred to as 'the Baining language') are available in Rascher (1900, 1904, 1907), Stehlin (1905-06) and Volmer (1926 and 1928). These materials are all in German and excepting Rascher (1907), are unpublished. There is also a very slim grammar ('Grammar essentials') for Kaket by Parker and Parker (1977), containing basic paradigms and a list of bound morphemes. There is only very limited linguistic material available for the other Baining languages. A reference to a Kairak grammar and dictionary (Mayerhofer 1940, listed in Carrington 1996:259) seems to refer to a lost work. Ura is currently being studied by Gary and Peggy Rosensteel from the Summer Institute of Linguistics. A description of Ura phonology with some comments on morphophonology was prepared by Lee Stanton in 2007 and, at the time of writing is available online.¹

Other non-Austronesian languages in the area include Taulil, Butam, Sulka and Kuot. Of these languages, Taulil and Butam appear to be related and are often connected to the

¹ This MA thesis from Canterbury University is available from: <http://ir.canterbury.ac.nz/handle/10092/940>.

Baining languages (for example in Wurm 1982:235-236). Kuot and Sulka are generally thought to be isolates (see for example, Ross' study of pronouns in East Papuan languages 2001:311).

The first data on Taulil were collected by P. Futscher, issued in a micro-film publication (Futscher 1959; Laufer 1959a). Laufer's overview of Taulil grammar (Laufer 1950) is based on Futscher's data. These two works, Futscher (1959) and Laufer (1950), are the only fully reliable sources of data on the language.. An additional wordlist was collected by Neuhaus (n.d.). One additional paper on Taulil is Lindrud and Nicholson (n.d.). This contains a brief one-page introduction describing the degree of endangerment of Taulil, a list of phonemes, a list of number-marking affixes, a list of pronouns, and a few rules of gender agreement in noun-adjective phrases. The paper includes an English-Taulil word list with a few hundred items (nouns, adjectives, adverbs, verbs), and twenty-four pages of paradigms and simple sentences in Taulil without any interlinear glosses.

Butam has not been spoken since the 1930s. Laufer (1959b) put together Futscher's materials on Butam. These materials seem to have subsequently been lost, with the result that Laufer (1959b) is now the only available source on this language.

The most recent materials about Sulka may be found in an extensive paper by Reesink (2005) describing the language and setting out its Oceanic and Papuan traits. The language was first documented in a brief sketch by Müller (1907). More comprehensive materials became available with the publication of a microfilm of Schneider's Sulka grammar (1962). Schneider's grammar is described in Burgmann (1962). Materials for Sulka were also prepared by SIL linguists (Tharp and Tharp 1989, n.d.). These are similar in coverage to the materials prepared for Kaket-Baining by Parker and Parker (1979).

1.3 Dialects of Mali

Mali is understood by speakers to comprise two dialects distinguished from one another on the basis of lexical and phonological differences. There is a coastal dialect whose speakers are called *abilta* 'those from the old village' and a mountain dialect whose speakers are called *arongda* 'those from a cold place'. The mountain dialect is considered to be the standard and the community representatives we met in the early stages of this research felt that this dialect should be recorded first. The Arongda (mountain) dialect is also divided into two groups based strictly on differences in intonation patterns, with a small group of speakers showing influence from intonation patterns of Tolai (the dominant neighbouring language) and (according to other Malis) speaking perceptibly more slowly than is considered usual.

The dialect spoken in Marunga village is the Arongda dialect, and this dialect is the focus of the description presented here. However, the corpus also contains several lengthy texts by speakers of the Abilta (coastal) dialect. Much remains to be recorded about the differences between the dialects (particularly in regards to phonology); I have made passing references to divergent forms when they appear in the examples presented here.

The Arongda dialect is mainly associated with the mountain villages. Until the early 1990s there was a path from Marunga up into the Baining Mountains that passed through the mountain villages (some of which were resettled after the war) and gave people access to services in the main regional centre, then at Rabaul. The path eventually became impassable as people began to rely on boat transport rather than walking cross-country. The long standing links provided by this now abandoned overland route to town may have reinforced the use of the Arongda dialect in Marunga.

1.4 Present day language contact

Many Mali villages today are heterogeneous with a good proportion of people from other communities sharing the living space. Many outsiders come in a professional capacity (for example, teachers and their families) but there are also refugees from the war in Bougainville and people from other communities who are linked by marriage.

English is having an impact on Mali speech communities, mainly through the education system. As Tok Pisin is an English lexifier creole exposure to English at school reinforces the *lingua franca* at the expense of the local language. During schooling students are in linguistically heterogeneous groups, making Tok Pisin the language of choice when English is not required.

Many Malis are able to speak or at least understand the languages of their neighbours. The Baining language Simbali is spoken to the west of Mali, and Kairak and Ura are spoken to the north. Speakers of the non-Austronesian language Sulka and many speakers of the locally dominant Austronesian language Tolai have been encroaching on Mali territory for several generations.

Very few communities are exclusively Mali. This has resulted in a high level of intra-community linguistic diversity. In contexts where one or more people from other language groups are involved, Tok Pisin is chosen as the medium of communication. This typically occurs in public social settings such as during community meetings and religious observances, or within family groups involving mixed marriages.

Hand gestures are widely used to communicate over distances or when there is too much noise. The verb *su ba* means 'to communicate by signs'. Most hand gestures are iconic and relate to the direction the speaker intends to travel in or has come from. Other gestures include beckoning which is signalled by bending all fingers downwards together (palm facing outwards) and negation which is signalled by twisting one's hand (with fingers spread) to and fro (palm facing downwards).

1.5 Language vitality

Within the Mali community there is a strong pattern of shift towards Tok Pisin. This is apparent both in the linguistic repertoire of speakers through different age groups and in terms of the expanding domains in which Tok Pisin rather than Mali is spoken.

Only the oldest generation of Mali speakers (fifty or more years of age) is fully fluent in Mali and able to use it in all domains without *ad hoc* borrowings from Tok Pisin. These people are also the only ones with a thorough knowledge of Mali ethnobiology and cosmology. The next generation (thirty to forty-nine years of age) is fully fluent in Tok Pisin. This is as a result of time spent away at school and the increasing need for linguistic accommodation within villages relating to changing marriage patterns and the presence of non-Malis in health and educational roles. This generation habitually speak Tok Pisin in many contexts. Younger adults (sixteen to twenty-nine years of age) show even more restricted domains of use. Children (two to fifteen years of age) who are born to two Mali parents learn Mali as their first language; however, they do not acquire extensive Mali vocabularies. Children are fully fluent in Tok Pisin by the middle of primary school.

One pressure that results in the expansion of Tok Pisin in Mali speaking communities is the difficulty of speaking about certain semantic domains. For example there is a lack of Mali terminology for institutional structures (such as committees) and activities (for example, political meetings), and for certain technology (such as computers).

Tok Pisin is also expanding its role in Mali communities because of social conventions around accommodative language use. These patterns are discussed in more detail in Stebbins (2004) and are summarised in §1.4.

1.6 Social organisation

Mali society has both matrilineal and patrilineal characteristics. Traditionally, connections through the mother's side are important during the processes of initiation (for boys) and marriage (for women) but the community was generally patrilocal. Land could be inherited through either side. Malis traditionally lived in small hamlets made up of one or two households. A Mali household is made up of members of an extended family.

Traditionally, marriages were arranged. A woman's mother's brothers determined who she could marry. An ideal arrangement involved women being exchanged so that each family ended up with a daughter from the other.

Broadly speaking, women are responsible for cooking, maintaining gardens, carrying food, water and firewood, and looking after children. Men are responsible for hunting, constructing houses, and clearing garden sites. However, gender roles are not rigid and people will participate in non-gender role activities as a necessity or as they are inclined.

Traditionally, groups on the Gazelle Peninsula raided each others' hamlets and gardens and this often seems to have involved killing anyone found there, although the main motivation seems to have been to steal food. Men were responsible for defending their families. (This role has been codified in two ways in Mali; the term *achēlēśacha* refers to a man who has been trained to always be alert, while *srumēn'ga* refers to a man who has been trained to react suddenly and violently to unusual disturbances.)

Mali society is fairly non-hierarchical. Traditionally, there are no chiefs or other stratified leadership position in Mali communities. Obligations based on clan and in-law relationships are important in determining land allocation and involvement in tasks such as clearing gardens, building houses and so on.

The Baining people are famous for their spectacular Day and Night dances that involve elaborate costuming. The meanings of the Day and Night dances have not been revealed by the Malis although we do know that they are related to the initiation of men. As Fajans (1997) and others note, Baining people tend to be reticent about their traditional beliefs. Day dances are special events that occur every six to ten years while Night dances happen more frequently. For more details see Fajans (1997), Hesse and Aerts (1979), and Stebbins and Planigale (2010).

Much of the Mali community has been involved for some years in a cargo cult (locally known as the *Kivung*) which is centred in the Mengen community (further to the west). Mali members of the cult whom we met stated that their beliefs were not exactly the same as the Mengen's but reflect the Mali world view. More information about Mali participation in the cult can be found in Whitehouse (1995). Those Malis who are not active members of the cult mostly identify as Catholic, although there are a few United Church and Seventh Day Adventists. Affiliations mainly depend on which church is active in a given location.

1.7 Subsistence

Malis, like all Baining people, were traditionally taro cultivators and hunter-gatherers. Mali agriculture is based on swidden farming. Garden sites are normally not re-used for at

least six years. A taro blight in the second half of the 20th century forced the diversification of crops so that now many types of tubers (several species of sweet potatoes, yams, and taro) as well as plantains and pitpit (a wild sugar cane *Saccharum spontaneum*) form the basis of the diet. Other vegetables that are now grown include corn, beans, capsicums, tomatoes, and spring onions. Rice is now also being grown in small quantities. Nuts were important in the traditional diet and people continue to collect these, as well as various wild fruits, in season. Coconut milk is important in cooking. People also cultivate the following fruits: banana, pineapple, pawpaw, orange, pomelo, and mango, among others. Domesticated pigs and chickens provide sources of protein food. Hunting, fishing, and gathering shellfish and crustaceans continue to be important ways to add protein to the diet. Although store-bought foods such as instant noodles and bread are enjoyed in the community most families do not have the cash resources to rely on these products as part of their staple diet. Betel nut is widely chewed in Mali society.

Most Mali households are peripheral participants in the cash economy. Cash is required to pay for services at a hospital or a health clinic and for school fees. The usual way to raise cash is by cocoa farming or cocoa dealing. Although most families have interests in coconut plantations, people report that it is not worth processing coconuts for cash because the value of the product (copra) is currently low and the costs involved in transporting copra must be paid by the producer, cutting into already marginal profit margins.

Mali houses were traditionally built from bush materials, and people seem to have had very few personal possessions. Bowls were left-over coconut shells and serving dishes were the shells of sea turtles. Tapa (bark) cloth was used to make clothing and masks, and people also made net bags and other woven artefacts.

Today Malis continue to weave as well as buying cloth or ready made clothing. People use various factory-made household utensils such as buckets, cutlery and crockery, as well as small electrical goods such as torches and cassette-radios. A mobile sawmill means that people are now able to build with milled timber. Corrugated iron is currently preferred to thatch roofing (for those who can afford it) and houses are now likely to be raised on stilts.

Malis did not traditionally use dugout canoes. Walking was the only means of transport. Because very few roads have been constructed in Mali territory walking continues to be the most common means of transport. Today villages along the coast also make use of outrigger dugout canoes and dinghies with outboard motors. Mountain villages have some access to vehicular transport.

1.8 Fieldwork situation

A preliminary fieldtrip in August and September 2001 allowed me to develop a general understanding of the cultural and political situation on the Gazelle Peninsula and the relationships between different linguistic groups. On this fieldtrip, I established contact with members of the Mali community. They were enthusiastic about the prospect of having their language documented. I was directed to the village of Marunga and told that Mr Julius Tayul would be the best person to work with. It quickly became clear that Mr Tayul was a very knowledgeable person with a passion for the Mali language and the well-being of his community. During this preliminary trip I recorded a few stories and word lists.

A much longer fieldtrip was conducted between February and November 2002. During this trip I was able to collect a comprehensive range of materials on Mali with the generous assistance of Mr Tayul. Most of my time was spent in Marunga village where I worked intensively with Mali speakers collecting texts, eliciting grammatical information, and

compiling a dictionary. I participated in daily life in the village and gained many insights into community attitudes towards the languages (English, Tok Pisin, Mali, Sulka, Tolai, and Simbali) used there.

A final two month trip to Marunga took place in late 2006. On this occasion I was able to sort out a number of outstanding questions relating to my grammatical analysis and to seek clarification about a large number of minor issues relating to the content of the dictionary in preparation for the publication of these materials.

In addition to the grammar and papers that have already appeared (Stebbins 2004, 2005), the research has resulted in a 250 page, fully bilingual story collection for the community (Tayul and Stebbins 2005), the aforementioned Mali–English dictionary (forthcoming) and a collection of annotated Mali (Baining) texts (2009).

1.9 About the data

This description of Mali is based on a corpus of data collected primarily in Marunga village on Wide Bay in East New Britain Province, Papua New Guinea. In this section I describe the data used in this study in more detail. See also §3.10 for additional notes on the transcription process. The orthography used in the community is used to represent Mali throughout the grammar except in Chapter 3 on Mali phonology. The first line of the examples used here is generally presented as it was collected during fieldwork with minor corrections to obvious misapplication of the orthographic conventions described in §3.8.

The corpus is made up of a mixture of spoken and written texts and songs. This is significant to the discussion of Mali phonology and the correspondence between phonology and the orthography discussed in §3.4 because the rate of speech (halting, careful, or fluent speech) determines the application of phonological processes. Different speakers tend to represent different styles of speaking when they write. Here I give an outline of the types of data that were recorded.

On my preliminary fieldtrip in 2001, I made recordings of two lengthy wordlists (by Mr Julius Tayul and Mrs Fidelma Lemka). These recordings are mentioned in §3.4 in relation to phonological processes relating to halting speech but were not otherwise used in this study.

A further set of data was available through the dictionary that I prepared (initially as a card file) during my 2002 fieldtrip. The cards were generated as part of the process of glossing the texts while in the field. After the Mali word and its translation were identified, and any relevant morphological information was recorded, Ms Julien Tayul wrote an example sentence in Mali for each sense listed on the card. Towards the end of the fieldtrip, several other people (particularly Mr Tayul) assisted in this work either writing sentences in Mali or assisting me with the task of translating the examples. Well over 3,000 cards were prepared using this process.

Most of the texts in my corpus (whether spoken or written) are from adult men. The spoken texts were collected from speakers ranging from nineteen to seventy-six years of age. Only one woman recorded stories on tape. Mrs Fidelma Lemka was in her mid-thirties at the time of the recordings. She contributed an instructional text and an historical narrative.

The 28 spoken texts form the core of the data. Just under a third of the spoken texts were from speakers of the Abilta dialect. The 28 texts represent around four and a half hours of recorded speech. They include two conversations (one in the form of an interview), as well as narrative and instructional texts. They were originally transcribed by

Mr Tayul with assistance from Ms Julien Tayul, then I glossed and translated them with Mr Tayul's assistance.

I also collected 33 written texts. These were also glossed and translated with assistance from Mr Tayul. The texts were collected by running a story competition with the assistance of Mr Tayul. The story competition was also intended to encourage people to explore writing in Mali. The competition judged males and females separately and had categories for three age groups (adults, teenagers and children). This provided me with the following written texts (all narratives in the Arongda dialect):

- adult men twelve texts,
- adult women seven texts,
- teenaged boys four texts,
- teenaged girls three texts,
- younger boys four texts, and
- younger girls three texts.

Twelve additional written texts, including eight in the Abilta dialect, were collected from a story collection prepared in May 2002 as the result of an Alphabet Design Workshop run by the Summer Institute of Linguistics and funded by AusAID.

All of the material I collected was transferred to computer files once I returned from the 2002 fieldtrip. (The remote location and difficult physical conditions made on-going use of a laptop in the field impractical and after the first trip I made the decision to work from paper while in the field.) The dictionary cards formed the basis for a 3,500 word Toolbox database of lexical entries and this allowed the detailed glossing of the major texts in the corpus. All of these resources were used in the development of the analysis presented here.

1.10 Theoretical orientation

In writing this grammar I viewed myself as part of a larger tradition of language description that could be described as functionally and/or typologically oriented (see Dryer 2006). Many readers will wish to label this grammar as coming from the perspective of 'basic linguistic theory' (Dixon 1997). Insofar as this label reflects the approaches described by Dryer (2006), the label is accurate. In my view, the key characteristics Dryer identifies as associated with this approach are a commitment to describing each language in its own terms and a typological orientation that provides a basis for relating the structures of the language to others already described.

This grammar represents the first attempts at providing a detailed and comprehensive description of a Baining language. Because there is so little other material on Baining languages, this research raises a large number of questions for which clear answers are possible but not yet available. I hope that many of these questions will be answered in the fullness of time as the other languages in the family become better known and as the types of research undertaken with this group of languages expand and diversify.

In some cases the answers are dependent on deeper study into aspects of Mali itself. An example of this is in my description of the phonology for the language: I expect that instrumental analysis is likely to contribute to our understanding of the way the phonotactics of the language is organised. Many more questions could benefit from a better understanding of related languages and a model of the development of these languages through the reconstruction of Proto-Baining.

Because there is so little information currently available on the other Baining languages, it has not been possible to place the analysis developed here for Mali in a broader diachronic context. Since all these languages are still currently spoken, it is likely that further information about them will eventually become available. For this reason, I have limited the assertions I make about the relationship of present system to past systems in the language. If Mali had been an isolate I may have taken a different tack and been freer in my speculations and therefore my conclusions.

2

Typological overview

This chapter provides an introduction to the content of this grammar from a typological perspective. It provides a general summary of the content of each of the chapters and flags topics that may be of interest to typologists and to readers with a more general interest in the languages of the New Guinea area. Typological overviews of the Papuan (non-Austronesian) languages of New Guinea may be found in Foley (1986) and in Aikhenvald and Stebbins (2007), while the Austronesian and Papuan languages from the area are compared in Foley (2000).

A useful summary of key typological differences between the Western Oceanic branch of Austronesian and Trans New Guinean type Papuan languages is provided in Ross (1996:186). Table 2.1 compares Mali with the Western Oceanic branch of Austronesian and Trans New Guinea languages and demonstrates that Mali has characteristics of both, probably suggesting long term and intensive contact between speakers of Mali (or the Baining languages more generally) and their Austronesian neighbours. The table also includes cross-references to the sections of this book in which the features in question are described.

2.1 Phonetics and phonology

The consonant and vowel phonemes in Mali are set out in §3.1 and §3.2 respectively. The consonant inventory has seventeen members. It is based on four places of articulation: labial, alveolar, palatal and velar. Stops include a nasal, a prenasalised voiced and a voiceless series. There is a bilabial and an alveolar fricative. In addition there are approximants in labio-velar, alveolar, palatal, and velar positions as well as an alveolar lateral and trill. The vowel inventory has six members: two front, two central, and two back. This profile is consistent with the general characteristics of languages of the region (both Austronesian and Papuan) (see also Foley 1986:53, 55, 2000:367-368, and Aikhenvald and Stebbins 2007:251).

Table 2.1: Typological comparison of Mali with Western Oceanic and Trans New Guinean type languages (adapted from Ross 1996:186).

	Western Oceanic	Trans New Guinean type	Mali
Unmarked constituent order	S V O	S O V	S V O (with split-S marking of intransitives, §2.5, §4.1)
NP: use of article	preposed article	no article	preposed article (§2.3, §10.3, §10.4)
Order of Adj in relation to head N	postposed Adj	postposed Adj	postposed Adj (§16.3 – §16.6)
Adjective agreement	possessor pronoun suffixed to Adj indexing person and number of head	none	noun class marking agrees with head noun (§8.2, §10.1)
Possession system	alienable/inalienable distinction	alienable/inalienable distinction	alienable/inalienable distinction (§11.4.2-§11.4.3)
Location of possessor NP	postposed	preposed	preposed (§11.1)
Behaviour of possessor pronoun with inalienables	suffixed to possessed noun	prefixed/infixed to possessed noun	proclitic to possessed noun (§11.4.3)
Possessor pronoun with alienables	suffixed to a classifier	independent, preposed	independent, preposed (§11.3)
Subject referencing pronoun	prefix or proclitic	portmanteau suffix (with TAM)	proclitic (§4.1)
Marking of tense/aspect/mood	prefix or proclitic (mood/aspect), reduplication for continuative	portmanteau suffix (tense/mood/aspect) (with subject pronoun)	stem initial mutations (tense) (§4.1), preverbal particles (aspect and mood) (§13.3) and discourse markers (mood) (§14.2)
Object referencing pronoun	suffix	prefix or suffix (preceding portmanteau)	enclitic (§4.1)
Pronoun system: inclusive/exclusive distinction	yes	no	no (§5.2.3–§5.2.5)
Adpositional phrases	prepositional	postpositional	prepositional (Ch.7)
Clause linkage	co-ordinate, subordinate	co-ordinate, cosubordinate, subordinate	co-ordinate, subordinate (Ch.16 and 17)
Clause linking devices	parataxis, independent conjunctions	suffixation (often part of the portmanteau suffix)	independent conjunctions (Ch. 16 and 17)

Although many Mali word roots and combinations of stem + affix contain CC sequences, Mali has a strong preference for CV(C) syllable structure. Foley reports a similar tendency towards breaking up consonant clusters in Sepik and Lower Sepik-Ramu languages (Foley 2000:369). The patterns in Mali are described in §3.3. The morphophonological rules apparent in Mali are summarised in §3.4. Most importantly for the reader's understanding of the examples presented here, alternations between stops and continuants are also morphologically significant for nouns (marking the presence of the specifier article, §10.4) and verbs (marking tense, §4.2). As described in §3.5, stress does not seem to carry a high functional load in Mali and is not contrastive.

Section 3.6 is focussed on the phonology of compounds and clitic groups in Mali. The boundaries of phonological words are distinguished on the basis of pause phenomena and the operation of phonological processes across morpheme boundaries. Grammatical words are identified on the basis of the unity of meaning of the morphemes and their distribution.

The Mali orthography used in the remainder of the grammar is introduced in §3.7. An earlier orthography that was introduced by the first Catholic missionaries to the area in the early 20th century is described in §3.8. The chapter closes with §3.9, which provides information about the transcription process employed in developing the corpus that was used in preparing the grammar.

2.2 Word classes and morphological categories

A summary of the word classes found in Mali is provided in Chapter 5. The chapter is divided into two broad sections. The lexical categories of verb, noun, adjective and adverb are discussed in §5.1, followed by grammatical words in §5.2. The classes covered in §5.2 include: prepositions, directionals, pronouns that may head an NP (which follow the noun class system), concordial pronouns and possessive pronouns (which follow the gender system), contrastive pronouns in topic position, demonstratives, determiners, markers of aspect and status, clause combining morphology, interjections, and discourse markers. Chapter 5 is not intended to cover every aspect of each word class. Its purpose is to introduce the word classes, characterise them briefly, and guide the reader to other parts of the grammar where more detailed discussion on various aspects of their use can be found.

The derivational strategies available in Mali are discussed in Chapter 6. In many cases it is difficult to assign roots to specific categories since they are available for use in more than one word class. This is discussed in §6.1. Reduplication and compounding are described in §6.2 and §6.3 respectively, followed by the derivation of adverbs in §6.4. Transitivity and valency changing devices are described in §6.5.

The chapter on prepositions (Chapter 7) is included at this point since a major pathway for word formation in the language is through formulaic expressions that result in lexicalised 'prepositional verbs' and in morphologically complex nouns. Simple prepositions are introduced in §7.1, followed by complex prepositions in §7.2. The structure of the prepositional phrase (PP) is summarised in §7.3 and the remainder of the chapter focuses on prepositional verbs and nouns (§7.4–§7.5). A summary is provided in §7.6. Other strategies of word formation that involve the lexicalisation of larger syntactic units are summarised in the final chapter of the grammar (§20.1) after the relevant structures have been described. The central role of prepositions in Mali is particularly striking given that prepositions are associated with Austronesian rather than Papuan languages.

The final chapters concerning word level categories discuss noun class and gender (Chapter 8) and number (Chapter 9). Most Papuan languages in the area can readily be identified as having gender systems, with only a two- or three-way distinction between masculine, feminine, and possibly neuter (cf. Terrill 2002). The Baining languages are unusual in having a gender system that interacts with a more complex noun class system.

The two systems of noun classification in Mali contrast in the number of distinctions they make and in their distribution. For the purposes of this grammar, the smaller set, which distinguishes only masculine, feminine, and neuter, will be called the gender system. The larger set, which includes size and shape based contrasts, will be called the noun class system. The gender system, which is used within the predicate and in possessive constructions, is introduced in §8.1. The noun class system, which is used within the NP, is introduced in §8.2. Assignment within the noun class system is discussed in §8.3 (for human referents) and §8.4 (for non-human referents). The mapping of the noun class system onto the gender system is described in §8.5. Patterns of markedness are discussed in §8.6.

Number is a much simpler topic in relation to Mali. The language makes a three way distinction between singular, dual and plural. Details of the system are described in §9.1 and lexical numerals are discussed in §9.2–§9.4.

2.3 Nominals

The noun phrase and its components are discussed in Chapter 10. The chapter begins with an outline of the general structure of the noun phrase (§10.1), and then considers possible head nouns, distinguishing common and proper nouns (§10.2). Mali is similar to neighbouring Austronesian languages in making use of articles. In fact, the language has two types of articles that can occur together: NP articles (§10.3) and specifier articles (§10.4). The language also has an elaborate system of demonstratives that occur in post-head position and may be followed by a modifier, a spatial term, or a prepositional phrase (§10.5). As shown in §5.2.6, demonstratives inflect for noun class and make a four way contrast between proximate, distal, contrastive and indefinite forms. In most cases there are emphatic and abbreviated versions of the demonstratives as well as emphatic enclitics that can be used in conjunction with the demonstrative stem. Prepositional phrases and directionals are usually associated with the predicate but there are some examples of these forms appearing within the NP (§10.6). A small number of discourse markers and adverbs can occur at the periphery of the NP (§10.7). Coordination of NPs is discussed in §10.8. Post-head modifiers within the NP containing nominals, adjectives and predicates are all treated on analogy with clauses that are introduced by relators (*ia*, *ma*, or *ama*). They are discussed in §16.3–§16.6 in connection with clause linking (see also §2.7 below). Postposed adjectives are typical of both Austronesian and Papuan languages in the area. The behaviour of Mali adjectives is somewhat similar to the patterns found in Austronesian languages in the region insofar as they agree with the head noun. However, they index the noun class and number of the noun rather than person and number as is more commonly observed in surrounding Austronesian languages.

Possession is addressed in Chapter 11. Possession is marked in the determiner slot within the NP, in pre-head position, following the pattern that is more typical of Papuan languages in the region. Like other languages in the region (both Austronesian and Papuan), Mali has an alienable/inalienable distinction. The structure of the possessed NP in Mali is described in §11.1. Agreement patterns associated with possessed NPs are

described in §11.2. Possessive phrases and/or bare possessive pronouns co-occur in only a limited way with determiners. The determiners that co-occur with possessive pronouns form clitic groups with them and the resulting possessive pronoun paradigms are set out in §11.3. Special possessive relations of three types are discussed in §11.4. These include a special set of possessive pronouns indicating a particularly close association between the possessor and the possessed NP, a small set of inalienably possessed nouns with bound stems, and the possessive pronouns associated with these bound nouns.

2.4 Directionals

In addition to prepositions, Mali has a large class of directionals: grammatical forms that provide information about location and direction but do not take NP complements. These forms occur independently in the clause or as complements to prepositions. The spatial systems of Austronesian and Papuan languages have been recognised as making use of absolute spatial reference.¹ Like many other languages in the region, Mali makes use of the landscape in its system of directionals. It also makes reference to more abstract spatial relations (the vertical and horizontal axes).

Mali has twelve basic directionals that are used as complements to prepositions or modifiers to the clause. Basic directionals are introduced in §12.1 and morphologically complex directionals are described in §12.2. Semantic extensions to the basic meanings of directionals are discussed in §12.3. Relational nouns are discussed in §12.4 and the deployment of directionals in discourse is described in §12.5. The use of adverbial demonstratives in expressing location is discussed in §12.6.

2.5 Clause and predicate structure

Mali has AVO constituent order and a split-S marking pattern. Constituent order thus reflects that of neighbouring Austronesian languages in the Gazelle Peninsula region rather than the AOV order more typical to Papuan languages of the New Guinea mainland. Constituent order and the split-S marking pattern are described in §4.1 along with information about three place predicates and verbless clauses.

One potentially confusing aspect of Mali grammar is the fact that tense is encoded through a combination of the form of the A/S_A concordial pronoun and the form of verb. This is explained more fully in §4.2. Verbs in Mali mutate for tense contrasts and can be organised into four classes depending on the tense contrasts they make. Type A verbs encode a three way contrast between present, past, and future tenses. Type B and C verbs encode a present versus non-present distinction. Type D verbs are non-inflecting. The A/S_A concordial pronouns, on the other hand, encode a past/non-past distinction. The result is that for most clauses the tense must be resolved with reference to both the verb and the concordial pronoun.

The order of elements within the predicate is described in §13.1. The elements involved include A/S_A concordial pronouns before the head of the predicate and O/S_O concordial pronouns afterwards. O/S_O concordial pronouns may be followed by a manner adverb.

¹ See Senft (1997) and Bennardo (2002), particularly the paper in the latter by Palmer, where he summarises the range of types of systems found in Oceania and makes reference to similar systems in other parts of the world.

These are discussed in §13.2. The head of the predicate is a verb, a verb plus a pre-verbal particle, or a multi-verb construction. Non-verbal heads of predicates are discussed in §4.1. Particles and multi-verb constructions within the predicate are discussed in §13.3. Particles within the predicate encode a number of semantic categories including aspectual distinctions, temporal relations, and modality. These categories are also encoded at the clause level by clause initial discourse markers and clause initial or clause final adverbs.

2.6 Modification to the clause

Clause level adverbs and discourse markers are described in Chapter 14. Clause level adverbs encode temporal distinctions and occur at the periphery of the sentence, that is, either in the initial topic slot or in final position (§14.1). This is the same distribution as expressions of time and location that appear in prepositional phrases. Discourse markers that encode a range of meanings associated with time, mood and modality are summarised in §14.2. Clause initial formulaic sequences containing discourse markers and other clause linking devices occur with high frequency in Mali discourse and are discussed in §14.3. Clause final particles are described in §14.4.

Chapter 15 draws together all of the forms and structures involved in encoding special illocutionary force. It begins with a discussion of the relationship between prosody and illocutionary force (§15.1) before considering negative clauses (§15.2) and describing the formation of interrogatives (§15.3) and imperatives (§15.4). Interrogatives and imperatives show the same basic clause structure as declarative clauses. Since prosody is an important way of identifying the illocutionary force intended by the speaker, the prosodic contours associated with declarative, interrogative and imperative utterances are illustrated in this chapter.

2.7 Clause linking

As described in §16.1, clause linking in Mali is striking for the fact that there are no processes of subordination (nominalisation, contrasts between finite and non-finite verbs, switch reference marking, etc.) of the sort that are usually associated with dependency or embeddedness of clause. This makes it difficult to speak in terms of structurally main versus non-main clauses, as the structure of each clause is kept intact. The only necessary elements in a clause are the head of the predicate and its concordial pronoun(s). There are no constraints on the coding of tense, aspect or modality in linked clauses in Mali, and A/S_A concordial pronouns are required for every verb where they could occur.

These facts about Mali are also striking in terms of comparative typology. This aspect of the language does not reflect the typical patterns associated with mainland Papuan languages but is similar in many ways to neighbouring Austronesian languages.

In spite of the lack of morphological complexity associated with clause linking in Mali, a rich range of semantic relationships exists between clauses. An overview is provided in §16.2. Clause linking is marked by words or clitics, generally in clause initial position. Apart from the clause initial forms the main correlates of clause linking in Mali are semantic dependency, including presupposition and, in some cases, syntactic embeddedness.

By identifying those clause linking devices that allow an embedded clause within the main clause, we are able to distinguish the relators, *ia*, *ma* and *ama* (discussed in §16.3–§16.6), from other clause linkers (Chapter 17).

The grounds for making distinctions among the remaining clause linkers are based on the strength of the semantic dependency between the clauses. On this basis we can distinguish between coordinators (§17.1), which can link clauses without necessarily indicating semantic relationships between them, and subordinators, which impose semantic relations between clauses (§17.2).

2.8 Discourse organisation

Chapter 18 draws upon de Vries' (2005, 2006) description of areal discourse strategies (in both Austronesian and Papuan languages) to explore some features of discourse organisation in Mali. This chapter covers thematisation and the use of the topic position (§18.1), associated clause level boundary phenomena (§18.2), contrastive reference (§18.3), tail-head linkage and intersentential clause chaining (§18.4), sentence level clause chaining (§18.5), and the use of ellipsis in Mali (§18.6).

Although languages associated with tail-head linkage often utilise clause chaining with switch reference marking, Mali is not a language of this type. There is no syntactic indication that the clause that is repeated closes one 'sentence' and then opens another. Nevertheless, the prosody typical of recapitulative clauses described by de Vries is present. That is, 'The tail clause has a falling final intonation and the head clause a rising intonation, with slow pronunciation, and often pauses or pause marking elements after the head clause (2005:378)'.

Chapter 19 covers a range of other topics relevant to discourse organisation in Mali. The first is the use of tense to organise information within discourse (§19.1). In narratives it is very common for the tense of the verb to disagree with the time reference of the text because the present tense is used in many contexts that relate to events in the past. This use of the present tense in a past time context indicates that the events being related are of present relevance. The present tense is also common in hypothetical and instructional texts which are in some sense 'timeless'.

Discourse related uses of noun class marking are addressed in §19.2. Two particular topics are addressed in this section: the lack of noun class marking on common NPs that refer to anthropomorphised non-human referents, and the lack of noun class marking on entities referred to only incidentally in the text.

Reported speech is discussed in §19.3. Both direct and indirect speech reports are frequently used in Mali narratives. Direct speech has the effect of enlivening the story and heightening the drama. Extensions of the reported speech construction are also described in this section.

The final topic in Chapter 19 is the expression of comparison (§19.4). The main comparative strategy in Mali involves the juxtaposition of two verbless clauses attributing opposite values to the entities under discussion. Other strategies involve words that encode comparative meanings.

2.9 Expansion of the lexicon

The grammar closes by considering strategies to expand the lexicon used by speakers of Mali. These include the use of formulaic sequences (§20.1), borrowing (§20.2), and code-switching (§20.3).

3

Phonetics and phonology

This chapter provides an overview of Mali phonetics and phonology. It is clear that there is scope for much more detailed work on Mali phonetics and phonology, and that, for example, instrumental work on a range of questions would be interesting and worthwhile. Two broad related areas that deserve further research are the effects of rate of speech and the realisation of the stop phonemes. There is a good deal of overlap between phonemes and allophones in Mali and this is also connected to wider issues relating to rates of speech. The rules that apply within words in slow speech are observed to apply at a higher level in fast speech. Prominence is an additional area where further research is necessary. As far as I have been able to ascertain, prominence does not occur at the level of lexical words (meaning, for instance that there are no minimal pairs based on different patterns of stress marking), but it may correlate with a higher level of organisation such as the intonational phrase.

The Mali consonant inventory includes seventeen phonemes across four places of articulation and with seven manners of articulation. There is a six-way vowel contrast with two front, two mid and two back vowels. Sections 3.1 and 3.2 set out the Mali consonant and vowel inventories and describe the phonological processes associated with consonants and vowels in the language. The phonotactic possibilities of the language are described in §3.3. Morphophonology is described in §3.4. A note about stress in the language is given in §3.5. In §3.6 the defining properties of phonological and grammatical words are compared and various clitic groups are identified. The modern orthography is described in §3.7, and its precursor, developed in the early 20th century, is set out in §3.8. Finally, in §3.9, there is a brief description of the transcription process used in collecting the narratives that form the bulk of the corpus used in preparing this analysis.

3.1 Consonants

The Mali consonant inventory has three places of articulation. Bilabials include a voiced prenasalised stop, a voiceless stop, a voiced fricative, a nasal, and a labio-velar approximant. Apico-alveolar phonemes include a voiced prenasalised stop, a voiceless stop, a voiceless fricative, a nasal, an approximant, a lateral, and a trill. The velar series includes a voiced prenasalised stop, a voiceless stop, a nasal, and an unrounded velar approximant. In addition, there is a palatal glide. Mali consonant phonemes are set out in Table 3.1.

Table 3.1: Mali consonant phonemes

	Bilabial	Apico-Alveolar	Lamino-Palatal	Dorso-Velar
Prenasalised voiced stop	^m b	ⁿ d		^ŋ g
Voiceless stop	p	t		k
Fricative	β	s		
Nasal	m	n		ŋ
Approximant	w	ɹ	j	ɰ
Lateral		l		
Trill		r		

Each phoneme is discussed below, beginning with prenasalised stops (§3.1.1), then voiceless stops (§3.1.2), fricatives (§3.1.3), nasals (§3.1.4), approximants (§3.1.5), the lateral and the trill (§3.1.6).

3.1.1 Prenasalised voiced stops: /^mb/, /ⁿd/, /^ŋg/

Like many other Papuan languages (Foley 1986:61), Mali has a series of prenasalised voiceless stops. Ladefoged and Maddieson (1996:119-123) note that there is not necessarily any phonetic difference between a prenasalised stop and a homorganic nasal plus stop cluster. There are cases, particularly in word-initial position, in which the nasal is articulated as a syllable nucleus in its own syllable. Also, if the preceding syllable is open in its underlying form, then the nasal is articulated as the final consonant in the preceding syllable. These issues are discussed in §3.3 on phonotactics.

The prenasalised voiced stops /^mb/, /ⁿd/, and /^ŋg/ are presented in (A)–(C) below.

A. The prenasalised voiced bilabial stop /^mb/

The phoneme /^mb/ has the allophones [b] and [^mb]. The phoneme /^mb/ can only appear in syllable-initial position. Where the preceding syllable ends in a voiceless stop the prenasalised stop loses its prenasalisation and becomes a simple oral stop.¹ This rule can apply across word boundaries in fast speech. These facts are summarised in (3.1).

- (3.1) /^mb/ → [b] / C_[+stop, -voice]__
 → [^mb] elsewhere

These allophones are illustrated in (3.2).

- (3.2) C_[+stop, -voice]__ /ut#^mbaŋ/ → [ut#baŋ] {ut ^mbaŋ 1.PL.I run.PRES} ‘we run’
 C_[+voice]__ /^mbir^mbirka/ → [^mbir^mbirka] ‘border’
 V_V /aua^mbap/ → [aua^mbap] {a=ua^mbap SPEC=white} ‘white’
 #_ /^mbiaska/ → [^mbiaska] ‘blood’

¹ This segment, the simple oral voiced stop, is represented orthographically as either or <p> by Mali writers.

B. The prenasalised voiced alveolar stop /ⁿd/

The phoneme /ⁿd/ has the allophones [d] and [ⁿd]. The phoneme /ⁿd/ can only appear in syllable-initial position. Where the preceding syllable ends in a voiceless stop the prenasalised stop loses the prenasalisation and becomes a simple oral voiced stop. This rule can apply across word boundaries in fast speech. These facts are summarised in (3.3).

- (3.3) /ⁿd/ → [d] / C_[+stop, -voice]__
 → [ⁿd] elsewhere

This is illustrated in (3.4).

- (3.4) C_[+stop, -voice]__ /auɥtⁿdrir/ → [auɥtⁿdrir] {a=ɥtⁿdrir SPEC=respect} ‘respect’
 C_[+voice]__ /siɥirⁿdɔt/ → [siɥirⁿdɔt] ‘shrink back’
 V_V /ɥəⁿdiɥən/ → [ɥəⁿdiɥən] ‘many’
 #_ /ⁿdəⁿdəŋ/ → [ⁿdəⁿdəŋ] ‘last’

C. The prenasalised voiced velar stop /^ŋg/

The phoneme /^ŋg/ has the allophones [g] and [^ŋg]. The phoneme /^ŋg/ can only appear in syllable-initial position. Where the preceding syllable ends in a voiceless stop the prenasalised stop loses the prenasalisation and becomes a simple oral stop. This rule can apply across word boundaries in fast speech. These facts are summarised in (3.5).

- (3.5) /^ŋg/ → [g] / C_[+stop, -voice]__
 → [^ŋg] elsewhere

This is illustrated in (3.6).

- (3.6) C_[+stop, -voice]__ /a^ŋgap^ŋgap/ → [a^ŋgapgap] {a=gapgap SPEC=light} ‘light’
 C_[+voice]__ /^ŋguar^ŋguarka/ → [^ŋguar^ŋguarka] ‘string’
 V_V /a^ŋgaini/ → [a^ŋgaini] ‘some small thing’
 #_ /^ŋgaran/ → [^ŋgaran] ‘blossom’

3.1.2 Voiceless stops: /p/, /t/, /k/

There are three voiceless stops in Mali: /p/, /t/, and /k/. These phonemes occur in both initial and final position in a syllable. The voiceless stops /p/, /t/, and /k/ are presented in (A)–(C) below. Voiceless stops have voiced counterparts following a nasal and become continuants intervocalically.

A. The voiceless bilabial stop /p/

The voiceless bilabial stop /p/ is realised as the fricative [β] intervocalically and as the voiced stop [b] after a nasal. Both these rules apply across word boundaries in fast speech. In other environments the voiceless bilabial stop is realised as [p]. These observations are summarised in (3.7).

- (3.7) /p/ → [b] / N_
 → [β] / V_V
 → [p] elsewhere

These rules are illustrated in (3.8).

- (3.8) N_ /muɛn#pɛia/ → [muɛn#bɛia] {arrive.PAST there=REL₁} ‘arrived where’
 V_V /ta#pɛia/ → [ta#βɛia] {3H.PL.III there=REL₁} ‘them where’
 #_ /paigɛltəm/ → [paigɛltəm] ‘beat up (present tense)’
 _# /ɣɔrtəp/ → [ɣɔrtəp] ‘chop (past tense)’

The voiceless alveolar stop /t/ is realised as the approximant [ɹ] intervocalically and as the voiced stop [d] after a nasal. Both these rules apply across word boundaries in fast speech. In other environments the voiceless alveolar stop is realised as [t]. These observations are summarised in (3.9).

- (3.9) /t/ → [d] / N_
 → [ɹ] / V_V
 → [t] elsewhere

These rules are illustrated in (3.10).

- (3.10) N_ /satəm#ta/ → [sɔɪəm#ta] {sa=təm ta to=GOAL 3H.PL.III} ‘to them’
 V_V /da#ta/ → [da#ɪa] {and 3H.PL.I} ‘and they’
 #_ /taŋam/ → [taŋam] ‘banana’
 _# /siɣirⁿdɔt/ → [siɣirⁿdɔt] ‘shrink back’

C. The voiceless velar stop /k/

The voiceless velar stop /k/ is realised as the fricative [ɣ] intervocalically or between a liquid and a vowel, and as the voiced stop [g] after a nasal. Both these rules apply across word boundaries in fast speech. In other environments the voiceless velar stop is realised as [k]. These observations are summarised in (3.11).

- (3.11) /k/ → [g] / N_
 → [ɣ] / V, L _ V
 → [k] elsewhere

These rules are illustrated in (3.12).

- (3.12) N_ /muɛn#klan/ → [muɛn#glan] {arrive.PAST only} ‘first arrived’
 V_V /pɛia#ka/ → [pɛia#ɣa] {there=REL₁ 3M.SG.I} ‘when he’
 L_V /kaŋalka/ → [kaŋalɣa] ‘headdress’
 #_ /aɣɛlak/ → [aɣɛlak] {a=ɣɛlak SPEC=soft} ‘soft’
 _# /kalukluka/ → [kalɔklɔka] ‘crab sp.’

3.1.3 Fricatives: /β/, /s/

Mali has two fricatives, the voiced bilabial fricative /β/ and the voiceless alveolar fricative /s/. The voiced bilabial fricative /β/ occurs in syllable-initial position but is highly restricted in syllable-final position. It optionally has the allophone [w] intervocalically in fast speech. This rule applies across word boundaries as well as within single phonological words. This distribution is summarised in (3.13)

(3.13) /β/ → [w] / V_V
 → [β] elsewhere

(3.14) V_V (fast) /kə#βai/ → [kə#wai] {3M.SG.II blow.NPRES} ‘it blew’
 V_V (slow) /kə#βai/ → [kə#βai] {3M.SG.II blow.NPRES} ‘it blew’
 #_ /βaruɯi/ → [βaruɯi] ‘lizard sp.’
 _# /aɪəβ/ → [aɪəβ] {3H.PL.POSS} ‘their’

The phoneme /s/ has no allophonic variants and occurs in both syllable-initial and syllable-final position. It can also occur intervocalically. It does not have any allophones. This is restated as a rule in (3.15).

(3.15) /s/ → [s]

(3.16) V_V /masar/ → [masar] ‘weave (all tenses)’
 #_ /sana/ → [sana] ‘do (present and future tenses)’
 _# /sas/ → [sas] ‘dig out (all tenses)’

3.1.4 Nasals: /m/, /n/, /ŋ/

Mali has three nasal stops, the bilabial /m/, the alveolar /n/ and the velar /ŋ/. All three nasals occur in both syllable-initial and syllable-final position and all three occur intervocalically. They are presented in (A)–(C) below.

A. The bilabial nasal /m/

The bilabial nasal /m/ has no allophonic variants and occurs in both syllable-initial and syllable-final position. It can also occur intervocalically. It does not have any allophones. This is restated as a rule in (3.17).

(3.17) /m/ → [m]

Examples are provided in (3.18).

(3.18) V_V /mamər/ → [mamər] ‘properly’
 #_ /maβɔ/ → [maβɔ] ‘badly’
 _# /piam/ → [piam] ‘wave (present tense)’

B. The alveolar nasal /n/

The alveolar nasal /n/ has no allophonic variants and occurs in both syllable-initial and syllable-final position. It can also occur intervocalically. It does not have any allophones. This is restated as a rule in (3.19).

(3.19) /n/ → [n]

Examples are provided in (3.20).

(3.20) V_V /sana/ → [sana] ‘do (present and future tense)’
 #_ /niarɛ/ → [niarɛ] ‘sap’
 _# /ᵐbɔn/ → [ᵐbɔn] ‘give (present tense)’

C. The velar nasal /ŋ/

The velar nasal /ŋ/ has no allophonic variants and occurs in both syllable-initial and syllable-final position. It can also occur intervocalically. It does not have any allophones. This is restated as a rule in (3.21).

(3.21) /ŋ/ → [ŋ]

Examples are provided in (3.22).

(3.22) V_V /kaŋalka/ → [kaŋalɕa] ‘headdress’
 #_ /ŋim/ → [ŋim] ‘find (present tense)’
 _# /ⁿdaŋ/ → [ⁿdaŋ] ‘burn (present tense)’

3.1.5 Approximants: /w/, /ɹ/, /j/, /ɰ/

Mali has four approximants: the labio-velar /w/, the alveolar /ɹ/, the palatal /j/ and the velar /ɰ/. Both the alveolar and velar approximants would benefit from further study, as their manner of articulation is not completely clear. In earlier publications I labelled the velar approximant as the fricative /ɣ/. It now seems clear that this phoneme is not a velar fricative although in some contexts uvular frication is apparent. Further research will be necessary to say anything definitive about the identity of these phonemes, including the distribution of possible allophones. In this section I simply provide a general statement about their use.

A. The labio-velar approximant /w/

The labio-velar approximant /w/ occurs in syllable-initial position and can occur intervocalically. It does not have any allophones. This is restated as a rule in (3.23).

(3.23) /w/ → [w]

Examples are provided in (3.24).

(3.24) V_V /gawətki/ → [gawətɕi] ‘crown of a tree’
 #_ /warnacha/ → [warnauɕa] ‘index finger’

B. The alveolar approximant /ɹ/

The alveolar approximant /ɹ/ occurs in syllable-initial position, and can occur intervocalically. The phoneme /ɹ/ has the allophone [r] in intervocalic contexts in fast speech. This is restated as a rule in (3.25).

(3.25) /ɹ/ → [r] / V_V in fast speech
 → [ɹ] elsewhere

Examples are provided in (3.26).

(3.26) V_V /ru.ɹa/ → [rura] ‘people’ ({ru-ta person-H.PL} > [ru.ɹa] then > [rura])
 #_ /ɹinɛm/ → [ɹinɛm] ‘fish’

C. The palatal approximant /j/

The palatal approximant /j/ occurs in syllable-initial position and can occur intervocalically. It does not have any allophones. This is restated as a rule in (3.29).

(3.29) /j/ → [j]

Examples are provided in (3.30).

(3.30) V_V /ajɔ/ → [ajɔ] {a=jɔ SPEC=bamboo} ‘bamboo’
 #_ /jamɛki/ → [jamɛɰi] ‘crocodile’

D. The velar approximant /ɰ/

The velar approximant /ɰ/ occurs in syllable-initial position and can occur intervocalically. It does not have any allophones. This is restated as a rule in (3.27).

(3.27) /ɰ/ → [ɰ]

Examples are provided in (3.24).

(3.28) V_V /auɰa^mbap/ → [auɰa^mbap] {a=ɰa^mbap SPEC=white} ‘white’
 #_ /ɰais/ → [ɰais] ‘left-handed’

3.1.6 The lateral /l/ and trill /r/

The lateral [l] and trill [r] are found in both syllable-initial and syllable-final position and both occur intervocalically. Neither of these phonemes has allophonic variants.

A. The lateral /l/

The lateral /l/ occurs in syllable-initial and syllable-final position and can occur intervocalically. It does not have allophones. This is restated as a rule in (3.31).

(3.31) /l/ → [l]

Examples are provided in (3.32).

(3.32) V_V /^mbalər/ → [^mbalər] ‘piece of wood’
 #_ /ləβɔpki/ → [ləβɔpki] ‘woman’
 _# /tal/ → [tal] ‘carry (present tense)’

B. The trill /r/

The trill /r/ occurs in syllable-initial and syllable-final position and can occur intervocalically. It does not have any allophones. This is restated as a rule in (3.33).

(3.33) /r/ → [r]

Examples are provided in (3.34).

(3.34) V_V /niarɛ/ → [niarɛ] ‘sap’
 #_ /raβəski/ → [raβəski] ‘nail, claw’
 _# /ⁿgamar/ → [ⁿgamar] ‘fight’

3.1.7 Minimal pairs

Minimal pairs involving the following segments are listed below: (i) stops and continuants,² (ii) nasals, (iii) the bilabial fricative and the labio-velar approximant, and (iv) the lateral, trill and alveolar approximant. The reader will note that many of these contrasts are used to encode tense distinctions on Mali verbs. This is discussed in detail in §4.2.

i. Stops and continuants

(3.35) [ᵐb]/[p] vs [β]: [pəs] ‘cook.PRES’, [βəs] ‘cook.NPRES’; [ᵐbɛn] ‘climb.PRES’, [βɛn] ‘climb.NPRES’.

(3.36) [ᵐd]/[t] vs [ɹ]: [tɛt] ‘go.PRES’, [ɹɛt] ‘go.FUT’; [ᵐdɛn] ‘arrive.PRES’, [ɹɛn] ‘arrive.NPRES’.

(3.37) [ᵑg]/[k] vs [w]: [wɔtna] ‘descend.PRES’, [kɔtna] ‘descend.NPRES’; [wɔm] ‘cough.PRES’, [ᵑgɔm] ‘cough.NPRES’

ii. Nasals

(3.38) [m] vs [n]: [ᵑgɔm] ‘cough.NPRES’, [wɔn] ‘sand’.

(3.39) [n] vs [ŋ]: [nam] ‘beckon.NI’, [ŋam] DIM.SG (pronoun).

(3.40) [ŋ] vs [m]: [ŋɛt] 3NH.PL.III (pronoun), [mɛt] ‘go.PAST’.

iii. The bilabial fricative and the labio-velar approximant

(3.41) [β] vs [w]: [βalɪŋ] ‘turn.over.PRES’, [walɪŋ] ‘turn.over.NPRES’.

iv. The lateral, trill and alveolar approximant

(3.42) [ɹ] vs [l]: [ɹɛr] ‘decline.NPRES’, [lɛr] ‘smash.NI’.

(3.42) [ɹ] vs [r]: [ɹɔn] ‘go.in.FUT’, [rɔn] ‘be.satisfied.NI’.

(3.43) [l] vs [r]: [sɔl] ‘reef’, [sɔr] ‘push’.

3.2 Vowels

The Mali vowel inventory is made up of six vowels: two front vowels, two central vowels, and two back vowels. They are shown in Table 3.2.

Table 3.2: Mali vowel phonemes

	Front	Central	Back
High	i		u
Mid	ɛ	ə	ɔ
Low		a	

Five of the six vowel phonemes occur in the concordial pronoun paradigms for classes II and III: [ŋi] 2SG.II, [ŋɛ] 2SG.III, [ŋə] 3N.I, [ŋɔ] 1SG.III, and [ŋu] 1SG.II. (See §4.1.3, Tables 4.1–4.3 for the full paradigms.) All Mali vowel phonemes are evidenced in the minimal pairs set out in Table 3.3:

² The term ‘continuant’ is used here to refer to a group of consonants made up of fricatives and approximants, excluding nasals.

Table 3.3: Minimal pairs of vowel phonemes in Mali

	i	ɛ	ə	a	ɔ
ɛ	/ ^m biŋ/ 'roll.string. PRES' / ^m bɛŋ/ 'climb'				
ɔ	/mir/ 'long.ago' /mər/ 'pull.up. PAST'	/tɛr/ 'pull.up.PRES' /tər/ 'decline'			
a	/βiŋ/ 'roll.string. PRES' /βaŋ/ 'run.NPRES'	/mɛs/ 'call.PAST' /mas/ 'sleep.PAST'	/tər/ 'pull.up. PRES' /tar/ 'come.loose. PRES'		
ɔ	/mir/ 'long.ago' /mɔr/ 'big'	/tɛr/ 'decline. PRES' /tər/ 'be.wet. PRES'	/mər/ 'pull.up. PAST' /mɔr/ 'big'	/tar/ 'come.loose. PRES' /tɔr/ 'wash.PRES'	
u	/ ^ɲ gi/ '2SG.POSS' / ^ɲ gu/ '1SG.POSS'	/sɛr/ 'weave.NI' /sur/ 'push.NI'	/mək/ 'down' /muk/ 'inside'	/sa/ 'to' /su/ 'try.NI'	/mɔ/ 'all' /mu/ 'put. PAST'

The high vowels /i/ and /u/ have lax allophones [ɪ] and [ʊ] in closed syllables. Both /ɔ/ and /a/ may be realised as [ə]; particularly in closed syllables.

The following combinations of vowels are found in Mali:

Table 3.4: Vowel combinations in Mali

ii /i.i/ 'I don't know'	iɛ /ɲiɛm/ 'look for'	iə -	ia /pi.am/ 'wave'	iɔ /ba.si.ɔ.ɥi/ 'crocodile'	iu /bi.ur.ka/ 'scar'
ei /la.dɛ.i.gəl/ 'apron'	eɛ -	ɛə -	ea -	ɛɔ -	eu -
əi /a.βə.i.nək/ 'those large things'	əɛ -	əə -	əa -	əɔ -	əu -
aɪ /ai.ri.ar/ 'green'	aɛ /a. ɛr/ 'light'	aə -	aa -	aɔ /ka.ɔ/ 'uncle'	au /aup.ka/ 'valley'
ɔi /kɔi.ku/ 'no'	ɔɛ /ɔ. ɛr.na/ 'race'	ɔə -	ɔa -	ɔɔ -	ɔu /u.ɔ.uk/ 'grandmother'
ui /βu.i/ 'out there'	uɛ /gu. ɛŋ/ 'scrape'	uə -	ua /a.ru.an/ 'pain'	uɔ /tu.ɔŋ/ 'bewitch'	uu -

There is only one sequence of a pair of identical vowels (/i.i/). This sequence has a fall-rising intonation and is used as an interjection meaning ‘I don’t know’. There are also restrictions on sequences of mid vowels, with no sequences having /ə/ in second position. The sequence /wə/ does occur and could be analysed as /uə/. This analysis has not been followed since the sequence only occurs following a bilabial consonant and is simplified to /ə/ in fast speech (see §3.2.2).

Of the sequences that do occur, only /ai/, /ɔi/, and /aw/ occur as the single nucleus of a syllable. They are treated as diphthongs in this analysis rather than a vowel followed by a consonantal off-glide. The motivation for doing this is that the alternative leads to a much more complex characterisation of the range of consonant clusters allowed intervocally, since the consonants /p/, /t/, /k/, /^ɲd/, /m/, /n/, /ŋ/, /β/, /s/, /r/, /ɹ/, /l/, and /ʉ/ are found to follow both /aw/ and /ai/, with /^mb/ also found following /aw/, and /^ɲg/ also found following /ai/.

3.3 Phonotactics

This section describes the phonotactic patterns available in Mali. Mali allows consonant clusters with two consonants in syllable-initial position. The syllable types available in Mali are described in §3.3.1, followed by a list of the consonant clusters that are possible in the onset in §3.3.2. An overview of the consonant clusters possible intervocally is given in §3.3.3.

3.3.1 Syllable types

Mali has both open and closed syllables, and allows consonant clusters in the onset. This results in the following syllable types: V, CV, CCV, VC, CVC, and CCVC. Examples of these syllable types are set out in Table 3.5. Shaded cells represent syllable types that are not attested in the corpus.

Table 3.5: Syllable types in Mali

	Word-initial		Word-internal	
V	/i.mər/ki/	‘cowrie shell’	/ru.chu.sim.a.cha/	‘praying mantis’
CV	/pa.βar/	‘on top’	/mi.la.ni/	‘yesterday’
CCV	/sla.βɔ.ʉa/	‘sin’	/a.ʉri.ri.as.ka/	‘centipede’
VC	/am. ^ɲ gi/	‘mouth’	/a.sin.ir/	‘beam’
CVC	/bən.ma.li/	‘thrash around’	/a. ^m bil.ta/	‘coastal people’
CCVC	/ ^ɲ grət.pəs/	‘section of frame’	/a.βlik.a/	‘sling’
	Word-final		Monosyllabic word	
V				
CV	/mɔ.nɔ/	‘across slope’	/ ^ɲ da/	‘and’
CCV	/a.sru/	‘huge’	/tlu/	‘see (present tense)’
VC	/a.lu.at/	‘bark’	/in/	‘those two’ (3SG.DL.I)
CVC	/aun.bəm/	‘two’	/ ^ɲ dən/	‘enter (present tense)’
CCVC	/ma.ʉlan/	‘at the time’	/ ^ɲ drəm/	‘know (present tense)’

In addition, the nasal in a prenasalised stop sometimes occurs as an independent syllabic peak in word initial position giving the syllable type N. Thus, the phonetic form of /ⁿdrəm/ is [n.drəm]. Similarly, the nasal in a prenasalised stop may occur as the coda if there is a preceding syllable ending in a vowel. For example, the noun /a^mbaŋ^ŋga/ is realised as [am.baŋ.ŋga].

3.3.2 Consonant clusters in the onset

The lateral and trill each combine with stops, fricatives or the approximant /w/ to form CC consonant clusters in the onset of a syllable. Nasal stops do not participate in this pattern. The voiceless alveolar stop /t/ additionally forms a consonant cluster with an alveolar nasal in second position. The bilabial nasal /m/ and the bilabial fricative /β/ both form consonant clusters with the labio-velar approximant /w/ in second position. The alveolar fricative /s/ forms clusters with /d/, /k/, /n/, and /β/ in addition to /l/ and /r/. Examples are provided in Table 3.6.

Table 3.6: Syllable-initial consonant clusters beginning with stops

Initial consonant	l	r	n	w	d	t
^m b	/ ^m blaʊŋga/ 'weak person'	/ ^m brətki/ 'wall'		/mwən/ 'arrive (past tense)'		
ⁿ d	/ ⁿ dlaŋga/ 'walking stick'	/ ⁿ drəm/ 'know.PRES'				
^ŋ g	/ ^ŋ glinga/ 'place'	/ ^ŋ gruʊa/ 'bandicoot'				
p	/plɔltəm/ 'loosen.PRES'	/prap/ 'fly.PRES'				
t	/tlaβuʊi/ 'kindness'	/trutki/ 'stem'	/tnari/ 'taste (pres. tense)'			
k	/klaβɔnɔtki/ 'crab sp.'	/krarək/ 'dry sth.PRES'				
ʉ	/ʉlɔβaʊi/ 'maggot'	/ʉrarək/ 'be.dry.NPRES'				
β	/βlɔʉəm/ 'spot'	/βruʉa/ 'enemy'		/βwət/ 'settlement'		
s	/slamər/ 'fix.NI'	/srəmən/ 'surprise.NI'	/snaɲa/ 'against'		/s ⁿ damər/ 'directly'	skɔi 'not yet'
m	/mluʉa/ 'lizard species'	/mrungɪ/ 'tree species'				

In words in which the bilabial consonants [m] and [β] are followed by the approximant [w], the glide is deleted in fast speech. Examples are given below.

(3.44) /βw/ → /β/: /βwət/ 'settlement' becomes [βət],

(3.45) /mw/ → /m/: /mwən/ 'arrive.PAST' becomes [mən]

Note, also, that this labialisation is represented with the vowel grapheme <u> in the orthography.

3.3.3 Intervocalic consonant clusters

There is only one Mali word that clearly contains a sequence of three consonants:

(3.46) /uu.maŋ.dal.ska/ ‘spider sp.’

Three other marginal sequences of three consonants are underlined in the following examples:

(3.47) /aiŋgrŋ.in.i/ → [aiŋ.grŋ.in.i] ‘sand fly’

(3.48) /a.ur.nas/ → [a.ur.nas] ‘hot’

(3.49) /bl.balka/ → [bəl.bal.ka] ‘crow’

Note that these are sequences of three consonants only in the phonemic form or in the phonetic form but not both. The presence of the schwa in examples (3.48) and (3.49) is clearest in careful speech. In fast speech the /l/ or /r/ functions as the syllable nucleus.

Sequences of two consonants are more frequent. The possible consonant cluster sequences that occur intervocalically in Mali are summarised in Table 3.7. Examples are not provided here due to the large number of combinations that are possible, but may be found in the Mali dictionary (Stebbins forthcoming).

Table 3.7: Intervocalic clusters (rows indicate consonant in first position, columns, second position)

	/ ^m b/	/ ⁿ d/	/ ⁿ g/	/p/	/t/	/k/	/m/	/n/	/ŋ/	/β/	/s/	/u/	/r/	/l/
/ ⁿ d/													✓	
/ ⁿ g/	✓												✓	✓
/p/		✓	✓		✓	✓	✓		✓	✓	✓		✓	
/t/			✓	✓		✓	✓	✓		✓				✓
/k/	✓	✓		✓	✓		✓	✓	✓	✓	✓		✓	✓
/m/		✓	✓	✓		✓		✓	✓	✓	✓		✓	✓
/n/	✓		✓	✓	✓	✓	✓		✓	✓	✓			
/ŋ/	✓	✓					✓	✓		✓	✓			✓
/β/													✓	✓
/s/	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓
/u/										✓			✓	✓
/r/	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
/l/	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		

3.3.4 Mali baby talk

The formation of words in baby talk used by adults talking to preverbal babies and toddlers shows a strong preference for CV(C) syllables.³ The forms for which there are clear phonological relationships between the adult and baby terms are included in Table

³ Special thanks to Julien Tayul and her friends for drawing my attention to this set of words.

3.8. These forms show a strong preference for CV or CVC syllables. CV syllables are preferred for single syllable words and CVC syllables are preferred in disyllabic words. In addition, disyllabic words generally have identical or nearly identical syllables.

Table 3.8: Baby words in Mali

Baby word	Adult word	Gloss
[kak\$kak]	[kau]	maternal uncle
[kau]	[kɔiku]	no
[ku\$lem]	[ɥurɛmga]	betel nut
[lɛl\$lɛl]	[aɥɔlɛl]	urine
[lal\$lal]	[laβərki]	sugar cane
[mɛ]	[mɛm]	suckle.NI, feed.NI
[ma]	[məs]	eat.NPRES
[mam\$mam]	[mamək]	father
[na]	[naik]	drink.NPRES
[nan\$nan]	[nanək]	mother
[nin\$nəm]	[ɲɪnnəm]	fish
[pap\$pap]	[balɛr]	taro
[wau\$wau]	[uauk]	grandmother
[jai\$jai]	[iaik]	grandfather

3.4 Morphophonology

This section provides general statements about the phonological and morphophonological processes that apply in Mali.

3.4.1 Phonological and morphophonological processes affecting consonants

Phonological processes affecting consonant phonemes are described below. They are (A) lenition of voiceless stops, (B) voice spreading, and (C) the intervocalic changes to the fricative /β/ which becomes approximant [w] and to the approximant /ɹ/ which becomes trill [r]. These processes describe patterns for word- or morpheme-initial consonants on nouns, pronouns, noun class markers, and particles. In addition there is a morphophonological process of consonant deletion (D) also dealt with here.

The contrast between voiceless stops, voiced stops and their continuant counterparts is neutralised through rules A and B. As a result, it is sometimes difficult to establish the underlying phoneme. There are a few grammatical morphemes that never occur utterance-initially, in which case the initial consonant may arguably be a voiced or voiceless stop or a continuant.

A. Lenition of voiceless stops

As demonstrated in §3.1.2, voiceless stops (/p/, /t/, /k/) that occur intervocalically become voiced continuants. The bilabial stop becomes a fricative [β], while the alveolar stop and the velar stop become approximants ([ɹ] and [ɰ] respectively). The application of this rule depends on the rate of speech: in fluent speech lenition may occur across both word and syllable boundaries. Voiceless stops may also become continuants in utterance-initial position when followed by a vowel. In halting speech the process is less likely to occur across phonological word boundaries but continues to occur across syllable boundaries. This rule neutralises the contrast between voiceless stops and their continuant counterparts.

(3.50) [-voice, -continuant] → [-voice, +continuant] / V __ V

There are several significant places within the grammar where this rule interacts with, or is blocked by morphology. For example, this rule is blocked by the morphology in verbs because the contrast between the stop and the related continuant in word initial position is morphemic, marking the contrast between present and non-present tense on many verbs (for example, /tu/ ‘shoot (present tense)’, /ɹu/ ‘shoot (non-present tense)’, see §4.2). In initial position on nouns, the contrast between the stop and the related continuant is triggered by an underlying vowel [a] that represents the specifier article (see §10.4). The specifier article itself is not always present in the surface form, however, and as a result is identified by the contrast between the stop and the related continuant. For example, the noun /taŋam/ ‘bananas’ becomes [a=taŋam] {a=taŋam} when the specifier article is added to the stem. For most speakers today, loans such as /(a)kanuɣa/ ‘canoe’, and /atungi/ ‘tuna’ (both from Tok Pisin) are not influenced by this rule. However, people do report that the generation of speakers who were adults before and during the First World War tended to apply these rules to loans as well. This resulted in the pronunciations [(a)ɣanuɣa] ‘canoe’, and [aɹɒŋgi] ‘tuna’.

One interesting exception to this rule is a small set of discourse markers that allows intervocalic [k]. These forms include /kɔiku/ ‘not’, /kɔki/ ‘also’ and /asika/ ‘if’.⁴ Not only is an intervocalic [k] possible in these examples, but the initial [k] in words such as /kɔiku/ ‘not’, /kɔki/ ‘also’ is in free variation with an initial [ɰ] in clause-initial position. The use of the fricative may be determined by discourse-level factors and associated with ‘softening’ the strength of an assertion in terms of its epistemic or deontic modality (see §15.4.2 on the use of [kule] and [ɰule] ‘don’t’ in negative imperatives).

B. Voiceless stop becomes voiced and prenasalised stop becomes a simple oral stop

There are two other patterns involving changes to stops triggered by neighbouring segments.

⁴ Stanton (2007:Ch.4) reports similar patterns in Ura with similar exceptions. Her examples (2007:105) indicate that the cognate discourse markers in Ura show this same exceptional status. Other examples which are exceptional in Ura, such as *mənatəm* ‘sleep’, have adjacent voiceless stops across a morpheme boundary in Mali. Thus, the Mali phrasal verb *munap təm* ‘sleep’ {*munap təm* ‘sleep within’} seems to maintain a morphological boundary that can only be seen as a trace in the exceptional behaviour of the voiceless stop that surfaces in Ura. Perhaps further work on the reconstruction of the Baining languages will allow similar observations to be made about the discourse markers in both Mali and Ura.

i. *Voicing spreads after a nasal*

Voiceless stops /p/, /t/, and /k/ become voiced when they follow nasals. As in rule 3.4.1.A, the application of this rule depends on the rate of speech. In halting speech it is less likely to occur across word boundaries. This rule neutralises the contrast between voiceless stops and prenasalised stops.

(3.51) [-voice, -continuant] → [+voice, -continuant] / N ____

For example, the noun stem /tik/ ‘hand’ becomes [dik] following the second and third person dual possessive pronoun [ain=dik] /ain=tik/. The masculine noun class marker {-ka} appears as [-ga] when it is suffixed to a noun ending in a nasal: /kalasuŋ/ ‘sweet.potato.PL’, [kalasuŋ-ga] /kalasuŋ-ka/ ‘sweet.potato-M.SG’. The emphatic demonstrative enclitic /pik/ becomes voiced after a demonstrative ending with an nasal: [aβaŋbɪk] /aβaŋ=pik/.

ii. *Loss of prenasalisation after a voiceless stop*

The prenasalised voiced stops /^mb/, /ⁿd/, and /^ŋg/ become simple oral stops when they follow voiceless stops. Again, the application of this rule depends on the rate of speech. In halting speech it is less likely to occur across word boundaries. This rule is summarised as follows:

(3.52) [+voice, +nasal, -continuant] → [+voice, -nasal, -continuant] / [-voice] ____

For example, the first person plural class I concordial pronoun [ot] causes the initial consonant in the verb ‘run’ [^mbaŋ] to lose nasalisation [baŋ] when the two are contiguous. Again, this rule neutralises the contrast between voiceless stops and prenasalised stops. This alternation is not always represented in writing.

C. Fricative /β/ becomes approximant [w], approximant /ɹ/ becomes trill [r]

Intervocally, in fast speech the fricative /β/ may become approximant [w] and the approximant /ɹ/ becomes trill [r]. This is particularly likely between a high back vowel /u/ and another vowel. The /u/ may precede or follow the consonant concerned.

When the fricative /β/ occurs intervocally it may become [w] in fast speech. For example, the verb /bənmalɪβi/ occurs as [bənmalɪwi]. In the environment of /u/ and another vowel, the bilabial fricative /β/ and the /u/ coalesce to [w], for example in the noun stem /a=βureɪ/ ‘SPEC=scar’ [awɹeɪ].

The alternation between /ɹ/ and [r] is exemplified by the plural human noun class suffix /-ta/, which (following rule A) appears as a continuant after a vowel [-ɪa], and may be further altered when it follows /u/, thus appearing as a trill [ra]. Consider the noun stem /ru-/ ‘person’: [arura], in careful speech [a-ru-ɪa] /a=ru-ta/ ‘SPEC=person-H.PL’.

D. Deletion of consonants in particular morphemes

There are several word classes that show allomorphy based on consonant deletion in fast speech. The final consonant in some prepositions is deleted in fast speech. For example the preposition /təm/ appearing as part of the verb [təs təm] ‘shake.PRES’ loses its final consonant when it forms a clitic group with a following article: {təs təm=kama} /təs tə=kama/ [təs təɹama] ‘shake the’. This type of consonant deletion is represented in the orthography (see §3.7).

Type A verbs have an initial alveolar approximant /ɹ/ in the future tense (see §4.2). These verbs conventionally form clitic groups with the preceding pronoun and lose the initial consonant. The verb [ɹæt] ‘go.FUT’ appears as [-ɛt]: [ɲiaɛt] {ɲia=ɹæt 2SG.I-go.FUT} ‘you go’. Conventionalised clitic groups like these are represented in writing.

In fast speech or conventionalised clitic groups, the continuant /ɹ/ may be deleted. For example, in fast speech the sequence [ʰda ɹia] ‘and she’ → [ʰdi ɹia] (vowel harmony) → [ʰdija] (deletion of consonant and elision of adjacent vowels). This type of deletion is not represented in writing.

3.4.2 Phonological processes affecting vowels

The following phonological processes are associated with Mali vowels: (A) allomorphy based on syllable type, (B) vowel harmony within clitic groups, (C) vowel epenthesis, (D) elision of adjacent vowels, and (E) coalescence of [a] and [u].

A. Vowel allophones

The high vowels /i/ and /u/ have lax allophones in closed syllables [ɪ] and [ʊ] (see §3.3). An alternation between /ə/ and /ɔ/ also occurs in closed syllables: [mɛ.ɪamən] and [mɛ.ɪamən] ‘language’, also [uramət] and [uramət] ‘name of a Baining tribe’. A similar, but even more restricted pattern applies to the vowel /a/. In clitic groups this vowel often becomes [ə]. For example: {sa} ‘to’ but [sək=kama] or [sə=ɹama] {to=ART}. Occasionally it is difficult to tell whether the underlying form is /a/ or /ə/. If there is no other evidence to determine the case I assume examples of [ə] are phonemic.

B. Vowel harmony

Vowel harmony occurs in Mali clitic groups. For example, the coordinator [ʰda] ‘and’ may also occur as the following: [ʰdə ɲət] /ʰda ɲət/ ‘and they’, [ʰdu ɹt] /ʰda ut/ ‘and we’, [ʰdi ɲia] /ʰda ɲia/ ‘and you’, and [ʰdɔ ɹɔsa] /ʰda kɔsa/ ‘and just’. The vowel alternation between /a/ and [ə] (mentioned in A above) may also be explained as a case of vowel harmony in examples such as {sa=mət} [sə=mət] ‘into’ {to=within}.

C. Vowel epenthesis

Vowel epenthesis may occur in CCV(C) syllables. Examples include the word for ‘pig’, [βələmga] or [βləmgə]. The plural is [βləm], indicating that the first vowel is epenthetic. Speakers vary in their treatment of the epenthetic vowel in writing; many older speakers prefer to omit it. Older speakers claim that ‘proper Mali’ does not ‘have these vowels’ and that they have crept in through influence from neighbouring Austronesian languages, with their strong preference for CVCV syllables. The proper name [βlək] (meaning ‘spots’), for example, is ‘Austronesianised’ as [βələk].

Epenthetic vowels also occur at morpheme boundaries where two consonants of the same type come together, for example, {ɹən ɲət} → [ɹən\$əɲət]. Noun roots ending in fricatives take an epenthetic vowel [a] before the noun class suffix, where the suffix begins with a stop. For example {la^ŋgə.ɹa-ka ‘corn-M.SG’} [la^ŋgə.ɹaɹa]. Note that the phonotactic rule preventing fricatives in word-final position (see §3.6) means that the noun stem appears with a final stop [la^ŋgat] ‘corn.PL’.

D. Elision of adjacent vowels

There are three situations in which vowels are deleted: (i) VV sequences in grammatical words or clitic groups; (ii) a pattern of stem alternation for some nouns, (iii) stem-final [a]-deletion for some nouns.

i. In grammatical words or clitic groups

Adjacent vowels may be deleted within grammatical words and clitic groups. The comitative preposition /sa/ ‘with’ takes the third person singular possessive pronoun /aβama/ as an enclitic. This results in a VV sequence /sa+aβama/. One of the vowels is deleted /saβama/ and the remaining vowel is reduced to [ə] [səβama]. In fluent speech the same pattern may be observed within clitic groups. For example the sequence /ⁿda ut/ ‘and we’ shows vowel harmony in careful speech [ⁿdu ʊt] and vowel deletion in fluent speech [ⁿdʊt].

ii. Stem alternation for nouns

A stem alternation involving the simplification of VV sequences with a high vowel (/ia/ → /i/ and /ua/ → /u/) is associated with some single syllable noun stems with fricative onsets. This alternation is a lexical rule that must be learnt for the nouns concerned. For example, /auqʊan/ ‘sand’ becomes /auqʊnga/ ‘meat’ when the masculine singular noun class marker is used. Similarly, /auqʊnaɪŋ/ becomes /auqʊnaɪŋga/ when the masculine singular noun class marker is added.

iii. Stem-final [a] on nouns

Finally, there is a morphophonological process that is analysed here as involving the deletion of an underlying stem-final [a] on some nouns. Some noun stems that end in a nasal take an epenthetic [a] before a noun class suffix. Consider the singular/plural pair [sənəŋaʊa] /sənəŋ(a)-ka/ ‘heart-M.SG’, /sənəŋ/ ‘hearts’. In the majority of cases, however, stem-final nasals take noun class markers without epenthetic vowels: [ᵐbaŋga] ‘house’ /ᵐbaŋ-ka/ ‘house-M.SG’ ‘his house’ or [ʉləŋga] ‘tree.species’ /ʉləŋ-ka/ ‘tree.species-M.SG’. As there is no way to predict the distribution of the [a], I take the form {sənəŋa} as the underlying root for ‘heart’. This pattern reflects a lexical rule that must be learnt for each of the nouns concerned.

E. Coalescence of [a] and [u]

The sequence /au/ is simplified to a mid vowel /ɔ/ in fast speech: /ʉaʊʉʉna/ ‘uncles’ becomes [ʉɔʉʉna], /sβau/ ‘steal.NI’ becomes [sβɔ].

3.5 Stress

Stress in Mali is not contrastive. There are no minimal pairs in the language distinguished by stress. Note that the phonological word does not map consistently onto the lexical word in Mali, making statements about lexical prominence problematic. Mali seems to have a basic pattern similar to the one reported for many Oceanic languages in which stress tends to be fixed on the penultimate syllable of the phonological word. However, like Stanton (2007:84–85), in her study of Ura, I found quite a few exceptions to this tendency.

Instrumental analysis shows that prominence is marked with an increase in intensity, and possibly duration and vowel quality. However, a more thorough instrumental analysis would need to be done to determine the precise relationship between these variables.

With regards to pitch, instrumental measurements of Mali show that the same word occurs with different pitch contours and volume levels depending on the context, particularly the rate of speech. In fluent speech there may be a single pitch contour for the predicate, and for individual noun or prepositional phrases within the clause. In many cases there is a single pitch contour for an entire clause. In halting speech, on the other hand, almost every morpheme has its own pitch contour and there is very little contrast in loudness between syllables. In halting speech it thus appears as if every syllable is stressed.

Further research is required for a better understanding of the correlations between particular types of phonetic prominence (loudness, duration and pitch movement) and their relationships with boundary marking and other phenomena at the level of the intonational phrase.

Given its low salience in the language, stress has not been marked in this description. The boundaries of phonological words (described in §3.7) are distinguished on the basis of pause phenomena and the operation of (morpho-) phonological processes across morpheme boundaries.

Loudness and pitch are used to convey pragmatic cues, information about the clause type, and to mark intonation unit boundaries. See §15.1 and §18.4 for further discussion of prosody and discourse.

3.6 Phonology of clitics and compounding

As we noted in §3.5, stress and pitch contours were not found to be useful criteria for identifying phonological words in Mali. For this reason, the boundaries of phonological words are distinguished on the basis of pause phenomena and the operation of phonological processes across morpheme boundaries. Grammatical words are identified on the basis of the unity of meaning of the morphemes and their distribution. The remainder of this section is organised as follows: criteria for identifying phonological words (§3.6.1), clitics and clitic groups (§3.6.2), and characteristics of grammatical words (§3.6.3).

3.6.1 Phonological words

Phonological criteria for identifying words in Mali include the following: (i) the occurrence of pauses, (ii) geminate consonants, and (iii) the operation of the phonological rules set out in §3.4.1 and §3.4.2. These criteria are particularly useful in determining the phonological relationships of grammatical forms such as pronouns, articles, and prepositions which tend to form clitic groups or combine with lexical stems as clitics.

i. Pauses

Pauses are useful in identifying phonological word boundaries in Mali. In narrative texts, pauses were identified after all of the forms listed in §5 and §6 on word classes. Hesitation can occur within a phonological word, however this phenomenon is marked by place-holding vocalisations and the repetition of the whole phonological word on repair. Pauses between phonological words do not require repair sequences. There are often pauses after concordial pronouns I/II because of the speaker having to correct their choice

(the class of the pronoun is an index of TAM—see §4.2). There are also occasional pauses between a noun stem and a noun class marker.

ii. Operation of phonological rules

The phonological rules listed in §3.4.1 and §3.4.2 operate within phonological words in careful speech and provide an additional means of determining phonological word-hood. To recap, the rules applying to consonants discussed in §3.4.1 were: (A) lenition of voiceless stops, (B) voice spreading, and (C) the intervocalic change of the fricative /β/ to the approximant [w] and the approximant /ɹ/ to the trill [r], and morphological processes of consonant deletion (D). The rules applying to vowels discussed in §3.4.2 were: (A) vowel allophones, (B) vowel harmony, (C) vowel epenthesis, (D) elision of adjacent vowels, and (E) coalescence of [a] and [u]. As I noted in §3.4, the rules may also apply across word boundaries in fluent speech.

3.6.2 Cliticisation and clitic groups

Grammatical elements combine together into clitic groups in order to create phonological words. Clitic groups occur at the periphery of the predicate, of NPs and PPs. Clitic groups occur most frequently in fluent unmonitored speech. They are avoided if the speaker wishes to emphasise one of the elements within the group. The clitic groups found in connected speech in Mali are presented in Table 3.9. The table identifies the phonological evidence for treating the clitic groups as single phonological words.

In terms of their representation in this grammar, mismatches between phonological and grammatical words is dealt with as follows: phonological breaks across single grammatical words are marked by a full stop <.> in the first line of an example; distinct grammatical words treated as single phonological words are indicated by an equal sign <=> in the second and third lines of an example. Suffixes are indicated by hyphens <-> in the second and third lines of the example. These relations are shown in (3.53). To show how examples are represented throughout the rest of the grammar, this example is given in the orthography of the language (see §3.8).

- (3.53) In *vondēm.mēt* [*aina* *chunēm*].
 in *vondēm.mēt* ain=a chuan-ēm
 3DL.I buy.NPRES 3DL.POSS=SPEC rice-RCD.SG
 ‘Those two bought a packet of rice.’

Table 3.9: Clitic groups in Mali

	Forms	Phonology	Examples
(a)	clause-initial coordinator and <i>chule</i>	- single pitch contour - possible vowel harmony	/da=ɥule/ ‘and=then’ → [dəɥule] or [dule]
(b)	clause-initial coordinator (<i>da/sa</i> only) and concordial pronoun I/II	- vowel harmony > vowel elision - single pitch contour	/da=ut/ ‘and=1PL’ → [dot]
(c)	clause-initial coordinator (<i>da</i> only) and article	lenition of /kama/ → ɥama	/da=kama/ ‘and=ART’ → [dəɥama]

	Forms	Phonology	Examples
(d)	concordial pronoun I and TAM	single pitch contour	/ɲua=βɛ/ '1SG=IMPF' → [ɲuaβɛ]
(e)	preposition and concordial pronoun III	- elision of repeated consonant - lenition of voiceless stop intervocalically	/pət=ta/ 'PREP=3PL' → [pəɲa]
(f)	preposition and article	- loss of final consonant of preposition - lenition of /kama/ → [ɥama]	/mət=kama/ 'PREP=ART' → [məɥama]
(g)	possessive pronoun and article	- single pitch contour - lenition of intervocalic stops	/aut=aɲa/ '1PL.POSS=NSPEC' → [auɲaɲa]
(h)	prepositions and directionals	single pitch contour	/sa=βuk/ 'to=the.top' → [saβuk]
(i)	prepositions and possessive pronouns (with specifier articles)	- lenition of intervocalic stops - single pitch contour	/səβət=aβ=a/ 'to=3SG.POSS=SPEC' → [səβəɲaβa]

In example (3.54) the article /kama/ forms a clitic group with the preposition /təm/.

- (3.54) *kiaβɛ ɲɪa tugas təɥama balki*
 kia=βɛ kia tugas təm=kama bal-ki
 3F.SG.I=IMPF 3F.SG.I play.PRES THEME=ART ball-F.SG
 'She is playing with the ball.'

Where no other grammatical elements are available, clitics may also be associated with lexical stems. The possibilities are shown in Table 3.10.

Table 3.10: Cliticisation to lexical stems in Mali

	Forms	Phonology	Examples
(a)	concordial pronoun I + verb stem (only class one inflection in future tense)	- loss of initial consonant of verb stem - one syllable word	/ka=ɪət/ '3M.SG.I=go.FUT' → [ɥaət]
(b)	one syllable concordial pronouns (I or II) and verb stem	the lenition of voiced stops following nasals (rule 3.4.1.B)	/in=tet/ 'DL.I=go.PRES' → [in=det]
(c)	verb stem + concordial pronoun III	lenition (voiceless stops in initial position of pronoun)	/βuspəm=ki/ 'erupt=3F.SG.III' → [βuspəmgi]

	Forms	Phonology	Examples
(d)	specifier article + noun stem	- association of nasalisation in prenasalised voiced stop with preceding syllable - lenition of voiceless stops in stem initial position and deletion of a= (see §10.4 for more information)	/a=mbaŋ-ga/ ‘SPEC=house-M.SG’ → [am\$baŋ-ga] /a=kurem/ ‘SPEC=betel.nuts’ → [ɥurem]
(e)	possessive pronoun + noun stem	the lenition of voiced stops intervocalically (rule 3.4.1.A) or following nasals (rule 3.4.1.B)	/aŋə=tik-ini/ ‘3N.POSS=hand-DIM.SG’ → [aŋ\$ŋə\$ɪɪɥ\$ɥɪm\$ni]

Grammatical elements and lexical stems also show phonological relations across word boundaries. For example, the phonological processes triggered by the specifier article (see (d) in Table 3.10) are observed even when the article forms a clitic group with preceding grammatical elements rather than with the noun. This is shown in row (a) of Table 3.11. Similar relations may be observed between concordial pronouns (of classes I and II) and the verb stem, and between the verb stem and a preposition. Row (b) of Table 3.11 shows that even though the prepositions form clitic groups with following pronouns or articles, phonological relations continue to hold between the preposition and the preceding verb.

Table 3.11: Phonological relations across word boundaries

	Forms	Phonology (occurs on)	Examples
(a)	possessive pronoun + specifier article + noun stem	lenition of voiceless stops in stem initial position and deletion of a= (see §10.4 for more information)	/gu=a kurem/ ‘1SG.POSS=SPEC betel.nuts’ → [gua ɥurem]
(b)	verb stem + preposition [= complex verb] + article or pronoun	- lenition (voiceless stops in initial position of preposition) - two pitch contours	/mwən.pət=ta/ ‘find.PAST=3PL’ → [mwən.bəɪa]

3.6.3 Grammatical words

Grammatical words, as distinct from phonological words, are identified in cases in which morphemes combine to form single conventional semantic units (such as lexemes) over multiple pitch contours. In most cases only two pitch contours are involved. Elements that combine to form single grammatical words in Mali occur repeatedly throughout the lexicon and have a fixed order in the clause. This topic is discussed in more detail in §20.1. An additional piece of evidence for identifying grammatical words in Mali is to consider the citation forms that speakers provide when identifying words. As described in §10.4, for example, many nouns take the specifier article as part of their citation form. This suggests that the specifier article is understood to form part of the grammatical word for a subset of nouns. The various combinations of forms that must be considered single grammatical words in Mali are set out in Table 3.12. In line with conventions in the rest of this grammar, I have used a full stop <.> to indicate the break between phonological words where this is relevant.

Table 3.12: Grammatical words in Mali

Construction	Resulting word class	Example
verb + preposition(s)	prepositional verb	/vɔndəm.mət/ {buy.NPRES} ‘buy (non-present tense)’ (/vɔn/ ‘give’, /dəm/ THEME, /mət/ ‘within’)
verb + preposition	concrete noun	/sunaspɛm-ki/ {teacher-F.SG} ‘female teacher’ (/sunas/ ‘teach’, /pɛm/ ‘in’)
reduplication	concrete nouns	/guar.guar-ka/ {string.of.meat-M.SG} (no unreduplicated form)
reduplication	adjectives	/luik.luik/ ‘scarless’ (no unreduplicated form)
reduplication	contrastive pronouns	/ɸəŋət.ɸəŋət/ ‘many many of them’ (/kəŋət/ ‘many of them’)
reduplication	adverbs	/mamər.mamər/ ‘very well’ (/mamər/ ‘well’)
compounding: verb + noun	verb	/tu.nanək/ ‘grizzle.PRES’ (/tu/ ‘put’, /nanək/ ‘mother’)
compounding: verb + verb	verb	/tət.ŋis/ ‘miss.PRES’ (/tət/ ‘go’, /ŋis/ ‘be separate’)
affixation: (prefix +) prefix + spatial term	spatial term	/i-na-βuk/ {DER ₁ -DER ₃ -up} ‘down towards the speaker’

3.7 Graphemes in the Mali orthography

Members of the Mali community have developed an orthography to introduce children to literacy in the local language elementary school program. The orthography is also being used in a number of publications in the language and people are experimenting with other formats such as public signs and personal letters. Mali graphemes and their corresponding phones are listed in Table 3.13. Note that an alveolar nasal followed by a velar stop [ng] is distinguished from an velar nasal [ŋ] <ng> by the insertion of an apostrophe <n’g>.

Table 3.13: Graphemes in the current Mali orthography

Bilabial	Alveolar	Palatal	Velar	Vowels	Diphthongs
/β/ <v>	/ɿ/ <th>	/j/ <y>	/u/ <ch>	/i/ <i>	/ɔi/ <oi>
/p/ <p>	/t/ <t>		/k/ <k>	/ɛ/ <e>	/ai/ <ai>
/b/ 	/d/ <d>		/g/ <g>	/ə/ <ē>	/au/ <au>
/m/ <m>	/n/ <n>		/ŋ/ <ng>	/a/ <a>	
	/s/ <s>			/ɔ/ <o>	
	/l/ <l>			/u/ <u>	
	/r/ <r>				

The graphemes in Table 3.13 indicate the system for representing Mali phones in writing. Given the highly productive nature of some phonological processes in Mali (discussed in §3.4), it is not surprising that writers vary in the way they represent Mali.

All three rates of speech are represented in writing by Mali speakers. Careful to fluent speech is emerging as the usual style of writing, but this is not a strongly established convention at this stage.⁵ This is consistent with community perceptions about normal rates of speech being reasonably fast. When people return to the community after periods away at boarding school or work in other communities, they often report that their tongues are ‘heavy’ and they can’t speak fluently (that is, fast) enough. A preference for fast speech is also reflected in Mali songs which are typically extremely fast. In some stanzas the rate is 444 syllables per minute.

Other things being equal, Mali writers have a disjunctive approach to orthographic word boundaries. Only noun class markers and derivational morphemes are normally written in the same word as the lexical stem. If a writer has adopted the strategy of representing fluent speech, they represent the processes of elision and deletion of vowels (see §3.4.2.C and §3.4.2.D) by contracting the clitic groups concerned. For example, the sequence *da ut* ‘and we’ shows vowel harmony in careful speech [du ut] <du ut> and vowel deletion in fluent speech [dot] <dut>.

Mali writers distinguish virtually all of the allophonic variation associated with consonants discussed in §3.4.1.A – §3.4.2.C. The alternations /p/ with [b] and [β], /t/ with [d] and [ɿ], /k/ with [g] and [u], and /ɿ/ with [r], all involve phones that also have independent phonemic status. This may explain their salience to Mali writers. The alternation between /β/ and [w] is not represented consistently for much the same reason although a handful of verbs do show a morphophonemic alternation between /β/ and /w/. In relation to vowels, only the phonological alternations between /a/, /ɛ/, and /ɔ/ and the allophone [ə] are represented in the orthography (see §3.4.2.A).

Prenasalisation on voiced stops is not usually written unless the nasal forms a syllable nucleus (as it may in word-initial position). Epenthetic vowels are not represented consistently. As I note in §3.3, people are aware that Mali (like other Baining languages) has a more complex syllable template than neighbouring Austronesian languages. Some speakers avoid representing epenthetic vowels as a strategy of linguistic purism while others are comfortable to include them in appropriate phonological circumstances.

⁵ These comments are based on the data collected during the story competition (see §1.9).

3.8 The ‘Catholic’ orthography first used to write Mali

The orthography described in §3.8 and used in this grammar is the second orthography to be used within the community and is based largely on an earlier version used in religious materials produced by the Catholic Mission. During the 1920s the original orthography was developed by a German Catholic priest, Fr Mayerhofer and a Mali man called Nguingimga. This orthography is shown in Table 3.14. Note that the earlier orthography made no distinction between /r/ and /ɾ/, and that the vowel /i/ was represented as <j> in VV sequences. The representation of the phoneme /ə/ varied a good deal, but was generally either <ö> or <ä>.

Table 3.14: Graphemes in the first Mali orthography

Bilabial	Alveolar	Palatal	Velar	Vowels	Diphthongs
/β/ <v>	/ɾ/ <r>	/j/ <j>	/uɣ/ <ch>	/i/ <i>, <j>	/ɔi/ <oi>
/p/ <p>	/t/ <t>		/k/ <k>	/ɛ/ <e>	/au/ <au>
/b/ 	/d/ <d>		/g/ <g>, <q>	/a/ <a>	/ai/ <ai>
/m/ <m>	/n/ <n>		/ŋ/ <ng>	/ə/ <ö>, <ä>	
	/s/ <s>			/ɔ/ <o>	
	/l/ <l>			/u/ <u>	
	/r/ <r>				

3.9 Information about the transcription process

As I noted in §1.9 Mr Julius Tayul generally transcribed the texts that were recorded for this research. This proved to be the best working solution to the problem posed by the challenges associated with the overlap of allophones and phonemes and by the different application of phonological rules at different rates of speech. When we first began to work together it was difficult to move between detailed transcriptions and the morphology they represented. Our working compromise was for Mr Tayul to transcribe what he heard using the orthography (including all the dysfluency associated with the speaker’s performance), and I worked out the forms being represented through analysis and translation (with his generous assistance).

4

Basic syntactic categories and the tense marking system

Every clause in Mali with an A/S_A argument must include concordial pronouns indexing this argument. These pronouns are also involved in encoding tense marking in the language. As the concordial pronouns are involved in both systems, the system of basic syntactic relations (§4.1) and the system for encoding tense (§4.2) are discussed together in this chapter. Section 4.1 also includes a description of verbless clauses.

4.1 Basic syntactic relations

Constituent order is fixed (AVO), providing the means of ascertaining grammatical roles. Intransitive clauses in Mali show a split-S marking pattern. The semantic basis for the split-S pattern is discussed in §4.1.1. Marking of core arguments is discussed in §4.1.2. Full paradigms of the concordial pronouns are provided in §4.1.3. The argument marking strategies for three place predicates are described in §4.1.4. Verbless clauses are discussed in §4.1.5.

The discussion in this subsection is framed in terms of the categories used by Dixon (1994). In Dixon's framework, the single argument of an intransitive verb (the intransitive subject) is labelled S, the subject of a transitive verb is labelled A, and the object of a transitive verb is labelled O. This system takes as a premise that there are intransitive and transitive verbs in the language and then applies these labels based on the number of arguments required by the verb. However, it should be noted that the very high proportion of prepositional verbs in Mali and the range of degrees of grammaticalisation they exhibit mean that in many cases the transitivity of the lexical entity, the complex verb, is difficult to establish with certainty. Prepositional verbs are discussed in more detail in §7.4. Wherever possible, the discussion in this section focuses on simple verb stems.

4.1.1 Split-S marking

With respect to constituent order in the clause and choice of concordial pronoun the S argument on an intransitive clause is either treated like an A argument or an O argument. This section describes the categorisation of Mali intransitive verbs into S_A types (active intransitive verbs) and S_O types (stative intransitive verbs).

Dixon (1994:71) contrasts split-S systems with fluid-S systems. In fluid-S systems the semantics of the particular situation determine the syntactic representation of the participants in the clause. In Mali, the split is conditioned by the identity of the verb. In the majority of cases, it is possible to identify some semantic motivation for why an intransitive verb is active or stative.¹ For example, we can generally characterise S_O (stative intransitive) verbs as either stative and/or showing a lack of control (for example, *bubu* ‘be dull in colour’, *dēdēn* ‘be confused’, *kēsēk* ‘be thirsty’). However, this characterisation does not allow reliable predictions about class membership. In a small number of cases it is not semantically apparent why a verb takes S_A or S_O agreement. Some verbs that have stative semantics and/or describe non-control situations are in the S_A class (for example, *dēm* ‘be sour’, *dlen* ‘be afraid’, and *pai* ‘fall down’). Thus, argument structure is a property of individual verbs and is not entirely predictable on semantic grounds.

Thirty simple verbs show S_O marking but the pattern of marking an S argument like an O argument is shared by a further 199 prepositional verbs.² Some examples of simple and prepositional S_O verbs include: *kule* ‘stay’; *pus sē* ‘squeeze out though a narrow gap’; *raik dēm* ‘scream’; *pus pēm* ‘erupt’; *pēl tē* ‘collapse, break (for example, a house that is burning down)’.

Many S_O verbs belong to one of the following semantic categories: sudden movements, onomatopoeia, physical property (including corporeal property), and human propensity. Verbs describing sudden movement (presumably with overtones of lack of control) include: *mundros na* ‘stop suddenly, freeze’, *pēlike sē* ‘slip’, and *suk dēm* ‘fall down’. The onomatopoeic verbs contain an imitative element followed by a preposition for example, *kēlēr kēlēr mēt* ‘rattle’, *krētkrēt sē* ‘rustle’, and *ngēngeng dēm* ‘squeak’. Verbs describing corporeal properties include a few of the verbs without prepositions (*arem* ‘have a fever’, *mēnap* ‘sleep’, and *trong* ‘be stiff’), as well as many examples of stems with prepositions that have not been attested as simple stems (*gēk pēt* ‘burp’, *pis dēm* ‘be swollen’, and *sukderut nē* ‘wither’). Most of the physical property and human propensity verbs are derived from adjectives. Examples of verbs that follow this pattern include: dimension terms (*athavēr mēt* ‘be wide’); colour terms (*achabavēs vēt* ‘be white’); some physical property terms (*achelach mēt* ‘be soft’, *achrnas tēm* ‘be hot’ and *ais vēt* ‘be wet’); human propensity terms (*alek mēt* ‘be open minded’, *asevaik pēt* ‘be joyful, rejoice’).

4.1.2 Marking core arguments

Core arguments are encoded within the predicate by A/S_A and/or O/S_O concordial pronouns. A/S_A concordial pronouns are phonologically independent of the verb but O/S_O concordial pronouns may be encliticised to the verb stem or verb complex.

Example (4.1) shows a basic transitive clause with concordial pronouns indexing both arguments. The A argument (a man hypothetically planning to marry a woman without her uncles’ permission) is indicated by the masculine singular concordial pronoun *ka* ‘he’ before the verb *tat* ‘get’, shown here in the future tense form *thēt*. The O argument, the woman in question, is marked by a feminine concordial pronoun *ki* encliticised to the verb.

¹ The reader may be interested to compare the semantics of the verbs described here with Foley’s (2005) model for predicting how splits in this type of system are likely to pattern in Austronesian languages.

² See §7.4 for a full discussion of the relationships between simple and prepositional verbs.

- (4.1) ... *dē cha thachi* ...
 da ka thēt=ki
 and 3M.SG.I get.FUT=3F.SG.III
 ‘... and he gets her ...’

Full NPs for either argument are optional; most transitive clauses in narrative contain one full NP in either A or O position. If the A/S_A NP is present, it is simply added before the predicate in addition to an A/S_A concordial pronoun. Example (4.2) shows an active intransitive clause containing both a full NP (*aumesta* ‘men’) and an A/S_A concordial pronoun (*tha* ‘they’) encoding the S_A argument.

- (4.2) *Aumesta tha donel.*
 a=chumes-ta ta donel
 SPEC=man-H.PL 3H.PL.I hunt.PRES
 ‘The men go hunting.’

Otherwise the A/S_A concordial pronoun appears without a full NP:

- (4.3) *Thi thal amēsmēs.*
 ti thal a=mēsmēs
 3H.PL.II carry.NPRES SPEC=food
 ‘They would carry food.’

Either an O/S_O concordial pronoun or an O/S_O NP may appear post-verbally in a single clause but not both. Examples (4.4) and (4.5) show S_O arguments.

- (4.4) ... *dē chule ka ve.*
 da chule ka pe
 and stay.NPRES 3M.SG.III there
 ‘... and he stayed there.’
- (4.5) *Sa chule ava lunggutki.*
 sa chule av=a lugut-ki
 NEF stay.NPRES 3M.SG.POSS=SPEC woman-F.SG
 ‘So she’d stay (as) his wife.’

Examples (4.6) and (4.7) show O arguments. In (4.6) the O argument is an NP: *kama mēsmēs* ‘the food’. In (4.7) there is a third person neuter class three concordial pronoun *ngēt* indexing the O argument.

- (4.6) *Ut tēs kama mēsmēs.*
 ut tēs kama mēsmēs
 1PL.I eat.PRES ART₁ food
 ‘We eat the food.’
- (4.7) ... *ta tēs ngēt* ...
 ta tēs ngēt
 3H.PL.I eat.PRES 3N.III
 ‘... they eat them ...’

Full NPs that denote arguments may be left-dislocated (§18.1). Any argument may undergo left-dislocation (§18.1). Where this occurs, the concordial pronouns must still be present within the predicate as described above. Examples (4.8) and (4.9) show intransitive predicates with left-dislocated S_O arguments. The full NP is in topic position to the left of the clause and the O/S_O concordial pronoun occurs in the expected position after the verb. The NP and the concordial pronoun are underlined in these examples.

- (4.8) ... *dē choki chama vėlēmga dē chēsēcha* ...
 da koki kama a=pėlēm-ka da chēsēk=ka
 and just ART₁ SPEC=pig-M.SG and thirsty.NPRES=3M.SG.III
 ‘... the pig was just thirsty ...’

- (4.9) ... *dak kama lēvop chule tha va bang.*
 dak kama lēvop chule ta pa bang
 but ART₁ women stay.NPRES 3H.PL.I LOC house
 ‘... but the women stay at home.’

4.1.3 Concordial pronouns

In this section I describe the concordial pronoun paradigms that mark core arguments. There are three sets of concordial pronouns. Classes I and II indicate the person, number and gender of the A/S_A argument. Class III pronouns indicate the person, number and gender of the O/S_O argument. The concordial pronouns may occur as independent phonological words but more often form clitic groups (§3.7). The A/S_A concordial pronouns form clitic groups with clause initial material such as coordinators, while the O/S_O concordial pronouns are encliticised to the verb or a preposition in the verb complex.

In addition to indexing the A/S_A argument, the class I and II concordial pronouns are involved in encoding tense distinctions. Class I concordial pronouns are unmarked for tense values but the class II concordial pronouns mark the clause as non-past. The tense marking system will be discussed in more detail in §4.2.

Class I, class II, and class III concordial pronoun paradigm are shown in Tables 4.1, 4.2, and 4.3, respectively.

Table 4.1: Class I concordial pronouns

Person/Gender	Singular	Dual	Plural	
1	<i>ngua</i>	<i>un</i>	<i>ut</i>	
2	<i>ngia</i>	<i>in</i>	<i>ngēn</i>	
			Human	Non-human
3M	<i>ka</i>	<i>in</i>	<i>ta</i>	<i>ngē</i>
3F	<i>kia</i>	<i>in</i>	<i>ta</i>	<i>ngē</i>
3N	<i>ngē</i>			

Table 4.2: Class II concordial pronouns

Person/Gender	Singular	Dual	Plural	
1	<i>ngu</i>	<i>uni</i>	<i>uthi</i>	
2	<i>ngi</i>	<i>ini</i>	<i>ngēni</i>	
			Human	Non-human
3M	<i>kē</i>	<i>ini</i>	<i>ti</i>	<i>ngēthi</i>
3F	<i>ki</i>	<i>ini</i>	<i>ti</i>	<i>ngēthi</i>
3N	<i>ngēthi</i>			

Table 4.3: Class III concordial pronouns

Person/Gender	Singular	Dual	Plural	
1	<i>ngo</i>	<i>un</i>	<i>ut</i>	
2	<i>nge</i>	<i>en</i>	<i>ngēn</i>	
			Human	Non-human
3M	<i>ka</i>	-	<i>ta</i>	<i>ngēt</i>
3F	<i>ki</i>	-	<i>ta</i>	<i>ngēt</i>
3N	<i>ngēt</i>			

Class III concordial pronouns occur after the predicate and encode O/S_O and oblique arguments. Example (4.10) shows a verb with both direct and indirect objects; both are marked with class III concordial pronouns. (The analysis of oblique arguments is discussed in more detail in §4.1.4.)

- (4.10) ... *dē chi von'ga thēmngēt.*
 da ki von=ka tēm=ngēt
 and 3F.SG.II give.NPRES=3M.SG.III THEME=3N.III
 ‘... and she gives it to him.’

Class III concordial pronouns are also used in topic position in the clause. The second person singular class III concordial pronoun is shown in this function in (4.11).

- (4.11) *Auk, nge, ngiet.*
 auk nge ngia=thet
 well 2SG.III 2SG.I=go.FUT
 ‘Well, you, you go.’

Class III concordial pronouns do not contribute to the tense marking of the clause. As a result, the tense marking possibilities for clauses with VS_O intransitive verbs are more restricted than for clauses with active transitive verbs (§4.2.2, especially examples (4.47) and (4.48)).

Mali also makes use of anaphoric pronouns that may function as the head of an NP. These are presented in Table 4.4 (see also §5.2.3). The anaphoric pronouns encode the noun class of the entity they refer to whereas the concordial pronouns encode gender. The two pronoun paradigms overlap, as is apparent when considering the third person singular

and plural forms. For speech act participants (that is, the first and second persons) concordial pronouns are the only forms available.

Table 4.4: Anaphoric pronouns in Mali

Class	Singular	Dual	Plural
Masculine (M)	<i>ka</i>	<i>ngaiom</i>	<i>ta</i> (human) or <i>ngēt</i> (non-human)
Feminine (F)	<i>ki</i>	<i>ngavem</i>	<i>ngēt</i>
Diminutive (DIM)	<i>ngini</i>	<i>ngithom</i>	<i>ngithong</i>
Reduced (RCD)	<i>ngam</i>	<i>ngavam</i>	<i>ngavap</i>
Flat (FLAT)	<i>ngaves</i>	<i>ngimelēm</i>	<i>ngimelēk</i>
Excised (EXC)	<i>ngigl</i>	<i>ngiglem</i>	<i>ngigleng</i>
Long (LONG)	<i>ngavet</i>	<i>ngisem</i>	<i>ngiseng</i>
Extended (EXT)	<i>ngait</i>	<i>nginēm</i>	<i>nginēk</i>
Count Neutral (CN)	<i>ngēt</i>		

Comparison of Tables 4.3 and 4.4 shows that there are no third person masculine and feminine dual forms in the concordial pronoun paradigm; the anaphoric pronouns are used instead. This is exemplified in (4.12) for a masculine dual argument.

- (4.12) *Ka lu ngaiom ...*
 ka lu ngaiom
 3M.SG.I see.NPRES M.DL
 ‘He saw two (people) ...’

4.1.4 Verbs of transfer and speech act verbs

This section describes the argument marking associated with three place predicates, including the verb of transfer *bon* ‘give’, and speech act verbs such as *kuar* ‘say, tell’ and *kēlol* ‘report’. All of these verbs make use of prepositions to introduce a non-A argument. The role of the argument associated with the preposition depends on the verb. Prepositions only appear if the relevant argument is included in the clause.

We begin with verbs of transfer. Either or both of the non-A arguments may occur. When they are present, either or both may be encoded with class III concordial pronouns. Examples (4.13) to (4.15) show the verb *bon* ‘give’ with different non-A arguments. In (4.13) the recipient is present as a full NP and is treated as the O argument. The undergoer is omitted.

- (4.13) *Dasik thi von angama chumeska nainavi ...*
 da=asik ti von angama chumes-ka na=i-na-avi
 and=IRR 3H.PL.II give.NPRES INDEF man-M.SG from-DER₁-DER₃-there
 ‘Then they’ll give [her to] a man from there ...’

Example (4.14) contains a full NP undergoer treated as the O argument. There is no mention of the recipient in this example.

- (4.14) *Ng* *von.dēchama* *vēthen'gi* *inamuk*
 ngi von=tēm=kama a=pēthen-ki i-na-muk
 2SG.II give.NPRES=THEME=ART₁ SPEC=lime-F.SG DER₁-DER₃-across
 'You pass (lit: give) the lime this way.'

Both the recipient and the undergoer are present in (4.15). In this example both arguments are encoded by pronouns. The recipient is treated as the O argument while the undergoer is introduced by the preposition *tēm*.

- (4.15) ... *dē* *chi* *von'ga* *thēmngēt*
 da ki von=ka tēm=ngēt
 and 3F.SG.II give.NPRES=3M.SG.III THEME=3N.III
 '... then she gives it to him.'

Although consultants always translate *bon* with the English verb 'give', the alignment of semantic roles and argument types for this verb to its arguments can best be understood as analogous with the verb 'provide' in English. For example, 'I provided them with food.' The English verb 'provide' treats the recipient as an O argument and the undergoer (the provisions) as a theme and this is consistent with the pattern used in Mali where the undergoer is a theme introduced by the preposition *tēm*.

The related complex verb *bon dēm* 'pay' is shown in (4.16). This verb takes the semantic theme as an optional O argument (present in the second clause in this example).

- (4.16) ... *kusek* *thi* *bondēm* *viavik*,
 kusek ti bondēm vi=avik
 only 3H.PL.II pay.PRES EMPH=ADV.DIST.DEM

ma *thi* *bondē.chama* *lēvop* *mētna*
 ma ti bondēm=kama lēvop mēt=na
 REL₂ 3H.PL.II pay.PRES=ART₁ women within=RECIP
 '... they just pay that way, by exchanging women.'
 (lit: '... they just pay that way, by paying women in each other.')

Speech act verbs take optional non-A arguments that refer to the addressee and the speech report. As with clauses headed by verbs of transfer, one or both of the non-A arguments may be present in the clause. The speech report is given as a complement clause. In (4.17) the verb *kuar* 'say' is accompanied by a complement clause (introduced by the relator *ia*) containing an indirect speech report (see §16.3 for an overview of the relators).

- (4.17) *Auk*, *as* *athē* *thave* *thi* *chuar* *ia*
 auk as athē ta=pe ti chuar ia
 well still H.PL.INDEF 3H.PL.I=there 3H.PL.II say.NPRES REL₁

vandi *as* *ti* *vēlēng* *ga*.
 vandi as ti vēlēng ka
 DESID still 3H.PL.II kill.NPRES 3M.SG.III
 'Well, others still said that they wanted to kill him.'

In (4.18), the preposition *na* allows overt mention of the addressee.

- (4.18) *Ngu chuar nē ngavem.*
 ngu chuar na ngavem
 1SG.II say.NPRES PREP F.DL
 ‘I told those two (women).’

In (4.19) both the addressee and the speech report are included in the clause.

- (4.19) *Dē tha chuar na cha ia, “Ithik nge ...”*
 da ta chuar na ka ia ithik nge
 and 3H.PL.I say.NPRES PREP 3M.SG.III REL₁ ADV.PROX.DEM 2SG.III
 ‘And they said to him, “Now, you ...”’

The speech act verb *kēlol* ‘report’ has quite a different approach to managing the semantic roles associated with two non-A arguments. Example (4.20) shows that the addressee follows the verb and the theme is in final position, introduced by the preposition *na*.

- (4.20) *Thoemga cha chēlol*
 at=oem-ka ka chēlol
 3F.SG.POSS-offspring-M.SG 3M.SG.I report.NPRES

kama sunasvemga nava ruavek.
 kama sunasvem-ka na=av=a rua-vek
 ART₁ teacher-M.SG PREP=3M.SG.POSS=SPEC friend-H.PL
 ‘The student reported his friends to his teachers.’

4.1.5 Verbless clauses

In Mali there are two patterns of agreement in verbless clauses. The first involves pronominal marking before the verbless clause complement and is analogous to the agreement pattern of an active intransitive clause (A). The second follows the stative pattern with pronominal marking after the verbless clause complement (B). Verbless clauses that do not require agreement are discussed in (C).

A. ‘Active’ verbless clauses

The pattern of positioning pronominal marking before the verbless clause complement, analogous to an active intransitive clause is used in describing existence, possession, and location.

Example (4.21) shows the anaphoric demonstrative *pe* used as an existential predicate. All the examples of *pe* as a verbless clause complement in the corpus occur with class I concordial pronouns.

- (4.21) *Kama singal ngē ve.*
 kama singal ngē pe
 ART₁ spirits 3N.I there
 ‘There are spirits.’

Clauses expressing possession require the existential construction and a possessive pronoun associated with the possessed noun (4.22).

- (4.22) *Gua mēthamonbes ngē ve*
 gu=a mēthamon-ves ngē pe
 1SG.POSS=SPEC message-FLAT.SG 3N.I there
 ‘I have a message ...’ (lit: ‘My message is there ...’)

Possession can also be expressed by an existential clause with the possessed noun introduced by a comitative preposition. An example is given in (4.23).

- (4.23) *Masa cha ve ta ve sēcha.*
 masa ka pe ta pe sa=ka
 certainly 3M.SG.I there 3H.PL.I there with=3M.SG.III
 ‘Certainly it’s there, they have it.’ (lit: ‘... they are with it.’)

A prepositional phrase following the verbless clause complement may also provide further details about location (4.24).

- (4.24) *Kama pletka cha ve vēt kama sospen’gi thēvus.*
 kama plet-ka ka pe pēt kama sospen-ki athē=pēs
 ART₁ plate-M.SG 3M.SG.I there at ART₁ saucepan-F.SG 3F.SG.POSS=top
 ‘The plate is there on top of the saucepan.’

Directionals may be used predicatively as verbless clause complements. As with existential verbless clause complements, class I concordial pronouns are required. Example (4.25) shows the directional *muk* ‘across’ following the class I feminine singular concordial pronoun *kia*.

- (4.25) *Arenggi chia muk mēt kama sospen’gi.*
 a=reng-ki kia muk mēt kama sospen-ki
 SPEC=water-F.SG 3F.SG.I across within ART₁ saucepan-F.SG
 ‘The water is in the saucepan.’

B. ‘Stative’ verbless clauses

Stative verbless clauses may be headed either by adjectives or nouns. They are used (i) to predicate properties of topicalised subjects and (ii) as relative clauses. Relative clauses are the only means for using adjectives attributively within the NP. Stative verbless clauses do not occur outside of these constructions. There is some difficulty concerning analysis of concordial pronouns in stative verbless clauses, and this issue is discussed in (iii).

(i) Predicative use of stative verbless clauses

Stative verbless clauses generally have an NP referring to the subject of the clause in topic position (at the left periphery of the sentence; see also §18.1 on thematisation). A clause initial particle is often present and indicates the clause boundary. The coordinator *da* ‘and’ is particularly common in this position and seems to be conventionalised in this function.

Example (4.26) shows the adjective *aulul* ‘long, tall’ as the head of the predicate with a third person class III concordial pronoun agreeing with the topicalised masculine singular subject.

- (4.26) *Chēvicha* *da* *aululka*
 kēvi=ka *da* *aulul=ka*
 CONTR=M.SG.III and tall=3M.SG.III
 ‘That guy is tall.’

Example (4.27) shows the noun *chudichi* ‘rotten log’ used predicatively. When a noun is in predicative function the preposition *na* always introduces the class III concordial pronoun agreeing with the subject.³

- (4.27) *Mēnapka* *da* *sok* *chudichi* *nacha* *mamēr.*
 mēnap=ka *da* *sok* *a=kudi-ki* *na=ka* *mamēr*
 sleep.NI=3M.SG.III and really SPEC=rotten.log-F.SG PREP=3M.SG.III properly
 ‘He is sleeping like a rotten log.’ (lit: ‘He is sleeping and really he is a rotten log.’)

(ii) *Stative verbless clauses in relativisation*

Stative verbless clauses headed by a noun or an adjective can be relativised and appear as modifiers within an NP (see also §16.3–§16.6). Examples are provided in (4.28), containing an adjective, and (4.29), containing a noun. In attributive uses of nouns in relative clauses a prepositional phrase with a class III concordial pronoun is required.

- (4.28) *kama* *chulēski* *ama* *morki*
 kama *a=kulēs-ki* *ama* *mor=ki*
 ART₁ SPEC=smoke-F.SG REL₃ big=3F.SG.III
 ‘a huge (cloud of) smoke’
- (4.29) *chē* *laurka* *chērak* *ama* *unqiom* *nacha*
 kē *laur-ka* *chērak* *ama* *unqiom* *na=ka*
 ART₃ wind-M.SG EMPH.M.SG.CONTR.DEM REL₃ two.M PREP=3M.SG.III
 ‘the second wind’

(iii) *Ambiguity in the analysis*

Some syncretism exists between the class III concordial pronouns and the noun class markers, for example, the third person singular masculine and feminine class III pronouns (=ka and =ki) are identical to the masculine and feminine singular noun class markers (-ka and -ki). It can sometimes be difficult to distinguish the concordial pronoun from a noun class marker in verbless clauses headed by adjectives.

The issue is clearer with third person neuter subjects, because they do not take noun class marking. Clauses such as (4.30) and (4.31) show that pronominal agreement is possible but not necessarily required in these constructions. Both these relative clauses are headed by the count neutral noun *baul* ‘sarong(s)’ triggering zero noun class agreement in (4.30) and the class III third person neutral concordial pronoun *ngēt* in (4.31). Both are equally grammatical and speakers did not perceive a difference in meaning between them.

- (4.30) *Ki* *vlēk* *kama* *baul* *ama* *mēr.*
 ki *vlēk* *kama* *baul* *ama* *mēr*
 3F.SG.II like.NPRES ART₁ sarongs REL₃ good
 ‘She likes the beautiful sarongs.’

³ In (4.27) the preceding clause *mēnapka* ‘He is sleeping’ establishes the referent of the verbless clause headed by *chudichi* ‘rotten log’.

- (4.31) *Ki vlēk kama baul ama mēr ngēt.*
 ki vlēk kama baul ama mēr ngēt
 3F.SG.II like.NPRES ART₁ sarongs REL₃ good 3N.III
 ‘She likes the beautiful sarongs.’

C. Verbless clauses that do not require concordial pronouns

Finally, it should be noted that noun phrases may also function as independent utterances without requiring pronominal agreement. Example (4.32) shows a noun phrase containing the head noun plus a demonstrative. This was uttered as a warning that there was a senior woman in the vicinity and that the addressee’s behaviour should be modified.

- (4.32) *Amorki avaik!*
 a=mor-ki avaik
 SPEC=big-F.SG F.SG.DIST.DEM
 ‘There’s a senior woman over there.’

Relativised NPs may stand alone as attributive clauses. An example is provided in (4.33).

- (4.33) *Urēn’ga ama morka.*
 urēn-ka ama mor-ka/=ka
 prawn-M.SG REL₃ big-M.SG/=3M.SG.III
 ‘[That’s] a big prawn.’

Noun phrases can also be used attributively with topicalisation of the verbless clause subject. See (4.34) in which the complement is the NP *chama airas sēvanaska* ‘a liar’.

- (4.34) *Kēvicha dē chama airas.sēvanaska.*
 kēvi=ka da kama a=iras.sēvanas-ka
 CONTR=3M.SG.III and ART₁ SPEC=liar-M.SG
 ‘That guy is a liar.’

4.2 Tense marking system

This section describes the mechanisms for encoding tense in Mali. The majority of Mali verbs mutate to make a present/non-present or a present/past/future distinction. These mutations are discussed in §4.2.1. Tense is also encoded through the form of the A/S_A concordial pronoun which indicates a non-past/unmarked distinction. The correlations between tense, the form of the concordial pronoun, and the form of the verb are discussed in §4.2.2.

4.2.1 Tense marking on the verb

A large proportion of Mali verbs (almost 70%) encode tense through alternations in the initial consonant of the stem. There are three types of inflecting verbs. Type A inflecting verbs make a three way distinction for present, past and future. Types B and C make a binary distinction between present and non-present. Non-inflecting verbs make up a fourth class (Type D). The distribution of verbs into the four classes is based on a complex set of factors. There is a rough correlation between frequency and class membership as class A contains many of the highest frequency verbs.

Mali treats the past or non-present tense as formally unmarked for Type A and B verbs. For Type C verbs the present tense forms are treated as formally unmarked. Formally unmarked verbs (that is past tense Type A verbs, non-present tense Type B verbs, and present tense Type C verbs) are the basis of derivational operations. However, the citation forms⁴ of the verbs are always the present tense forms. Following this convention, present tense forms of the verbs are generally used in the discussion unless the tense of the verb is specifically relevant to the discussion at hand.

Although verb class membership is predictable in some cases (for example all verbs starting with [s] are Type D), it is not generally possible to predict the inflection class of the verb from its form. For example, although many verbs that begin with [m] in the past tense are Type A verbs there are also Type D verbs that begin with [m].

All Type A verbs make use of the same set of consonant changes involving an alveolar stop <t> or <d> in the present tense, a bilabial nasal <m> in the past tense and an alveolar approximant <th> in the future tense. Examples are given in Table 4.5. This pattern of inflection applies to some of the highest frequency verbs in Mali, for example: *tair* ‘stand’, *tas* ‘sleep, lie down’, *tat* ‘get’, *tēs* ‘eat’, *tet* ‘go’, *tu* ‘put’, and *tuchun* ‘sit’. Note that the stem initial alveolar stop in the present tense may be voiceless, as in the preceding examples, or it may be voiced as in *dang* ‘burn’, *dēm* ‘itch’, and *don* ‘go in’.

Table 4.5: Examples of Type A inflecting verbs

Present	Past	Future	Gloss
<i>dēn</i>	<i>muēn</i>	<i>thēn</i>	‘arrive’
<i>tes</i>	<i>mes</i>	<i>thes</i>	‘call, read’

Type B and C inflecting verbs involve pairs of alternations that indicate a present/non-present contrast. For Type B inflecting verbs a stop alternates with a fricative or approximant. This pattern includes examples where the bilabial stops <p> and alternate with bilabial fricative <v>; alveolar stops <t> and <d> with the approximant <th>; the alveolar approximant <th> with the trill <r>; velar stops <k> and <g> with fricative <ch>; and a handful of examples where the bilabial fricative <v> alternates with the labio-velar approximant <w>. Examples of Type B verbs are given in Table 4.6.

Table 4.6: Examples of Type B inflecting verbs

Present	Non-present	Gloss
<i>bang</i>	<i>vang</i>	‘run’
<i>prap</i>	<i>vrap</i>	‘fly’
<i>valing</i>	<i>waling</i>	‘turn’
<i>dong</i>	<i>thong</i>	‘turn’
<i>tēchen</i>	<i>thēchen</i>	‘groan’
<i>thoret</i>	<i>roret</i>	‘crawl’
<i>gum</i>	<i>chum</i>	‘cough’
<i>kēlep</i>	<i>chēlep</i>	‘feel embarrassed’

⁴ By citation form I mean the form that speakers offer in response to the question ‘How do you say ...’

Type C inflecting verbs mark the contrast between present and non-present tense by the addition or deletion of a segment in stem-initial position. In the first pattern, which applies to a few verbs beginning with alveolar nasals, laterals, or trills, the present is marked by the addition of the voiceless alveolar stop <t>. The second pattern applies to verbs beginning with the vowel <i>. In the present tense the initial vowel is deleted. These patterns are shown in Table 4.7.

Table 4.7: Examples of Type C inflecting verbs

Pattern 1		
Present	Non-present	Gloss
<i>tlu</i>	<i>lu</i>	‘see’
<i>tnok</i>	<i>nok</i>	‘cry’
<i>trong</i>	<i>rong</i>	‘stiff’
Pattern 2		
Present	Non-present	Gloss
<i>ngim</i>	<i>ingim</i>	‘search’
<i>ngip</i>	<i>ingip</i>	‘die’

At times the initial vowel in the non-present verb stem of pattern 2 forms is not overtly apparent. The final vowel of the class II concordial pronoun that is required in the future tense is identical with the initial vowel on the verb, and the latter is sometimes elided according to the rule in §3.4.2.D.i.

Type D verbs are non-inflecting, for example, *gamar* ‘fight’, *irēs* ‘be sad’, *kuiep* ‘shake’, *mangas* ‘fetch (water)’, and *ser* ‘tap’.

These different inflectional possibilities are glossed in the examples according to the following conventions:

- Type A verbs: *don* go.in.PRES, *mon* go.in.PAST, and *thon* go.in.FUT,
- Type B verbs: *don* thow.away.PRES, *thon* thow.away.NPRES,
- Type C verbs: *tlu* see.PRES, *lu* see.NPRES, and
- Type D verbs: (non-inflecting) *su* try.NI.

4.2.2 Coding tense through the verb and the concordial pronoun

The tense value of non-present verbs is resolved by the form of the concordial pronoun. These patterns are summarised in Table 4.8. The table also shows which concordial pronouns occur with Type D verbs, which do not inflect for tense. Like Type B and C verbs, Type D verbs use class I concordial pronouns in the past tense and class II pronouns for present and future tenses. As these verbs are non-inflecting, the present and future tenses are not formally distinguished.

Table 4.8: Concordial pronouns and verbs types according to tense

	Verb type			
	A	B	C	D
Present tense	class I	class II	class II	class II
Future tense	class I	class II	class II	class II
Past tense	class I	class I	class I	class I

Examples of tense marking showing the forms of the pronoun and the verb are provided in Table 4.9. These examples use the first person singular concordial pronouns *ngua* (class I) and *ngu* (class II). Example sentences with discussion follow this table.

The future tense is used in a range of irrealis contexts in Mali. Examples (4.37) and (4.40) use the future tense to refer to events that are hypothetical rather than future oriented whereas example (4.43) and (4.46) are both hypothetical and future oriented. Although this is to be expected in the future tense, it also reflects a more general tendency for a relatively loose correlation between time and tense marking in Mali. The contrast between past and present tense marking is also used to manage organisation within Mali discourse (§19.1).

Table 4.9: Examples of tense marking with pronoun and verb

	Verb type			
	A	B	C	D
Present tense	<i>ngua tet</i> 'I walk'	<i>ngu bang</i> 'I run'	<i>ngu tlu</i> 'I see'	<i>ngu su</i> 'I try'
Future tense	<i>ngua thet</i> 'I'll walk'	<i>ngu vang</i> 'I'll run'	<i>ngu lu</i> 'I'll see'	<i>ngu su</i> 'I'll try'
Past tense	<i>ngua met</i> 'I walked'	<i>ngua vang</i> 'I ran'	<i>ngua lu</i> 'I saw'	<i>ngua su</i> 'I tried'

As Table 4.9 shows, Type A verbs always take class I concordial pronouns. The tense of the clause is encoded by the initial consonant of the verb stem alone. Examples (4.35), (4.36), and (4.37) show the Type A verb *tain/main/thain* 'dance' in present, past, and future tense clauses respectively.

- (4.35) *Lēvopta tha tain dē chik.achik*
 lēvop-ta ta tain da achik=achik
 woman-H.PL 3H.PL.I dance.PRES and F.SG.CONTR.DEM=REDUP
- kia thēk atha viringgi.*
 kia thēk at=a viring-ki
 3F.SG.I wear.NPRES 3F.SG.POSS=SPEC apron-F.SG
 'The women dance and each one wears her apron.'

- (4.36) *Mēnap.mētki i sok mali chia main nēbangang.*
 mēnap.mēt=ki i sok mali kia main na=bangang
 sleep.NI=3F.SG.III because really earlier 3F.SG.I dance.PAST PREP=night
 ‘She slept because before she really danced all night.’
- (4.37) *Tha mu chama nēngur*
 ta mu kama nēngur
 3H.PL.I put.PAST ART₁ decorative.leaves
diva tha thain sēngēt.
 diva ta thain sa=ngēt
 PURP₃ 3H.PL.I dance.FUT with=3N.III
 ‘They put on the decorative leaves in order to dance with them.’

As Table 4.9 shows, tense distinctions for Type B and C verbs are determined through reference to both the form of the verb stem and the form of the concordial pronoun. Examples (4.38), (4.39) and (4.40) show the present, past and future forms of the Type B verb *tēk/thēk* ‘do, work, build’. In (4.39) and (4.40) the form of the verb is the non-present *thēk*, and it is the form of the pronoun that distinguishes between past and future readings.

- (4.38) *Dithik dok ut pe uthi tēk sēchi ...*
 da=ithik da=kok ut pe uthi tēk sa=ki
 and=ADV.PROX.DEM and=just 1PL.I there 1PL.II work.PRES with=3F.SG.III
 ‘So now we’re still working with it ...’
- (4.39) *Naruer peia cha muēn glan*
 naruer pe=ia ka muēn klan
 before there=REL₁ 3M.SG.I arrive.PAST only
dē tha thēk kama mbang.
 da ta thēk kama a=bang
 and 3H.PL.I build.NPRES ART₁ SPEC=house
 ‘At first when he came they built the houses.’
- (4.40) *Kē thēk klan daithik ia,*
 kē thēk klan ta=ithik ia
 3M.SG.II do.NPRES like EMPH=here REL₁
kē thēk anga mbangini.
 kē thēk anga bang-ini
 3M.SG.II build.NPRES NSPEC house-DIM.SG
 ‘This is what he’ll do, he will build a small hut.’

Examples (4.41), (4.42) and (4.43) show present, past and future clauses headed by the Type B verb *bang/vang* ‘run’. The form of the pronoun disambiguates the non-present readings of the verb.

- (4.41) *Lulen’gi chi bang nathēvit ma Ineska.*
 lulen-ki ki bang na=tē-vuit ma Ineska
 boat-F.SG 3F.SG.II run.PRES from=DER₂-up.TERM REL₂ PN
 ‘The boat runs from out there at Ineska.’

- (4.42) *Ia, chok kusek ma chēvingo ngua met taithik,*
 ia kok kusek ma kēvi=ngo ngua met ta=ithik
 yes just only ART₂ CONTR=1SG.III 1SG.I go.PAST EMPH=here

ngua vang.

ngua vang

1SG.I run.NPRES

‘Yes, it was only me who came here, I ran (away).’

- (4.43) *Ngo da vandi ngu vlēk ia ngu vang.*
 ngo da vandi ngu vlēk ia ngu vang
 1SG.III and DESID 1SG.II want.NPRES REL₁ 1SG.II run.NPRES
 ‘Me, I want to (try and) run (away).’

Examples (4.44), (4.45) and (4.46) show the present, past and future forms of the Type C verb *tlu/lu* ‘see’. As with Type B inflecting verbs, it is the form of the pronoun that disambiguates the non-present readings of the verb.

- (4.44) ... *da ngēni tlu ve ma chama ples.balus ...*
 da ngēni tlu pe ma kama ples.balus
 and 2PL.II see.PRES there REL₂ ART₁ airport
 ‘... you all see the airport there ...’

- (4.45) ... *dē kia lu da ngēmbēs nanga rutha.*
 da kia lu da angēmbēs na=anga ru-ta
 and 3F.SG.I see.NPRES and NEG PREP=NSPEC person-H.PL
 ‘... and she couldn’t see any people.’ (lit: ‘and she saw and there were not any people.’)

- (4.46) *Di ngi lu chama ivētki avaik ...*
 da ngi lu kama ivēt-ki avaik
 and 2SG.II see.NPRES ART₁ earth-F.SG F.SG.DIST.DEM
 ‘And you will see the earth, that one ...’

For Type B and C inflecting verbs, the form of the concordial pronoun disambiguates the two non-present tense readings of the verb. Thus, examples (4.39), (4.42), and (4.45), which are in the past tense, all use class I concordial pronouns; while examples (4.40), (4.43), and (4.46), which are in the future tense, use class II concordial pronouns. Note that class II concordial pronouns are also used with the present tense forms of Type B and C inflecting verbs (examples (4.38), (4.41), and (4.44)).

Whereas it is possible to disambiguate the non-present readings of transitive or active intransitive Type B and C verbs with reference to the concordial pronoun used with A/S_A arguments, this is not possible for stative intransitive Type B and C verbs, which have a single S_O argument. This is because stative intransitive verbs take a class III pronoun encoding the S_O argument. Other information must be used in order to assign tense to these verbs. Examples (4.47) and (4.48) show that in stative intransitive clauses the verb and pronoun pairing are identical, regardless of the (past or future) time orientation of the clause. The verb used in these examples is the Type B verb *kule/chule* ‘stay’.

- (4.47) *Mēt kama mundika avak mali ma cha met,*
 mēt kama mundik-ka avak mali ma ka met
 within ART₁ year-M.SG M.SG.DIST.DEM earlier REL₂ 3M.SG.I go.PAST

dē chule ngo ve ia Vunakanau.
 da chule ngo pe ia Vunakanau
 and stay.NPRES 1SG.III there REL₁ PN
 ‘Last year I stayed at Vunakanau.’

- (4.48) *Chusek ama moriom ini sunas dak vang*
 kusek ama mor-iom ini sunas dak avang
 only REL₃ big-M.DL 3DL.II learn.NI but CN.DIST.DEM

da chule ngēt va bang, mēndu ma mēndu
 da chule ngēt pa bang mēndu ma mēndu
 and stay.NPRES 3N.III LOC house before REL₂ before

ma angēbēs nanga dul.
 ma angēmbēs na=anga dul
 REL₂ NEG PREP=NSPEC money
 ‘The oldest two (will) go to school but the others (will have to)
 stay home because there is no money.’

Type D verbs, which do not inflect for tense, use class I concordial pronouns in the past tense and class II pronouns for the present and future tenses, like Type B and C verbs. As a result the present and future tenses are not formally distinguished for Type D verbs. An example of this ambiguity is given in (4.48) where the verb *sunas* ‘learn’ takes a class II concordial pronoun. Class II concordial pronouns can indicate either present or future readings. In this case the future reading was intended. Example (4.49) shows the same verb, *sunas*, with the class I concordial pronoun indicating past tense.

- (4.49) *Guangithong ma chia sunas tēmngēt veia sunaski,*
 guang=ithong ma kia sunas tēm=ngēt pe=ia sunas-ki
 thing-DIM.PL REL₂ 3F.SG.I learn THEME=3N.III there=REL₁ school-F.SG

sok chia mu ngēt mēt ath gēnēngachi.
 sok kia mu ngēt mēt at gēnēng-ki
 really 3F.SG.I put.PAST 3N.III within 3F.SG.POSS brain-F.SG
 ‘Things that she learnt at school are all kept in her brain.’
 (lit: ‘The things she learned at school, she really put them all in her brain.’)

5

Word classes

The purpose of this chapter is to introduce the word classes of Mali, characterise them briefly, and guide the reader to other parts of the grammar where more detailed discussion on various aspects of their use can be found.

The discussion in this chapter is organised around two types of word classes. Lexical word classes, that is, verbs, nouns, adjectives, adverbs, and ideophones are discussed in §5.1. Grammatical word classes are set out in §5.2. These include: prepositions, directionals, pronouns that may head an NP (which follow the noun class system), concordial pronouns and possessive pronouns (which follow the gender system), contrastive pronouns, demonstratives, determiners, markers of aspect and status, clause combining morphology, discourse markers, and interjections.

5.1 Lexical word classes

Lexical words in Mali have been identified on the basis of their semantic content and their ability to act as roots for words that head phrases. These forms include verbs (§5.1.1), nouns (§5.1.2), adjectives (§5.1.3), adverbs (§5.1.4) and ideophones (§5.1.5). Verbs and nouns form open classes. Adjectives, adverbs, and ideophones seem to be semi-closed classes as they do not readily allow new members.

As the discussion in §6.1 demonstrates in more detail, Mali clearly distinguishes word classes on the level of stems but not necessarily on the level of roots. For this reason, the focus in this section is on stems. The key criteria used to distinguish lexical word classes in Mali are whether the stem in question can:

- take specifier articles (these occur on nouns and adjectives),
- take noun class marking (nouns and adjectives),
- function as the head of an NP (determined by its ability to take an NP article; nouns only),
- mutate for tense (verbs only),
- head an intransitive predicate (determined by its ability to take concordial pronouns; verbs and adjectives), and
- function as subject complement in verbless clause (nouns and adjectives).

Derivational morphology is not a particularly useful diagnostic of word class in Mali since there is only limited use of derivational morphology to change the category of a root. A fair number of roots may occur in more than one class with appropriate marking (for

example the verb *donel/monel/thonel* ‘hunt’ and the noun *amonelka* ‘hunter’ {*a=monel-ka* SPEC=hunt.PAST-M.SG}, but the marking is not derivational *per se* and this use of past tense verbs as nouns is not productive. Derivational processes are discussed in §6 and the status of roots is considered in more detail there.

The most productive means of expanding the lexicon is through the use of prepositions to form morphologically complex verbs or nouns. For example, the verb *tor* ‘wash’ is a simple verb with an O that refers to the object being washed. It forms the complex verb *tor tēm* ‘swim’ {wash THEME} which optionally takes an NP referring to the location of swimming as a second argument. The count neutral noun *mambu* ‘song’ forms the noun *mambumētka* {*mambu-mēt-ka* song-within-M.SG} ‘singer’. The category of the word created in this process is determined by the inflectional marking it takes, rather than the category of the root. For example, the verb *tlu* ‘see’ forms the noun *tluvemka* {*tlu-pem-ka* see.PRES-in-M.SG} ‘watchman’. Thus, the formation of prepositional verbs and nouns does not assist in the definition of word classes; rather it raises interesting issues about the relationship between the ‘word’ and the ‘phrase’ or the ‘clause’. These issues will be explored in more detail in Chapter 6 on derivational processes and in Chapter 7 on prepositions.

Table 5.1 summarises the criteria used to distinguish between nouns, verbs, adjectives and adverbs in Mali. The properties of each of these classes are discussed in the following sections. Ideophones (§5.1.5) are not dealt with in Table 5.1 since they form roots but not stems.

Table 5.1: Properties of lexical word classes

Class	Verb	Adjective	Noun	Adverb
Take specifier articles ¹	N	Y	Y	N
Take noun class marking	N	Y	Y	N
Head of NP ²	N	N	Y	N
Mutate for tense	Y	N	N	N
Head of intransitive predicate ³	Y	Y	N	N
Subject complement in verbless clause	N	Y	Y	N

5.1.1 Verbs

Verbs head the predicate and are associated with concordial pronouns that cross-reference the person, number and gender of core grammatical arguments (§4.1). Most verbs show stem initial mutations for tense (§4.2). Verbs do not take any of the morphology associated with nouns (that is, specifier articles or noun class markers) and they may not function as the head of an NP. The corpus contains roughly 200 monomorphemic verbs and around 900 morphologically complex verbs (including prepositional verbs and verbs involving reduplication or compounding).

¹ Specifier articles are used to signal that the referent is salient and specific. They are discussed in §5.1.2.B and §10.4.

² Whether or not a stem functions as the head of an NP is determined by its ability to take an NP article.

³ Whether or not a stem functions as the head of the predicate is determined by its ability to take concordial pronouns.

Verbs may be classified in relation to the type of the tense marking mutations they show (A), and in relation to their transitivity (B). A small set of dummy verbs is presented in (C).

A. Mutation types

As described in §4.2, approximately seventy percent of Mali verbs indicate tense contrasts through stem initial mutations to the verb. There are two patterns among verbs that inflect for tense with stem initial mutations: Type A verbs show a three way split (present/past/future), while Type B and C verbs show a binary split (present/non-present). Type D verbs do not show tense marking.

B. Transitivity

For simple verbs it is possible to distinguish intransitive (active and stative) and transitive verbs. Three place predicates always require the use of prepositions to introduce the third argument, making the identification of ditransitive verbs problematic. The distinctions between intransitive (active and stative) and transitive verbs are based on the agreement patterns shown by concordial pronouns (see §4.1). Examples of each category (present tense equivalents) are listed below:

- i. active intransitive verbs (S_A V): *bang* ‘run’, *dang* ‘catch fire’, *gum* ‘cough’, *tusavus* ‘wiggle’, and *vanim* ‘roll’
- ii. stative intransitive verbs (S_O V): *bubu* ‘be dull in colour’, *disse* ‘faint’, *irēs* ‘feel sad’, and *mēnap* ‘sleep’
- iii. transitive verbs (A V O): *bias* ‘step on’, *don* ‘throw away’, *kēthep* ‘catch, grab’, *pais* ‘bind’, and *tal* ‘carry’.

O arguments may be ellipsed when mention of the O is redundant or where the identity of the O is not important. For example, the object is overtly mentioned in (5.1) but omitted in (5.2).

- (5.1) *Ngua tēs chama kalasunggi.*
 ngua tēs kama kalasung-ki
 1SG.I eat.PRES ART₁ sweet.potato-F.SG
 ‘I’m eating sweet potato.’

- (5.2) *Ngia tēs Ø dai asik aron nge.*
 ngia tēs Ø dai asik aron nge
 2SG.I eat.PRES Ø thus IRR satisfied 2SG.III
 ‘You eat so that you are satisfied.’

Other mono-morphemic verbs that frequently show this type of ellipsis include *drēm* ‘understand, know’, *tēt* ‘get’, and *tlu* ‘see’. Given that O arguments can be optional in context there is no evidence for the identification of ambitransitive $A = S_A$ verbs. A great many verb stems occur as the basis of prepositional verbs with changes in transitivity. These are illustrated in §7.4.

A small handful of verbs are ambitransitive $O = S_O$. Apart from the mono-morphemic *tēchēp* ‘be full (stative intransitive)’, ‘fill (transitive)’, all of these verbs are prepositional verbs (§7.4). The ambitransitive $S_A = O$ prepositional verbs identified in the corpus are: *lēr tēm* ‘break apart (stative intransitive)’, ‘tear (transitive)’; *pērēk mēt* ‘be torn (stative

intransitive)', 'rip (transitive)'; *suk dēm* 'fall down (stative intransitive)', 'forget (transitive)'; and *tar sē* 'fall out (stative intransitive)', 'pour out (transitive)'.

C. Dummy verbs

There are three dummy verbs in Mali. These verbs are used when the speaker cannot produce an appropriate verb because of retrieval problems or in order to avoid being more specific. Dummy verbs are glossed with the semantically underspecified English verbs 'make' and 'do' to indicate their transitivity and the grammatical gloss NSPEC or INDEF to indicate whether the hearer should be able to identify a particular kind of action. These verbs mutate for tense.

tichina do.NSPEC.PRES and *thichina* do.NSPEC.NPRES

tichina nē make.NSPEC.PRES and *thichina nē* make.NSPEC.NPRES

sana do.INDEF.NPAST (*mēsana* do.INDEF.PAST)⁴

The verb *sana* is also used in forming content questions (§15.3.2).

5.1.2 Nouns

Nouns head noun phrases (Chapter 10) and take noun class marking (Chapter 8). Nouns also take the specifier article in many contexts (§10.4). In some cases the application of the specifier article is only observable through the phonological processes it triggers (§3.4.1.A). Nouns may occur as copula complements.

A noun can be classified as a common noun or a proper noun (A). Common nouns can be further classified according to their relation to specifier articles (B). A set of dummy nouns is presented in (C). Section D notes stem alternations between noun class marked and unmarked forms. See Chapter 10 for more detailed discussion of nouns and the determiner system as a whole.

A. Proper nouns and common nouns

Proper nouns include forms such as *Namunas* (a girl's name) and address terms such as *Gumamēk* 'Dad'. Proper nouns are distinguished from common nouns because proper nouns do not take specifier articles or noun class marking. The relationship between noun class marking and proper nouns is discussed in more detail in §8.5 and §10.2.2.

B. Relation to specifier articles

The specifier article is a proclitic that generally cliticises to the head of the NP. Approximately one third of all common nouns have the specifier article as part of their citation form; for example, *arucha* 'man' {*a=ru-ka* SPEC=person-M.SG}.

Nouns whose stems begin in voiceless stops show the presence of the specifier as a stem initial mutation. That is, the specifier article *a=* is not overtly present on nouns beginning in /p/, /t/, /k/. Instead these stems show an initial mutation reflecting the phonological rule

⁴ The verb *sana* shows a fifth tense marking pattern—distinguishing a past tense verb with the prefix *mē-* from a non-past tense verb with no prefix. This pattern requires further checking to confirm that there is no distinct future form. For this reason it has not been included as a distinct verb type in the analysis presented here.

for intervocalic lenition described in §3.4.1.A. Thus, the noun *chēthopki* ‘pool’ is the surface form of {*a=kēthop-ki* SPEC=pool-F.SG}. The distribution of the specifier article is described in more detail in §10.4.

C. Dummy nouns

There are three forms that function as dummy nouns: the count neutral *gingēt* ‘whatnot.CN’, the masculine singular *gicha* ‘whatnot.M.SG’ (an abbreviated form of the masculine singular indefinite pronoun *agicha*) and the negator *angēmbēs* ‘nothing’. The use of the first two is quite limited. Examples (5.3) and (5.4) come from related episodes in the same text.

- (5.3) *Dē ngu donbathēm.nangēt ia sik ngua lu*
 da ngu donbathēm.na=ngēt ia asik ngua lu
 and 1SG.II check.PRES=3N.III REL₁ IRR 1SG.I see.NPRES
angama basiochi ura sik ngua lu
 angama basio-ki ura asik ngua lu
 INDEF crocodile-F.SG or IRR 1SG.I see.NPRES
ama gingēt ta.ithang da.ithik.
 ama gingēt ta=ithang ta=ithik
 REL₃ whatnot.CN EMPH=CN.PROX.DEM EMPH=here
 ‘And I checked them closely because maybe I saw a crocodile or
 maybe I saw some other particular whatnot.’
- (5.4) *Ngua thongmēs mēthik ma choi ngua ingim*
 ngua thongmēs mēthik ma koi ngua ingim
 1SG.I turn.NPRES aside REL₂ NEG 1SG.I look.NPRES
mamēr ia nga gicha vachēvak.
 mamēr ia anga gicha pachēvak
 properly REL₁ NSPEC whatnot.M.SG EMPH.M.SG.DIST.DEM
 ‘I turned myself around without properly seeing what it was.’

The negative dummy noun *angēmbēs* (§15.2) is made up of the non-specific NP article *anga* and the flat singular noun class marker *-vēs*. This noun class is used to form abstract nouns.

D. Stem alternations between singular and unmarked/plural forms

In Mali, singular and dual are marked numbers. A distinctive characteristic of the class of nouns in Mali is the fact that some nouns have stem alternations triggered by the presence of noun class marking. While most unmarked nouns have forms identical to the stem of a noun class marked singular form, a small number of nouns have different forms when the noun class marking is absent. For example, the noun *chuar* {*a=kaur* SPEC=vein} ‘vein(s)’ has the singular form *churacha* {*a=kur-ka* SPEC=vein-M.SG} ‘(one) vein’.⁵

⁵ The <a> between the stem and the noun class marker is epenthetic.

5.1.3 Adjectives

To date, almost eighty adjectives have been identified in Mali, covering the semantic classes of: DIMENSION *alel* ‘small’, AGE *aicheru* ‘new’, VALUE *amēr* ‘good’, COLOUR *airiar* ‘green’ (although a few COLOUR terms are nouns, see §10.2.1), and PHYSICAL PROPERTY *athavēr* ‘wide’. More PHYSICAL PROPERTY terms are in the verb class (for example, *aisvēt* ‘wet’). Most HUMAN PROPENSITY terms are prepositional verbs (for example, *amēr pēt* ‘happy’) but the terms *guanguamo* ‘greedy’ and *irit* ‘unlucky’ are adjectives. Terms describing SPEED are adverbs. QUANTIFIERS and the NUMBERS ‘one’ to ‘three’ are also adjectives (see (F) below).

Adjectives share a number of distributional and inflectional properties with both nouns and verbs. Like verbs, adjectives may head an intransitive predicate, taking pronominal agreement marking (A). Also like verbs, adjectives may not head an NP (B). Like nouns, adjectives may take the specifier article (C) and/or noun class marking (D), can function as a subject complement in a verbless clause (E), and do not mutate for tense. Because of these similarities, it would be possible to assign adjectives to either the noun or verb classes as somewhat defective or specialised members. The only unique characteristic of adjectives is the tendency for reduplication of the root to encode intensification.

The properties outlined above (summarised in Table 5.1) suggest that, on the whole, adjectives have more in common with nouns than verbs. A crucial difference between adjectives and nouns is the fact that adjectives take noun class marking in agreement with the entity they refer to rather than having inherent noun class. For this reason I identify a separate class of adjectives in Mali.

A. Adjectives may head intransitive predicates

When adjectives function as the head of an intransitive predicate they follow the stative verb pattern and take a class III concordial pronoun to cross-reference the subject. An example is given in (5.5).

- (5.5) *Aila cha lu dē amēr ngēt.*
 a=ila ka lu da a=mēr ngēt
 SPEC=image 3M.SG.I see.NPRES and SPEC=good 3N.III
 ‘The pictures he saw, they were beautiful.’

B. Adjectives may not head an NP

Many adjectives share the same form as nouns that refer to abstract concepts or to people with particular properties. These two functions are associated with distinct lexemes. The meaning of the noun is not always predictable from the meaning of the corresponding adjective stem. For example, the adjective *achērot* ‘strong’ is related to the abstract noun *achērot* ‘power’ while the adjective *amēr* ‘good’ is related to the concrete noun *amēr* ‘good thing’, which has a range of related terms that are derived using noun class markers: for example, as *amērta* {*a=mēr-ta* SPEC=good-H.PL} ‘good people’. Examples are provided in (5.6) and (5.7). In (5.6) the adjective *chabapka* functions as a modifier to the head noun *achun’ga* ‘sand’ while in (5.7) the noun *chabapta* {*chabap-ta* white-H.PL} ‘white people’ functions as the head of the A NP in the underlined clause.

- (5.6) *Achun’ga ma chabapka da mērka.*
 a=chun-ka ma chabap-ka da mēr-ka
 SPEC=sand-M.SG REL₂ white-M.SG and good-M.SG
 ‘White sand is nice.’
- (5.7) *Athinēm krang ama mor,*
 a=thinēm krang ama mor
 SPEC=fish CN.CONTR.DEM REL₃ big
- ama chabapta tha tes nget ia weil.*
 ama chabap-ta ta tes nget ia weil
 REL₃ white.people-H.PL 3H.PL.I call.PRES 3N.III REL₁ whale
 ‘Those large fish that the white people call whales.’

C. Adjectives take specifier articles

Adjectives in Mali typically occur with the specifier article *a=*, for example, *alel* {*a=l* SPEC=small}. There is at least one stem that, like a noun, shows stem initial lenition rather than prefixation when the specifier article is present: *kacham* ‘be.empty’ (verb) *chacham* {*a=kacham* SPEC=empty} ‘empty’ (adjective). In connected speech, the specifier article may not be present due to elision where the preceding word ends with an [a], (§3.4.2.D.i). This is the case in (5.8). Where the specifier article is not overtly present in the clause it is also omitted from the glossing line. Example (5.9) shows the same stem *iriar* ‘green’ with the specifier article overtly present, representing more careful speech.

- (5.8) *Tēlēng ma iriar ta.ithang.*⁶
 tēlēng ma iriar ta=ithang
 leaves REL₂ green EMPH=CN.PROX.DEM
 ‘There are green leaves here.’
- (5.9) *Tlēngbēs avēvēs da airiar ngas.*
 tēlēng=vēs avēvēs da a=iriar ngas
 leaf=FLAT.SG FLAT.SG.DIST.DEM and SPEC=green FLAT.SG
 ‘That leaf is green.’

D. Adjectives may take noun class marking

Adjectives take noun class marking to agree with the head noun. For example, in (5.10), both the head noun *urēn’ga* {*urēn-ga* prawn-M.SG} ‘prawn’ and the adjective *morka* {*mor-ka* big-M.SG} take the masculine singular noun class marker *-ka*.

- (5.10) *Urēn’ga ama morka.*
 urēn-ka ama mor-ka
 prawn-M.SG REL₃ big-M.SG
 ‘(That’s a) big prawn.’

⁶ There is no verb *iriar* ‘be green’ in Mali, this clause is a verbless clause with an adjective phrase functioning as the subject complement. This type of structure was described in §4.1.5.C, example (4.34). The verb associated with this adjective is *airiarvēs vēt* ‘be greenish’.

E. Adjectives may function as a complement in a verbless clause

I have treated examples such as (5.10) as cases in which the adjective is the complement in a verbless clause (see also §4.1.5 on types of verbless clauses). A further example is given in (5.11). In this case, the specifier article and the noun class marking on the stem indicate that *amorini* is an adjective rather than a verb.

- (5.11) *Ngia oemini sok amorini.*
 ngia oem-ini sok a=mor-ini
 2SG.POSS baby-DIM.SG really SPEC=big-DIM.SG
 ‘Your baby is really big.’

F. Quantifiers and the numerals ‘one’, ‘two’, and ‘three’

The numerals ‘one’, ‘two’, and ‘three’ behave like adjectives, occurring in modifier position in NPs and agreeing with the noun class of the entity they describe. The forms of these inflected numerals are not fully segmentable and are not segmented in the glossing in this grammar (see Table 9.1 in §9.2 for the full paradigm). An example of the ‘flat’ singular form of the numeral one *asēgēvēs* is given in (5.12).

- (5.12) *Kama pepavēs ma asēgēvēs ngē ve.*
 kama pepa-vēs ma asēgēvēs ngē pe
 ART₁ paper-FLAT.SG REL₂ one.FLAT 3N.I there
 ‘There is one piece of paper there.’

All numerals over three are complex expressions involving nouns. The Mali counting system is quinary with a secondary system of base twenty for higher numerals (see §9.2 for details). The numerals *angēthikpet da aungiom* ‘seven’ is shown in (5.13) as a modifier to the noun *oes* ‘children’. The numeral *aungiom* ‘two’ in this expression is in the masculine noun class as this class is functionally unmarked (see §8.6.2).

- (5.13) *In dal ainoes ama*
 in tal ain=oes ama
 3DL.I carry.PRES 3DL.POSS=children REL₃

angēthikpet da aungiom chēlan.
 angēt=tik-vet da aungiom klan
 3N.POSS=hand-LONG.SG and two.M only
 ‘They have seven children altogether.’

When the numerals ‘one’, ‘two’, and ‘three’ are used to refer to ordinal values they behave like nouns and take prepositional phrase complements containing pronouns (see §9.3).

- (5.14) ... *sa ngian.bētchē laurka chērak*
 sa ngia=thēn=pēt=kē laur-ka chērak
 NEF 2SG.I=arrive.FUT=at=ART₃ wind-M.SG EMPH.M.SG.CONTR.DEM

ama ungiom nacha.
 ama ungiom na=ka
 REL₃ two.M PREP=3.M.SG.III
 ‘... then you will reach the second wind.’

Two quantifiers in Mali, *chēndichēn* ‘many’ and *alilu* ‘many’ (the latter from the Abilta dialect only), are marginal members of the adjective class. These two words show the same distribution as adjectives as they can be modifiers in NPs (5.15) and predicates in verbless clauses. However, they do not inflect for the noun class of the stem. At times they take prepositional phrase complements containing pronouns, behaving like nouns (5.16). In such cases, the quantifiers could alternately be analysed as marginal examples of count neuter nouns.

- (5.15) *Dak uthi chuar ia mēndik ama chēndichēn ngē met.*
 dak uthi chuar ia mundik ama chēndichēn ngē met
 but 1PL.II say.NPRES REL₁ years REL₃ many 3N.I go.PAST
 ‘But we say that many years went by.’

- (5.16) *Kama sospenvap da achēdichēn nēngavap.*
 kama sospen-vap da achēdichēn na=ngavap.
 ART₁ saucepan-RCD.PL and many PREP=RCD.PL
 ‘There are a lot of little saucepans.’

5.1.4 Adverbs

A great many adverbs in Mali begin with the syllable *ma*. Although this does not seem to represent a productive process synchronically, the identity of this morpheme is likely to have been the relator *ma*. See §6.4 for further discussion. Two types of adverbs have been identified in Mali. Firstly, clause level adverbs encode temporal distinctions and occur at the periphery of the sentence (§14.1 and §18.1). This is the same distribution as other expressions of time and location such as the prepositional phrase *nēp bangang* ‘at night’ (§7.3). Clause level adverbs include: *mathēchasep* ‘in the morning’, *maulul* ‘a long time’, *mēchēvēs* ‘sometimes, once’, *mērmēr* ‘always’, *milani* ‘yesterday’, *mubang* ‘tomorrow’, *nasot* ‘later’, and *naruer* ‘firstly, before’. These adverbs are discussed in more detail in §14.1. An example containing the temporal adverb *mathēchasep* in the topic slot is provided in (5.17).

- (5.17) *Auk, sa mathēchasep sa in mungun mēt kama kanucha ...*
 auk sa mathēchasep sa in mugun mēt kama kanu-ka
 well NEF in.the.morning NEF 3DL.I sit.PAST within ART₁ canoe-M.SG
 ‘Well, so in the morning they sat in the canoe ...’

Secondly, manner adverbs modify the predicate and occur in predicate final position. They are discussed in more detail in §13.2. Manner adverbs in Mali include: *machēlak* ‘a little bit’, *mailu* ‘maybe, possibly’, *maru* ‘really, at all’, *masa* ‘too much’, *mavo* ‘badly’, *mo* ‘all, completely’, *ngis* ‘apart’, *sa* ‘for a while’, *sdamēr* ‘directly, correctly’, and *sravo* ‘in surprise’ (see §13.2 for a complete list). A handful of manner adverbs with more epistemic meanings also occur in clause initial position as discourse markers (see §5.2.10.B and §14.2.2). An example containing the adverb *mavo* ‘badly’ in predicate final position is provided in (5.18).

- (5.18) *Koiku ngaiom ina tluna mavo ...*
 koiku ngaiom ini=na tlu=na mavo
 NEG M.DL 3DL.II=IRR.FOC see.PRES=RECIP badly
 ‘The two of them did not get cross (lit: see each other badly) ...’

5.1.5 Ideophones

Ideophones convey impressions of sensory experiences. One set of ideophones is based on auditory experiences and used to form onomatopoeic roots that are reduplicated and take additional morphology in order to function as nouns and verbs. These roots include: *vong* ‘whir’, *dēl* ‘ring’, *kēlē* ‘squawk, rattle’, and *tēbut* ‘stamp (of feet)’. In some cases the resulting word refers specifically to a sound: *dēldēl* ‘ringing’, *kēlērkēlē* ‘squawking’, and *tēbut tēbut* ‘stomping’. In other cases the resulting word refers to a species of animal: *avongavongacha* ‘orange and black wasp’, *chētikkētika* ‘grasshopper species’, *dingdingga* ‘bird species’).

A second smaller set of ideophones are descriptive of physical characteristics. These may function as verbs or are reduplicated and take additional morphology in order to form adjectives. These include: *bing* ‘bend, curve’, *pis* ‘swell’.

Inherently reduplicated stems that seem to have an ideophonic basis include: the verbs *kiskisa* ‘sneeze’, *pētpēt na* ‘fall, scatter’; the noun *vungbungga*, which refers to a type of firedancer; and the adjectives *adēdēn* ‘odd, crazy, delirious’, *adedēr* ‘tight’, and *adildil* ‘dried up’.

See §6.2 on reduplication and §7.4.2 on the construction of prepositional verbs based on onomatopoeic roots.

5.2 Minor word classes

This section describes the minor word classes in Mali. These classes are generally organised into paradigms and/or express more abstract meanings relating to grammatical or discourse relations.

The grammatical word classes are presented as follows: §5.2.1 prepositions, §5.2.2 directionals, §5.2.3 pronouns that may head an NP and follow the noun class system, §5.2.4 concordial pronouns and possessive pronouns which follow the gender system, §5.2.5 contrastive pronouns and pronouns occurring in the topic position, §5.2.6 demonstratives, §5.2.7 determiners, §5.2.8 markers of aspect and status, §5.2.9 clause combining morphology, §5.2.10 discourse markers, and §5.2.11 interjections.

5.2.1 Prepositions

Prepositional phrases occur at the periphery of the clause or within an NP (see Chapter 7 and §10.6). Prepositions take NPs and directionals as complements. At clause level prepositional phrases express temporal relations and locations. Within the NP prepositional phrases introduce location terms. Prepositions also have an important role in derivational processes in Mali (§7.4–§7.5).

Mali uses both simple and morphologically complex prepositions. Morphologically simple prepositions form clitic groups with an article, if one is present, or with a pronoun. Complex prepositions are generally independent phonological words.

The following simple prepositions may be used independently taking NP arguments: *daer* ‘over’, *gēl* ‘with’, *gēlē* ‘near’, *mēni* ‘on’, *mēt* ‘within’, *na* ‘from, PREP’, *nani(a)* ‘for’, *pa* ‘LOC, BEN’, *pēm* ‘in’, *pēt* ‘at’, *sa* ‘to, with’, *sēng* ‘at the bottom of’, and *tēm* ‘THEME, GOAL, PATH’. Each simple preposition is discussed in §7.1 with reference to topological relations and meanings associated with motion and thematic roles, as well as metaphorical extensions where these are relevant. An example of the preposition *mēt* ‘within’ describing the location of an action in clause final position is provided in (5.19).

- (5.19) ... *chia* *thu* *ngēt* *mēt* *kama* *auratki*...
 kia *thu* *ngēt* *mēt* *kama* *a=urat-ki*
 3F.SG.I put.FUT 3N.III within ART₁ SPEC=basket-F.SG
 ‘... she puts it in the basket...’

Complex prepositions are generally compounds formed with the preposition *sa* or *na* in first position and a second preposition in final position. In these compounds the vowel in the first preposition is reduced to <ē> (see §3.4.2.A). Prepositions that can occur in final position are: *gēl* ‘with’, *gēlē* ‘near’, *mēni* ‘on’, *mēt* ‘within’, *pa* ‘LOC, BEN’, *pem* ‘in’, *pēt* ‘at’, and *tēm* ‘THEME, GOAL, PATH’. For example, the preposition *sa* ‘to’ also forms: *sagēl* ‘towards’ {*sa=gēl* to=with}, *sagēlē* ‘close by’ {*sa=gēlē* to=near}, *sēmēt* ‘into’ {*sa=mēt* to=within}, *sēthem* ‘to, with’ {*sa=tēm* to=GOAL}, *sēvem* ‘over to’ {*sa=pem* to=in}, and *sēvēt* ‘about’ {*sa=vēt* to=at}. Similar forms occur with the preposition *na* in first position. The prepositions *mēt* ‘within’ and *pa* ‘LOC, BEN’ may also occur in initial position but with a much more limited distribution. This is discussed in more detail in §7.2.1.

An example of the complex preposition *sēvēt* {*sa=pēt* to=at} ‘about’ is shown in (5.20). This example also contains the simple preposition *pem* ‘in’ introducing the goal of the movement.

- (5.20) *Amusnēng* *ngē* *mēn* *vemga* *sēvēt* *kama* *Siapan’ga* ...
 a=musnēng *ngē* *muēn* *pem-ka* *sa=pēt* *kama* *Siapan-ka*
 SPEC=idea 3N.I arrive.PAST in=3M.SG.III to=at ART₁ japanese-M.SG
 ‘An idea came to him about the Japanese man ...’

5.2.2 Directionals

Directionals are discussed in detail in Chapter 12. Directionals are usually clause final, and thus have a similar distribution to prepositional phrases and adverbial demonstratives that express location. Directionals differ from prepositions in not taking NP complements.

Directionals occur in a paradigm based on orientation, involving the vertical ‘up’ and ‘down’ and horizontal ‘across’ axes encoding and the type of relation involved (abstract, landform, terminal end point, general direction). The twelve basic directionals are organised in Table 5.2. The first two rows represent the vertical and landform axes respectively. The final two rows show terms that conflate these two axes and contrast terms with implicit terminal end points with those with no implicit terminal end point. The glosses listed in the table represent the core meanings of these terms. Further information is provided in §12.1.

Table 5.2: Organisation of directionals in Mali

Meaning	Lower on the axis	Higher on the axis	Across the axis
abstract	<i>mēk</i> ‘down’	<i>vuk</i> ‘up’	<i>muk</i> ‘across’
a place related to landform	<i>mano</i> ‘down slope’	<i>vono</i> ‘up slope’	<i>mono</i> ‘across slope’
a terminal end point	<i>manēp</i> ‘down.TERM’	<i>vuit</i> ‘up.TERM’	<i>muīt</i> ‘across.TERM’
a general direction	<i>mani</i> ‘downwards’	<i>vui</i> ‘upwards’	<i>mui</i> ‘sideways’

There is a good deal of semantic complexity in the way the class is organised. Like many other languages in the region, Mali makes use of the landscape in its system of spatial reference. It also makes reference to more abstract spatial relations (the vertical and

horizontal axes). This class includes both morphologically simple and complex forms. There are twelve basic directionals in addition to more than seventy complex forms involving the prepositions *sa* and *na* as well as derivational prefixes that provide more nuanced information about direction or location.

Example (5.21) shows the simple directional *muk* ‘across’ referring to the space within a boat. This example also illustrates a typical strategy in Mali discourse in which directionals and prepositional phrases are deployed in tandem in characterising the spatial characteristics of an event.

- (5.21) *Laurka uthi tor muk mēchama lulen’gi.*
 laur-ka uthi tor muk mēt=kama lulen-ki
 wind-M.SG 1PL.II wash.PRES across within=ART₁ boat-F.SG
 ‘Wind, we got wet in the boat.’

5.2.3 Pronouns heading an NP

There are three series of pronouns that may head an NP: (A) anaphoric pronouns, (B) interrogative pronouns, and (C) indefinite pronouns. Each series follows the noun class system and distinguishes three numbers (singular, dual, and plural). See also §5.2.5 on the use of anaphoric pronouns and contrastive pronouns in topic position.

A. Anaphoric pronouns

Anaphoric pronouns are optionally used to refer to established entities. They appear in topic position when indexing an argument in A/S_A function and in the post-verbal position when indexing an O/S_O argument (§4.1.3). The anaphoric pronouns are shown in Table 5.3. They also have reduced forms, shown in Table 5.4.

Table 5.3: Anaphoric pronouns in Mali

Class	Singular	Dual	Plural
Masculine (M)	<i>ka</i>	<i>ngaiom</i>	<i>ta</i> (H) or <i>ngēt</i> (NH)
Feminine (F)	<i>ki</i>	<i>ngavem</i>	<i>ngēt</i>
Diminutive (DIM)	<i>ngini</i>	<i>ngithom</i>	<i>ngithong</i>
Reduced (RCD)	<i>ngam</i>	<i>ngavam</i>	<i>ngavap</i>
Flat (FLAT)	<i>ngaves</i>	<i>ngimelēm</i>	<i>ngimelēk</i>
Excised (EXC)	<i>ngigl</i>	<i>ngiglem</i>	<i>ngigleng</i>
Long (LONG)	<i>ngavet</i>	<i>ngisem</i>	<i>ngiseng</i>
Extended (EXT)	<i>ngait</i>	<i>nginēm</i>	<i>nginēk</i>
Count Neutral (CN)	<i>ngēt</i>		

The paradigms for anaphoric pronouns share a number of forms with the third person class III concordial pronouns (shown in Table 4.3, repeated below as Table 5.8). Identical forms include: masculine and feminine third person singular pronouns (-)*ka* and (-)*ki*, and the human plural (-)*ta*, and the masculine non-human plural anaphoric pronoun *ngēt*, which is identical to the count neutral third person class III pronoun.

Table 5.4: Abbreviated anaphoric pronouns in Mali

Class	Singular	Dual	Plural
Masculine (M)	<i>ka</i>	<i>iom</i>	<i>ta</i> (H) or <i>ngēt</i> (NH)
Feminine (F)	<i>ki</i>	<i>vem</i>	<i>ngēt</i>
Diminutive (DIM)	<i>ini</i>	<i>ithom</i>	<i>ithong</i>
Reduced (RCD)	<i>chēs</i>	<i>vam</i>	<i>vap</i>
Flat (FLAT)	<i>ves</i>	<i>imelēm</i>	<i>imelēk</i>
Excised (EXC)	<i>igl</i>	<i>iglem</i>	<i>igleng</i>
Long (LONG)	<i>vet</i>	<i>isem</i>	<i>iseng</i>
Extended (EXT)	<i>chit</i>	<i>inēm</i>	<i>inēk</i>
Count Neutral (CN)	<i>ngēt</i>		

Further research into discourse patterns is required in order to explore the distribution and semantics of the anaphoric pronouns particularly in comparison with their abbreviated counterparts. The abbreviated anaphoric pronouns are similar in form to the noun class markers. They are encliticised to a preceding stem. Compare the full anaphoric pronoun *ngavam* in (5.22) with the abbreviated form *vam* in (5.23).

- (5.22) *Chalunbam* *ta.ithēvam* *da*
a=kalun-vam ta=ithēvam da
SPEC=singapore.taro-RCD.DL EMPH=RCD.DL.PROX.DEM and
mor ngavam.
mor ngavam
big RCD.DL
‘Those two short singapore taros are big.’
- (5.23) *Chalunbam* *ta.ithēvam* *da morvam.*
a=kalun-vam ta=ithēvam da mor=vam
SPEC=singapore.taro-RCD.DL EMPH=RCD.DL.PROX.DEM and big=RCD.DL
‘Those two short singapore taros are big.’

The =*vam* in (5.23) could also be taken to be a noun class marker. It is definitely not a concordial pronoun marking agreement in a verbal clause because a plural non-human S_O argument would be indexed by the class III concordial pronoun *nqēt* 3N, as in (5.24).

- (5.24) *Chalunbam* *ta.ithēvam*
a-kalun-vam ta=ithēvam
SPEC-singapore.taro-RCD.DL EMPH=RCD.DL.PROX.DEM
da mor ngēt.
da mor ngēt
and big 3N.III
‘Those two short singapore taros are big.’

Finally, the anaphoric pronouns may form contrastive pronouns with the proclitic *kēvi*=. This is discussed in §5.2.5.

B. Interrogative pronouns

Interrogative pronouns occur in place of a full NP and refer to a human entity. Non-human referents are questioned using the indefinite pronouns discussed in (C) below. The use of interrogative pronouns in forming content questions is described in §15.3.2. Table 5.5 shows all the possible interrogative pronouns in Mali. There are some restrictions on how the size- and shape-based noun classes can apply to human referents (§8.3.3). Forms that may only be used in joking contexts are indicated with an asterisk <*>. There is also an unmarked form *nēma*, used in contexts in which the noun class of the entity is not known.

Table 5.5: Interrogative pronouns for human referents

Person/Gender	Singular	Dual	Plural
Masculine (M)	<i>nēmga</i>	<i>nēmiom</i>	<i>nēmda</i>
Feminine (F)	<i>nēmgi</i>	<i>nēmbem</i>	
Diminutive (DIM)	<i>nēmini</i>	<i>nēmithom</i>	<i>nēmithong</i>
Reduced (RCD)	<i>nēmbem*</i>	<i>nēmbam*</i>	<i>nēmbap</i>
Excised (EXC)	<i>nēmigl*</i>	<i>nēmilem*</i>	<i>nēmigleng*</i>
Long (LONG)	-	<i>nēmisem*</i>	<i>nēmiseng*</i>
Extended (EXT)	<i>nēmachit*</i>	<i>nēminem*</i>	<i>nēminek*</i>

Note that there are no examples of the ‘flat’ noun class in this paradigm, and there is no ‘long’ singular form. The ‘diminutive’ forms apply to people of either sex and refer to children or to small figures in the distance. The ‘reduced’ forms also refer to people of either sex. The ‘excised’ forms may only refer to women, while the ‘long’ and ‘extended’ forms only refer to men.

The feminine singular interrogative personal pronoun *nēmgi* is shown in (5.25). (See also examples (8.1) and (8.2) in §8.3.3.)

- (5.25) *Ma nēmgi chia mēs guanot?*
 ma nēmgi kia mēs gu=a=not
 ART₂ who.F.SG 3F.SG.I eat.PAST 1SG.POSS=SPEC=taro
 ‘Who ate my taro?’

Possession is questioned using the interrogative pronoun stem *nēm(a)* with a possessive pronoun. The unmarked form is *nēmav* {*nēma*=*av* ‘who=3M.SG.POSS’} but there is also a more explicit set that reflects gender distinctions. These are presented in §11.3.4.

C. Indefinite pronouns

Indefinite pronouns are found in interrogative, negative, and other indefinite contexts. The indefinite pronouns follow the noun class system. They are set out in Table 5.6. The contrast in the human plural indefinite pronouns is between a non-specific indefinite pronoun (*agitha*) and a specific indefinite pronoun (*athē*). The prenasalised stop is often represented as a nasal followed by a stop reflecting the observation that the nasal portion of a prenasalised stop often occurs as the final consonant in the preceding syllable if the syllable is open (see also §3.1.1). For example, *agicha* and *anggicha* are both possible pronunciations of the masculine singular indefinite pronoun.

Table 5.6: Indefinite pronouns in Mali

Class	Singular	Dual	Plural
Masculine (M)	<i>agicha</i>	<i>agiom</i>	<i>agitha, athē</i> (H) <i>agit</i> (NH)
Feminine (F)	<i>agichi</i>	<i>agivem</i>	<i>agitha, athē</i> (H) <i>agit</i> (NH)
Diminutive (DIM)	<i>agini</i>	<i>agithom</i>	<i>agithong</i>
Reduced (RCD)	<i>agigl</i>	<i>agiglem</i>	<i>agigleng</i>
Flat (FLAT)	<i>agives</i>	<i>agimelēm</i>	<i>agimelēk</i>
Excised (EXC)	<i>agichēm</i>	<i>agivam</i>	<i>agivap</i>
Long (LONG)	<i>agivet</i>	<i>agisem</i>	<i>agiseng</i>
Extended (EXT)	<i>agiit</i>	<i>aginēm</i>	<i>aginēk</i>
Count Neutral (CN)	<i>agit</i>		

Example (5.26) shows the indefinite masculine singular pronoun *agicha* in an interrogative context.

- (5.26) *Agicha cha thap ava lēchar?*
agicha ka thap av=a lēchar
 M.SG.NSPEC 3M.SG.I cut.NPRES 3M.SG.POSS=SPEC leg
 ‘Which one cut his leg?’

A negative clause containing the diminutive dual indefinite pronoun *agithom* is shown in (5.27).

- (5.27) *Kusek kama senithom in ve mēt kama thalga*
kusek kama sen-ithom in pe mēt kama thal-ka
 only ART₁ knife-DIM.DL 3DL.I there within ART₁ bilum-M.SG
da ngēmbēs na agithom muk.
da angēmbēs na agithom muk
 and NEG PREP DIM.DL.NSPEC across
 ‘Only two knives are in the bilum and nothing else.
 (lit: ... and not any other two small things.)’

The count neutral indefinite pronoun *agit* is shown in a non-specific context in (5.28).

- (5.28) *Chok mange vathēm.mēs ia ngiat agit.*
kok ma=nge pa=tēm=mēs ia ngi=that agit
 just REL₂=2SG.III LOC=PATH=REFL REL₁ 2SG.II=get.FUT CN.NSPEC
 ‘Just according to your choice you’ll get something.’

5.2.4 Concordial, associative and possessive pronouns

This section describes two basic pronoun paradigms that take gender marking rather than noun class marking: the concordial pronouns and the possessive pronouns. The concordial pronouns (A) form the basis for two further series of pronouns: associative pronouns (B) and pronouns occurring in the topic slot which may be marked for contrastive reference (see §5.2.5). The basic possessive pronoun paradigm is presented in (C). Note that there are several other paradigms of specialised possessive pronouns deriving from this series that are described in §11.3–§11.4.

The concordial pronouns and the possessive pronouns all follow the gender system in Mali and distinguish three numbers (singular, dual, and plural). As discussed in §3.7, both concordial and possessive pronouns may be cliticised to neighbouring forms.

A. Concordial pronouns

The class I, II and III concordial pronouns were introduced in §4.1.3. See Tables 4.1–4.3. For easy reference the class II and III concordial pronouns are repeated here as Tables 5.7 and 5.8.

Table 5.7: Class II concordial pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>ngu</i>	<i>uni</i>	<i>uthi</i>	
2	<i>ngi</i>	<i>ini</i>	<i>ngēni</i>	
			Human	Non-human
3M	<i>kē</i>	<i>ini</i>	<i>ti</i>	<i>ngēthi</i>
3F	<i>ki</i>	<i>ini</i>	<i>ti</i>	<i>ngēthi</i>
3N	<i>ngēthi</i>			

Table 5.8: Class III concordial pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>ngo</i>	<i>un</i>	<i>ut</i>	
2	<i>nge</i>	<i>en</i>	<i>ngēn</i>	
			Human	Non-human
3M	<i>ka</i>	-	<i>ta</i>	<i>ngēt</i>
3F	<i>ki</i>	-	<i>ta</i>	<i>ngēt</i>
3N	<i>ngēt</i>			

B. Associative pronouns

Associative pronouns are required when NPs are coordinated (see §10.8 for more information about NP coordination). Associative pronouns are formed with a class II or class III concordial pronoun and the associative particle *nē*. The associative pronouns are set out in Table 5.9. The class II concordial pronouns in the table (that is, first and second person singular and third person human plural) are marked in bold (see also Table 5.7). The feminine third person singular form is *ki* in both class II and class III and is treated as a class III pronoun here on analogy with the masculine third person singular form. Other forms are based on class III concordial pronouns.

Table 5.9: Associative pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>ngunē=</i>	<i>unē=</i>	<i>utnē=</i>	
2	<i>nginē=</i>	<i>inē=</i>	<i>ngēnē=</i>	
			Human	Non-human
3M	<i>kanē=</i>	<i>inē=</i>	<i>tinē=</i>	<i>ngēnē=</i>
3F	<i>kinē=</i>	<i>inē=</i>	<i>tinē=</i>	<i>ngēnē=</i>
3N	<i>ngēnē=</i>			

Associative pronouns are fully segmentable although there appears to be syncretism at the surface level. In addition to the same form being used for the second and third person dual as in the regular class II and III concordial pronoun paradigms, the second person plural associative *ngēnē* is identical to the third person form because the final [n] on the second person plural class III concordial pronoun *ngēn* has been elided. The same process applies to the first person dual form: *un* + *nē* -> *unē*.

The forms in Table 5.9 are marked with equal signs <=> to indicate that they may be procliticised to the following morpheme. Either an article or a concordial pronoun follows the associative pronoun. Further discussion on cliticisation is found in §3.7.

The grouping of the associative marker with neighbouring forms varies. Example (5.29) shows the associative pronoun and proper noun article forming a single phonological word, while (5.30), taken from a written text, shows the associative pronoun and the common noun article forming two orthographic words. Note that in (5.29) the gender of the first referent, the Warangoi river (*Varongo*) is assigned on the basis that the common noun for rivers (*arenggi*) is feminine (see also §8.5.1.).

- (5.29) *Da avivui viavik dē munggurup*
 da avi=vui vi=avik da munggurup
 and there=upwards EMPH=ADV.DIST.DEM and between

ma Varongo chinēma Mēnima ...
 ma Varongo ki=nē=ma Mēnima
 REL₂ PN F.SG=ASSOC=ART₂ PN
 ‘Up that way, between Warangoi and Menima ...’

- (5.30) *Mir kama duraiki chinē chama malachi*
 mir kama duraik-ki ki=nē kama mala-ki
 long.ago ART₁ chicken-F.SG F.SG=ASSOC ART₁ bush.hen-F.SG

da aina ruavem na=na mamēr.
 da ain=a rua-vem na=na mamēr
 and 3DL.POSS=SPEC friend-F.DL DETR₁=RECIP good
 ‘Long ago the chicken and the bush hen had a good friendship.’

C. Possessive pronouns

This section introduces the basic possessive pronoun paradigm (Table 5.10) and indicates how possessive pronouns are distributed. Possession is discussed in more detail

in Chapter 11 which presents a range of more specialised possessive pronouns and clitic groups involving possessive pronouns with articles.

Table 5.10: Possessive pronouns

Person	Singular	Dual	Plural	
1	<i>gu</i>	<i>aun</i>	<i>aut</i>	
2	<i>gi</i>	<i>ain</i>	<i>angen</i>	
			Human	Non-human
3M	<i>av</i>	<i>ain</i>	<i>athēv</i>	<i>angēt</i>
3F	<i>at</i>	<i>ain</i>	<i>athēv</i>	<i>angēt</i>
3N	<i>angēt</i>			

In possessed NPs, a possessive pronoun always precedes the possessed noun. The possessor may be represented by a pronoun only, as in (5.31).

- (5.31) ... *ngam ngē sek angēthik tēmgi*.
 ngam ngē sek angēt=tik tēm=ki
 RCD.SG 3N.I lift.NI 3N.POSS=hand GOAL=3F.SG.III
 ‘... the short one lifted his hand (to frighten her).’

The possessor may also be represented by a full NP. In (5.32) the full NP representing the possessor is *chama taliaskēna athēva mbang* ‘the wizard’s family’s house’. It is linked to the possessed item *am* ‘front, doorway’ by the third person neuter possessive pronoun *angēt*. Each of the possessed NPs is indicated by brackets in example (5.32).

- (5.32) ... [[*chama taliaskēna [athēva mbang]*] *angētham*].
 kama talias-kēna athēv=a bang angēt=am.
 ART₁ wizard-H.PL 3H.PL.POSS=SPEC house 3N.POSS=mouth
 ‘... the front of the wizard’s family’s house.’
 (lit: ‘... the wizards, their house, it’s mouth.’)

As (5.32) shows, there can be recursion within a possessed NP. The first possessive relation in the example (*chama taliaskēna athēva mbang* ‘the wizard’s family’s house’) contains the third person plural human possessive pronoun *athēv* with a specifier article as an enclitic (see also §11.3.1) indicating possession of the house. Note that the phrase *chama taliaskēna* ‘the wizard’s family’ is translated as a possessive phrase in English but is actually a type of associative plural (see §8.3.2).

5.2.5 Contrastive pronouns and the topic position

Contrastive pronouns are formed with the proclitic *kēvi=* and, usually, a class III concordial pronoun (following the gender system).⁷ It is also possible to cliticise *kēvi=* to an anaphoric pronoun. As noted in §5.2.3.A, there is considerable overlap among the forms in these two systems.

⁷ The only exception here is the second person singular pronoun which is drawn from the class II paradigm (see Table 5.8).

A sample set of contrastive pronouns is presented in Table 5.11. This includes the masculine, feminine, diminutive and count neutral forms. As contrastive pronouns are fully segmentable, other forms that are based on anaphoric pronouns may be ascertained by consulting Table 5.3.

Table 5.11: Contrastive pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>kēvi=ngo</i>	<i>kēvi=un</i>	<i>kēvi=ut</i>	
2	<i>kēvi=ngi</i>	<i>kēvi=en</i>	<i>kēvi=ngēn</i>	
			Human	Non-human
Masculine (M)	<i>kēvi=ka</i>	<i>kēviom/kēvi=ngaiom</i>	<i>kēvi=ta</i>	<i>kēvi=ngēt</i>
Feminine (F)	<i>kēvi=ki</i>	<i>kēvi=vem/kēvi=ngavem</i>	<i>kēvi=ta</i>	<i>kēvi=ngēt</i>
Diminutive (DIM)	<i>kēvi=ngini</i>	<i>kēvi=ngithong</i>	<i>kēvi=ngithong</i>	
Count Neutral (CN)	<i>kēvi=ngēt</i>			

Contrastive pronouns only occur in NPs in topic slot. Example (5.33) shows the masculine singular contrastive pronoun *kēvicha* {*kēvi=ka* CONTR=M.SG}. The use of contrastive marking is discussed in more detail in §18.3.1.

- (5.33) *Kēvicha* *sok* *angelka.vemga*.
kēvi=ka *sok* *angelka.vem=ka*
 CONTR=3.M.SG.III really be.clever=3M.SG.III
 ‘That man, he is really clever.’

Note that the topic slot may also contain non-contrastive pronouns. Where this is the case, the same forms are used as listed in Table 5.11, but without the contrastive proclitic. (That is, either a class III concordial pronoun or an anaphoric pronoun.) This is shown in (5.34) and (5.35).

- (5.34) *Ngo* *da* *ngu* *tlu.vēt* *kama* *vlēmga*
ngo *da* *ngu* *tlu.vēt* *kama* *a=plēm-ka*
 1SG.III and 1SG.II look.after.PRES ART₁ SPEC=pig-M.SG

da *sa* *morka*.
da *sa* *mor=ka*
 and NEF big=3M.SG.III
 ‘Me, I looked after the pig and it got big.’

- (5.35) *Nginēm* *in* *namas* *ithēmna*.
nginēm *in* *namas* *i-tēm=na*
 EXT.DL 3DL.I lie.down.NI DER₁-PATH=RECIP
 ‘Those two tall ones are lying side by side.’

5.2.6 Demonstratives

The demonstrative paradigms are set out in this section as follows: (A) proximate demonstratives, (B) distal demonstratives, (C) contrastive demonstratives, (D) indefinite demonstratives, (E) adverbial demonstratives encoding time, manner and direction.

The distribution and functions of demonstratives are discussed in detail in §10.5. Like the pronouns, the demonstratives distinguish three numbers (singular, dual, and plural). Demonstratives also encode the noun class of the head noun. In basic terms, demonstratives occur in final position within an NP. An example of the feminine singular distal demonstrative *avaik* is shown (5.36).

- (5.36) *Da ta.ithik ngia tamon sēchama*
 da ta=ithik ngia tamon sa=kama
 and EMPH=ADV.PROX.DEM 2SG.I speak.PRES to=ART₁
achen'gen'gi avaik da morki?
 a=chen'gen-ki avaik da mor-ki
 SPEC=earthquake-F.SG F.SG.DIST.DEM and big-F.SG
 'And now will you speak about that earthquake, the big one?'

In addition to the basic demonstratives, there are abbreviated and emphatic forms for the proximate, distal and contrastive demonstratives. The abbreviated forms of the demonstratives are used in fast speech. They may carry the sense that the speaker is being a bit off-hand (see (5.43)). The emphatic forms imply that the speaker is using the demonstrative in order to reinforce the specific referent (see (5.39)).

A. Proximate demonstratives

The proximate demonstratives are set out in Table 5.12.

Table 5.12: Proximate demonstrative paradigm

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>ithak</i>	<i>ithom</i>	<i>ithathē</i>	<i>ithang</i>
Feminine (F)	<i>ithaik</i>	<i>ithēvem</i>	<i>ithathē</i>	<i>ithang</i>
Diminutive (DIM)	<i>ithini</i>	<i>ithithom</i>	<i>ithithong</i>	
Reduced (RCD)	<i>ithēcham/ithēchēm</i>	<i>ithēvam</i>	<i>ithēvap</i>	
Flat (FLAT)	<i>ithēvēs</i>	<i>ithēmelēm</i>	<i>ithēmelēk</i>	
Excised (EXC)	<i>ithigl</i>	<i>ithiglem</i>	<i>ithigleng</i>	
Long (LONG)	<i>ithēvet</i>	<i>ithisem</i>	<i>ithēseng</i>	
Extended (EXT)	<i>ithēchit</i>	<i>ithēinēm</i>	<i>ithēinēk</i>	
Count Neutral (CN)	<i>ithang</i>			

The count neutral proximate demonstrative *ithang* is shown in example (5.37).

- (5.37) *Dul ithang da amēr ngēt nani chama avithēm.*
 dul ithang da amēr ngēt nani kama avith-ēm
 stone CN.PROX.DEM and good 3N.III for ART₁ earth.oven-RCD.SG
 'These flat stones are good for the earth oven.'

The paradigm shown in Table 5.12 is the basis for two further series of proximate demonstratives: a phonologically abbreviated series in which the initial vowel is elided and the alveolar continuant <th> becomes a stop <t> (see Table 5.13), and an emphatic series, taking the proclitic *ta=* (see Table 5.14).

Table 5.13: Proximate demonstrative paradigm: abbreviated forms

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>tak</i>	<i>tiom</i>	<i>tathē</i>	<i>tang</i>
Feminine (F)	<i>taik</i>	<i>tēvem</i>	<i>tathē</i>	<i>tang</i>
Diminutive (DIM)	<i>tini/tēni</i>	<i>tithom</i>	<i>tithong</i>	
Reduced (RCD)	<i>tēcham/tēchēm</i>	<i>tēvam</i>	<i>tēvap</i>	
Flat (FLAT)	<i>tēvēs</i>	<i>tēmelēm</i>	<i>tēmelēk/tang</i>	
Excised (EXC)	<i>tigl/tēgl</i>	<i>tiglem/tēglem</i>	<i>tigleng/tēgleng</i>	
Long (LONG)	<i>tēvet</i>	<i>tēsem</i>	<i>tēseng</i>	
Extended (EXT)	<i>tēchit</i>	<i>tēinēm</i>	<i>tēinēk</i>	
Count Neutral (CN)	<i>tang</i>			

The abbreviated proximate demonstrative forms *tini*, *tigl*, *tang*, *tiglem*, and *tigleng* are associated more with the Abilta dialect.

Example (5.38) shows the masculine singular abbreviated proximate demonstrative *tak*. The sentence is describing how a net that is used to catch birds can be used in divination.

- (5.38) *Di chiave chi tu.nangēt avik da asik*
 da kia=pe ki tu.na=ngēt avik da asik
 and 3F.SG.I=there 3F.SG.II throw.PRES=3N.III ADV.DIST.DEM and IRR
- ngia ndrēm sēvanas ia arucha chave*
 ngia drēm sa=pa-nas ia a=ru-ka ka=pe
 2SG.I know.PRES to=LOC-REFL REL₁ SPEC=person-M.SG 3M.SG.I=there
- cha ingip na ini pēt gelingga tak.*
 ka ingip na ini pēt geling-ka tak
 3M.SG.I die.NPRES PREP DIM.SG at place-M.SG M.SG.PROX.DEM
 ‘Then it throws them that way so you’ll know in yourself that a person has
 died there on that side.’

The emphatic series of proximate demonstratives, given in Table 5.14, include the proclitic *ta=*. This form is always a distinct syllable, that is, it does not seem to diphthongise with the initial <i> of the stem. In speech and in writing there is variation as to whether the proclitic is treated as part of a single word formed with the demonstrative. In this grammar the two forms are treated as distinct phonological words in the first line of the transcription and as a clitic group in the second line.

Table 5.14: Proximate demonstrative paradigm: emphatic forms

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>ta=ithak</i>	<i>ta=ithom</i>	<i>ta=ithathē</i>	<i>ta=ithang</i>
Feminine (F)	<i>ta=ithaik</i>	<i>ta=ithēvem</i>	<i>ta=ithathē</i>	<i>ta=ithang</i>
Diminutive (DIM)	<i>ta=ithini</i>	<i>ta=ithithom</i>	<i>ta=ithithong</i>	
Reduced (RCD)	<i>ta=ithēchēm</i>	<i>ta=ithēvam</i>	<i>ta=thēvap</i>	
Flat (FLAT)	<i>ta=ithēvēs</i>	<i>ta=ithēmelēm</i>	<i>ta=ithēmelēk</i>	
Excised (EXC)	<i>ta=ithigl</i>	<i>ta=ithiglem</i>	<i>ta=ithigleng</i>	
Long (LONG)	<i>ta=ithēvet</i>	<i>ta=ithisem</i>	<i>ta=ithēseng</i>	
Extended (EXT)	<i>ta=ithēchit</i>	<i>ta=ithēinēm</i>	<i>ta=ithēinēk</i>	
Count Neutral (CN)	<i>ta=ithang</i>			

Example (5.39) shows the excised plural emphatic proximate demonstrative *ta ithigleng*.

- (5.39) *Palangigleng ta.ithigleng da nani chama*
 palang-iglang ta=ithigleng da nani kama
 plank-EXC.PL EMPH=EXC.PL.PROX.DEM and for ART₁
sunaski atha vēt.
 sunas-ki at=a vuēt
 school-F.SG 3F.SG.POSS=SPEC building
 ‘These very pieces of plank are for the school building.’

The emphatic proximate demonstratives are typically used in contexts in which the speaker is reinforcing the identity of the referent. Speakers of Mali who also know English tend to translate the emphatic demonstratives as ‘these very ones’ or ‘these particular ones’. In (5.39), for example, there is an implication that the addressee should not use the planks for something else.

A second way in which contrastive emphasis may be encoded with the proximate demonstratives is by using the emphatic enclitic =*tik*. Once again, speakers use expressions such as ‘these very ones’ or ‘these particular ones’ when translating Mali examples containing these forms. Example (5.40) shows the emphatic enclitic on the masculine singular proximate demonstrative *ithak*.

- (5.40) *Aichua, arucha ithak.tik kinas ka ingip ...*
 aichua a=ru-ka ithak=tik kinas ka ingip
 oh SPEC=person-M.SG M.SG.PROX.DEM=EMPH just 3M.SG.I die.NPRES
 ‘Oh, this particular person just died ...’

It is possible to use both the proclitic *ta=* and enclitic =*tik* with the same demonstrative, as shown in (5.41).

- (5.41) *nēvēt ka mēlka tha.ithak.tik*
 na=pēt kē=a mēl-ka ta=ithak=tik
 from=at ART₃=SPEC island-M.SG EMPH=M.SG.PROX.DEM=EMPH
 ‘from this particular island’

B. Distal demonstratives

The distal demonstratives are set out in Table 5.15.

Table 5.15: Distal demonstrative paradigm

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>avak</i>	<i>aviom</i>	<i>avathē</i>	<i>avang</i>
Feminine (F)	<i>avaik</i>	<i>avēvem</i>	<i>avathē</i>	<i>avang</i>
Diminutive (DIM)	<i>avēni</i>	<i>avēthom</i>	<i>avēthong</i>	
Reduced (RCD)	<i>avēcham/avēchēm</i>	<i>avēvam</i>	<i>avēvap</i>	
Flat (FLAT)	<i>avēvēs</i>	<i>avēmelēm</i>	<i>avēmelēk</i>	
Excised (EXC)	<i>avēgl</i>	<i>avēglem</i>	<i>avēgēleng</i>	
Long (LONG)	<i>avēvet</i>	<i>avisem</i>	<i>aviseng</i>	
Extended (EXT)	<i>avēchit</i>	<i>avēinēm</i>	<i>avēinēk</i>	
Count Neutral (CN)	<i>avang</i>			

Example (5.42) shows the extended singular distal demonstrative *avēchit*.

- (5.42) *Sa ngo, ngu kuer sa ut tet ivi*
sa ngo ngu kuer sa ut tet i-vui
 NEF 1SG.III 1SG.II go.first.PRES NEF 1PL.I go.PRES DER₁-upwards
de savuk sēmēni chama abraingia avēchit
da sa=vuk sa=mēni kama a=braing-ia avēchit
 and to=up to=on ART₁ SPEC=small.creek-EXT.SG EXT.SG.DIST.DEM
ma Uvēlia.
ma Uvēlia
 ART₂ PN
 ‘So me, I led as we went along and up to that small creek, Uvelia.’

Table 5.16: Distal demonstrative paradigm: abbreviated forms

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>vak</i>	<i>viom</i>	<i>vathē</i>	<i>vang</i>
Feminine (F)	<i>vaik</i>	<i>vēvem</i>	<i>vathē</i>	<i>vang</i>
Diminutive (DIM)	<i>vēni</i>	<i>vēthom</i>	<i>vēthong</i>	
Reduced (RCD)	<i>vēcham/vēchēm</i>	<i>vēvam</i>	<i>vēvap</i>	
Flat (FLAT)	<i>vēvēs</i>	<i>vēmelēm</i>	<i>vēmelēk</i>	
Excised (EXC)	<i>vēgl</i>	<i>vēglem</i>	<i>vēgēleng</i>	
Long (LONG)	<i>vēvet</i>	<i>visem</i>	<i>viseng</i>	
Extended (EXT)	<i>vēchit</i>	<i>vēinēm</i>	<i>vēinēk</i>	
Count Neutral (CN)	<i>vang</i>			

Distal forms are the basis for two further series of proximate demonstrative: abbreviated forms (Table 5.16) and emphatic forms (Table 5.17). In the phonologically abbreviated series, the initial <a> is deleted but the bilabial continuant <v> is not altered to a stop. The same semantic value is retained. The emphatic series takes the proclitic *pa=*.

Example (5.43) shows the masculine singular abbreviated distal demonstrative *vak*. The example comes from a story in which some Japanese soldiers are preparing to kill one of their prisoners. The use of the abbreviated demonstrative communicates something about the soldiers' uncaring attitude towards the man, as does the use of the word *chumeska* 'man' as a form of address.

- (5.43) *Ta vēr.mēcha dē tha chuar ia,*
ta vēr.mē=ka da ta chuar ia
 3H.PL.I grab.NPRES=3M.SG.III and 3H.PL.I say.NPRES REL₁
‘Ithik nge, ma chumeska vak
ithik nge ma chumes-ka avak
 ADV.PROX.DEM 2SG.III ART₂ man-M.SG M.SG.DIST.DEM
ngi mbang ngiaet nasothaut.’
ngi bang ngia=thet nasot=ut
 2SG.II run.PRES 2SG.I=go.FUT after=1PL.III
 ‘They grabbed him and they said, “Now you particular man,
 you come and follow us”.’

The emphatic distal demonstrative paradigm is presented in Table 5.17. The emphatic distal demonstratives are more complex than the emphatic proximate forms in their composition. While there is a common use of the proclitic *pa* among these forms, the form of the stem varies. Where the basic distal demonstrative is used, the initial <a> in the stem is sometimes changed to <i>. In other cases the contrastive demonstrative is used as an alternative to the distal demonstrative in forming the stem. It appears as if there were once two series of emphatic demonstratives taking the proclitic *pa=* which are collapsing together.

Table 5.17: Distal demonstrative paradigm: emphatic forms⁸

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>paivak/vachēvik</i>	<i>paviom</i>	<i>paivathē</i>	<i>pavang/pachēvang</i>
Feminine (F)	<i>paivaik/vachēvik</i>	<i>pavēvem</i>	<i>paivathē</i>	<i>pavang/pachēvang</i>
Diminutive (DIM)	<i>pavēni</i>	<i>pavēthom</i>	<i>pavēthong</i>	
Reduced (RCD)	<i>pavēcham/pavēchēm</i>	<i>pavēvam</i>	<i>pavēvap</i>	
Flat (FLAT)	<i>pavēvēs</i>	<i>pavēmelēm</i>	<i>pavēmelēk</i>	
Excised (EXC)	<i>pavēgl</i>	<i>pavēglem</i>	<i>pavēgēleng</i>	
Long (LONG)	<i>pavēvet</i>	<i>pavisem</i>	<i>paviseng</i>	
Extended (EXT)	<i>pavēchit</i>	<i>pavēinēm</i>	<i>pavēinēk</i>	
Count Neutral (CN)	<i>paivang/pachēvang</i>			

⁸ An alternate abbreviated series of distal demonstratives may be recoverable from the forms in this table by deleting *pa-*. For example there is a masculine singular distal demonstrative *ivak* and a count neutral demonstrative *ivang*. This series was not used much in the Arongda dialect and it was not possible to collect the full paradigm or explore this series in more detail.

As we have noted above, the emphatic demonstratives are used to reinforce the unique identity of the referent. The emphatic enclitic =vik may also encode this type of meaning. Example (5.44) shows both these forms in consecutive utterances. The count neutral emphatic distal demonstrative *pachēvang* appears at the end of the first line and the emphatic enclitic =vik occurs on the count neutral distal demonstrative *avang* in the echo NP on the second line of the example. Speakers tend to translate both of these constructions with either ‘that particular one’ or ‘that very one’ in English.

- (5.44) *Auk, vivi ma ve vēchama lat pachēvang,*
 auk pa=avi ma pe pēt=kama lat pachēvang
 well LOC=there REL₂ there at=ART₁ garden EMPH.CN.DIST.DEM

sa kama lat avang.bik ...
 sa kama lat avang=vik
 NEF ART₁ garden CN.DIST.DEM=EMPH
 ‘Well, there, at that very garden, that particular garden ...’

C. Contrastive demonstratives

The contrastive demonstratives assist in managing competing referents within the discourse. The paradigm for the contrastive demonstratives is set out in Table 5.18. It has not yet been possible to establish the basis for the distribution of the alternate forms present in the table.

Table 5.18: Contrastive demonstratives

	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>achēk</i>	<i>achēkiom</i>	<i>chrathe</i>	<i>chēngēt/chēkrang</i>
Feminine (F)	<i>achik</i>	<i>achēkvem</i>	<i>chrathe</i>	<i>chēngēt/chēkrang</i>
Diminutive (DIM)	<i>achēni</i>	<i>achēthom</i>	<i>achēthong</i>	
Reduced (RCD)	<i>achēchēm</i>	<i>achēvam</i>	<i>achēvap</i>	
Flat (FLAT)	<i>achēvēs/avēchē/achēchēs</i>	<i>achēmelēm</i>	<i>achēmelēk</i>	
Excised (EXC)	<i>achēgl</i>	<i>achēglem</i>	<i>achēgleng</i>	
Long (LONG)	<i>achēvet</i>	<i>achēsem</i>	<i>achēseng</i>	
Extended (EXT)	<i>achēchit</i>	<i>achēnēm</i>	<i>achēnēk</i>	
Count Neutral (CN)	<i>chēngēt/chēkrang</i>			

In the first line of (5.45) the count neutral contrastive demonstrative *chēkrang* is shown in post-head position, before a relativised clause.

- (5.45) ... *sa ini var kama sēlik chēkrang*
 sa ini var kama slik chēkrang
 NEF 3DL.II cook.NPRES ART₁ meat EMPH.CN.CONTR.DEM

ma mali cha monel nania ngēt.
ma mali ka monel nania ngēt
 REL₂ earlier 3M.SG.I hunt.PAST for 3N.III
 ‘... the two of them would cook the meat that he had hunted for.’

As with the proximate and distal demonstratives, there are abbreviated and emphatic forms of the contrastive demonstratives. The abbreviated forms (Table 5.19) involve elision of the initial vowel <a> and fortition of the new initial consonant (<ch> becomes <k>). As with the full contrastive demonstratives, it has not yet been possible to establish the basis for the distribution of the alternate forms presented in this paradigm.

Table 5.19: Contrastive demonstratives: abbreviated forms

	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>krak</i>	<i>kiom</i>	<i>krathe</i>	<i>krang</i>
Feminine (F)	<i>kraik</i>	<i>kēvem</i>	<i>krathe</i>	<i>krang</i>
Diminutive (DIM)	<i>kēni</i>	<i>kēthom</i>	<i>kēthong</i>	
Reduced (RCD)	<i>kēchēm/kēm</i>	<i>kēvam</i>	<i>kēvap</i>	
Flat (FLAT)	<i>kēvēs/kēchēs</i>	<i>kēmelēm</i>	<i>kēmelēk</i>	
Excised (EXC)	<i>kēgl</i>	<i>kēglem</i>	<i>kēgleng</i>	
Long (LONG)	<i>kēvet</i>	<i>kēsem</i>	<i>kēseng</i>	
Extended (EXT)	<i>kēchit</i>	<i>kēnēm</i>	<i>kēnēk</i>	
Count Neutral (CN)	<i>krang</i>			

Like pronouns, contrastive demonstratives may occur alone in NPs. In (5.46), the abbreviated form *kēm* of the reduced singular contrastive demonstrative is introduced by the relativiser *ama*. The demonstrative is repeated to convey a distributive meaning.

- (5.46) *Ka mat kama athoes kēngēt ma nēvēt*
ka mat kama athoes kēngēt ma na=pēt
 3M.SG.I get.PAST ART₁ children CN.CONTR.DEM REL₂ from=at
- kama mbangbap ama kēm,*
kama a=bang-vap ama kēm
 ART₁ SPEC=village-RCD.PL REL₃ RCD.SG.CONTR.DEM
- kēm, kēm ...*
kēm kēm ...
 RCD.SG.CONTR.DEM RCD.SG.CONTR.DEM.
- ‘He got some children from each of the villages around ...’

Emphatic contrastive demonstratives (Table 5.20) are generally formed by prefixing the syllable *chē-* to the abbreviated (Table 5.19) form of the series. These forms are treated as single phonological words. Note that there is some overlap with the basic demonstratives (Table 5.18), for example, the count neutral forms are identical in each paradigm. Since in this case there are two competing forms, it seems likely that at an earlier stage the two

forms were assigned to different paradigms but that the semantic contrast between them has not been maintained. It has not been possible to establish a clear basis for the distribution of the alternate forms presented in this paradigm.

Table 5.20: Emphatic contrastive demonstratives

	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>chēkrak/chērak/chēvak</i>	<i>achēkiom</i>	<i>chrathe</i>	<i>chēngēt/chēkrang</i>
Feminine (F)	<i>chēkraik/chēraik/chēvaik</i>	<i>achēkvem</i>	<i>chrathe</i>	<i>chēngēt/chēkrang</i>
Diminutive (DIM)	<i>chēkēni</i>	<i>chēkēthom</i>	<i>chēkēthong</i>	
Reduced (RCD)	<i>chēkēchēm</i>	<i>chēkēvam</i>	<i>chēkēvap</i>	
Flat (FLAT)	<i>chēkēvēs</i>	<i>chēkēmelēm</i>	<i>chēkēmelēk</i>	
Excised (EXC)	<i>chēkēgl</i>	<i>chēkēglem</i>	<i>chēkēgleng</i>	
Long (LONG)	<i>chēkēvet</i>	<i>chēkēsem</i>	<i>chēkēseng</i>	
Extended (EXT)	<i>chēkēchit</i>	<i>chēkēnēm</i>	<i>chēkēnēk</i>	
Count Neutral (CN)	<i>chēngēt/chēkrang</i>			

As Table 5.20 shows, there is an alternate strategy for indicating emphasis in the contrastive demonstrative paradigm. This overlap between the contrastive demonstratives and the distal demonstratives in an emphatic context reflects the use of the emphatic forms in expressing the marked identity of the referent.

Example (5.47) shows the masculine singular emphatic contrastive demonstrative *chēkrak*.

- (5.47) *Da chēkrak* *ma mēliarka* *da chē* *tlu ...*
 da chēkrak *ma mēliar-ka* *da kē* *tlu*
 and EMPH.M.SG.CONTR.DEM REL₂ small.parrot-M.SG and 3M.SG.II see.PRES
 ‘But that one, the small parrot, he sees ...’

Whereas the proximate and distal series of demonstratives also have enclitics that can be used for emphasis, this is not the case with contrastive demonstratives.

D. Indefinite demonstratives

Like the proximate, distal and contrastive demonstratives described above, the indefinite demonstratives occur in post-head position within the NP and inflect for the noun class of the NP head. The indefinite demonstratives are used in indefinite, interrogative and irrealis contexts (see also §15.3.2.C). Unlike the previous demonstrative paradigms, there is only one set of forms for the indefinite demonstratives. These forms are shown in Table 5.21.

Table 5.21: Indefinite demonstratives in Mali

Class	Singular	Dual	Plural	
			Human	Non-human
Masculine (M)	<i>aung</i>	<i>guaiom</i>	<i>guavek</i>	<i>anggun</i>
Feminine (F)	<i>anguik</i>	<i>guavam</i>	<i>guavek</i>	<i>anggun</i>
Diminutive (DIM)	<i>guani</i>	<i>guathom</i>	<i>guathong</i>	
Reduced (RCD)	<i>guachēm</i>	<i>guavam</i>	<i>guavap</i>	
Flat (FLAT)	<i>guaves</i>	<i>guamelēm</i>	<i>guamelēk</i>	
Excised (EXC)	<i>guagl</i>	<i>guaglem</i>	<i>guagleng</i>	
Long (LONG)	<i>guavet</i>	<i>guasem</i>	<i>guaseng</i>	
Extended (EXT)	<i>guait</i>	<i>guanēm</i>	<i>guanēk</i>	
Count Neutral (CN)	<i>anggun</i>			

Like other demonstratives, indefinite demonstratives follow nouns in an NP. Example (5.48) shows the flat plural indefinite demonstrative *guamelēk* in a non-specific context.

- (5.48) *Ngi chuar nacha ia chat*
 ngi chuar na=ka ia ka-thēt
 2SG.II say.NPRES PREP=3M.SG.III REL₁ 3M.SG.I-get.FUT
anga tēlēngimelēk guamelēk ...
 anga tēlēng-imelēk guamelēk
 NSPEC paper-FLAT.PL FLAT.PL.INDEF.DEM
 ‘Tell him to get some papers ...’

In (5.49) the masculine singular indefinite demonstrative heads an NP in a clause that describes an irrealis situation.

- (5.49) ... *dē choiku aung ka chut.mēcha*
 da koiku aung ka chut.mē=ka
 and NEG M.SG.INDEF.DEM 3M.SG.I spear.NPRES=3M.SG.III
nanga chepki.
 na=anga chep-ki
 PREP=NSPEC spear-F.SG
 ‘... and no-one stabbed him with a spear.’

E. Adverbial demonstratives

Mali adverbial demonstratives make reference to time, manner and location. Unlike the nominal demonstratives, adverbial demonstratives do not have corresponding contrastive or indefinite forms. There is a paradigm of these forms with a proximate/distal contrast and simple and emphatic forms. This paradigm is shown in Table 5.22.

Table 5.22: Adverbial demonstratives

	Proximate	Emphatic proximate	Distal	Emphatic distal
Location	<i>ithē</i>	<i>ta ithē/ta ithik</i>	<i>avi</i>	<i>avivi/avivik</i>
Time/Manner	<i>ithik</i>	<i>ta ithik</i>	<i>avik</i>	<i>viavik</i>

The demonstratives are discussed in the following sections: (i) location adverbial demonstratives, and (ii) time/manner adverbial demonstratives.

In addition to the forms in Table 5.22, there is an anaphoric demonstrative *pe*. It is not included in the table as it does not show the paradigmatic contrasts for proximal/distal and there is no emphatic form. This form (usually with the surface form *ve*) refers to a previously mentioned place. An example is given in (5.50). The use of *pe* as a verbless predicate in existential clauses is discussed in §4.1.5.A and the use of adverbial clauses specifying the location of the demonstrative are described in §16.4.5 and §16.5.3.

- (5.50) *Atha mbang ivuk peia Maslabe*
 at=a bang i-vuk pe=ia Maslabe
 3F.SG.POSS=SPEC village DER₁-up there=REL₁ PN
ve vēt ma Mēndai thēvus.
pe pēt ma Mēndai tē=a=pēs
 there at ART₂ PN 3F.SG.POSS=SPEC=head
 ‘Her village was up there at Maslabe, there at the head of the Mundai River.’

i. Location adverbial demonstratives

The emphatic proximate location adverbial demonstrative *ta ithik* ‘here’ is shown in (5.51).

- (5.51) *Ia, chok kusek ma chēvingo ngua met ta.ithik ...*
 ia kok kusek ma kēvi=ngo ngua met ta=ithik
 yes just only ART₂ CONTR=1SG.III 1SG.I go.PAST EMPH=here
 ‘Yes, it was only me who came here ...’

The distal location adverbial demonstrative *avi* ‘there’ is shown in (5.52).

- (5.52) *Da ti kuar ia ngē venaseng avi.*
 da ti kuar ia ngē venaseng avi
 and 3H.PL.II say.PRES REL₁ 3N.I start.NPRES there
 ‘And they say that it started there.’

ii. Time and manner adverbial demonstratives

Time/manner adverbial demonstratives share a single set of forms but have different distributions. Time adverbial demonstratives, like other expressions of time, may occur at either end of the clause. In (5.53), the proximate time adverbial demonstrative *ithik* ‘now’ occurs at the start of the clause. In (5.54), the emphatic distal time adverbial demonstrative *viavik* ‘then’ occurs at the end of the clause.

- (5.53) *Ithik sa chule nge nginaut taithē.*
 ithik sa chule nge ngi=nē=ut ta=ithē
 ADV.PROX.DEM NEF stay.NPRES 2SG.III 2SG.II=ASSOC=1PL.III EMPH=here
 ‘Now you’ll stay with us here.’
- (5.54) *... glēm ma autha morta viavik ...*
 gēlēm ma aut=a mor-ta vi=avik
 near REL₂ 1PL.POSS=SPEC ancestor-H.PL EMPH=ADV.DIST.DEM
 ‘... with our ancestors at that time ...’

Manner adverbial demonstratives follow the predicate. Manner adverbs are discussed further in §13.2. The emphatic proximate manner adverbial demonstrative *taithik* is shown in (5.55), and the emphatic distal manner adverbial demonstrative *viavik* is shown in (5.56).

- (5.55) *Rndam, sa ngua tet taithik*
 Rndam sa ngua tet ta=ithik
 PN NEF 1SG.I go.PRES EMPH=ADV.PROX.DEM
da ngu tal ka guangithong ...
 da ngu tal kē=a guang-ithong
 and 1SG.II carry.PRES ART₃=SPEC thing-DIM.PL
 ‘Witch, I come like this, I carry the things ...’

- (5.56) *Ka iras.tēmga viavik*
 ka iras.tēm=ka vi=avik
 3M.SG.I lie.to.NI=3M.SG.III EMPH=ADV.DIST.DEM
ia cha mēs kama snok.
 ia ka mēs kama snok
 REL₁ 3M.SG.I eat.PAST ART₁ excreta
 ‘He lied to him like that, that he had eaten excreta.’

5.2.7 Determiners

Determiners in Mali include a set of NP articles and the specifier article *a=*. These forms are discussed in more detail in §10.3 and §10.4 respectively. The specifier article has already been mentioned in §5.1.2 as it may trigger lenition in the initial consonant of the noun. NP articles include:

- the unmarked NP article *kama* (glossed as ART₁),
- the NP article *ma* (glossed as ART₂), which marks inherently uniquely identifiable referents,
- the NP article *kē* (glossed as ART₃), which marks referents whose unique identity is established by the discourse, and
- the indefinite NP articles *anga* (non-specific; glossed as NSPEC), *angama* (non-specific indefinite; glossed as INDEF), and *agia* (specific indefinite; glossed as ‘which’).

NP articles are NP initial (5.57) but they are not required if the NP is in topic position (5.58) or is introduced by a relator (5.59). Example (5.57) shows the non-specific indefinite article *angama* and the unmarked NP article *kama* (appearing as *chama*).

- (5.57) *Mundu angama morka ma ka tet*
 mēndu angama mor-ka ma ka tet
 before INDEF ancestor-M.SG REL₂ 3M.SG.I go.PRES
tēchama renggi.
 tēm=kama reng-ki
 GOAL=ART₁ river-F.SG
 ‘Long ago an ancestor went to the river.’

- (5.58) *Amusnēng ngē muēn.bēt guauk ...*
 a=musnēng ngē muēn.vēt gu=uauk
 SPEC=idea 3N.I find.PAST 1SG.POSS=grandmother
 ‘An idea came to my grandmother ...’
- (5.59) *Doki kraik ama rongqi ...*
 da=koki kraik ama rong-ki
 and=also F.SG.CONTR.DEM REL₃ from.cold.place-F.SG
 ‘And also that one that person or thing from a high altitude ...’

5.2.8 Markers of aspect and status

This section covers a diverse range of forms that are used in the expression of aspect, modality and illocutionary force in Mali. This includes: (A) aspectual distinctions encoded by multi-verb constructions, (B) modality distinctions encoded within the predicate, (C) particles for encoding negation, words for encoding (D) interrogatives, and (E) imperatives. Additional discourse markers that encode epistemic distinctions are discussed in §5.2.10.

A. Aspectual distinctions encoded by multi-verb constructions

There are four aspectual distinctions that are expressed in multi-verb constructions, a subset of which can be analysed as asymmetrical serial verb constructions (see §13.3.2). The verbs involved are: the existential predicate *pe* ‘be there’ which encodes imperfective aspect (5.60), the verb *namu* ‘continue’ which encodes durative aspect (5.61), the verb *lik dēm* ‘be sudden’ (5.62) which encodes punctual aspect, and the verb *sot* ‘finish’ which encodes perfective aspect (5.63).

- (5.60) *Arutha ama mēlta tha v̄e tha tas*
 a=ru-ta ama mēl-ta ta pe ta tas
 SPEC=person-H.PL REL₃ foreign-H.PL 3H.PL.I there 3H.PL.I sleep.PRES

vēt ma Basil ava mbangga.
 pēt ma Basil av=a bang-ka
 at ART₂ PN 3M.SG.POSS=SPEC house-M.SG
 ‘The foreign people are there, they’re sleeping at Basil’s house.’
- (5.61) *Dē cha namu chē bēn.sēlēp sanggēlēmgī ...*
 da ka namu kē bēn.sēlēp sa=gēlēm=ki
 and 3M.SG.I continue.NI 3M.SG.II question.NI to=near=3F.SG.III
 ‘And he continued to question her closely ...’
- (5.62) *Lik.dēm ga da cha thon.nanas*
 lik.dēm ka da ka thon.nanas
 be.sudden 3M.SG.III and 3M.SG.I jump.NPRES

savono sēvēt kama vlēmga avathēng
 sa=vono sa=pēt kama a=plēm-ka av=a=thēng
 to=up.slope to=at ART₁ SPEC=pig-M.SG 3M.SG.POSS=SPEC=back
 ‘Suddenly he jumped up onto the pig’s back.’

- (5.63) *Kule das kave cha tēs dē chē sot,*
 kule da=as ka=pe ka tēs da kē sot
 later and=still 3M.SG.I=there 3M.SG.I eat.PRES and 3M.SG.II finish.NI
dē chule dē chave chē tneik
 da kule da ka=pe kē tnaik
 and later and 3M.SG.I=there 3M.SG.II drink.PRES
 ‘Once he had finished eating, then he drank.’

B. Modality distinctions encoded within the predicate

There are also four modality distinctions that are encoded in similar ways (for the specific details about each construction see §13.3.2). They involve the following forms: the realis focus marker *thia* (see (5.64), which describes an enchanted pool capturing some people), the irrealis focus marker *na* (see (5.65)), as well as the form *nia* which encodes both mirativity and the frustrative mood. A mirative reading occurs in the past and present tenses (see (5.66) which describes the sudden execution of a man after a long series of preliminary events (see Text 1)). A frustrative reading is available in the future tense (see (5.67)).

- (5.64) ... *dē cha thia cha suchup sē tha sēmēt*
 da ka thia ka suchup sa ta sa=mēt
 and 3M.SG.I REL.FOC 3M.SG.I sweep.NI to 3H.PL.I to=within

ava lugutki ...
 av=a lugut-ki
 3M.SG.POSS=SPEC spouse-F.SG
 ‘... he just swept them into his wife ...’

- (5.65) *Athoemga vak da choiku cha*
 at=oem-ka avak da koiku ka
 3F.SG.POSS=offspring-M.SG M.SG.DIST.DEM and NEG 3M.SG.I

na nari ...
 na nari
 IRR.FOC hear.NPRES
 ‘That child does not listen ...’

- (5.66) ... *dē chania krtēp.*
 da ka=nia kērtēp
 and 3M.SG.I=MIR chop.PRES
 ‘... he got the knife and he chopped.’

- (5.67) *Di chia nia kia thet inamēk da ngēmbēs ...*
 da kia nia kia thet i-na-mēk da angēmbēs
 and 3F.SG.I FRUST 3F.SG.I go.FUT DER₁-DER₃-down and NEG
 ‘And she tried to go around but no ...’

C. Markers of negation

There are three clause level markers of negation: the discourse markers *koiku* and *koi* (with variant forms *choiku* and *choi*, see also §14.2.3) and the negative dummy noun

angēmbes (also various truncated forms: *angēbēs*, *ambēs*, *mbēs*) ‘nothing’. All three forms are also used as a complete utterance meaning ‘no’. When negating a clause these forms occur in topic position. Example (5.68) shows the negator *angēmbes* at the start of the sentence before a second topic ‘that man’.

- (5.68) ... *da angēmbēs ka rucha vak*
 da angēmbēs kē=a ru-ka avak
 and NEG ART₃=SPEC person-M.SG M.SG.DIST.DEM
 kave ka lu chi.
 ka=pe ka lu ki
 3M.SG.I=there 3M.SG.I see.NPRES 3F.SG.III
 ‘... and no, that man didn’t see her.’

Negation is described more fully in §15.2.

D. Interrogatives (polar questions and content questions)

Polar questions are mainly indicated prosodically by a sharp rise in intonation on the final syllable (15.1). The irrealis marker *asik* is also a signal of interrogative status. This form is one of a large set of (A)S(A)- initial discourse markers introduced in §5.2.10 and discussed in more detail in §14.2.1. An example of the irrealis marker *asik* in a question context is provided in (5.69).

- (5.69) *Asik ngēnbe ngēni thēk?*
 asik ngēn=pe ngēni thēk
 IRR 2PL.I=there 2PL.II work.NPRES
 ‘Are you all going to work?’

Content questions are indicated by the same prosody as polar questions. In content questions an interrogative or indefinite form is also used. These are all illustrated in §15.3.2. They include:

- interrogative and indefinite pronouns
- non-specific and indefinite articles
- indefinite demonstratives
- *mēnia*, *minia* ‘how’
- *amēnia* ‘how many’
- *sana* ‘do something INDEF’
- *kue*, *kuenai* ‘where’
- *kēvēsnia* ‘when’

Examples of the count neutral indefinite pronoun *agit* ‘what’ and the interrogative for location *kue* (with alternate forms *chue* and *choe*) ‘where’ are provided below.

- (5.70) *Agit ngē ve mēt gi uratki?*
 agit ngē pe mēt gi urat-ki?
 CN.NSPEC 3N.I there within 2SG.POSS basket-F.SG
 ‘What’s inside your basket?’

- (5.71) ... *da sik ta vĕtka chue?*
 da asik ta vĕt=ka kue?
 and IRR 3H.PL.I bury.NPRES=3M.SG.III where
 ‘... where did they bury him?’

Finally, note that the word *ura* ‘or’ also functions as a tag question (see §15.3.4 for examples).

E. Markers of the imperative mood

Imperatives and prohibitives are discussed more fully in §15.4. There are no specific morphological markers of imperative mood in Mali, although imperative readings for first and third persons require the new event focus marker *sa* (see §5.2.10 and §14.2.1). The main indication of imperative mood is a prosodic pattern involving a slight rise in pitch on the final syllable.

Prohibitives on the other hand do involve a specific morphological marker, the K-discourse marker *kule/chule* (see also §5.2.10 and §14.2.3). The prohibitive occurs at the beginning of the sentence, in the same position as the negators introduced above. An example is shown in (5.72).

- (5.72) *Chule ngia na thu ngo!*
 kule ngia na thu ngo
 NEG.IMP 2SG.I IRR.FOC shoot.NPRES 1SG.III
 ‘Don’t shoot me!’

5.2.9 Clause combining morphology

There are three different sets of clause linking devices in Mali: (A) relators, (B) coordinators, and (C) subordinators. They are distinguished from one another on the basis of the types of relations they impose on the clauses they link (see Chapter 16 for details).

A. Relators

Relators introduce clauses or NPs that are embedded within a clause as dependents of an NP or an AdvP. There are three relators in Mali (listed in i-iii), each signal a different relationship between the clause or NP and the modified NP or AdvP. An overview of the relators is provided in §16.3. Relators are the only means of introducing lexical words as modifiers within an NP (see also §10.1).

- i. *ia* introduces clauses or NPs that have the same syntactic status as the NP or AdvP head they are dependent upon <A=B> (see also §16.4). This relator is glossed as REL₁.
- ii. *ma* introduces clauses or NPs that provide additional information about the NP or AdvP head they are dependent upon <A≈ B> (see also §16.5). This relator is glossed as REL₂.
- iii. *ama* introduces clauses or NPs that describe or refer to one particular characteristic of the NP or AdvP head they are dependent upon <B is a characteristic of A> (see also §16.6). This relator is glossed as REL₃.

All three relators occur in clause initial position. An example of the relator *ama* is provided in (5.73), where it introduces a modifier within an NP.

- (5.73) *kama rutha ama adēvaung natha*
 kama ru-ta ama adēvaung na=ta
 ART₁ person-H.PL REL₃ three.M PREP=H.PL
 ‘the three people’

B. Coordinators

Coordinators can be distinguished from relators and subordinators because they link clauses without necessarily indicating structural or semantic relationships between them. The coordinators found in Mali are:

- i. additive marker *da* ‘and’ (§17.1.1),
- ii. adversative marker *dak* ‘but’ (§17.1.2), and
- iii. disjunctive marker *ura* ‘or’ (§17.1.3).

Coordinators occur at the start of the clause. In addition to coordinating clauses, the additive marker *da* has further functions in marking the left-hand boundary of the clause (see §18.2). The additive marker *da* (with a reduced vowel: *dē*), is shown functioning as a coordinator in (5.74).

- (5.74) *Ka sēp mēk sē ka lechi dē chule*
 ka sēp mēk sa kē=a lek-ki da chule
 3M.SG.I fall.NI down to ART₃=SPEC hole-F.SG and stay.NPRES
 cha ve.
 ka pe
 3M.SG.III there
 ‘He fell down into the hole and he stayed there.’

C. Subordinators

Subordinators in Mali are used to encode the following relations of semantic dependency between clauses:

- i. purposives, encoded by *va* ‘in order to’ (PURP₁), *iva* ‘intending to’ (PURP₂), and *diva* ‘so that’ (PURP₃) (see also §17.2.1),
- ii. reason clauses, encoded by the marker *i* ‘because’ often in conjunction with the adverb *mēndu* ‘before’ (see also §17.2.2),
- iii. elaboration and consequence clauses, introduced by *dai* ‘thus’ (see also §17.2.3), and
- iv. conditional clauses introduced by the discourse marker *asika* ‘if’ (see also §17.2.4).

All subordinators occur in clause initial position. An example of a purposive clause is provided in (5.75).

- (5.75) *Ta tēthangēt diva sai thi don.nangēt*
 Ta tēt=ngēt diva sai ti don.nē=ngēt
 3H.PL.I get.PRES=3N.III PURP₃ again 3H.PL.II throw.PRES=3N.III
mēt athēva mēsmēs ...
 mēt athēv=a mēsmēs
 within 3H.PL.POSS=SPEC food
 ‘They get it in order to put it on their food again ...’

5.2.10 Discourse markers

Discourse markers fall into one of three groups based on their form and distribution. All discourse markers occur in clause initial position. However, since a clause may take more than one discourse marker their positions in relation to each other must also be considered. The discourse markers are listed below in (A)–(C) (see §14.2 for more information about their distribution and functions). A small number of other forms that have discourse marker functions are listed in (D).

A. (A)S(A)-initial discourse markers

(A)S(A)-initial discourse markers include: *as* ‘still, yet’, *asik* marking irrealis and hypothetical clauses, *asika* marking conditional clauses, *asip* ‘later on’, *sa* contrasting events in the following clause with events that have previously been described (glossed as NEF (new event frame)), *sai* ‘again’ and *saika* ‘possibly’. These forms are described in §14.2.1. An example of the discourse marker *sa* is provided in (5.76).

- (5.76) *Sa chi suchut.nanas mēt ki.*
 sa ki suchut.nanas mēt ki
 NEF 3F.SG.II try.out.NI within 3F.SG.III
 ‘Then she tried to go through it.’

B. M-initial discourse markers

M-initial discourse markers are reminiscent of lexical adverbs, which are typically formed with the derivational prefix *ma-* (see also §6.4). M-initial discourse markers include: the temporal forms *maila chuvēsnia* (also *mailu chuvēsnia*) ‘last time, the other time’, *mali* ‘earlier’, *mēndu* ‘before’, *mir* ‘long ago’, and *mithu* ‘much later on’; and the epistemic forms *mailu* or *nēmailu* ‘maybe, possibly’, *marik* ‘really, truly’, and *masa* ‘certainly’. These forms are described in more detail in §14.2.2. The discourse marker *nēmailu* ‘maybe’ is shown in (5.77).

- (5.77) *O, asik nēmailu cha ruchi tha.ithaik tik*
 O asik nēmailu kē=a ru-ki ta=ithaik tik
 Oh IRR maybe ART₃=SPEC person-F.SG EMPH=F.SG.PROX.DEM EMPH
kia ve chia vang da.ithik.
 kia pe kia vang ta=ithik
 3F.SG.I there 3F.SG.I run.NPRES EMPH=ADV.PROX.DEM
 ‘Oh, maybe this particular woman she has run away now.’

C. K-initial discourse markers

All K-initial discourse markers share an initial velar that is realised either as a voiceless stop or a fricative. These forms include: *kinai* ‘in contrast’, *kinak* ‘indeed’, *kinas* ‘just, recently’, *kinasa* ‘really, already’, *kok* ‘just, already’, *koki* ‘also’ and *kosa* ‘just, simply’, *koi* ‘not’ (a phonologically reduced form of *koiku* ‘not’), *kule* ‘later’, and *kusek* ‘only’. These forms are examined in more detail in §14.2.3. The discourse marker *kok* ‘just’ is shown in (5.78).

- (5.78) *Da sik kok mamēr ia ngia mair.senas ura?*
 da asik kok mamēr ia ngia mair.senas ura
 and IRR just possible REL₁ 2SG.I stand.alone.PAST or
 ‘And it was impossible to stand up wasn’t it?’

D. Other discourse markers

Two additional discourse markers that are difficult to relate to the categories identified above in terms of their distribution and form are: *vandi* ‘desiderative’ (glossed as DESID) and *sok* ‘really’. These are discussed in §14.2.4. Example (5.79) shows the discourse marker *sok* at the start of two adjacent clauses.

- (5.79) *Kule sok bremdēm ma chaelga*
 kule sok bremdēm ma a=kael-ka
 later really be.angry.NI ART₂ SPEC=wallaby-M.SG

sok cha vang vaur.
 sok ka vang pa=ur
 really 3M.SG.I run.NPRES LOC=bush
 ‘Then the wallaby was really angry and he ran into the bush.’

5.2.11 Interjections

Interjections occur as independent utterances, particularly in spontaneous speech. They include: *ai* ‘oh!’, *aie* ‘careful!’, *alēchar* ‘oh dear!, oh my goodness!’ (lit: ‘oh legs!’), *ana* ‘I’ll take it’, *ani* ‘take this!’, *athoi* ‘ow!’, *chule nge chēlan* ‘bye!’ (lit: you just stay!), *chule sa* ‘wait a minute!’ (lit: stay a while!), *e* ‘oh!’, *i* ‘oh no!’, *iii* ‘I don’t know, maybe’, *kinak* ‘yes, all right’, *kule klan* ‘never mind’ (lit: stay only), *maricha* ‘oh!’, ‘hey!’, *oo* ‘goodbye!’, *saisavi* ‘look out!’, *salve* ‘greetings’, *vavu* ‘wow’, and *waioi* ‘ow!’.⁹

The relator *ma* is associated with hesitancy in many contexts. For example, it can be used to moderate the speaker’s stance towards a prohibitive. The particle *auk* ‘well’ is used to signal a change in the topic of the discourse. The particle *aichua* ‘oh, I see’, is used in back channelling or as an interjection to express surprise.

⁹ More complete semantic descriptions of the interjections are available in the Mali Dictionary (Stebbins forthcoming).

6

Derivation and valency changing

This chapter concerns the types of derivational processes used in Mali. We begin with the question of apparently acategorial roots (§6.1) and then discuss reduplication (§6.2), compounding (§6.3), the adverbializer *ma-* (§6.4), and transitivity and valency decreasing morphology (§6.5). The most productive pattern of lexical expansion in Mali, relating to the use of prepositions to form new expressions and in some cases words, is discussed in Chapter 7. Three other strategies of lexical expansion that rely on the conventionalisation of syntactic constructions are discussed in §20.1. These processes include the conventionalisation of modified NPs, possessed NPs, and clauses.

With the exception of morphology involved in transitivity or valency decreasing, which is quite productive, there is only limited use of derivational morphology in the Mali lexicon and it occurs relatively rarely in discourse. There is little indication that these processes described in this chapter are particularly productive within the language today. Rather, my understanding is that a small set of each of these types of forms are lexicalised and the derivational processes involved are otherwise only used in nonce forms.

6.1 Acategoriality and conversion

There are difficulties in determining the part of speech of many basic roots in Mali because of their ability to occur in multiple functional slots (with appropriate morphological marking for that slot if this is required by the discourse context). The identification of roots as adjectives, nouns and verbs is particularly problematic. As summarised in Table 5.1, the major word classes in Mali can be classified on the basis of a mixture of morphological and syntactic criteria. These properties allow us to determine the category of a root in terms of its use in any given context. However, because there is overlap between the categories, they are of limited assistance in allowing us to determine what category the root ultimately belongs to. In particular:

- there are a good many sets of noun/verb alternations where each use of the root is entirely consistent with the requirements of the class (§6.1.1),
- similarly, there are sets of noun/adjective alternations (§6.1.2), and
- it can be difficult to distinguish adjectives from verbs since an adjective may head an intransitive predicate (§6.1.3).

6.1.1 Noun/verb pairs

Morphological criteria readily allow us to distinguish the function of roots that occur as both nouns and verbs. Most verbs mutate for tense (see also §4.2.1) while the two morphological signals that a root is functioning as a noun are noun class marking (§8.2) and the specifier article *a*= (§10.4). Most nouns that are formed from verbs have the specifier article as part of their citation form. For example the verb *slamēr* ‘fix, tidy’ is related to the noun *aslamērki* ‘clinic, hospital’ {*a*=*slamēr*-*ki* SPEC=fix-F.SG}. (The feminine singular noun class is used for large buildings that have institutional functions.) Because there is more morphology associated with the citation form of the noun, in this case it seems reasonable to view the verb as more basic.

For mutating verbs (§4.2.1), the past or non-present tense form of the verb is associated with the noun root: the verb *donel* with the past tense form *monel* ‘hunt’ is related to the noun *amonelka* ‘hunter’ {*a*=*monel*-*ka* SPEC=hunt.PAST-M.SG}. The verb *tal* ‘carry’ with the non-present form *thal* is related to the noun *athalka* ‘small net bag’ {*a*=*thal*-*ka* SPEC=carry.NPRES-M.SG}. In these examples, the masculine singular noun class suffix *-ka* is identical to the masculine singular class III concordial pronoun, that would mark the O argument of the verb in a verbal clause. However, the concordial pronoun in a verbal clause indexes to the undergoer while the noun class marker indexes the agent in *amonelka* or the instrument in the case of *athalka*.

There are just under thirty noun/verb pairs in Mali. They cover a wide range of semantic classes and include transitive and intransitive verbs and complex stems as well as simple roots. Some examples are:

- activity verbs (*mēs* ‘eat.PAST’ related to *amēsmēs* ‘food’, *amēsmēski* ‘feast’, *amētēmna* ‘side dish’),
- change of state verbs (*thir* ‘grow quickly NPRES’ related to *athir* ‘new growth’),
- verbs of transfer (*mat* ‘get.PAST’ related to *amēthacha* ‘gift’),
- speech act verbs (*iras* ‘lie’ related to *airas* ‘lie’; *mēthamēn* ‘speak.PAST’ related to *mēthamēngi* ‘language, word, order’).

In spite of the strength of this pattern, to treat the specifier article and noun class markers as derivational in function (that is as deriving nouns from verbs) would be overstating the case. Both the specifier article and the noun class marking depend on the context of the utterance rather than the function of the root. In a non-specific context the specifier article will not appear and plural non-human nouns do not require noun class markers. For example, in (6.1) the noun *amuthēmmēs* ‘decorations’ is based on the verb *tuthēmmēs* ‘decorate oneself’. In the example the noun is identical with the past tense form of the verb: *muthēmmēs*. There is no noun class marker as the noun is plural. The specifier article is present in the clause but forms a clitic group with the possessive pronoun rather than the noun stem.

- (6.1) *Kama lotu.vemgi atha muthēmmēs ama mēr.*
 kama lotu.vem-ki at=a muthēmmēs ama amēr
 ART₁ church-F.SG 3F.SG.POSS=SPEC decorations REL₃ good
 ‘The church has beautiful decorations.’

This sentence illustrates the point made at the start of the chapter, that roots may occur in multiple slots without necessarily taking additional morphology. This is evidence that the morphology involved is not derivational in nature.

6.1.2 Noun/adjective pairs

The criteria for distinguishing adjectives from nouns is set out in §5.1.3. Key differences are that adjectives cannot head an NP and that nouns have inherent noun class values whereas adjectives do not (the use of noun class marking is discussed in detail in Chapter 8). A single adjective may be associated with several related nouns. As with the relationship between pairs of nouns and verbs, it is tempting to see the assignment of an inherent noun class as a derivational process that allows the conversion of an adjective into a noun. However, this process is not reliable as a diagnostic since count neutral and non-human plural nouns do not require noun class marking. For example, the adjective *amēl* meaning ‘loose’ and by extension ‘foreign’ is related to the nouns: masculine singular *amēlka* ‘island’, reduced singular *amēlē* ‘small island’, masculine singular *amēlka* ‘foreign man’, feminine singular *amēlki* ‘foreign woman’, human plural *amēlta* ‘foreigners’ and the non-human plural *amēl* ‘islands’, which is identical in form to the adjective.

6.1.3 Verbal uses of adjectives

An adjective may appear as a modifier within an NP or act as an intransitive predicate (see §16.4–§16.6 and §4.1.5.b.ii respectively). In at least one example both the adjective and the verb are identified as distinct lexemes sharing the same root: the verb is *kumer* ‘be clean’ and the adjective is *achumer* {*a=kumer* SPEC=clean} ‘clean’.

One useful indicator that a form is functioning as an adjective rather than a verb is the presence of the specifier article *a*= . The article is part of the citation form for 65 of the 85 adjectives identified to date and may occur even when the adjective heads an intransitive clause. However, for the remaining adjectives, where the specifier article is absent, there is no ready basis for analysis. Thus, inspection of the context in (6.2) does not indicate whether the head of the predicate should be classified as a verb or an adjective.

- (6.2) *Baulchi* *ma* *chēlevuchi*.
 baul-ki *ma* chēlevu(-/=)ki.
 sarong-F.SG REL₂ purple(-F.SG)/(=3F.SG.III)
 ‘The sarong is purple.’

The ambiguity is not resolved by the pronominal agreement on the predicate as this morpheme may be either the feminine singular noun class marker agreeing with the head noun (strengthening the analysis that the form in question is indeed an adjective) or the third person singular class III concordial pronoun (reinforcing the problematic distinction between an adjective and a verb). This ambiguity was mentioned in relation to ‘stative’ verbless clauses in §4.1.5.B.iii.

There are also many examples of adjective stems taking a preposition and functioning as prepositional verbs that describe properties. This is demonstrated by the following examples, based on the adjective *amēr* ‘good’: *amēr ba* {*amēr pa* good LOC} ‘be happy’, *amēr gēlē* {*amēr gēlē* good near} ‘rejoice’, *amēr pēt* {*amēr pēt* good at} ‘be happy’, *amēr mēt* {*amēr mēt* good within} ‘taste good’, *amēr vem* {*amēr pem* good in} ‘be happy’.

6.2 Reduplication

Reduplication is common in onomatopoeic words (§6.2.1) and is used in Mali in a very limited manner to form nouns (§6.2.2), verbs (§6.2.3) and adjectives (§6.2.4). Although the reduplication process does not seem to be productive, it is often associated with semantics of intensification. The reduplicated element occurs before the root, and in some cases the vowel in the reduplicated syllable is reduced as a result of greater intensity on the final syllable of the root (see also §3.4.2.A).

6.2.1 Reduplication and onomatopoeia

Many ideophones referring to sounds are inherently reduplicated. Examples include: *kēlē* *kēlē* ‘rattling sound’, *kus kus* ‘hissing sound’ and *tēbut tēbut* ‘stamping sound’. These ideophones are the basis of prepositional verbs such as *tēbut tēbut sē* ‘stamp’ and *kēlē kēlē mēt* ‘rattle’, and nouns such as *achuskuska* ‘a hissing noise’.

6.2.2 Reduplication to form nouns

Some nouns in Mali are derived from reduplicated verb roots. For example the past tense verb root *mēs* ‘eat.PAST’ becomes *amēsmēs* {*a=mēs-mēs* SPEC=eat.PAST-eat.PAST} ‘food’ and *amēsmēski* {*a=mēs-mēs-ki* SPEC=eat.PAST-eat.PAST-F.SG} ‘feast’ and the verb root *kut* ‘stab’ forms the prepositional verb *kut ma* ‘write’ and the noun *achutkut* {*a=kut-kut* SPEC=draw.PRES-draw.PRES} ‘drawing’. There is often an intensification of meaning associated with reduplication. Thus, *ves* ‘blow’ forms *vēsves* ‘magic’ (magic is often done by blowing something on or toward the target). Some nouns appear to be inherently reduplicated, for example *achinggoinggi* ‘butterfly’ {*a=king-koing-ki* SPEC=[?]-REDUP-F.SG}.

6.2.3 Reduplication to form verbs

There are no examples of reduplicated verbs acting as single predicates in my corpus. However, there are many examples of symmetrical verb serialisation in which the same active transitive verb is repeated to express durativity (see (18.26) in §18.5). A few prepositional verbs (see also §7.4.2) are based on reduplicated noun roots. For example, *genainggenaing mēt* ‘be snotty’ is based on the noun *genaing* ‘cerebrum, phlegm’, and *chunēnggunēng dēm* ‘be apparent, be real’ is based on the noun *kunēng* ‘sun, daytime, day’. The intransitive verb *dungdung* ‘empty’ is inherently reduplicated. As noted in §6.2.1, we also find reduplicant ideophones as roots of the prepositional verbs, for example, *krētkrēt sē* ‘rustle’ and *ngēngeng dēm* ‘squeak’.

6.2.4 Reduplication of adjectives

Reduplication of adjectives encodes intensification, for example: *amēl* ‘loose’, *amēlmēl* ‘wobbly’ and *achumer* ‘clean’, *achumerkumer* ‘very clean’. Quite a few inherently reduplicated adjectives cannot be associated with any current root morpheme, for example: *adēndēn* ‘odd, crazy, delirious’, *adungdung* ‘empty’, and *agapgap* ‘weightless’.

6.3 Compounding

As noted in the introduction to this chapter, the Mali lexicon makes extensive use of a range of complex lexicalised expressions that have internal syntactic structure. In this section we consider verb + noun and verb + verb compounds. The following patterns are found:

- Nouns made from verb + noun compounds (§6.3.1),
- Verbs made from verb + noun compounds (§6.3.2), and
- Verbs made from verb + verb compounds (§6.3.3).

Both kinds of verb + noun compounds give the appearance of lexicalised VPs.

6.3.1 Verb + noun compounds that make nouns

There are only a few examples of compound V-N nouns in my corpus. These appear to be conventionalised expressions that have been reanalysed as nouns. Examples include: *achutathinēmga* ‘sea hawk’ {*a=kut=a=thinēm-ka* SPEC=spear=SPEC=fish-M.SG} and *achirkēsengga* ‘comb’ {*a=kiar-kēseng-ka* SPEC=scrape-hair-M.SG}.

6.3.2 Verb + noun compounds that make verbs

Although NP incorporation is not a productive process in Mali, V-N compounds could be said to have lexicalised incorporated objects. Examples of verbs that are V-N compounds include: *ben sachong* {*ben-sachong* bend eyes} ‘check’, *tu snēng* {*tu-snēng* put heart} ‘think’, and *tu nanēk* {*tu-nanēk* put mother} ‘grizzle’. Example (6.3) shows the intransitive V-N compound *sek alugut* {*sek-alugut* marry-SPEC=spouse} ‘be married’.

- (6.3) *Ngēmbēs in sēk.alugut.*
 angēmbēs in sēk.alugut
 NEG 3DL.I be.married.NI
 ‘They aren’t married.’

Evidence that *sek alugut* is a verb compound comes from the lack of noun class marking on the noun and the fact that it is impossible to insert other constituents between the verb and the noun. (A dual human referent should trigger a dual masculine noun class marker on the noun.) The verb *sēk* ‘marry’ is also shown in (6.4) as the detransitivised reciprocal verb *sēk na* ‘marry each other’. (See §6.5.3 concerning *-na* in this example.)

- (6.4) *Lugutvēthaiom in sēk.na.*
 lugutvēt-iom in sek.na
 couple-M.DL 3DL.I get.married.NI
 ‘The couple married each other.’

6.3.3 Verb + verb compounds that make verbs

The verb/verb compounds may be lexicalised symmetrical serial verbs in which only one set of concordial pronouns is now required. Example (6.5) shows the lexicalised serial verb *bang buinem* {*bang-buinem* run-return} ‘wander around’. Another verb of this kind is *tet ngis* {*tet-ngis* go-be.separate} ‘miss’.

- (6.5) ...*chama duraiki ma chi bang.buinem imono ...*
 kama duraik-ki ma ki bang.buinem i-mono
 ART₁ chicken-F.SG REL₂ 3F.SG.II wander.around.PRES DER₁-across.slope
 ‘... a chicken that was wandering around ...’

6.4 Derivation of adverbs

The Mali lexicon includes adverbs that have been derived from adjectives and nouns using the prefix *ma-*. This same form may be used as a relator to introduce adverbial clauses (§16.5.5). As a derivational strategy this process no longer seems to be productive. Examples of related adjectives and adverbs include: *amor* ‘large’, *mamor* ‘loudly’; *amēr* ‘good’, *mamēr* ‘properly’; and *aulul* ‘long’, *maulul* ‘a long time’. Although it is not fully productive as a prefix for deriving adverbs from nouns, we find pairs such as *athēchasepka* ‘morning’ (N) and *mathēchasep* ‘in the morning’ (ADV).

6.5 Transitivity and valency changing

Mali has four suffixes that are involved in modifying the transitivity of the verb (see Hopper and Thompson 1980). Three of these change the valency of the verb while one does not:

- the suffix *-mes* decreases transitivity and may decrease valency (§6.5.1),
- the suffix *-na* decreases transitivity but not valency (§6.5.2),
- the other suffix *-na* marks reciprocals (§6.5.3), and
- the suffix *-nas* marks reflexives (§6.5.4).

There is a good deal of variation in the phonological and hence orthographic relationship between these suffixes and the stem depending on whether an element such as a concordial pronoun or other phonologically independent sequence follows (see also §3.7.1). In this description these forms are treated as suffixes within grammatical words since they typically have the function of changing the valency of the stem. However, from a phonological perspective it would sometimes be more appropriate to treat them as clitics.

The reciprocal and the reflexive suffixes *-na* and *-nas* are highly productive while the transitivity reducing suffixes *-mes* and *-na* generally seem to occur in lexicalised expressions.¹ Mali does not have causativising morphology. Strategies for expressing causation are listed in §6.5.5.

6.5.1 Transitivity and valency decrease using *-mes*

The suffix *-mes* is used with transitive verbs to decrease the transitivity of the verb, and in some cases to decrease its valency.

In some cases the effect of the suffix *-mes* is to reduce the affectedness of the O (a characteristic of transitivity). For example, with the suffix *-mes* the verb *kut* ‘stab something, spear something’ becomes *kutmes* ‘spear randomly (at something)’. This is shown in (6.6) and (6.7). Whereas the verb *kut* ‘stab something, spear something’ implies that the O was affected, the verb *kutmes* ‘spear randomly (at something)’ does not necessarily imply this.

¹ These suffixes may also be quite productive but further research is required to establish this.

- (6.6) ... *da tha chut athēva sndēm.*
 da ta chut athēv=a sndēm
 and 3H.PL.I stab.NPRES 3H.PL.POSS=SPEC ears
 ‘... they pierced their ears.’

- (6.7) *Cha chut.mes kama urēn.*
 ka chut.mes kama urēn
 3M.SG.I shoot.randomly.at.NPRES ART₁ prawn
 ‘He shot randomly at the prawns.’

As examples (6.6) and (6.7) show, the suffix *-mes* does not necessarily reduce the valency of the verbs. However, valency reduction is its most usual function. Examples of transitive verbs that become intransitive with the suffix *-mes* include: *dong mes* ‘turn around’ (*dong* ‘turn something’), *pardēm mes* ‘crawl’ (*par dēm* ‘drag something’), *sek mes* ‘get up’ (*sek* ‘lift something’), and *tu thēm mes* ‘decorate oneself’ (*tu thēm* ‘decorate something’). In these examples the A argument becomes an S_A argument. Examples of *par dēm* ‘drag something’ and *par dēm mes* ‘crawl’ are shown in (6.8) and (6.9).

- (6.8) *Chē par.davama vaimga naosthanas.*
 kē par.dēm=avama a=paim-ka naost-nas
 3M.SG.II drag.PRES=3M.SG.POSS SPEC=dog-M.SG behind-REFL
 ‘He dragged his dog behind him.’

- (6.9) *Sa ngua tet nēgua thik,*
 sa ngua tet na=gu=a tik
 NEF 1SG.I go.PRES PREP=1SG.POSS=SPEC hand

 ngēnē gua lēchar ...
 ngē=nē gu=a lēchar
 3N.I=ASSOC 1SG.POSS=SPEC leg

 ma sok ngu par.dēm.mes.
 ma sok ngu par.dēm.mes
 REL₂ really 1SG.II crawl.PRES
 ‘So I went on my hands and legs ... I was really crawling.’

6.5.2 Transitivity decrease using *-na*

Both transitive and intransitive verbs may take the suffix *-na* (DETR₁). The main use of this suffix is the formation of reflexives and reciprocals with transitive verbs of movement. Like *-mes*, the suffix *-na* may reduce one of the characteristics of transitivity without changing the valency of the verb. An example of the verb *parna* ‘call’ (*par* ‘pull’) is shown in (6.10).

- (6.10) *Save mathēchasep sa ini*
 sa=pe mathēchasēp sa ini
 to=there in.the.morning NEF 3DL.II

 par.naina vaim.
 par-na=ain=a paim
 pull.PRES-DETR₁=3DL.POSS=SPEC dogs
 ‘In the morning the two of them called their dogs.’

Other verbs in the corpus that take the suffix *-na* without a change to valency include the transitive verbs *drēmna* ‘recognise’ (*drēm* ‘know’) and *tēkna* ‘process’ (*tēk* ‘do’). In fact *-na* may be applied to intransitive verbs. For example, the intransitive verb *tor* ‘wash’ with an agent subject forms the extended intransitive *torna* ‘pour’ with an author subject. An example is shown in (6.11).

- (6.11) *Renggi chi torna nēmēt kama sospen’gi.*
 reng-ki ki tor-na na=mēt kama sospen-ki
 water-F.SG 3F.SG.II wash.PRES-DETR₁ from=within ART₁ saucepan-F.SG
 ‘Water poured from the saucepan.’

6.5.3 Reciprocals

Reciprocals are formed from transitive verbs with the suffix *-na*. An example is provided in (6.12).

- (6.12) *Ithik sa ngaiom ini tluna mavo.*
 ithik sa ngaiom ini tlu=na mavo
 ADV.PROX.DEM NEF M.DL 3DL.II see.PRES=RECIP badly
 ‘Now the two of them hate each other.’

Some verbs must be detransitivised with the suffix *-na* (DETR₁) before the reciprocal can apply. The corpus shows this is the case for the verbs *gamar* ‘fight’ (6.13) and *tuchun* ‘chase’.

- (6.13) *Thi gamar.nana nēchama vilēk.*
 ti gamar-na=na na=kama vilēk
 3H.PL.II fight.NI-DETR₁=RECIP PREP=ART₁ guns
 ‘They fought with guns.’

The detransitivising suffix *-na* is homophonous with the preposition *-na* ‘PREP’. Verbs with either the detransitivising suffix or the preposition may take the reciprocal suffix. The detransitivising suffix and the preposition can be distinguished from each other since prepositions have the function of increasing the transitivity of the verb. The intransitive verb *piru* ‘writhe’ takes the preposition *-na* and the reciprocal suffix *-na* to form *pirunana* ‘struggle with each other’. The verb *kuar na* ‘tell’, which contains the preposition *na*, may form the reciprocal *kuar nana* ‘tell each other’.

The reciprocal suffix *-na* occurs in place of a NP complement in a prepositional phrase. See example (6.14). In this function it forms the expression *tēmna* {*tēm=na* THEME=RECIP} ‘together’.

- (6.14) *Kama mēngbem in namas va.thēm.na.*
 kama mēng-vem in namas pa=tēm=na
 ART₁ tree-F.DL 3DL.I lie.down.NI LOC=THEME=RECIP
 ‘The two trees lay parallel to each other.’

The reciprocal modifier *nana* ‘each other’ can be used to modify nouns.² An example is given in (6.15).

² The slot after the head of the NP may also be filled by the particle *mo* ‘all’. This particle also modifies pronouns: *ut mo* ‘all of us’.

- (6.15) *Ngaiom aina vruiom nana mamēr.*
 ngaïom ain=a vru-iom na=na mamēr
 M.DL 3DL.POSS=SPEC enemy-M.DL DER₃=RECIP properly
 ‘The two of them are real enemies.’
 (lit: ‘Those two (have) proper enmity for each other.’)

The verb *erna* ‘compete’ is inherently reflexive. It is based on the adverb *er* ‘first’.

6.5.4 Reflexives

Transitive verbs form reflexives with the suffix *-nas*. Examples are shown in (6.16) and (6.17).

- (6.16) *Asecha sēvēt kama rura athē ia Malichēna*
 a=sek-ka sa=pēt kama ru-ta athē ia Mali-kēna
 SPEC=story-M.SG to=at ART₁ person-H.PL H.PL.INDEF REL₁ PN-H.PL

ta tesnas ia Morki atha vēlekvek.
 ta tes=nas ia Morki at=a vēlek-vek
 3H.PL.I call.PRES=REFL REL₁ PN 3F.SG.POSS=SPEC grandchild-H.PL
 ‘[The] story about the other people, Malis who call themselves the grandchildren of the goddess.’
- (6.17) *Gu lunggutki asik ngi tlu.vēthanas mamēr.*
 gu lugut-ki asik ngi tlu.vēt=nas mamēr
 1SG.POSS spouse-F.SG IRR 2SG.II look.after.PRES=REFL properly
 ‘My wife, you must look after yourself properly.’

Some verbs, mainly verbs of movement, require the detransitivising suffix before the reflexive can be added. An example is given in (6.18) with the verb *suchut* ‘push, shove’.

- (6.18) *Sa chi suchutnanas mēt ki.*
 sa ki suchut-na-nas mēt ki
 NEF 3F.SG.II push.NI-DETR₁-REFL within 3F.SG.III
 ‘Then she eased herself through it.’

Other verbs that require the detransitivising suffix before the reflexive include: *nathēk* ‘point’, *tnēp* ‘tip’, *sot* ‘finish’, and *tudēng* ‘finish’ (*tu-dēng* put-end). The verb *donanas* ‘jump’ can be analysed as containing both these suffixes: {*don-na-nas* go.in-DETR₁-REFL}. The verb *narimunanas* ‘listen’ also contains these suffixes: {*nari-mu-na-nas* hear.NPRES-put.PAST-DETR₁-REFL}. The verb *kuēvanas* ‘shake oneself’ contains the reflexive.

6.5.5 Strategies for encoding causation

The corpus contains two examples of verbs that are used to express causation. They are based on intransitive prepositional verbs. As the basic function of a causative is to increase transitivity, these examples are consistent with other uses of prepositions to increase the valency of a verb (§7.4). As different prepositions are used in each case it does not seem as if there is a special causative construction in Mali. The future tense form of the verb *tuchun* ‘sit’ is shown in (6.19). It takes the preposition *na* and encodes a causative meaning.

- (6.19) *Dē tha thuchun nachi dēvēthik.*
 da ta thuchun na=ki dēvēthik
 and 3H.PL.I sit.FUT PREP=3F.SG.III beside
 ‘They make her sit beside [him].’

In (6.20) the past tense form of the verb *tair* ‘stand’ is shown with the preposition *sa*. Again the meaning is causative.

- (6.20) ... *sasik in mair.sichit* ...
 sa=asik in mair=sa=ki
 NEF=IRR 3DL.I stand.PAST=with=3F.SG.III
 ‘... so that they make it stand ...’

A more common strategy for encoding causation is to use a purposive clause (see also §17.2.1). Examples containing the purposive *diva* are provided in (6.21) and (6.22).

- (6.21) *Sa chule sa chē rut.nēchama ases muk pem*
 sa kule sa kē rut.nē=kama a=ses muk pem
 NEF later NEF 3M.SG.II push.PRES=ART₁ SPEC=ropes across in
diva sa ngēt ngēthi sēp samēk.
 diva sa ngēt ngēthi sēp sa=mēk
 PURP₃ NEF 3N.III 3N.II fall.NI to=down
 ‘Later he can push the ropes from inside to make them fall down.’
- (6.22) ... *dē ngi sep.mēchama rutha diva thi Katulik*
 da ngi sep.mē=kama ru-ta diva ti Katulik
 and 2SG.II change.NI=ART₁ person-H.PL PURP₃ 3H.PL.II Catholic
ta.ithē ve ka mbangēm dēchēm.
 ta=ithē pēt kē=a bang-ēm tēchēm
 EMPH=here at ART₃=SPEC village-RCD.SG RCD.SG.PROX.DEM
 ‘... you change the people so that there are Catholics in this village.’

7

Prepositions and associated constructions

Prepositions play a central role in Mali grammar. They have important functions in expanding the lexicon as part of formulaic expressions that result in lexicalised ‘prepositional verbs’ and morphologically complex nouns. One of the challenges in dealing with prepositions in Mali has been the difficulty associated with sorting out their semantics since the semantics of prepositions within lexicalised expressions can be quite different to that in more productive contexts.

This chapter begins in §7.1 with an introduction to each preposition in its simple form so that glosses can be established for each one. In framing this discussion I have made use of Frawley’s (1992) work on the semantics of spatial relations.¹ Morphologically complex prepositions are described in §7.2. The structure and distribution of prepositional phrases (PPs) are summarised in §7.3. Prepositional verbs and nouns are discussed in §7.4 and §7.5. A summary showing how each preposition may be used is provided in §7.6.

7.1 Simple prepositions in Mali

The following simple prepositions may be used independently taking NP arguments: *daer* ‘over’ (§7.1.1), *gēl* ‘with’ (§7.1.2), *gēlēn* ‘near’ (§7.1.3), *mēni* ‘on’ (§7.1.4), *mēt* ‘within’ (§7.1.5), *na* ‘from, PREP’ (§7.1.6), *nani(a)* ‘for’ (§7.1.7), *pa* ‘LOC, BEN’ (§7.1.8), *pem* ‘in’ (§7.1.9), *pēt* ‘at’ (§7.1.10), *sa* ‘to, with’ (§7.1.11), *sēng* ‘at the bottom of’ (§7.1.12), and *tēm* ‘THEME, GOAL, PATH’ (§7.1.13). Each preposition is discussed in turn with topological relations examined first followed by meanings associated with motion and thematic roles, and metaphorical extensions where these are relevant.

7.1.1 *daer* ‘over’

The preposition *daer* ‘over’ encodes a spatial relationship of superiority; one entity is above another (see Frawley 1992:265f.). An example is given in (7.1).

- (7.1) *Kama srucha cha mu chama sospen'gi*
kama sru-ka ka mu kama sospen-ki
ART₁ elderly.person-M.SG 3M.SG.I put.PAST ART₁ saucepan-F.SG

¹ See Frawley (1992:171ff.) on the structure of motion, (1992:201ff.) on thematic roles and (1992:254ff.) on topological locations.

daer kama mundēm.

daer kama mundēm

over ART₁ fire

‘The elderly man put the saucepan over the fire.’

Daer ‘over’ is also used to encode comparative relations. An example is given in (7.2). Comparative strategies are discussed in more detail in §19.4.

- (7.2) *Kēvicha da arēmalika daer ma ngo.*
 Kēvi=ka da a=rēmali-ka daer ma ngo
 CONTR=3M.SG.III and SPEC=clever.person-M.SG over ART₂ 1SG.III
 ‘He is a more clever person than me.’
 (lit: ‘That one and [he is a] clever person over me.’)

The preposition *daer* may contain a reflex of the morpheme *ēr* ‘first’ (see also §19.4.4 on inherently comparative lexemes) but a compositional analysis of this preposition is not possible at this stage as it is not clear what the initial segment is.

7.1.2 *gēl* ‘with’

The form *gēl* ‘with’ encodes coincidence and is generally limited in use to human referents. As such, it typically has associative overtones. According to Frawley (1992:255), a relation of coincidence means that ‘the located object and the reference [object][should] be *conceptually projected as sharing the same ideal space*’ [emphasis original]. Consider (7.3) and (7.4).

- (7.3) *Thik da chave gēl kama rutha.*
 ithik da ka=pe gēl kama ru-ta
 ADV.PROX.DEM and 3M.SG.I=there with ART₁ person-H.PL
 ‘Now he is there with the people.’
- (7.4) *Kama naingiska cha tas gēl ma Petrus.*
 kama naingis-ka ka tas gēl ma Petrus
 ART₁ foreigner-M.SG 3M.SG.I sleep.PRES with ART₂ PN
 ‘The foreigner is sleeping at Petrus’s.’

7.1.3 *gēlē* ‘near’

The form *gēlē* ‘near’ encodes a looser relationship of coincidence than *gēl* and has a closely related, but non-segmentable, form. This preposition may be used with human or non-human referents. An example is shown in (7.5).

- (7.5) *Auk, ta ma thave va nggarēs dē*
 auk ta ma ta=pe pa garēs da
 well 3H.PL.III REL₂ 3H.PL.I=there LOC beach and
- thave gēlē ngēt ngēmo.*
 ta=pe gēlē ngēt ngē=mo
 3H.PL.I=there near 3N.III 3N.I=all
 ‘Well, those who are on the coast have everything.’
 (lit: ‘Well, those who are there at the coast they [are] there near it, it all.’)

7.1.4 *mēni* ‘on’

Another preposition encoding a type of coincidental relationship is *mēni* ‘on’. This form encodes contact with the surface of the reference object (see Frawley 1992:257). Consider example (7.6) and (7.7)

- (7.6) *Ka thap mēni chama viulacha ...*
 ka thap mēni kama viula-ka
 3M.SG.I cut.NPRES on ART₁ mango.tree-M.SG
 ‘He made a cut on a mango tree ...’
- (7.7) ... *cha mu aguvangithong ngē mo ithē mēni ivētki.*
 ka mu aguvang-ithong ngē mo ithē mēni ivēt-ki
 3M.SG.I put.PAST everything-DIM.PL 3N.I all here on earth-F.SG
 ‘... he put everything here on earth.’

Frawley (1992:257) notes that the located object is typically supported by the reference object. This is why, in both Mali and English, the same preposition is used for examples such as (7.8) which encode support but where the amount of surface contact is in fact minimal.

- (7.8) *Ini tal kama vėlēmga mēni chama lica.*
 ini tal kama a=plēm-ka mēni kama li-ka
 3DL.II carry.PRES ART₁ SPEC=pig-M.SG on ART₁ carrying.pole-M.SG
 ‘The two are carrying the pig on the carrying pole.’

Note that in example (7.9), there is a mismatch between the English and the Mali encoding of the situation. The activity of washing occurs in the medium of water: this is (at least metaphorically) associated with the surface of the river in Mali but under the surface of the river in English.

- (7.9) *Ngua met ngu tor mēni ma Mundai*
 ngua met ngu tor mēni ma Mundai
 1SG.I go.PAST 1SG.II wash.PRES on ART₂ PN
atha aicha.
 at=a ai-ka
 3F.SG.POSS=SPEC branch-M.SG
 ‘I went for a wash in a branch of the Mundai River.’

7.1.5 *mēt* ‘within’

The form *mēt* ‘within’ is one of two forms (see also *pem* below) that encode relations of interiority (see Frawley 1992:258-260). *Mēt* is used to describe relations involving physical containment (7.10) and (7.11) as well as temporal relations of containment (7.12).

- (7.10) *Kama vlambap ma aduguavap ngē ve mēt*
 kama a=plam-vap ma aduguavap ngē pe mēt
 ART₁ spec=pigs-RCD.PL REL₂ three.RCD.PL 3N.I there within
kama ichēthachi.
 kama ichēt-ki
 ART₁ enclosure-F.SG
 ‘There are three piglets in the enclosure.’

- (7.11) *Sndamēr veia sospen'gi chia ve mēt kama mundēm ...*
 sdmēr pe=ia sospen-ki kia pe mēt kama mundēm
 directly there=REL₁ saucepan-F.SG 3F.SG.I there within ART₁ fire
 'While the pot sits in the fire ...'

- (7.12) ... *mir mēt kama gamar.*
 mir mēt kama gamar
 long.ago within ART₁ war
 '... long ago during the war.'

Note that this preposition is also compatible with verbs of movement, as in (7.13) where it describes a goal.

- (7.13) *Sa chia thuchi mētkama amundēm.*
 sa kia thu=ki mēt=kama a=mundēm
 NEF 3F.SG.I put.FUT=3F.SG.III within=ART₁ SPEC=fire
 'Then she puts it into the fire.'

The preposition *mēt* is used to describe locations and movements 'through' an object, that is a path involving interiority; this is shown in (7.14) and (7.15).

- (7.14) ... *da chama dulgi ma alechi mētki*
 da kama dul-ki ma a=lek-ki mēt=ki
 and ART₁ stone-F.SG REL₂ SPEC=hole-F.SG within=3F.SG.III
thavēs.
 at=a=pēs
 3F.SG.POSS=SPEC=head
 '... and the stone which [had] a hole through it[s head].'
- (7.15) *Sa chi suchutnanas mēt ki.*
 sa ki suchut=na=na mēt ki
 NEF 3F.SG.II push.NI=DETR₁=REFL within 3F.SG.III
 'Then she tried to go through it.'

7.1.6 *na* 'from, PREP'

The preposition *na* (which may be reduced to *nē* in clitic groups) is homophonous with (and probably at least historically related to) the associative marker =*nē*= (or =*na*=). It is a high frequency preposition in Mali, and is productive in forming complex prepositions (to be discussed in §7.2) and with directionals (§12.2.5). The preposition *na* does not have a topological meaning but encodes the direction 'from' in contexts associated with movement (7.16).

- (7.16) *Kia met nacha.*
 kia met na=ka
 3F.SG.I go.PAST from=3M.SG.III
 'She went [away] from him.'

The meaning 'from' is often part of the semantics of the complex prepositions formed with *na* and with locational expressions that involve adverbial demonstratives and directionals (discussed in §12.5–§12.6). Note that it is actually unusual for *na* to introduce a simple NP

as it does in (7.16). It is more common for this type of spatial relation, associated with movement, to be expressed using a complex location phrase (§7.2.3).

The preposition *na* also signals relative locations ‘in relation to another point’ where in English we would use ‘to’.

- (7.17) *Sagēlēṃna nēchama tēpki.*
 sa=gēlēṃ=na na=kama tēp-ki
 to=near=RECIP from=ART₁ hell-F.SG
 ‘Half-way to hell.’

The preposition *na* is used to add arguments to the clause in a range of thematic roles. Whereas *sa* adds comitatives to the clause and *pa* adds benefactives, *na* seems to be functionally unmarked and adds all other types of arguments to the clause. Thematic roles of *na* include instruments, as shown in (7.18).

- (7.18) *Ka chut kē plēmga nēcha chepki.*
 ka chut kē plēm-ka na=kē=a chep-ki
 3M.SG.I shoot.NPRES ART₃ pig-M.SG PREP=ART₃=SPEC spear-F.SG
 ‘He shot the pig with the spear.’

The preposition *na* also introduces the addressee for many speech act verbs (see also §4.1.4).

- (7.19) *Dē chē snandever nāchi mamēr ...*
 da kē snandever na=ki mamēr
 and 3M.SG.II ask.NI PREP=3F.SG.III properly
 ‘And he asked her to make sure ...’

In the nonce construction (7.20), which expresses causation, *na* adds an O argument.

- (7.20) *Dē tha thuchun nāchi dēvēthik.*
 da ta thuchun na=ki tē=av=tik
 and 3H.PL.I sit.FUT PREP=3F.SG.III DER₂=3M.SG.POSS=hand
 ‘They make her sit next to him.’

Finally, *na* is required to introduce predicative complements in verbless clauses that predicate on a nominal. This includes negation with the nominal negator *angēmbes* (7.21), as well as ordinal numbers (7.22), colours encoded by nouns² (7.23) and other common nouns (7.24).

- (7.21) *Angēmbēs nānga aguang taithē.*
 angēmbēs na=anga angguang ta=ithē
 NEG PREP=NSPEC CN.INDEF.DEM EMPH=here
 ‘There is not anything here.’

- (7.22) ... *sa ngian bēthēchē laurka chērak*
 sa ngia=then pēt=kē laur-ka chērak
 NEF 2SG.I=arrive.FUT at=ART₃ wind-M.SG EMPH.M.SG.CONTR.DEM

² Most colour terms are adjectives and follow a different pattern (described in §10.1, particularly (10.3)) but *alolka* {*a=lol-ka* SPEC=red-M.SG} ‘red’ (occasionally *alolki* as in (7.23)) and *chēthiacha* {*chēthia-ka* blue-M.SG} ‘blue’ are nouns. See also §6.1.2 on the distinction between nouns and adjectives.

ama ungiom nacha.
 ama ungiom na=ka
 REL₃ two.M PREP=3M.SG.III
 ‘... then you will reach the second wind.’

- (7.23) *Ki tal kama bukvam ama lolki nēngavam.*
 ki tal kama buk-vam ama lol-ki na=ngavam
 3F.SG.II carry.PRES ART₁ book-RCD.DL REL₃ red-F.SG PREP=RCD.DL
 ‘She carried the two red books.’

- (7.24) ... *dacha Siapan’gēna tha mēthacha*
 da=kē=a Siapan=kēna ta mat=ka
 and=ART₃=SPEC Japanese=H.PL 3H.PL.I get.PAST=3M.SG.III
diva thēva thatalvemga nacha.
 diva athēv=a thatalvem-ka na=ka
 PURP₃ 3H.PL.POSS=SPEC carrier-M.SG PREP=3M.SG.III
 ‘... the Japanese got him for their carrier.’

The range of meanings shown in (7.17)–(7.24) poses problems in glossing as the most salient meaning ‘from’ is incompatible with a single parsable gloss for these examples. I use the gloss PREP where the gloss ‘from’ is inappropriate.

7.1.7 *nani(a)* ‘for’

The preposition *nani* is used to introduce arguments in the role of non-locational goals (see Frawley 1992:221–222). Examples are shown in (7.25) and (7.26). The final <a> in the form is present when the following word is a pronoun, as in (7.26).

- (7.25) *Julien chia met sēva lat nani chama not.*
 Julien kia met sa=pa lat nani kama not
 PN 3F.SG.I go.PAST to=LOC garden for ART₁ taro
 ‘Julien went to the garden for taro.’

- (7.26) *Asik peia thi nēs nania cha*
 asik pe=ia ti nēs nania ka
 IRR there=REL₁ 3H.PL.II call.NPRES for 3M.SG.III
sēmēt kama gamēracha...
 sa=mēt kama gamar-ka
 to=within ART₁ fight-M.SG
 ‘When they call him to the fighting ground ...’

7.1.8 *pa* ‘LOC, BEN’

The preposition *pa* is used to encode two distinct types of relations. The first relationship is shown in examples (7.27) and (7.28), where *pa* introduces an NP that further specifies a directional. NPs in this function appear to have lowered referentiality, as they denote a type of location rather than a specific location. This is similar to the contrast between ‘to the house’ and ‘home’ in English. NPs in this function do not take articles (see also §10.3). In this function, *pa* is glossed ‘LOC’.

- (7.27) *Kule ngaikom pē aina mbangēm*
 kule ngaikom pēt ain=a bang-ēm
 stay.PRES M.DL at 3DL.POSS=SPEC village-RCD.SG
mano va nggarēs.
 mano pa a=garēs
 down.slope LOC SPEC=beach
 ‘The two of them stayed together at their village down on the coast.’
- (7.28) *Sa chian be va lat sa chi*
 sa kia=then pe pa lat sa ki
 NEF 3F.SG.I=arrive.FUT there LOC garden NEF 3F.SG.II
thik.tēchama auravu.
 thik.tē=kama auravu
 pick.NPRES=ART₁ native.spinach
 ‘When she reaches the garden she picks the native spinach.’

The second use of *pa* is to introduce benefactives (see Frawley 1992:215-217). In this function, *pa* is glossed ‘BEN’. An example is shown in (7.29).

- (7.29) *Cha mēt ka mēngēm bachi.*
 ka mat kē=a mēng-ēm pa=ki
 3M.SG.I get.PAST ART₃=SPEC tree-RCD.SG BEN=3F.SG.III
 ‘He got the tree stump for her.’

This preposition is likely to be related to the purposive marker *va* (§17.2.1). The form of the initial consonant is determined by the preceding phonological segment so that the preposition introducing beneficiaries may well appear as *va* in context (see also §3.4.1.A). Since the semantic scope of the preposition is quite different to the purposive marker and the former is only associated with NPs, the two are treated as distinct forms in this analysis.

7.1.9 *pem* ‘in’

In addition to *mēt* ‘within’ (§7.1.5), interiority is also encoded by the preposition *pem*. This low frequency form is generally used in lexicalised expressions that associate named characteristics with actions or entities (§7.5.2). Examples (7.30)–(7.32) show that the range of use of *pem* ‘in’ is (at least superficially) quite similar to *mēt* ‘within’. The low frequency of *pem* and its restricted use in lexicalised expressions suggest that *pem* is being displaced by *mēt*.

- (7.30) ... *cha nep.nēchama avētkā*
 ka nep.nē=kama a=vuēt-ka
 3M.SG.I turn.over.NPRES=ART₁ SPEC=house-M.SG
ma thi pēs kama mēsmēs pemga.
 ma ti pēs kama mēsmēs pem=ka
 REL₂ 3H.PL.II cook.PRES ART₁ food in=3M.SG.III
 ‘... he turned over the house that they cook food in.’

- (7.31) *Amusnēng ngē mēn vēmga sēvēt kama*
 a=musnēng ngē muēn pem=ka sa=pēt kama
 SPEC=idea 3N.I arrive.PAST in=3M.SG.III to=at ART₁
Siapan'ga ia sok ka vēlēngga.
 Siapan-ka ia sok ka vēlēng=ka
 Japanese-M.SG REL₁ really 3M.SG.I kill.NPRES=3M.SG.III
 'He decided about the Japanese man that he really would kill him.'
 (lit: 'An idea it arrived in him about the Japanese man ...')
- (7.32) *Da nasot tat kama dulki da thi*
 da nasot ta=that kama dul-ki da ti
 and later 3H.PL.I=get.FUT ART₁ stone-F.SG and 3H.PL.II
nēski vēm kama silingim.
 nēs=ki pem kama siling-ēm
 put.NPRES=3F.SG.III in ART₁ old.net.bag-RCD.SG
 'Then later they get the stone and they put it in an old net bag.'

7.1.10 *pēt* 'at'

Like *gēl* 'with', and *gēlēn* 'near', *pēt* encodes a spatial relation of coincidence. In this case the coincidence is real and occurs in a concrete location (rather than ideal or socially conceived space). Examples (7.33)–(7.36) are provided to show that the semantic scope of the preposition is quite wide and covers a range of spatial relations expressed by distinct prepositions in English.

- (7.33) *Kē tlu chama katiketkēna vēt kama bangbap.*
 kē tlu kama katiket-kēna pēt kama bang-vap
 3M.SG.II see.PRES ART₁ catechist-H.PL at ART₁ village-RCD.PL
 'He saw the catechists in the villages.'
- (7.34) ... *da maila minia ia sa ngēt nga ve vēt kama buk.*
 da maila minia ia sa ngēt ngē pe pēt kama buk
 and maybe how REL₁ NEF 3N.III 3N.I there at ART₁ book
 '... and maybe that's how it got to be in the book.'
- (7.35) ... *di chia thungēt vēt kama tevolki athathēng.*
 da kia thu=ngēt pēt kama tevol-ki at=a=thēng
 and 3F.SG.I put.FUT=3N.III at ART₁ table-F.SG 3F.SG.POSS=SPEC=back
 '... and she puts them on the table.'
- (7.36) *Asik ki sangar kama aiski vētkama*
 asik ki sangar kama a=is-ki pēt=kama
 IRR 3F.SG.II hold.NI ART₁ SPEC=rope-F.SG at=ART₁
chumeska ava thēng.
 chumes-ka av=a thēng
 male-M.SG 3M.SG.POSS=SPEC back
 'She holds onto the rope at the back of the man.'

7.1.11 *sa* ‘to, with’

The preposition *sa* ‘to’ is phonologically identical in form to the discourse marker *sa* that is used to introduce clauses that stand in contrast to events that have previously been described (glossed as NEF indicating a new event frame; see also §14.2.1.E). It seems reasonable to suspect a historical link between the two forms. The preposition has a reduced form *sē* but the clause linker does not. Like *na* ‘from’, *sa* ‘to’ is a high frequency preposition and is productive in the derivation of complex prepositions. It also combines with directionals. In all these uses *sa* indicates movement towards the goal encoded by the reference object.

An example is given in (7.37) showing *sa* ‘to’ before the anaphoric³ directional demonstrative *pe* ‘there’. (The relator *ia* introduces an NP referring to the place by name.)

- (7.37) *Kama araunga mētki chia thal ut*
 kama a=raun-ka mēt=ki kia thal ut
 ART₁ SPEC=sound-M.SG within=3F.SG.III 3F.SG.I carry.NPRES 1PL.III
save *ia Kokopo.*
 sa=pe *ia Kokopo*
 to=there REL₁ PN
 ‘The car carried us to Kokopo.’

There are no examples in the corpus in which the preposition *sa* with the sense ‘to’ takes an NP complement. Where *sa* is used to introduce a place encoded by an NP, it occurs in a complex location phrase (see §7.2.3 for more information).

The second function of *sa* is to introduce NPs in comitative relations. With verbs of movement the comitative refers to a second referent accompanying the S_A, as shown in (7.38).

- (7.38) ... *angēmbēs ngua ve ngua met sanga*
 angēmbēs ngua pe ngua met sa=anga
 NEG 1SG.I there 1SG.I go.PAST with=NSPEC
chumesta inamēk.
 chumes-ta i-na-mēk
 male-H.PL DER₁-DER₃-down
 ‘... I didn’t come up this way with any men.’

Examples (7.39) and (7.40) show that the referent in the comitative role need not be animate.

- (7.39) *Cha von ma Lēmuthēmga nava vilēchi*
 ka von ma Lēmuthēmga na=av=a pilēk-ki
 3M.SG.I give.NPRES ART₂ PN PREP=3M.SG.POSS=SPEC gun-F.SG
da cha chuer sēchi.
 da ka chuer sa=ki.
 and 3M.SG.I go.first.NPRES with=3F.SG.III
 ‘He gave Lēmuthēmga his gun and he went first with it.’

³ In this case the demonstrative is used cataphorically as it anticipates the explicit mention of the location.

- (7.40) *Dē chania chē vang sēchama sangauchi.*
 da ka=nia kē vang sa=kama sangau-ki.
 and 3M.SG.I=MIR 3M.SG.II run.NPRES with=ART₁ net-F.SG
 ‘And he tried to run with the net.’

In clauses containing other types of predicates, the comitative marker is used to introduce referents with an involvement in the proposition. An example is provided in (7.41).

- (7.41) *Adēdēr kama seska sēchama baul.*
 a=dēdēr kama ses-ka sa=kama baul
 SPEC=tight ART₁ rope-M.SG with=ART₁ clothes
 ‘The rope is tight because of the clothes [hanging off it].’

The semantic role occupied by NPs introduced by the comitative *sa* is closely related to the role of instrument. The choice between instrumental and comitative marking may depend on the degree to which the referent is considered to be integral to the activity concerned. Examples (7.42) and (7.43) suggest that in Mali the choice is contextually determined. The same item (a net) treated as comitative in (7.42) is treated as instrumental (using the preposition *na*) in (7.43).

- (7.42) *Tha monel sēchama sangauchi.*
 ta monel sa=kama sangau-ki.
 3H.PL.I hunt.PAST with=ART₁ net-F.SG
 ‘They fished (lit: hunted) with a net.’
- (7.43) *Ia, asik tat kama isēm minia nēchama*
 ia asik ta=that kama isēm minia na=kama
 yes IRR 3H.PL.I=get.FUT ART₁ birds how PREP=ART₁
sangachi avaik piavik.
 sangau-ki avaik vi=avik
 net-F.SG F.SG.DIST.DEM EMPH=ADV.DIST.DEM
 ‘Yes, how they get the birds with that particular net.’

7.1.12 *sēng* ‘at the bottom of’

The preposition *sēng* ‘at the bottom of’ (glossed as ‘at.base’) refers to a spatial location of proximity where something is located in relation to the base of something else. Examples (7.44) and (7.45) show that the located object may be contained by the reference object or it may simply be located close to its base.

- (7.44) *Dē chule chama renggi mēk sēng chama*
 da chule kama reng-ki mēk sēng kama
 and stay.NPRES ART₁ water-F.SG down at.base ART₁
lechi thut.⁴
 lek-ki thut
 hole-F.SG base
 ‘And then the water stayed down in the bottom of the hole.’

⁴ The noun *thut* ‘base’ is usually inalienably possessed. It appears as if there is an idiosyncratic process of haplology in relation to this word as it never marks a third person feminine singular possessor [at=thut] as would be expected in this context.

- (7.45) *Cha monel maulul, sa vaim ngē vēn*
 ka monel maulul, sa a=paim ngē vēn
 3M.SG.I hunt.PAST long.time NEF SPEC=dogs 3N.I corner.NPRES
kama vlēmga sēng gama ngēmēngga.
 kama a=plēm-ka sēng kama angē=mēng-ka
 ART₁ SPEC=pig-M.SG at.base ART₁ 3N.POSS=tree-M.SG
 ‘He hunted for a long time, then the dogs stopped the pig at the foot of a tree.’

The preposition *sēng* is also used to refer to objects located underneath the base of the reference object.

- (7.46) *Bremgi achik kia mēn sēng vēthik.*
 brem-ki achik kia muēn sēng avē=tik
 boil-F.SG F.SG.CONRT.DEM 3F.SG.I arrive.PAST at.base 3M.SG.POSS=arm
 ‘There was a boil under his arm.’

7.1.13 *tēm* ‘THEME, GOAL, PATH’

The preposition *tēm* is used to introduce referents in the semantic roles of theme and goal as a simplex preposition.⁵ It is also occasionally used to encode path. This preposition is not used very frequently as a simple form, occurring mainly in complex prepositions (§7.2). *Tēm* is not used to express topological relationships. This preposition expresses spatial relations deriving from motion in prepositional verb complexes (see §7.4, but see also (7.52)). It is unusual in being compatible with a derivational morpheme *i-* forming the preposition *ithēm* ‘along’. The derivational prefix *i-* otherwise only applies to location adverbs and indicates movement away from the deictic centre. Directionals and associated morphology are discussed in Chapter 12.

As we noted in §4.1.4, the preposition *tēm* introduces themes in examples such as (7.47) in which the O argument of the verb ‘give’ is in the semantic role of the recipient.

- (7.47) ... *dē chi von’ga thēmngēt*
 da ki von=ka tēm=ngēt
 and 3F.SG.II give.NPRES=3M.SG.III THEME=3N.III
 ‘...and she gives him it.’

Example (7.48) shows how this thematic role is incorporated in prepositional verbs. The verb stem *par* means ‘arrive’. When the theme is added, introduced by *tēm*, the meaning of the lexicalised prepositional verb *par dēm* is ‘drag’; that is, ‘displace the theme such that it arrives’.

- (7.48) *Sei cha ve chē par.dēmga.*
 sai ka pe kē par.dēm=ka
 again 3M.SG.I there 3M.SG.II drag.PRES=3M.SG.III
 ‘Again he dragged it.’

The corpus also contains a small number of examples in which the preposition *tēm* introduces a goal. This goal is the goal of an activity rather than the goal of a verb of movement (which is encoded by the preposition *sa* ‘to’ §7.1.11). In (7.49) the transitive

⁵ Following Frawley (1992:172), I define the theme here as the entity displaced in the event.

verb *mēs* ‘eat.PAST’ takes an additional goal argument introduced by *tēm*. Similarly, in (7.50) the argument introduced by *tēm* is not the displaced entity but the goal.

- (7.49) ... *ka mēs⁶ mavan dēmga.*
 ka mēs mavan tēm=ka
 3M.SG.I eat.PAST ginger GOAL=3M.SG.III
 ‘... he spat the ginger on him.’

- (7.50) ... *chama tēbērnānbap ngē vali chama dulki*
 kama tēbērnān-vap ngē vali kama dul-ki
 ART₁ small.person-RCD.PL 3N.I roll.NPRES ART₁ stone-F.SG
 thēmga.
 tēm=ka
 GOAL=3M.SG.III
 ‘... the small people rolled a stone at him.’

The preposition *tēm* appears in a number of lexicalised prepositional verbs which have verbs of movement as stems. *Tēm* indicates that the action has a path. This is particularly obvious with the verb *tor tēm* ‘swim’ which is based on the verb *tor* ‘bathe, wash’. Example (7.51) shows that the verb *tor tēm* may itself take a PP indicating the location of the action.

- (7.51) *Kē tor.tēm vēt kama plāngigl angēthathēng.*
 kē tor.tēm pēt kama palang-igl angēt=thēng
 3M.SG.II swim.PRES at ART₁ plank-ECX.SG 3N.POSS=back
 ‘He swam on [top of] the plank.’

In a few cases, a verb of movement seems to take the preposition *tēm* to introduce a kind of goal. As far as I can tell these examples do not involve lexicalised prepositional verbs.⁷ In example (7.52) the preposition *tēm* takes an NP complement, which was not required in (7.51) (see also §7.4.1 on criteria for identifying lexicalised verb + preposition sequences).

- (7.52) ... *dē cha tet tēchama⁸ renggi*
 da ka tet tēm=kama reng-ki
 and 3M.SG.I go.PRES PATH=ART₁ river-F.SG
 va nani chama thinēm.
 va nani kama thinēm
 PURP₁ for ART₁ fish
 ‘... he walked along the river for fish.’

⁶ The act of spraying ginger over someone is said to make them feel hot. It can be done as a therapeutic activity if someone is sick or, in this case, to prepare them for a fight. The process involves chewing a mouthful of ginger and then spitting it over the person’s skin. The verb *mēs* ‘eat.PAST’ is used here as a type of synecdoche with reference to the chewing stage but standing for the whole sequence of actions associated with this activity.

⁷ A more conventional strategy in this context is to use a complex preposition with the locative marker *pa* in addition to the preposition *tēm*: *pathēm* ‘along’ (see (7.56)).

⁸ See §7.4.1.D on the phonological reduction of the preposition.

Finally, an additional use of this preposition, with the reciprocal marker as a suffix, is to express togetherness. An example is provided in (7.53). The use of the reciprocal is described in more detail in §6.5.3.

- (7.53) *Umesta tha mon dēmna.*
 chumes-ta ta mon tēmna
 male-H.PL 3H.PL.I go.in.PAST together
 ‘Men gather together.’

7.2 Morphologically complex prepositions

Complex prepositions are formed by compounding. In most cases this process allows a preposition that encodes relative location (in second position in the compound) to be used to describe movement from a particular point of origin. In a few cases both prepositions refer to relative location. The vowel [a] in the first preposition of the compound is centralised to [ə] in complex prepositions.

Prepositions vary in their ability to occur as the first or second preposition within the complex. The most productive prepositions in first position are *sa* ‘to’ and *na* ‘from’. These two prepositions may not occur in second position. They are also the only prepositions that can be used with directionals (§12.2.5). Complex prepositions vary in how transparently their semantics relate to the component prepositions. In a few cases the semantics involved must be dealt with in the lexicon as the forms are not predictable.

Examples (7.54) and (7.55) show that the meanings of *sēmēt* {*sa=mēt* to=within} ‘into’ and *nēmēt* {*na=mēt* from=within} ‘out from’ are readily relatable to the simple prepositions involved in the compounds.

- (7.54) ... *dē cha nēski sēmēt kama ini.*
 da ka nēs=ki sa=mēt kama i-ini
 and 3M.SG.I put.NPRES=3F.SG.III to=within ART₁ bamboo-DIM.SG
 ‘... he put her in a small bamboo.’

- (7.55) *Sa gu chlochacha cha met nēmēt*
 sa gu chlok-ka ka met na=mēt
 NEF 1SG.POSS soul-M.SG 3M.SG.I go.PAST from=within
ngo vik.
ngo avik
 1SG.III ADV.DIST.DEM
 ‘Then my soul it went from me there.’

A complete list of complex prepositions is provided in Table 7.1. Some complexities within the system and a number of more lexicalised uses of these forms are discussed below. Asterisks mark forms specifically mentioned in the following paragraphs.

Table 7.1: Complex prepositions in Mali

Form	Occurs in first position	Occurs in second position
<i>daer</i> ‘over’	NO	NO
<i>gēl</i> ‘with’	NO	<i>sagēl</i> { <i>sa=gēl</i> to=with} ‘towards’ <i>nagēl</i> { <i>na=gēl</i> from=with} ‘from’
<i>gēlē</i> ‘near’	NO	<i>sagēlē</i> { <i>sa=gēlē</i> to=near} ‘close by’ <i>nagēlē</i> { <i>na=gēlē</i> from=near} ‘from close by’
<i>mēni</i> ‘on’	NO	<i>sēmēni</i> { <i>sa=mēni</i> to=on} ‘onto’ <i>nēmēni</i> { <i>na=mēni</i> from=on} ‘aside’ also, presumably related, is <i>nēmēn</i> ‘aside, away’
<i>mēt</i> ‘within’	<i>mēvem</i> { <i>mēt=pem</i> in-in} ‘inside’ *	<i>sēmēt</i> { <i>sa=mēt</i> to=within} ‘into’ <i>nēmēt</i> { <i>na=mēt</i> from=within} ‘out of’
<i>na</i> ‘from, PREP’	YES (examples listed with forms in second position)	NO
<i>nani(a)</i> ‘for’	NO	<i>snania</i> { <i>sa=nania</i> to=for} ‘against’ *
<i>pa</i> ‘LOC, BEN’	<i>pathēm</i> { <i>pa=tēm</i> LOC-PATH} ‘along’ *	<i>sēva</i> { <i>sa=pa</i> to=LOC} ‘to’ * <i>nēva</i> { <i>na=pa</i> from=LOC} ‘from’ *
<i>pem</i> ‘in’	NO	<i>sēvem</i> { <i>sa=pem</i> to=in} ‘into’ <i>nēvem</i> { <i>na=pem</i> from=in} ‘in’ <i>mēvem</i> { <i>mēt=pem</i> within=in} ‘inside’
<i>pēt</i> ‘at’	NO	<i>sēvēt</i> { <i>sa=pēt</i> to=at} ‘about’ <i>nēvēt</i> { <i>na=pēt</i> from=at} ‘from’
<i>sa</i> ‘to, with’	YES (examples listed with forms in second position)	NO
<i>sēng</i> ‘at base’	NO	<i>mēsēng</i> { <i>mē(t)=sēng</i> within=base} lexicalised, occurs only as a noun meaning ‘ground’
<i>tēm</i> ‘THEME, GOAL, PATH’	NO	<i>sēthēm</i> { <i>sa=tēm</i> to=THEME/PATH/GOAL} ‘to, with’ <i>nēthēm</i> { <i>na=tēm</i> from=THEME/PATH/GOAL} ‘from, about’

The following paragraphs address issues concerning: the prepositions *mēt* ‘within’ and *pa* ‘LOC, BEN’, which may occur in first or second position (§7.2.1); the lexicalised complex preposition *snania* (§7.2.2); and the analysis of *sēva* and *nēva* (§7.2.3). Further examples and information about complex prepositions are available in the Mali Dictionary (Stebbins forthcoming).

7.2.1 Other initial position prepositions

As can be seen in Table 7.1, the only prepositions besides *sa* ‘to’ and *na* ‘from’ that occur in first position are *mēt* ‘within’ and *pa* ‘LOC, BEN’. These last two have a much more

limited range of use and occur more freely in second position (this is in contrast to *sa* and *na* which only occur in first position). In initial position, the preposition *mēt* loses the final consonant (see also §7.4.1.D).

The preposition *pa* appears in complex prepositions used to refer to the relative location of multiple objects. The complex preposition *pathēm* ‘along’ incorporates the prepositions *pa* and *tēm*. An example is given in (7.56).

- (7.56) *Ut met vathēm chama renggi ...*
 ut met pa=tēm kama reng-ki
 1PL.I go.PAST LOC=PATH ART₁ river-F.SG
 ‘We went along the river ...’

Example (7.57) shows the only complex preposition with *mēt* in first position, *mēvem* ‘inside’ {*mēt*=*pem* within=in}.

- (7.57) *Vusecha naimēk mēvem kē chēthopka.*
 vuse-ka na=i-mēk mēt=pem kē a=kēthop-ka
 emerge.NPRES-3M.SG.III from=DER₁-down within=in ART₃ SPEC=pool-M.SG
 ‘He came up from inside the pool.’

7.2.2 The lexicalised complex preposition *sania*

The complex preposition *sania* ‘against’ has lexicalised and it is no longer possible for speakers to segment this preposition. It appears to have been made up of the prepositions *sa* ‘to’ and *ania* ‘for’. This preposition expresses spatial relations of lateral orientation and proximity. Contact between the located object and the reference object is possible, as in (7.58), but not necessary, as shown in (7.59).

- (7.58) *Ka mair sania chi ...*
 ka mair sania ki
 3M.SG.I stand.PAST against 3F.SG.III
 ‘He leaned on her ...’

- (7.59) *Ngia tuchun sania ngo.*
 ngia tuchun sania ngo
 2SG.I sit.PRES against 1SG.III
 ‘You sit next to me.’

The preposition allows metaphorical extensions to contact or proximity that involve large areas of the located object’s surface as in (7.60) and (7.61) respectively.

- (7.60) *Kama chunēngga cha naingēm sania ngo.*
 kama a=kunēng-ka ka naingēm sania ngo
 ART₁ SPEC=sun-M.SG 3M.SG.I shine.NI against 1SG.III
 ‘The sun shone on me.’

- (7.61) *Ngì thong diva gia buthicha sania ut.*
 ngì thong diva gi=a buthi-ka sania ut
 2SG.II turn.NPRES PURP₃ 2SG.POSS=SPEC spine-M.SG against 1PL.III
 ‘You turn so that your back is towards us.’

7.2.3 Complex location phrases based on *sēva* and *nēva*

The forms *sēva* and *nēva* are complex prepositions {*sa=pa* ‘to at’} and {*na=pa* ‘from=at’}. These forms generally occur in complex location phrases with the identical initial preposition paired with the anaphoric demonstrative *pe* (*save* or *nave*). This is shown in (7.62) and (7.63). The pairing of the two expressions is very common in narrative. In (7.63) the women are standing on the beach looking out to someone sitting in a canoe.

- (7.62) *Ka thal ka save sēva bang.*
 ka thal ka sa=pe sa=pa bang
 3M.SG.I carry.NPRES 3M.SG.III to=there to=LOC house
 ‘He carried it home.’

- (7.63) *Lēvop ti tlu cha nave nēva nggarēs.*
 lēvop ti tlu ka na=pe na=pa garēs
 women 3H.PL.II see.PRES 3M.SG.III from=there from=LOC beach
 ‘(Some) women saw him from the beach.’

An alternate analysis is that *va* here represents or is related to the purposive marker *va* discussed in §17.2.1. See also §16.4.5 and §16.5.3 regarding the uses of the relators *ma* and *ia* in introducing place names or descriptions of locations after the anaphoric demonstrative *pe* ‘there’. The fact that the NP that occurs in the complex prepositional construction does not contain an NP article (such as *kama* or *ma*) suggests that the effect of *va* is to render the meaning more adverbial (on analogy with the alternation between ‘to the house’ and the adverbial ‘home’ in English).

7.3 Structure and distribution of PPs

Prepositions head PPs with NPs, anaphoric demonstratives and directionals as complements. All prepositions can take NP complements containing either a full NP or a pronominal. This structure is illustrated in many of the examples in §7.1–§7.2. As we noted in §7.2.3, the prepositions *sa* and *na* also occur with the anaphoric demonstrative *pe* ‘there’. Only these two prepositions are also used with directionals (described in Chapter 12). Most of the examples in this chapter show PPs in clause final position. Examples of PPs in topic position are provided in §18.1.

7.4 Prepositional verbs and nouns

This section describes the use of prepositions in ‘prepositional verbs’ and ‘prepositional nouns’ in Mali. Prepositional verbs are comprised of a verb, adverb, adjective or noun stem plus a preposition. Adjectives and nouns with prepositions typically form expressions that function as stative intransitive prepositional verbs. Examples include *achrnas* ‘hot’ (adjective), *achrnas tēm* ‘be hot’ (stative intransitive verb) and *mulen’gi* ‘fear’ (noun) *muleng’i vēt* ‘be anxious’ (stative intransitive verb). There are occasional examples of nouns forming transitive verbs, for example *gamar* ‘fight’ (noun) *gamar nē* ‘fight’ (transitive verb). Verbs with prepositions form prepositional verbs in all transitivity classes: *tor* ‘wash’ (transitive verb) *tor tēm* ‘swim’ (active intransitive verb), *mal* ‘stop’ (active intransitive verb) *mal vēt* ‘rest’ (stative intransitive verb), and *lēmēr* ‘clean’ (transitive verb) *lēmēr dēm* ‘carve’ (transitive verb). Prepositional nouns are similar in structure, formed with an adjective, noun

or verb stem plus a preposition and then other relevant noun morphology as required, for example, *achrnasmētkā* {*achrnas-mēt-ka* hot-within-M.SG} ‘brave man’.

Although prepositional verbs and nouns containing simple prepositions are far more common than prepositional verbs and nouns containing complex prepositions, the latter are also found. For example the complex preposition *nēthēm* ‘from’ contributes to the prepositional verb *tat nēthēm* ‘help’ {*tat nēthēm* get from}.

The discussion of prepositional verbs and nouns is organised as follows. In §7.4.1 we begin with a discussion of the status of these complex verb expressions in Mali and review some criteria for determining whether a verb + preposition is lexicalised (formulaicity is discussed in more general terms in Chapter 20). In §7.4.2, the class of stative intransitive prepositional verbs is discussed with comments on the types of prepositions used to form these verbs and the types of lexical stems involved in these constructions. Active intransitive prepositional verbs and transitive prepositional verbs are treated in a similar fashion in §7.4.3 and §7.4.4 respectively. Prepositional nouns are discussed in §7.4.5. In §7.5 the semantic contribution of the prepositions to prepositional verbs and nouns is considered.

7.4.1 Formulaicity and lexicalisation in prepositional verb constructions

Prepositions are extremely important in expanding the lexicon of verbs available in Mali, and prepositional verbs make up well over 50% of the verbal lexicon. The formation of new lexical items through the association of a verb stem with a preposition is a process of lexicalisation rather than derivation. Although there are a number of patterns that can be identified within the set of prepositional verbs in the language, the semantic changes associated with the combination of a verb stem and preposition are not fully predictable and speakers vary in their attitudes towards particular forms. It is tempting to try to impose an analysis similar to the one used in English grammar to distinguish between phrasal verbs and prepositional verbs but the types of tests used in English to make this distinction are not available in Mali. For example, there is no difference in the behaviour of full NPs compared to pronouns in relation to the organisation of a prepositional verb, and word order is fixed so tests about possible orderings of elements cannot be used.

Whereas there is limited evidence that the many derivational processes described in Chapter 6 are productive in the language, there is clear evidence of the productivity of lexicalising prepositional verbs and forming morphologically complex nouns through conventionalised associations with prepositions. One piece of evidence for their productivity is the high frequency of prepositional verbs and nouns in discourse and their regular appearance as expressions for new concepts and things. The picture is complicated by the fact that any given individual expression can be at different stages of lexicalisation for different speakers within the community. As a result, generalisations about the lexical status of prepositional verbs and nouns can be problematic at times.

I gloss the prepositional verbs as a single lexical stem that happens to correlate with two phonological words in Mali. This is shown in (7.64) where the prepositional verb *tlu vēt* [*tlu pēt* see at] literally ‘look at’ is glossed with the non-literal but more accurate term ‘look after’.

- (7.64) *Gu lunggutki asik ngi tlu.vēthanas mamēr.*
 gu lugut-ki asik ngi tlu.vēt=nas mamēr
 1SG.POSS spouse-F.SG IRR 2SG.II look.after.PRES=REFL properly
 ‘My wife, you must look after yourself properly.’

Although this approach has complicated the glossing on one level and seems to obscure the etymology of the expressions concerned, it has a number of advantages. The strategy is efficient in that it provides the reader with the meaning of the sequence. It seemed methodologically acceptable as it reflected my perception of the way in which speakers of Mali seemed to associate form and meaning in not treating these units as analysable. Furthermore, this glossing strategy is necessary in the numerous cases in which the first element in the construction does not occur as an independent form (see also paragraph B in this section below). This strategy allows me to remain silent on a series of questions about etymology that I am not in a position to answer since they involve verb stems that never occur independently. For example, the sequence *bēng bēt* ‘wrap up’ seems to be comprised of a verb *bēng/vēng* and the preposition *pēt* ‘at’. The precise meaning of the base is impossible to ascertain since the verb never occurs without the preposition

The approach taken here to glossing is also motivated by the practicalities of representing words in the Mali dictionary. The ‘normal’ approach to these complex constructions would be to include the more complex construction within an entry based on the simple lexical stem. However, this creates a number of difficulties.

The first problem to solve is that I frequently have not been able to include the verb base as a headword because it does not exist as an independent form in the language. I have also been concerned about the effect on the structure of the dictionary. Using only irreducible headwords would result in long entries with complex embedding that would be difficult for many readers to follow. Two issues seem to be particularly likely to cause trouble. Firstly, some verb stems that occur independently also occur in long lists of more complex forms, and secondly, these forms often build upon each other resulting in potentially complex embedding of subentries within entries. Both these issues are illustrated with reference to the verb base *tu* ‘put’ shown in Table 7.2.

Table 7.2: Formulaic sequences involving *tu*

Formulaic sequence	English translation	Stem	Literal gloss	Preposition	Gloss of preposition ⁹
<i>tu ba</i>	set rules	<i>tu</i>	put	<i>pa</i>	BEN
<i>tu chelak tēm</i>	please	<i>tu + chelak</i>	put + soft	<i>tēm</i>	THEME
<i>tu chuar sē</i>	call	<i>tu chuar</i>	put + say	<i>sa</i>	to
<i>tu dēm nē</i>	lose	<i>tu dēm</i> ¹⁰	put + THEME	<i>na</i>	PREP
<i>tu ma</i>	joke	<i>tu</i>	put	<i>ma</i>	PREP
<i>tu ma sē</i>	joke about	<i>tu ma</i>	joke	<i>sa</i>	to
<i>tu mamēr sēna</i>	level	<i>tu + mamēr</i>	put + properly	<i>sa + na</i>	PREP + DER ₁
<i>tu mana</i>	arrange ones-selves	<i>tu</i>	put	<i>ma + na</i>	PREP + DER ₁
<i>tu manas</i>	get ready	<i>tu</i>	put	<i>ma + nas</i>	PREP + REFL
<i>tu mēt</i>	set on fire	<i>tu</i>	put	<i>mēt</i>	within

⁹ The prepositions *ma* and *nē* are labelled PREP because their use is so varying as to make the use of an English gloss misleading.

¹⁰ This is the preposition *tēm* with a voiced initial consonant. Because prepositional verbs and nouns are lexicalised sequences, their underlying forms are not represented in this analysis. See also *tu them mes* ‘decorate oneself’ lower down in Table 7.2.

Formulaic sequence	English translation	Stem	Literal gloss	Preposition	Gloss of preposition ⁹
<i>tu mrang dēm</i>	cover	<i>tu + mrang</i>	put + ?	<i>tēm</i>	THEME
<i>tu na</i>	shoot with	<i>tu</i>	shoot	<i>na</i>	PREP
<i>tu salēl nē</i>	shrink	<i>tu + salēl</i>	put + have become small	<i>na</i>	PREP
<i>tu samor nē</i>	make fun of	<i>tu + samor</i>	put + have become big	<i>na</i>	PREP
<i>tu sathēver nē</i>	widen	<i>tu + sathēver</i>	put + have become wide	<i>na</i>	PREP
<i>tu thēm</i>	decorate	<i>tu</i>	put	<i>tēm</i>	THEME
<i>tu thēm mes</i>	decorate oneself	<i>tu thēm</i>	decorate	<i>tēm + mes</i>	THEME + DER
<i>tu thēm mes pēt</i>	be glorious	<i>tu them mes</i>	decorate oneself	<i>pēt</i>	at
<i>tu thik tēm</i>	stretch	<i>tu thik</i>	put hand	<i>tēm</i>	THEME

The base *tu* ‘put’ occurs in at least nineteen more sequences involving prepositions and various other forms. An entry headed by *tu* containing this many subentries would be very difficult for novice readers, and even expert readers, to navigate. I am particularly concerned that the dictionary should be as accessible as possible for Mali speakers. I was doubtful that many Mali speakers who used the dictionary would persist through the entire entry to find a formulaic sequence such as *tu mrang dēm* ‘cover’. The other issue is the treatment of series of formulaic sequences such as *tu thēm* ‘decorate’, *tu them mes* ‘decorate oneself’, *tu thēm mes pēt* ‘be glorious’. If *tu thēm* ‘decorate’ is a subentry to *tu* ‘put’ then two more layers of embedding seem to be required to accommodate *tu them mes* ‘decorate oneself’ and *tu thēm mes pēt* ‘be glorious’, and this is not practical.

Having made the decision that lexicalised sequences should be treated as single lexical units, some criteria were necessary to determine whether a verb + preposition was lexicalised. Although native speaker intuition varies, it nevertheless proved to be the best yardstick by which to judge the status of these forms. The supplementary criteria I developed to determine the relationship between a verb and a following preposition are outlined in (A) through (E) below. A final comment about the issue of determining the degree of lexicalisation is provided in (F).

A. Does the preposition occur with an associated NP?

If the preposition can occur without an NP complement this is evidence in favour of viewing the preposition as part of a lexicalised construction. For example, the preposition *pēt* in the prepositional verb *bēn bēt* ‘search for, gather’ does not allow a complement. This suggests that the preposition *pēt* in this expression does not function as a full preposition but is present because it contributes to the fixed expression *bēn bēt* ‘search for, gather’. In (7.65) the goal, the cocoa, is introduced by the preposition *nani* ‘for’; the preposition *pēt* does not have an NP complement.

- (7.65) *Ka vĕn.bēt nani chama kakauvap ...*
 ka vĕn.bēt nani kama kakau-vap
 3M.SG.I search.for.NPRES for ART₁ COCOa-RCD.PL
 ‘He searched around for cocoa [pods] ...’

B. Does the verb appear independently?

One of the major barriers to taking a more diachronic approach to the prepositional verbs is the fact that in roughly 38% of these expressions the verb stem never appears independently and speakers cannot provide translations for the stem independent of a preposition. The following prepositional verbs have stems that occur once in the corpus as part of a prepositional verb: *pen dē* ‘fall’, *tēthuk pēt* ‘slide’, *bal tēm* ‘knock over’. Other verb stems only occur in a number of prepositional verbs but never occur independently. For example, *kēthik* appears in *kēthik mēt* ‘bind’, *kēthik pēt* ‘tie’, *kēthik sēthēm* ‘fasten’ and *kēthik tēm* ‘tie on’. Obviously in each case we can hypothesise that the verb *kēthik* encodes the attachment of something to something else by means of string or rope. However, this is not a particularly workable strategy once it is repeated through such a large section of the lexicon. Including *kēthik* as a headword in the dictionary or translating it as if it is an independent word would be a misrepresentation of the language from a synchronic perspective.

The risks associated with seeking to reconstruct the semantics of the verb by ‘subtracting’ the semantics of the preposition are amply demonstrated by the polysemous prepositional verb *bang bēt*: ‘take without permission’ (transitive verb), ‘remember’ (stative intransitive verb), ‘run over’ (transitive verb). Removing the semantics of the preposition ‘at’ from these expressions is not an informative exercise. Knowing that the verb *bang* means ‘run’ allows us to imagine how the prepositional verbs were formed but the reverse is not true. None of the prepositional verbs listed as always appearing with a preposition occur with more than one sense, and even when three apparently relatable senses are available (as is the case with *bang bēt*), a meaningful outcome is not guaranteed.

The indeterminacy of verbs that only appear as prepositional verbs is evidence that the combinations concerned are lexicalised and suggests that a synchronic approach in these cases is the most accurate one to take. Further research on the language is likely to solve some of the puzzles associated with these verb stems, and work on other members of the Baining language family will solve a few more. However, this does not detract from the validity of the synchronic approach taken here overall.

C. Does the verb + preposition form a unit with respect to morphological and syntactic processes?

If the verb + preposition can take a derivational suffix or a further preposition or prepositional phrase this is evidence in favour of viewing the preposition as part of a lexicalised construction. The following derivational, detransitivising suffixes were listed in §6.5: the suffix *-mes* decreases transitivity and may decrease valency, one suffix *-na* decreases transitivity but not valency, another suffix *-na* marks reciprocals, and the suffix *-nas* marks reflexives. The two *-na* suffixes are difficult to distinguish in the corpus of prepositional verbs. However, it is clear that all four suffixes may be used with prepositional verbs and consequently provide evidence of their lexicalised status. Where the suffix occurs after the preposition rather than after the verb stem, there is evidence that

the verb + preposition is functioning as a lexical unit. For example, good evidence that the expression *tu thēm* ‘decorate’ is a prepositional verb comes from the fact that it can be detransitivised: *tu them mes* ‘decorate oneself’. Note that prepositional verbs can also be built on structurally complex lexemes of this type, for example, *tu thēm mes pēt* ‘be glorious’.

D. Does the preposition involved show a phonologically reduced form?

This test concerns the prepositions *tēm*, *mēt*, and *pēt* which have been observed to lose their final consonant in many examples. In fast speech this seems to be strictly a phonological process but when these final consonants are also absent in careful speech, this may be taken as evidence that the preposition is losing its status as a distinct independent morpheme. There are many examples of probable prepositional verbs in the dictionary with *ma* or *mē* in the preposition slot. In some but certainly not all cases, speakers reported that the preposition was really *mēt* but was pronounced as *ma* or *mē* in that particular case. Thus in the case of verb + preposition sequences the lack of a final consonant of these forms is suggestive of lexicalisation having taken place.

E. Is there a shift in meaning of the verb stem?

Where the lexical stem (noun, adjective or verb) contributing to the prepositional verb does exist as an independent form, it can be useful to compare the semantics of the lexical stem occurring within the prepositional verb with the semantics of the lexical stem when used independently. Where there seems to have been a shift in meaning we can be reasonably confident that lexicalisation of the verb + preposition has taken place. A good example is the senses of *bang bēt* already mentioned in (B). The transitive sense of the verb ‘run over’ is easy enough to relate back to the lexical stem, but for the other two senses, ‘take without permission’ (transitive verb) and ‘remember’ (stative intransitive verb), it appears that a shift in meaning has occurred.

This test is of relatively limited use since a great many prepositional verbs, particularly prepositional verbs based on a noun + preposition, do not show changes in the semantics of the original lexical stem. For example, a range of cultural associations allow the adjective *achrnas* ‘hot’ to form stative intransitive prepositional verbs as follows: *achrnas mēt* ‘be brave’, *achrnas pēt* ‘struggle, try hard’, and *achrnas tēm* ‘be hot’. Also, as the discussion associated with example (7.48) above showed, the verb *par* ‘arrive’ plus the preposition *tēm* ‘THEME’ as *par dēm* does seem to be decomposable as ‘displace the THEME such that it arrives’, even though to speakers the prepositional verb *par dēm* does seem to form a distinct lexeme.

F. The status of these criteria

The limitation of these criteria is that a form can be a lexicalised sequence even if none of these criteria apply. Although the process of lexicalisation is often related to specialised or idiosyncratic behaviour in the component forms, these types of behaviours represent sufficient but not necessary evidence that lexicalisation has taken place. Sequences in the early stages of lexicalisation are much less likely to evidence all of the characteristics outlined above than sequences that have been established in the language for some time (see also the discussion of formulaicity in §20.1).

7.4.2 Stative intransitive prepositional verbs

Stative intransitive prepositional verbs can involve the use of adjective, adverb, noun or verb stems. At the time of writing 143 stative intransitive prepositional verbs have been identified within the corpus. This represents 17.4% of all verbs identified to date. The verb stems involved come from every transitivity class. A selection of examples is provided in Table 7.3. Note that where there is only a question mark in the columns labelled ‘lexical stem’, ‘gloss of stem’ and ‘category of stem’ this indicates that the stem is not otherwise attested in the corpus. Where each of these columns contains a word followed by a question mark, this indicates that the stem is attested elsewhere in the corpus as part of another complex construction but is not attested as an independent lexeme.

Table 7.3: Representative sample of stative intransitive prepositional verbs

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/ gloss of preposition
<i>srēmēn gēl</i>	get a shock	<i>srēmēn</i>	surprise	transitive verb	<i>gēl</i>	with
<i>amēr gēlē</i>	rejoice	<i>amēr</i>	good	adjective	<i>gēlē</i>	near
<i>ser ma</i>	be first	<i>sēr</i>	first	adverb	<i>ma</i>	PREP
<i>pēl mēni</i>	snap	<i>pēl?</i>	break?	verb?	<i>mēni</i>	on
<i>buel mēt</i>	be blunt	?	?	?	<i>mēt</i>	within
<i>achrnas mēt</i>	be brave	<i>achrnas</i>	hot	adjective	<i>mēt</i>	within
<i>kēlē kēlē mēt</i>	rattle	<i>kēlē kēlē</i>	rattle	noun	<i>mēt</i>	within
<i>marēs mēt</i>	be greasy	<i>marēski</i>	oil	noun	<i>mēt</i>	within
<i>pur mēt</i>	germinate	<i>pur</i>	grow	stative intransitive verb	<i>mēt</i>	within
<i>dēngbēm na</i>	faint/collapse	?	?	?	<i>na</i>	PREP
<i>mundros na</i>	stop instantly	?	?	?	<i>na</i>	PREP
<i>kēsīn na</i>	stink	<i>achēsīn</i>	rotten	adjective	<i>na</i>	PREP
<i>mavo na</i>	be broken down	<i>mavo</i>	badly	adverb	<i>na</i>	PREP
<i>lengen na</i>	be famous	<i>lengenacha</i>	leader	noun	<i>na</i>	PREP
<i>sēpsēp na</i>	duck down	<i>sēp</i>	fall	active intransitive verb	<i>na</i>	PREP
<i>mamēr na</i>	be possible to	<i>mamēr</i>	be possible	stative intransitive verb	<i>na</i>	PREP
<i>pētpēt na</i>	fall	<i>pēt...</i>	plant/dive	transitive verb	<i>na</i>	PREP

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/ gloss of preposition
<i>amēr ba</i>	be happy	<i>amēr</i>	good	adjective	<i>pa</i>	LOC
<i>kēlu vathēm</i>	be shy	<i>kēlep</i>	embarrassed, be	stative intransitive verb	<i>pathēm</i>	according to
<i>amēr vem</i>	be happy	<i>amēr</i>	good	adjective	<i>pem</i>	in
<i>angelka vem</i>	be clever	<i>angelki</i>	knowledge	noun	<i>pem</i>	in
<i>pus pem</i>	erupt	<i>pus?</i>	move up?	verb?	<i>pem</i>	in
<i>prur pēt</i>	have goosebumps	?	?	?	<i>pēt</i>	at
<i>amēr pēt</i>	be happy	<i>amēr</i>	good	adjective	<i>pēt</i>	at
<i>anēs nēs vēt</i>	be spiky	<i>anēs nēs</i>	spikes	noun	<i>pēt</i>	at
<i>mal vēt</i>	rest	<i>mal</i>	stop	active intransitive verb	<i>pēt</i>	at
<i>pēl vēt</i>	break	<i>pēl?</i>	break?	verb?	<i>pēt</i>	at
<i>dingdēm pēt</i>	stick	<i>dingdēm</i>	stuck, be	stative intransitive verb	<i>pēt</i>	at
<i>srēmēn vēt</i>	be surprised	<i>srēmēn</i>	surprise	transitive verb	<i>pēt</i>	at
<i>tēbut tēbut sē</i>	stamp	<i>tēbut tēbut</i>	stamping	noun	<i>sa</i>	PREP
<i>tar sē</i>	pour out/ fall out	<i>tar</i>	fall	active intransitive verb	<i>sa</i>	PREP
<i>sukderut sē</i>	be stillborn	<i>sukdērut?</i>	lifeless?	verb?	<i>sa</i>	PREP
<i>ngēk dē</i>	gasp/grunt	?	?	?	<i>tē</i>	PREP
<i>alīk tēm</i>	be narrow	<i>alīk</i>	narrow?	?	<i>tēm</i>	THEME
<i>dīl tēm</i>	be dried	?	?	?	<i>tēm</i>	THEME
<i>auvulēk tēm</i>	feel cold	<i>auluvēk</i>	cold	adjective	<i>tēm</i>	THEME
<i>paik dēm</i>	jump	<i>paik</i>	jump	active intransitive verb	<i>tēm</i>	THEME
<i>munap tēm</i>	sleep	<i>mēnap(ki)</i>	sleep	verb/noun	<i>tēm</i>	within
<i>pēlikdēm</i>	slip away	<i>pēlik?</i>	slip?	verb?	<i>tēm</i>	THEME
<i>tēn dēm</i>	be stuck	<i>tēn</i>	hang	transitive verb	<i>tēm</i>	THEME

As Table 7.3 shows, a range of prepositions are involved in the formation of stative intransitive prepositional verbs. These include: *gēl* ‘with’, *gēlēn* ‘near’, *ma* (probably a reduced version of *mēt*), *mēni* ‘on’, *mēt* ‘within’, *na* ‘from, PREP’, *pa* ‘LOC, BEN’, the complex preposition *pathēm* ‘along, according to’, *pem* ‘in’, *pēt* ‘at’, the phonologically reduced version of *sa*, *sē* ‘to, with’, and the full and the phonologically reduced forms of *tē(m)* ‘THEME, GOAL, PATH’.

The use of prepositions with all sorts of lexical stems to form stative intransitive prepositional verbs reflects the strategy mentioned in §7.1.6 in which the preposition *na* is required to introduce the predicative complement in verbless clauses that predicate on a nominal. This was shown, for example in (7.23) and is repeated here for convenience.

- (7.66) *Ki tal kama bukvam ama lolki nēngavam.*
 ki tal kama buk-vam ama lol-ki na=ngavam
 3F.SG.II carry.PRES ART₁ book-RCD.DL REL₃ red-F.SG PREP=RCD.DL
 ‘She carried the two red books.’

7.4.3 Active intransitive prepositional verbs

The number of true active intransitive prepositional verbs is much smaller than for the stative intransitive and transitive categories. These verbs contain two types of verb stems: the first are based on active intransitive verb stems. There are two prepositional verbs in this category, *bēn bēt* ‘search out’ and *dēn pēt* ‘arrive’, related to *bēn* ‘climb’ and *dēn* ‘arrive’ respectively. The second type appear to be made up of a transitive prepositional verb plus a detransitivising suffix. Among these verbs are some with analysable components, for example, *dēn dēmna* ‘gather together’ {*dēn tēm=na* arrive GOAL=RECIP}.¹¹ In other cases it is not possible to analyse the elements within the construction with much certainty. For example, the active intransitive verb *pat pēthanas* ‘forget’ clearly contains the reflexive suffix *-nas* and the preposition *pēt* ‘at’ but the verb stem *pat* is not attested independently and nor is the complex *pat pēt*.

7.4.4 Transitive prepositional verbs

Transitive prepositional verbs are the largest class of prepositional verbs. At the time of writing 265 transitive prepositional verbs have been identified within the corpus. This represents 32.2% of all verbs identified in the corpus. In spite of their greater frequency, transitive prepositional verbs are more restricted than stative intransitive prepositional verbs in terms of the range of types of lexical stems and prepositions involved. A representative selection is shown in Table 7.4. As the table shows, transitive prepositional verbs are generally based on noun and verb stems. The prepositions involved include: *ithēm* ‘along’, *mēni* ‘on’, *mēt* ‘within’, *na* ‘from, PREP’, *namēn* ‘from=on’, *namēt* ‘from=within’, *nēthēm* ‘from=THEME/GOAL/PATH’, *pa* ‘LOC, BEN’, *pem* ‘in’, *pēt* ‘at’, *sa* ‘to, with’, *sēvēt* ‘to=at’, *snania* ‘against’ and *tēm* ‘THEME, GOAL, PATH’. As in Table 7.3, where there is only a question mark in the columns labelled ‘lexical stem’, ‘gloss of stem’ and ‘category of stem’ this reflects the fact that the stem is not otherwise attested in the corpus. Where a column contains a word followed by a question mark, this indicates that the stem is attested elsewhere in the corpus as part of another complex construction but is not attested as an independent lexeme.

¹¹ The use of the preposition *tēm* with the reciprocal suffix to mean ‘together’ was noted in §7.1.13 above.

Table 7.4: Representative sample of transitive prepositional verbs

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/gloss of preposition
<i>kut ithēm</i>	lean on	<i>kut</i>	spear/stack/serve	active intransitive/transitive verb	<i>ithēm</i>	along
<i>pirēs ithēm</i>	hide behind	?	?	?	<i>ithēm</i>	along
<i>bing mēni</i>	break, snap (of a rope)	<i>bing?</i>	break?	verb?	<i>mēni</i>	on
<i>kop mēni</i>	fasten	<i>kop?</i>	tie/hang?	?	<i>mēni</i>	on
<i>sek mēni</i>	walk through	<i>sek</i>	lift	transitive verb	<i>mēni</i>	on
<i>don mēt</i>	wear	<i>don</i>	go in	active intransitive verb	<i>mēt</i>	within
<i>masar mēt</i>	weave	<i>masarka</i>	incomplete net bag	noun	<i>mēt</i>	within
<i>mēnaing mēt</i>	sharpen	?	?	?	<i>mēt</i>	within
<i>nges mēt</i>	dig	<i>nges?</i>	dig?	verb?	<i>mēt</i>	within
<i>drēm na</i>	recognise	<i>drēm</i>	know	transitive verb	<i>na</i>	PREP
<i>nam na</i>	beckon	<i>nam</i>	flap	active intransitive verb	<i>na</i>	PREP
<i>tlavuchi na</i>	pity	<i>tlavuchi</i>	kindness	noun	<i>na</i>	PREP
<i>tnap na</i>	wave	?	?	?	<i>na</i>	PREP
<i>tor na</i>	pour	<i>tor</i>	wash	active intransitive/transitive verb	<i>na</i>	PREP
<i>tu na</i>	shoot with	<i>tu</i>	shoot	transitive verb	<i>na</i>	PREP
<i>tunaik na</i>	leave s.th.	<i>tunaik?</i>	?	verb?	<i>na</i>	PREP
<i>turik na</i>	punish	<i>tu thik</i>	put hand	verb phrase	<i>na</i>	PREP
<i>vēs pem na</i>	close	<i>pēs?</i>	cover?	verb?	<i>na</i>	PREP
<i>tēvaik namēn</i>	redeem	<i>tēvika</i>	explanation	noun	<i>namēn</i>	PREP
<i>kutik namēt</i>	poke repeatedly	<i>kut</i>	spear/stack/serve	active intransitive/transitive verb	<i>namēt</i>	from=within
<i>tuthik namēt</i>	throw at	<i>tu thik</i>	shoot hand	verb phrase	<i>namēt</i>	from=within
<i>tat nēthēm</i>	help	<i>tat</i>	get	transitive verb	<i>nēthēm</i>	from=THEME
<i>tēs nēthēm</i>	taste	<i>tēs</i>	eat	transitive verb	<i>nēthēm</i>	from=THEME

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/gloss of preposition
<i>su ba</i>	make signs	<i>su</i>	try	transitive verb	<i>pa</i>	BEN
<i>tēvaik ba</i>	explain	<i>tēvika</i>	explanation	noun	<i>pa</i>	BEN
<i>slamēr vem</i>	fix	<i>slamēr</i>	make good?	verb?	<i>pem</i>	within
<i>tēk pem</i>	shove	<i>tēk</i>	do/wear	active intransitive/transitive verb	<i>pem</i>	in
<i>bang bēt</i>	take without permission	<i>bang</i>	run	active intransitive verb	<i>pēt</i>	at
<i>bang vēt</i>	run over	<i>bang</i>	run	active intransitive verb	<i>pēt</i>	at
<i>bēk pēt</i>	hatch	?	?	?	<i>pēt</i>	at
<i>del vēt</i>	tap	<i>dēldēl</i>	ringing	noun	<i>pēt</i>	at
<i>sem bēt</i>	peel	<i>sēm?</i>	trim?	transitive verb	<i>pēt</i>	at
<i>ben sē</i>	honour	?	?	?	<i>sa</i>	to
<i>dēn sē</i>	bring back	<i>den</i>	arrive	active intransitive verb	<i>sa</i>	with
<i>iras tēm sē</i>	lie to	<i>iras tēm</i>	lie	transitive verb	<i>sa</i>	to
<i>kērtēp sē</i>	cut	<i>kērtēp?</i>	chop?	verb?	<i>sa</i>	with
<i>kop sē</i>	tie up	<i>kop?</i>	tie/hang?	?	<i>sa</i>	to
<i>kuer sē</i>	lead	<i>kuer</i>	go first	active intransitive verb	<i>sa</i>	with?
<i>kutēm sē</i>	sew	<i>kut + tēm?</i>	get rid of	transitive verb	<i>sa</i>	to
<i>kēthik sēthēm</i>	fasten	<i>kethik</i>	tie?	verb?	<i>sēthēm</i>	onto
<i>pēsding sēthēm</i>	block	<i>pesding</i>	close	transitive verb	<i>sēthēm</i>	to=THEME
<i>rek sēthēm</i>	close in	?	?	?	<i>sēthēm</i>	to=THEME
<i>tamēn sēthēm</i>	tell	<i>tamēn</i>	speak	active intransitive verb	<i>sēthēm</i>	to=THEME
<i>kuasin sēvēt</i>	splash	<i>kuasin?</i>	slosh	transitive verb	<i>sēvēt</i>	to=at
<i>pērēn sēvēt</i>	smell	<i>pērēn</i>	smell	verb?	<i>sēvēt</i>	to=at
<i>pestēm sēvēt</i>	whisper charms	<i>pes</i>	blow	active intransitive verb	<i>sēvēt</i>	to=at

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/gloss of preposition
<i>tair snania</i>	lean against	<i>tair</i>	stand	active intransitive verb	<i>snania</i>	against
<i>pēl tēm</i>	bend over	<i>pēl?</i>	break?	verb?	<i>tēm</i>	THEME
<i>tēvaik tēm</i>	loosen	<i>tēvika</i>	explanation	noun	<i>tēm</i>	THEME
<i>tik tēm</i>	pick	<i>tik</i>	get down	transitive verb	<i>tēm</i>	THEME
<i>tneng dēm</i>	choose	<i>tneng</i>	avoid	active intransitive verb	<i>tēm</i>	THEME
<i>trek tēm</i>	prohibit	?	?	?	<i>tēm</i>	THEME

7.4.5 Prepositional nouns

The readiness with which many stems can function as both nouns and verbs was discussed in §6.1.1. This flexibility is also reflected in the use of prepositional verb type constructions in the formation of lexical nouns. ‘Prepositional nouns’ may involve a noun, adjective or verb stem plus one of a restricted set of prepositions. The preposition is followed by a noun class marker that triggers agreement on the predicate. Several examples are provided in Table 7.5. The noun class markers shown in Table 7.5 are *-ka* ‘masculine singular’, *-ki* ‘feminine singular’ and *-ves* ‘flat singular’ (which is used to form abstract nouns, see also §8.4.3.C). Nouns in the count neutral noun class, like plural nouns, do not take an overt noun class marker. Like Tables 7.3 and 7.4, where there is only a question mark in the columns labelled ‘lexical stem’, ‘gloss of stem’ and ‘category of stem’ this reflects the fact that the stem is not otherwise attested in the corpus. Where a column contains a word followed by a question mark, this indicates the stem is attested elsewhere in the corpus as part of another complex construction but is not attested as an independent lexeme.

Table 7.5: Representative sample of prepositional nouns

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/gloss of preposition
<i>amasithēm-ki</i>	dream	<i>mas</i>	lie.down. PAST	active intransitive verb	<i>ithēm</i>	along
<i>arausmet</i>	accent	?	?	?	<i>mēt</i>	within
<i>achēsasēkmēt-ki</i>	bread	<i>achēsasēk</i>	dry	adjective	<i>mēt</i>	within
<i>mambumēt-ka</i>	singer	<i>mambu</i>	songs	noun	<i>mēt</i>	within
<i>sunēthēm-ves</i>	temptation	<i>su</i>	try	transitive verb	<i>nēthēm</i>	from=at

Prepositional verb	Translation	Lexical stem	Gloss of stem	Category of stem	Preposition	Category/ gloss of preposition
<i>amētpathēm</i>	promises	<i>mēt</i>	go.PAST	active intransitive verb	<i>pathēm</i>	according to
<i>lotuvem-ki</i>	church	<i>lotu</i>	rituals	noun	<i>pem</i>	in
<i>mervem-ka</i>	benevolent man	<i>amēr</i>	good	adjective	<i>pem</i>	in
<i>sunasvem-ka</i>	teacher	<i>sunas</i>	learn	transitive verb	<i>pem</i>	in
<i>vingbem-ka</i>	vandal	<i>bing?</i>	break?	verb?	<i>pem</i>	in
<i>avēsvēsven-ki</i>	kitchen	<i>vēs</i>	cook	active intransitive verb	<i>pem</i>	THEME
<i>lasērvētha-ka</i>	fish sp.	?	?	?	<i>pēt</i>	at
<i>mairvētka</i>	boss	<i>mair</i>	stand.PAST	active intransitive verb	<i>pēt</i>	at
<i>atharespēt</i>	contract	<i>thares</i>	press.FUT	transitive verb	<i>pēt</i>	at
<i>avulikpētha-ki</i>	gecko	<i>vulik?</i>	slip.PAST?	verb?	<i>pēt</i>	at
<i>athektēmna</i>	contract	<i>thek</i>	touch.NPRES	transitive verb	<i>tēm</i>	THEME
<i>vunakdēm-ka</i>	first flood	<i>vunak?</i>	bend.PAST?	verb?	<i>tēm</i>	THEME

7.5 Semantic contribution of prepositions to prepositional verbs and nouns

There are three prepositions in Mali that are used so frequently that it is feasible to attempt an analysis of the semantic contribution they make to the prepositional nouns and verbs in which they appear. These prepositions are: *mēt* ‘within’ (§7.5.1), *pem* ‘in’ (§7.5.2), and *pēt* ‘at’ (§7.5.3). Many other prepositions simply do not occur frequently enough to make this type of analysis possible. Others, such as *tēm* ‘THEME, GOAL, PATH’ and *na* ‘from, PREP’ have very diverse meanings, making analysis difficult.

7.5.1 Semantic contribution of preposition *mēt* ‘within’

In association with adjective or noun stems, the preposition *mēt* ‘within’ indicates an association with a particular quality. For example, *amēr mēt* ‘taste good’ {*amēr mēt* good within}, *athavēr mēt* ‘be wide’ {*athavēr mēt* wide within}.

The preposition *mēt* is associated with reduction in the valency of the verb *lēr mēt* ‘be torn’ (vi) {*lēr mēt* tear (transitive) within}, and is used in prepositional verbs that refer to contact between two participants (often with an associated increase in transitivity), for example, *pai mēt* ‘slap’ {*pai mēt* fall within} and *pes mēt* ‘blow on’ {*pēs mēt* blow within}.

A few additional examples of prepositional verbs and nouns containing the preposition *mēt* are presented in Table 7.6.

Table 7.6: Formation of new lexemes with the preposition *mēt* ‘within’

Lexical stem	Word class	Resulting form	Morphemes	Glosses	Effective word class
<i>araun’ga</i> ‘sound’, ¹²	noun	<i>araun’ga mētki</i> ‘car, motorcycle’	<i>a=raun-ka mēt-ki</i>	SPEC=sound-M.SG- within-F.SG	noun
<i>masarka</i> ‘incomplete net bag’	noun	<i>masarka mēt</i> ‘weave’	<i>masar-ka mēt</i>	incomplete.bilum- M.SG within	transitive verb
<i>mat</i> ‘get.PAST’	transitive verb	<i>matmēt</i> ‘division’	<i>mat-mēt</i>	get.PAST-within	noun
<i>pur</i> ‘grow’	stative intransitive verb	<i>pur mēt</i> ‘germinate’	<i>pur mēt</i>	grow within	stative intransitive verb
<i>asok</i> ‘solid’	adjective	<i>asok mētkā</i> ‘brave man’	<i>a=sok mēt-ka</i>	SPEC=solid within- M.SG	noun
<i>asok</i> ‘solid’	adjective	<i>asok mēt</i> ‘be brave’	<i>a=sok-mēt</i>	SPEC=solid within	stative intransitive verb

7.5.2 Semantic contribution of preposition *pem* ‘in’

In association with adjective, verb and noun stems, the preposition *pem* forms stative intransitive prepositional verbs denoting human characteristics. In some cases the resulting form takes noun class marking and functions as a noun referring to a particular type of person rather than a descriptive verb. Examples of prepositional verbs and nouns containing the preposition *pem* are shown in Table 7.7.

Table 7.7: Formation of new lexemes with the preposition *pem* ‘in’

Lexical stem	Word class	Resulting form	Morphemes	Glosses	Effective word class
<i>thēvaik</i> ‘explanations’	noun	<i>arēvaikpemka</i> ‘saviour’	<i>a=thēvaik pem-ka</i>	SPEC=explanations in-M.SG	noun
<i>angelki</i> ‘knowledge’	noun	<i>angelka vem</i> ‘be clever’	<i>a=ngel-ka pem</i>	SPEC=knowledge- M.SG in	stative intransitive verb
<i>sunas</i> ‘learn’	transitive verb	<i>Sunasvemga</i> ‘teacher’	<i>sunas-pem-ka</i>	learn-in-M.SG	noun
<i>amēr</i> ‘good’	adjective	<i>amēr vem</i> ‘be happy’	<i>amēr pem</i>	good in	stative intransitive verb

¹² Note that based on the available data, the form *araun’ga* is not used in any other context.

7.5.3 Semantic contribution of preposition *pēt* ‘at’

Like *mēt* and *pem*, the preposition *pēt* ‘at’ appears in stative intransitive prepositional verbs that refer to particular characteristics of the subject of the clause. The stem may be a noun, verb or adjective. For example, the noun *kēthopka* ‘sap’ forms the stative intransitive prepositional verb *kēthopka vēt* ‘be fat’ {*kēthop-ka pēt* sap-M.SG at}. The resulting expressions are occasionally used as nouns, for example *mairvētka* ‘boss’ {*mair pēt-ka* stand.PAST at-M.SG}. Prepositional nouns may also be formed with a noun stem. Again this expression refers to an association with the lexical stem, for example a ‘woman who has children’ is *athoespēthachi* {*at=oes pēt-ki* 3F.SG.POSS=off.spring at-F.SG}. The preposition *pēt* is also found in prepositional verbs expressing increased affectedness of an object: *pai vēt* ‘slap’ {*pai pēt* fall.down (active intransitive) at}, *sek pēt* ‘peel’ {*sek pēt* lift (transitive) at}. An increase in transitivity may be involved but is not always necessary. Transitive verb stems take this preposition with no increase in valency (cf. *sek pēt* ‘peel’ above). Further examples of prepositional verbs and nouns containing the preposition *pēt* are shown in Table 7.8.

Table 7.8: Formation of new lexemes with the preposition *pēt* ‘within’

Lexical stem	Word class	Resulting form	Morphemes	Glosses	Effective word class
<i>athopki</i> ‘sore’	noun	<i>athopēthacha</i> ‘species of fish that has spots’	<i>athop-pēt-ka</i>	sores-at-M.SG	noun
<i>mulen’gi</i> ‘fear’	noun	<i>mulen’gi vēt</i> ‘be anxious’	<i>mulen-ki pēt</i>	fear-F.SG at	stative intransitive verb
<i>tepmuan</i> ‘squeeze’	transitive verb	<i>tēpmuan vēt</i> ‘digest’	<i>tēp muan vēt</i>	squeeze at	transitive verb
<i>pes</i> ‘blow’	active intransitive verb	<i>pes pēt</i> ‘charm (by blowing magic powder towards)’	<i>pes pēt</i>	blow at	transitive verb
<i>achrnas</i> ‘hot’	adjective	<i>achrnas pēt</i> ‘struggle with something’	<i>achrnas pēt</i>	hot at	stative intransitive verb

7.6 Summary

Mali makes use of a relatively large set of prepositions. As shown in §7.1, some of these have narrow and specific unitary meanings while others seem to be polysemous or used in fairly general ways. As the discussion in §7.2–§7.3 indicated, the prepositions *sa* and *na* have a much broader range of functions than the rest of the items in the class. The use of prepositions in lexicalised constructions that function as verbs and nouns was described in §7.4–§7.5. Table 7. summarises the use of simple prepositions across these areas.

Table 7.9: Summary of behaviour of simple prepositions in complex prepositions and in prepositional verbs and nouns

Form	Type of complement	Complex preposition	Occurrence in prepositional verbs/nouns
<i>daer</i> ‘over’	NP	no	no
<i>gēl</i> ‘with’	NP	second position only	stative intransitive verbs only
<i>gēlēṃ</i> ‘near’	NP	second position only	stative intransitive and transitive verbs
<i>mēni</i> ‘on’	NP	second position only	stative intransitive and transitive verbs
<i>mēt</i> ‘within’	NP	second position, restricted in first position	stative intransitive and transitive verbs, nouns
<i>na</i> ‘from, PREP’	NP, anaphoric demonstrative (§7.2.3) and spatial terms (§7.3)	first position only	stative intransitive verbs, transitive verbs (the complex preposition <i>nēthēm</i> containing <i>na</i> also forms prepositional nouns)
<i>nani(a)</i> ‘for’	NP	only in lexicalised preposition <i>snania</i> (§7.2.2)	(the complex preposition <i>snania</i> containing <i>nania</i> forms a transitive prepositional verb)
<i>pa</i> ‘LOC, BEN’	NP, non-referential noun (§7.1.8)	second position, restricted in first position	stative intransitive and transitive verbs (the complex preposition <i>pathēm</i> containing <i>pa</i> forms a prepositional noun)
<i>pem</i> ‘in’	NP	second position only	stative intransitive verbs, transitive verbs, nouns
<i>pēt</i> ‘at’	NP	second position only	active intransitive, stative intransitive, and transitive verbs, nouns
<i>sa</i> ‘to, with’	NP, anaphoric demonstrative (§7.2.3) and spatial terms (§7.3)	first position only	stative intransitive and transitive verbs
<i>sēng</i> ‘at base’	NP	restricted in second position	one possible example of stative intransitive verb
<i>tēm</i> ‘THEME, GOAL, PATH’	NP	second position only	stative intransitive and transitive verbs, nouns

8

Noun classes and gender in Mali

Noun class and gender morphology in Mali are the focus of this chapter. From an areal perspective, the non-Austronesian languages of the Bismarck Archipelago, Bougainville, and the Solomons exhibit nominal classification of some kind (Terrill 2002). Most can readily be identified as gender systems, with only a two- or three-way distinction between masculine, feminine, and possibly neuter. The Baining languages are unusual in having a gender system of noun classification that interacts with a second more complex noun class system.

The two systems of noun classification in Mali contrast in their size and distribution. For the purposes of this grammar, the smaller set, distinguishing only masculine, feminine, and neuter, will be called the gender system, while the larger set, including size and shape based contrasts will be called the noun class system. The gender system, which is used within the predicate and in possessive constructions, is introduced in §8.1. The noun class system, which is used within the NP, is introduced in §8.2. Assignment within the noun class system is discussed in §8.3 (for human referents) and §8.4 (for non-human referents). The mapping of the noun class system onto the gender system is described in §8.5. Patterns of markedness are discussed in §8.6. Stebbins (2005) contains a more detailed discussion of the material presented in this chapter.

8.1 Gender in Mali

The Mali gender system makes a three-way contrast between masculine, feminine, and neuter forms. This is mapped onto a three way contrast in number: singular, dual and plural. In the plural a human/non-human distinction is added. The gender system is marked on the concordial pronouns and the possessive pronouns (§5.2.4).

These contrasts are shown in Table 8.1 (repeated from §4.1.3, Table 4.1, in relation to the class I concordial pronouns). As already noted, masculine and feminine are not distinguished for dual pronouns operating within the gender system.

Table 8.1: Class I concordial pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>ngua</i>	<i>un</i>	<i>ut</i>	
2	<i>ngia</i>	<i>in</i>	<i>ngēn</i>	
			Human	Non-human
3M	<i>ka</i>	<i>in</i>	<i>ta</i>	<i>ngē</i>
3F	<i>kia</i>	<i>in</i>	<i>ta</i>	<i>ngē</i>
3N	<i>ngē</i>			

There is a general correlation between gender and noun class such that a noun that belongs to the masculine singular noun class can be expected to have masculine singular gender. However, this correlation is not entirely predictable; and it would be an overgeneralisation to view the gender system as a reduced version of the noun class system that is mechanically applied outside the NP to reflect the surface marking within. The correlations between noun class marking and gender are considered in more detail in §8.5.

8.2 Mali noun classes

The noun class system in Mali is marked within the NP on the head noun and on dependents such as modifiers, the numbers one, two and three, and demonstratives. It involves nine sex-, size-, and shape-based contrasts. The masculine and feminine noun classes are the most complex, involving all these parameters, while the other noun classes are more strictly shape- and size-based.

Like the gender system, the noun class system displays a contrast between human and non-human in the plural, though only with masculine human nouns. Non-human masculine nouns are unmarked in the plural, as is the case for count neutral nouns. All feminine plural nouns are also formally unmarked. Other noun classes have distinct plural forms. Also like the gender system, number marking is not possible in some cases. In the noun class system, the count neutral noun class does not distinguish the number of the referent. Finally, whereas the gender system does not distinguish the gender of dual referents, the noun class system has distinct forms for all classes with dual referents.

The noun class suffixes are presented in Table 8.2. The abbreviations used to gloss the classes are given in brackets.

Table 8.2: Mali noun classes suffixes

Class	Singular	Dual	Plural
Masculine (M)	<i>-ka</i>	<i>-iom</i>	<i>-ta</i> (H) or <i>Ø</i> (NH)
Feminine (F)	<i>-ki</i>	<i>-vem</i>	<i>Ø</i>
Diminutive (DIM)	<i>-ini</i>	<i>-ithom</i>	<i>-ithong</i>
Reduced (RCD)	<i>-vēm</i>	<i>-vam</i>	<i>-vap</i>
Flat (FLAT)	<i>-vēs</i>	<i>-imelem</i>	<i>-imelēk</i>
Excised (EXC)	<i>-igl</i>	<i>-iglem</i>	<i>-igleng</i>
Long (LONG)	<i>-vet</i>	<i>-isem</i>	<i>-iseng</i>
Extended (EXT)	<i>-ia</i>	<i>-inēm</i>	<i>-inēk</i>
Count neutral (CN)	<i>Ø</i>		

For agreement within the NP see §10.5 and 10.7. For paradigms of pronouns and demonstratives see §5.2.3–§5.2.6. For the paradigm associated with the numbers one, two and three see §9.2.

The nouns in tables 8.3 and 8.4 provide an idea of the range of senses encoded by the noun classes.

Table 8.3: Assignment of the stem *amēng* ‘tree, wood’ to Mali noun classes

Noun Class	Singular	Dual	Plural	Gloss
Masculine (M)	<i>amēng-ka</i>	<i>amēng-iom</i>	<i>amēng</i>	‘slender tree’
Feminine (F)	<i>amēng-ki</i>	<i>amēng-vem</i>	<i>amēng</i>	‘large full grown tree’
Diminutive (DIM)	<i>amēng-ini</i>	<i>amēng-ithom</i>	<i>amēng-ithong</i>	‘stick’
Reduced (RCD)	<i>amēng-ēm</i>	<i>amēng-vam</i>	<i>amēng-vap</i>	‘tree stump’
Flat (FLAT)	–	–	–	–
Excised (EXC)	<i>amēng-igl</i>	<i>amēng-iglem</i>	<i>amēng-igleng</i>	‘plank’
Long (LONG)	<i>amēng-vēt</i>	<i>amēng-imelēm</i>	<i>amēng-imelēk</i>	‘pole’
Extended (EXT)	<i>amēng-ia</i>	<i>amēng-inēm</i>	<i>amēng-inēk</i>	‘large log’
Count neutral (CN)	<i>amēng</i>			‘wood or trees’

Table 8.4: Assignment of the stem *dul* ‘stone, money’ to Mali noun classes

Noun Class	Singular	Dual	Plural	Gloss
Masculine (M)	<i>dul-ka</i>	<i>dul-iom</i>	<i>dul</i>	‘a slightly longish, not large stone’
Feminine (F)	<i>dul-ki</i>	<i>dul-vem</i>	<i>dul</i>	‘a large stone’
Diminutive (DIM)	<i>dul-ini</i>	<i>dul-ithom</i>	<i>dul-ithong</i>	‘a small stone’
Reduced (RCD)	<i>dul-ēm</i>	<i>dul-vam</i>	<i>dul-vap</i>	‘sand crab sp.’
Flat (FLAT)	<i>dul-vēs</i>	–	–	‘a stony area’
Excised (EXC)	<i>dul-igl</i>	<i>dul-iglem</i>	<i>dul-igleng</i>	‘silver coin’
Long (LONG)	–	–	–	–
Extended (EXT)	–	–	–	–
Count neutral (CN)	<i>dul</i>			‘stone(s), money’

As we noted above, non-human nouns have unmarked plural forms unless they belong to one of the size- or shape-based noun classes. Thus *amēng* can mean both ‘wood’ and ‘trees’ and the size contrast between *amēng-ka* ‘slender tree’ and *amēng-ki* ‘large full grown tree’ is lost.¹ In addition to straightforward semantic relations between the noun class and the stem (for example the diminutive noun class is associated with *amēng-ini* ‘stick’ and *dul-ini* ‘a small stone’), there are also examples in which the basic sense of the noun class is used metaphorically (for example the ‘flat’ noun class can be used on quite

¹ To assist with the identification of the relevant noun class markers, these are represented here without the phonological changes that normally apply. The listing of these forms in the lexicon (Appendix A) shows the actual pronunciation of these forms.

bulky objects with the sense ‘spread over an area’: *dul-vēs* ‘a stony area’). Also, note that it is not possible to use all noun classes with all nominal stems. There are lexical restrictions on the use of the noun classes based on the ‘logic’ of the combinatorial possibilities. Thus, there is no noun **dul-vēt* ‘pole shaped stone’ using the ‘long’ noun class marker because the nature of stones in the area (heavy and brittle) is incompatible with a long slender shape.

Noun class assignment is a concern of the lexicon. The noun stem + noun class value is in a lexicalised relationship with a particular category or concept. Reassigning nouns to another class results in the formation of a new lexeme. The noun stem may also occur independently in the lexicon. Even where this is not the case, the stem may be available for re-use in another noun class.

Based on materials collected to date (a corpus of roughly 2,000 nouns), it is clear that by far the largest classes of Mali nouns are the masculine and feminine classes, which are almost equal in size (approximately 650 nouns in each). The count neutral noun class runs a distant third, with about half as many nouns. The six shape based classes are quite small by comparison, with an average of around thirty members each. Most nouns in the shape-based noun classes can be related to nouns in the count neutral noun class. The distribution of nouns to noun classes is schematised in Figure 8.1.

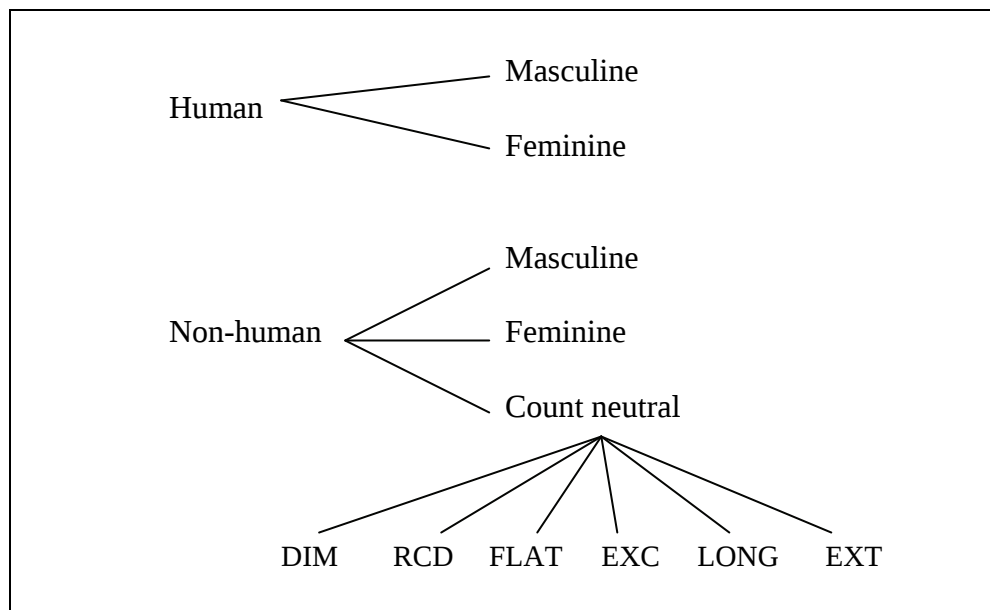


Figure 8.1: Noun class assignment in Mali-Baining

Each noun in Mali is assigned to a noun class. For human referents the usual noun class is masculine (and is used as the citation form), though the noun class may vary according to the sex of the referent. For culturally salient inanimate items (such as clothes, containers, woven items, ornaments, tools, weapons and so on), the noun class is generally masculine or feminine. Other nouns are found in the count neutral noun class. Noun class variability among inanimates relates to the size and shape of the referent.

Noun class reassignment is used as a strategy for deriving new words. Although it is always possible to relate the derivational strategy that is used to the principles for noun class assignment outlined here, derivational strategies are not fully predictable in Mali. For

example, the word *sachong* ‘eye(s)’, is extended to *sachong* ‘glasses’ without any additional morphological change. Based on the patterns presented here, and the knowledge that the singular is *sachong-ka* ‘eye’ (masculine), we may have expected to find the word for glasses in the feminine noun class along with other words referring to clothes and so on (§8.4.1). Instead, it remains in the count neutral class.

There are limits on the applications of the principles of noun class assignment described in the following sections. Like most noun class systems, a core set of examples are readily related to principles for noun class assignment but there also appear to be exceptions to the principles. These are likely to be due to shifts in the principles of noun class assignment over time, or to changing cultural factors (see Dixon 1982:174ff.). As a result, the principles presented here work best as an explanatory device. Loans are often an interesting testing ground in exploring noun class assignment. In Mali, loans are assigned according to semantic principles summarised below and set out in greater detail in Stebbins (2005).

8.3 Human referents and noun class assignment

One of the most straightforward uses of the masculine and feminine noun classes is to distinguish between male and female referents. This is true of humans, other rational entities such as spirits, and of animals and birds that are readily identified as male or female due to the distinctive physical features of each sex. Examples of masculine/feminine pairs are given in Table 8.5. They include relationship terms such as *mat-ka* ‘older sibling’ and nouns referring to people with particular characteristics *amunam-ka* ‘lame person’ or professions *sunasvem-ka* ‘teacher’.

Table 8.5: Male and female human referents in the masculine and feminine noun classes

Masculine noun class	Feminine noun class
<i>amēl-ka</i> ‘foreign man’	<i>amēl-ki</i> ‘foreign woman’
<i>amonel-ka</i> ‘male traveller, hunter’	<i>amonel-ki</i> ‘female traveller, hunter’
<i>amunam-ka</i> ‘lame man’	<i>amunam-ki</i> ‘lame woman’
<i>arua-ka</i> ‘male friend’	<i>arua-ki</i> ‘female friend’
<i>auligal-ka</i> ‘Sulka man’	<i>auligal-ki</i> ‘Sulka woman’
<i>lik-ka</i> ‘younger brother’	<i>lik-ki</i> ‘younger sister’
<i>mat-ka</i> ‘older brother’	<i>mat-ki</i> ‘older sister’
<i>sunasvem-ka</i> ‘male teacher’	<i>sunasvem-ki</i> ‘female teacher’

In many cases a count neutral noun stem which refers to some human propensity or a geographical location may be used in the masculine and feminine noun classes to refer to people displaying that propensity or coming from that place. Examples include: *avu* ‘sin’, *avu-ka* ‘male sinner’, *avu-ki* ‘female sinner’; and *rong* ‘high altitudes’, *rong-ka* ‘man from the mountains’, *rong-ki* ‘woman from the mountains’.

There are four issues that should be mentioned in relation to the use of noun class marking with human referents: the lack of noun class marking on some nouns used as address terms (§8.3.1); alternative plural marking on nouns with human referents (§8.3.2); the use of the size- and shape-based noun classes (§8.3.3); and noun class marking on higher animates (§8.3.4) treated analogously to humans.

8.3.1 Lack of noun class marking on some address terms

Some nouns that are both address terms and common nouns do not take any noun class marking in the singular. These forms are formally count neutral nouns in the singular. They take the associative plural noun class markers which are an additional set of noun class markers only associated with human plural entities. Examples include: *dokta* ‘doctor’, *dokta-kēna* ‘doctors’, *chau* ‘uncle (mother’s brother)’, *cho-kēna* ‘uncles (mother’s brothers)’,² *iaik* ‘grandfather’, *iaik-kēna* ‘grandfather and his cohort’, *uauk* ‘grandmother’, *uauk-kēna* ‘grandmother and her cohort’.

8.3.2 Alternative plural marking on nouns with human referents

Other nouns referring to people may be divided into two classes based on their plural marking morphology. Most nouns with human referents take the masculine plural human noun class marker *-ta*, for example: *arucha* (*a=ru-ka*) ‘man, boy’, *aruchi* (*a=ru-ki*) ‘woman, girl’, *arura* (*a=ru-ta*) ‘people’. Some nouns take the collective plural noun class marker *-vek* instead. For example: *lugut-ka* ‘husband’, *lugut-ki* ‘wife’, *lugut-vek* ‘people who are married’. A few nouns can take either of these plural markers with no discernable difference in meaning: *chēlu-ka* ‘brother in law’ (male speaker), *chēlu-ki* ‘sister in law’ (female speaker), and *chēlu-ta* or *chēlu-vek* ‘same sex in-laws’.

There is no difference in meaning between these plural noun class markers (*-ta*, *-kēna*, and *-vek*) and their distribution is now lexically determined. Based on their distribution it seems that perhaps *-vek* used to have a collective reading (consider the unsegmentable noun *chēvek* ‘relatives’), while *-kēna* had an associative meaning (compare its use with proper names such as *Fidelma-kēna* ‘Fidelma and her associates’).

The forms available for marking nouns with plural human referents are set out in Table 8.6. Note that feminine nouns with plural human referents do not usually receive a noun class marker. This is discussed in more detail in §8.5.2.

Table 8.6: Human Noun Classes in Mali

Noun Class	Singular	Plural
Masculine	<i>-ka</i>	<i>-ta</i>
Feminine	<i>-ki</i>	<i>-∅</i>
Collective	<i>-ka</i> or <i>-ki</i>	<i>-vek</i>
Associative	<i>-∅</i>	<i>-kēna</i>

8.3.3 Size- and shape-based noun classes and nouns with human referents

There are strict limitations on the use of the size- and shape-based noun classes with human referents. The diminutive is used quite frequently with reference to young children (*athoem-ini* ‘baby’ {*at=oem-ini* 3F.SG.POSS=child-DIM.SG}), the elderly (*lēvop-ini* ‘old woman’), and distant figures who appear to be small (for example, people walking along the beach some distance away). The use of the diminutive in referring to elderly people may be an example of an attenuative strategy for marking respect.

² This is a regular alternation affecting a few nouns with VV sequences in the stem. See §3.4.2.D.

The other shape-based noun classes can only be used in non-literal ways as metaphorical uses of the noun class to refer to a noticeable physical characteristic. A few, such as *thoem-vap* {*at=oem-vap* 3F.SG.POSS=child-RCD.PL} ‘kids’, are lexicalised. Others include: *aru-ves* {person-FLAT.SG} ‘crowd of people’, and *aru-vet* {person-LONG.SG} ‘tall skinny man’. Although human nouns in shape-based noun classes are most commonly *ad hoc* creations, there is a paradigm of interrogative pronouns for human referents based on the noun classes that include the size- and shape-based noun class markers. These can only be used in joking contexts, and are used to make fun of the size of people. Example (8.1) shows a plural interrogative pronoun for the ‘extended’ noun class *nēm-inēk* used to refer to big strong men, while example (8.2) shows a plural interrogative pronoun for the ‘excised’ noun class *nēm-igleng* used to refer to large women.

- (8.1) *Nēminēk* *avēnēk* *vui?*
 nēma-inēk *avēnēk* *vui*
 who-EXT.PL EXT.PL.DIST.DEM upwards
 ‘Who are those big strong men up there?’
- (8.2) *Nēmiqleng* *avēqleng* *mēk* *ngē* *tugas?*
 nēma-igleng *avēqleng* *mēk* *ngē* *tugas*
 who-EXC.PL EXC.PL.DIST.DEM down 3N.I play.PRES
 ‘Who are those large women who are playing down there?’

8.3.4 Noun class marking on higher animates

Higher animates whose sex is identifiable because of distinctive physical features are treated in the same way as human referents in noun class assignment. A few examples are shown in Table 8.7. Lower animates, whose sex is not readily identifiable, cannot be treated in this way. They may be assigned to either noun class following other principles (§8.4).

Table 8.7: Male and female animal referents in the masculine and feminine noun classes

Stem	Masculine noun class, Male referent	Feminine noun class, Female referent
<i>duraik</i> ‘chicken(s)’	<i>duraik-ka</i> ‘rooster’	<i>duraik-ki</i> ‘hen’
<i>mathong</i> ‘hornbill(s) (bird sp.)’	<i>mathong-ka</i> ‘male hornbill’	<i>mathong-ki</i> ‘female hornbill’
<i>mēliar</i> ‘small parrot(s) (bird sp.)’	<i>mēliar-ka</i> ‘male parrot’	<i>mēliar-ki</i> ‘female parrot’
<i>vaim</i> ‘dog(s)’	<i>vaim-ka</i> ‘dog’	<i>vaim-ki</i> ‘bitch’
<i>vlam</i> ‘pig(s)’	<i>vlēm-ka</i> ‘pig’	<i>vlēm-ki</i> ‘sow’

As with human referents, masculine is the functionally unmarked form. In fact, although it is possible to mark animals such as dogs and pigs with the feminine noun class markers to refer to bitches and sows, this is only done to make a particular point about the sex of the animal. Mostly the distinction is not made and masculine endings are used.

8.4 Non-human referents and noun class assignment

Size, extension of dimensions, arrangement, malleability, affective value, and function are the key parameters for assignment of nouns referring to non-human entities to noun classes in Mali. In this section, the noun classes are discussed as follows: the masculine and feminine noun classes are discussed together in §8.4.1, the count neutral noun class is described in §8.4.2, and the remaining classes are discussed in §8.4.3.

8.4.1 Masculine and feminine noun class assignment

The only obvious distinction between the masculine and feminine noun classes as they are assigned to non-human referents is size. Nouns in the count neutral noun class may be assigned to either the masculine or feminine noun class depending on their relative size. This is true of nouns from a wide range of semantic domains. In every case the masculine form is unmarked for size while the feminine form refers to large entities. A few examples are given in Table 8.8.

Table 8.8: Marked and unmarked sizes encoded in the masculine and feminine noun classes

Stem	Masculine noun class, average size	Feminine noun class, large size
<i>thinēm</i> ‘fish’	<i>thinēm-ka</i> ‘a fish’	<i>thinēm-ki</i> ‘a big fish’
<i>bang</i> ‘houses’	<i>bang-ka</i> ‘house’	<i>bang-ki</i> ‘large building, centre’
<i>lulen</i> ‘water craft’	<i>lulen-ga</i> ‘a dug-out canoe’	<i>lulen-gi</i> ‘a long dinghy’
<i>areng</i> ‘liquid’	<i>areng-ka</i> ‘creek’	<i>areng-ki</i> ‘river’

There are many examples in which a three way contrast between large (feminine noun class), regular (masculine noun class), and small (diminutive noun class) referents occurs as a set. This is true, for example, of the following borrowings: *sipun* ‘spoons’, *sipun-ka* ‘dessert spoon’, *sipun-ki* ‘serving spoon’, *sipun-ini* ‘teaspoon’; and *plastik* ‘plastic containers or bags’, *plastik-ka* ‘plastic container between one and five litres in capacity, plastic shopping bag’, *plastik-ki* ‘plastic container at least five litres in capacity, large cocoa, flour, or rice bale’, and *plastik-ini* ‘small plastic container less than one litre in capacity, small plastic bag’. In some cases the size contrast is considerable and crosses semantic domains. For example, the noun stem *dam* ‘lumps’, can generally refer to a ‘lump’ *dam-ka*, it can also refer to a geographic feature *dam-ki* ‘mountain’, and a skin lesion *dam-ini* ‘small lump’ (especially an insect bite or pimple).

The alternation between masculine and feminine gender is often used as a strategy for lexical expansion. In most cases the association between the feminine class and relatively large size is maintained. For example, the word *isēm* ‘birds’ with the semantically unmarked masculine singular form *isēm-ka* ‘a bird’, is also used to refer to aircraft, *isēm-ki* ‘an aeroplane’. In this case the existing semantically marked feminine noun class word for a large bird, *isēm-ki* has been lexicalised in a new sense. Other examples include the word *vilē-ka* ‘crack of lightning’ which was the basis for *vilē-ki* ‘gun’, and *slēp-ki* ‘bone’ which has given rise to *slēp-ka* ‘pen, pencil’.

In the last case mentioned above a feminine noun has been reassigned to the masculine noun class. There are restrictions on this pattern. For example the feminine noun *urat-ki* ‘basket’ does not have a masculine counterpart that refers to a smaller, average-sized basket. The noun *slēp-ki* ‘bone’ has not simply changed its size through reassignment to the masculine noun class. The concept it refers to has also changed from ‘bone’ to ‘writing instrument’. The possibilities for each noun stem must be learnt individually. Mali speakers sometimes recite series of nouns with the same stems but different noun class markers in discussions about the language, in much the same way as speakers of European languages ‘rattle off’ declensions. The resulting lists are similar to those presented above in Tables 8.3 and 8.4.

Masculine and feminine noun class marking can also be used with unbounded referents. There are two patterns for interpreting the size-based distinctions that these noun classes encode. Firstly they are used to refer to particular conventional units of measure: *rais* ‘rice’, *rais-ka* ‘1kg bag of rice’, *rais-ki* ‘10kg bale of rice’, and *rais-ini* ‘500g packet of rice’. Alternately, the masculine and feminine noun class markers can be used to delineate areas of different sizes: *achelachuas* ‘grass sp. (has seeds that stick to people’s legs)’, *achelachuas-ka* ‘an area of grass sp.’, *achelachuas-ki* ‘a large area of grass sp.’, and *achelachuas-ini* ‘a small area of grass sp.’; or *luchuap* ‘spaces, places’, *luchup-ka* ‘place’, *luchup-ki* ‘dancing ground, playground etc.’, *luchup-ini* ‘small space’.

Some noun stems are polysemous, with different uses in the masculine and feminine noun classes. For example, the stem *nangas* can be used to refer to ‘smoke, tobacco plants, cigarettes’. It has a masculine form *nangas-ka* ‘tobacco plant, cigarette’ and a feminine form *nangas-ki* ‘smoke’. Another example is the stem *thēchēnmu* ‘taboo thing(s)’, which becomes a count noun referring to a spirit with the masculine noun class marker *thēchēnmu-ka* ‘sacred being’ and a delineated place with the feminine noun class marker *thēchēnmu-ki* ‘taboo place’. The masculine gender was assigned to the spirit because human (rational) nouns have masculine as the unmarked gender. Further examples of polysemous stems that have both human and non-human referents are given below.

A. Polysemous stems in the masculine and feminine noun classes

Some noun stems in Mali have polysemous patterns depending on whether the referent is viewed as human or non-human. For example, the noun stem *asingal* may refer to snakes or to forest spirits. In the first case the masculine and feminine noun class markers encode a size distinction: *asingal-ka* ‘snake.M.SG’ or *asingal-ki* ‘large snake.F.SG’. In the second case the masculine and feminine forms encode a gender distinction: *asingal-ka* ‘male forest spirit’ and *asingal-ki* ‘female forest spirit’. The stem *manangiēm* {*ma-na-nangiēm* REL₂-IRR.FOC-look.PRES} takes the feminine noun class marker to refer to objects that assist in making things visible: *manangiēm-ki* ‘window, torch’, but it may also be used to refer to people: *manangiēm-ka* ‘sighted man’ and *manangiēm-ki* ‘sighted woman’.

B. Part-whole relationships in the masculine and feminine noun classes

In a few cases the size distinction between the masculine and feminine noun classes has been lexicalised as referring to a part (masculine)—whole (feminine) relationship. This is the case for the following two nouns referring to edible greens eaten widely in the Gazelle Peninsula. The nouns *aichil* and *auravu* are alternate names for a type of plant known as *aibika* in Tok Pisin or ‘native spinach’ in English. The term for an individual plant is

feminine *auravu-ki* or *aichil-ki*, while a piece of the plant that has been harvested for cooking is masculine *auravu-ka* or *aichil-ka*. Fruits are generally feminine and nuts are masculine.

The assignment of parts of things to the masculine noun class is exemplified with the following: parts of buildings (*mononamu-ka* ‘crossbeam’, *sut-ka* ‘ridgepole’, *rēprēp-ka* ‘fence post’), parts of water systems (*achērua-ka* ‘side branch of river with seasonal flow’, *ai-ka* ‘side branch of river always flows’), and types of areas within the landscape (*aup-ka* ‘valley floor’, *gali-ka* ‘mountain range’, *radēm-ka* ‘cave’), while the feminine noun class is associated with natural wholes within buildings (*nemon-ki* ‘door’, *thēkdēngētham-ki* ‘porch’, *chinip-ki* ‘hearth’), with bodies of water (*lachuas-ki* ‘pools that form in the reef at low tide’, *agares-ki* ‘the sea’), and with specific locations within the landscape (*angēthut-ki* ‘area beneath overhanging cliff’, *rong-ki* ‘area at high altitude’, *ngiēmngiēm-ki* ‘look out’).

Another pattern that involves encoding part-whole relationships is associated with feminine nouns referring to body parts. In this pattern, there is an alternation between the feminine noun, which refers specifically to a body part, and a count neutral noun, which has a more schematic meaning (see also §20.1.2.B on relational nouns). The resulting forms are always inalienably possessed. For example, the inalienably possessed noun *angēt=keng-ki* {3N.POSS=tooth-F.SG} ‘tooth’ is related to *angēt=keng* {3N.POSS=edge} ‘edge’. Similarly, *angēt=tik-ki* ‘hand, arm’ is used in the form *angēt=tik* ‘side’. In other examples the body part noun is not inalienably possessed. For example, *am-gi* ‘mouth’ is related to *angēt=am* {3N.POSS=shore} ‘shore’, and *vus-ki* {*a=pēs-ki* SPEC=head-F.SG} ‘head’ is related to *angēt=vus* {*angēt=pēs* 3N.POSS=head} ‘top’.

C. Other patterns of assignment to the masculine and feminine noun classes

In a number of other respects the basis for assigning nouns to the masculine and feminine noun classes is difficult to ascertain. Consequently, at first glance the masculine and feminine noun classes seem to be rather heterogeneous, having a great deal of overlap with each other. This is not surprising given the large number of nouns in each class.

However, closer analysis reveals that many lower level patterns organise the masculine and feminine noun classes in subtle but quite comprehensive ways. For example, there are plants, trees, and fruits in both classes, and the most definitive general statement one can make with regard to flora and fauna is that all mushrooms, mammals, prawns and crays are masculine, while crocodiles and cassowaries are feminine. In the semantic domain of artefacts, we may observe that woven items, containers, and clothes are feminine while tools tend to be masculine.

In summary, masculine is the usual class for referents that are: average sized, component parts, tools, prawns and crayfish, mammals, birds, insects, fungi, maintained locations, the sun, lights, wind, colours, textures, and sounds. Feminine is the usual class for referents that are: large sized, natural wholes, clothes, containers, crocodiles, fruit-bearing trees, abandoned locations, the moon, precipitation, brightness and darkness, social groups and activities, and emotions. This is discussed further in Stebbins (2005).

8.4.2 Count neutral noun class

Count neutral nouns are formally unmarked. This class includes many examples of nouns that are physically unbounded such as *achuan* ‘sand’ or *chinap* ‘ashes’, and entities

that are used or encountered in large amounts such as *malos* ‘grass species’ or *gawun* ‘edible ferns’. There are also two other principles for assigning nouns to the count neutral noun class. Firstly, nouns that are identified using a circumlocution based on a possessive NP are count neuter. These nouns include the terms *thabu angēt nanēk* {spiders 3N.POSS mother} ‘large insect sp.’ and *lamon angēt iaik* {waves 3N.POSS grandfather} ‘saltwater eel sp.’. Quite a few body part terms are included in this group, for example *ais-angēt=keng* {waist.ropes-3N.POSS=edge} ‘waists’. Even if the noun is singular, the expression remains a count neutral noun since the number of the head of the expression (the possessed noun) does not change. Thus, the singular *ais-ki-at=keng* {waist.rope.F.SG-3F.SG.POSS=edge} ‘waist’ (lit. ‘the edge of the waist rope’), and the plural *sachong-angēt=kēseng* {eyes-3N.POSS=hair} ‘eyelash(es)’. Secondly, many borrowings are also assigned to the count neutral noun class. Examples include: *misa* ‘mass’, *trinitas* ‘trinity’ from Latin (these have entered Mali through exposure to Catholicism); *paranda* ‘veranda’, and *sisel* ‘chisel’ from English; and *varkurai* ‘court’ from Kuanua.

8.4.3 Size- and shape-based noun classes

The assignment of forms to the size- and shape-based noun classes is mostly straightforward and based on a single semantic criteria. In a few cases (particularly the ‘flat’ noun class), there are extensions to the basic semantic value. Parameters include: size, extension of dimensions, arrangement, malleability, and affective value. Table 8.9 summarises the parameters relevant to each class as well as the size parameters and part-whole relationships established for masculine and feminine nouns in §8.4.1. Examples of each size- and shape-based noun class follow.

Table 8.9: Parameters used in assignment to the size- and shape-based noun classes

Noun class	Size	Extension of dimensions	Malleability	Arrangement	Affective value
Masculine (M)	average			component part	
Feminine (F)	large			natural whole	
Diminutive (DIM)	small	reduced in three dimensions			attenuative
Reduced (RCD)	short	reduced in one or two dimensions			depreciative
Flat (FLAT)		extended in two dimensions	flexible	not arranged	
Excised (EXC)		cut off along one dimension	rigid	arranged by people	
Long (LONG)	long	extended in one dimension	rigid		
Extended (EXT)	very large	extended in three dimensions	flexible		

A. Diminutive noun class (SG *-ini*, DL *-ithom*, PL *-ithong*)

There are two different avenues to assignment to the diminutive noun class: small size and attenuative value. Examples here are reduced in all three dimensions and include: *baiv-ini* ‘small black bush frog’, *guing-ini* ‘buds of fruit’, *lair-ini* ‘small ridge’, and *urat-ini* ‘small basket’. Attenuative readings are encoded by the diminutive suffixes in order to minimise the attention one is drawing to them. The diminutive has attenuative senses in the following contexts: to avoid attracting attention to oneself, one’s cleverness or wealth (*guvang-ithong* {bad-DIM.PL} ‘possessions, belongings’, *sneng-ini* ‘an idea, a plan’, *amēspēt-ithong* ‘side dishes’); as a politeness strategy with many body part terms (*slēv-ini* ‘leg’, and *alēng-ini* ‘shoulder’, especially with addressee’s body parts, but increasingly lexicalised and referring to any person’s body part); to minimise the significance of social events or situations (*thares-ini* ‘trouble’, *thēktēk-ini* ‘job’, *lenge-ini* ‘social event, meeting’).

B. ‘Reduced’ noun class (SG *-(ch)ēm*, DL *-vam*, PL *-vap*)

Like the diminutive noun class, there are two reasons for assigning nouns to the ‘reduced’ noun class. Firstly, the noun may be short or stumpy in shape: *livin-ēm* ‘short carrying poles’, *achapdēth-ēm* ‘stout fish sp.’, *muli-chēm* ‘spike on orange tree’, *avith-ēm* ‘pit oven (appears as a low mound when it is completed)’, *vloch-ēm* ‘spot’, *srēv-ēm* ‘dwarf’. Secondly, it may assign a deprecative value to locations (*bang-ēm* {house-RCD.SG} ‘a village’, *abil-ēm* ‘abandoned settlement’, *Mur-ēm* name of a creek), people (*vingbing-vap* {crooked-RCD.PL} ‘Bainings’, *mat-ēm* {older.sibling-RCD.SG} ‘brother’, and *kavat-ēm* {spirit.causes.illness-RCD.SG} ‘fire dancer, wears mask with large eyes’), and to weather and celestial bodies (*saeng-vap* {rain-RCD.PL} ‘storm’ and *kunēng-ēm* {sun-RCD.PL} ‘morning star’).

The bridge between these two senses is the use of the ‘reduced’ noun class to refer to worn down or worn out things that are not the size they were when new: *baul-ēm* ‘old sarong (laplap), piece of rag’, hence *siling-ēm* ‘old net bag’ etc. The use of the reduced noun class with young animals or children is not motivated by their size (this is encoded with the diminutive) but in order to express a deprecation: *vlēm-vap* ‘piglets’, *vaim-vap* ‘puppies’, *thoem-vap* {*at=oem-vap* 3F.SG.POSS=child-RCD.PL} ‘children’.

C. ‘Flat’ noun class (SG *-ves*, DL *-imelēm*, PL *-imelēk*)

Members of the ‘flat’ noun class are (i) extended in two dimensions (*vaia-ves* ‘sheet of arcmesh wire’, *sen-ves* ‘wall woven from leaf stems’, *chēseng-ves* ‘feather’ (cf. *chēseng* ‘hair’), *urat-ves* ‘coconut frond for making a basket’ (cf. *uratki* ‘basket’)), (ii) flexible (*pepa-ves* ‘paper’, *tēlēng-ves* ‘leaf’), or (iii) items dispersed at a fairly high density through a lexically specified area (*mundēm* ‘fire’, *mundēm-ves* ‘bonfire’, *mudēm-ga* ‘a burning stick’).

The ‘flat’ singular noun class marker is also associated with items that are dispersed but not formally arranged. For cultivated crops these forms refer to a random area in which the crop happens to occur frequently, for example: *tangam-ves* ‘area of bananas, banana leaf’ (cf. *tangam-igl* ‘plantation of bananas’). However, the word *urat-ves* {basket-FLAT.SG} specifically refers to an enclosed space, such as a room, full of baskets. A word for ‘twilight’ is *bangang-ves* (based on *bangang-gi* ‘night’), suggesting a dispersal of darkness through the light. Similar reasoning seems to motivate the use of *-ves* in attenuative colour

terms. The singular ‘flat’ noun class suffix is applied to colour terms to attenuate their intensity. This applies to all colours, regardless of their original noun class assignment. For example, the masculine colour *alolka* ‘red’ becomes *alolves* ‘reddish’ and the adjective *ariar* ‘green’ becomes the noun *airiarves* ‘greenish’. This suffix can also be used to refer to ‘crowds’ of certain animate referents: *thinēm-ves* {fish-FLAT.SG} ‘a school of fish’, and *aru-vēs* {person-FLAT.SG} ‘a crowd of people’.

Note that when used in this extended sense, dual and plural marking is not possible. This seems intuitively sensible as these nouns appear to be inherently plural. Any reasonably sized unit dispersed at a high density must logically occur in multiple instances. For example, the word *urat-ves* ‘room full of baskets’ cannot be pluralised. However, the same form also has the meaning ‘coconut frond to be used to make a basket’ and in this sense the plural *urat-imēlēk* ‘coconut fronds for making baskets’ is possible.

D. ‘Excised’ noun class (SG *-igl*, DL *-iglem*, PL *-iseng*)

The ‘excised’ noun class includes referents which are cut off along one dimension, especially referents that have a straight side such as might be produced by being cut with a knife: *dul-igl* ‘silver coin’, *ad-igl* ‘a piece of taro’, *lamēs-igl* ‘a piece of coconut’, and *tangam-igl* ‘piece of banana’. In a few cases the characteristic of ‘being a piece of something’ has been extended to organs within the body: *lavait-igl* ‘placenta’ (cf. *lavait-ki* ‘navel’) and *lamēs-igl* ‘spleen’. The excised noun class also includes referents that are rigid: *tapa-igl* ‘writing slate’, *kapa-igl* ‘sheet of corrugated iron’, and *amēng-igl* ‘board’. More peripherally, it includes referents that are arranged by people. This sense is particularly applied to plantations: *lamēs-igl* ‘coconut plantation’, and *tangam-igl* ‘banana plantation’.

E. ‘Long’ noun class (SG *-vet*, DL *-isem*, PL *-iseng*)

There are only a handful of nouns in the ‘long’ noun class in the corpus. Prototypical examples relate to wood-based products such *suchul-vet* {post-LONG.SG} ‘slender post’ and *amēng-vet* {wood-LONG.SG} ‘pole’. All nouns in this class are (i) extended in one dimension and (ii) rigid (the inclusion of *vaia-it* ‘a strand of wire’, *chēseng-ia* ‘a long straight hair’ in the ‘extended’ class rather than the ‘long’ class seems to be motivated by their flexibility).

Referents that are extended in one dimension without being very obviously ‘long’ are also included here (*a=chut-ngēt-thēng-vet* {SPEC=lean.NPRES-3N.POSS=back-LONG.SG} ‘chair’), as are the numbers *angē-tik-vet* {3N.POSS=hand-LONG.SG} ‘five’ and *angē-tik-isem* {3N.POSS=hand-LONG.DL} ‘ten’. Their inclusion seems to be based on the fact that in counting on the fingers, all of the fingers on one hand are extended after counting to five and on both hands after counting to ten.

It is also possible to refer somewhat humorously to young men, using the ‘long’ noun class: *nēma-vet* {who-LONG.SG} ‘who’s that tall skinny guy?’ (See also (8.1) and (8.2).)

F. ‘Extended’ noun class (SG *-(a)it*, *-chit* or *-ia*, DL *-inēm*, PL *-inēk*)

The ‘extended’ noun class has been named for its association with large entities, particularly (though not exclusively) parts of the landscape. This includes many names for places. For example, *Berurum-ia* is the name of a ridge in Mali territory. It is also used in the following terms that label the landscape: *chun-ia* ‘sandy beach’ (cf. *chuan* ‘sand’), *gis-*

ia ‘pebbly beach’ (cf. *gis* ‘pebbles’), *braing-ia* ‘small creek’, *aup-ia* ‘valley’, *is-ia* ‘ridge’ (cf. *ais-ki* {road-F.SG}); Bainings follow the lines of ridges to orient themselves when travelling through the bush).

Very large objects (extended in three dimensions) made by people may also be included here: *suchul-ia* ‘very long post’ (cf. *suchul-ki* ‘large post’). A small number of weather or diurnal features are also included in this class: *kulēs-ia* ‘haze’ (cf. *kulēs-ki* smoke) and *aun-ia* ‘darkness due to a volcanic eruption or eclipse’ (cf. *aun-ki* ‘darkness’).

Finally, the class includes a few long flexible objects. Examples include *vaia-it* ‘a strand of wire’, and *chēseng-ia* ‘a long straight hair’ (especially from a European as opposed to a Melanesian). The link seems to be provided by the use of the ‘extended’ noun class to refer to very tall trees and long vines: *changgēt-ait* ‘long narrow vine’ (cf. *changēt-ka* ‘vine sp.’), *lamēs-ait* ‘tall coconut palm’ (cf. *lamēs-ki* ‘coconut palm’), and *amēng-ia* ‘a large log’ (cf. *ameng-ki* ‘large tree’).

8.5 Mapping of noun class system onto gender system

As we have seen, humanness, sex, size, extension of dimensions, arrangement, malleability, affective value, and function determine the assignment of nouns to noun classes in Mali. The situation for gender assignment in the concordial pronouns and possessive pronouns reflects these same values as gender assignment is determined by the noun class. The agreement is with the noun class value of the lexeme, rather than with overt marking of noun class. In (8.3) there is a lack of overt agreement: the noun *amēsmēs(ki)* ‘feast’ is feminine though noun class marking does not occur here. The third person singular agreement on the adjective, functioning here as the head of a verbless predicate (see §4.1.5.Bii and iii on this analysis), is possible because the feminine noun class is associated with the noun whether it is overtly marked or not. The relationship between overt marking of noun class and other functional considerations is considered in more detail in §8.6.

- (8.3) *Amēsmēs* *ma* *morki* *via* *Krismas*.
 a=mēsmēs ma mor-ki pe=ia Krismas
 SPEC=feast REL₂ big-F.SG there=REL₁ Christmas
 ‘There will be a big party at Christmas.’

All members of the masculine and feminine noun classes belong respectively to the masculine and feminine genders. Examples (8.15) shows human and non-human masculine noun classes and genders in one clause. Two examples for feminine nouns are given below. In (8.4) the human feminine noun *rua-ki* ‘friend’ takes the feminine noun class marker *-ki*, and the feminine concordial pronoun *kia* from the gender system appears before the verb.

- (8.4) *Dak* *atha* *ruachi* *chia* *len*.
 dak at=a rua-ki kia len
 but 3F.SG.POSS=SPEC friend-F.SG 3F.SG.I be.afraid.NPRES
 ‘But her friend was afraid.’

Example (8.5) shows that the same pattern occurs with non-human nouns. The feminine noun *sul-ki* ‘reef stone’ (a large chunk of reef that is lodged up in the mountains through geological uplift) also takes the feminine singular concordial pronoun *ki*.

- (8.5) *Dē ngavap ngē vali chama sulki inavuk vēt*
 da ngavap ngē vali kama sul-ki i-na-vuk pēt
 and RCD.PL 3N.I roll.NPRES ART₁ reef.stone-F.SG DER₁-DER₃-up at
kama kurēn'ga ... Petrus ka lu ki nainavuk.
 kama kurēn-ka Petrus ka lu ki na=i-na-vuk
 ART₁ slope-M.SG PN 3M.SG.I see.NPRES 3F.SG.III from=DER₁-DER₃-up
 'And the small ones [referring to little forest people] the rolled the reef stone
 downwards over the slope ... Peter saw it coming at him.'

The neuter gender corresponds to both the count neutral noun class and the six size- and shape-based noun classes. Example (8.6) shows the neuter concordial pronoun *ngēt* cross-referencing the count neutral noun *auravu* 'native spinach'.

- (8.6) *Kama auravu tha.ithang ma ta*
 kama auravu ta=ithang ma ta
 ART₁ native.spinach EMPH=CN.PROX.DEM REL₂ 3H.PL.I
vēs ngēt da achēvu.mēt ngēt.
 vēs ngēt da achēvu.mēt ngēt
 cook.NPRES 3N.III and be.over.done 3N.III
 'This very native spinach that they cooked is overdone.'

Example (8.7) shows that the noun *pepa-vēs* 'paper' with the 'flat' singular noun class marker also takes a neuter cross-referencing concordial pronoun *ngē*:

- (8.7) *Pepavēs ngē ve mēt kama botolka.*
 pepa-vēs ngē pe mēt kama botol-ka
 paper-FLAT.SG 3N.I there within ART₁ bottle-M.SG
 'There is paper in the bottle.'

The correspondences between the genders and noun classes are set out in Figure 8.2.

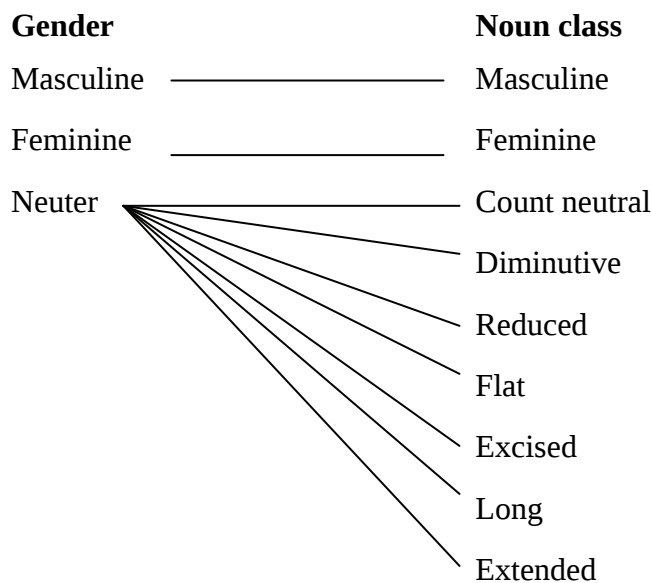


Figure 8.2: Correspondences between Mali genders and noun classes

Although these correspondences generally hold quite well, and are recognised by speakers, there are occasional examples of mismatches between the gender of the entity and the noun class. It is possible to account for these mismatches either in terms of the underlying gender of the referent or in terms of the human versus non-human distinction that cuts across both the gender and noun class systems. The first case concerns mismatches associated with zero noun class marking on proper nouns (§8.5.1). The second case involves mismatches based on different distributions of plural marking in the gender and noun class systems for human referents (§8.5.2).

8.5.1 Proper nouns and zero noun class marking

Proper nouns without noun class suffixes are formally members of the count neutral noun class. They are assigned gender on semantic rather than formal grounds. In (8.8), a pool is referred to with the proper name *Malagun*, formally a count neutral noun, but it triggers the masculine gender (rather than the expected neuter gender) on both the masculine singular class II concordial pronoun *kē* and the masculine singular possessive pronoun *av*, used in the associative possessive construction. The general term for pools *kēthop-ka* is masculine, and this seems to be the trigger for agreement.

- (8.8) *Ut drēm sēva-nas nēchama kēthopiom*
 ut drēm sa=pa-nas na=kama kēthop-*iom*
 1PL.I know.PRES to=LOC-REFL PREP=ART₁ pool-M.DL
ma Malagun chēnēya lugutki.
 ma Malagun kē=nē=av=a lugut-*ki*
 ART₂ PN 3M.SG.II=ASSOC=3M.SG.POSS=SPEC spouse-F.SG
 ‘We know for ourselves about the two pools, Malagun and his wife
 (ie., the second pool).’

This same pattern is found with nouns for human referents used as address terms that do not take a noun class marker in the singular. As example (8.9) shows, a noun such as *dokta* ‘doctor’ also assigns gender based on the underlying noun class of the referent. In example (8.9) the referent is a male person, so whatever term is chosen as the underlying noun referring to him (the obvious candidates are: *aru-ka* ‘man’ and *achumes-ka* ‘male’) will be in the masculine noun class. The gender of the class II concordial pronoun *kē* is, predictably, masculine.

- (8.9) *Ka met sēva arēmgi*
 ka met sa=av a=rēm-*ki*
 3M.SG.I go.PAST with=3M.SG.POSS SPEC=illness-F.SG
diva dokta chē lu ka.
 diva dokta kē lu ka
 PURP₃ doctor 3M.SG.II see.NPRES 3M.SG.III
 ‘He went with his illness so the doctor could see him.’

In example (8.10), *Mēndai* is the proper name for a river. The noun *Mēndai* is formally count neutral. However, the gender of the possessive pronoun *at* is feminine. The feminine reading comes from the category river (*areng-ki* {river-F.SG} ‘river’), not from the noun class of the proper noun itself, which should trigger neuter agreement.

- (8.10) *Mēndai atha chēruacha*
 Mēndai at=a chērua-ka
 PN 3F.SG.POSS=SPEC branch-M.SG
da sok kē bang mamor.
 da sok kē bang mamor
 and really 3M.SG.II run.PRES fast
 ‘The branch of the Mendai River flows really fast.’

In these examples, semantic agreement (agreement based on categorical information not formal patterns) occurs in the concordial pronouns and possessive pronouns. This pattern may also apply when a shape based noun class marker becomes lexicalised as part of a proper name.

Similar patterns are also found in borrowing or code switching involving common nouns. For example, the common noun *chrētki* ‘policeman’ appears to have feminine noun class marking but is treated as a masculine noun in the gender system in accordance with the unmarked gender for people working in this role (see (16.24) for an example).

8.5.2 Human plurals and zero noun class marking

Mismatches also arise in marking human plurals. As we have already noted, humanness is an additional parameter for noun classification in Mali. This is apparent in plural number marking in both the noun class and gender systems. In the noun class system only masculine human nouns take a plural noun class suffix (-*ta*, see also Table 8.2). Mismatches arise when a plural human noun from the feminine or neuter noun class takes zero plural marking within the NP but plural human concordial pronouns following the gender system.

Example (8.11) shows that the masculine plural noun class marker is -*ta* and the plural human concordial pronoun is *ta*.

- (8.11) *Achumesta ta mon.dēm-na.*
 a=chumes-ta ta mon.dēm=na
 SPEC=men-3H.PL 3H.PL.I gather.PAST=RECIP
 ‘The men gather together.’

Example (8.12) shows the masculine singular noun class marker -*ka* and masculine concordial pronouns for both human and non-human referents, also *ka*. Feminine singular examples were given in (8.4) and (8.5).

- (8.12) *Dak kama morka ... ka tet ivi*
 dak kama mor-ka ka tet i-vui
 but ART₁ adult-M.SG 3M.SG.I go.PRES DER₁-upwards
dak vlēmga cha namu nasothacha.
 dak a=plēm-ka ka namu nasot=ka
 but SPEC=pig-M.SG 3M.SG.I continue.NI after=3M.SG.III
 ‘But the man ... he ran away but the pig continued after him.’

Examples (8.12) and (8.13) show that while pigs are assigned to the masculine noun class and gender in the singular, they take zero noun class marking in the plural (*vlam-Ø*), making them count neutral nouns. As such, they are assigned to the neuter gender (*ngēthi*, *ngēt* and *ngē*) in the plural. This pattern occurs for all non-human nouns.

- (8.13) *Vlam ngēthi nari dē ngēt ngē dēn.*
 a=plam ngēthi nari da ngēt ngē dēn
 SPEC=pigs 3N.II hear.NPRES and 3N.III 3N.I arrive.PRES
 ‘The pigs will hear and come.’

In the gender system, the contrast between plural human and non-human referents is possible for both the masculine and feminine genders. This is shown in (8.14) where the third person human plural class II concordial pronoun *ti* is used though no plural marking is present on the noun itself. Feminine forms referring to people take zero noun class marking in the plural (*lēvop-Ø*).

- (8.14) *Lēvop ti tlu ka nave nēva garēs.*
 lēvop ti tlu ka na=pe na=pa garēs
 females 3H.PL.II see.PRES 3M.SG.III from=there from=LOC beach
 ‘(Some) women saw him from the beach.’

This results in an apparent mismatch between plural human gender marking and noun class marking on these nouns. Among younger speakers, especially younger women, there is a tendency to use the plural human noun class suffix with feminine nouns (for example *lēvop-ta* {female-H.PL} ‘women’) on analogy with the marking found on masculine human nouns.

When a shape-based noun class marker is used, the contrast between human and non-human referents is ignored. Human nouns used with these shape based noun classes (in metaphorical extensions and so on) are assigned to the neuter gender. This is shown in example (8.15) where the plural human referent *thaemvap* {*at=oem-vap* 3F.SG.POSS=child-RCD.PL} ‘kids’ from the ‘short’ noun class takes the third person neuter concordial pronoun *ngēthi*, not the third person plural human concordial pronoun *ti*.

- (8.15) *Dē chama thaembap pavēvap*
 da kama at=oem-vap pavēvap
 and ART₁ 3F.SG.POSS=child-RCD.PL RCD.PL.DIST.DEM
ngēthi tlu=cha.
 ngēthi tlu=ka
 3N.II see.PRES=3M.SG.III
 ‘And those kids saw him.’

The distribution of plural number marking morphology is summarised in Table 8.10.

Table 8.10: Plural number marking for Mali genders and noun classes

Plural marking in the gender system	Genders	Noun Classes	Plural marking in the noun class system
<i>ta</i> for humans	Masculine	Masculine	no plural marking for non-humans or for female humans
<i>ngēt</i> for non-humans	Feminine	Feminine	
<i>ngēt</i> for all nouns	Neuter	Shape- and size-based classes	plural marking for all classes
		Count neutral nouns	no plural marking

8.6 Markedness patterns in the noun class system

As Table 8.10 shows, non-human nouns from the masculine noun class and all nouns in the feminine noun class are formally unmarked in the plural, as are all count neutral nouns. In this section we consider examples of functional markedness in the noun class system. Functionally unmarked forms include those that: are used frequently, can be used as a super-category, may be required in certain grammatical environments (for example, gender resolution), or are realised in neutralised contexts (Greenberg 1966:25-30). Patterns of functional markedness associated with non-human nouns are considered in §8.6.1, while human nouns are discussed in §8.6.2.

8.6.1 Functional markedness and non-human nouns

For non-human nouns, patterns of functional markedness, such as noun class resolution or the use of supercategories for non-human nouns are often resolved by using the count neutral noun class and the neuter pronouns. Even conflict between human and non-human referents can be resolved by assigning the group to the count neutral noun class. Consider example (8.16), in which the neuter pronoun is used to refer to a man and his dogs. The dogs, in the count neutral noun class, rather than the man, in the masculine noun class, determine the form of the pronoun *ngē*. (As §8.5 showed, count neutral nouns are assigned to the neuter noun class. Had the human noun been used in resolving the gender assignment, the human plural pronoun *ta* would have been used instead.)

- (8.16) ... *sa chē tnēs nani chama vaim*
 sa kē tnēs nani kama a=paim
 NEF 3M.SG.II call.PRES for ART₁ SPEC=dogs
- diva chēnangēt ngē monel sēva ur.*

 PURP₃ 3M.SG.II=ASSOC=3N.III 3N.I hunt.PAST at=LOC bush
- ‘... then he called for his dogs in order (for them all) to hunt in the bush.’

For all referent types (human and non-human combined), the count neutral noun class is functionally unmarked. However, individual non-human nouns are also assigned to other genders, and these may restrict the derivational possibilities available through assignment to other noun classes. The discussion in §8.4 showed that there is a tendency to assign nouns to either masculine, feminine or count neutral noun classes (and more occasionally one of the size- or shape-based noun classes). Table 8.9 showed that nouns from the count neutral noun class can take almost all of the other noun class markers with reasonably predictable semantic outcomes. In §8.4.1, we saw that there is a strong pattern of assigning nouns in the masculine noun class to the feminine noun class to refer to larger than usual examples of the entity concerned. We noted that there are restrictions on allowing nouns from the feminine noun class to be assigned to the masculine noun class to refer to smaller instances on analogy with this basic pattern. The gender of the usual class determines what additional noun classes are available for use in derivational strategies. These patterns are summarised in Table 8.11.

Table 8.11: Derivational uses of noun classes for nouns with non-human referents

Usual class:	Other possible noun classes:		
Count neutral	→ masculine 'average size'	→ feminine 'large size'	→ various size and shape classes
Masculine		→ feminine 'large size'	→ various size and shape classes
Feminine			→ various size and shape classes
Size and shape classes			→ other size and shape classes

8.6.2 Functional markedness and human nouns

For virtually all human nouns, masculine is the functionally unmarked noun class. This is shown by the use of the masculine dual noun class marker *-iom* in resolving the gender of mixed pairs of nouns referring to people: *thēvus-ka* 'father-in-law, uncle-in-law, son-in-law, nephew-in-law', *thēvus-ki* 'mother-in-law, aunty-in-law, daughter-in-law, niece-in-law', *thēvus-iom* 'a pair of in-laws', or *sunasvem-ka* 'male teacher', *sunasvem-ki* 'female teacher' and *sunasvem-iom* 'two teachers'. Neutralised contexts, such as cases in which the sex of the referent is unknown, are also assigned to the masculine noun class. Example (8.17) shows that even in contexts in which a female protagonist is likely (food collection is mostly women's work in Mali society), a masculine pronoun is used.

- (8.17) *Nēma cha mēr kama dīchi avaik?*
 nēma ka mēr kama di-ki avaik
 who 3M.SG.I pull.up.PAST ART₁ taro-F.SG F.SG.DIST.DEM
 'Who pulled out that taro?'

There are a few cases in which the feminine is the usual class. All of these examples are cases in which the referents are understood to be prototypically female. They include relationship terms *nan-ki* 'mum', nouns referring to people with particular characteristics *nimuli-ki* 'slut' or professions *amumēthathop-ki* 'nurse'. Although masculine human nouns are frequently reassigned to the feminine class, this pattern is much more restricted in the case of basically feminine nouns. Of the feminine nouns in the corpus used for this study, only the noun *amumēthathop-ki* 'nurse' could be reassigned to the masculine noun class: *amumēthathop-ka* 'medical attendant, orderly'.

Figure 8.3 shows the usual classes and their derivational possibilities for nouns with human referents. Although size- and shape-based noun classes may be used on stems with human referents, we saw in §8.3.3 (examples (8.1) and (8.2)) that this is a relatively marginal pattern.

Figure 8.3: Derivational uses of noun classes for nouns with human referents

Usual class:	Other possible noun classes:	
Masculine	→ feminine	→ various size and shape classes
Feminine	→ masculine	→ various size and shape classes

NOTE: → = always possible, → = highly restricted possibilities.

9 *Number*

This chapter discusses the use of number in Mali. In §9.1 number systems that are encoded within Mali grammar are discussed, while in §9.2 the form and distribution of numerals is described. Ordinals are discussed in §9.3 and fractions in §9.4.

9.1 Mali number systems

A three term number system (singular, dual, plural) applies to the following areas of the grammar: noun classes (§8), adjectives (in agreement with nouns (§5.1.2)) and all pronouns and demonstratives (including indefinite terms (§5.2.3–§5.2.6)). Within the noun class marking system, bare stems may encode non-human plurals and count neutral nouns—including ‘mass’ nouns (see Tables 8.2 and 8.3 in §8.2). In §19.2 on the discourse uses of noun classes, the bare stem is shown to be functionally unmarked. Incidental referents are bare stems; they are not marked as singular or dual unless they become more central to the action. There are no verbs in Mali that supplete for number.

Within the gender system, the distinction between second and third person is neutralised for dual referents (see Tables 4.1, 4.2 and 4.3 in §4.1.3, and Table 5.9 in §5.2.4.B).

As we noted in §3.4.2.D(ii), a few nouns have a stem alternation distinguishing singular from plural which involves simplifying VV sequences (/ia/ → /i/ and /ua/ → /u/). This pattern is only associated with single syllable noun stems with fricative onsets containing sequences beginning with a high vowel. Examples were provided at §3.4.2.D(ii).

9.2 Numerals

Numerals between one and three function like adjectives, taking noun class marking in agreement with the head noun. For this reason, the numbers ‘one’, ‘two’, and ‘three’ are analysed as adjectives. In example (9.1) the noun *vlembap* {*vlem-vap* SPEC=pig-RCD.PL} ‘piglets’ takes the reduced plural noun class marker. The number ‘three’ agrees with the noun class and number *aduguavap* ‘three.RCD.PL’.

- (9.1) *Kama vlembap* *ma aduguavap* *ngē* *ve* *mēt*
 kama *a=plem-vap* *ma* *aduguavap* *ngē* *pe* *mēt*
 ART₁ SPEC=pig-RCD.PL REL₂ three.RCD.PL 3N.I there within

kama ichēthachi.
kama ichēt-ki
 ART₁ fence-F.SG
 ‘There are three piglets in the fence.’

Table 9.1 shows the numerals ‘one’, ‘two’, and ‘three’ in Mali. The forms are at least partially segmentable in all cases. Note that the masculine forms are identical to the count neutral forms and that the specifier article *a=* is part of the citation form.

Table 9.1: Mali numerals one, two, and three

Class	One	Two	Three
Masculine (m)	<i>asēgēk</i>	<i>aungiom</i>	<i>aduvaung</i>
Feminine (f)	<i>asēnggik</i>	<i>aunbem</i>	<i>aduvanguik</i>
Diminutive (dim)	<i>asēgēni</i>	<i>aundom</i>	<i>aduguathong</i>
Reduced (rcd)	<i>asēgēgl</i>	<i>aunglem</i>	<i>adugaugleng</i>
Flat (flat)	<i>asēgēvēs</i>	<i>aunmēlē</i>	<i>aduguamēlēk</i>
Excised (exc)	<i>asēgēm</i>	<i>aunbam</i>	<i>aduguavap</i>
Long (long)	<i>asēgēvēt</i>	<i>aundisem</i>	<i>aduguaseng</i>
Extended (ext)	<i>asēngit</i>	<i>aundenēm</i>	<i>adeguanēk</i>
Count Neutral (cn)	<i>asēgēk</i>	<i>aungiom</i>	<i>aduvaung</i>

Lexical numbers greater than ‘three’ are expressed by complex NPs. Like other nominal expressions they function as modifiers in an NP (introduced by a relator, see §16.5.1.C). Lack of agreement between the number and the head is shown in (9.2) where the head noun (non-human plural) takes neutral noun class marking but the lexicalised possessed noun phrase used to refer to the concept of ‘ten’ *angēthikisem* {3N.POSS=hand-LONG.DL} is marked for the ‘long’ noun class.

- (9.2) *Ka var.sēchama thinēm ma angēthikisem.*
ka var.sē=kama thinēm ma angē=tik-isem
 3M.SG.I catch.NPRES=ART₁ fish REL₂ 3N.POSS=hand-LONG.DL
 ‘He caught ten fish.’

Mali has essentially a vigesimal system. The numbers ‘one’, ‘two’, ‘three’, ‘four’ and ‘five’ are expressed using single words; as are the numbers ‘ten’, ‘twenty’, ‘one hundred’ and ‘one thousand’. ‘Four’ has the form *alevavet*. Although this is not segmentable it appears to belong to the ‘long’ noun class. The number ‘five’ is formed on the stem for hand {*angē=tik-vet* 3N.POSS=hand-LONG.SG} and the number ‘ten’ is formed on the dual for hands {*angē=tik-isem* 3N.POSS=hand-LONG.DL}. The number ‘fifteen’ is formed by adding two hands and one leg {*angē=tik-isem da a=lēchar-vet* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG}, while ‘twenty’ is the phrase ‘a whole person’ {*a=ru-ka ma tem-ka* SPEC=person-M.SG REL₂ whole-M.SG}. The term for one hundred is *ailotka*, this stem also means ‘image’ or ‘picture’ as the feminine noun *ailotki*. The term for ‘one thousand’ is based on the noun stem for ‘head’ *athēvuska* {*athēv=pēs-ka* 3H.PL.POSS=head-M.SG}, although the noun ‘head’ *vuski* {*a=pēs-ki* SPEC=head-F.SG} is actually feminine.

Other numbers are built up from these basic elements. Thus, ‘six’ is {*angē=tik-vet da asēgēk* five and one}, ‘eleven’ is {*angē=tik-isem da asēgēk* 3N.POSS=hand-LONG.DL and

one.M}, ‘sixteen’ is {*angē=tik-isem da a=lēchar-vet da sēgēk* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and one.M}, and so on. Other ‘tens’ are built up from ‘twenty’: ‘thirty’ {*a=ru-cha ma tem-ga da angē=tik-isem* SPEC=person-M.SG REL₂ whole-M.SG and 3N.POSS=hand-LONG.DL}, using the relator *ma* where multiples of twenty are required: ‘forty’ {*a=ru-iom ma tem-iom* SPEC=person-M.DL REL₂ whole-M.DL} ‘two whole people’.

A representative sequence of numbers is given below. When counting, the masculine/count neutral pattern is used for the first three numbers. For numbers higher than ‘three’, each term has an inherent noun class. For example, the numbers ‘five’ and ‘ten’ belong to the ‘long’ noun class and are fully segmentable. The ‘long’ noun class seems to have been chosen because, counting on the fingers, all of the fingers on one hand are extended after counting to ‘five’ and on both hands after counting to ‘ten’. Note that the masculine dual noun class marker is optional in more complex numbers (see for example the number ‘sixty’ below).

- 1 *asēgēk* {*a=sēgēk* SPEC=one.M}
- 2 *aungiom* {*a=ungiom* SPEC=two.M}
- 3 *adēvaung* {*a=dēvaung* SPEC=three.M}
- 4 *alevavet* {*a=levavet* SPEC=four.LONG.SG}
- 5 *angēthikvet* {*angē=tik-vet* 3POSS=hand-LONG.SG}
- 6 *angēthikvet da sēgēk* {*angē=tik-vet da sēgēk* 3N.POSS=hand-LONG.SG and one.M}
- 7 *angēthikvet da ungiom* {*angē=tik-vet da aungiom* 3N.POSS=hand-LONG.SG and two.M}
- 8 *angēthikvet da dēvaung* {*angē=tik-vet da dēvaung* 3N.POSS=hand-LONG.SG and three.M}
- 9 *angēthikvet da alevavet* {*angē=tik-vet da alevavet* 3N.POSS=hand-LONG.SG and four.M}
- 10 *angēthikisem* {*angē=tik-isem* 3N.POSS=hand-LONG.DL}
- 11 *angēthikisem da sēgēk* {*angē=tik-isem da sēgēk* 3N.POSS=hand-LONG.DL and one.M}
- 12 *angēthikisem da ungiom* {*angē=tik-isem da aungiom* 3N.POSS=hand-LONG.DL and two.M}
- 13 *angēthikisem da dēvaung* {*angē=tik-isem da dēvaung* 3N.POSS=hand-LONG.DL and three.M}
- 14 *angēthikisem da alevavet* {*angē=tik-isem da a=levavet* 3N.POSS=hand-LONG.DL and SPEC=four.LONG.SG}
- 15 *angēthikisem da alēcharavet* {*angē=tik-isem da a=lēchar-vet* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG}
- 16 *angēthikisem da alēcharavet da sēgēk* {*angē=tik-isem da a=lēchar-vet da sēgēk* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and one.M}
- 17 *angēthikisem da alēcharavet da ungiom* {*angē=tik-isem da a=lēchar-vet da aungiom* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and two.M}
- 18 *angēthikisem da alēcharavet da dēvaung* {*angē=tik-isem da a=lēchar-vet da dēvaung* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and three.M}
- 19 *angēthikisem da alēcharavet da levavet* {*angē=tik-isem da a=lēchar-vet da levavet* 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and four}
- 20 *arucha ma temga* {*a=ru-ka ma tem-ka* SPEC=person-M.SG REL₂ whole-M.SG}
- 21 *arucha ma temga da sēgēk* {*a=ru-ka ma tem-ka da sēgēk* SPEC=person-M.SG REL₂ whole-M.SG and one.M}
- 22 *arucha ma temga da ungiom* {*a=ru-ka ma tem-ka da aungiom* SPEC=person-M.SG REL₂ whole-M.SG and two.M}

- 23 *arucha ma temga da dēvaung* {*a=ru-ka ma tem-ka da dēvaung* SPEC=person-M.SG REL₂ whole-M.SG and three.M}
- 24 *arucha ma temga da levavet* {*a=ru-ka ma tem-ka da levavet* SPEC=person-M.SG REL₂ whole-M.SG and four.LONG.SG}
- 30 *arucha ma temga da angēthikisem* {*a=ru-ka ma tem-ka da angē=tik-isem* SPEC=person-M.SG REL₂ whole-M.SG and 3N.POSS=hand-LONG.DL}
- 40 *aruom ma temiom* {*a=ru-om ma tem-om* SPEC=person-M.DL REL₂ whole-M.DL}
- 50 *aruom ma temiom da angēthikisem* {*a=ru-om ma tem-om da angēt=tik-isem* SPEC=person-M.DL and 3N.POSS=hand-LONG.DL}
- 56 *aru atemiom da ngēthichisem da alēcharavet da sēgēk*
{*a=ru a=tem-om da angēt=tik-isem da a=lēchar-vet da sēgēk* SPEC=person SPEC=whole-M.DL and 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG one.M.SG}
- 60 *aru atem ama dēvaung* {*a=ru atem ama dēvaung* SPEC=person SPEC=whole REL₃ three.M}
- 70 *aru atem ama dēvaung da angēthikisem* {*a=ru a=tem ama dēvaung da angē=tik-isem* SPEC=person SPEC=whole-M.DL REL₃ three.M and 3N.POSS=hand-LONG.DL}
- 77 *aru atem ama dēvaung da ngēthikisem da alēcharavet da ungiom* {*a=ru a=tem ama dēvaung da angē=tik-isem da alēcharavet da ungiom* SPEC=person SPEC=whole REL₃ three.M and 3N.POSS=hand-LONG.DL and SPEC=leg-LONG.SG and two.M}
- 80 *aru atem ama levavet* {*a=ru atem ama levavet* SPEC=person SPEC=whole REL₃ four}
- 90 *aru atem ama levavet da angēthikisem* {*a=ru atem ama levavet da angēthikisem* SPEC=person SPEC=whole REL₃ four and 3N.POSS=hand-LONG.DL}
- 100 *ailotka* {*a=ilot-ka* SPEC=hundred-M.SG}
- 200 *ailothiom* {*a=ilot-om* SPEC=hundred-M.DL}
- 300 *ailot ama dēvaung* {*a=ilot-ka* SPEC=hundred-M.SG REL₃ three.M}
- 1000 *athēvuska* {*athēv=pēs-ka* 3H.PL.POSS=head-M.SG}
- 1354 *athēvuska ailot ama dēvaung aru atemiom da ngē thichisem da levavet* {*athēv=pēs-ka a=ilot-ka ama dēvaung a=ru-om ma tem-om da angēt tik-isem da alevavet* 3H.PL.POSS=head-M.SG SPEC=hundred-M.SG REL₂ three.M SPEC=person SPEC=whole-M.DL and CN.POSS hand-LONG.DL and four.LONG.SG}

Numbers up to ‘ten’ are used in everyday discourse but higher numbers are often replaced by Tok Pisin terms.

9.3 Ordinals

Ordinal numbers refer to individual entities from a series whereas cardinal numbers refer to a whole set. This is reflected in the way number is marked within the NP. Whereas cardinal numerals show number agreement between the head noun, the numeral and the pronoun in the PP (see (9.3) in which the head noun, the number, and the pronoun in the PP are dual), ordinal numbers do not. In an ordinal number construction, referring to the first, second or third place, the head noun and the pronoun in the PP are singular, while the number word indexes the number of the place in the series. In example (9.4) the numeral word is dual.

- (9.3) *Kia sek athama mundikithom ama undom nēngithom.*
 kia sek athama mundik-ithom ama undom na=ngithom
 3F.SG.I husk.NI 3F.SG.POSS pitpit-DIM.DL REL₃ two.M PREP=DIM.DL
 ‘She husked her two small pitpits of which there were two small ones.’

This pattern is also used to express ordinal numbers. In example (9.4) the masculine number two *aungithom* is used to refer to a singular referent.

- (9.4) *Kia tet ivi kia met sa sēvēt kama*
 kia tet i-vui kia met sa sa=pēt kama
 3F.SG.I go.PRES DER₁-upwards 3F.SG.I go.PAST to to=at ART₁
sandricha chēk ma aungiom nacha ...
 sandri-ka achēk ma a=ungiom na=ka
 sentry-M.SG M.SG.CONTR.DEM REL₂ SPEC=two.M PREP=3M.SG.III
 ‘She went along to the second sentry ...’

9.4 Fractions

The noun *chutigligēl* ‘half’ appears to have two excised singular noun class markers (-igl) as suffixes {*chut-igl-igl* ?-EXC.SG-EXC.SG}. (In fact there is an intermediate step in the etymology, the prepositional verb ‘chop’ *kutigēl tēm*.) An example is given in (9.5).

- (9.5) *Ka von ngo chama dichi atha chutigligēl.*
 ka von ngo kama di-ki at=a chutigl-igl
 3M.SG.I give.NPRES 1SG.III ART₁ taro-F.SG 3F.SG.POSS=SPEC half-EXC.SG
 ‘He gave me half of a taro.’

The verb *tigil mēt* ‘split, halve’ also appears to be related to the excised noun class marker -igl. An example is given in (9.6).

- (9.6) *Kule sa chia tigil.mēt kama churemga.*
 kule sa kia tigil.mēt kama a=kurem-ka
 later NEF 3F.SG.I split.PRES ART₁ SPEC=betelnut-M.SG
 ‘Then she split a betelnut [in half].’

In appropriate contexts (such as where something is to be shared with one other person) more general terms such as ‘a piece’ can also be understood to refer to half of something. An example is provided in (9.7).

- (9.7) *Ngī von.dēm chama laverki at*
 ngī von.dēm kama laver-ki at
 2SG.II give.away.NPRES ART₁ sugarcane-F.SG 3F.SG.POSS
chēvēlki bachi.
 a=kēvēl-ki pa=ki
 SPEC=piece-F.SG LOC=3F.SG.III
 ‘You give half of the sugarcane to her.’

10

The noun phrase

This section describes the structure of the Mali noun phrase. Following an outline of the general structure of the noun phrase (§10.1), we consider possible heads of the NP, including common nouns, proper nouns, pronouns and demonstratives (§10.2), and then turn to consider the other possible constituents of the NP, including NP articles (§10.3), specifier articles (§10.4) and demonstratives (§10.5). Examples of prepositional phrases (§7) and directionals (§12), are discussed in §10.6. These are usually associated with the predicate but there are some examples of these forms appearing within the NP. A small number of discourse markers and adverbs can occur at the periphery of the NP. These are discussed in §10.7. NP coordination is discussed in §10.8.

Also relevant to NP structure, posthead modifiers within the NP that contain nominals, adjectives and clauses must be introduced by relators (*ia*, *ma*, or *ama*). Posthead modifiers are discussed in §16.4 to §16.6 after the function of each relator has been described in §16.3. Possession is marked by a possessive pronoun or possessive NP before the head; they are functionally equivalent to NP articles but are treated separately in §11.

10.1 Outline of the general structure of the noun phrase

Mali noun phrases are typically headed by nouns. The overall structure of the noun phrase is set out in Figure 10.1, and may be characterised as follows. The noun may be preceded by the adverbial modifier *kusek* ‘only’, an NP article, or a possessive pronoun or phrase. The noun may also be preceded by a specifier article. Demonstratives, the adverbial modifiers *mo* ‘all’ and *marik* ‘really, truly’, location terms (i.e., prepositional phrases and directionals) as well as other modifiers of the NP (clauses, nouns and adjectives introduced by a relator) follow the noun. The modifiers and location terms always follow demonstratives. The corpus does not contain any examples containing both modifier clauses and prepositional phrases. Within the corpus, adverbial modifiers generally occur in NPs without other additional modifiers.

Figure 10.1: Structure of a Mali noun phrase

1. Discourse marker *kusek*
2. NP article or Possessor
3. Specifier article (clitic to head noun)
4. Head noun
5. Demonstratives
6. Relator + modifier(s) or location term or adverbial modifiers *mo* or *marik*

Multiple modifiers within a single NP are relatively rare in Mali discourse. Example (10.1) shows that a contrastive demonstrative precedes a prepositional phrase while (10.2) shows that a demonstrative precedes a modifier clause, in this case introduced by the relator *ma*.¹

- (10.1) *Din det da sndamēr na*
 da-in tet da sdamēr na
 and-3DL.I go.PRES and directly PREP
 [*mbangēm kēchēm peva nggarēs*].
 a=bang-ēm kēchēm pe=pa a=garēs
 SPEC=village-RCD.SG RCD.SG.CONTR.DEM there=LOC SPEC=coast
 ‘They went straight across to the next village on the coast.’
- (10.2) [*Aremini avēnivik ma chēkrak ka*]
 a=rem-ini avēnivik ma kēkrak ka
 SPEC=cause-DIM.SG DIM.SG.DIST.DEM REL₂ EMPH.M.SG.CONTR.DEM 3M.SG.I
 [*vang savama ruacha va sravētki*].
 vang sa=avama rua-ka av=a sravēt-ki
 run.NPRES with=3M.SG.POSS friend-M.SG 3M.SG.POSS=SPEC shirt-F.SG
 ‘The cause of that small thing (their animosity) was that he ran away with his friend’s shirt.’

Although multiple modifier clauses were not common in the corpus, example (10.3), with three adjectives, was given through elicitation. In this example a dimension term *amor* ‘big’ is followed by colour *airiar* ‘green’ and then the value term *amēr* ‘good’. Further examples would be required in order to determine whether or not there is really a preferred order for modifiers.

- (10.3) *Vandi nguas [kama mulichi]*
 vandi ngu-thēs kama muli-ki
 DESID 1SG.II-eat.FUT ART₁ orange-F.SG
 [*ama morki ama airiarki ama mērki*].
 ama amor-ki ama airiar-ki ama amēr-ki
 REL₃ big-F.SG REL₃ green-F.SG REL₃ good-F.SG
 ‘I want to eat the big, green, sweet [good] orange.’

¹ In this chapter square brackets are used in the Mali line of the examples to indicate the relevant NP and underlining is used to indicate the relevant word. Where the relevant NP contains only a single word, it is underlined and no brackets are used.

10.2 Possible heads of the NP

There are three possible types of heads for an NP in Mali: common nouns (§10.2.1), proper nouns and kinship terms (§10.2.2), and pronouns and demonstratives (§10.2.3).

10.2.1 Common nouns

Common nouns cover the semantic classes of concrete nouns and abstract nouns, including a few colour terms (A) and numbers over three (B). Abstract nouns include terms such as: *aingēpki* ‘death’, *alengeiki* ‘truth’, *tlavuchi* ‘kindness’, and *athondem* ‘law’. Common nouns may be distinguished from proper nouns by their use of the articles *kama* and *kē* (see §10.3 on the function of these articles) and by their use of noun class markers (differences between proper nouns and common nouns in the use of noun class markers are discussed in §8.5.1 and §19.2.1). NPs containing the unmarked NP article *kama* are exemplified with *lamēs* ‘coconut (milk)’ and the borrowing *sospen-ki* ‘saucepan-F.SG’ in (10.4).

- (10.4) *Ki tepmaun [kama lamēs] sēmēt [kama sospengi].*
 ki tepmaun kama lamēs sa=mēt kama sospen-ki
 3F.SG.II squeeze.PRES ART₁ coconut to=within ART₁ saucepan-F.SG
 ‘She squeezed the coconut (milk) into the saucepan.’

Common nouns may be subdivided into nine morphological classes based on noun class marking (§8). This system incorporates a contrast between count and non-count nouns. This contrast is shown in the following two examples, containing the noun stem *chuan* ‘rice’. In example (10.5), the stem is not marked with a noun class marker and has a non-count reading. In example (10.6), however, the noun class marker *-ēm*, which marks entities ‘reduced’ in at least one dimension, is used to refer to a one kilogram packet of rice, such as is typically bought at the trade store in the village. Note the vowel reduction in the stem when the noun class marker is added: *chuan* becomes *chun*.²

- (10.5) [*Kama chuan*] *ma chia vēs ngēt da aichēru.*
 kama chuan ma kia vēs ngēt da a=ichēru
 ART₁ rice REL₂ 3F.SG.I cook.NPRES 3N.III and SPEC=raw
 ‘The rice that she cooked is raw.’
- (10.6) *In vondēm.mēt [aina chunēm].*
 in vondēm.mēt ain=a chaun-ēm
 3DL.I buy.NPRES 3DL.POSS=SPEC rice-RCD.SG
 ‘They bought their kilogram packet of rice.’

A. Colour terms

Most colour terms are adjectives but two terms have inherent noun class values and must be considered nouns. They belong to the masculine noun class: *chēthiacha* ‘blue-M.SG’ and *alolka* ‘red-M.SG’ (see §16.5.1 on the behaviour of adjectives and nouns in modifier function). The singular ‘flat’ noun class suffix *-ves* may be applied to colour terms to attenuate the intensity of the colour. This applies to all colours, regardless of their word class membership (see also §8.4.3.C). For example, the masculine colour *alolka* ‘red’ becomes *alolves* ‘reddish’ and the adjective *airiar* ‘green’ becomes *airiarves* ‘greenish’.

² This is a regular alternation affecting a few nouns with VV sequences in the stem. See §3.4.2.D and §9.1.

B. Numerals over ‘three’

Most numerals have inherent noun classes and so must be considered to be nouns (see also §9.2 on the morphological structure of the counting system). The numerals ‘one’, ‘two’ and ‘three’ agree with the noun class of the entities being counted and are treated as adjectives in this description. In neutral contexts, such as counting, the masculine noun class is functionally unmarked although the numerals ‘four’ and ‘five’ take the ‘long’ noun class marker *-vet*: *alevavet* ‘four.LONG.SG’, and *angēthikpet* ‘five’ {*angē-tik-pet* 3N.POSS-hand-LONG.SG}. The numeral ‘ten’ also belongs in the long noun class: *angēthikisem* ‘ten’ {*angē-tik-isem* 3N.POSS-hand-LONG.DL}.

Unlike other common nouns, numerals over ‘three’ do not take the articles *kama* or *kē*. Like adjectives (and the numbers ‘one’, ‘two’ and ‘three’), these numerals tend to occur as modifiers in an NP. Example (10.7) shows the numerals *alevavet* ‘four’ modifying the head noun *vlam* ‘pigs’. There is a relator but no article before the numerals.

- (10.7) *Ta vėlėng [kama vlam ama levavet].*
 ta vėlėng kama a=plam ama a=levavet
 3H.PL.I kill.NPRES ART₁ SPEC=pigs REL₃ SPEC=four.LONG.SG
 ‘They killed four pigs.’

10.2.2 Proper nouns and kinship terms

Proper nouns and kinship terms are used to uniquely identify individuals within discourse. Proper nouns can be distinguished from common nouns because proper nouns do not take specifier articles or noun class marking. The article *ma* is used in NPs referring to uniquely identifiable entities (see also §10.3.2). This article usually occurs with proper nouns that are used referentially. When kinship terms are used to refer to uniquely identifiable kin, they may also take the article *ma*. Both a proper noun and the kinship term *guauk* ‘my grandmother’ are shown in (10.8), an introduction to a story. The article *ma* occurs before each noun:

- (10.8) *Nguave ngu thondēm sēvēt [ma quauk]*
 ngu=pe ngu thondēm sa=pēt ma gu=uauk
 1SG.I=there 1SG.II recount.NPRES to=at ART₂ 1SG.POSS=grandmother

[ma Veronika.Tēchērnām] mir mēt kama gamar.
 ma Veronika.Tēchērnām mir mēt kama gamar
 ART₂ PN long.ago within ART₁ war
 ‘I am recounting about my grandmother, Veronica Tēchērnām, long ago in the war.’

In narratives, common nouns may be used as proper nouns (§19.2.2). In example (10.9) the article *ma* indicates that the common noun *karuvaik* ‘earlybird, bird species’ is being used to refer to a uniquely identifiable entity, that is, as a proper noun. The treatment of common nouns as proper nouns within narratives shows some interesting discourse effects, which are discussed in §19.2.1.

- (10.9) *Sa chule sa [ma charuvaik]*
 sa kule sa ma a=karuvaik
 NEF later NEF ART₂ SPEC=earlybird

ka sekmes namēk nēk kulēp.
 ka sekmes na=mēk na=pēt kulēp
 3M.SG.I get.up.NI from=down from=at pool
 ‘And then the earlybird he got out of the pool.’

When used as address terms, proper nouns and kinship terms do not take articles or other modifiers. A bare common noun stem may also be used as an address term. In example (10.10) the stem for ‘chicken(s)’ *duraik* is used by one character to address another, a rooster, in a story:

- (10.10) *Auk, duraik nge dinai ngia thet*
 auk duraik nge da=kinai ngia thet
 well chicken 2SG.III and=in.contrast 2SG.I go.FUT
- save sdēngētham dak ngo nasot.*
 sa=pe sdē=angēt=am dak ngo nasot
 to=there at=3N.POSS=front but 1SG.III behind
 ‘Well, Rooster, you must go to the front and I will sit in the back.’

Most people in Mali society are known by a first name of European origin and a surname that is Mali. Mali names continue to be used as first names although, at least in communities that are associated with the Catholic church, European names from the Catholic tradition (such as Baltasar or Immaculate) are more common. Traditionally, names were phrases such as *Lēmuthēmga* {*lēmu.tēm=ka* look.after=3M.SG.III} ‘look after him’ or *Nguingimga* {*ngu=ingim=ka* 1SG.II=look.NPRES=3M.SG.III} ‘I found him’. These names are now used as surnames within families. Frequently, only an abbreviated form of the name is used. One of the men who recorded a story for us was generally known by the surname *Dēnka* although the full version of his name was *Nguathamēnpadēn* {*ngua-thamon-padēn* 1SG.I-speak-??} ‘I’ll speak ...’. The abbreviated form is made up of the final syllable of the full name and the masculine noun class suffix.

Nicknames based on Mali expressions are also common. We were told that one woman in Marungga had the name ‘snotty’. She had been given this name as a child because of her constantly runny nose and it had stuck into adulthood. Naming practices within Mali culture would be an interesting area to explore in more detail, both in terms of the forms that are used and the way in which names are chosen or assigned. Kinship terms can be used as address terms to non-kin. For example, an older man may be addressed as *gu nanēk* {*gu nanēk* 1SG.POSS father} ‘father’ by someone who he meets for the first time in town.

10.2.3 Pronouns and demonstratives

As described in §5.2.3–§5.2.5, there are four series of pronouns that may head an NP: anaphoric pronouns, contrastive pronouns, interrogative pronouns, and indefinite pronouns. Contrastive and indefinite demonstratives may also occur in this function to a limited extent (§5.2.6).

Unlike the concordial pronouns, which operate within the gender system, anaphoric pronouns and demonstratives reflect the noun class of the entity they refer to. NPs headed by pronouns or contrastive or indefinite demonstratives do not usually allow additional modifiers (but see (10.23) for an exception). Contrastive and indefinite demonstratives may occur as modifiers within an NP, but indefinite pronouns and interrogative pronouns may not. The anaphoric pronoun *ngavet* ‘LONG.SG’ is used in place of an NP in (10.11).

- (10.11) *Ngia kama mēngvet dē ngi thon*
 ngia=that kama mēng-vet da ngi thon
 2SG.I=get.FUT ART₁ wood-LONG.SG and 2SG.II put.in.NPRES
ngavet sēmēt kama mudēm.
 ngavet sa=mēt kama mudēm
 LONG.SG to=within ART₁ fire
 ‘You get the long stick and put it into the fire.’

Although modification within an NP headed by a pronoun is generally not possible, some pronouns may occur as possessed NPs. Example (10.12) shows the masculine singular pronoun *ka* possessed by a first person singular pronoun. The possessed noun phrase has a non-specific reading.

- (10.12) [*Gua ka*], *sa ngia ndēn.*
 gu=a ka sa ngia dēn
 1SG.POSS=SPEC 3M.SG.III NEF 2SG.I arrive.PRES
 ‘My one, you have come.’

The contrastive and indefinite demonstratives may also be possessed. Example (10.13) shows the reduced plural emphatic contrastive demonstrative modifying the noun *vlēmvp* ‘piglets’ and the non-emphatic version of the same demonstrative as the head of a possessed NP.

- (10.13) [*Kama vlēmvp chēkēvp*]
 kama a=plēm-vap chēkēvp
 ART₁ SPEC=pig-RCD.PL EMPH.RCD.PL.CONTR.DEM
dēma Andrēu avēchēvp.
 da=ma Andrēu av=achēvp
 and=ART₂ PN 3M.SG.POSS=CONTR.RCD.PL.DEM
 ‘Those piglets, and Andrew they’re his ones.’

Example (10.14) shows a possessed indefinite demonstrative, the reduced dual form *guavam*.

- (10.14) *Kē kurēs ia vadi [avē guavam]*
 kē kuares ia vadi avē guavam
 3M.SG.II say.PRES REL₁ DESID 3M.SG.POSS RCD.DL.INDEF.DEM
nēvēt kama vaimbap avēvp.
 na=pēt kama a=paim-vap avēvp
 from=at ART₁ SPEC=dog-RCD.PL RCD.PL.DIST.DEM
 ‘He says he wants two of the puppies.’

10.3 NP articles

Mali has a set of articles that occur before the NP head. The term ‘NP article’ is defined here as articles that may be found in ‘all types of nominal expressions, including nominal expressions functioning as modifiers within complex nominal expressions (as in the end of the movie)’ (Himmelmann 2001:835). Mali NP articles occur in phrase initial position and occur in embedded NPs as shown in (10.15). They do not occur in modifier sequences introduced by one of the relators (see for example the noun *vingbingda* in (10.18)).

- (10.15) [*atha* *musneng* [*sēchama* *nēngaik*³ [*sēmēni* *chama* *isk*]]]
 at=a musneng sa=kama nēng-ki sa=mēni kama is-ka
 3F.SG.POSS=SPEC idea to=ART₁ tree-F.SG to=on ART₁ path-M.SG
 ‘her thoughts of a tree across the path’

These articles have the discourse function of providing additional information about the identifiability of the head noun. They share their discourse functions with possessive phrases (§11) and are in complementary distribution with them. An NP article is obligatory unless the NP is in topic position at the start of the clause or refers to a location introduced by the preposition *pa*. An example of a common noun in topic position, lacking an NP article is shown in (10.16), and a similar example with a proper noun is shown in (10.17).

- (10.16) [*Vaimga* *ithak*] *ava* *sdēm*
 a=paim-ka ithak av=a sdēm
 SPEC=dog-M.SG M.SG.PROX.DEM 3M.SG.POSS=SPEC ears

dē *ngē* *maling*.
da *ngē* *maling*
 and 3N.I flip.over.NI
 ‘This dog, his ears they flip over.’
- (10.17) *Karla* *cha* *chut* *kama* *nēkēthopki* *dē* *chia*
 Karla ka chut kama nēkēthop-ki da kia
 PN 3M.SG.I spear.NPRES ART₁ eel-F.SG and 3F.SG.I

wunak *kama* *chepki*.
wunak *kama* *chep-ki*
 twist.PAST ART₁ spear-F.SG
 ‘Charles speared the eel and it twisted the spear.’

Additionally, NP articles are not required when a noun is incorporated into the NP as a modifier. In (10.18), the noun *vingbingda* ‘Baining people’ occurs as a modifier to the head *ut* ‘1PL.III’ and therefore no NP article is present in the clause. The form *ama* before the noun *Baininggēna* is a relator that introduces modifiers within the NP (§16.3–§16.6).⁴

- (10.18) *Kusek* [*ut* *ama* *vingbingda* *marik*.]
 kusek ut ama vingbing-ta marik
 only 1PL.III REL₃ Baining-H.PL truly
 ‘Only us, the true Bainings.’

The NP articles to be discussed here are the unmarked NP article *kama* (§10.3.1), the NP article *ma* that marks inherently uniquely identifiable referents (§10.3.2), the NP article *kē* that marks referents whose unique identity is established by the discourse (§10.3.3), and the indefinite NP articles *anga*, *angama*, and *agia* (§10.3.4).

³ This example is from a speaker of the Abilta dialect.

⁴ The similarity between the NP articles and the relators *ma* and *ama* bears further investigation. It seems reasonable to suspect that these forms are related particularly as their distribution between NPs and subordinate clauses matches the distribution of complement articles in mainland Papuan languages (Reesink 1994). In the analysis presented here, the forms are treated as homophonous pending further investigation of the Baining languages in their historical context. Interestingly, the unmarked NP article has the form *ama* rather than *kama* in Kaket (Parker and Parker 1977), further indication that the two forms are historically related in the Baining languages.

All the NP articles described below have a final vowel [a]. It is often difficult to be sure whether or not the specifier article [a], which may follow an NP article, is present as it can be deleted through elision (§3.4.2.D). As a result, it can be difficult to assert with any confidence that the specifier article is definitely absent from the NP. Fortunately, it is possible to be confident about two places in which the specifier article does appear: with *kama* and with *kē*.

10.3.1 The unmarked NP article *kama*

The unmarked NP article *kama* is ubiquitous in Mali discourse. The main function of *kama* is to mark the left-hand boundary of an NP. It occurs when the NP articles for uniquely identifiable referents or a possessive construction are not appropriate. Although English translations give the impression that it is a definite article, it may be used in specific-indefinite contexts such as (10.17). An example of the article *kama* in associative-anaphoric use is given in (10.19). This example is the opening to a story. As the buffaloes are working, the people mentioned in the second clause are implicitly established in the first clause.

- (10.19) *Kama bafaloiom da ini tēk peia Yara ...*
 kama bafalo-iom da ini tēk pe=ia Yara
 ART₁ buffalo-M.DL and 3DL.II work.PRES there=REL₁ PN
Ngaiom in dat.nēthēm [kama rura] ...
 ngaiom in tat.nēthēm kama ru-ta
 M.DL 3DL.I help.PRES ART₁ person-H.PL
 ‘The two buffaloes worked at Yara ... They both helped the people ...’

A specifier article and a common noun article may occur together in a single clause as shown in (10.20) from a written text by Mr Julius Tayul. An additional example is found with *kama arutha* in (10.21).

- (10.20) [*Kama avungi*] chia muit vētha chuan.
 kama a=vun-ki kia muit pēt=a chuan
 ART₁ SPEC=turtle-F.SG 3F.SG.I across.TERM at=SPEC sand
 ‘The turtle came ashore on the sand.’

10.3.2 NP article *ma*

The NP article *ma* is associated with inherently uniquely identifiable referents within the discourse. As a result, it appears consistently with personal names used for reference. Example (10.21) shows the proper noun article *ma* with the personal names *Merngo* and *Lunangingis*.

- (10.21) *Veia tha mēn veia Kubaia sa tha*
 pe=ia ta muēn pe=ia Kubaia sa ta
 there=REL₁ 3H.PL.I arrive.PAST there=REL₁ PN NEF 3H.PL.I
musasothana, kine [ma Mērngo] chēnētha,
 musasot=na kinai ma Mērngo kē=nē=ta
 change.PAST=RECIP in.contrast ART₂ PN 3M.SG.II=ASSOC=3H.PL.III

dak malvēt [ma Lunangingis].
dak malvēt ma Lunangingis
 but rest.NI ART₂ PN
 ‘When they arrived at Kubaia, they changed; Merngo and some others
 had a turn and Lunangingis rested.’

Example (10.22) shows the common noun *vaimga* ‘dog’, functioning as a proper noun introduced by the proper noun article *ma*. The sentence is from a popular Baining story about a wallaby and a dog (see also §19.2.2 on personification in narrative).

- (10.22) *Auk, kule sa cha nēs nani [ma vaimga] ia,*
auk kule sa ka nēs nani ma a=paim-ka ia
 well later NEF 3M.SG.I call.NPRES for ART₂ SPEC=dog-M.SG REL₁
“Ngi bang.”
ngi bang
 2SG.II run.PRES
 ‘Well, he called to Dog, “You come.”’

This NP article has the same form as one of the relators, *ma*.

10.3.3 NP article *kē*

The NP article *kē* is associated with uniquely identifiable referents established within the discourse. More specifically, it is used to reintroduce established topical referents or to introduce referents the speaker is asserting that the hearer should already be able to place (see also §18.3.3 on its contrastive function). When followed by the specifier article, the resulting form is *ka* {*kē*=*a* ART₃=SPEC}.

Example (10.23) comes from a text describing the traditional settlement in Mali society of conflict over marriages that have not been properly arranged. The text presents ‘the man who grabs a woman for his wife without her uncles’ permission’ as the main protagonist, backgrounding the woman. After describing what happens between the man and the woman’s uncles we return to the woman with the sentence in (10.23). Here the article *kē* signals that the woman is an established referent in the discourse, telling the listener that it is the same woman who was mentioned before.

- (10.23) *Kule dē [chē lēvopki],*
kule da kē lēvop-ki
 later and ART₃ woman-F.SG
dē thi chut sēng atha snaingithom ...
da ti chut sēng at=a snaing-ithom
 and 3H.PL.II spear.NPRES at.base 3F.SG.POSS=SPEC thigh-DIM.DL
 ‘Then the woman, they spear her thighs ...’

The NP article *kē* is also used to refer to entities that the listener can surmise must be present in the context. The clause in (10.24) comes from a story about events that happened during the Japanese occupation of the Gazelle Peninsula during the Second World War. The narrator is describing an execution. The knife referred to in (10.24) has not been introduced before but the discourse context allows the speaker to assume that the listener will know that a knife is necessarily involved in the events being described.

- (10.24) *ka mēt [ka sen'gi]*
ka mat kē=a sen-ki
 3M.SG.I get.PAST ART₃=SPEC knife-F.SG
 'he got the knife'

This NP article also occurs as the form *ka* which is probably the effect of the presence of the specifier article on the head of the NP. This analysis is reflected in the glossing of (10.24).

10.3.4 Indefinite NP articles

A second set of NP articles index indefinite referents: (A) the non-specific NP article *anga*, (B) the non-specific indefinite NP article *angama*, and (C) the specific indefinite NP article *agia*. The first two may be used in conjunction with possessive pronouns (§11.3.2 and §11.3.3). All of these NP articles may appear in interrogative clauses (§15.3.2.B).

A. Non-specific NP article *anga*

The non-specific NP article *anga* occurs in contexts where there is no specific referent for the speaker to refer to, or where the specific identity of the referent is in doubt. Example (10.25) shows the non-specific NP article *anga* introducing a hypothetical hut that is mentioned in an instructional text. The example is non-specific because the speaker is not referring to a specific hut; there is no specific hut to have in mind.

- (10.25) *Kē thēk klan daithik ia,*
kē thēk klan ta=ithik ia
 3M.SG.II do.NPRES like EMPH=ADV.PROX.DEM REL₁

kē thēk [anga bangini].
kē thēk anga bang-ini
 3M.SG.II build.NPRES NSPEC house-DIM.SG
 'This is what he'll do, he will build a small hut.'

A secondary use of the non-specific NP article *anga* is to encode a partitive reading. In (10.26) the second person singular possessive pronoun forms a clitic group with the non-specific NP article *gianga* 'some of your' {*gi=anga* 2SG.POSS=NSPEC} and is used with this partitive meaning.

- (10.26) *Asip sa ngua thēn sē [gianga viam].*
asip sa ngua thēn sa gi=anga a=piam
 later.on NEF 1SG.I arrive.FUT with 2SG.POSS=NSPEC SPEC=Tahitian.chestnuts
 'Later I'll come back with some of your Tahitian chestnuts.'

It is because of the partitive reading that the specifier article *a=* is allowed on the head noun *piam* 'galip nuts'.

B. Non-specific indefinite NP article *angama*

The non-specific article *angama* is used in NPs referring to entities when the specific identity of the referent is not significant. Example (10.27) shows the indefinite NP article *angama* in an instructional text. The context for this text is a description of the practice of sister exchange in traditional marriages among the Baining. In the ideal scenario, a woman who marries into one family is reciprocated for by sending another woman, a sister-in-law,

back. Whereas in (10.26) no particular hut was intended and only one hut is in question, in (10.27) there are many men who could potentially be identified as the referent of the clause and the speaker indicates by using *angama* that he has no particular man in mind. It does not matter who the woman marries, only that the man she marries is from the same family as her sister-in-law.

- (10.27) *Dasik thi von [angama chumeska nainavi ...]*
 da=asik ti von angama chumes-ka nainavi
 and=IRR 3H.PL.II give.NPRES INDEF man-M.SG from.there
 ‘Then they’ll give her to a man from there ...’

There is an interaction between the type of indefinite NP article and the demonstratives available in the NP. Non-specific NPs introduced by *anga* take regular demonstratives as shown in example (10.28) with the diminutive singular distal demonstrative *avēni* in an NP introduced by *anga*. NPs introduced by the non-specific indefinite demonstrative take the indefinite demonstratives, as shown in (10.29) with the reduced singular indefinite demonstrative *guachēm* in an NP introduced by *angama*.

- (10.28) *Ambēs [anga musnēngini avēni], angēmbēs anga gamar.*
 angēmbēs anga musnēng-ini avēni, angēmbēs anga gamar
 NEG NSPEC idea-DIM.SG DIM.SG.DIST.DEM NEG NSPEC fight
 ‘There wasn’t anything like that, not any fighting.’

- (10.29) ... *da sik kule da ngēn met sēvēt*
 da asik kule da ngēn met sa=pēt
 and IRR later and 2PL.I go.PAST to=at
 [*angama mbangēm guachēm*]?
 angama bang-ēm guachēm
 INDEF village-RCD.SG RCD.SG.INDEF.DEM
 ‘... and then you all went to which village?’

C. Specific indefinite NP article *agia*

The specific indefinite NP article *agia* or *anggia* is used in contexts in which the identity of the referent is not known but where a specific referent is intended. This is shown in (10.30).

- (10.30) [*Anggia mundika ivak*]?
 agia mundik-ka ia=avak
 which year-M.SG REL₁=M.SG.DIST.DEM
 ‘Which year was that?’

10.4 Specifier article

The NP articles encode a range of meanings associated with the discourse status of the NP. One important function of the specifier article *a=* is to mark referentiality more generally. As discussed in §5.1, the specifier article occurs with both common nouns and adjectives. For example, the past tense of the verb ‘clean’ is *chumer*, while the adjective ‘clean’ and the noun ‘clean thing’ share the form *achumer* (§6.1). The specifier article is also used in conjunction with possessive pronouns (§11.3.1).

As a clitic, the specifier article is sometimes only identifiable through the phonological processes it triggers. Evidence that the specifier article is present is based on the morphophonological rules described in §3.4.1.A. For nouns beginning in <p/t/k>, a specifier article is signalled by the change to <v/th/ch>—there is usually no overt specifier article (*paimga* and *vaimga* ‘dog’).⁵ For nouns beginning in <b/d/g> the specifier article forms a syllable with the nasal portion of the prenasalised stop (*bangga* versus *ambangga*), see also §3.1.1. Occasionally the article itself is deleted due to elision with a preceding vowel (*mbangga*) (§3.3). For nouns beginning in <a>, it is impossible to tell whether the specifier article is present. It is elided following the rule in §3.4.2.D (see *angon* ‘flying foxes’ in (10.32)).⁶ For all other nouns a specifier article is signalled overtly (*vrin’gi* and *avrin’gi* ‘bamboo drum’).

Many nouns incorporate the specifier article in their citation form, for example, *alat* ‘garden’. When a possessive pronoun precedes the specifier article the article is encliticised to the possessive pronoun. The phonological processes just mentioned still apply to the noun stem.

Specifier (or in Himmelmann’s terminology, specific) articles indicate that the speaker has a specific referent in mind but do not require that the hearer is able to identify the referent (Himmelmann 2001:834). Specifier articles in Mali occur in at least the following three contexts: larger situation use (§10.4.1), associative-anaphoric use (§10.4.2), and specific-indefinite use (§10.4.3). Examples of the Mali specifier article *a* in each of these functions are provided below. Examples in which the article *a* is absent (including non-specific readings) are provided in §10.4.4. Interactions between the specifier article and the NP articles are discussed in §10.4.5.

10.4.1 Larger situation use

The larger situation use refers to the use of an article at the first mention of a referent that can be identified with reference to the general knowledge of members of the speech community. In (10.31), the nouns *aurki* ‘the bush’ and *arutha* ‘people’ both take the specifier article because they are readily identified by the people listening to the story.

- (10.31) ... *ta tet ta ngim nani*
 ta tet ta ngim nani
 3H.PL.I go.PRES 3H.PL.I search.PRES for
 [*chama arutha*] *vēk* [*kama aurki*].
 kama a=ru-ta *pēt kama a=ur-ki*
 ART₁ SPEC=person-H.PL at ART₁ SPEC=bush-F.SG
 ‘... they go out and search for people in the bush.’

10.4.2 Associative-anaphoric use

The associative-anaphoric use refers to the use of an article where the hearer can be expected to identify the referent based on the preceding discourse. In the following example, *aisēm* ‘birds’ is introduced with the specifier article. This sentence is from a story

⁵ Note that borrowings are an exception to this rule.

⁶ In fast speech it can be difficult to tell whether these phonological processes are triggered by the specifier article or by preceding vowels overtly present in the clause (see §3.4).

about a traditional Mali hunting technique that uses a large net to catch birds or flying foxes as they fly over a saddle between two hills. Up until (10.32), the story has focused on constructing the net. Then the speaker says:

- (10.32) *Auk*, [*aisēm* *da.ithangēt*⁷ *ta.ithik*], *ura angon*,
 auk *a=isēm* *ta=ithang* *ta=ithik* *ura angon*
 well *SPEC=bird* *EMPH=CN.PROX.DEM* *EMPH=here* or *flying.foxes*
- dasa* *ngiathangēt* *pe* *ma* *nēp* *bangang*.
 da=sa *ngia=that=ngēt* *pe* *ma* *na* *bangang*
 and=NEF *2SG.I=get.FUT=3N.III* *there* *REL₂* *PREP* *night*
 ‘Well, these birds here, or flying foxes, you’ll catch them at night.’

The birds and flying foxes are obvious referents to expect in a story about this particular hunting technique. They are able to take the specifier article through their association with the net. It is not possible to tell whether or not the specifier article was used on the noun *angon* ‘flying foxes’ as it begins with an <a>. If the specifier article was present (and given that the two NPs are coordinated we would expect that it was), it has been elided following the rule set out in §3.4.2.D.

10.4.3 Specific-indefinite use

The specific-indefinite use, which is common in Austronesian languages (Himmelfmann 2001:834), occurs when the speaker introduces a new participant into the discourse. In (10.33) the specifier article refers to a pair of witches at their first mention in a story. The witches, an exciting addition to the story, are not predictable from the preceding context (as in §10.4.2 above) nor from general knowledge (as in §10.4.1).

- (10.33) *Sa* [*chama auravem*] *in* *det* *sa* *in* *lu* *cha*.
 sa *kama* *a=ur-vem* *in* *tet* *sa* *in* *lu* *ka*
 NEF *ART₁* *SPEC=witch-F.DL* *3DL.I* *go.PRES* *NEF* *3DL.I* *see.NPRES* *3M.SG.III*
 ‘Then the two witches came and saw him.’

10.4.4 Contexts in which the specifier article is not required

Nouns without the specifier article may be non-specific. For example, the noun *vaimga* ‘dog’ has the specifier article as part of the citation form. The underlying stem is *paim*. Dogs are higher animates and are valued for hunting in Mali culture. The form *paim* is relatively rare in Mali discourse. The only occasion when it was used spontaneously in my hearing during fieldwork occurred when I jumped because of a strange snuffling sound behind my back. Without even raising her head to see what made the noise, my friend said *paim* in an off-hand way; letting me know it was a dog making the noise. Because she hadn’t seen the dogs and their identity was irrelevant to her, the specifier article was not used in this context.⁸

The lack of the article does not necessarily signal a non-specific reading. Example (10.34) shows that the specifier article tends not to be marked on backgrounded entities.

⁷ This example is from a speaker of the Abilta dialect. The form *ithangēt* appears to be a dialect variant of the count neutral proximate demonstrative *ithang*.

⁸ In fact it was her dog that I had heard but she did not want to acknowledge that her dog was there. She later chased it away.

The following example comes from a story about a woman escaping from the Japanese during the Second World War. The speaker refers to the location where the Japanese set up their prison camp by its Mali name and then incidentally reminds the listeners that the place was a prison. We know that the article *a=* is omitted from the NP *kama kumēngas* because the form of *kumēngas* would have changed to *chumēngas* if it were present.

- (10.34) ... *dē tha met sētha marik save ia Masarau,*
 da ta met sa=ta marik sa=pe ia Masarau
 and 3H.PL.I go.PAST with=3H.PL.III truly to=there REL₁ PN
 sēmēt [kama kumēngas ...]
 sa=mēt kama kumēngas
 to=within ART₁ camp
 ‘... and really they went with them to Masarau, into the camp ...’

The article may also be lacking on well-established discourse entities. Proper names and kinship terms understood to have unique referents such as *mamēk* ‘father’, *nanēk* ‘mother’, *uauk* ‘grandmother’, and *iaik* ‘grandfather’ do not take a specifier article. Other kinship terms such as *matki* ‘older sister’ and *liki* ‘younger sister’, take specifier articles within a possessed NP.

In example (10.35), in a story about a pig that gets tricked into jumping down into a pit trap, the pig, which is a well established participant in the story, is not marked by the specifier article. The article *kē*, which is associated with referents that are established by the discourse, indicates a similar discourse status to a proper name.

- (10.35) *Kule dē [chē plēmga] cha thon.nanas samēk.*
 kule da kē plēm-ka ka thon.nanas sa=mēk
 later and 3M.SG.II pig-M.SG 3M.SG.I jump.NPRES to=down
 ‘Then the pig jumped down.’

Quite a common pattern in the stories I collected was for the specifier article to be marked on the first mention of an entity and then be missing on the second mention only a clause or two later. This is the case for example (10.36).

- (10.36) *Ta muēn.bēthangam*
 ta muēn.vēt=ngam
 3H.PL.I find.PAST=3RCD.SG
 dē tha chēthep [kama arutha].
 da ta chēthep kama a=ru-ta
 and 3H.PL.I catch.NPRES ART₁ SPEC=person-H.PL
 Ta muēn.bēthangam dē tha chēthep [kama rutha
 ta muēn.vēt=ngam da ta chēthep kama ru-ta
 3H.PL.I find.PAST=RCD.SG and 3H.PL.I catch.NPRES ART₁ person-H.PL
 ama adēvaung nacha].
 ama adēvaung na=ka
 REL₃ three.M PREP=3M.SG.III
 ‘They found it (the village) and they captured the people. They found it and they captured three people.’

10.5 Demonstratives

Complete paradigms for Mali demonstratives are given in §5.2.6. Demonstratives appear in post-head position and may be followed by a modifier, a spatial term, or a prepositional phrase (see (10.1) and (10.2)). An example of the feminine dual proximate demonstrative *ithēvam* ‘these two feminine’ is given in (10.37).

- (10.37) *Ngī chiar.vēt [kama lamēsveem ithēvem].*
 ngī chiar.vēt kama lamēs-vem ithēvem
 2SG.II scrape.NPRES ART₁ coconut-F.DL F.DL.PROX.DEM
 ‘You scrape these two coconuts.’

Very occasionally the demonstrative occurs without an overt head noun in the NP. This is the case in (10.38) where the demonstrative *avang* follows immediately after the verb.

- (10.38) *Ia, ngē vus ma Pater ava bang,*
 ia ngē vus ma Pater av=a bang
 yes 3N.I burn.NPRES ART₂ Father 3M.SG.POSS=SPEC house

 ngē vus avang bono.
 ngē vus avang vono
 3N.I burn.NPRES CN.DIST.DEM up.slope
 ‘Yes, it burnt Father’s house, it burnt those ones on top.’

The inability of the distal or the proximate demonstratives to take modifiers and their inability to be possessed is additional evidence that these demonstratives do not head NPs. As was shown in §10.2.3, contrastive and indefinite demonstratives may head an NP, occurring in possessive constructions in place of a lexical noun. Example (10.39) shows the indefinite RCD.PL demonstrative *guavap* ‘some of those reduced ones’ possessed by a first person singular pronoun.

- (10.39) *Vadi [gu guavap] nēvēt*
 vandi gu guavap na=pēt
 DESID 1SG.POSS RCD.PL.INDEF.DEM from=at

 vaimvap avēvap.
 a=paim-vap avēvap
 SPEC=dog-RCD.PL RCD.PL.DIST.DEM
 ‘I want some of those puppies.’

When dependent within an NP, contrastive demonstratives are frequently used in enumeration, for example *kunēngga achēk* ‘one day’ is used with the function of ‘once upon a time’ in Mali. The contrastive demonstratives are also used to encode sequential or distributive relations. A sequential reading is shown in (10.40).

- (10.40) *Auk, sa ini chuar nana ia in*
 auk sa ini chuar na=na ia in
 well NEF 2.DL.II say.NPRES PREP=RECIP REL₁ 2DL.I

 det ini pul mēthain kanucha
 tet ini pul mēt=ain kanu-ka
 go.PRES 2DL.II paddle.NI within=2DL.POSS canoe-M.SG

save sēva [mbangēm kēchēm].
 sa=pe sa=pa a=bang-ēm kēchēm
 to=there to=LOC SPEC=village-RCD.SG RCD.SG.CONTR.DEM
 ‘Well, they said to each other that they’d go paddle their canoe to
 the next village.’

A distributive reading is shown in (10.41). Note that the form of the contrastive demonstrative is masculine singular, although the head noun is plural. Masculine is the usual noun class for birds: *isēmga* {*isēm-ka* ‘bird-M.SG’}.

- (10.41) *Isēm ngēmo, achēk, achēk sei chok kēlan piavik.*
isēm ngē=mo achēk achēk sai kok klan vi=avik
 bird 3N.I=all M.SG.CONTR.DEM REDUP again just like EMPH=ADV.DIST.DEM
 ‘All of the birds, each of them did the same thing.’

10.6 Prepositional phrases and directionals

Prepositional phrases (§7) and directionals (§12) usually function as modifiers to the predicate in Mali discourse. However, there are also a few examples of prepositional phrases modifying NPs. Prepositional phrases and directionals that modify an NP occur after the NP head and after any demonstrative that is present. An example is provided in (10.42).

- (10.42) *Din det da sndamēr na [mbangēm*
da=in tet da sdamēr na a=bang-ēm
and=3DL.I go.PRES and directly PREP SPEC=village-RCD.SG
kēchēm peva nggarēs].
kēchēm pe=pa a=garēs
 RCD.SG.CONTR.DEM there=LOC SPEC=coast
 ‘They went straight across to the next village on the coast.’

Example (10.43) shows the spatial term *mēk* ‘down (on the ground)’ as a dependent of the noun *vrsetki* ‘strange mark’.

- (10.43) *Sa ngua lu sok ngua lu*
sa ngua lu sok ngua lu
 NEF 1SG.I see.NPRES really 1SG.I see.NPRES
[kama vrsetki mēk].
kama a=prset-ki mēk
 ART₁ SPEC=strange.mark-F.SG down
 ‘Then I saw, really I saw a strange mark on the ground.’

10.7 Peripheral modifiers

It is possible to modify the NP with a discourse marker or an adverb that appears at the periphery. The discourse marker *kusek* ‘only’ (§10.7.1) appears at the beginning of the NP, while the adverbs *mo* ‘all’ (§10.7.2) and *marik* ‘truly’ (§10.7.3) occur to the right of the NP head.

10.7.1 *Kusek* ‘only’

The adverb *kusek* can be used within the clause as a discourse marker. It is generally translated by speakers as ‘just’ or ‘only’ and is used to indicate that the proposition encoded by the clause is the only possibility available. An example of this use is provided in (10.44).

- (10.44) *Kusek thi bondēm viavik ...*
 kusek ti bondēm vi=avik
 only 3H.PL.II pay.PRES EMPH=ADV.DIST.DEM
 ‘They just pay that way ...’

Although the adverb *kusek* may modify the predicate, its more usual function in discourse is to modify an NP. When in this function, it indicates exclusivity. In (10.45), the context is that the protagonist has invited her friend to run away along with her but the friend is frightened and refuses.

- (10.45) *Dak [kusek ma guauk] kia met nē bangang.*
 dak kusek ma gu=uauk kia met na bangang
 but only ART₂ 1SG.POSS=grandmother 3F.SG.I go.PAST PREP night
 ‘So only my grandmother went at night.’

The position of the adverb, to the left of the NP article, indicates that it is at the left-most periphery of the NP.

Although pronouns do not normally require articles, when a pronoun follows the adverbial modifier in this construction the article *ma* is used by most speakers. Examples are provided in (10.46) and (10.47) with an anaphoric pronoun and a contrastive pronoun respectively.

- (10.46) *[Kusek ma ngavem ama unbem] in vuinem.*
 kusek ma ngavem ama unbem in vuinem
 only ART₂ F.DL REL₃ two.F 3DL.I return.PAST
 ‘Only the two [women], the two of them returned.’

- (10.47) *Ia, chok [kusek ma chēvingo] ngua met*
 ia kok kusek ma kēvi=ngo ngua met
 yes just only ART₂ CONTR=1SG.III 1SG.I go.PAST
 ta.ithik, ngua vang.
 ta=ithik ngua vang
 EMPH=ADV.PROX.DEM 1SG.I run.NPRES
 ‘Yes, it was only me who came here, I ran away.’

An alternate analysis would be that the relator *ma* is used here and that the adverb *kusek* is functioning as the head of the NP (§16.5.1). Evidence that the article rather than the relator is present comes from examples containing the unmarked NP article *kama*. See (10.48).

- (10.48) *Daka mir da ngēmbēs, [chusek kama gamar] klan.*
 dak mir da angēmbēs kusek kama gamar klan
 but long.ago and NEG only ART₁ fight only
 ‘But long ago there was none of that, there was just fighting.’

10.7.2 *Mo* ‘all’

The adverb *mo* occurs to the right of the predicate and indicates the completeness of the state of affairs described there. Example (10.49) contains an active intransitive verb, allowing a ready analysis of the adverb as applying to the predicate as a whole.

- (10.49) *Da ka ndang da kosa vuthem ga mēk*
 da ka dang da kosa vuthem ka mēk
 and 3M.SG.I burn.PRES and just fall.NPRES 3M.SG.III down

 dē cha ndang mo.
 da ka dang mo
 and 3M.SG.I burn.PRES all
 ‘And it burnt and it just fell down and it all burnt.’

Where an NP occurs in clause initial position, followed by *mo*, we can be confident that the adverb is modifying the NP. Example (10.50) shows a clear example of *mo* modifying an NP; in this case headed by the noun *kunēngga* ‘day’.

- (10.50) *Dak [kunēngga mo] da ngabēs ka vlēng*
 dak kunēng-ka mo da angēmbēs ka vlēng
 but day-M.SG all and NEG 3M.SG.I kill.NPRE

 avanga vlēmga.
 av=anga a=plēm-ka
 3M.SG.POSS=NSPEC SPEC=pig-M.SG
 ‘But he did not kill a pig all day.’

In other cases, particularly where the adverb *mo* appears in clause final position after an O NP, it can be difficult to determine the scope of the adverb. Example (10.51) shows such an example. Alternate translations of the adverb are included in square brackets.

- (10.51) *Sok ka tēs [kama ivētki mo] ...*
 sok ka tēs kama ivēt-ki mo
 really 3M.SG.I eat.PRES ART1 earth-F.SG all
 ‘It really consumed [all] the earth [all up] ...’

A common strategy for modifying a noun is to use a construction containing a pronoun and the adverb *mo* in apposition to the NP. This seems to reflect a close but not exclusive connection in the grammar between the adverb *mo* and the concordial pronouns. Although it is not difficult to find examples such as (10.50) with the adverb immediately following the NP, the strategy illustrated in (10.52) seems to be preferred.

- (10.52) *Da arutha [tha mo] dē tha vang.*
 da a=ru-ta ta mo da ta vang
 and SPEC=person-H.PL 3H.PL.III all and 3H.PL.I run.NPRES
 ‘And all the [other] people ran away.’

10.7.3 *Marik* ‘really, truly’

When it has scope over a clause, the adverb *marik* is found in initial position and expresses certainty. It gives a strong positive epistemic evaluation of the proposition, as shown in the second clause in (10.53).

- (10.53) *Chule ma ngi sunas masa,*
kule ma ngi sunas masa
 NEG.IMP ART2 2SG.II learn.NI too.much
asik marik dēdēn ngia vuski.
asik marik dēdēn ngia a=pēs-ki
 IRR truly be.confused.NI 2SG.POSS SPEC=head-F.SG
 ‘Don’t study too hard or you might confuse your head.’

When it occurs in clause-final position, as in (10.54), this adverb only has scope over the predicate, where it also gives an epistemic evaluation, this time in terms of truthfulness.

- (10.54) *Ngia thamon sēthēm ngo marik ...*
ngia thamon sa=tēm ngo marik
 2SG.I speak.FUT to=GOAL 1SG.III truly
 ‘You tell me truly ...’

In (10.55), the NP contains the adverb *marik* ‘really, truly’ as a modifier to the head noun. In this function, the adverb means ‘authentically, really’.

- (10.55) *Kēvichit dē gisnēng ia sok*
kēvi=ki da gisnēng ia sok
 CONTR=3F.SG.III and as.if REL₁ really
[kama aruchi marik].
kama a=ru-ki marik
 ART₁ SPEC=person-F.SG truly
 ‘That one is just like a true human being.’

10.8 NP coordination

In Mali NP coordination is generally not treated analogously to clause level coordination. The only coordinator that is used with both NPs and clauses is the disjunctive coordinator *ura* ‘or’ (§17.1.3). An example of NP disjunctive coordination using *ura* is given in (10.56):

- (10.56) *Kapa ura palang, ti tal ngēt.*
kapa ura palang ti tal ngēt
 corrugated.iron or plank 3H.PL.II carry.PRES 3N.III
 ‘Corrugated iron or planks, they carried them.’

Coordination at the level of the NP involves the use of associative pronouns. An example is shown in (10.57) with the associative pronoun *chinē* {*ki=nē* 3F.SG.III=ASSOC} ‘her and’ between the two NPs.

- (10.57) *Mir [kama duraiki] chinē [chama malachi]*
mir kama duraik-ki ki=nē kama mala-ki
 long.ago ART₁ chicken-F.SG 3F.SG.III=ASSOC ART₁ bush.hen-F.SG
da aina ruavem nana mamēr.
da ain=a rua-vem na=na mamēr
 and 3DL.POSS=SPEC friend-F.DL DETR₁=RECIP properly
 ‘Long ago the chicken and the bush hen had a good friendship.’

As noted in §5.2.4.A, the associative pronouns are based on a mixture of the class II and class III concordial pronouns and the associative particle *nē*. The associative pronouns are repeated from §5.2.4.A in Table 10.1.

Table 10.1: Associative pronouns in Mali

Person/Gender	Singular	Dual	Plural	
1	<i>ngunē=</i>	<i>unē=</i>	<i>utnē=</i>	
2	<i>nginē=</i>	<i>inē=</i>	<i>ngēnē=</i>	
			Human	Non-human
3M	<i>kanē=</i>	<i>inē=</i>	<i>tinē=</i>	<i>ngēnē=</i>
3F	<i>kinē=</i>	<i>inē=</i>	<i>tinē=</i>	<i>ngēnē=</i>
3N	<i>ngēnē=</i>			

11 *Possessive phrases*

This chapter describes the mechanisms for marking possession in Mali. As we noted in §4.1.4, there are no special verbs of ‘having’ in Mali. The possessive relationship is only expressed through possessive pronouns, whether attributive or predicative. The existential construction may be used with a possessive NP in order to make a predication about possession (see (4.22) in §4.1.5.A).

The structure of the possessed NP in Mali is described in §11.1. Within the NP possession is marked in the pre-head position in the determiner slot. However, possessive phrases and/or bare possessive pronouns co-occur only in a limited way with determiners, which then form clitic groups with the possessive pronouns. Agreement patterns associated with possessed NPs are described in §11.2. The possessive pronoun paradigms are set out in §11.3. Special possessive relations are discussed in §11.4. These relations include possessive pronouns marking the closeness of a relation and a set of bound inalienable nouns.

11.1 The possessive NP¹

In Mali all possessed NPs have a possessive pronoun preceding the possessed noun. The possessor may be represented in a number of ways. It may be represented only by a pronoun, as in (11.1) *guauk* {*gu=uauk* 1SG.POSS=grandmother} ‘my grandmother’.

- (11.1) *Amusnēng ngē muēn.bēt guauk*
 a=musnēng ngē muēn.vēt gu=uauk
 SPEC=idea 3N.I find.PAST 1SG.POSS=grandmother

 klan da.ithik ...
 klan ta=ithik
 like EMPH=ADV.PROX.DEM
 ‘An idea came to my grandmother like this ...’

The possessor may also be represented by either a proper noun (11.2) *Isidor ava lugutki* {*Isidor av=a lugut-ki* PN 3M.SG.POSS=SPEC wife-F.SG} ‘Isidor’s wife’ or a common noun (11.3) *nanēk at kēmēk* {*nanēk at kēmēk* mother 3F.SG.POSS breasts} ‘mother’s breasts’ preceding the possessive pronoun.

¹ In this chapter square brackets are used in the Mali line of the examples to indicate the relevant NP being discussed.

- (11.2) *Kama chavatka cha chavat.tēma*
 kama a=kavat-ka ka chavat.tēm=ma
 ART₁ SPEC=adulterer-M.SG 3M.SG.I commit.adultery.with.NPRES=ART₂

[*Isidor ava lugutki*].
 Isidor av=a lugut-ki
 PN 3M.SG.POSS=SPEC spouse-F.SG
 ‘The adulterer committed adultery with Isidor’s wife.’

- (11.3) *Ngua mu chama peletka vuk vēt*
 ngua mu kama pelet-ka vuk pēt
 1SG.I put.PAST ART₁ plate-M.SG up at

[*kama tevolki atha thēng*].
 kama tevol-ki at=a thēng
 ART₁ table-F.SG 3F.SG.POSS=SPEC back
 ‘I put the plate on the top of the table.’ (lit: ‘... at the table its back.’)

Inanimate common nouns occur in possessive NPs, mainly to denote parts of things (11.3) *kama tevolki atha thēng* {*kama tevol-ki at=a thēng* table-F.SG 3F.SG.POSS back} ‘the top of the table’, or in fixed expressions such as (11.4) *isēm angēt luchupki* {*isēm angēt luchup-ki* aeroplanes 3N.POSS space-3F.SG} ‘airport’.

- (11.4) *Nguaet samanēp ma Tol diva ngu lu*
 ngua=thet sa=manēp ma Tol diva ngu lu
 1SG.I=go.FUT to=down.TERM REL₂ PN PURP₃ 1SG.II see.NPRES

[*chama isēm angēt luchupki*].
 kama isēm angēt luchup-ki
 ART₁ aeroplane 3N.POSS space-F.SG
 ‘I’m going to Tol to see the airport.’

It is possible for possession to be encoded recursively within an NP. In example (11.5), one possessive NP is embedded within another. The first possessors are in the first person plural encoded by the possessive pronoun *aut*. They form a possessed NP *autha morta* ‘our ancestors’ which functions as the second possessor. They are encoded by the third person human plural possessive pronoun *athēv* for the possessed noun *lēmuaiom* ‘two allies’.

- (11.5) *A, mēndu chama chēthopiom baviom*
 a mēndu kama a=kēthop-iom paviom
 well before ART₁ SPEC=pool-M.DL M.DL.DIST.DEM

dē thi kuar ia
 da ti kuar ia
 and 3H.PL.II say.PRES REL₁

[*autha morta athēva lēmuaiom*].
 aut=a mor-ta athēv=a lēmu-iom
 1PL.POSS=SPEC ancestor-H.PL 3H.PL.POSS=SPEC ally-M.DL
 ‘Well, because the two pools, those two they say that they were our ancestors’ allies.’

11.2 Agreement in possessed NPs

Agreement marking in relation to a possessed NP is determined differently for adjective marking versus the selection of the NP article. In relation to adjective agreement, the possessed noun acts as the head, triggering noun class agreement. Example (11.6) shows the adjective *mērki* {*mēr-ki* good-F.SG} ‘good’ agreeing with the feminine singular possessed noun *sravētki* ‘shirt’.

- (11.6) *Dē cha mēt ma charuvaika*
 da ka mat ma a=karuvaik-ka
 and 3M.SG.I get.PAST ART₂ SPEC=earlybird-M.SG
 [*ava sravētki ama mērki*].
 av=a sravēt-ki ama amēr-ki
 3M.SG.POSS=SPEC shirt-F.SG REL₃ good-F.SG
 ‘And he got Earlybird’s good shirt.’

Example (11.7) shows that the anaphoric pronoun *ngini* in the S_O slot is diminutive singular in agreement with the head noun *angēthichini* ‘hand’ which appears in the extraposed O NP *kama mēngga avama angēthichini* ‘the branch of the tree’.

- (11.7) [*Kama mēngga avama angēthichini*]
 kama mēng-ka avama angē=tik-ini
 ART₁ tree-M.SG 3M.SG.POSS 3N.POSS=hand-DIM.SG
dē vėl.sēngini.
 da vėl.sē=ngini
 and break.NPRES=DIM.SG
 ‘The branch of the tree broke.’

However, the status of possessor N determines the form of the article. In example (11.8), the proper noun article *ma* occurs at the start of the NP, followed by the possessor, the noun *thalias* ‘wizard’, functioning here as a proper noun. The possessed noun, which is the head for other purposes, is the common noun *-oes* ‘children’. A common noun that was not marked for contrastiveness would take the determiner *kama* (see also §10.3 on the NP articles). I suggest that this reflects facts about linear precedence within the NP. The determiner comes at the left boundary of the clause followed by the possessor NP and therefore reflects the functional class of the possessor NP.

- (11.8) *Dē ka muēn.vēt [ma thalias avoes] puk.*
 da ka muēn.vēt ma thalias av=oes vuk
 and 3M.SG.III find.PAST ART₂ wizard 3M.SG.POSS=offspring up
 ‘And he found the wizard’s children inside.’

Overall, linear precedence appears to determine how agreement is managed in possessed NPs. The possessor N occurs to the left of the possessed noun and controls agreement at the left edge of the NP. The possessed N occurs to the right and controls any agreement that follows (that is, modifiers).

11.3 Possessive pronouns

Like the concordial pronoun system, the possessive pronouns index the number and gender of the possessor. They distinguish three genders (masculine, feminine and neuter),

and three numbers (singular, dual, and plural). Also, like the concordial pronouns, the possessive pronouns show reduced contrasts for second person dual and masculine and feminine third person dual (all values encoded by the pronoun *ain*), and for neuter nouns (all values encoded by *angēt*). In the plural there is a contrast between human and non-human nouns. Plural human possessors are encoded by the pronoun *athēv*, while non-human plural possessors are grouped with the neuter nouns, encoded by the pronoun *angēt*. The possessive pronoun paradigm is set out in Table 11.1.

Table 11.1: Mali possessive pronoun paradigm

Person	Singular	Dual	Plural	
1	<i>gu</i>	<i>aun</i>	<i>aut</i>	
2	<i>gi</i>	<i>ain</i>	<i>angen</i>	
			Human	Non-human
3M	<i>av</i>	<i>ain</i>	<i>athēv</i>	<i>angēt</i>
3F	<i>at</i>	<i>ain</i>	<i>athēv</i>	<i>angēt</i>
3N	<i>angēt</i>			

Example (11.9) shows the third person feminine singular possessive pronoun *at* in the possessive NP *at baul* ‘her sarongs’.

- (11.9) *Kia vreng [at baul] vēt kama chun’gi.*
 kia vreng at baul pēt kama chun-ki
 3F.SG.I spread.NPRES 3F.SG.POSS sarongs at ART₁ sand-F.SG
 ‘She spread her sarongs on the sand.’

There are a number of other forms that can appear in the determiner slot in a possessed NP in Mali. These forms are made up of the possessive pronoun and some other determiner modifying the possessed noun. These forms combine to create clitic groups as follows: possessive pronoun and specifier article (§11.3.1); non-specific possessive pronouns (§11.3.2); and indefinite possessive pronouns (§11.3.3). Interrogative possessive pronouns are set out in §11.3.4.

11.3.1 Possessive pronoun and specifier article

The most common clitic group is comprised of a possessive pronoun and a specifier article. The specifier article =*a* is encliticised to the possessive pronoun (see also §10.4 on specifier articles). Where the possessive pronoun ends in a voiceless stop, the phonological rule set out in §3.4.1.A applies, and a continuant replaces the voiceless stop. For example, the third person feminine singular possessive pronoun *at* becomes *atha* {*at*=*a* 3F.SG.POSS=SPEC} with the specifier article as an enclitic. The paradigm of possessive pronouns with specifier articles is shown in Table 11.2.

Table 11.2: Possessive pronouns with specifier articles

Person	Singular	Dual	Plural	
1	<i>gua</i> { <i>gu=a</i> }	<i>auna</i> { <i>aun=a</i> }	<i>autha</i> { <i>aut=a</i> }	
2	<i>gia</i> { <i>gi=a</i> }	<i>aina</i> { <i>ain=a</i> }	<i>angena</i> { <i>angen=a</i> }	
			Human	Non-human
3M	<i>ava</i> { <i>av=a</i> }	<i>aina</i> { <i>ain=a</i> }	<i>athēva</i> { <i>athēv=a</i> }	<i>angētha</i> { <i>angēt=a</i> }
3F	<i>atha</i> { <i>at=a</i> }	<i>aina</i> { <i>ain=a</i> }	<i>athēva</i> { <i>athēv=a</i> }	<i>angētha</i> { <i>angēt=a</i> }
3N	<i>angētha</i> { <i>angēt=a</i> }			

Example (11.10) shows the second and third person dual possessive pronoun forming a clitic group with the specifier article *aina* {*ain=a* 3DL.POSS=SPEC} ‘their.DL’.

- (11.10) *In vondēm.mēt [ainə chunēm].*
 in vondēm.mēt ain=a chuan-ēm
 3DL.I buy.NPRES 3DL.POSS=SPEC rice-RCD.SG
 ‘Those two bought their packet of rice.’

11.3.2 Non-specific possessive pronouns

Non-specific possessive pronouns are comprised of a possessive pronoun with the non-specific article *anga* (§10.3.4.A) as an enclitic. The non-specific possessive pronouns are set out in Table 11.3. As with the possessive pronouns and specifier articles, a final voiceless stop in a possessive pronoun triggers the phonological rule set out in §3.4.1.A and a continuant replaces the voiceless stop. Thus, the third person feminine singular possessive pronoun *at* becomes *athanga* {*at=anga* 3F.SG.POSS=NSPEC} with the non-specific article as an enclitic.

Table 11.3: Non-specific possessive pronouns

Person	Singular	Dual	Plural	
1	<i>guanga</i> { <i>gu=anga</i> }	<i>aunanga</i> { <i>aun=anga</i> }	<i>authanga</i> { <i>aut=anga</i> }	
2	<i>gianga</i> { <i>gi=anga</i> }	<i>ainanga</i> { <i>ain=anga</i> }	<i>angenanga</i> { <i>angen=anga</i> }	
			Human	Non-human
3M	<i>avanga</i> { <i>av=anga</i> }	<i>ainanga</i> { <i>ain=anga</i> }	<i>athēvanga</i> { <i>athēv=anga</i> }	<i>angēthanga</i> { <i>angēt=anga</i> }
3F	<i>athanga</i> { <i>at=anga</i> }	<i>ainanga</i> { <i>ain=anga</i> }	<i>athēvanga</i> { <i>athēv=anga</i> }	<i>angēthanga</i> { <i>angēt=anga</i> }
3N	<i>angēthanga</i> { <i>angēt=anga</i> }			

Example (11.11) shows the non-specific dual possessive pronoun in an interrogative context.

- (11.11) [*Ainanga* *thinēm*] *ngē* *ve?*
 ain=anga thinēm *ngē* *pe*
 2DL.POSS=NSPEC fish 3N.I there
 ‘Do you two have any fish?’

Example (11.12) shows the non-specific possessive pronoun in a hypothetical proposition. The NP *avanga vlēmga* ‘his.NSPEC pig’ refers to a pig that has not yet been hunted and so cannot be viewed as a real possession of the protagonist.

- (11.12) *Ka* *tu* *asnēng* *ia*
 ka tu a=snēng ia
 3M.SG.I put.PRES SPEC=idea REL₁

sik *kē* *vlēng* [*avanga* *vlēmga*].
 asik kē vlēng av=anga plēm-ka
 IRR 3M.SG.II kill.NPRES 3M.SG.POSS=NSPEC pig-M.SG
 ‘He hoped that he’d kill a pig.’

11.3.3 Indefinite possessive pronouns

Indefinite possessive pronouns are comprised of a possessive pronoun and the indefinite article *angama* (§10.3.4.C) as an enclitic. As with the possessive pronouns discussed in §11.3.1 and §11.3.2, a continuant replaces a final voiceless stop due to the initial vowel in *angama*. As a result, the third person feminine singular possessive pronoun *at* becomes *athangama* {*at=angama* 3F.SG.POSS=INDEF} with the indefinite article as an enclitic. The full paradigm is presented in Table 11.4.

Table 11.4: Indefinite possessive pronouns

Person	Singular	Dual	Plural	
1	<i>guangama</i> { <i>gu=angama</i> }	<i>aunangama</i> { <i>aun=angama</i> }	<i>authangama</i> { <i>aut=angama</i> }	
2	<i>giangama</i> { <i>gi=angama</i> }	<i>ainangama</i> { <i>ain=angama</i> }	<i>angenangama</i> { <i>angen=angama</i> }	
			Human	Non-human
3M	<i>avangama</i> { <i>av=angama</i> }	<i>ainangama</i> { <i>ain=angama</i> }	<i>athēvangama</i> { <i>athēv=angama</i> }	<i>angēthangama</i> { <i>angēt=angama</i> }
3F	<i>athangama</i> { <i>at=angama</i> }	<i>ainangama</i> { <i>ain=angama</i> }	<i>athēvangama</i> { <i>athēv=angama</i> }	<i>angēthangama</i> { <i>angēt=angama</i> }
3N	<i>angēthangama</i> { <i>angēt=angama</i> }			

The indefinite dual possessive pronoun *ainangama* {*ain=angama* ‘DL.POSS=INDEF’} ‘any of their’ is used in (11.13).

- (11.13) [*Ainangama* *thangam*] *ma* *mang* *ngēt?*
 ain=angama tangam ma mang ngēt
 3DL.POSS=INDEF banana REL₂ ripe 3N.III
 ‘Are any of their (dual) bananas ripe?’

11.3.4 Interrogative possessive pronouns

Interrogatives that question the identity of a human possessor are formed with the interrogative pronoun *nēma* ‘who’, followed by a possessive pronoun. The unmarked construction for human referents is *nēmav* {*nēma=av* who=3M.SG.POSS} ‘whose’. An example is given in (11.14).

- (11.14) [*Nēmav* *kunduchi*] *ta=ithaik?*
 nēma=av *kundu-ki* *ta=ithaik*
 who=3M.SG.POSS hand.drum-F.SG EMPH=F.SG.PROX.DEM
 ‘Whose hand drum is this?’

Example (11.15) shows the specifier article may also be present in this construction.

- (11.15) *Choiku ut drēm ia*
 koiku ut drēm ia
 NEG 1PL.I know.PRES REL₁

 [*nēmava* *mēngigl* *ta=ithēgl*].
 nēma=av=a *mēng-igl* *ta=ithēgl*
 who=3M.SG.POSS=SPEC wood-EXC.SG EMPH=EXC.SG.PROX.DEM
 ‘We don’t know whose board that is.’

This interrogative form is functionally unmarked, being used in contexts where the gender of the referent is unknown. In addition, there are more specific forms that can be used in contexts in which the gender of the possessor is known or guessed at. For example, if there could only be a female possessor the form *nēmgi at* {*nēma=ki at* who-F.SG 3F.SG.POSS} ‘whose.F.SG’ may be used. Interrogative possessive pronouns with marked gender are shown in Table 11.5. These forms are only used with human possessors. For non-human possessors the specific indefinite NP article *agia* is used instead.

Table 11.5: Interrogative possessive pronouns with marked gender in Mali

Person/Gender	Singular	Dual	Human Plural
3M	<i>nēmga va</i> { <i>nēma=ka av</i> }	<i>nēmiom ain</i> { <i>nēma=iom ain</i> }	<i>nēmda thēv</i> { <i>nēma=ta athēv</i> }
3F	<i>nēmgi at</i> { <i>nēma=ki at</i> }	<i>nēmbem ain</i> { <i>nēma=vem ain</i> }	<i>nēmda thēv</i> { <i>nēma=ta athēv</i> }

11.4 Special possessive relations

In addition to the possessive pronouns listed in §11.2, there are two additional forms used to encode relationships between the possessed and the possessor: a set of special possessive pronouns and inalienable bound nouns. Firstly, a set of special possessive pronouns that mark a close relationship between the possessor and the possessed are discussed in §11.4.1. Inalienable possession is marked on some nouns in Mali and this is associated with bound noun stems. An overview of inalienable possession is provided in §11.4.2 before describing the special possessive pronouns that are associated with inalienably possessed nouns in §11.4.3.

11.4.1 Possessive pronouns marking a close relationship

A set of possessive pronouns ending in *-ama* are used to index a close relationship between the possessor and the possessed. This set of pronouns appears to contain the determiner *ma*, which is used to refer to uniquely identifiable entities within the discourse (see §10.3.2), preceded by an epenthetic vowel to maintain preferred phonotactic structure. This set of pronouns is set out in Table 11.6. Note that the phonological changes mentioned in §11.3 also apply to the possessive pronoun stems in this paradigm.

Table 11.6: Special possessive pronouns

Person	Singular	Dual	Plural	
1	<i>guama</i> { <i>gu=ma</i> }	<i>aunama</i> { <i>aun=ma</i> }	<i>authama</i> { <i>aut=ma</i> }	
2	<i>giama</i> { <i>gi=ma</i> }	<i>ainama</i> { <i>ain=ma</i> }	<i>angenama</i> { <i>angen=ma</i> }	
			Human	Non-human
3M	<i>avama</i> { <i>av=ma</i> }	<i>ainama</i> { <i>ain=ma</i> }	<i>athēvama</i> { <i>athēv=ma</i> }	<i>angēthama</i> { <i>angēt=ma</i> }
3F	<i>athama</i> { <i>at=ma</i> }	<i>ainama</i> { <i>ain=ma</i> }	<i>athēvama</i> { <i>athēv=ma</i> }	<i>angēthama</i> { <i>angēt=ma</i> }
3N	<i>angēthama</i> { <i>angēt=ma</i> }			

The use of these possessive pronouns is determined by the context. They are used when the speaker wishes to highlight the relationship between the possessor and the possessed. Thus, special possessive pronouns are most frequently used when the possessive relation is in focus (11.16), such as situations involving stealing or hiding things.

- (11.16) *Cha ngaip [avama dul] mēk mēth[avama thalka].*
 ka ngaip avama dul mēk mēt=avama thal-ka
 3M.SG.I hide.NI 3M.SG.POSS money down within=3M.SG.POSS net.bag-M.SG
 ‘He hid his money in his net bag.’

These pronouns are also used to emphasise a person’s relationship to markers of identity such as language, ancestry, culture, or village affiliation (11.17).

- (11.17) *Auk, ithēngēt ta.ithik, ut [authama athondēm].*
 auk ithē=ngēt ta=ithik ut authama a=thondēm
 well here=3N.III EMPH=ADV.PROX.DEM 1PL.I 1PL.POSS SPEC=law
 ‘Well, these here are our laws.’ (lit: ‘Well, these ones here us our laws.’)

Finally, they are used to emphasise part-whole, body part (11.18) and some kinship relations (11.19).

- (11.18) *Mithu sa ta thal [avama slēp].*
 mithu sa ta thal avama slēp
 later.on NEF 3H.PL.I carry.NPRES 3M.SG.POSS bones
 ‘Later they moved his bones.’

- (11.19) ... *da [guama tambu] cha mēthango.*
 da guama tambu ka mat=ngo
 and 1SG.POSS in.law 3M.SG.I get.PAST=1SG.III
 ‘... and my in-law got me.’

11.4.2 Inalienably possessed nouns

Some body part nouns with extended applications encoding part-whole relationships (§20.1.2.C) and consanguineal kinship terms are inalienable, as are a few other nouns such as *angēthēpki* ‘personal name’ {*angēt*=?-*ki* 3N.POSS=?-F.SG}. Inalienable nouns are bound stems in which a possessive pronoun must be present. They cannot occur without a possessor. The set of possessive pronouns used with these nouns is presented in §11.4.3. The possessive pronoun used when no overt possessor can be identified is the third person neuter form *angēt* (Tables 11.1 and 11.7). Inalienable body parts include *angētkenggi* ‘tooth’ {*angēt*=*keng*-*ki* 3N.POSS=tooth-F.SG}, and *angēthiki* ‘hand, arm’ {*angēt*=*tik*-*ki* 3N.POSS=hand,arm-F.SG}. Kinship terms include: *angētnanēchi* ‘mother’ {*angēt*=*nanēk*-*ki* 3N.POSS=mother-F.SG}, and *angēthiaik* ‘grandfather’ {*angēt*=*iaik* 3N.POSS=grandfather}. Consider example (11.20), in which the noun *uauk* ‘grandmother’ takes the possessive pronoun *angēt*. In the story, the speaker was referring to two older women, using *uauk* as a term of respect by making reference to their kinship status, and a neuter possessive pronoun is used.

- (11.20) *Angēthuaukvem* *in* *dlu* *ka* ...
 angēt=*uauk*-*vem* *in* *tlu* *ka*
 3N.POSS=grandmother-F.DL 3DL.I see.PRES 3M.SG.III
 ‘The two grandmothers saw it ...’

One exception to this pattern is the stem for ‘fruit’ or ‘offspring’ (-*oem* ‘fruit.SG, offspring.SG’, -*oes* ‘fruit.PL, offspring.PL’). When the referent is fruit and the possessor is unknown, the third person neuter form is used *angēthoemgi* ‘fruit’ {*angēt*=*oem*-*ki* 3N.POSS=fruit-F.SG}. However if the referent is human and the possessor is unknown, the feminine possessive pronoun is instead *athoemga* ‘child’ {*at*=*oem*-*ka* 3F.SG.POSS=offspring-M.SG}.

The possessive pronouns on some inalienably possessed nouns are being reanalysed by speakers as part of the noun stem. Many speakers do not delete the third person neuter possessive pronoun even when another possessive pronoun is used. In (11.21) the masculine singular special possessive pronoun and the neuter possessive pronoun are both used with the noun *tik* ‘arm’. This pattern is observed with speakers of all ages.

- (11.21) *Kama mēngga avama angēthichini dē vēl.sē=ngini.*
 kama mēng-*ka avama angē*=*tik*-*ini* *da vēl.sē*=*ngini*
 ART₁ tree-M.SG 3M.SG.POSS 3N.POSS=hand-DIM.SG and break.NPRES=DIM.SG
 ‘The branch of the tree broke.’

Body part nouns are used extensively to encode part-whole relations for inanimate nouns. In this context they continue to behave as inalienable nouns. For example, the noun stem -*keng* ‘tooth’ is used with inanimate objects to refer to edges of things. In relation to a river, it refers to the river bank (11.22) (see also §8.4.1.B on the use of noun classes in these alternations).

- (11.22) *Tēchep.nēchama dul vēt arenggi thēcheng.*
 tēchep.nē=*kama dul pēt a*=*reng*-*ki* *tē*=*keng*
 be.full=ART₁ stone at SPEC=river-F.SG 3F.SG.POSS=edge
 ‘The river bank is full of stones.’

This use of body part terminology to form relational nouns is discussed in more detail in §20.1.2.B.

11.4.3 Special possessive pronouns for inalienable nouns

The inalienable possessive pronouns used with the nouns identified in §11.4.2 are set out in Table 11.7.² There are variant forms for the singular pronouns and the third person plural pronouns. The variant forms of the first and second person possessive pronouns are identical to the class I concordial pronouns. As shown in Table 11.7, these special possessive pronouns are used as alternatives to possessive pronouns containing a specific marker (Table 11.2). Most invariant forms are the same as in Table 11.1 but occur here in clitic groups with the inalienably possessed noun. The various singular and third person plural forms are optional. An example of the third person neuter form *angē* is given in (11.21). Only the nouns *angēvuski* ‘head’ and *angēthiki* ‘hand’ are regularly used with these special pronouns. As suggested by Table 11.7, the regular possessive pronouns are in free variation with these special forms; as such they are used in the same contexts with the same meanings.

Table 11.7: Special possessive pronouns for inalienable nouns

Person	Singular	Dual	Plural	
1	<i>ngua= / gua=</i>	<i>aun=</i>	<i>aut=</i>	
2	<i>ngia= / gia</i>	<i>ain=</i>	<i>angen=</i>	
			Human	Non-human
3M	<i>pē= / u= / avē</i>	<i>ain=</i>	<i>athē= / athēv=</i>	<i>angē= / angēt=</i>
3F	<i>tē= / at=</i>	<i>ain=</i>	<i>athē= / athēv=</i>	<i>angē= / angēt=</i>
3N	<i>angē= / angēt=</i>			

Example (11.23) shows the regular first person singular possessive pronoun with a specifier article enclitic *gu=a* encoding possession for the inalienably possessed noun *angēthikithom* ‘two small hands’.

- (11.23) *Dē cha chuar nēma chaelka ia,*
 da ka chuar na=ma a=kael-ka ia
 and 3M.SG.I say.NPRES PREP=ART₂ SPEC=wallaby-M.SG REL₁
 “*Ngī lu [gua thikithom].*”
 Ngī lu gu=a tik-ithom
 2SG.II see.NPRES 1SG.POSS=SPEC hand-DIM.DL
 ‘And he said to wallaby, “You, see my two paws.”’

An example for the first person singular is shown in (11.24), and a second person example is provided in (11.25). Both examples use the inalienably possessed noun *pēsiki* ‘head’. The alternation of the initial consonant of the noun stem (giving the form *vuski*) is triggered by the final vowel on the possessive pronoun. It is impossible to tell whether or not the specifier article is also present (see discussion in §10.4 on the elision of the specifier article in the vicinity of an identical vowel).

² It appears that the possessive pronoun system is shifting but it is not possible to state with any certainty the directionality of the changes at this stage.

- (11.24) *Ngua* *ve ngu thor* [*ngua vuski*].
 ngua pe ngu thor ngua pēs-ki
 1SG.I there 1SG.II wash.NPRES 1SG.POSS head-F.SG
 ‘I’m washing my head.’

- (11.25) *Ta mungēt mēni* [*ngia vuski*].
 ta mu=ngēt mēni ngia pēs-ki
 3H.PL.I put.PAST=3N.III on 2SG.POSS head-F.SG
 ‘They put them around your head.’

Third person singular possessors also have special forms. The feminine singular form is *te*, and is shown in (11.26) and (11.27). In (11.26) the surface form is *the* in accordance with the rule set out in §3.4.1.A. The phonological association of the possessive pronoun with the preposition in (11.26) but with the possessed noun in (11.27) reflects a larger series of phonological adjustments that facilitate faster speech as outlined in §3.4. In these two examples, the body parts in question do not take noun class marking.³

- (11.26) *Ki tal kama diskī dē[thē vus]*.
 ki tal kama dis-ki tēm=tē pēs
 3F.SG.II carry.PRES ART₁ dish-F.SG THEME=3F.SG.POSS head
 ‘She carried the dish on her head.’

- (11.27) *Inguingga cha nes tēthik*.
 inguing-ka ka nes tē-tik
 crab-M.SG 3M.SG.I bite.NPRES 3F.SG.POSS-hand
 ‘The crab bit her hand.’

The masculine singular form of the special possessive pronouns is *pe*. This is shown in (11.28). For the noun *vuski* ‘head’ the masculine possessive form is *u-*. This is shown in (11.29).

- (11.28) *Vulik.dēm kama nēkethopki nēvēt pethik*
 vulik.dēm kama nēkethop-ki na=pēt pe-tik
 slip.away.NPRES ART₁ eel-F.SG from=at 3M.SG.POSS-hand
da kosa chia vang.
 da kosa kia vang
 and just 3F.SG.I run.NPRES
 ‘The eel slipped from his hands and ran away.’

- (11.29) *Ta sēm uvuski nēchama sisiska*.
 ta sēm av=pēs-ki na=kama sisis-ka
 3H.PL.I trim.NI 3M.SG.POSS=head-F.SG PREP=ART₁ scissors-M.SG
 ‘They trimmed his head with scissors.’

³ This is due to discourse motivations. In these examples the motivation is likely to be the low salience of the body part in the context of the body part representing a location.

12

Directionals

In addition to prepositions, Mali has a large class of directionals: grammatical forms that provide information about location and direction but do not take NP complements. These forms occur independently in the clause or as complements to prepositions. Basic directionals are introduced in §12.1. Directionals make use of several derivational prefixes and may occur as complements to the prepositions *sa* ‘to’ and *na* ‘from’. Complex directionals are described in §12.2. Semantic extensions to the basic meanings of directionals are discussed in §12.3. A further set of spatial relations are expressed as relational nouns. These are discussed in §12.4. The deployment of directionals in discourse is described in §12.5. The use of adverbial demonstratives in expressing location is discussed in §12.6.

12.1 Directionals: an overview

The spatial systems of Austronesian and Papuan languages have been recognised as making use of absolute spatial reference.¹ Mali has twelve basic directionals that are used as complements to prepositions or modifiers to the clause. Their distribution is similar to the distribution of adverbial demonstratives (§5.2.6.E and §12.6). Like many other languages in the region, Mali makes use of the landscape in its system of directionals. It also makes reference to more abstract spatial relations, namely the vertical and horizontal axes.

The twelve basic directionals are displayed in the Table 12.1. The first two rows represent the abstract vertical axis and the landform axis respectively. The second two rows show terms that conflate these two axes. They contrast terms with implicit terminal end points with terms with no implicit terminal end points. The glosses listed in the table represent the core meanings of these terms. Basic examples are given after the table.

¹ See the papers in Senft (1997) and Bennardo (2002), particularly the paper in the second volume by Palmer which summarises the range of types of systems found in Oceania and also makes reference to similar systems in other parts of the world.

Table 12.1: Organisation of directionals in Mali

Meaning	Lower on the axis	Higher on the axis	Across the axis
abstract	<i>mēk</i> ‘down’	<i>vuk</i> ‘up’	<i>muk</i> ‘across’
a place related to landform	<i>mano</i> ‘down slope’	<i>vono</i> ‘up slope’	<i>mono</i> ‘across slope’
a terminal end point	<i>manēp</i> ‘down.TERM’	<i>vuit</i> ‘up.TERM’	<i>muit</i> ‘across.TERM’
a general direction	<i>mani</i> ‘downwards’	<i>vui</i> ‘upwards’	<i>mui</i> ‘sideways’

The terms referring to an abstract vertical axis are given in (12.1)–(12.3).

- (12.1) *Ka sēp mēk sēka lechi ...*
 ka sēp mēk sa=kē=a lek-ki
 3M.SG.I fall.NI down to=ART₃=SPEC hole-F.SG
 ‘He fell down into the hole ...’
- (12.2) *Thi tēn ga vuk vēt kama valēmga ...*
 ti tēn ka vuk pēt kama a=palēm-ka
 3H.PL.II hang.PRES 3M.SG.III up at ART₁ SPEC=hanger-M.SG
 ‘They hang it up on the hanger ...’
- (12.3) ... *da muk mēt ngēt da agethon.*
 da muk mēt ngēt da a=gethon
 and across within 3N.III and SPEC=yellow
 ‘... and inside them they were yellow.’

The landform terms are given in (12.4)–(12.6).

- (12.4) *Di chia muēn mano mēni cha iska.*
 da kia muēn mano mēni kē=a is-ka
 and 3F.SG.I arrive.PAST down.slope on ART₃=SPEC road-M.SG
 ‘And she reached the road down the bottom.’
- (12.5) ... *da cha mēn vono ...*
 da ka muēn vono
 and 3M.SG.I arrive.PAST up.slope
 ‘... he arrived up (there) ...’
- (12.6) *Da sik koiku ngēn na bang taithē mono marik.*
 da asik koiku ngēn na bang ta=ithē mono marik
 and IRR NEG 2PL.I IRR.FOC run.PRES EMPH=here across.slope truly
 ‘And truly you must not fly across in a straight line.’

The contrast between terms with implicit terminal end points with terms with no implicit terminal end points are shown in the second line of (12.7) and in (12.8). Example (12.8) describes someone rescuing a sea turtle that had been captured by rolling it onto its back. The second clause describes the turtle heading down towards the sea.

- (12.7) *Aiskias ngo mamor dēng via ngua mēn da.ithē*
 aiskias ngo mamor dēng pe=ia ngua muēn ta=ithē
 be.cold 1SG.III a.lot until there=REL₁ 1SG.I arrive.PAST EMPH=here

via *guabangēm* *manēp* *ma* *Marungga.*
 pe=ia gu=a=bang-ēm manēp ma Marungga
 there=REL₁ 1SG.POSS=SPEC=village-RCD.SG down.TERM REL₂ PN
 ‘I was really cold until I arrived down here at my village, Marunga.’

- (12.8) *Ka* *nēp.nēchi* *mēthik* *dē* *chi* *vaik* *mani.*
 ka nēp.nē=ki mēthik da ki vaik mano
 3M.SG.I turn=3F.SG.III aside and 3F.SG.II jump.NPRES down.slope
 ‘He turned it over and downwards it went.’

12.2 Morphologically complex directionals

Although all of the forms listed in Table 12.1 can occur as simple stems, they are more usually found with prepositions as proclitics and often take one or more derivational prefixes. For this reason, before describing the use of the directionals in any detail, it is necessary to introduce the prefixes associated with them. Over seventy complex directionals based on permutations of the derivational suffixes and the prepositions *sa* ‘to’ and *na* ‘from’ have been identified. A complete listing with examples may be found in the Mali dictionary (Stebbins forthcoming).

The three derivational prefixes are:

- *i-* ‘away’ (glossed as DER₁) (§12.2.1)
- *thē-*, *tē-*, *dē-* ‘vicinity’ (glossed as DER₂) (§12.2.2)
- *na-* ‘back to deictic centre’ (glossed as DER₃) (§12.2.3)

The prefixes can be used on location demonstratives as well as directionals. Each of the prefixes is exemplified in the following paragraphs. It is possible to ‘stack’ these prefixes. Combinatorial possibilities are described in §12.2.4 and the use of prepositions is discussed in §12.2.5. Where possible, the basic directionals *mēk* ‘down’ and *vuk* ‘up’ are used as stems to facilitate comparison of the prefixes.

12.2.1 *i-* ‘away’

The prefix *i-* is used to emphasise that the directional refers to an area away from the deictic centre. Example (12.9) shows the complex term *imēk* ‘away down there’.

- (12.9) *Tha* *ve* *imēk* *sēng* *chama* *renggi.*
 ta pe i-mēk sēng kama reng-ki
 3H.PL.I there DER₁-down at.base ART₁ river-F.SG
 ‘They are there down by the river.’

Example (12.10) shows the complex directional *ivuk* ‘away up there’.

- (12.10) *Atha* *mbang* *ivuk* *peia* *Maslabe ...*
 at=a bang i-vuk pe=ia Maslabe
 3F.SG.POSS=SPEC village DER₁-up there=REL₁ PN
 ‘Her village [was] up there at Maslabe ...’

Note that when *i-* combines with the forms *vui* and *vuit*, the resulting stems are *ivi* and *ivit* (§3.3). An example of *ivi* is provided below in (12.40).

12.2.2 *tē-* ‘vicinity’

The derivational prefix *tē-* (with allomorphs *thē-* and *dē-*) indicates that the speaker is referring to a general vicinity rather than a specific place. The form *tēvuk* ‘up there somewhere’ is shown in (12.11). The example comes from an account of the Christmas story and refers to the shepherds hearing angels singing in the sky.

- (12.11) ... *da thi nari a mambu thēvuk.*
 da ti nari a mambu tē-vuk
 and 3H.PL.II hear.NPRES SPEC song DER₂-up
 ‘... and they heard songs up there somewhere.’

12.2.3 *na-* ‘back to deictic centre’

The prefix *na-* ‘back to deictic centre’ reverses the meaning of the basic directional. This prefix indicates that the basic directional is used to refer to the point of origin rather than the end point. This prefix never occurs alone with a simple base form of the directional. Either *i-* or *tē-* or one of the prepositions mentioned above (*sa* or *na*) must occur before the derivational prefix *na-*. Example (12.12) shows the complex spatial term *nanamēk* {*na=na-mēk* from=DER₃-down} ‘back from down there’ modifying a verb of movement and indicating direction.

- (12.12) *Ka vēt uvēs samēk*
 ka vēt av=pēs sa=mēk
 3M.SG.I dive.NPRES 3M.SG.POSS=head to=down

 sa chule sa vus.sēcha nanamēk.
 sa kule sa vus.sē=ka na=na-mēk
 NEF later NEF emerge.NPRES=3M.SG.III from=DER₃-down
 ‘He dove his head down then later he came back from down there.’

Example (12.13) shows the directional *tenavuk* ‘back down a bit’. (This example describes a place on the Gazelle Peninsula with reference to a golf club that was destroyed by the 1997 volcano in Rabaul.)

- (12.13) *Dak tēnavuk, ma mir kama golf.club ura.*
 dak tē-na-vuk ma mir kama golf.club ura
 but DER₂-DER₃-up REL₂ long.ago ART₁ golf.club or
 ‘But back down a bit, where the golf club used to be, wasn’t it.’

12.2.4 Multiple derivational prefixes and directionals

There are two possibilities for ‘stacking’ derivational prefixes. In both cases the prefix *na-* occurs as the innermost prefix. Either *i-* or *thē-* may occur to the left of *na-*. Although the glosses supplied for *i-* ‘away’ and *na-* ‘back to deictic centre’ appear to be semantically incompatible, they are used together to produce the meaning ‘back this way’. Thus *inamēk* means ‘back up towards the deictic centre from a place lower down’. The prefix *thē-* ‘location, vicinity’ combines with *na-* to mean ‘not far from the deictic centre’. Thus *tēnamēk* means ‘somewhere around but a bit further up’. Example (12.14) shows the forms *inamēk* and *tēnamēk*. The deictic centre is the location in which the narrator told the story.

- (12.14) *Kia tet inamēk save ia Bulus tēnamēk.*
 kia tet i-na-mēk sa=pe ia Bulus tē-na-mēk
 3F.SG.I go.PRES DER₁-DER₃-down to=there REL₁ PN DER₂-DER₃-down
 ‘She went [back this way] up to Bulus, a little further up.’

It is not possible to combine the prefixes *i-* and *thē-*. This may partly be attributed to the fact that the form *ithē* occurs before directionals as the proximate demonstrative. In (12.15), it is clear that the demonstrative is used here as it appears in the emphatic form (see also (12.6) for an additional example).

- (12.15) *Doki cha mundēmbēs avēchēs.pik ngē met*
 da=koki kē=a mundēm-vēs avēchēs=vik ngē met
 and=also ART₃=SPEC fire-FLAT.SG FLAT.SG.CONTR.DEM=EMPH 3N.I go.PAST
diva sa dēng nēngas ta.ithēvui ...
 diva sa dēng na=ngas ta=ithē=vui
 PURP₃ NEF end PREP=FLAT.SG EMPH=here=upwards
 ‘And that particular huge fire just went so that it ended out there ...’

12.2.5 Prepositions as proclitics to directionals

As we noted in the introduction to this section, it is common to find a preposition procliticised to the spatial term. The only prepositions available in this function are *sa* ‘to’ and *na* ‘from’.² The most productive basic directionals are *muk*, *mēk*, and *vuk*.

The preposition and directional *sa=mēk* ‘to down’ is shown in (12.16).

- (12.16) *Sa ngēt ngē tar samēk.*
 sa ngēt ngē tar sa=mēk
 NEF 3N.III 3N.I fall.PRES to=down
 ‘They fall down [to the ground].’

Note that some bisyllabic directionals with initial bilabial nasals take *mo=* as an allomorph of *na=*. These forms include *momono* and *momānēp*. Example (12.17) shows the complex spatial term *momono*. This example comes from a text in which traditional marriage customs are described. The sentence in (12.17) summarises the practice of reciprocating brides. The preceding clauses, providing the deictic centre, were: ‘She marries a man, then later the woman’s husband’s relatives ...’

- (12.17) ... *asik tha naingim momono*
 asik ta naingim na=mono
 IRR 3H.PL.I look.NI from=across.slope
save ia chama lēvopki chia met nachue.
 sa=pe ia kama lēvop-ki kia met na=kue
 to=there REL₁ ART₁ woman-F.SG 3F.SG.I go.PAST from=where
 ‘... they will look back to where the woman came from.’

The fact that both the preposition *na* ‘from’ and the derivational prefix *na-* ‘back to deictic centre’ can be present on the same stem indicates that the two forms have distinct functions (see (12.12) above and (12.18)).

² These two forms are also able to form complex prepositions by combining with other prepositions (see §7.2).

- (12.18) *Bas kia thal ut nanamēk sathē sēva bang.*
 bas kia thal ut na=na-mēk sa=ithē sa=pa bang
 barge 3F.SG.I carry.NPRES 1SG.III from=DER₃-down to=here to=LOC village
 ‘A barge took us to here to the village.’

12.3 Extended uses of directionals

The spatial terms introduced in §12.1 and §12.2 are now discussed in more detail. Examples are given to show their use in context and to illustrate extensions to the basic meanings of each term. The discussion is organised as follows: vertical axis (§12.3.1), landform axis (§12.3.2), directionals encoding terminal end points (§12.3.3) and directionals not encoding terminal end points (§12.3.4). There are a few uses of these terms that are relevant to all of the terms. These will be discussed first.

Directionals are used to refer to spatial relations on maps as well as in the real world. Example (12.19) described a huge fire that burnt south from a volcano on the northern side of the Gazelle Peninsula. The narrator uses the spatial term *navuk* {*na=vuk* from=up}, treating the south as lower down than the north.

- (12.19) *Dē ngē ndang da.ithē navuk, machēlak, machēlak, machēlak.*
 da ngē dang ta=ithē na=vuk machēlak machēlak machēlak
 and 3N.I burn EMPH=here from=up slowly slowly slowly
 ‘And it burnt from up [there], slowly, slowly, slowly.’

Time is also treated as corresponding to a vertical axis of some kind. Movement forward in time is frequently encoded up the term *i-vuit* ‘DER₁-up.TERM’. This can be seen in example (12.20).

- (12.20) *Ta tichina chlan avik klan ivuit,*
 ta tichina klan avik klan i-vuit
 3H.PL.I do.NSPEC.PRES like ADV.DIST.DEM like DER₁-up.TERM
ivuit, vaki dēng iva sa chama chulumda
 i-vuit va=koki dēng iva sa kama chulum-ta
 DER₁-up.TERM PURP₁=also until PURP₂ NEF ART₁ white-H.PL
tha muēn.
 ta muēn
 3H.PL.I arrive.PAST
 ‘They did that all the time, on and on until when the white people arrived.’

The use of the stem *mēk* ‘down’ in (12.21) indicates that this is not simply a special property of the term *ivuit*.

- (12.21) *Kama viam da ngēthi tal nave.ia*
 kama a=piam da ngēthi tal na=pe=ia
 ART₁ spec=Tahitian.chestnut and 3N.II bear.PRES from=there=REL₁
kama yachun’gi ma April inamēk va sa
 kama yachun-ki ma April i-na-mēk pa sa
 ART₁ month-F.SG REL₂ PN DER₁-DER₃-down LOC to

save.ia kama yachun'gi ma July.
sa=pe=ia kama yachun-ki ma July
 to=there=REL₁ ART₁ month-F.SG REL₂ July
 'The Tahitian chestnut trees bear [their fruit] from April all the way until July.'

12.3.1 The vertical axis

This section discusses extended uses of terms that express spatial relations with reference to a strictly vertical axis: (A) *mēk* 'down', (B) *vuk* 'up', and (C) *muk* 'across'.

A. *mēk* 'down'

The spatial term *mēk* is generally quite straightforward in referring to places at the bottom of a vertical axis. It is often found in collocations with *mēsēng* 'ground': for example, *samēk sēmēsēng* 'down to the ground' *namēk nēmēsēng* 'up from the ground'. An interesting semantic extension that has been identified for *mēk* 'down' is that the location of hidden things is conceived of as *mēk*. This is shown in (12.22) and (12.23).

- (12.22) *Cha ngaip avama dul mēk mēthavama thalga.*
 ka ngaip avama dul mēk mēt=avama thal-ka
 3M.SG.I hide.NI 3M.SG.POSS money down within=3M.SG.POSS net.bag-M.SG
 'He hid his money [down] in his net bag.'

Although it is not difficult to imagine the relationship between the location of money in a net bag and a place that is lower down in (12.22), the spatial term in (12.23) does not refer to space at all; it simply indicates that the idea is hidden. The object under discussion is an idea and cannot occupy a physical location. In this example the diminutive noun class marking encodes an attenuating reading.

- (12.23) *Ia, musnēngini ngē mēk ma morini.*
 ia musnēng-ini ngē mēk ma mor-ini
 yes idea-DIM.SG 3N.I down REL₂ big-DIM.SG
 'Yes, the hidden idea is big.' (lit: 'Yes, the idea down there is big.')

B. *vuk* 'up'

As we noted in §12.1, the spatial term *vuk* refers to spaces and locations towards the top of the vertical axis. Example (12.24) shows that the vertical axis is independent of the landscape. In this example *vuk* refers to a place in the sky, describing bombing raids during the Second World War.

- (12.24) *Ta thu.nangēt nēk kama balus navuk?*
 ta thu.na=ngēt na=pēt kama balus na=vuk
 3H.PL.I shoot.at.NPRES=3N.III from=at ART₁ plane from=up
 'They shot them down from a plane in the sky?'

The spatial term *vuk* is also used to refer to the inside of a house. In (12.25) movement inside is encoded by *mon* 'go.in.PAST'. But the interior of the house is encoded by *vuk*.

- (12.25) ... *du chule dē cha mon savuk dē*
 da kule da ka mon sa=vuk da
 and later and 3M.SG.I go.in.PAST to=up and

 ka muēn.vēt ma thalias avoes puk.
 ka muēn.vēt ma thalias av=oes vuk
 3M.SG.I find.PAST ART₂ wizard 3M.SG.POSS=offspring up
 ‘... then he went in and he found the wizard’s children inside.’

C. *muk* ‘across’

The spatial term *muk* often refers to an area within a contained or bordered space. In (12.26), the inside of an enclosure for keeping pigs is described.

- (12.26) *Dak ka met samuk sēmēt ma*
 dak ka met sa=muk sa=mēt ma
 but 3M.SG.I go.PAST to=across to=within ART₂

 thalias avama ichathachi ...
 thalias avama ichēt-ki
 wizard 3M.SG.POSS enclosure-F.SG
 ‘So he went into the wizard’s enclosure ...’

12.3.2 The landform axis

Terms that express spatial relations with reference to the axis imposed by the fall of the land are (A) *mano* ‘down at the coast’, (B) *vono* ‘up in the mountains’, and (C) *mono* ‘over the side of the ridge’. Each of these terms also has semantically extended uses, which are discussed below.

A. *mano* ‘down at the coast’

The spatial term *mano* refers to locations or movement towards the lower part of a ridge. Although, as described in §12.3, this prototypically means ‘down at the coast’, *mano* also refers to locations down a slope more generally. In Mali territory locations down-slope are typically rivers or roads. In (12.27) the spatial term *mano* is associated with a road at the bottom of a slope.

- (12.27) *Di chia muēn mano mēni cha iska.*
 da kia muēn mano mēni kē=a is-ka
 and 3F.SG.I arrive.PAST down.slope on ART₃=SPEC road-M.SG
 ‘And she arrived down on the road.’

In (12.28) a river at the bottom of a valley is the location referred to by *mano*.

- (12.28) *Sa cha mēn namana*
 sa ka muēn na=mano
 NEF 3M.SG.I arrive.PAST from=down.slope

 nave nēmēni chama renggi.
 na=pe na=mēni kama reng-ki
 from=there from=on ART₁ river-F.SG
 ‘Then he arrived from down in the river.’

B. vono ‘up in the mountains’

With reference to locations in the landscape, *vono* encodes locations higher up, prototypically locations up in the mountains. When places along the coast provide the context, *vono* may also mean ‘inland, away from the sea’ (12.29).

- (12.29) *Kule da kuk kama urēn’ga*
 kule da kok kama urēn-ka
 later and just ART₁ crayfish-M.SG

cha sangar ava kanucha
 ka sangar av=a kanu-ka
 3M.SG.I hold.NI 3M.SG.POSS=SPEC canoe-M.SG

dak ka met dē savono.
 dak ka met da sa=vono
 but 3M.SG.I go.PAST and to=up.slope
 ‘Then the crayfish just held on to his canoe and he went inland.’

C. mono ‘across the side of the ridge’

Like the other forms in the last column in Table 12.1, *mono* refers to spatial relationships or locations on the horizontal plane. As well as prototypically referring to locations on the same level on a slope, *mono* can refer to a horizontal field. In (12.30) the subject moves across water.

- (12.30) *Kē pul dē cha tet imono ...*
 kē pul da ka tet i-mono
 3M.SG.II paddle.NI and 3M.SG.I go.PRES DER₁-across.slope
 ‘He paddled and went across ...’

In (12.31) the word *thēmono* {*tē-mono* DER₂-across.slope} means ‘all around’.

- (12.31) *Dak kama katiketkēna athē*
 dak kama katiket-kēna athē
 but ART₁ catechist-H.PL H.PL.INDEF

da tha nēchama mbangbap
 da ta na=kama a=bang-vap
 and 3H.PL.I PREP=ART₁ SPEC=village-RCD.PL

ma thēmono.
 ma tē-mono
 REL₂ DER₂-across.slope
 ‘But the other catechists they were at other villages all around.’

In (12.32) *momono* {*na-mono* DER₃-across} ‘back across’ encodes the act of reciprocation. This is a generic statement about how women were exchanged between groups in traditional marriage arrangements. The actual geographic locations are not relevant here but the act of reciprocation across social space is central to the statement.

- (12.32) ... *kia thuvēt momono save ia*
 kia thuvēt na-mono sa=pe ia
 3F.SG.I answer.NPRES DER₃-across.slope to=there REL₁

mali lēvopki achik kia met nave.
mali lēvop-ki achik kia met na=pe
 earlier woman-F.SG F.SG.CONTR.DEM 3F.SG.I go.PAST from=there
 ‘... she answers there for the woman who came from there before.’

12.3.3 Directionals encoding terminal end points

The third set of terms included in Table 12.1 refers to terminal end points related to the vertical and horizontal axes. The forms are: (A) *manēp* ‘down.TERM’, (B) *vuit* ‘up.TERM’, and (C) *muīt* ‘across.TERM’. Semantic extensions to the basic uses described in §12.1 are set out below.

A. *manēp* ‘down.TERM’

Example (12.7) showed *manēp* referring to a geographic place. It can also be used to refer to the orientation of objects and to their parts. In (12.33) *manēp* refers to the orientation of the addressee.

(12.33) *Ngi ger manēp.*
ngi ger manēp
 2SG.II bend.NI down.TERM
 ‘You bend down.’

The third line in example (12.34) refers to the lower parts of the object’s body. The action of hitting, which is not directly encoded by this clause, is predictable from the preceding two lines in the example, describing the protagonist picking up a stick.

(12.34) *Kia nia chia mēt kama ngēmēngga*
kia nia kia mat kama angē=mēng-ka
 3F.SG.I MIR 3F.SG.I get.PAST ART₁ 3N.POSS=wood-M.SG

ma vlēngacha vēthiki.
ma a=plēng-ka avē=tik-ki
 REL2 SPEC=tree.sp-M.SG 3M.SG.POSS=hand-F.SG

Di chia nia savuit samanēp.
da kia nia sa=vuit sa=manēp
 and 3F.SG.I MIR to=up.TERM to=down.TERM
 ‘At once she picked up a branch of a *vlēngacha* tree. And she
 [hit him from] top to bottom.’

B. *vuit* ‘up.TERM’

In addition to its frequent use to encode movement forward in time (see (12.20)), *vuit* seems to be used in metaphors relating spatial relations to victory in competition.³ Consider example (12.35).

³ In both of the texts that contain relevant examples it would be possible to argue that the directionals are in fact being used in their more literal senses and the competitions described did involve participants moving forward or upwards in space. This was not the way that they were translated however, and I have assumed here that Mr Tayul chose words relating to victory because they were the best translations in context. Additional examples, especially if they involved movement downwards, would settle this point more clearly.

- (12.35) *Kēvicha da cherotka dē cha savuit.*
 kēvi=ka da cherot=ka da ka sa=vuit
 CONTR=3M.SG.III and strong=3M.SG.III and 3M.SG.I to=up.TERM
 ‘That one, he is strong and he was victorious.’

C. *muit* ‘across.TERM’

There are four ways in which *muit* may be extended semantically from referring to one side or another. As example (12.36) shows, in a verbless clause *muit* refers to the act of coming ashore.

- (12.36) *Kama avun’gi chia muit vētha chuan.*
 kama a=vun-ki kia muit pēt=a chuan
 ART₁ SPEC=turtle-F.SG 3F.SG.I across.TERM at=SPEC sand
 ‘The turtle came ashore on the sand.’

Moreover, *muit* is used to refer to reciprocal relationships between two sides. In (12.37) this relates to locations on either side of a body of water.

- (12.37) ... *diva sik ka thet sēvēt kama mēlka*
 diva sik ka thet sa=pēt kama mēl-ka
 PURP₃ IRR 3M.SG.I go.FUT to=at ART₁ island-M.SG
chēk sathēmuit, mēni chama nggarēs.
 achēk sa=tē-muit mēni kama a=garēs-ki
 M.SG.CONTR.DEM to=DER₂-across.TERM on ART₁ SPEC=sea-F.SG
 ‘... in order to go to one of the islands on the other side, across the sea.’

In (12.38) *muit* relates to two trees opposite one another.

- (12.38) ... *ivasik mamēr sēna nēchama anēngacha*⁴
 iva=asik mamēr sēna na=kama a=mēng-ka
 PURP₂=IRR possible simultaneously PREP=ART₁ SPEC=tree-M.SG
chēk muit.
 chēk muit
 M.SG.CONTR.DEM across.TERM
 ‘... to be in line with the other tree opposite.’

Finally, consistent with the fact that this series of directionals encode a terminal end point, *muit* may refer to the end of something, such as the end of a length of rope in (12.39).

- (12.39) ... *dē cha chop.sēchama ngelengiom muit.*
 da ka chop.sē=kama ngeleng-iom muit
 and 3M.SG.I fasten.NPRES=ART₁ small.stone-M.DL across.TERM
 ‘... and he fastens two stones at the end of it.’

12.3.4 Directionals not encoding terminal end points

Finally, Table 12.1 also includes a set of basic directionals that do not refer to terminal end points: *mani* ‘downwards’, *vui* ‘upwards’, and *mui* ‘sideways’. The corpus does not

⁴ The stem *nēng* is the Abilta dialect equivalent of Arongda *mēng* ‘tree’.

indicate any marked semantic extensions for *mani* ‘downwards’ and *mui* ‘sideways’. As we noted in the introduction to §12.3, the upward direction is associated with moving forward in time. The highest frequency word for encoding movement forward in time or space is *ivi* {*i-vui* DER-upwards}. A typical example relating to time is shown in (12.40).

- (12.40) *Sa chule sa ivi sa chule sa*
 sa kule sa i-vui sa kule sa
 NEF later NEF DER₁-upwards NEF later NEF
tha venaseng nēchē gamar navi.
 ta venaseng na=kē gamar na=avi
 3H.PL.I start.NPRES PREP=ART₃ fight from=there
 ‘So from then on the fighting started.’ (lit: ‘Then later upwards
 then later they started with the fighting from then.’)

This form encodes continuing action in any direction. In (12.41) the protagonist is actually running downhill, away from a huge stone that is rolling towards him.

- (12.41) *Petrus ka lu chi nainavuk*
 Petrus ka lu ki na=i-na-vuk
 PN 3M.SG.I see.NPRES 3F.SG.III from=DER₁-DER₃-up
dē cha bang ivi.
 da ka bang i-vui
 and 3M.SG.I run.NPRES DER₁-upwards
 ‘Peter saw it rolling down and he ran.’

12.4 Relational nouns as directionals

Location can be denoted by the occurrence of possessed NPs in which inanimate common nouns are situated in reference to body part terms. For example, (12.42) *kama tevolki atha thēng* {*kama tevol-ki at=a thēng* table-F.SG 3F.SG.POSS back} ‘the top of the table’. The expression is enclosed in square brackets in (12.42).⁵

- (12.42) *Ngua mu chama peletka vuk vēt*
 ngua mu kama pelet-ka vuk pēt
 1SG.I put.PAST ART₁ plate-M.SG up at
 [*kama tevolki atha thēng*].
 kama tevol-ki at=a thēng
 ART₁ table-F.SG 3F.SG.POSS=SPEC back
 ‘I put the plate on the top of the table.’ (lit: ‘... at the table its back.’)

Other body part terms used in this way include *angēthik* ‘side’ {*angēt=tik* 3N.POSS=hand}, *angētkeng* ‘edge’ {*angēt=keng* 3N.POSS=tooth}, *angēthut* ‘base’ {*angēt=thut* 3N.POSS=base}, *angētvus* ‘top’ {*angēt=pēs* 3N.POSS=head}, *angētham* ‘front’ {*angēt=am* 3N.POSS=mouth}.

The body part based terms *angētham* ‘front’ {*angēt=am* 3N.POSS-mouth} and *vēthik* ‘side’ {*pe=tik* at=hand} can occur with the derivational prefix for location terms *the-/dē-*.

⁵ Many body part terms are inalienably possessed and in this construction generally do not take noun class marking. If the possessor is not clear from context the third person neuter possessive pronoun *angēt* is used (see §11.4.2).

Further, *sa* or *na* may be added to the stem beginning with the prefix *dē-*: *sdēngētham* ‘to the front’ and *sdēvēthik* ‘to the side’. The term *thēng* ‘back’ forms the spatial expression *dēvēthēng*, literally ‘behind its back’, which is used as a fixed expression meaning ‘you don’t know where it comes from’.

The adverbial demonstratives *ithē* ‘here’ and *pe* ‘there’ may also take the above derivational morphology, but cannot follow prepositions functioning as prepositions. (See §5.2.6.E for the paradigms of adverbial demonstratives). Example (12.43) shows the demonstrative *ithē* ‘here’ as the stem of the form *nainathē* ‘from here’:

- (12.43) *Arura* *nainathē* *da* *tha* *donel*
 a=ru-ta na-i-na-ithē da ta donel
 SPEC=person-H.PL from-DER₁-DER₃-here and 3H.PL.I hunt.PRES

 nani athēanga *mēstēmna*.
 nani athēv=anga mēstēmna
 for 3H.PL.POSS=NSPEC side.dishes
 ‘People from here went hunting for their side dishes.’

Example (12.44) shows the preposition *sa* ‘to’ with the distal demonstrative *pe*. It is extremely common for the preposition + demonstrative to be followed by an additional prepositional phrase, as it is in (12.44), or relativised clause (§16.4.5 and §16.5.3). However, the expression *save* may also occur alone, as shown in (12.45).

- (12.44) *Nge dēnai* *ngia thet* *save* *sdengētham*.
 nge da=kinai ngia thet sa=pe sa-tē=angēt=am
 2SG.III and=in.contrast 2SG.I go.FUT to=there to-DER₂=3N.POSS=mouth
 ‘It’s your turn to go (to sit) there at the front.’

 (12.45) *Dē kosa chama arura* *tha* *nari* *dē*
 da kosa kama a=ru-ta ta nari da
 and just ART₁ SPEC=person-H.PL 3H.PL.I hear.NPRES and

 tha *vang* *save*.
 ta vang sa=pe
 3H.PL.I run.NPRES to=there
 ‘And actually the people heard and they ran there.’

12.5 Directionals and prepositional phrases in discourse

Directionals and prepositional phrases often occur in pairs or series in Mali discourse. There seems to be a stylistic preference for combining forms from the different rows in Table 12.1. This results in multiple encoding of location or direction. In many cases both the vertical and the landform axes occur together. In other examples a specific directional encoding a terminal point is used alongside a directional that does not encode a terminal point. This practice indicates that the directionals from each series are semantically compatible with each other.

In example (12.46) both the vertical and the landform axes are represented by *inamuk* and *imono* respectively.

- (12.46) *Dak peia* *ngi* *sēkmes* *dē* *ngi* *bing.pēthanas*
 dak pe=ia ngi sēkmes da ngi bing.pēthanas
 but there=REL₁ 2SG.II get.up.NI and 2SG.II circle.around.PRES

<i>klaŋ</i>	<i>da.ithik</i>	<i>imono</i>	<i>inamuk,</i>
klaŋ	ta=ithik	i-mono	i-na-muk
like	EMPH=ADV.PROX.DEM	DER ₁ -across.slope	DER ₁ -DER ₃ -across
<i>imono</i>	<i>inamuk,</i>	<i>imono,</i>	<i>inamuk.</i>
i-mono	i-na-muk	i-mono	i-na-muk
DER ₁ -across.slope	DER ₁ -DER ₃ -across	DER ₁ -across.slope	DER ₁ -DER ₃ -across
'When you take off you must circle around like this: to and fro, to and fro, to and fro.'			

Example (12.47) contains the complex spatial term *imano* based on the general terms for location and direction as a complement to the procliticised preposition *na=*. It also contains the complex spatial term *inamēk*, encoding the vertical axis.

(12.47)	<i>Pea</i>	<i>cha</i>	<i>tet</i>	<i>naimano</i>	<i>inamēk</i> ...
	pe=ia	ka	tet	na=i-mano	i-na-mēk
	there=REL ₁	3M.SG.I	go.PRES	from=DER ₁ -down.slope	DER ₁ -DER ₃ -down
	'When he walks up there ...'				

In (12.48) the same direction is encoded by two prepositional phrases with directionals as complements: *navuk* {*na=vuk* from=up} 'down' and *samēk* {*sa=mēk* to=down} 'down'. In this case both terms belong to the vertical axis.

(12.48)	<i>Sa</i>	<i>ma</i>	<i>secha</i>	<i>chē</i>	<i>chutna</i>	<i>navuk</i>	<i>samēk</i>	<i>sok</i>
	sa	ma	sek-ka	kē	chut.na	na=vuk	sa=mēk	sok
	NEF	ART ₂	hero-M.SG	3M.SG.II	descend.NPRES	from=up	to=down	really
	<i>ka</i>	<i>vēlēng</i>	<i>atha</i>		<i>rochi</i>	<i>da</i>	<i>kia</i>	<i>ngiēp.</i>
	ka	vēlēng	at=a		rua-ki	da	kia	ngip
	3M.SG.I	kill.NPRES	3F.SG.POSS=SPEC	friend-F.SG	and	3F.SG.I	die.PRES	
	'Then the good man came down from up there, he really killed her friend and she died.'							

In (12.49) the vertical axis is represented by a spatial term (*imono*) and the landform axis appears in a prepositional phrase (*samuk*) and then further information is supplied by two additional prepositional phrases.

(12.49) *Sa kēvi dē cha ve cha tet imono*
 sa kēvi da ka pe ka tet i-mono
 NEF CONTR and 3M.SG.I there 3M.SG.I go.PRES DER₁-across.slope
samuk sēva mbang sanggēl amamēkkēna.
 sa=muk sa=pa a=bang sa=gēl a=mamēk-kēna
 to=across to=LOC SPEC=village to=with SPEC=father-H.PL
 ‘So he walked over to the village to his parents.’

12.6 Adverbial demonstratives as location terms

The full paradigm of adverbial demonstratives was given in §5.2.6.E. The emphatic proximate location adverbial demonstrative *taithik* 'here' is shown in (12.50).

- (12.50) *Ki kuar ia, “Ia, chok kusek ma chēvingo*
ki kuar ia ia kok kusek ma kēvi=ngo
 3F.SG.II say.PRES REL₁ yes just only ART₂ CONTR=1SG.III
ngua met taitihik, ngua vang.”
ngua met ta=ithik ngua vang
 1SG.I go.PAST EMPH=here 1SG.I run.NPRES
 ‘She said, “Yes, it was only me who came here, I ran away.”’

The distal location adverbial demonstrative *avi* ‘there’ is shown in (12.51).

- (12.51) *Da ti kuar ia ngē venaseng avi.*
da ti kuar ia ngē venaseng avi
 and 3H.PL.II say.PRES REL₁ 3N.I start.NPRES there
 ‘And they say that it started there.’

The anaphoric demonstrative, *pe* (usually with the surface form *ve*) is also used for denoting location. An example is given in (12.52).⁶

- (12.52) *Atha mbang ivuk peia Maslabe*
at=a bang i-vuk pe=ia Maslabe
 3F.SG.POSS=SPEC village DER₁-up there=REL₁ PN
ve vēt ma Mēndai thēvus.
pe pēt ma Mēndai tē=a=pēs
 there at ART₂ PN 3F.SG.POSS=SPEC=head
 ‘Her village was up there at Maslabe, there at the head of the Mundai River.’

⁶ See also §4.1.5.A, where the use of *pe* as a verbless predicate in existential clauses is discussed, §7.2.3 where the use of complex prepositions to expand the demonstrative is mentioned, and §16.4.5 and §16.5.3 where the use of adverbial clauses specifying the location of the demonstrative is described.

13

Structure of the predicate

This chapter sets out the structure of the predicate. Associated with the predicate, there are a number of semantic categories that may be expressed. These include aspectual distinctions, markings for temporal relations, and modality. The main mechanisms for marking these categories within the predicate are particles and asymmetrical serial verb constructions. At clause level, clause-initial discourse markers and clause-initial or clause-final adverbs are used. There is no tidy correlation of semantic value to structural type. For example, negation may be marked by an asymmetrical serial verb construction, a clause initial discourse marker or both. The strategy taken here is to anchor the description in the structural characteristics of each construction with summaries that provide cross-references to semantic types. This chapter includes a discussion of the asymmetrical serial verb construction and the semantic categories it encodes. Chapter 14 describes the use of discourse markers and clause level adverbs in encoding a further set of semantic distinctions.

The order of elements within the predicate is described in §13.1. Manner adverbs are discussed in §13.2. Particles within the predicate are discussed in §13.3. For information on the reduplication of verbs and verb compounds see §6.2.3 and §6.3.2–§6.3.3. The use of prepositions in forming new verbs is discussed in §7.4 while §6.5 discusses valency and transitivity reducing suffixes and reflexives and reciprocals.

13.1 Order of elements within the predicate

Schematically, the predicate occurs in the middle of a clause. The ordering of elements within the predicate is illustrated in Figure 13.1 with cross references to relevant sections. The formation of clitic groups involving these forms is discussed in §3.7. Aspectual distinctions are indicated through two distinct means: particles within the predicate (§13.3), and discourse markers that appear in clause-initial position (§14.2).

Figure 13.1: Ordering of elements within the predicate

- | |
|---|
| <ul style="list-style-type: none">• A/S_A class I or II concordial pronoun (§4.1.3)• Head of predicate (see also §4.1.5 on verbless clauses)• O/S_O class III concordial pronoun or O/S_O NP (§4.1.3 and, for clauses functioning as O arguments §16.4.2)• Manner adverb (§13.2) |
|---|

Examples (13.1), (13.2) and (13.3) show the components that may occur in a predicate. The predicate in (13.1) is headed by the intransitive verb *ngip* ‘die’. It takes a second person singular A/S_A concordial pronoun (class II *ngi*) indexing the S_A argument. The sentence has the illocutionary force of a threat. This is reflected in the use of the atelic irrealis marker *asik* in first position in the predicate.

- (13.1) *Asik ngi ngip.*
 asik ngi ngip
 IRR 2SG.II die.PRES
 ‘You will die.’

The predicate in (13.2) includes an S_O class III concordial pronoun. Two locative expressions occur to the right of the predicate: the demonstrative *pe* ‘there’ and the prepositional phrase *mēni chama arenggi* ‘at (lit: on) the river’. A full NP representing the S_O argument occurs in topic position before the predicate.

- (13.2) *Mali chama sekvek, kule _____ tha ve mēni chama arenggi.*
 mali kama sek-vek kule ta pe mēni kama a=reng-ki
 earlier ART₁ hero-H.PL stay.PRES 3H.PL.I there on ART₁ SPEC=river-F.SG
 ‘Once upon a time, the heroes were at the river.’

13.2 Manner adverbs

Manner adverbs modify the predicate and occur in predicate-final position. In (13.3) the adverb *marik* ‘really, truly’ follows the class III concordial pronoun *ta*.

- (13.3) ... *dē tha met sētha marik save ia Masarau.*
 da ta met sa=ta marik sa=pe ia Masarau
 and 3H.PL.I go.PAST with=3H.PL.III truly to=there REL₁ PN
 ‘... and truly, they went with them to Masarau.’

The following manner adverbs have been identified for Mali: *dalias* ‘squattingly’ (only as a modifier to the verb *tuchun* ‘sit’), *iri ma* ‘very fast’, *klan* ‘only, for nothing’¹, *machēlak* ‘a little bit, slowly’, *machēlak machēlak* ‘very slowly’, *machuisēr* ‘sideways, diagonally’, *madēng* ‘carelessly, unconcernedly’, *mailu* or *nēmailu* ‘maybe, possibly’, *malilu* ‘repeatedly’, *mamor* ‘a lot, fast, loudly’, *mamēr* ‘properly, well’, *marik* ‘really, truly’, *maru* ‘really, at all’, *masa* ‘too much’, *masēchas* ‘clearly’ (refers to how someone is speaking), *(ma)thaneng* ‘hanging on’ (refers to a technique for spearing in which the spear is not released—‘stabbingly’), *mavērēt* ‘suddenly, urgently’ (occurring without warning and in such a manner as to give someone a shock), *mavo* ‘badly’, *minia* ‘how’ (see §15.3.2 on interrogatives), *mo* ‘all, completely’, *ngis* ‘apart’, *sa* ‘for a while’, *sdamēr* ‘directly, correctly’, *sēsēkpes* ‘readily, easily’, *sēna* ‘simultaneously’, *set* ‘very fast’, and *sravo* ‘in surprise’.

A handful of these adverbs, namely those with a more epistemic meaning, also occur in clause initial position as discourse markers (§14.2.2). The adverb *mamēr* ‘properly’ may also take a dependent clause. In this case it means ‘possibly’ (§16.4.6.A).

As noted in §6.4, a number of manner adverbs have been derived from adjectives using the prefix *ma-*, which is homophonous to the relator *ma* (§16.5) and no doubt related to it.

¹ See also §16.4.6.C on the use of *klan* as a complement clause taking adverb meaning ‘like(wise)’.

This process no longer appears productive, and overall it seems that these manner adverbs currently form a closed class.

Example (13.4) shows the directional adverb *ngis* ‘aside’ after the predicate in the first clause.

- (13.4) *Ngia thu chama anot ngis*
 ngia thu kama a=not ngis
 2SG.I put.FUT ART₁ SPEC=taro apart
dak kule chama chalasung be.
 dak kule kama a=kalasung pe
 but stay.PRES ART₁ SPEC=sweet.potato there
 ‘You put the taro aside but the sweet potato stays there.’

In example (13.5) the adverb *machuisēr* ‘diagonally’ is in final position of a verbless relative clause. In (13.5) each clause begins on a new line.

- (13.5) *Aulan’gi chia vaimanas mēni chama kakaucha*
 a=ulan-ki kia vaim-nas mēni kama kakau-ka
 SPEC=snake-F.SG 3F.SG.I fold.NPRES-REFL on ART₁ cocoa.tree-M.SG
ava thiki [ama chia namēt machuisēr].
 av=a tik-ki ama kia na=mēt machuisēr
 3M.SG.POSS=SPEC hand-F.SG REL₃ 3F.SG.I from=within diagonally
 ‘The snake curls itself on the branch of a cocoa tree which goes out diagonally.’

Adverbial demonstratives referring to manner also follow the predicate. The adverbial demonstrative paradigm was given in §5.2.6.E. The emphatic proximate manner adverbial demonstrative *taithik* is shown in (13.6), and the emphatic distal manner adverbial demonstrative *viavik* is in (13.7).

- (13.6) *Rndam, sa ngua tet taithik*
 Rndam sa ngua tet ta=ithik
 PN NEF 1SG.I go.PRES EMPH=ADV.PROX.DEM
da ngu tal ka guangithong ...
 da ngu tal kē=a guangithong
 and 1SG.II carry.PRES ART₃=SPEC things
 ‘Witch, I come like this, I carry the things ...’

- (13.7) *Ka iras.tēmga viavik*
 ka iras.tēm=ka vi=avik
 3M.SG.I lie.to.NI=3M.SG.III EMPH=ADV.DIST.DEM
ia cha mēs kama snok.
 ia ka mēs kama snok
 REL₁ 3M.SG.I eat.PAST ART₁ excreta
 ‘He lied to him like that, that he had eaten excreta.’

13.3 Other modification within the predicate

Mali makes use of a number of particles to express aspectual distinctions and modality within the predicate. In addition to the plain particle *na* (§13.3.1), there is evidence that in

some cases these constructions are asymmetrical serial verb constructions (§13.3.2). In other cases, there simply appear to be sequences of clauses involved (§13.3.3). All of the verbs involved in these constructions are type D non-inflecting verbs.

13.3.1 The irrealis focus particle *na*

The irrealis focus marker *na* is most commonly used to focus negation on the predicate. It is a particle that occurs between the A/S_A concordial pronoun and the verb. Unlike the verbs presented in the rest of this section, it does not require a concordial pronoun of its own. It is included here because of its position within the predicate. The irrealis focus marker is not required for the clause to be negative, as (13.8) shows.

- (13.8) ... *da angēmbēs ka rucha vak*
 da angēmbēs kē=a ru-ka vak
 and NEG ART₃=SPEC person-M.SG M.SG.DIST.DEM
 kave ka lu chi.
 ka=pe ka lu ki
 3M.SG.I=there 3M.SG.I see.NPRES 3F.SG.III
 ‘... and that particular man didn’t see her.’

Example (13.9) shows a typical case of negation with the irrealis focus marker. The negator in this clause is the negative word *angēmbēs* (with the reduced form *ambēs*). The use of the irrealis focus marker has a contrastive function. Example (13.9) occurred in a story about relations between two tribes in pre-colonial times. The narrator has accused the other group of cannibalism. In the preceding clause he acknowledges that his own group did kill the other group but then he says:

- (13.9) *Ambēs tina mēs.*
 angēmbēs ti=na mēs
 NEG 3H.PL.II=IRR.FOC eat.PAST
 ‘They didn’t eat [them].’

The irrealis focus marker *na* may be found in negative contexts in all tenses. In negative declarative clauses it is associated with a negator (see also §15.2.4). It is also used with prohibitives (§15.4.2). Example (13.10) is in the present tense, example (13.11) is in the past tense and example (13.12) is in the future tense. Future tense negative clauses are frequently prohibitive.

- (13.10) *Dak choiku thina bondēm nanga dul*
 dak koiku ti=na bondēm na=anga dul
 but NEG 3H.PL.II=IRR.FOC pay.PRES PREP=NSPEC money
 ura anga gingēt.
 ura anga gingēt
 or NSPEC whatnot.CN
 ‘But they don’t pay with money or anything.’
- (13.11) *Ambēs tina mēs.*
 angēmbēs ti=na mēs
 NEG 3H.PL.II=IRR.FOC eat.PAST
 ‘They didn’t eat them.’

- (13.12) *Chule ngia na thu ngo!*
 kule ngia na thu ngo
 NEG.IMP 2SG.I IRR.FOC shoot.NPRES 1SG.III
 ‘Don’t shoot me!’

The irrealis focus marker only has scope over the clause in which it is found. In (13.13), the clause introduced by *peia*, which provides background information, is presupposed but the main clause it modifies is negative.

- (13.13) *Veia chē chut.na*
 pe=ia kē chut.na
 there=REL₁ 3M.SG.II descend.NPRES

da choiku chana ngiēm vuit ...
 da koiku ka=na ngiēm vuit
 and NEG 3M.SG.I=IRR.FOC look.PRES up.TERM
 ‘When he climbed down he could not look up ...’

In (13.14) the irrealis focus marker occurs in a dependent clause, introduced by *ia*. The irrealis focus marker seems to reinforce the irrealis marker *asik* that follows the relator at the start of the second line.

- (13.14) *Dak athē, asik athē nēmga cha lu*
 dak athē asik athē nēma-ka ka lu
 but H.PL.INDEF IRR H.PL.INDEF who-M.SG 3M.SG.I see.NPRES

ia sik ti na remanas.nacha ura.
 ia asik ti na remanas.na=ka ura
 REL₁ IRR 3H.PL.II IRR.FOC recognise.NPRES=3M.SG.III or
 ‘But others, they saw that [maybe] they recognised him or [something].’

Example (13.15) shows a series of clauses with different status marking. The first clause is negative, and the negator seems to have scope over the second (complement) clause. The final two clauses each include the irrealis focus marker. These clauses elaborate on the second clause. I analyse the second complement clause to be in a paratactic relationship with the previous clause and linked with the next clause by the additive coordinator *da*.

- (13.15) *Dak koiku mamēr*
 dak koiku mamēr
 but NEG possible

ia chok ma chēvichi vathēm.mes
 ia kok ma kēvi=ki pa=tēm=mes
 REL₁ just ART₂ CONTR=3F.SG.III LOC=PATH=REFL

ia sik kina lu aung
 ia asik ki=na lu aung
 REL₁ IRR 3F.SG.II=IRR.FOC see.NPRES M.SG.INDEF.DEM

di china sēcha.
 da ki=na sēk=ka
 and 3F.SG.II=IRR.FOC marry.NI=3M.SG.III
 ‘But it was not right that she should follow her own inclinations to see someone and marry him.’

Example (13.15) seems to indicate that the negator *koiku* has scope over the first complement clause. It also shows that the irrealis focus marker may co-occur with the atelic irrealis marker *asik* (in the third line) in subordinate clauses. Example (13.16), like the third line in (13.15), shows that the irrealis focus marker may occur when a negator is present in the main clause even if it is not strictly required.

- (13.16) *Angambēs mamēr ia chok ma chēvichi*
 angēmbēs mamēr ia kok ma kēvi=ki
 NEG possible REL₁ just ART₂ CONTR=3F.SG.III
china met=pathēm.mes.
 ki=na met=pa=tēm=mes
 3F.SG.II=IRR.FOC go.PAST=LOC=PATH=DETR₂
 ‘It is not possible that that one she could go according to herself [i.e., her choice].’

Finally, it is important to note that the irrealis focus marker is sometimes found in clauses referring to attempts that turn out to be successful. In (13.17) the irrealis focus marker refers to an attempt at something. It does not imply that the event took place. The next clause indicates that the protagonist was successful. The particle *nia* in the third line encodes mirativity, expressing the narrator’s surprise at the turn of events.

- (13.17) *Cha na ngiēm*
 ka na ngiēm
 3M.SG.I IRR.FOC look.PRES
da cha lu kama angēmēngga
 da ka lu kama angē=mēng-ka
 and 3M.SG.I see.NPRES ART₁ 3N.POSS=tree-M.SG
da chania cha chop pēthik sēnas vuk.
 da ka=nia ka chop av=tik sa=nas vuk
 and 3M.SG.I=MIR 3M.SG.I hang.NPRES 3M.SG.POSS=hand to=REFL up
 ‘He tried to look and he saw a tree and he tried to hang from it by his hands.’

Example (13.17) shows then that when the irrealis focus marker occurs without other overt markers of negation in a clause, it does not commit the speaker to a specific polarity value.

13.3.2 Asymmetrical serial verb constructions

The definition of asymmetrical serial verb constructions (SVCs) used here comes from Aikhenvald (2006:21). She describes asymmetrical SVCs as involving one verb from a relatively open class and a second verb from a more restricted class. In these constructions, the verb from the non-restricted class encodes the event being predicated and the verb from the restricted class (the minor verb) provides some sort of modification. Mali makes use of an asymmetrical SVC to encode the semantics of aspect and modality. This construction is somewhat fossilised, with only one of the particles that function as a minor verb in an asymmetrical SVC also occurring as an independent verb.

In asymmetrical SVCs, the minor verb encoding aspect or modality occurs in first position and takes a class I (A/S_A) concordial pronoun. An example is provided in (13.18) showing the imperfective aspect encoded by the existential predicate *pe* which is functioning as a minor verb.

- (13.18) *Kaye cha lel.tēm avanga mēngithong...*
 ka=pe ka lel.tēm av=anga mēng-ithong
 3M.SG.I=there 3M.SG.I gather.NI 3M.SG.POSS=NSPEC wood-DIM.PL
 ‘He is gathering his small pieces of wood ...’

The aspectual categories encoded by asymmetrical SVCs include: (A) imperfective aspect and (B) durative aspect. As noted above, the examples of SVCs encoding modality are fossilised to some extent. This is evident from the fact that although the structures shown in the following paragraphs are the asymmetrical SVCs, not all can occur as an independent lexical verb. The forms encoding modality are the (C) realis focus marker and (D) frustrative/mirative.

A. Imperfective aspect

The imperfective aspect is encoded by an asymmetrical serial verb construction. The form *pe* ‘(be) there’, which encodes the imperfective aspect, is also used as an existential predicate (§4.1.5) and as an anaphoric demonstrative (§5.2.6.E). Example (13.19) shows the imperfective marker *pe* in preverbal position followed by the VS_O verb *rēn sē* ‘grow well’. This example shows that the class I concordial pronoun is required by the imperfective marker, since in VS_O clauses the pronoun marking the S_O argument occurs after the verb.

- (13.19) *Kama mēngga sa chaye rēn.sēcha*
 kama mēng-ka sa ka=pe thēn.sē=ka
 ART₁ tree-M.SG NEF 3M.SG.I=there grow.well.FUT=3M.SG.III

i mali cha nangger.
i mali ka nangger
 because earlier 3M.SG.I be.bent.NI
 ‘The tree is standing up where once (lit: ‘because’) it was bent.’

The inceptive aspect is encoded by a construction in which the existential predicate *pe* is followed by a purposive clause introduced by the basic purposive marker *va*. An example is provided in (17.10).

B. Durative aspect

In (13.20), *namu* ‘continue’ appears in a SVC in which it provides information about the duration of the verb *bēn sēlēp* ‘question, interrogate’.

- (13.20) *Dē cha namu chē bēn.sēlēp sanggēlēmgī ...*
 da ka namu kē bēn.sēlēp sa=gēlēm=ki
 and 3M.SG.I continue.NI 3M.SG.II question.NI to=near=3F.SG.III
 ‘And he continued to question her closely ...’

In (13.21) the verb *namu* ‘continue’ acts as a main verb in a pair of coordinated clauses.

- (13.21) *Da kosa ngua namu da kosa ngua dēn bono.*
 da kosa ngua namu da kosa ngua dēn vono
 and just 1SG.I continue.NI and just 1SG.I arrive.PRES up.slope
 ‘And I just continued and I reached the top.’

C. The realis focus marker

The form *thia* occurs at pivotal points in stories and seems to be used to focus on key events. In my corpus it is often associated with quick, sudden actions such as ‘spearing’. Example (13.22) comes from a story about a man who spears a fish in a river. This is a key event in the story since the fish is transformed into a pig after he stabs it. The man finds himself in a garden surrounded by the people who own the dead pig and who are threatening to kill him in revenge.

- (13.22) ... *da kosa chule dē cha thia cha chut.mēchi.*
 da kosa kule da ka thia ka chut.mē=ki
 and just later and 3M.SG.I REL.FOC 3M.SG spear.PAST=3F.SG.III
 ‘... and he speared it at once.’

Of the forms discussed in this section, only *thia* is readily associated with an independent verb. The independent verb *thi* ‘hurry’ is shown in (13.23).

- (13.23) *Ngi pul dē ngia thi ngia thi.*
 ngi pul da ngia thi ngia thi
 2SG.II paddle.NI and 2SG.I hurry.NI 2SG.I hurry.NI
 ‘You have to paddle quickly.’ (lit: ‘You paddle and you really hurry.’)

D. The mirative/frustrative

The function of *nia* depends on the tense of the clause. In past and present tense clauses *nia* encodes mirativity, referring to actual events that are surprising to the speaker.² It has a concomitant discourse function similar to *thia* insofar as it highlights key events within a narrative. For example, in (13.24), in the past tense, a small bird tricks an eagle by catching a ride on its back.

- (13.24) *Dē ngēnia ngē munggun puno*
 da ngē=nia ngē munggun vono
 and 3N.I=MIR 3N.I sit.PAST up.slope
 vēt kama ambrasocha ava thēng.
 pēt kama ambraso-ka av=a thēng
 at ART₁ eagle-M.SG 3M.SG.POSS=SPEC back
 ‘And it sat on the eagle’s back.’

In (13.25), a present tense example, the hero of the story is being carried away on a large stone by some witches. In order to escape, he daringly jumps from the stone and swings himself up onto an over-hanging branch. Note that the verb *paik dēm* ‘jump’ is a VS_O verb, taking a class III concordial pronoun as a suffix.

- (13.25) ... *dē cha nia paik.demga savuk*
 da ka nia paik.dem=ka sa=vuk
 and 3M.SG.I MIR jump.PRES=3M.SG.III to=up

² All of the examples in my corpus are in the third person. Unfortunately, I do not have examples of this form in questions or commands.

sēmēni kama amēngga vēthik.
 sa=mēni kama amēng-ka pe=tik
 to=on ART₁ tree-M.SG 3M.SG.POSS=hand
 ‘... and he tried to jump up over the branch of a tree.’

In future tense contexts *nia* encodes a frustrative reading and refers to non-actual events. For example, in (13.26), a man who has been walking and talking with his wife’s ghost turns to see her one last time but she is already gone.³

- (13.26) ... *dē chania chē ingim ia chia chue,*
 da ka=nia kē ingim ia kia kue
 and 3M.SG.I=FRUST 3M.SG.II look.NPRES REL₁ 3F.SG.I where

da sa ngēmbēs nachit.
da sa angēmbēs na=ki
 and NEF NEG PREP=3F.SG.III
 ‘... and he wanted to look back to where she was but she was not there.’

13.3.3 Multi-verb constructions

In addition to the SVCs discussed above, there are two multi-verb constructions that encode aspectual distinctions but that appear to be comprised of sequences of independent verbs, each with their own clause. The first is punctual aspect (A), which occurs in clause initial position rather than within an SVC. The second is the perfective aspect encoded in a multiclausal construction in which the second clause contains the verb *sot* ‘finish’ (B).

A. Punctual aspect: an irregular case

The verb *likdēm* ‘be sudden’ occurs outside of the clause headed by the main verb. In some respects it is similar to a verb functioning as the predicate in an adverbial clause, however subordinators are usually required in adverbial clauses (§16–§17).

In (13.27) *likdēm* acts as a VS_O verb. It takes a class III concordial pronoun, occurs outside the main clause, and provides adverbial information to the clause. The predicate *mat* ‘get.PAST’ is introduced by the coordinator *da*.⁴

- (13.27) *Likdēmga dē cha mēt ava sen’gi.*
 likdēm=ka da ka mat av=a sen-ki
 be.sudden.NI=3M.SG.III and 3M.SG.I get.PAST 3M.SG.POSS=SPEC knife-F.SG
 ‘Suddenly he got his knife.’

We must regard the verb *likdēm* as the head of a predicate as it too may be introduced by the coordinator *da* and take a S_O concordial pronoun. This is shown in (13.28).

- (13.28) *Dē likdēmga di cha mētkā*
 da likdēm=ka da ka mat=kē=a
 and be.sudden.NI=3M.SG.III and 3M.SG.I get.PAST=ART₃=SPEC

³ Note that this example is from a speaker of the Abilta dialect who uses a variant of the 3F.SG.III pronoun *kit* (see also Table 4.3).

⁴ See §18.1 for other examples of left dislocation. This slot is typically filled by an NP, an adverbial phrase encoding time, or an adverbial clause.

ngēmēngga *namēk ...*
 angē=mēng-ka na=mēk
 3N.POSS=wood-M.SG from=down
 ‘At once he picked up a piece of wood ...’

Although we cannot say that the verb *likdēm* is acting as part of a SVC in these examples, it certainly does not function as a canonical main verb either. Instead the verb + concordial pronoun (*likdēmga*) seems to be developing into a discourse marker (see also §14.2). Example (13.29) has been included to show the related VS_O verb *pēlik dēm* ‘slip out from’ (past tense form: *vulik dēm*) functioning as a main verb.

- (13.29) *Vulik.dēm* *kama nēkethopki nēvēt pethik*
 vulik.dēm kama nēkethop-ki na=pēt pe=tik
 slip.away.NPRES ART₁ eel-F.SG from=at 3M.SG.POSS=hands

da kosa chia vang.
 da kosa kia vang
 and just 3F.SG.I run.NPRES
 ‘The eel slipped from his hands and escaped (Lit: ran).’

B. Perfective aspect

In (13.30) the verb *sot* ‘finish’ is used to encode the perfective aspect, referring to a completed action. This is not an SVC construction but rather a clause chain. This is shown more clearly in (13.31) where the first verb takes an object and a coordinator indicating a clause boundary occurs between the two predicates.

- (13.30) *Ka mēs ka sot.*
 ka mēs ka sot
 3M.SG.I eat.PAST 3M.SG.I finish.NI
 ‘He finished eating.’
- (13.31) *Sa in bar ngam din sot.*
 sa in bar ngam da=in sot
 NEF 3DL.I cook.PRES RCD.SG and=3DL.I finish.NI
 ‘So they finished cooking.’ (lit: ‘Then they cook it and they finish(ed).’)

14 *Adverbs and discourse markers*

This chapter discusses clause-level adverbs which encode time (§14.1) and discourse markers which encode a range of meanings associated with time, mood and modality (§14.2). As we noted in §13.3, mood and modality are also managed using particles within the predicate. Clause-initial formulaic sequences containing discourse markers and other clause linking devices occur with high frequency in Mali discourse and are discussed in §14.3. Clause-final discourse markers are described in §14.4. Chapter 15 provides a discussion of negation interrogatives and imperative formation in relation to the forms introduced here and in Chapter 13.

14.1 Clause-level adverbs

Clause-level adverbs encode temporal distinctions and occur at the periphery of the sentence, either in the initial topic slot or in final position (see also §18.1). This distribution is the same as that of other expressions of time and location, encoded by prepositional phrases such as *nēp bangang* ‘at night’. This is in contrast with manner adverbs, which always occur to the right of the predicate after the O argument (§13.2).

Time adverbs include: *mathēchasep* ‘in the morning’, *maulul* ‘a long time’, *mēchēvēs* ‘sometimes, once’, *mērmēr* ‘always’, *milani* ‘yesterday’, *mubang* ‘tomorrow, next day’, *nasot* ‘later’ and *naruer* ‘firstly, before’. An example of the time adverb *mubang* ‘tomorrow, the next day’ in topic position is given in (14.1).

- (14.1) *Mubang sa abangga ma umeska chē sēpmes.*
mubang sa a=bang-ka ma chumes-ka kē sekmes
next.day NEF SPEC=house-M.SG REL2 male-M.SG 3M.SG.II get.up.NI
‘The next day the men’s house goes up.’

The use of a time adverb, *milani* ‘yesterday’ in final position is illustrated in (14.2).

- (14.2) *Cha mēt ava vēngbēngga milani.*
ka mat av=a vēngbēng-ka milani
3M.SG.I get.PAST 3M.SG.POSS=SPEC envelope-M.SG yesterday
‘He got his envelope yesterday.’

Adverbial demonstratives referring to time, like other expressions of time, may occur at either end of the clause. In (14.3), the proximate time adverbial demonstrative *ithik* ‘now’

occurs at the start of the clause. In (14.4), the emphatic distal time adverbial demonstrative *avik* ‘then’ occurs at the end of the clause.

- (14.3) *Ithik* *sa* *chule* *nge* *nginaut* *taithē*.
 ithik *sa* *chule* *nge* *ngi=nē=ut* *ta=ithē*
 ADV.PROX.DEM NEF stay.NPRES 2SG.III 2SG.II=ASSOC=1PL.III EMPH=here
 ‘Now you’ll stay with us here.’

- (14.4) ... *glēm* *ma* *autha* *morta* *viavik* ...
 *gēlē*m *ma* *aut=a* *mor-ta* *vi=avik*
 near REL₂ 1PL.POSS=SPEC ancestor-H.PL EMPH=ADV.DIST.DEM
 ‘... with our ancestors at that time ...’

There is overlap between this set and the set of *m*- initial discourse markers described in §14.2.2.

14.2 Clause-initial discourse markers

Clause-initial discourse markers are distributed in clause-initial position along with clause linking devices (see Chapters 16 and 17 which describe relators, coordinators and subordinators). Mali makes use of a large set of clause-initial discourse markers that are readily broken into three major groups on the basis of their distribution and form. Within each category there are discourse markers across the semantic categories of mood, modality and time. On this basis, we can identify the following groups of clause-initial discourse markers:

- (a) (A)S(A)- forms occur after clause linking devices and may be followed by other discourse markers as listed in (b)–(d). These forms include: *as* ‘still, yet’, *asik* (marks irrealis and hypothetical clauses), *asika* (marks conditional clauses), *asip* ‘later on’, *sa* (contrasts events in the following clause with events that have previously been described), and *sai* ‘again’. They are described in §14.2.1.
- (b) M- discourse markers may occur before clause linking devices and also after the epistemic markers listed in (a), (c) and (d). These forms are reminiscent of lexical adverbs which are typically formed with the derivational prefix *ma*-. All of these forms at least contain an initial [m]. These forms include the temporal forms *maila chuvēsnia* (also *mailu chuvēsnia*) ‘last time, the other time’, *mali* ‘earlier’, *mēndu* ‘before’, *mir* ‘long ago’, *mithu* ‘much later on’ and the epistemic forms *mailu* or *nēmailu* ‘maybe, possibly’, *marik* ‘really (truly)’, *masa* ‘certainly’. They are described in more detail in §14.2.2.
- (c) K- discourse markers occur after clause linking devices and the forms listed above in (a). They may be followed by the discourse markers listed in (b). All of them share an initial velar that is realised either as a fricative or a voiceless stop. These forms include *kinai* ‘in contrast’, *kinak* ‘indeed’, *kinas* ‘just, recently’, *kok* ‘just, already’, *koki* ‘also’ and *kosa* ‘just, simply’, *koi* ‘not’ (a phonologically reduced form of *koiku* ‘not’), *kule* ‘later’, and *kusek* ‘only’. They are examined in more detail in §14.2.3.

- (d) Two other discourse markers that are more difficult to relate to the distribution described in (a) to (c) are *vandi* ‘desiderative’ and *sok* ‘really’. In general terms we can at least say that they tend to occur after the forms listed in (a) and may precede or follow the forms in (b) and (c). They are exemplified in §14.2.4.
- (e) Finally, there are also a couple of related nominal forms that are used to construct clauses that encode questions about or negation in relation to nouns: *a=mēnia* {*a=mēnia* SPEC-how} ‘how many, how much’ and *angēmbes* ‘no, nothing’ {*anga-ves* NSPEC-FLAT.SG}. They are discussed in Chapter 15 on special sentence types.

14.2.1 (A)S(A)- discourse markers

The (A)S(A)- discourse markers relate predominantly to temporal and irrealis meanings and have phonological as well as distributional properties in common. All of them make use of an initial phonetic sequence involving *sa* or *as*. They occur after clause linking devices and may be followed by other discourse markers as listed in (b)–(c). Examples of each term are provided below: (A) *as* ‘still, yet’, (B) *asik* (marks irrealis and hypothetical clauses), (C) *asika* (marks conditional clauses), (D) *asip* ‘later on’, (E) *sa* (contrasts events in the following clause with events that have previously been described), (F) *sai* ‘again’, and (G) *saika* ‘possibly’. These forms may occasionally co-occur with each other, see for example (14.11) and (14.13).

A. *as* ‘still, yet’

The discourse marker *as* is used to indicate that the situation described by the clause is extended in relation to other events within the discourse.

- (14.5) *Thalias as ngia mair.*
 thalias as ngia mair
 wizard still 2SG.I stand.PAST
 ‘Wizard, you just wait.’ (lit: ‘Wizard, still you stood.’)

This discourse marker is strongly associated with negative contexts where the temporal sequence (e.g. the relationship of potentially overlapping events) is being managed. An example of this type is provided as (14.6b).

- (14.6) a. *Tangamētta tha ndēn,*
 Tangamēt-ta ta dēn
 PN-H.PL 3H.PL.I arrive.PRES
- b. *das koi angama Aulingalta,*
 da=as koi angama Aulingal-ta
 and=still NEG INDEF PN-H.PL
- c. *ura angitha, angēmbēs.*
 ura angitha angēmbēs
 or someone NEG
 ‘Tolais came, but still no Sulkas or any others, no.’

B. *asik* ‘irrealis’

There are four contexts in which the atelic irrealis marker may be used: to describe hypothetical cases (such as are found in instructional texts) (14.7a), to describe historical events that were not witnessed by the speaker (14.8a), and to refer to possible future events (14.9a). It can also be used to construct interrogatives (see (15.25)). Where a subordinator is present *asik* occurs to its left (see (14.17)).

- (14.7) a. *Asik pia vandi ki sek.alugut*
 asik pe=ia vandi ki sek.alugut
 IRR there=REL₁ DESID 3F.SG.II be.married.NI
- b. *dasik at kochēna*
 da=asik at kao-kēna
 and=IRR 3F.SG.POSS maternal.uncle-H.PL
- c. *thi von.dēmgi ...*
 ti von.dēm=ki
 3H.PL.II give.away.NPRES=3F.SG.III
 ‘When she wants to get married, her uncles give her away ...’
- (14.8) a. *O, asik nēmailu cha ruchu tha.ithaiktik*
 O asik nēmailu kē=a ru-ki ta=ithaik=tik
 oh IRR maybe ART₃=SPEC person-F.SG EMPH=F.SG.PROX.DEM=EMPH
- b. *kia ve chia vang da.ithik.*
 kia pe kia vang ta=ithik
 3F.SG.I there 3F.SG.I run.NPRES EMPH=ADV.PROX.DEM
 ‘Oh, maybe this particular woman has run away now.’
- (14.9) a. *Asik ngu chut.mēnge nēgua chepki*
 asik ngu chut.mē=nge na=gu=a chep-ki
 IRR 1SG.II shoot.NPRES=2SG.III PREP=1.SG.POSS=SPEC spear-F.SG
- b. *thiathik.*
 ta=ithik
 EMPH=ADV.PROX.DEM
 ‘I’ll shoot you with this spear of mine.’

C. *asika* ‘if’

This form occurs at the beginning of conditional clauses. An example is provided in (14.10a). These clauses are discussed in more detail in §17.2.4.

- (14.10) a. ... *dasika ngia thēn.pēthama git,*
 da=asika ngia thēn.pēt=ma agit
 and=if 2SG.I find.NPRES =ART₂ CN.NSPEC
- b. *klan kama urēn’ga,*
 klan kama urēn-ka
 like ART₁ crayfish-M.SG

- c. *ka thamon sēthēm nge dē ngi nari*
ka thamon sa=tēm nge da ngi nari
 3M.SG.I speak.FUT to=GOAL 2SG.III and 2SG.II hear.NPRES
 ‘...and if you find anything, like a crayfish, it speaks to you, you must hear and obey.’

D. *asip* ‘later on’

The discourse marker *asip* indicates that the events described in the clause happened after other events that have already been established. An example is provided in (14.11).

- (14.11) *Asip sa ngua thēn sē gianga viam.*
asip sa ngua thēn sa gi=anga piam
 later.on NEF 1SG.I arrive.FUT with 2SG.POSS=NSPEC Tahitian.chestnut
 ‘Later I’ll come back with some of your Tahitian chestnuts.’

E. Contrasting event marker *sa*

The clause-initial discourse marker *sa* is homophonous with the allative/comitative preposition *sa* ‘to, with’, and with a clause-final discourse marker meaning ‘for a while’. This discourse marker is translated by Mali-English bilinguals in one of two ways: either with the English word ‘then’ or with present perfect tense marking (*have V-en*). When the present perfect tense is used in the translation, the adverb *already* is generally also present. This pair of translation equivalents reflects the fact that the function of *sa* in Mali does not map very well onto English. These translation strategies are all consistent with *sa* being used to introduce clauses that are presented as contrasting with previously mentioned events.

Often *sa* is simply used to indicate that a new state of affairs or a change in activity has taken place (triggering the translation *then*). The gloss used for *sa*, NEF, stands for ‘new event frame’. See examples (14.12a) and (14.13a) and (14.13b).

- (14.12) a. *Ngua mu avithēm sa ngua sot*
ngua mu avith-ēm sa ngua sot
 1SG.I put.PAST earth.oven-RCD.SG NEF 1SG.I finish.NI
 b. *dē ngua veng.vēt kama vēn’gi.*
da ngua veng.vēt kama vēn-ki
 and 1SG.I cover.NPRES ART₁ mound-F.SG
 ‘I made an earth oven then I finished and I covered the mound [of the earth oven].’
- (14.13) a. *Sa chule sa uthi lotu veia Anggini*
sa kule sa uthi lotu pe=ia Anggini
 NEF later NEF 1PL.II worship.NI there=REL₁ PN
 b. *sa as koia tha thēk kama lotuvemgi maru ...*
sa as koi=ia ta thēk kama lotuvem-ki maru
 NEF still NEG=REL₁ 3H.PL.I build.NPRES ART₁ church-F.SG really
 ‘Then we worshipped at Anggini, (then) still they hadn’t built a church permanently (lit: really) ...’

Example (14.13) also shows the formulaic sequence *sa chule sa* ‘then, later on’. Formulaic sequences of clause initial forms are discussed in §14.3.

At other times the discourse marker *sa* signals the introduction of earlier states of affairs that are relevant. In these cases the present perfect tense tends to be used in translation. Examples are found in (14.14b) and (14.15b).

- (14.14) a. *Dak kule dē tha ingim da ngēmbēs ta lu*
 dak kule da ta ingim da angēmbēs ta lu
 but later and 3H.PL.I look.NPRES and NEG 3H.PL.I see.NPRES
- b. *aiska ia sa tha met inavuk.*
 a=is-ka ia sa ta met i-na-vuk.
 SPEC=road-M.SG REL₁ NEF 3H.PL.I go.PAST DER₁-DER₃-up
 ‘And then they looked and they couldn’t see the road that they had gone
 down.’
- (14.15) a. *Dak secha ava musneng da samuk,*
 dak sek-ka av=a musneng da sa=muk
 but hero-M.SG 3M.SG.POSS=SPEC idea and to=across
- b. *dē sa ka rem ...*
 da sa ka rem
 and NEF 3M.SG.I realise.NPRES
 ‘But the hero was thinking, he had realised ...’

Although the translations for (14.14) and (14.15) are suggestive of past perfect marking in Mali, the fact is that *sa* is only loosely associated with the predicate. For example, in (14.16a), it occurs in clause-initial position before a sequence of topics. In most cases it has pragmatic rather than grammatical significance. Example (14.16) also shows that another, more causal translation of *sa* is also possible.

- (14.16) a. *Sa ka mundēmbēs sa gia ruavek*
 sa kē=a mudēm-vēs sa gi=a rua-vek
 NEF ART₃=SPEC fire-FLAT.SG NEF 2SG.POSS=SPEC friend-H.PL
- b. *tave thi mbang nēmēt nge.*
 ta=pe ti bang na=mēt nge
 3H.PL.I=there 3H.PL.II run.PRES from=within 2SG.III
 ‘So that huge fire, your friends, they are running away from you.’

The clause-initial discourse marker *sa* is in the process of grammaticalising in some contexts. In a sequence with predicative adjectives the discourse marker is interpreted as marking a resultant state predicate. For example, the adjective *amor* ‘big’ is the basis for the predicate *samor* ‘get bigger’. This verb is shown in (14.17). This is a process of conventionalisation rather than a derivational process which has been observed with a number of different adjectives. Other examples of the lexicalisation of syntactic sequences are discussed in §20.1.

- (14.17) *Ka thor ngo da samor ngo machelak.*
 ka thor ngo da samor ngo machelak
 3M.SG.I baptise.NPRES 1SG.III and get.bigger.NI 1SG.III little.bit
 ‘He baptised me when I got a bit bigger.’ (lit: ‘He baptised me and then
 (at that time) I was (already) a bit big.’)

F. *sai* ‘again’

The discourse marker *sai* ‘again’ (also written *sei*) is used to indicate that the events described in the clause are repeated. An example is provided in (14.18a).

- (14.18) a. *Sei tha vuinem sēmēk*
 sai ta vuinem sa=mēk
 again 3H.PL.I return.NPRES to=down
- b. *veia thi tēk pe.*
 pe=ia ti tēk pe
 there=REL₁ 3H.PL.II work.PRES there
 ‘Again they returned to where they worked.’

G. *saika* ‘possibly’

The discourse marker *saika* ‘possibly’ is the only discourse marker in this set with an epistemic orientation. It introduces clauses that describe a possible state of affairs. An example is provided in (14.19b).

- (14.19) a. *Dak ngua tu gusnēng ia*
 dak ngua tu gu=snēng ia
 but 1SG.I put.PRES 1SG.POSS=thought REL₁
- b. *saika anga ma marupki*
 saika anga ma marup-ki
 possibly NSPEC REL2 cassowary-F.SG
- c. *sik mailu chia mat angama sechithom ...*
 asik mailu kia mat angama sek-ithom
 IRR maybe 3F.SG.I get.PAST INDEF trap-DIM.DL
 ‘But I thought that maybe one of the cassowaries was caught in
 one of those two traps ...’

14.2.2 M- discourse markers

All of the forms in this set share an initial phonetic sequence [m(a)]. This is reminiscent of the derivational prefix *ma-* that forms adverbs from adjectives (§6.4), and also of the relator *ma* which is used to introduce modifiers at various levels of the clause (§16.5). These temporal and epistemic markers occur before clause linking devices and also after the epistemic markers listed in §14.2.1 and §14.2.3. M- marks the temporal forms *maila* *chuvēsnia* (also *mailu chuvēsnia*) ‘last time, the other time’, *mali* ‘earlier’, *mēndu* ‘before’, *mir* ‘long ago’, and *mithu* ‘much later on’; as well as the epistemic forms *mailu* or *nēmailu* ‘maybe, possibly’, *marik* ‘really, truly’, and *masa* ‘certainly’. All of the epistemic forms listed here also occur as manner adverbs in predicate final position (§13.2). Examples (14.20) and (14.21b), show temporal and epistemic discourse markers respectively.

- (14.20) *Asik mir da angabēs nanga.ma vondēmgi.*
 asik mir da angēmbēs na=angama vondēm-ki
 IRR long.ago and NEG PREP=INDEF gift-F.SG
 ‘Long ago there were no payments.’

- (14.21) a. *Sa cha mēs mavan dēma klēmēn*
 sa ka mēs mavan tēm=ma klēmēn
 NEF 3M.SG.I eat.PAST ginger GOAL=ART₂ fool
- b. *sa chule sa mailu angēthama chērnaska*
 sa kule sa mailu angētha.ma chērnas-ka
 NEF later NEF maybe 3N.POSS heat-M.SG
- c. *cha mēthacha.*
 ka mat=ka
 3M.SG.I get.PAST=3M.SG.III
 ‘So he chewed ginger and spat it over the fool, then maybe its heat got him.’

14.2.3 K- discourse markers

This set of discourse markers generally encode polarity and epistemic stance. They occur after clause linking devices and the forms listed in §14.2.1 above. They may also be followed by the forms listed in §14.2.2. All of these forms share an initial velar that is realised either as a fricative or a voiceless stop (§3.4.1.A). They include *kinai* ‘in contrast’, *kinak* ‘indeed’, *kinas* ‘just, recently’, *kinasa* ‘really, already’, *kok* ‘just, already’, *koki* ‘also’, *kosa* ‘just, simply’, *koi* ‘not’ (a phonologically reduced form of *koiku* ‘not’), *kule* ‘later’, and *kusek* ‘only’. Occasionally, two of these discourse markers may be found in the same clause. An example of the discourse marker *kosa* ‘just, simply’ is provided in (14.22).

- (14.22) *Da kosa chia tet inamēk.*
 da kosa kia tet i-na-mēk
 and just 3F.SG.I go.PRES DER₁-DER₃-down
 ‘And she simply went up.’

The negator *koiku* is shown in (14.23), functioning as a modifier to the clause.

- (14.23) *Kunēng dē koiku ngua ndrēm ia levavēt ura dēvaung.*
 kunēng da koiku ngua drēm ia levavēt ura dēvaung
 day and NEG 1SG.I know.PRES REL₁ four or three.M
 ‘Days, I don’t know, four or three.’

All of the forms listed above may occur after a clause-linking device and the forms listed in §14.2.1 as modifiers to the following clause, but a number of these discourse markers also occur in other contexts. For example, the negators *koiku* and *koi* also modify clauses introduced by the relator *ia*. This is described in (§16.4.6.B).

In addition, the discourse marker *kusek* ‘only’ can also occur as a peripheral modifier within an NP (§10.7), and *kule* ‘later’ often occurs as part of larger clause-initial formulaic sequences, which are discussed in §14.3.

The discourse marker *kinai*, in contrast, has the most varying set of semantic associations in clause-initial position. It is associated with a range of contexts in which one alternative is considered in relation to another. Example (14.24) shows a series of clauses all containing the discourse marker *kinai* ‘in contrast’ in initial position to signal that the activity being described is counter to the expectations of the speaker. In the context of this example, the hero fights to defend himself against someone the fool has provoked. The narrator speaks as the fool, who is distracting the hero by teasing him about his fighting

technique ('so that's how they fight, is it?'). The discourse marker is used by the (narrator as the) fool to signal the existence of alternative expectations about good fighting.

- (14.24) a. *Ma chinai paikdēm da,*
 ma kinai paikdēm ta
 REL₂ in.contrast jump.PRES 3H.PL.III
- b. *kinai thi vanggal,*
 kinai ti vanggal
 in.contrast 3H.PL.II suck.in.belly.NPRES
- c. *kinai tha thas, kinai nging.dēm̄da,*
 kinai ta thas kinai nging.dēm̄=ta
 in.contrast 3H.PL.I lie.down.FUT in.contrast duck.NI=3H.PL.III
- d. *aichua thi neng klan avik?*
 aichua ti neng klan avik
 I.see 3H.PL.II dodge.NPRES like ADV.DIST.DEM
 'They actually jump like that, they actually suck in their bellies, they actually lie down, they actually duck, I see, they dodge like that?'

In (14.25c) the discourse marker *kinai* is used in conjunction with *dak* 'but' to show that events have not proceeded as expected.

- (14.25) a. *Dē cha ve chiras ia krētkrēt.sēcha*
 da ka pe kē=iras ia krētkrēt.sē=ka
 and 3M.SG.I there 3M.SG.II=lie.NI REL₁ rustle.NI=3M.SG.III
- b. *vuk dē cha bangga vam.*
 vuk tēm kē=a bang-ka av=am
 up GOAL ART₃=SPEC house-M.SG 3M.SG.POSS=door
- c. *Dak kinai plaik.sēcha mēt ambangga*
 dak kinai plaik.sē=ka mēt a=bang-ka
 but in.contrast come.out.NPRES=3M.SG.III within SPEC=house-M.SG
- d. *ava vēmgi achik.*
 av=a vam-ki achik
 3M.SG.POSS=SPEC door-F.SG F.SG.CONTR.DEM
 'And so he pretended to make noise near the main door [but actually] instead he came out from the other door.'

The coordinator *da* 'and' (discussed in §17.1.1) also occurs with *kinai* (*da kinai* or *dinai* {*da=kinai* and=*in/contrast*}) in a similar function. It is often used to indicate alternations in entities taking the role of the actor as in (14.26).

- (14.26) a. *Auk, kule dinai cha tu*
 auk kule da=kinai ka tu
 well later and=*in.contrast* 3M.SG.I put.PRES
- b. *ava ngelenggi vik*
 av=a ngeleng-ki avik
 3M.SG.POSS=SPEC small.stone-F.SG ADV.DIST.DEM

- c. *vētha.vama avēlika dē chē tu.*
 pēt=avama a=vēlik-ka da kē tu
 at=3M.SG.POSS SPEC=sling-M.SG and 3M.SG.II shoot.PRES
 ‘Well, then in turn he puts his stone in his sling and he shoots.’

14.2.4 Other discourse markers

Two other discourse markers to be mentioned here are *sok* ‘really’ and *vandi* ‘desiderative’. The discourse marker *sok* occurs in clause-initial position and tends not to be used in conjunction with other discourse markers. As described in §14.3, *sok* may precede and follow *kule* ‘later’, one of the forms listed in §14.2.3. As noted above, *kule* is the basis for a whole series of formulaic sequences of clause-initial devices which are discussed in §14.3. The sequence *kule sok*, as well as an example of *sok* ‘really’ occurring independently are provided in (14.27). The sequence *sok kule* is shown in (14.28).

- (14.27) a. *Kule sok bremdēm ma chaelga*
 kule sok bremdēm ma a=kael-ka
 later really be.angry.NI ART₂ SPEC=wallaby-M.SG
 b. *sok cha vang vaur.*
 sok ka vang pa=ur
 really 3M.SG.I run.NPRES LOC=bush
 ‘Then the wallaby was really angry and he ran into the bush.’
- (14.28) *Sok kule dēma vaimga cha nari ...*
 sok kule da=ma a=paim-ka ka nari
 really later and=ART₂ SPEC=dog-M.SG 3M.SG.I hear.NPRES
 ‘The dog really heard ...’

The discourse marker *vandi* is used independently, but it also occurs quite freely in combination with any of the other clause-initial forms listed in this section (for a summary see the list in §14.2 (a)–(c)). It tends to occur after the forms listed in §14.2.1 and may precede or follow the forms in §14.2.2 and §14.2.3. An example of the desiderative discourse marker *vandi* occurring after the irrealis marker *asik* is provided in (14.29).

- (14.29) a. *Dasika vandi ngia thet diva ngi lu*
 da=asika vandi ngia thet diva ngi lu
 and=if DESID 2SG.I go.FUT PURP₃ 2SG.II see.NPRES
 b. *da chok mamēr ia ngi lu.*
 da kok mamēr ia ngi lu
 and just possible REL₁ 2SG.II see.NPRES
 ‘And if you want to go and see, you could see it.’

Note that the desiderative meaning can be used to indicate attempted actions, as shown in (14.30), as well as less actively pursued desires and states, shown in (14.31b).

- (14.30) *Vandi ithik da ngēni tlu ve.*
 vandi ithik da ngēni tlu pe
 DESID ADV.PROX.DEM and 2PL.II see.PRES there
 ‘Maybe now you can see there.’

- (14.31) a. *Auk sa kule da sa ut muit sanggēlēma*
 auk sa kule da sa ut muit sa=gēlēma
 well NEF later and NEF 1PL.I across.TERM to=near=RECIP
- b. *vandi va uthen ...*
 vandi va ut=then ...
 DESID PURP₁ 1PL.I=arrive.FUT
 ‘Well, then we were close to shore, we had almost arrived...’

In order to explicitly reinforce the desiderative meaning, the discourse marker *vandi* often co-occurs with the lexical verb *pēlēk* ‘want, like’ and its complement clause (introduced by the relator *ia*). Examples of this kind are provided in §16.4.2.C.

14.3 Clause-initial formulaic sequences

A number of clause-initial forms are used in clause-initial formulaic sequences with one of a small number of temporal adverbs and discourse markers. The clause-initial forms involved include the discourse markers *sa* NEF, *sai* ‘again’, and *sok* ‘really’, as well as the coordinators *da* ‘and’, *dak* ‘but’ and the subordinator *dai* ‘thus’. These forms flank a small number of temporal adverbs and discourse markers such as the adverbial demonstrative *ithik* ‘now’, and the discourse markers *kule* ‘later’ and, less frequently, *mali* ‘before’. The most common sequences are *da chule da* ‘and then’, *sa chule sa* ‘then later, then afterwards’. The second of these is shown in (14.32b).

- (14.32) a. *Aichua, da sa ngia muēn*
 aichua da sa ngia muēn
 I.see and NEF 2SG.I arrive.PAST
- b. *sa chule sa Pater Alphonse ka muēn?*
 sa kule sa Pater Alphonse ka muēn
 NEF later NEF PN PN 3M.SG.I arrive.PAST
 ‘I see, so you were born (lit: arrived) and then afterwards
 Father Alphonse arrived?’

The temporal adverb *mali* ‘earlier’ is shown as part of a formulaic sequence in (14.33) and a sequence with the proximate adverbial demonstrative *ithik* is shown in (14.34b).

- (14.33) *Sa mali sa chē tlu chi va sachong glan.*
 sa mali sa kē tlu ki pa sachong klan
 NEF earlier NEF 3M.SG.II see.PRES 3F.SG.III LOC eye only
 ‘Before that he only saw her in [his] dreams (lit: in (his) eye(s)).’
- (14.34) a. *Sa mali ia auna vēlēk pathēmna*
 sa mali ia aun=a a=pēlēk pa=tēm=na
 NEF earlier REL₁ 1PL.POSS=SPEC SPEC=love LOC=PATH=RECIP
- b. *sa ithik sa ngēmbēs.*
 sa ithik sa angēmbēs
 NEF ADV.PROX.DEM NEF NEG
 ‘Once we loved each other but now no more.’

Occasionally one of the two slots is not filled. Examples are shown in (14.27) and (14.28) and (14.34a). It is also possible that a different form may occur in one of the slots as shown in (14.31b) and in (14.35b).

- (14.35) a. *Sa kē tnarichi klan dik*
 sa kē tnari=ki klan ithik
 NEF 3M.SG.II hear.PRES=3F.SG.III like ADV.PROX.DEM
- b. *dē chule sai cha ve chē tnok.*
 da kule sai ka pe kē tnok
 and later again 3M.SG.I there 3M.SG.II cry.PRES
 ‘When he heard her saying that he started to cry again.’

14.4 Clause-final particles

A range of time adverbs and epistemic markers can also be found in clause-final position. These forms are a subset from across the categories listed in §14.1–§14.2 and §13.2. While time adverbs occur quite freely in clause-final position, only a few members of the other classes discussed above are also found here. The adverb *mēndu* ‘before’ refers to past time. Example (14.36b) shows *mēndu* encoding the time of an event in clause-final position.

- (14.36) a. *Ka thap mēni chama viulacha*
 ka thap mēni kama viula-ka
 3M.SG.I cut.NPRES on ART₁ mango-M.SG
- b. *nēchama vēthēpki mundu*
 na=kama vēthēp-ki mēndu
 PREP=ART₁ axe-F.SG before
- c. *da sa ithik sa vur aithir.*
 da sa ithik sa vur a=ithir
 and NEF ADV.PROX.DEM NEF grow.NPRES SPEC=new.growth
 ‘He made a cut on a mango [tree] before with an axe but now the cut
 is healed again with new skin.’

In (14.37) the adverb *naruer* ‘before, first’ is in final position.

- (14.37) ... *da sa chia lēt.tēchama mundēm naruer.*
 da sa kia lēt.tē=kama mundēm naruer
 and NEF 3F.SG.I light.NI=ART₁ fire first
 ‘... she lights the fire first.’

Another discourse marker occurring in clause-final position is *sai* ‘again’ as shown in (14.38b).

- (14.38) a. *Dē ngu vlēk iva ngia thet inavuk*
 da ngu vlēk iva ngia thet i-na-vuk
 and 1SG.II like.NPRES PURP₂ 2SG.I go.FUT DER₁-DER₃-up
- b. *diva ngi lucha sai.*
 diva ngi lu=ka sai.
 PURP₃ 2SG.II see.NPRES=3M.SG.III again
 ‘I want you to come down to see him again.’

In many cases the meaning of the discourse marker is different when it occurs in clause-final position. Thus, the new event frame marker *sa* means ‘for a while’ clause-finally (see (14.39c)).

- (14.39) a. ... *dē chama mēliarka dē ser ka*
 da kama mēliar-ka da ser ka
 and ART₁ small.parrot-M.SG and be.first.NI 3M.SG.III
- b. *kē vēthuvēs*
 kē vēt=av=pēs
 3M.SG.II dive.NPRES=3M.SG.POSS=head
- c. *dak kule chama karuvaika sa.*
 dak kule kama karuvaik-ka sa
 but stay.PRES ART₁ bird.sp-M.SG for.a.while
 ‘... the parrot would be the first to dive, but the earlybird should wait
 (lit: stay) a while.’

One additional form that occurs in clause-final position is the subordinator *dai* ‘thus’. As shown in (14.40d), in this context, *dai* has a contrastive meaning (see also §17.2.3).

- (14.40) a. *Sa chave sa, “I! Secha,*
 sa ka=pe sa i sek-ka
 NEF 3M.SG.I=there NEF oh hero-M.SG
- b. *ngu vēlēng ma nēma tha.ithik?*
 ngu vēlēng ma nēma ta=ithik
 1SG.II kill.NPRES ART₂ who EMPH=ADV.PROX.DEM
- c. *Ngua ve va vandi nguna aung*
 ngua pe va vandi ngu=nē aung
 1SG.I there PURP₁ DESID 1SG.II=ASSOC M.SG.INDEF.DEM
- d. *uni gamar dai.*
 uni gamar dai
 1DL.II fight thus
 ‘So he’s, “Oh! hero, who will I kill this time? I want someone to fight with.”’
 (lit: ... ‘Me and someone we will fight thus.’)

15 *Status and illocutionary force*

Strategies for forming negative clauses and, to a lesser extent, interrogatives have been mentioned in passing in the preceding chapters. This chapter draws together all of the forms and structures involved in encoding negative clauses (§15.2), interrogatives (§15.3) and imperatives (§15.4). First, the prosodic contours associated with specific types of illocutionary force are illustrated (§15.1).

15.1 Prosody and illocutionary force

Statements, polar questions and commands all have the same syntactic structure, making prosody the primary means of determining the intended illocutionary force of the utterance. A basic declarative clause functioning as a statement is presented in (15.1) and the pitch trace for this utterance is shown in Figure 15.1. The prosody of basic declarative utterances shows down-stepping across the utterance.

- (15.1) *Aichua, arucha ithak tik*
aichua a=ru-ka ithak tik
oh SPEC=person-M.SG M.SG.PROX.DEM EMPH

kinas ka ingip dē tha vēt ka.
kinas ka ingip da ta vēt ka
just 3M.SG.I die.NPRES and 3H.PL.I bury.NPRES 3M.SG.III
‘Oh, this person he just died and they buried him.’

Polar questions and commands have their own distinctive prosodic patterns. Example (15.2) shows a polar question, indicated by a sharp rise on the final syllable. This is reflected in the pitch trace of the utterance provided in Figure 15.2.

- (15.2) *Dē cha namu chē bēn.sēlēp sanggēlēmgī,*
da ka namu kē bēn.sēlēp sa=gēlēm=ki
and 3M.SG.I continue.NI 3M.SG.II question.NI to=near=3F.SG.III

‘Sok kama lengeiki nange?’
sok kama lengeik-ki na=nge
really ART₁ truth-F.SG PREP=2SG.III
‘And he continued to question her closely, “Is that really the truth?”’

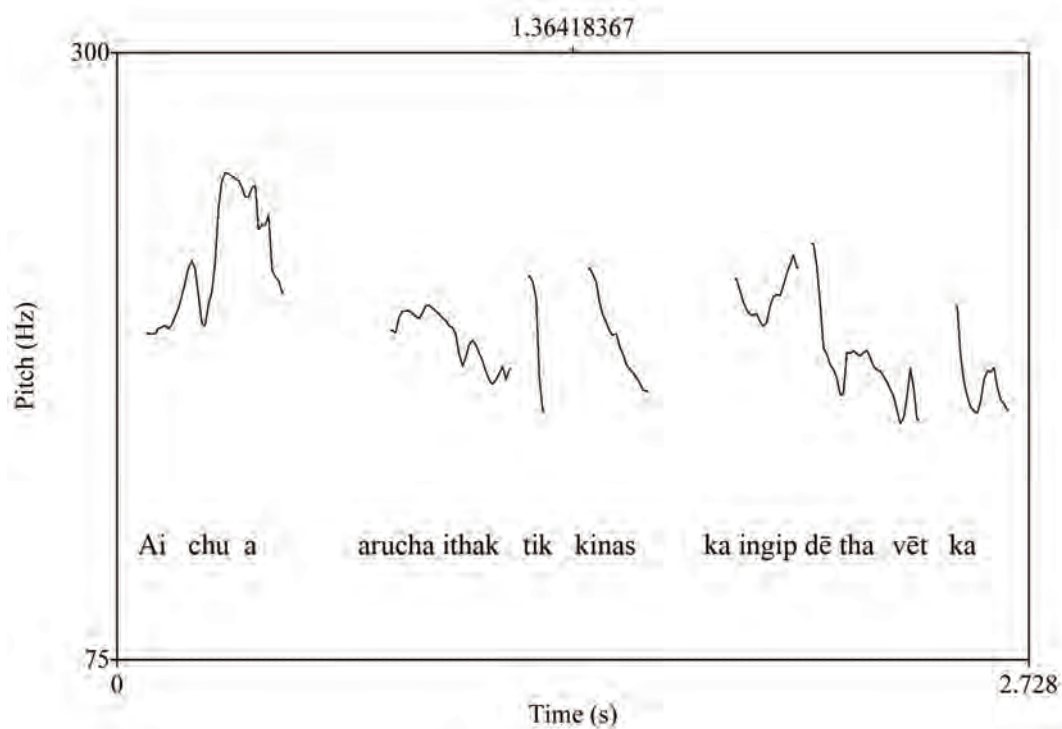


Figure 15.1: Pitch trace for (15.1)

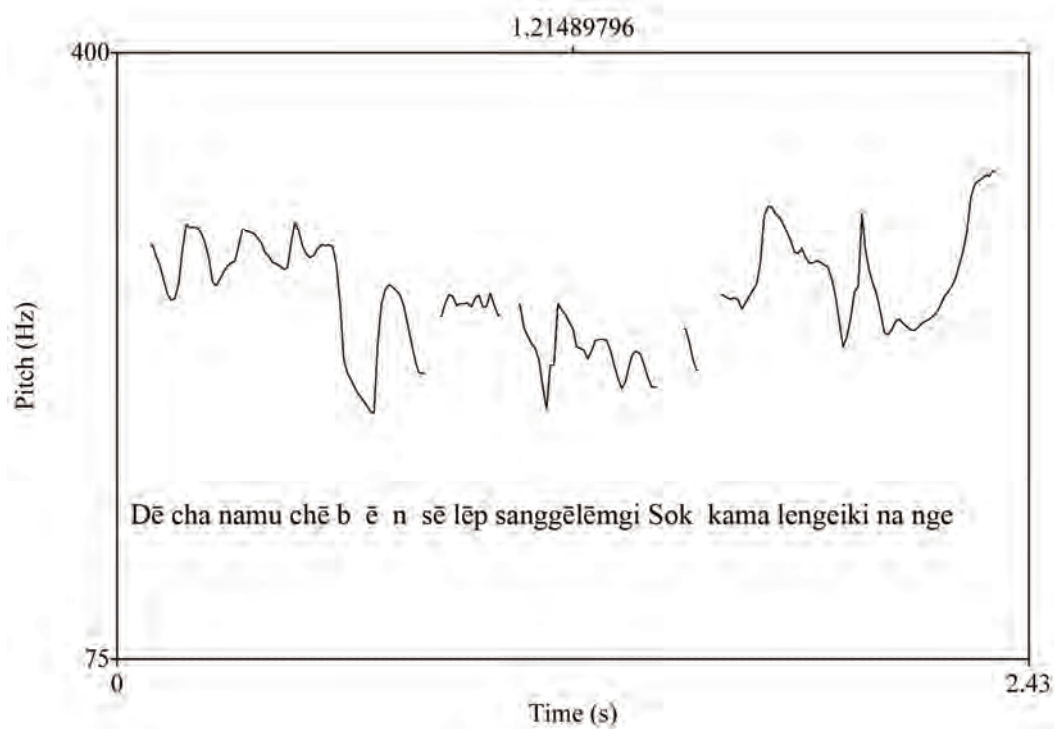


Figure 15.2: Pitch trace for (15.2)

A similar example is given in example (15.3) and Figure 15.3.

- (15.3) ... *mamēr ia unmo uni vang*
 mamēr ia un=mo uni vang
 possible REL₁ 1DL.I=all 1DL.II run.NPRES

 nēmēt kama kumēngas?”
 na=mēt kama kumēngas
 from=within ART₁ prison
 ‘... would it be possible for us to run away from the prison?’”

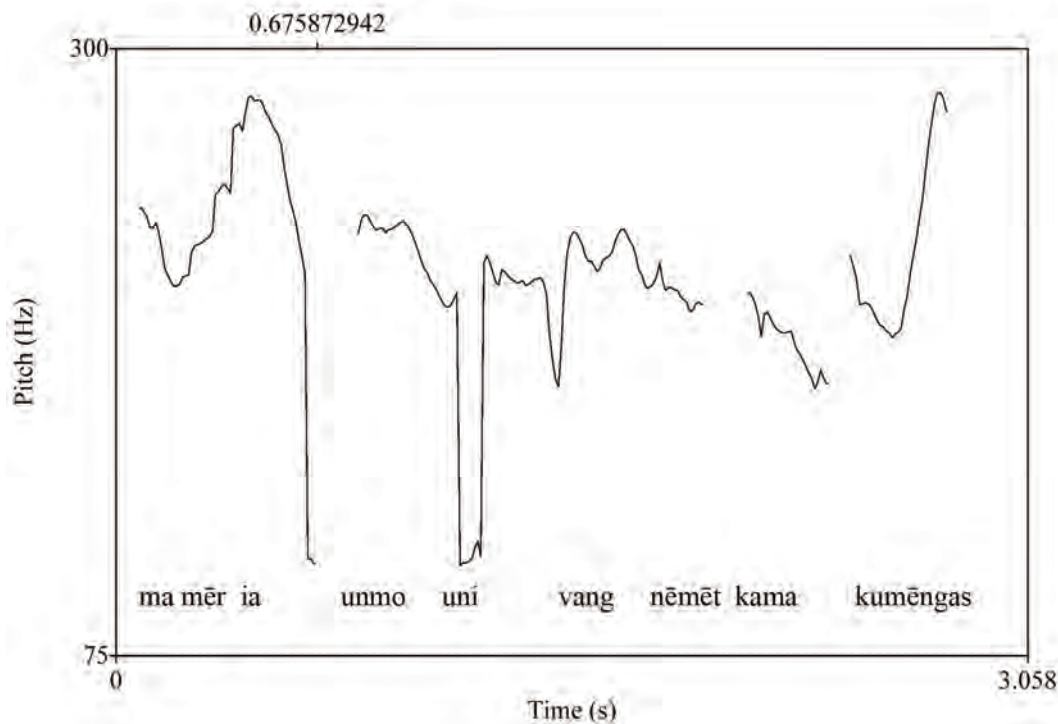


Figure 15.3: Pitch trace for (15.3)

Content questions make use of indefinite, interrogative and irrealis words and have a similar prosody to declarative clauses.

Commands are indicated by a slight rise in pitch on the final syllable. Example (15.4) shows a clause with an imperative reading. The pitch trace for this example is provided in Figure 15.4.

- (15.4) ... *nge mbang ngiaet nasotha ut.*
 nge bang ngia=thet nasot ut
 2SG.III run.PRES 2SG.I=go.FUT after 1PL.III
 ‘... you come with us.’

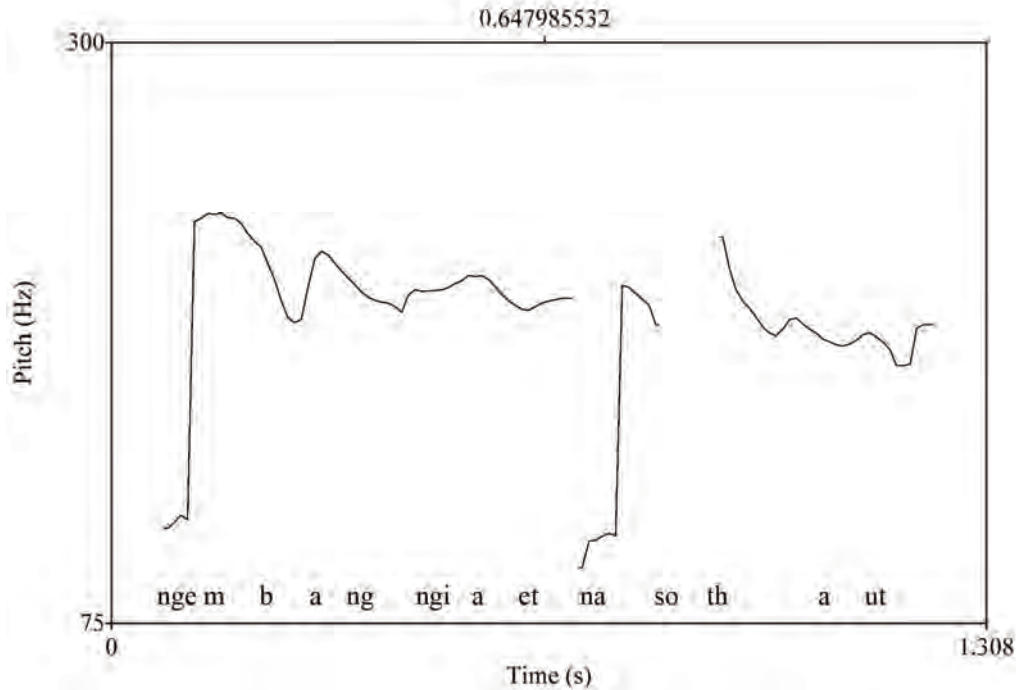


Figure 15.4: Pitch trace for (15.4)

15.2 Negation

This section is organised into the following parts: basic negation (§15.2.1), negation and dependent clauses (§15.2.2), negation in verbless clauses (§15.2.3), focus of negation on constituents within the clause (§15.2.4).

15.2.1 Basic negation

Negation is marked in the clause by one of three negative forms: the discourse markers *koiku* and *koi* (discussed in §14.2.3 with variant forms *choiku* and *koi* as is the case with all other K- discourse markers) and the negative dummy noun *angēmbes* (also various reduced forms: *angēbēs*, *ambēs*, *mbēs*) ‘nothing’ (mentioned in §5.1.2.C). All three forms are also used as a complete utterance meaning ‘no’. Basic negation of clauses with each of these negators is shown in examples (15.5)–(15.7).

- (15.5) *Koiku* *tha* *drēm* *sēvēt* *Deo*.
 koiku ta drēm sa=pēt Deo
 NEG 3H.PL.I know.PRES to=at God
 ‘They didn’t know about God.’

- (15.6) *Koi* *ut* *lēr.sēnas*, *ia* *nēma* *nēma*.
 koi ut lēr.sēnas ia nēma nēma
 NEG 1PL.I split.apart.NI REL₁ who who
 ‘We did not split apart into these ones and these ones.’

- (15.7) *Aichua, angēmbēs ka lu chi.*
 aichua angēmbēs ka lu ki
 oh NEG 3M.SG.I see.NPRES 3F.SG.III
 ‘Oh! He didn’t see her.’

15.2.2 Negation and dependent clauses

Examples (15.8b)–(15.10b) in all three cases, show that it is also possible to negate dependent clauses. All of these negated dependent clauses are introduced by the relator *ia* (§16.4).

- (15.8) a. *Sa veia thi sot sa tha ndrēm ia*
 sa pe=ia ti sot sa ta drēm ia
 NEF there=REL₁ 3H.PL.II finish.NI NEF 3H.PL.I know.PRES REL₁
- b. *mali sa koiku tha thucha ...*
 mali sa koiku ta thu=ka
 earlier NEF NEG 3H.PL.I shoot.NPRES=3M.SG.III
 ‘So when they finish they realise that they hadn’t shot him ...’
- (15.9) a. *Dak ngua ndrēm ia as*
 dak ngua drēm ia as
 but 1SG.I know.PRES REL₁ yet
- b. *koi anga Ulingalka das koi cha muēn*
 koi anga Ulingal-ka da=as koi ka muēn
 NEG NSPEC PN-M.SG and=yet NEG 3M.SG.I arrive.PAST
- c. *piavik.*
 vi=avik
 EMPH=ADV.DIST.DEM
 ‘But I know that no Sulka yet, he had not yet arrived then.’¹
- (15.10)a. *In mēn bēva bang di in lu ia*
 in muēn pe=pa bang da in lu ia
 3DL.I arrive.PAST there=LOC house and 3DL.I see.NPRES REL₁
- b. *angēmbēs nēma secha.*
 angēmbēs na=ma sek-ka
 NEG PREP=ART₂ hero-M.SG
 ‘They arrived at the house and they saw that the hero was not there.’

All three negators can also head a dependent clause introduced by the relator *ia*. This is discussed in §16.4.6.B and is illustrated in (15.11). This example suggests that the use of the relator *ia* introducing a distinct clause has to do with whether or not the negator is used predicatively. The difference is not easily reflected in the English translation but may be examined by comparing (15.11b) with (15.13).

- (15.11)a. *Sa chia muēn.bēt kama aruchēm,*
 sa kia muēn.vēt kama a=ru=ēm
 NEF 3F.SG.I find.PAST ART₁ SPEC=person=RCD.SG

¹ *Ulingalka* and *Sulka* are synonyms.

- b. *mbēs* *ia* *ulul* *ngam*, *achuvēt* *ngam*.
 angēmbēs *ia* *ulul* *ngam* a=chuvēt *ngam*
 NEG REL₁ long RCD.SG SPEC=short RCD.SG
 ‘She found a small person, he was not tall, he was short.’

15.2.3 Negation in verbless clauses

Etymologically, the negator *angēmbēs* seems to be made up of the non-specific determiner and the flat singular noun class marker: *angēmbēs* {*anga-ves* NSPEC-FLAT.SG}. This negator is often used to create negative verbless clauses. Example (15.12) shows a verbless clause with the subject of the clause in topic position, while (15.13) shows an NP in predicate function followed by the subject of the clause in O/S_O position, introduced by the preposition *na* (§4.1.5.B.i).

- (15.12) *ithē* *da* *ambēs*
 ithē *da* angēmbēs
 here and NEG
 ‘not here’

- (15.13) ... *dē* *sa* *mbēs* *anga* *rucha* *nango*.
 da *sa* angēmbēs *anga* *ru-ka* *na=ngo*
 and NEF NEG NSPEC person-M.SG PREP=1SG.III
 ‘... and at that time I was not a man.’

This latter non-verbal construction (with an underlying S argument introduced by the preposition *na*) is also possible with the negator *koiku* but is not attested for *koi*. An example with *koiku* is provided in (15.14).

- (15.14) *Koiku* *na* *angung* *mundu* *masa* *chia* *vēlēng* *ngēt*.
 koiku *na* angung mēndu *masa* *kia* *vēlēng* *ngēt*
 NEG PREP CN.INDEF.DEM before certainly 3F.SG.I kill.NPRES 3N.III
 ‘There was nothing because it certainly killed them.’

15.2.4 Focus of negation of constituents within a clause

The irrealis focus marker *na* (§13.3) is used to focus negation on the verb. For example, while the clause in (15.15b) would have been grammatical without the irrealis focus marker (cf. (15.5)), its use here contributes emphasis to the message about what the addressee has failed to do.

- (15.15) a. *Nge* *ma* *ngi* *palkochuik*,
 nge *ma* *ngi* *palkochuik*
 2SG.III REL₂ 2SG.II disobey.PRES
- b. *dē* *choiku* *nge* *na* *tnari* *amēthamon*.
 da *koiku* *ngi* *na* *tnari* *a=mēthamon*
 and NEG 2SG.II IRR.FOC hear.PRES SPEC=message
 ‘You who disobey, and do not listen when you are told.’
 (lit: You [are someone] who disobeys, and you do not hear messages.)

Mali does not have distinct forms of constituent negation but is able to focus negation on an NP by using the non-specific determiner *anga* (see (15.16) and (15.17b)) and much less frequently with the indefinite determiner *angama* (see (15.18c)).

- (15.16) *Da mbēs anga vondēmgi chia muēn.*
 da angēmbēs anga vondēm-ki kia muēn
 and NEG NSPEC prize-F.SG 3F.SG.I arrive.PAST
 ‘So no prizes were given.’

- (15.17) a. *Pea cha mēn ve vabang*
 pe=ia ka muēn pe pa=bang
 there=REL₁ 3M.SG.I arrive.PAST there LOC=house

- b. *da ngēmbēs ka mēn sanga slik.*
 da angēmbēs ka muēn sa=anga slik
 and NEG 3M.SG.I arrive.PAST with=NSPEC meat
 ‘When he got home he did not bring any meat.’
 (lit: ‘When he arrived home he did not arrive with any meat.’)

The irrealis focus marker can be used in clauses along with the negator and the non-specific NP. All three are shown in (15.18b).

- (15.18) a. *Pema ngi thu.samor.sichit*
 pe=ma ngi thu.samor.sē=ki
 there=REL₂ 2SG.II make.fun.of.FUT=3F.SG.III
- b. *da sik koiku anga isēm ngēna mēthachit*
 da asik koiku anga isēm ngē=na mat=ki
 and IRR NEG NSPEC bird 3N.I=IRR.FOC get.PAST=3F.SG.III
- c. *ura angama angon.*
 ura angama angon
 or INDEF flying.foxes
 ‘When you make fun of it no birds will be caught by it, nor flying foxes.’

NP and AdvP constituents may also be negated by making use of the topic slot in clause-initial position. As with nonverbal negation, this pattern of negation is limited to *angēmbēs* and *koiku*; it is not attested with *koi*. This strategy for negating the NP is shown in (15.19). Example (15.16) uses a non-specific NP in topic position.

- (15.19) *Da chok koiku kama mundēmbēs dē chok ngē dang ...*
 da kok koiku kama mundēm-vēs da kok ngē dang
 and just NEG ART₁ fire-FLAT.SG and just 3N.I burn.PRES
 ‘But not the fire, it just burnt ...’

An example of an AdvP negated in this way is provided in (15.20), but note that such examples are rare in the corpus.

- (15.20) a. *Dē chule da mbēs maulul*
 da kule da angēmbēs maulul
 and later and NEG long.time

- b. *da kosa chama sen'ga viavik*
 da kosa kama sen-ka vi=avik
 and just ART₁ knife-M.SG EMPH=ADV.DIST.DEM
- c. *ka mēt ka sen'gi dē chania krtēp.*
 ka mat kē=a sen-ki da ka=nia krtēp
 3M.SG.I get.PAST ART₃=SPEC knife-F.SG and 3M.SG.I=MIR chop.PRES
 'And then, not long, just like that the executioner, he got the knife and at once he chopped.'

15.3 Interrogatives

This section describes interrogative clauses in Mali. It deals with the following topics: §15.3.1 polar questions, §15.3.2 content questions, §15.3.3 question strategies based on ellipsis, §15.3.4 tag questions, and §15.3.5 the use of questions as polite commands. Intonation characterised by a sharp rise on the final syllable is used to mark polar questions (Figures 15.2 and 15.3). This intonation pattern contrasts with the falling intonation of declarative clauses and content questions and the slightly rising intonation of imperative clauses (Figure 15.4).

15.3.1 Polar questions

In the case of polar questions, intonation is the only indication that the clause is intended as a question since the clause has the same structure and content as a declarative clause. Examples of this type are given in (15.21) and (15.22).

- (15.21) ... *da chok ngēni tlu chama mundēm?*
 da kok ngēni tlu kama mundēm
 and just 2PL.II see.PRES ART₁ fire
 '... and could you all just see the fire?'
- (15.22) *Da tiathik ngia tamon*
 da ta=ithik ngia tamon
 and EMPH=ADV.DIST.DEM 2SG.I speak.PRES

sēchama achen'gen'gi avaik da morki?
 sa=kama a=chen'gen-ki avaik da mor-ki
 to=ART₁ SPEC=earthquake-F.SG F.SG.DIST.DEM and big-F.SG
 'And now will you speak about that particular earthquake, the big one?'

Polar questions based on verbless clauses are also possible. Example (15.23) shows a verbless clause used as a polar question. Follow-up questions (such as (15.23)) and questions used to check the speaker's understanding have a less marked rise than preliminary information-seeking questions. The intonation contour used by the speaker of this question was less sharp than for the above questions, possibly reflecting its use as a follow-up question.

- (15.23) *Kusek kama kapa klan?*
 kusek kama kapa klan
 only ART₁ corrugated.iron only
 'Was it only corrugated iron?'

An existential clause may also function as an interrogative. In example (15.24), the non-specific possessive pronoun *gianga* marks the focus of the question.

- (15.24) *Gianga* *mēthamon* *nga* *ve*
 gi=anga mēthamon ngē pe
 2.SG.POSS=NSPEC message 3N.I there
- vasik* *ngia* *thamēn* *nangēt*
 va=asik ngia thamon na=ngēt
 PURP₁=IRR 2SG.I speak.FUT PREP=3N.III
- sēvēt* *gia* *lunggutki?*
 sa=pēt gi=a lugut-ki
 to=at 2SG.POSS=SPEC spouse-F.SG
 ‘Do you have any message for your wife?’
 (lit: ‘Your (non-specific) message is there for you to tell your wife?’)

As well as intonation, it is possible to mark a polar interrogative with the atelic irrealis marker *asik*. The atelic irrealis marker was introduced in §14.2.1.B. As we noted there, *asik* is used in hypothetical cases, to describe historical events that were not witnessed by the speaker and to refer to possible future events. All of these uses of *asik* are compatible with questions. In example (15.25) *asik* occurs in a question relating to a non-witnessed historical event. See also (15.24).

- (15.25) *Asik* *ma* *Pater.Alphonse* *cha* *thor* *nge?*
 asik ma Pater.Alphonse ka thor nge
 IRR ART₂ PN 3M.SG.I wash.NPRES 2SG.III
 ‘Did Father Alphonse baptise you?’

It is also possible to form a polar question based on the adverb *mamēr* ‘possible’ which is used to encode epistemic modality (§16.4.6.A). In example (15.26) the construction is used to seek the addressee’s opinion.

- (15.26) *Gua* *ruachi,* *mamēr* *ia*
 gu=a rua-ki mamēr ia
 1SG.POSS=SPEC friend-F.SG possible REL₁
- unmo* *uni* *vang* *nēmēt* *kama* *kumēngas?*
 un=mo uni vang na=mēt kama kumēngas
 1.DL.I=all 1DL.II run.NPRES from=within ART₁ prison
 ‘My friend, shall we run away from prison?’
 (lit: ‘My friend, is it possible that we two run away from prison?’)

Polar questions may also result from the use of the tag question marker and a negator. This is illustrated in (15.48) in §15.3.4.

15.3.2 Content questions

Content questions typically have the same prosodic contour as declarative statements and there is no difference in word order. Occasionally, if the speaker is really emphasising the fact that the utterance is a question, they may use the intonation associated with polar questions, but this is not the usual strategy. Indefinite, irrealis and interrogative words provide cues to the intended illocutionary force of the utterance.

The similarities between declaratives and content questions are shown in examples (15.27) and (15.28). The interrogative *anggit* ‘what’ is used for the S argument in the existential clause in (15.27). It is equivalent to the NP *kama kuremga* ‘the betelnut’ in (15.28).

- (15.27) *Anggit ngē ve mēt gi uratki?*
 agit ngē pe mēt gi urat-ki
 CN.NSPEC 3N.I there within 2SG.POSS basket-F.SG
 ‘What’s inside your basket?’
- (15.28) *Kama kuremga cha ve mēt gu uratki.*
 kama kurem-ka ka pe mēt gu urat-ki
 ART₁ betelnut-M.SG 3M.SG.I there within 1SG.POSS basket-F.SG
 ‘The betelnut is in my basket.’

Mali has a good sized inventory of interrogative words. There is very little overlap between indefinite words and interrogative words. Indefinite words are common in polar questions, while interrogatives are found in content questions. Interrogative words are listed below, and discussed in their respective paragraphs.

- (A) interrogative and indefinite pronouns
- (B) non-specific and indefinite articles
- (C) indefinite demonstratives
- (D) *mēnia, minia* ‘how’
- (E) *amēnia* ‘how many’
- (F) *sana* ‘do something INDEF’
- (G) *kue, kuenai* ‘where’
- (H) *kēvēsnia* ‘when’

A. Interrogative and indefinite pronouns

Interrogative and indefinite pronoun paradigms inflect for noun class. The paradigms are set out in §5.2.3.B and §5.2.3.C. The interrogative pronouns for human referents are based on the interrogative word *nēma* ‘who’. These pronouns may only be used with human referents and are equivalent to proper nouns. As we noted in §8.3.3 (examples (8.1) and (8.2)), there are restrictions on which noun class suffixes the interrogative word *nēma* ‘who’ can take.

Example (15.29) shows the plural human interrogative pronoun *nēmda* ‘who’ functioning as the A argument. Whereas the common noun interrogative pronouns do not take articles, the proper noun interrogative pronouns may optionally take the proper noun article *ma*.

- (15.29) *Da ma nēmda iva tha mēthangēn save?*
 da ma nēma=ta iva ta mat=ngēn sa=pe
 and ART₂ who=H.PL PURP₂ 3H.PL.I get.PAST=2PL.III to=there
 ‘And who was it who took you all there?’

The interrogative *nēma* with a possessive pronoun as an enclitic is used to ask about possessor NPs. Interrogative possessive pronouns are discussed in §11.3.4 (Table 11.5). An example of the functionally unmarked interrogative possessive pronoun *nēma av* ‘whose’ is given in (15.30).

- (15.30) *Barth, nēma.av chulēski avaik mano?*
 Barth nēma=av a=kulēs-ki avaik mano
 PN who=3M.SG.POSS SPEC=smoke-F.SG F.SG.DIST.DEM down.slope
 ‘Barth, whose smoke is that down there?’

To ask about a common noun the indefinite pronouns are used. The count neutral term in this paradigm is *agit* ‘what’ (see Table 5.5 for the complete paradigm). Example (15.31) shows the masculine dual indefinite pronoun *anggiom* ‘what two’ functioning as the O argument in a complement clause.

- (15.31) *Ngi kuar nango ia*
 ngi kuar na=ngo ia
 2SG.II say.PRES PREP=1SG.III REL₁

nguat anggiom nēmēt gi uratki?
 ngu=that agiom na=mēt gi urat-ki
 1SG.II=get.FUT M.DL.NSPEC from=within 2SG.POSS basket-F.SG
 ‘Which two did you tell me to get from your basket?’
 (lit: ‘You told me that I will get what two from your basket?’)

This strategy is also used to frame questions about external arguments. An example is provided in (15.32).

- (15.32) ... *da tha thēk ava mbang namanggit?*
 da ta thēk av=a bang na=agit
 and 3H.PL.I build.NPRES 3M.SG.POSS=SPEC house PREP=CN.NSPEC
 ‘... and what did they build his house with?’
 (lit: ‘... and they built his house with what?’)

B. Indefinite and non-specific articles

Indefinite articles *angama* (non-specific indefinite, glossed as INDEF), and *angia* (specific indefinite, glossed as ‘which’) were introduced in §5.2.7 and are illustrated in more detail in §10.3.4. They can be used to ask about the identity of a referent. An example of the non-specific indefinite article is provided in (15.33) and the specific indefinite article is shown in (15.34).

- (15.33) *Angama achuan anggung bango?*
 angama a=chuan anggung pa=ngo
 INDEF SPEC=rice CN.INDEF.DEM BEN=1SG.III
 ‘[Is there] any rice for me?’
- (15.34) *Agia gulinggi dē ngia ve mētki?*
 anggia guling-ki da ngia pe mēt=ki
 which group-F.SG and 2SG.I there within=3F.SG.III
 ‘Which group are you in?’

C. Indefinite demonstratives

Indefinite demonstratives are used to form questions identifying a particular referent from a set (that is, questions translated with the English indefinite determiner ‘which’). Indefinite demonstratives were introduced in §5.2.6.D with examples in declarative clauses

and the full paradigm of indefinite demonstratives, set out in Table 5.21, may be found in that section. Like all demonstratives, indefinite demonstratives in interrogative clauses follow the head noun. An example is given in (15.35) with the reduced singular indefinite demonstrative *quachēm* ‘EXT.SG.INDEF.DEM’.

- (15.35) ... *dasik kule da ngēn met*
 da=asik kule da ngēn met
 and=IRR later and 2PL.I go.PAST
 sēvēt angama mbangēm quachēm?
 sa=pēt angama bang-ēm guachēm
 to=at INDEF village-RCD.SG RCD.SG.INDEF.DEM
 ‘... and then which village did you all go to?’

In (15.36) the long dual indefinite demonstrative *guasem* ‘LONG.DL.INDEF.DEM’ is the only element in the O NP.

- (15.36) *Chat guasem*
 ka=that guasem
 3M.SG.I=get.FUT LONG.DL.INDEF.DEM
 ura kusek kama mēngga ma sēgēk?
 ura kusek kama mēng-ka ma sēgēk
 or only ART₁ wood-M.SG REL₂ one.M
 ‘Should he get two [of those poles] or just the one piece of wood?’

D. *mēnia*, *minia* ‘how’

The interrogative adverb *mēnia*, *minia* ‘how’ is used to form questions about the manner in which something is done or the reason why something happened. Questions relating to manner also take the distal manner demonstrative *viavik* ‘that way’, while questions relating to reason also take a purposive subordinator, either *iva* or *diva* (see §17.2.1 on purposives). This interrogative form appears in the slot for VP adverbs (adverbs of manner) following O arguments (see also §13.2). An example of a question relating to manner is given in (15.37).

- (15.37) *Da tha thal kama kapa minia*
 da ta thal kama kapa mēnia
 and 3H.PL.I carry.NPRES ART₁ corrugated.iron how
 viavik?
 vi=avik
 EMPH=ADV.DIST.DEM
 ‘And how did they carry the corrugated iron?’

E. *amēnia* or *aminia* ‘how many’

The interrogative form *amēnia* or *aminia* ‘how many’ appears in a relative clause following the noun being counted. The interrogative is comprised of the manner interrogative *mēnia* ‘how’ and the specific article *a=*. Two examples are given in (15.38) and (15.39). The initial vowel of *amēnia* may be deleted as it is identical to the final vowel in the relativisers *ama* and *ma* (see also the rule in §3.4.2.D). This is the case in (15.38).

- (15.38) *Kama kunēng ama minia ama un'gi*
 kama kunēng ama amēnia ama un-ki
 ART₁ day REL₃ how.many REL₃ darkness-F.SG
mēt kama chunēngga va sachong?
 mēt kama a=kunēng-ka av=a sachong
 within ART₁ SPEC=sun-M.SG M.SG.POSS=SPEC eyes
 'How many days was darkness over the sun?' (lit: '... within the sun's eyes')
- (15.39) *Pepa.imēlēk ma amēnia nēngimēlēk?*
 pepa-imelēk ma amēnia na=ngimelēk
 paper-FLAT.PL REL₂ how.many PREP=FLAT.PL
 'How many papers are there?'

F. *sana* 'do something INDEF'

As we noted in §5.1.1.C, Mali has three dummy verbs: *tichina* 'do something', *tichina nē* 'make', and *sana* 'do something.INDEF'. The indefinite dummy verb *sana* is used in interrogatives that ask about action (15.40).

- (15.40) *Ngēn sana avi?*
 ngēn sana avi
 2PL.I do.INDEF.NPAST there
 'What are you all doing there?'

The verb *sana* has the form *mēsana* in the past tense, as shown in (15.41).

- (15.41) *Secha, ngia mēsana diva ngia mēt*
 Secha ngia mēsana diva ngia mat
 PN 2SG.I do.something.INDEF.PAST PURP₃ 2SG.I get.PAST
ta.ithang da.ithik?
 ta=ithang ta=ithik
 EMPH=CN.PROX.DEM EMPH=ADV.PROX.DEM
 'Hero, how did you get all these [things] here?'
 (lit: 'Hero, you did what to get these here?')

Compare (15.40) and (15.41) with (15.42), which uses the definite dummy verb *tichina nē* 'make something' in a content question marked by *minia viavik* 'how'. In (15.42) the speaker asks about the manner of the action.

- (15.42) *Tha tikina.nēchama hat klan minia viavik?*
 ta tichina.nē=kama hat klan mēnia vi=avik
 3H.PL.I make.NSPEC.PRES=ART₁ hat like how EMPH=ADV.DIST.DEM
 'How do they make hats like that?'

G. *kue, kuenai* 'where'

The interrogative word used to form locational questions has two forms: *kuenai* and *kue* 'where'. The second form seems to be a phonological reduction of the first. Both forms have the same distribution and are both used for asking about a path or a location. They occur in clause-final position like other location expressions such as prepositional phrases

and directions, discussed in §7 and §12 respectively. Examples (15.43) and (15.44) show *kuenai* and *kue* respectively.

- (15.43) *Asik, asip nēp bangang da asik ngua that kuenai?*
 asik asip na bangang da asik ngua that kuenai
 IRR later.on PREP night and IRR 1SG.I go.FUT where
 ‘Later at night, where can I go?’

- (15.44) ... *da gi nanēk kia thal nge choe?*
 da gi nanēk kia thal nge kue
 and 2SG.POSS mother 3F.SG.I give.birth.to 2SG.III where
 ‘... where did your mother give birth to you?’

H. *kēvēsnia* ‘when’

Like other expressions of time (§14.1), the question word for time *kēvēsnia* ‘when’ may occur at either end of the clause. Example (15.45) shows *kēvēsnia* ‘when’ at the start of the clause and example (15.46) at the end.

- (15.45) *Kēvēsnia ngia thēn peia Kokopo?*
kēvēsnia ngia thēn pe=ia Kokopo
 when 2SG.I arrive.FUT there=REL₁ PN
 ‘When will you get to Kokopo?’

- (15.46) *Ngi vinem kēvēsnia?*
 ngi vuinem kēvēsnia
 2SG.II return.NPRES when
 ‘When will you return?’

15.3.3 Question strategies based on ellipsis

Questions in which the expected answer forms a clause may be constructed by omitting the anticipated clause. Questions about motivation may have the form of sentences with empty slots after the complementiser *diva*. An example is given in (15.47).

- (15.47) *Ngi ser kama urat diva?*
 ngi ser kama urat diva
 2SG.II weave.NI ART₁ baskets PURP₃
 ‘Why are you weaving the baskets?’
 (lit: ‘You weave baskets for what purpose?’)

15.3.4 Tag questions

The form *ura* ‘or’ functions as a disjunctive coordinator clause-initially (§17.1.3) and as a tag question marker in clause-final position. Clause finally, *ura* may be used to form questions or as a rhetorical device. Example (15.48) shows the tag *ura* being used as a rhetorical device, while (15.49) shows it being used as the marker of an interrogative clause (intonation also contributes to the illocutionary force here). There are no negative tag questions.

- (15.48) *Auluvēkmētkā ura?*
 auluvēkmēt-ka ura
 coward-M.SG or
 ‘Are you a coward?’

- (15.49) *Dasik kok mamēr ia ngia mair.sēnas ura?*
 da=asik kok mamēr ia ngia mair.sēnas ura
 and=IRR just possible REL₁ 2SG.I stand.alone.PAST or
 ‘And it was possible for you to stand unsupported, or [not]?’

Polar questions based on the tag are also possible by placing the negator *angēmbēs* in final position in the clause.

- (15.50) *Pater.Mayerhoper ma cha muēn ura ngēmbēs?*
 Pater.Mayerhoper ma ka muēn ura angēmbēs
 PN REL₂ 3M.SG.I arrive.PAST or NEG
 ‘Father Mayerhoffer, he had arrived or not?’

15.4 Imperatives

Mali does not make use of a distinct morphosyntactic imperative construction but has a range of strategies for indicating that an imperative interpretation is intended. Imperatives are associated with distinctive prosody involving a slight rise in pitch on the final syllable (Figure 15.4). Imperatives are described in §15.4.1. Prohibitives have a distinct morphosyntactic construction (§15.4.2).

15.4.1 Imperative interpretations of declarative clauses

Imperative interpretations of declarative clauses are possible for second person and for first person plural. In this section we begin by considering (A) the use of normal declarative clauses as commands, followed by (B) clauses with omitted pronouns, (C) the use of the contrasting event frame marker *sa* in first and third person commands, and (D) the formation of imperatives on stative intransitive verbs.

A. Declarative clauses

A typical imperative with a second person singular subject is given in (15.51). The clause is formally identical to a declarative clause. The imperative reading arises because of the second person subject and the prosodic contour involving a slight rise in pitch on the final syllable.

- (15.51) *Ngia thamon sēthēm ngo marik.*
 ngia thamon sa=tēm ngo marik
 2SG.I speak.FUT to=GOAL 1SG.II truly
 ‘You will speak to me truthfully.’

In present tense clauses, an imperative reading is possible for second person (any number), as in (15.52) and first person plural shown in (15.53). This is the simplest imperative construction.

- (15.52) *Ngia tet dē nge tlu.vēthanas mamēr.*
 ngia tet da ngi tlu.vēt-nas mamēr
 2SG.I go.PRES and 2SG.II look.after.PRES-REFL properly
 ‘Go and look after yourself properly.’

- (15.53) *Ut tet.*
 ut tet
 1PL.I go.PRES
 ‘Let’s go.’

Clauses in the future tense form an imperative with second person pronouns (15.54). Future tense imperatives may carry a sense of being less demanding than present tense imperatives. There are no first person plural examples of an imperative marked by the future tense in the corpus.

- (15.54) *Ngi chunaik kama marasin mamēr.*
 ngi chunaik kama marasin mamēr.
 2SG.II drink.NPRES ART₁ medicine properly
 ‘Drink the medicine properly.’

B. Clauses with ellipted pronouns

In virtually all cases the pronoun must be present in the clause. The only verb that is allowed as an exception to this rule is *nari* ‘listen’, as shown in (15.55):

- (15.55) *Nari!*
 nari
 hear.NPRES
 ‘Listen!’

This example can only have a second person reading, but may refer to any number. (*Nari* can be hissed in a non-specific way when one is sitting within a large talkative gathering if one is having trouble hearing the main speaker.)

C. First and third person commands

Declarative clauses intended to have imperative interpretations for first and third person must take the new event frame marker *sa* in clause-initial position. The corpus shows that an imperative interpretation is possible for singular (15.56), dual and plural (15.57) first person referents as well as for singular (15.58) and plural (15.61) third person referents.

- (15.56) *Sa ngua tet.*
 sa ngua tet
 NEF 1SG.I go.PRES
 ‘Let me go.’ (Context: I have to go.)

- (15.57) *Sa ut tet.*
 sa ut tet
 NEF 1PL.I go.PRES
 ‘Let’s go.’ (Context: We have to go.)

- (15.58) *Sa chi bang.*
 sa ki bang
 NEF 3F.SG.II run.PRES
 ‘Let her come.’ (Context: She has to run.)

D. Imperatives based on stative intransitive verbs

In addition to the above examples featuring transitive or active intransitive verbs where the subject is an A/S_A argument, the following examples show that at least some stative intransitive verbs (those in which the subject maintains control over the event) may also be used in imperative constructions. In this case the S_O argument can be a first, second or third person pronoun, provided the use of *sa* described in (C) is maintained. An example of second person is given (15.59), while first person is shown in (15.60) and third person in (15.61).

- (15.59) *Mēnaman.nangi.*
 mēnaman.na=nge
 be.quiet.NI=2SG.III
 ‘Be quiet.’
- (15.60) *Mēnaman.naut.*
 mēnaman.na=ut
 be.quiet.NI=1PL.III
 ‘Let us be quiet.’
- (15.61) *Sa mēnaman.natha.*
 sa mēnaman.na=ta
 NEF be.quiet.NI=3H.PL.III
 ‘Let them be quiet. (They have to be quiet.)’

15.4.2 Prohibitives

Whereas (positive) imperatives are not structurally distinct from plain declarative clauses, prohibitives are formally distinct. Prohibitive clauses are marked by the K-discourse marker *kule/chule*. An example is provided in (15.62).

- (15.62) *Kule ngia tet mēt kama ais*
kule ngia tet mēt kama ais
 NEG.IMP 2SG.I go.PRES within ART₁ wet
- peia arēm nge.*
 pe=ia a=rēm nge
 there=REL₁ SPEC=sick 2SG.III
 ‘Don’t go in the wet when you are sick.’

The alternation between the <k> and <ch> forms of the prohibitive seem to have different illocutionary force. The <k> form is possibly stronger than the <ch> form. Example (15.63) shows a milder imperative with *chule*, in which a person is begging not to be the centre of attention.

- (15.63) *Chule ma ngia tu.ma.*
 kule ma ngia tu.ma
 NEG.IMP REL₂ 2SG.I make.fun.PRES
 ‘Don’t make fun (of me).’

Two additional grammatical words are used in prohibitive constructions to modulate illocutionary force. The relator *ma* sets up a structure in which the prohibitive is used predicatively (on analogy with the use of dependent clauses with negators described in §15.2.2 above). This construction indicates something marked in the speaker’s attitude. It may be used to soften a prohibitive as in (15.63). Depending on the context and the prosody of the speaker, however, the relator can also be used to strengthen the prohibition (15.64).

- (15.64) *Kule ma avinos nge avi*
 kule ma avinos nge avi
 NEG.IMP REL₂ play.around.NI 2SG.III there
mēt kama athēchēnmu.
 mēt kama a=thēchēnmu
 within ART₁ SPEC=sacred.place
 ‘Don’t play around there in the sacred place.’

The irrealis focus marker *na* may be used alone in a declarative clause to give a prohibitive reading (15.65), with *kule/chule* (15.66), or in combination with *ma* (15.67).

- (15.65) *Ngī nā methamēn ithēm gu dul.*
 ngī nā methamēn i-tēm gu dul
 2SG.II IRR.FOC speak.PAST DER₁-THEME 1SG.POSS money
 ‘You must not tell about my money.’
- (15.66) *Chule ngia nā thu ngo!*
 kule ngia nā thu ngo
 NEG.IMP 2SG.I IRR.FOC shoot.NPRES 1SG.III
 ‘Don’t shoot me!’ (Begging.)
- (15.67) *Kule ma ngia nā ngim!*
 kule ma ngia nā ngiem
 NEG.IMP REL₂ 2SG.I IRR.FOC look.PRES
 ‘Don’t look!’ (Warning.)

It is also possible to form third person prohibitives.

- (15.68) *Kule ma ki bang.*
 kule ma ki bang
 NEG.IMP REL₂ 3F.SG.II run.PRES
 ‘She mustn’t come.’

16 *Clause linkage*

Clause linking in Mali is striking because there are no morphological processes of subordination (nominalisation, contrasts between finite and non-finite verbs, switch reference marking, etc.) of the sort that are usually associated with dependency or embeddedness of clauses. This makes it difficult to speak in terms of structurally main versus non-main clauses as the structure of each clause is kept intact. In spite of the lack of morphological complexity associated with clause linking in Mali, a rich range of semantic relationships exist between clauses. These relationships are marked by words or clitics, generally in clause-initial position. Apart from clause-initial forms, the main correlates of clause linking in Mali are semantic dependency, including presupposition and, in some cases, syntactic embeddedness.

This chapter provides a framework for describing the three classes of clause linking devices in Mali: relators, subordinators, and coordinators, showing that in all cases the clauses involved are fully tensed (§16.1) and outlining the differences between them (§16.2). Three types of clause linking involving syntactic embedding, marked by relators, are then discussed (§16.3–§16.6). Coordinators and subordinators are discussed in §17.

16.1 Lack of distinction between ‘main’ and ‘subordinate’ clauses in Mali

The only necessary elements in a clause are the head of the predicate and its concordial pronoun(s). There are no constraints on the coding of tense, aspect or modality in linked clauses in Mali and A/S_A and concordial pronouns are required for every verb where they could occur. In other words, as noted above, there is no clause-internal means of distinguishing between a main clause and a non-main clause in the language. Examples (16.1) and (16.2) show complex clauses with fully tensed verbs in the subordinate clause (indicated by square brackets).

- (16.1)a. *Sa thaithik sa ngēni lu Ø ia*
 sa ta-ithik sa ngēni lu ia
 NEF EMPH-ADV.PROX.DEM NEF 2PL.II see.NPRES REL₁
- b. [*vaimga da cha tēs chama asnok*].
 a=paim-ka da ka tēs kama a=snok
 SPEC=dog-M.SG and 3M.SG.I eat.PRES ART₁ SPEC=excreta
 ‘So now you see that the dog eats excreta.’

- (16.2)a. *Sa chule sa ka chuar nēma secha Ø ia*
 sa kule sa ka chuar na=ma sek-ka ia
 NEF later NEF 3M.SG.I say.NPRES PREP=ART₂ hero-M.SG REL₁
- b. [*sa chule sa ini thonachi*].
 sa kule sa ini thon=ki
 NEF later NEF 3DL.II throw.away.NPRES=3F.SG.III
 ‘So then he told the hero that afterwards they’d throw her away.’

Example (16.3) shows that subordinate clauses functioning as modifiers within the NP are also formally identical to main clauses. The relators *ma* and *ama* are used in relativisation strategies but should not be considered as relativisers *per se*. The justification for this is set out in §16.2–§16.6, below.¹

- (16.3)a. *Sa uthi skruim² autha lat*
 sa uthi skruim aut=a lat
 NEF 1PL.II continue.NI 1PL.POSS=SPEC garden
- b. *ama [mundu ut vat]*.
 ama mēndu ut vat
 REL₃ before 1PL.I plant.NPRES
 ‘So we continued making gardens that we planted before.’

Although linked clauses have the same type of content and the same syntactic structure as main clauses, their interpretation is semantically dependent on the surrounding context. Mood is a significant parameter in determining the semantic relations between clauses. The temporal clause in (16.4b) gains a quasi-conditional reading because of the irrealis clause in (16.4a).

- (16.4)a. *Auk, [asik peia amor ngēt]₁*
 auk asik pe=ia a=amor ngēt
 well IRR there=REL₁ SPEC=big 3N.III
 ‘Well, if they’re big,
- b. [*sa veia thi tēk sēng mēngēt*]₂,
 sa pe=ia ti tēk sēng mēt=ngēt
 NEF there=REL₁ 3H.PL.II work.PRES at.base within=3N.III
 ‘then when people work around them,
- c. [*da sa chēvitha athēvama viam*
 da sa kēvi=ta athēvama a=piam
 and NEF CONTR=3H.PL.III 3H.PL.POSS SPEC=Tahitian.chestnut
 ‘then they claim those particular Tahitian chestnuts
- d. *paivang ama sik ta tēs ngēt*]₃.
 paivang ama asik ta tēs ngēt
 EMPH.CN.DIST.DEM REL₃ IRR 3H.PL.I eat.PRES 3N.III
 ‘that they will eat.’

¹ In this chapter, where the relator introduces a modifier, the head of the phrase (generally a head noun in an NP) is underlined.

² Note that *skruim* is a Tok Pisin borrowing. There is a Mali word *namu* ‘continue’; it is grammaticalising into an aspectual marker. Perhaps this is the motivation for using a Tok Pisin loan.

16.2 Clause linking types

In Mali, clause linking is indicated by forms that occur in clause-initial position. In the following sections and the next chapter, I introduce each clause linking device in turn and comment on the types of relationships it encodes. The linking devices are grouped according to the type of relationship they signal.

If we begin by drawing a distinction between those clause linking devices that allow an embedded clause within the main clause at some level and others that do not, we are able to distinguish the relators, *ia* (§16.4), *ma* and *ama* (§16.5–§16.6), from other clause linkers. The grounds for making distinctions among the remaining clause linkers are based on the strength of the semantic dependency between the clauses. On this basis we can distinguish between coordinators (§17.1), which can link clauses without necessarily indicating semantic relationships between them, and subordinators which impose semantic relations between clauses (§17.2). The relators as a group are introduced in §16.3 before more detailed descriptions in §16.4–§16.6.

16.3 Overview of the relators

All three relators are used to introduce clauses that are embedded within another clause as dependents of an NP or an AdvP. They are also used to introduce NPs in this function. The difference between the relators has to do with the relationship between the head and the subordinate element. This may be summarised as follows:

- *ia* introduces clauses or NPs that have the same syntactic status as the NP or AdvP head they are dependent upon. <A=B>
- *ma* introduces clauses or NPs that provide additional information about the NP or AdvP head they are dependent upon. <A≈B>
- *ama* introduces clauses or NPs that describe or refer to one particular characteristic of the NP or AdvP head they are dependent upon. <B is a characteristic of A>

The relator *ia* introduces subordinate clauses or NPs whose status is equivalent to another noun or an adverb that functions as the head of a phrase. The constituents introduced by *ia* are alternatives to the head of the phrase, and semantically the two elements stand in an equative relationship to each other. There is often an apparent sense that the speaker uses the subordinate clause to elaborate on an underspecified entity or theme that the head of the phrase refers to (see for example (16.16)). That is, <A=B>, where A is the head of the phrase and B is the element introduced by the relator. Subordinate clauses occurring within the VP can be understood as headless examples of this same relation.

Evidence for the underlying unity of the functions of *ia* is demonstrated by the use of the relator in speech reports. Speech reports may optionally be introduced by the expression *klaŋ ta ithik ia* ‘like this that’. Where the framing expression is used, there is an overt head for the subordinate clause, the proximate demonstrative *ta ithik* ‘this’. An example is provided in (16.5).

- (16.5)a. *Kule dē chama chaelka cha kuar nacha*
 kule da kama a=kael-ka ka kuar na=ka
 later and ART₁ SPEC=wallaby-M.SG 3M.SG.I say.PRES PREP=3M.SG.III
- b. *chēlan ta.ithik ia, “[Ngu mēs kama snok].”*
 klan ta=ithik ia ngua mēs kama snok
 like EMPH=ADV.PROX.DEM REL₁ 1SG.I eat.PAST ART₁ excreta
 ‘Then the wallaby said to him, “I ate excreta.”’

The introduction is associated with reported speech from distant original sources, such as texts in which animals (16.5) or the ancestors speak.

Where the frame does not occur, there is arguably a headless construction giving the appearance of a subordinate clause headed by the verb. Two examples occur in (16.6c) and (16.6d).

- (16.6)a. *Auk kule sa ma chaelga*
 auk kule sa ma a=kael-ka
 well later NEF ART₂ SPEC=wallaby-M.SG
- b. *ka chuar nacha Ø ia,*
 ka chuar na=ka ia
 3M.SG.I say.NPRES PREP=3M.SG.III REL₁
- c. “[*Tik sa ngu chuar nange Ø ia*
 ithik sa ngu chuar na=nge ia
 ADV.PROX.DEM NEF 1SG.II say.NPRES PREP=2SG.III REL₁
- d. [*ngu mēs kama asnok*].”
 ngu mēs kama a=snok
 1SG.II eat.PAST ART₁ SPEC=excreta
 ‘Well, then the wallaby said to it, “Now, I’ll tell you that I ate the excreta.”’

In essence then, this form straddles the area between complement clauses and relative clauses in its structural properties and also in terms of its function. I have not used the term ‘complementiser’ to label *ia* as this does not cover the core of its function, which is to introduce a constituent that is equal to, or occurs in place of, a syntactic head. Examples are given in (16.5) and (16.6) respectively.

As we have seen, the relator *ia* within an NP stands in an equivalent relationship with the head of the NP (see the examples in §16.4.4). In contrast, clauses introduced by the relators *ma* and *ama* introduce supporting material that helps the addressee determine who or what the head of the NP refers to. These clauses have the status of modifiers. There is a semantic difference between the two relators. Whereas the relator *ma* provides additional information allowing the addressee to resolve the reference of the head of the NP <A≈B>, the relator *ama* provides information about a particular attribute of the head of the NP: <B is a characteristic of A>. A simple example illustrating this contrast is shown in (16.7). The relator *ama* introduces the characteristic ‘big’ whereas the relator *ma* introduces a more complete description, in this case a circumlocution describing the type of dish.

- (16.7)a. *Sa chiat kama amilatki ama [morki]*
 sa kia=that kama a=milat-ki ama mor-ki
 NEF 3F.SG.I=get.FUT ART₁ SPEC=plate-F.SG REL₃ big-F.SG

- b. *ma* [thi *kiar.vēt* *kama lamēs* *sēvemgi*].
 ma *ti* *kiar.vēt* *kama lamēs* *sa=pem=ki*
 REL₂ 3H.PL.II scrape.PRES ART₁ coconut to=in=3F.SG.III
 ‘She gets a big dish to scrape the coconut into.’

Also consider (16.8) and (16.9). Both examples concern the colours of the entities involved. The relator *ma* is used in (16.8) where the purpose of the subordinate clause is to uniquely identify one hat from another. The two hats in question are the only relevant hats in the village. The speaker is assigning each hat to an owner.

- (16.8)a. *Tonya atha* *hatki* *ma* [chēthiacha *nachi*]
 Tonya at=a *hat-ki* *ma* *a=kēthia-ka* *na=ki*
 PN 3F.SG.POSS=SPEC hat-F.SG REL₂ SPEC=blue-M.SG PREP=3F.SG.III
- b. *dak Mark da ava* *chik* *ma* [chabapki].
 dak Mark da av=a *achik* *ma* *chabap-ki*
 but PN and 3M.SG.POSS=SPEC F.SG.CONTR.DEM REL₂ white-F.SG
 ‘Tonya’s hat (is the) blue (one) and Mark’s (is the) white (one).’

Since the relators *ama* and *ma* are also able to introduce modifier NPs within AdvPs, it is not accurate to more generally assign it the label ‘relativiser’, although there is obvious similarity with the function of the relativising strategy shown in (16.8). In (16.9), with *ama*, the adjective *chabap* ‘white’ occurs again but this time it is used to indicate a particular attribute of the sap of the breadfruit tree.

- (16.9)a. *Kama variacha*
 kama varia-ka
 ART₁ breadfruit.tree-M.SG
- b. *da atha* *nun’ga* *ama* [chabapka].
 da at=a *nun-ka* *ama* *chabap-ka*
 and 3F.SG.POSS=SPEC sap-M.SG REL₃ white-M.SG
 ‘The breadfruit tree has white sap.’
 (lit: ‘The breadfruit tree and its sap which is white.’)

Table 16.1 summarises the differences between the relators and their distribution and functions. Dashes in the table indicate categories that do not occur. Relevant sections of discussion are indicated.

Table 16.1: Function and distribution of *ia*, *ma* and *ama*
 (A = head of embedded clause; B = embedded clause)

	<i>ia</i>	<i>ma</i>	<i>ama</i>
Semantic relation to head	<(A)=B>	<A≈ B>	<B is a characteristic of A>
Prosodic associations	relator is prosodically associated with main clause; prosodic break after relator relatively common	relator is prosodically associated with material it introduces; prosodic break before relator not unusual	relator is prosodically associated with material it introduces; prosodic break before relator unusual
Optional head	yes (16.6)	§16.5.4	no

	<i>ia</i>	<i>ma</i>	<i>ama</i>
Equivalent to an O/S _O argument	introduces clauses; §16.4.1–§16.4.3	§16.5.4	no
Modifier within an NP	introduces clauses and NPs; §16.4.4	introduces clauses and verbless clauses; §16.5.1	introduces clauses and NPs; §16.6.1
Modifier within AdvP	introduces clauses and NPs; §16.4.5–§16.4.6	introduces clauses and/or NPs; §16.5.2	introduces clauses and NPs; §16.6.2

16.4 The relator *ia*

The relator *ia* occurs with the following functions: introducing naming clauses (§16.4.1), introducing other subordinate clauses equivalent to an O/S_O argument (§16.4.2), including clauses related to speech act verbs (§16.4.3), introducing NPs or clauses equivalent to NPs (§16.4.4), clauses or place names equivalent to location adverbials (§16.4.5), clauses or NPs equivalent to temporal adverbials (§16.4.6), and clauses expanding manner adverbs and negators (§16.4.7). Examples of each type are set out below.

16.4.1 Naming clauses

Two equivalent versions of an O argument are useful in the predication of the names of entities. Example (16.10b) is a subordinate clause that contains the transitive verb *tes* ‘call’ and the proper name *Nguingimga* introduced by *ia* in apposition to the third person masculine pronoun.

- (16.10)a. *Katiketka chēk*
katiket-ka achēk
catechist-M.SG M.SG.CONTR.DEM
- b. *ma tha tes ka ia [Nguingimga].*
ma ta tes ka ia Nguingimga
REL₂ 3H.PL.I call.PRES 3M.SG.III REL₁ PN
‘A catechist who they call [him] Nguingimga.’

Although this construction is superficially similar to a complex transitive clause in English (as shown in the translation of (16.10)), the two are not the same, as shown in (16.11c) in which the subordinate clause occurs ‘headlessly’, that is, without a head noun it would stand in apposition to.

- (16.11)a. *Sa chia met di chia muēn.bēthatha*
sa kia met da kia muēn.vēt=ta
NEF 3F.SG.I go.PAST and 3F.SG.I find.PAST=3H.PL.I
- b. *ve ia athēva bangēm*
pe ia athēv=a bang=ēm
there REL₁ 3HPL.POSS=SPEC village=RCD.SG
- c. *peia tha tes Ø ia [Chronia] ...*
pe=ia ta tes ia Chronia
there=REL₁ 3H.PL.I call.PRES REL₁ PN
‘Then she went and she found them there [at] their village there which they call Chronia ...’

16.4.2 Subordinate clauses equivalent to an O/S₀ argument

Members of the following semantic categories of verbs allow subordinate clauses introduced by *ia* in O function and do not necessarily require an overt head to the clause: (A) perception, (B) cognition, (C) desire, (D) emotion, (E) trying, and (F) deception. Each of these verb types is discussed below. Speech act verbs are considered in §16.4.3.

A. Perception

Two perception verbs may take subordinate clauses introduced by the relator *ia*: *ingim* ‘look’ and *tlu* ‘see’. The latter may also take pronominal or NP O arguments, while the former more often takes a prepositional phrase complement. In example (16.12), the verb *tlu* ‘see’ (occurring here in the non-present form *lu*) takes a subordinate clause describing a state of affairs explained in the preceding narrative by the same speaker.

- (16.12)a. *Sa thaithik sa ngēni lu Ø ia*
 sa ta=ithik sa ngēni lu ia
 NEF EMPH=ADV.PROX.DEM NEF 2PL.II see.NPRES REL₁
- b. [*vaimga da cha tēs chama asnok.*]
 a=paim-ka da ka tēs kama a=snok
 SPEC=dog-M.SG and 3M.SG.I eat.PRES ART₁ SPEC=excreta
 ‘So now you see that the dog eats excreta.’

In (16.13) is an example with *ingim* ‘look’.

- (16.13)a. ... *sa chē ingim Ø ia [ma duraika cha choe],*
 sa kē ingim ia ma duraik-ka ka kue
 NEF 3M.SG.II look.NPRES REL₁ ART₂ chicken-M.SG 3M.SG.I where
- b. *dak sa cha vang.*
 dak sa ka vang
 but NEF 3M.SG.I run.NPRES
 ‘... then he looked (for) the rooster but he was gone.’

Other perception verbs such as *tnari* ‘hear, feel’ and *pērēn* ‘smell’ take NP and PP complements respectively and do not occur with subordinate clauses introduced by *ia*.

B. Cognition

Several cognition verbs in Mali are compounds or fixed expressions that make use of two key nouns denoting concepts which relate to cognition in Mali;³ *amusneng* ‘thought’ and *asnēng* ‘idea’. The following words or expressions may take subordinate clauses introduced by *ia*: *amusnēng ngē mēn* {*a=mu-snēng ngē muēn* SPEC=put.PAST-thought 3N.I arrive.PAST} ‘decide’; *ndrem* ‘know’; *tēchēm sēvēthanas* {*tēchēm sa=pēt-nas* feel to=at-REFL} ‘realise’; *tēp ma amusnēng* {*tēp.ma a=mu-snēng* make SPEC=put.PAST-thought} ‘plan’; and *tu asnēng* {*tu a=snēng* put.PRES SPEC=idea} ‘think’. Example (16.14) shows the morphologically simple verb *ndrem* ‘know’ with a subordinate clause.

³ Compounds were discussed in §6.3, a more complete discussion of the use of phrases to expand the lexicon is presented in §20.

- (16.14)a. *Sa tha ndrēm Ø glan ia*
 sa ta drēm klan ia
 NEF 3H.PL.I know.PRES like REL₁
- b. [*sa chēvi=ngaiom sa in mēs ta.*]
 sa kēvi=ngaiom sa in mēs ta
 NEF CONTR=M.DL NEF 3DL.I eat.PAST 3H.PL.III
 ‘Then they just know that those two [pools] ate them.’

The exchange in (16.15) illustrates *drēm* ‘know’ with relator *ia* followed by an NP containing an indefinite interrogative pronoun.

- (16.15)a. *Da sik kama rutha tha drēm ia anggit?*
 da asik kama ru-ta ta drēm ia agit
 and IRR ART₁ person-H.PL 3H.PL.I know.PRES REL₁ CN.NSPEC
 ‘Did the people know what it was?’
- b. *Koiku, thi kuar Ø ia [mundēmbēs ngave ngē ndēn].*
 koiku ti kuar ia mundēm-vēs ngē=pe ngē dēn
 NEG 3H.PL.II say.PRES REL₁ fire-FLAT.SG 3N.I=there 3N.I arrive.PRES
 ‘No, they said that a huge fire was coming.’

Example (16.16) shows the expression *tēp ma amusnēng* ‘plan’ with a possessive pronoun preceding the noun *amusnēng* ‘thought’ and a following subordinate clause.

- (16.16)a. *Sa chule dē chama Tangamēt-ta*
 sa kule da kama Tangamēt-ta
 NEF later and ART₁ PN-H.PL
- b. *tha thēp.mathēva musnēng ia ...*
 ta thēp.ma=athēv=a musnēng ia
 3H.PL.I make.NPRES=3H.PL.POSS=SPEC thought REL₁
- c. [*vandi tha thēt dē thi svo.*]
 vandi ta that da ti svo
 DESID 3H.PL.I get.FUT and 3H.PL.II steal.NI
 ‘Later the Tolais planned that ... they’d try to get (it) and steal (it).’

An alternative strategy, also used with perception verbs, is to make use of a prepositional phrase complement as in (16.17). Note that the NP contains a post-head modifier, the adjective *umes* ‘male’ introduced by a relator.

- (16.17) *Thi tēp.ma musnēng [sa chama bangga ma umeska.]*
 ti tēp.ma musnēng sa kama bang-ka ma chumes-ka
 3H.PL.II make.PRES thought to ART₁ house-M.SG REL₂ male-M.SG
 ‘They make their plans about the men’s house.’

C. Desire

The verb *pēlēk* ‘want, like’ takes subordinate clauses describing the state of affairs the protagonist wishes for. It may also occur as a simple transitive verb taking an NP object with the meaning ‘like, love someone or something’. This verb is illustrated in (16.18) with a subordinate clause following.

- (16.18) *Ngī vlēk Ø ia [sik ngia tuchun sip na bangang].*
 ngī vlēk ia asik ngia tuchun asip na bangang
 2SG.II like.NPRES REL₁ IRR 2SG.I sit.PRES later.on PREP night
 ‘You’d like to sit again that night.’

This verb often co-occurs with the desiderative marker *vandi* (§14.2.4). The desiderative occurs in clause-initial position and encodes an irrealis mood, indicating that the events are desirable but not actual. The relationship between the verb *pēlēk* and the desiderative *vandi* varies. In (16.19), the desiderative occurs in the main clause, while in (16.20) it introduces the embedded clause.

- (16.19) *Ngo da vandī ngu vlēk Ø ia [ngu vang].*
 ngo da vandī ngu vlēk ia ngu vang
 1SG.III and DESID 1SG.II like.NPRES REL₁ 1SG.II run.NPRES
 ‘I want to try and run away.’

- (16.20)a. ... *dē cha vlēk Ø ia*
 da ka vlēk ia
 and 3M.SG.I like.NPRES REL₁
- b. [*vandī cha chēlan da.ithik*].
 vandī ka klan ta=ithik
 DESID 3M.SG.I like EMPH=ADV.PROX.DEM
 ‘... and he wished that he could have the same thing.’
 (lit: ‘and he wanted that he as if like this.’)

D. Emotion

In Mali, verbs of emotion fall into two groups, depending on their treatment of the experiencer. All emotion verbs relating to positive emotions, including those based on the stem *amēr* ‘good’ (*amēr gēlē*, *amēr vem*, and *amēr pēt* all translated as ‘be happy’) are stative intransitive verbs with S_O arguments. These verbs may take prepositional phrases or reason clauses as complements. Other verbs of emotion, including *guer* ‘fume, scold’, *dlen* ‘be afraid’, and *tnok* ‘cry’, are ambitransitive with A or S_A arguments referring to the experiencer of the emotion. These verbs can take subordinate clauses introduced by *ia*. Example (16.21) uses the verb *dlen* ‘fear’ (appearing here in the non-present tense form *len*) with two different versions of the O argument in apposition. In this example there is an overt head for the clause introduced by *ia*, which has the function of elaborating on the fears represented by the referent of the pronoun (a powerful, magical fly).

- (16.21)a. *Ngua lu cha dē ngua len ga ia*
 ngua lu ka da ngua len ka ia
 1SG.I see.NPRES 3M.SG.III and 1SG.I be.afraid.NPRES 3M.SG.III REL₁
- b. [*cha na chunaik ngo chēlan*].
 ka na chunaik ngo klan
 3M.SG.I IRR.FOC swallow.NPRES 1SG.III like
 ‘I saw it and I feared it that it might swallow me the same way.’

Example (16.22) uses the expression *tlu O mavo* ‘feel jealous of’ which again takes a pronominal O argument and an elaborating subordinate clause introduced by *ia*.

- (16.22)a. ... *da cha ve chē tlu ma duraika mavo*
 da ka pe kē tlu ma duraik-ka mavo
 and 3M.SG.I there 3M.SG.II see.PRES ART₂ chicken-M.SG badly
- b. *ia [chule thi ma ti vēlechacha*
 ia kule ti ma ti vlek=ka
 REL₁ later 3H.PL.II REL₂ 3H.PL.II like.NPRES=3M.SG.III
- c. *savama ithepki ama mērki.]*
 sa=avama ithep-ki ama mēr-ki
 with=3M.SG.POSS rooster.tail-F.SG REL₃ good-F.SG
 ‘... he started to feel jealous of Rooster [because] they liked his tail which
 was beautiful.’

E. Trying

Mali has one verb *su* referring to the concept of ‘trying’. This verb can take a subordinate clause introduced by the relator *ia*, as demonstrated in example (16.23) (beginning in line c.).

- (16.23)a. ... *dē chule ngēt klan ma maulul*
 da chule ngēt klan ma maulul
 and stay.NPRES 3N.III only REL₂ long.time
- b. [*diva sik kama isēm ngē tet*]
 diva asik kama isēm ngē tet
 PURP₃ IRR ART₁ bird 3N.I go.PRES
- c. [*diva sa ngēt ngēthi su Ø ia*]
 diva sa ngēt ngēthi su ia
 PURP₃ NEF 3N.III 3N.II try.NI REL₁
- d. [*sik ngēt ngē tet minia, angētha is nangēt.]]*
 asik ngēt ngē tet mēnia angēt=a is na=ngēt
 IRR 3N.III 3N.I go.PRES how 3N.POSS=SPEC road PREP=3N.III
 ‘... it must be left for a long time in order for the birds to try going that way, so
 that it will become their track.’

F. Deception

The verb of deception *iras* ‘pretend, lie’ may take subordinate clauses introduced by *ia*. In (16.24) the subordinate clause reports indirect speech (see also §16.4.3).

- (16.24)a. *Chrētki cha sangaracha dak ka iras Ø ia*
 chrētki ka sangar.NI=ka dak ka iras ia
 policeman 3M.SG.I arrest=3M.SG.III but 3M.SG.I lie.NI REL₁
- b. [*cha da ngēmbes.*]
 ka da angēmbes
 3M.SG.I and NEG
 ‘The policeman arrested him but he lied that it wasn’t him.’

16.4.3 Speech act verbs

Speech act verbs can take subordinate clauses containing reported speech. These are introduced by the relator *ia*. The clause containing reported speech optionally has an overt head, as was shown in (16.5) and (16.6). The expression of reported speech is discussed in more detail in §19.3.

Verbs in this semantic category include: *guer* ‘shout crossly’, *kuar* ‘say’, *kuares* ‘say’, *nēs* ‘call’, *nunguik* ‘shout’, *snan* ‘ask’, *snandēvēr* ‘ask’, *tamon* ‘speak’, *tēk mamēr* ‘explain’, *thesdēm* ‘agree’, *tnok* ‘cry’, *tondēm* ‘recount’, *tu ba* ‘set a rule’, and *tuvēt* ‘reply’. Example (16.25) shows the verb *snan* ‘ask’ introducing direct speech.

- (16.25)a. *Arura ti snan Ø ia*,
 a=ru-ta ti snan ia
 SPEC=person-H.PL 3H.PL.II ask.NI REL₁
- b. [*Ngē va mēnia ta.ithik?*]
 ngē va mēnia ta=ithik
 3N.I PURP₁ how EMPH=ADV.PROX.DEM
 ‘They asked, “What’s going on?”’

Other verbs that behave in this way but which do not encode speech per se are verbs denoting communication by other means such as *su ba* ‘make signs’, *tu asuchut* ‘make signs’.

16.4.4 NPs or clauses equivalent to NPs

In this section we turn to the use of the relator *ia* as equivalent to NPs in other functions. In this context, *ia* may introduce either an NP or a clause that stands in apposition to the head noun as an equivalent alternative to it. Example (16.26) shows a clause introduced by *ia*, while (16.27) shows a proper noun in the same position as the subordinate clause.

- (16.26)a. *Asecha sēvēt kama Thangammētta ia*
 a=sek-ka sa=pēt kama Thangammēt-ta ia
 SPEC=story-M.SG to=at ART₁ PN-H.PL REL₁
- b. [*tha mēn mēnia dak minia diva*
 ta muēn mēnia dak mēnia diva
 3H.PL.I arrive.PAST how but how PURP₃
- c. *thi nēchama Baininggēna tha gamarnana*.
 ti nē=kama Baining-kēna ta gamar-na=na
 3H.PL.II ASSOC=ART₁ PN-H.PL 3H.PL.I fight-DETR₃=RECIP
 ‘Story about the Tolais, how they came [and] why they and the Bainings fought with each other.’⁴
- (16.27)a. *Da in det vaur vēt kama ais ia*
 da in tet pa=ur pēt kama a=is ia
 and 3DL.I go.PRES LOC=bush at ART₁ SPEC=ridge REL₁

⁴ This example is a typical story opening in Mali. Structurally it is an NP, but it is able to stand independently as an utterance.

- b. [ma Chenangia].
 ma Chenangia
 ART₂ PN
 ‘And they went through the bush following the Chenangia ridge.’

16.4.5 Clauses or place names equivalent to location adverbials

Location adverbs, particularly the anaphoric demonstrative *pe* ‘there’ are often followed by a place name or description of a place introduced by the relator *ia*. In effect, the demonstrative pronoun is used cataphorically in anticipation of the more contentful expression introduced by the relator. An example of *ia* introducing a clause after the demonstrative is shown in (16.28).

- (16.28)a. *Da thamo tha met sēcha save ia*
 da ta=mo ta met sa=ka sa=pe ia
 and 3H.PL.I=all 3H.PL.I go.PAST with=3M.SG.III to=there REL₁
- b. [asik ti vėlēng ga ve].
 asik ti vėlēng ka pe
 IRR 3H.PL.II kill.NPRES 3M.SG.III there
 ‘And they all went with him to where they’d kill him.’

An example of a place name in this position is shown in (16.29).

- (16.29) *Kule tha ve ia [Masarau] ...*
 kule ta pe ia Masarau
 stay.PRES 3H.PL.I there REL₁ PN
 ‘They stayed there [at] Masarau ...’

Other location adverbials may also take subordinate clauses introduced by *ia*. In (16.30) the location adverbial *vono* ‘on top’ takes an NP introduced by the relator.

- (16.30) *Ta thon.nēchama bom savono ia [Vaingait]?*
 ta thon.nē=kama bom sa=vono ia Vaingait
 3H.PL.I throw.NPRES=ART₁ bomb to=up.slope REL₁ PN
 ‘They threw bombs onto Vaingait?’

16.4.6 Clauses and NPs equivalent to temporal adverbials

Temporal adverbials, like location adverbials, may take subordinate clauses introduced by *ia*. In (16.31) the endpoint of the state of affairs is expressed as a clause introduced by *ia*.

- (16.31)a. ... *dē chule ut pe sa dēdēng ia*
 da chule ut pe sa dēdēng ia
 and stay.NPRES 1PL.III there NEF finish REL₁
- b. [gamar ngē sot nanas]
 gamar ngē sot na=na
 war 3N.I finish.NI DETR₁=REFL
 ‘... and we stayed there until the end of the war’
 (lit: ‘... and we stayed there to [the] end that [the] war it finish itself.’)

There are also limited examples of nominal constituents introduced by *ia* which follow a temporal adverbial. In (16.32), a Tok Pisin expression is used to refer to the year. Had the equivalent Mali expression been used here, it would have been a complex noun phrase (see §9.2 on the Mali counting system).

- (16.32) *Amundika ma ut met pe ia [poti seven].*
 a=mēndik-ka ma ut met pe ia poti seven
 SPEC=year-M.SG REL₂ 1PL.I go.PAST there REL₁ forty seven
 ‘The year when we went was forty-seven.’

The relator and the demonstrative often form a clitic group *veia* {*pe=ia* there=REL₁}. The clitic group appears to be grammaticalising into a temporal relator meaning ‘when’, introducing temporal adverbial clauses. Example (16.33) contains a resultative marker indicating that the event in the temporal clause should be complete before the event in the main clause takes place.

- (16.33)a. *Ki vraseng.nachi nēmēt ka mundēm*
 ki vraseng.na=ki na=mēt kē=a mundēm
 3F.SG.II remove.NPRES=3F.SG.III from=within ART₃=SPEC fire
- b. *veia [sa manggi]*
 pe=ia sa mang=ki
 there=REL₁ NEF cooked=3F.SG.III
- c. *di chia thuchi sa mēthik.*
 da kia thu=ki sa mēthik
 and 3F.SG.I put.FUT=3F.SG.III to aside
 ‘She removes it from the fire when it is cooked and she puts it aside.’

Temporal clauses are frequently found in topic position and co-occur with a range of time adverbs. Examples (16.34)–(16.36) show that events with a range of temporal relations to the main clause may be encoded in this way.

- (16.34)a. *Naruer veia [chia thet sēva lat]*
 naruer pe=ia kia thet sa=pa lat
 before there=REL₁ 3F.SG.I go.FUT to=LOC garden
- b. *di chiat kama uratki dēma asen’gi ...*
 da kia=that kama urat-ki da=kama a=sen-ki
 and 3F.SG.I=get.FUT ART₁ basket-F.SG and=ART₁ SPEC=knife-F.SG
 ‘Before she goes to the garden, she gets the basket and the knife...’
- (16.35)a. *Sndamer veia [sospen’gi chia ve mēt]*
 sdamēr pe=ia sospen-ki kia pe mēt
 directly there=REL₁ saucepan-F.SG 3F.SG.I there within
- b. *kama mundēm] da sa ki tiktēm.vētkama auravu.*
 kama mundēm da sa ki tiktēm.vēt=kama auravu
 ART₁ fire and NEF 3F.SG.II break=ART₁ native.spinach
 ‘While the pot sits in the fire she breaks the native spinach.’

- (16.36)a. *Da chok kē tneng klan dēng peia*
 da kok kē tneng klan dēng pe=ia
 and just 3M.SG.II dodge.PRES like until there=REL₁
- b. [*cha thanger.pēt kē langun'ga uvēs*].
 ka thanger.pēt kē langun-ka av=pēs
 3M.SG.I break.off.NPRES ART₃ decorative.plant-M.SG 3M.SG.POSS=head
 'He just dodged until he broke the top off the decorative leaf.'

Hypothetical events may also be introduced with the relator *peia* 'when', as indicated by the atelic irrealis marker *asik* (see also §14.2.1.B on the use of the irrealis marker).

- (16.37)a. *Asik veia [thi vondēmgi]*
 asik pe=ia ti vondēm=ki
 IRR there=REL₁ 3H.PL.II give.away.NPRES=3F.SG.III
- b. *dē that kama lēvopki ...*
 da ta=that kama lēvop-ki
 and 3H.PL.I=get.FUT ART₁ woman-F.SG
 'When they give her away, they get the woman ...'

16.4.7 Clauses expanding manner adverbs and negators

The construction for expanding adverbs and negators is predominantly associated with encoding the epistemic status of the clause. A special type of verbless clause in Mali contains the manner adverb *mamēr* 'possible' (see A) or a negator in initial position (see B), followed by a clause introduced by the relator *ia*. A different construction is found with *klan* 'like' (see C).

A. Possibility encoded by *mamēr* 'possible'

The adverb *mamēr* {*ma=mēr* DER=good} 'possible, properly, well, fine', can be expanded by a clause introduced by *ia*. An example of *mamēr* with the relator *ia* is provided in (16.38).

- (16.38) *Ta.ithik, mamēr ia [ngi thon.bathēm naut ...]*
 ta=ithik mamēr ia ngi thon.bathēm na=ut
 EMPH=ADV.PROX.DEM possible REL₁ 2SG.II check.NPRES PREP=1PL.III
 'Now, you can check on us ...'
 (lit: 'Now, [it is] possible that you will check on us.')

B. Negators

The negators *angebēs*, *koiku*, and *koi* may also occur in this frame. A reduced form of the negator *angebēs*, *mbēs* is shown in (16.39).

- (16.39)a. *Sa chia muēn.bēt kama aruchēm,*
 sa kia muēn.vēt kama a=ru-ēm
 NEF 3F.SG.I find.PAST ART₁ SPEC=person-RCD.SG

- b. *mbēs ia [ulul ngam], achuvēt ngam.*
 angēmbēs ia ulul ngam a=chuvēt ngam
 NEG REL₁ long RCD.SG SPEC=short RCD.SG
 ‘She found a small person, not tall, short, he was short.’

Example (16.40) below shows *koiku* without the use of a relator. Additional discussion of the negators can be found in §15.2.

C. Similarity encoded by *klan* ‘like(wise)’

The concept of similarity is encoded using the adverb *klan* ‘like(wise)’ and the stative intransitive verb *gisnēng* ‘seem as if’. When used to refer to situations of similarity, the adverb *klan* often occurs in verbless clauses (see §4.1.5) with a clause as either the subject, or the complement, or in both positions. A simple example with NPs in both positions is provided in (16.40). The subject of the verbless clause comes before the adverb and the complement follows.

- (16.40) *Choiku anga isēmga chlan ngo.*
 koiku anga isēm-ka klan ngo
 NEG NSPEC bird-M.SG like 1SG.III
 ‘[There is] not any bird like me.’

If the complement of the verbless clause is itself a clause, then it will be introduced by *ia*. In (16.41) both arguments are clauses. The subject is a clause headed by *drem* ‘know’ and the complement is a clause headed by *mēs* ‘eat.PAST’ and is introduced by the relator *ia*. Both embedded clauses are shown in brackets.

- (16.41)a. *Sa chule sa [ka rēm] gēlan ia ...*
 sa kule sa ka rēm klan ia
 NEF later NEF 3M.SG.I know.NPRES like REL₁
- b. *[sa mundu ma sa thiathik ka ma]*
 sa mēndu ma sa ta=ithik ka ma
 NEF before REL₂ NEF EMPH=ADV.PROX.DEM 3M.SG.I REL₂
- c. *ka mēs mavan dēmga].*
 ka mēs mavan tēm=ka
 3M.SG.I eat.PAST ginger GOAL=3M.SG.III
 ‘Then he knew like this that it was because he uhm he’d just chewed the ginger on him.’

As (16.42) also indicates, the relator is not required for the clause in subject position.

- (16.42)a. *Dē cha neng,*
 da ka neng
 and 3M.SG.I dodge.NPRES
- b. *dē choki chē lēvopki*
 da koki kē lēvop-ki
 and also ART₃ female-F.SG

- c. *dē* [*chi* *tneng*] *klan* *ga*.
 da ki tneng klan ka
 and 3F.SG.II dodge.PRES like 3M.SG.III
 ‘He dodges, and also the woman, also her, she dodges like him.’
 (lit: ‘[her] dodging [was] like him.’)

The form *gisnēng* (probably a conventionalisation of *gi=snēng* 2SG.POSS=heart ‘you’d think’) is used to express apparent similarity. It functions as a stative intransitive verb. An example of *gisnēng* ‘seem as if’ with the relator *ia* is provided in (16.43).

- (16.43)a. *Kēvichit* *dē* *gisnēng* *ia*
 kēvi=ki da gisnēng ia
 CONTR=3F.SG.III and seem.as.if.NI REL₁
- b. [*sok* *kama* *aruchi* *marik*].
 sok kama a=ru-ki marik
 really ART₁ SPEC=person-F.SG truly
 ‘That one seems just like a real human being.’

The subordinator *gisnia*, which appears to be a reduced form of *gisnēng ia*, is shown in (16.44).

- (16.44)a. *Mali* *naruer* *dē* *choki* *cha* *tet*
 mali naruer da koki ka tet
 earlier firstly and also 3M.SG.I go.PRES
- b. *gisnia* *ve* [*kule* *cha* *ve* *mēni* *aut* *glinginggēl*].
 gisnia pe kule ka pe mēni aut gling-igl
 as.if there stay.PRES 3M.SG.I there on 1PL.POSS place-EXC.SG
 ‘At first, he’d just gone along as if he was at our place.’

In summary, the relator *ia* introduces prototypical subordinate clauses, as shown in §16.4.1–§16.4.2, but its use extends to cases in which one constituent of the clause is juxtaposed to another on analogy with predicative subordinate clauses (§16.4.3–§16.4.4 above). Only A arguments are never introduced by the relator *ia*.

16.5 The relator *ma*

The relator *ma* introduces modifier NPs or clauses to an NP (§16.5.1) and also introduces a modifier after adverbials (§16.5.2). The clitic group *pema* {*pe=ma* there=REL₂}, functions as a subordinator meaning ‘as’ and introduces temporal clauses in topic position (§16.5.3). Note that the relator *ma* has the same form as the proper noun article. Diachronic reasons for this are outlined in §16.5.4. Finally, the corpus contains examples of two clauses linked by *ma* in which the latter clause appears to amplify the first (§16.5.5). This is similar to the elaborating function of *ia* mentioned above (see for example (16.16)). In this section the relevant NPs are shown with square brackets and modifier clauses are underlined.

16.5.1 Modifiers within NPs

As shown in §10.1, a relator, either *ma* or *ama* is required in order to incorporate modifiers within the NP. The modifiers that occur with *ma* in this position include: full clauses (A), verbless clauses containing adjectives (B), and nominals (C). The relator *ma* can also introduce quantifiers (D). Adverbs may also occur in the post-head position within an NP (E).

Although the modified noun phrase in the examples below is often headed by a common noun in the examples presented in this section, it may also be headed by a contrastive pronoun, as shown in (16.45).

- (16.45)a. *Dē chinak kēvicha*
 da kinak kēvi=ka
 and indeed CONTR=3M.SG.III
- b. *ma [morka chēvak]*
 ma mor-ka kēvak
 REL₂ big-M.SG M.SG.CONTR.DEM
- c. *ma [cha tet tēcha renggi].*
 ma ka tet tēm=kē=a reng-ki
 REL₂ 3M.SG.I go.PRES PATH=ART₃=SPEC river-F.SG
 ‘And just that particular big man who went along the river.’

Also appearing in this slot is the discourse marker *kusek* ‘only’. This is exceptional behaviour for an adverb from this set (§14.2.3) but is semantically consistent with the use of contrastive pronouns, which also work to draw distinctions among possible referents. An example of *kusek* in this position is provided in (16.46). As we noted in §10.7 a better analysis of the discourse marker is to treat it as a peripheral modifier within the NP and to view *ma* as an article introducing the pronoun.

- (16.46) *Kusek ma ngavem ama [unbem] in vuinēm.*
 kusek ma ngavem ama unbem in vuinēm
 only ART₂ F.DL REL₃ two.F 3DL.I return.NPRES
 ‘Only the two of them the two (women) they returned.’

In fact, as (10.45) showed, it is possible for the contrastive pronoun to be introduced by the article *ma* and to follow the discourse marker *kusek*, which suggests that the latter analysis is correct.

A. Full clauses

Example (16.47b) and (16.48) both show full clauses introduced by *ma*, which follows the head noun.

- (16.47)a. *Di chia met di chia ngim chama alechi*
 da kia met da kia ngiem kama a=lek-ki
 and 3F.SG.I go.PAST and 3F.SG.I look.PRES ART₁ SPEC=hole-F.SG
- b. *ma [mali chia luchi save].*
 ma mali kia lu=ki sa=pe
 REL₂ earlier 3F.SG.I see.NPRES=3F.SG.III to=there
 ‘And she went and she searched for the hole that she had seen before.’

B. Verbless clauses containing adjectives

Example (16.48) shows a verbless clause containing an adjective. See also §4.1.5.B.ii–§4.1.5.B.iii for a fuller discussion of adjectives in this function.

- (16.48) *Kē nges.machama lechi ma [morki].*
kē nges.mē=kama lek-ki ma mor-ki
 3M.SG.II dig.in.NI=ART₁ hole-F.SG REL₂ big-F.SG
 ‘He dug a big hole.’

C. Verbless clauses containing nouns

Like adjectives, common nouns may be used to modify the head noun of an NP if they are presented as the predicate in a verbless relative clause. These constructions are a type of verbless clause with a concordial pronoun indexing the head noun occurring within the clause that follows the preposition *na* (this is described in §4.1.5.B.i.). Two types of nouns commonly found in this context are certain numerals and colour terms. Example (16.49) shows the noun *adēdēng* ‘last’ in a relative clause modifying the noun *mudika* ‘year’. The numeral ‘ten’ *angēthikisēm* modifies the feminine singular noun *ulunggi* ‘grade’ in the same way (see §9.2 on numerals).

- (16.49)a. *Jenifa chi tēk.matha mudika*
Jenifa ki tēk.mē=at=a mēndik-ka
 PN 3F.SG.II work.PRES=3F.SG.POSS=SPEC year-M.SG
- b. *ma [adēdēng nacha] mēt*
ma a=dēdēng na=ka mēt
 REL₂ SPEC=last PREP=3M.SG.III within
- c. *kama ulunggi ma [angēthikisēm nachi].*
kama ulung-ki ma angē=tik-isēm na=ki
 ART₁ grade-F.SG REL₂ 3N.POSS=hand-LONG.DL PREP=3F.SG.III
 ‘Jennifer is studying her last year at school, grade ten.’
 (lit: ‘Jennifer she works at her year that (is) last in the grade that (is) ten.’)

Example (16.50) shows that nominal colour terms operate in the same way. The head noun *chorachi* ‘banana flower’ is feminine but the noun *alolka* ‘red’ is inherently masculine (see §10.2.1.A on the distribution of colour terms into the noun and adjective classes). The feminine singular concordial pronoun agrees with the NP head.

- (16.50)a. *Tangamga vak da*
tangam-ka avak da
 banana.plant-M.SG M.SG.DIST.DEM and
- b. *va chorachi ma [lolka nachi].*
av=a kērora-ki ma alol-ka na=ki
 M.SG.POSS=SPEC banana.flower-F.SG REL₂ red-M.SG PREP=3F.SG.III
 ‘That banana plant, its banana flower that is red.’

D. Quantifiers as modifiers

The quantifier *chēndichēn* ‘many’ also occurs in this frame.

- (16.51)a. *Angebēs guanga mēthamon ma [chēndichēn]*
 angēmbēs gu=anga mēthamon ma chēndichēn
 NEG 1SG.POSS=NSPEC message REL₂ many
- b. *diva ngu na mēthamon sēthēm nge nangēt.*
 diva ngu na mēthamon sa=tēm nge na=ngēt
 PURP₃ 1SG.II IRR.FOC message to=GOAL 2SG.III PREP=3N.III
 ‘I don’t have a lot to tell you about.’ (lit: ‘not many messages of mine in order to (give) messages to you (about) it.’)

E. Adverbs in the post-head position within an NP

Many adverbs are derived from adjectives with the derivational prefix *ma* which, given its position and function, appears to have grammaticalised from the relator. Although most of these adverbs are restricted to functioning as clause level modifiers, a handful may also occur as modifiers within an NP. An example of the term *marik* ‘authentic, true’, more usually translated as ‘really, truly’ in its clause level function, is given in (16.52).

- (16.52) *Kusek ut ama [vingbingda marik].*
 kusek ut ama vingbing-ta marik
 only 1PL.I REL₃ Baining-H.PL truly
 ‘Only us, the true Bainings.’

In most cases it is possible to identify the stem (for example, *mamor* {*ma-mor* DER-big} ‘greatly, a lot’) but in the case of *marik* the etymology of the stem is not clear. This derivational process is not currently productive.

16.5.2 Modifiers of adverbials

The relator *ma* may also introduce NPs or clauses after locative (A) or temporal adverbials (B). In most examples from the corpus, the adverbial involved is the anaphoric demonstrative *pe*. Other adverbial demonstratives may also be modified in this way, as shown in (16.53) below.

A. Modifying locative adverbials

After the anaphoric demonstrative *pe* referring to a location, the interpretation of *ma* introducing a place name is ambiguous between the relator and the proper noun article. An example, parsed for the reading of *ma* as a relator is provided in (16.53).

- (16.53) *Baski chia mēthaut save ma [Spalengan]*
 bas-ki kia mat=ut sa=pe ma Spalengan
 barge-F.SG 3F.SG.I get.PAST=1PL.III to=there REL₂ PN
 ‘The barge took us to Spalengan.’

B. Modifying temporal adverbials

The anaphoric demonstrative *pe* may also refer to a specific time and take an NP introduced by *ma*. An example is provided in (16.54).

- (16.54) *In dēvēng dēng ve ma [aeraer].*
 in tēvēng dēng pe ma a=eraer
 3DL.I sing.PRES until there REL₂ SPEC=dawn
 ‘They sang until dawn.’

16.5.3 Temporal subordinator *pema* ‘as’

In clause-initial position, the clitic group *pema* (*pe=ma* there=REL₂) seems to be grammaticalising to become a temporal subordinator meaning ‘as’. This is analogous in structure and function to the subordinator *peia* ‘when’. As a subordinator of topicalised temporal clauses, *pema* only occurs a few times in the corpus. In examples (16.55) and (16.56) it introduces an event that encompasses the time referred to in the main clause.

- (16.55)a. *Vema [in det nēka iska sama*
pe=ma in tet na=kē=a is-ka sa=ma
there=REL₂ 2.DL.I go.PRES PREP=ART₃=SPEC road-M.SG with=ART₂
- b. *secha] cha thēchēm sēvēthanas ia*
sek-ka ka thēchēm sa=pēt=nas ia
hero-M.SG 3M.SG.I realise.NPRES to=at=REFL REL₁
- c. *thi talga.*
ti tal=ka
3H.PL.II carry.PRES=3M.SG.III
 ‘As [the two were walking along the road with the hero],
 he realised they were carrying him.’
- (16.56)a. ... *pema [in det nēka iska*
pe=ma in tet na=kē=a is-ka
there=REL₂ 3DL.I go.PRES PREP=ART₃=SPEC road-M.SG
- b. *sa in lu cha vuk povar]*
sa in lu ka vuk povar
NEF 3DL.I see.NPRES 3M.SG.I up on.top
 ‘... as they walked along the road and saw him up there.’

There are no examples of the relator *ma* after other temporal adverbials (cf. *ia* in §16.4.6).

16.5.4 Relationship between relator and proper noun article

A traditional name introduced by the relator *ma* can just as well be analysed as a headless subordinate clause. This is not unlike the possibilities for the relator *ia*, which, as shown in §16.4, is often used with the head noun omitted. For this reason, it seems likely that the source for the proper name article is the relator *ma*. The glossing in example (16.57) follows the analysis as a proper noun article but the bracketing for the headless clause is also provided to show the similarities in structure between this clause and the preceding examples.

- (16.57)a. *Cha von Ø ma [Lēmuthēmga]*
ka von ma lēmu=tēm-ka
3M.SG.I give.NPRES REL₂/ART₂ clean.NI=THEME-3M.SG.I

- b. *nava* *vilēchi ...*
 na=av=a *pilēk-ki*
 PREP=3M.SG.POSS=SPEC *gun-F.SG*
 ‘He gave Lēmuthēmga his gun ...’
 (lit: ‘He gave “[the one] who [is] clean” his gun ...’)

16.5.5 Modifier to another clause

Example (16.58) shows *ma* introducing a clause that amplifies the content of the preceding clause. This use of the relator *ma* is reminiscent of the use of *ia* in elaborating clauses but different insofar as there is no clear head to the clause. Further analysis is required to fully understand the status of this form in relation to the uses discussed in §16.5.1–§16.5.3; at this stage it seems reasonable to gloss this *ma* differently as ‘that is’.

- (16.58)a. *Sok ka tēs kama ivētki mo*
 sok ka tēs kama ivēt-ki mo
 really 3M.SG.I eat.PRES ART₁ earth-F.SG all
- b. *ma [cha tēs kama ivētki mo sa tem].*
 ma ka tēs kama ivēt-ki mo sa tem
 REL₂ 3M.SG.I eat.PRES ART₁ earth-F.SG all NEF whole
 ‘It really consumed all the earth, that is, it consumed the earth all up.’

The relator *ma* is used as a marker of hesitation, and this is a possible interpretation of its use in restating material as in (16.58).

16.6 The relator *ama*

The relator *ama* has a more restricted distribution than *ma*. The relator *ama* usually only occurs within an NP (§16.6.1) but may also occur within an AdvP (§16.6.2).

16.6.1 Use of *ama* within the NP

The relator *ama* occurs in NPs and introduces modifiers with the following forms: (A) full subordinate clauses, and (B) verbless clauses containing adjectives; *ama* also introduces (C) nominals and (D) quantifiers.

A. Full subordinate clauses

An example showing the use of *ama* to introduce a full subordinate clause into an NP is shown in (16.59). As with the examples of *ma* in §16.4.1.A–§16.4.1.C, this example shows how *ama* is used as a relativising strategy.

- (16.59)a. *Sa athēktēchini chini ama*
 sa a=thēktēk-ini achini ama
 NEF SPEC=job-DIM.SG DIM.SG.CONTR.DEM REL₃
- b. *[chi thēk.nēngini] ...*
 ki thēk.na=ngini
 3F.SG.II do.NPRES=DIM.SG
 ‘Then another small job that she does ...’

B. Verbless clauses containing adjectives

Verbless clauses containing adjectives introduced by *ama* were described in §4.1.5.B.ii. In example (16.60), the noun and the adjective agree, both taking zero noun class marking as *gēthēp* ‘trouble’ is a count neutral noun.

- (16.60) *Auk, asik gēthēp ama [mor] ngēthēn avivik.*
 auk asik gēthēp ama mor ngē=thēn avi=vik
 well IRR trouble REL₃ big 3N.I=arrive.FUT there=EMPH
 ‘Well, there will be a lot of trouble after that.’

The numerals one, two and three function like adjectives and are also presented in this frame. See (16.61).

- (16.61)a. *Sa chule ngo vē kama mundik ama [devaung] pe*
 sa chule ngo pēt kama mēndik ama dēvaung pe
 NEF stay.NPRES 1SG.III at ART₁ year REL₃ three.M there
 b. *ma Kininigunam.*
 ma Kininigunam
 REL₂ PN
 ‘Then I stayed for three years there (at) Kininigunam.’

C. NP modified by nouns

NPs may take nouns as modifiers when the modifier noun is introduced by the relator *ama*. When the relator *ma* introduces a nominal modifier into an NP, a concordial pronoun indexing the head of the clause and hosted by the preposition *na* is required, whereas no concordial pronoun is required when a noun is introduced by *ama*. An example is shown in (16.62). Also note here the use of the second person singular pronoun *nge* as the head of the NP.

- (16.62)a. *Ithik nge ama [chumeska]*
 ithik nge ama chumes-ka
 ADV.PROX.DEM 2SG.III REL₃ man-M.SG
 b. *ngia thon samuk sēmēt kama lechi.*
 ngia thon sa=muk sa=mēt kama lek-ki
 2SG.I go.in.FUT to=across to=within ART₁ hole-F.SG
 ‘Now, you man, you get down into the hole.’

D. NPs modified by quantifiers

The quantifier *chēndichēn* ‘many’ was shown with the relator *ma* in (16.53) and may also occur with the relator *ama*, as in (16.63).

- (16.63) *Dak uthi chuar ia mēndik ama [chēndichēn] ngē met.*
 dak uthi chuar ia mēndik ama chēndichēn ngē met
 but 1PL.II say.NPRES REL₁ years REL₃ many 3N.I go.PAST
 ‘But we say that many years went by.’

When the concept of an amount is used in an interrogative context, the fixed expression *ama minia* ‘how many’ is used. Only the relator *ama* may occur in this expression. An example is provided in (16.64a).

- (16.64)a. *Kama kunēng ama [minia] ama [un’gi*
kama kunēng ama amēnia ama un-ki
 ART₁ day REL₃ how/many REL₃ darkness-F.SG
- b. *mēt kama chunēngga va sachong]?*
mēt kama a=kunēng-ka av=a sachong
 within ART₁ SPEC=sun-M.SG 3M.SG.POSS=SPEC eyes
 ‘How many days was darkness over the sun?’

16.6.2 Use of *ama* following adverbials

The corpus does not contain any examples of *ama* following location adverbials or place names. However, there are examples of (A) temporal and (B) manner adverbs modified by clauses or NPs introduced by *ama*.

A. Temporal adverbials

In (16.65) the temporal emphatic adverbial demonstrative *piavik* takes a clause introduced by *ama* describing the time of a historically noteworthy event.

- (16.65)a. *Da piavik ama [puspechama damgi]*
da vi=avik ama pus.pem=kama dam-ki
 and EMPH=ADV.DIST.DEM REL₃ erupt.PRES=ART₁ mountain-F.SG
- b. *ma ngi kuar ia vuspemgi*
ma ngi kuar ia vuspem=ki
 REL₂ 2SG.II say.PRES REL₁ erupt.NPRES=3F.SG.III
- c. *vea ma Rabaul.*
pe=ia ma Rabaul
 there=REL₁ ART₂ PN
 ‘And then the mountain erupted that you said it erupted there (at) Rabaul.’

B. Manner adverbials

The corpus contains examples of both lexical manner adverbs and adverbial demonstratives referring to manner with modifiers introduced by *ama*. Examples are provided in (16.66) and (16.67).

- (16.66)a. *Ta tēthangēt diva sai thi don.nangēt*
ta tat=ngēt diva sai ti don.nē=ngēt
 3H.PL.I get.PRES=3N.III PURP₃ again 3H.PL.II throw.PRES=3N.III
- b. *mēt athēva mēsmēs*
mēt athēv=a mēsmēs
 within 3H.PL.POSS=SPEC food

- c. *klan ama [aichil ura chama mundik].*
 klan ama aichil ura kama mundik
 like REL₃ native.spinach or ART₁ pitpit
 ‘They get it in order to put (lit: throw) it on their food again,
 like native spinach or pitpit.’
- (16.67)a. *Da avoes da vaivang*
 da av=oes da vaivang
 and 3M.SG.POSS=fruit and EMPH.3N.DIST.DEM
- b. *viavik ama [viam].*
 vi=avik ama a=piam
 EMPH=ADV.DIST.DEM REL₃ SPEC=Tahitian.chestnut
 ‘And its fruit, those particular ones like that (are called) Tahitian chestnuts.’

17 *Coordination and subordination*

As mentioned in §16.1, Mali does not have any strategies that make it possible to differentiate between main clauses and non-main clauses on structural grounds, such as nominalisation, contrasts between finite and non-finite verbs, switch reference marking and so forth. Nevertheless, semantic dependencies between clauses do exist and we can distinguish between coordinators (§17.1) and subordinators (§17.2) on the basis of the degree of semantic dependency in clauses linked by these devices.

17.1 Coordination

In terms of the relations between clauses, coordinators are distinct from subordinators as they link clauses without necessarily indicating semantic relationships between them. The coordinators found in Mali are:

- Additive marker *da* (§17.1.1)
- Adversative marker *dak* (§17.1.2)
- Disjunctive marker *ura* (§17.1.3).

Of these, only the disjunctive marker *ura* is also used to co-ordinate NPs. The other way to do this is to use the associative construction. NP coordination is discussed in §10.8.

17.1.1 Additive marker *da*

The coordinator *da* ‘and’ is used to encode addition. This coordinator frequently forms clitic groups with neighbouring pronouns, articles and clause-initial adverbs or discourse markers. It shows a range of phonological variants: most often *dē*, involving vowel reduction, but also *du*, *di*, and more rarely *do* involving vowel harmony with a following form. Vowel harmony and clitic groups are discussed in §3.4.2.B and §3.7 respectively. An example of the additive marker is given in (17.1).

- (17.1) a. *A.luvop ta ve thik nging.dēchama umesk*
 a=lēvop ta pe ti nging.dē=kama chumes
 SPEC=female 3H.PL.I there 3H.PL.II spy.on.NI=ART₁ male

- b. *da aumesta thik nging.dēchama luvop.*
 da a=chumes-ta ti nging.dē=kama lēvop
 and SPEC=male-H.PL 3H.PL.II spy.on.NI=ART₁ female
 ‘The women spied on the boy and the men spied on the girl.’

The additive coordinator is also frequently used in clause-initial position as a boundary marker. This is discussed in §18.2.

17.1.2 Adversative marker *dak*

Clauses involving an opposition are linked by *dak*. This form is used to oppose different activities and/or different participants. Both meanings are involved in (17.2).

- (17.2) a. ... *da ngu chuar natha ia ut thet pono*
 da ngu chuar na=ta ia ut thet vono
 and 1SG.II say.NPRES PREP=3H.PL.III REL₁ 1PL.I go.FUT up.slope
- b. *dak ti kuar ia ut thet mano.*
 dak ti kuar ia ut thet mano
 but 3H.PL.II say.PRES REL₁ 1PL.I go.FUT down.slope
 ‘... and I said to them that we should go up but they said we’d go down.’

Although this coordinator is generally translated by the English word ‘but’ as in example (17.2), the semantics are not a match. Consider (17.3) in which the expectations set up in the first sentence are not met in the second (beginning in line d). The unmarked coordinator *da* is used. The free translation would read more felicitously in English if the two English coordinators in the free translation were reversed: ‘Then the one who could see said to the blind woman that she should climb and she would stay down on the ground. But the blind woman refused.’ However, it follows the Mali word choice in which the counter-expectation conventionally marked by *but* in English is the one in the last clause, rather than the change in referent marked by *dak* in Mali in the penultimate clause in this example.

- (17.3) a. *Da chama amanangiēmgi chia chuar nēchama susurki*
 da kama amanangiēm-ki kia chuar na=kama susur-ki
 and ART₁ sighted.one-F.SG 3F.SG.I say.NPRES PREP=ART₁ blind-F.SG
- b. *ia kēvichi chi vēn*
 ia kēvi=ki ki vēn
 REL₁ CONTR=3F.SG.III 3F.SG.II climb.NPRES
- c. *dak kēvichi da chule chi mēk.*
 dak kēvi=ki da chule ki mēk
 but CONTR=3F.SG.III and stay.NPRES 3F.SG.III down
- d. *Da ma susurki aruski.*
 da ma susur-ki arus=ki
 and ART₂ blind-F.SG refuse.NI=3F.SG.III
 ‘Then the one who could see said to the blind woman that she should climb
 but she would stay down on the ground. And the blind woman refused.’

17.1.3 Disjunctive marker *ura*

The form *ura* can be used to link clauses or NPs. It also functions as the marker of a tag question (§15.3.4). Example (17.4c) shows the coordination of two different versions of events, expressed as distinct clauses.

- (17.4) a. *Dak peia gamar ngē muēn*
 dak pe=ia gamar ngē muēn
 but there=REL₁ war 3N.I arrive.PAST
- b. *da.sik kama gamar ngē munggunangēn ma vono*
 da=asik kama gamar ngē mugun=ngēn ma vono
 and=IRR ART₁ war 3N.I chase.PAST=2PL.III REL₂ up.slope
- c. *ura chok askok kule ngēn be ngēnnēma Pater?*
 ura kok as=kok kule ngēn pe ngēn=nē=ma Pater
 or just yet=just stay.PRES 2PL.III there 2.PL=ASSOC=ART₂ Father
 ‘And when the war arrived, did it chase you all up higher, or did you all just stay there with Father?’

Any of the logical relations potentially involved in disjunction are illustrated by Mali as the following examples show:

- open disjunction (X or Y (or Z)), example (17.4)
- closed disjunction (X or Y – nothing else), example (17.5)
- inclusive closed disjunction (either X or Y – or both), example (17.6)
- exclusive closed disjunction (either X or Y – not both), example (17.7).

- (17.5) *Ai, Jenifa, amēr.gēlēn ngē ura angēbēs?*
 ai Jenifa amēr.gēlēn ngē ura angēmbēs
 oh PN be.happy.NI 2SG.III or NEG
 ‘Oh, Jennifer, are you happy or not?’

- (17.6) a. *Ka dē chē pēlēng kama thinēm*
 ka da kē pēlēng kama thinēm
 3M.SG.I and 3M.SG.II kill.PRES ART₁ fish
- b. *ura chama isēm nēchama urki.*
 ura kama isēm na=kama ur-ki
 or ART₁ bird from=ART₁ bush-F.SG
 ‘He killed fish or birds from the bush.’

- (17.7) a. *Asika ngi vēlēk ia ngi vēlēng ngo,*
 asika ngi vlēk ia ngi vēlēng ngo
 if 2.SG.II like.NPRES REL1 2SG.II kill.NPRES 1SG.III
- b. *dai nge vēlēng ngo save ia sēmēt aup*
 dai ngi vēlēng ngo sa=pe ia sa=mēt a=up
 thus 2SG.II kill.NPRES 1SG.III to=there REL1 to=within SPEC=valley

- c. *ura save sēmēni chama renggi ...*
 ura sa=pe sa=mēni kama reng-ki
 or to=there to=on ART₁ river-F.SG
 ‘If you want to kill me, then you will kill me on the valley
 floor or at the river ...’

17.2 Subordination

This section describes clause linking strategies in Mali that involve a semantic dependency between one clause and another. Included here are purposive clauses (§17.2.1), reason clauses (§17.2.2), elaboration and consequence clauses (§17.2.3), and conditional clauses (§17.2.4).

17.2.1 Purposive clauses

Mali has three different purposives of increasing morphological complexity and semantic specificity. The basic form is *va* (A). There is also an intentional purposive *iva* (B) and a controlled purposive *diva* (C).

A. Basic purposive *va* ‘in order to’

The morphologically simple form *va* is the basic purposive. This form is clearly related to the benefactive and locative preposition *pa* (also pronounced *va*) (§7.1.8). Example (17.8) shows a purposive clause introduced by *va*, beginning in line c..

- (17.8) a. *Dē tha thēk.nathēvama chasesta*
 da ta thēk.na=athēvama chases-ta
 and 3H.PL.I make.PRES=3H.PL.POSS spy-H.PL
- b. *ma ta tes ta ia chama Kembechēna*
 ma ta tes ta ia kama Kembe-kēna
 REL₂ 3H.PL.I call.PRES 3H.PL.III REL₁ ART₁ PN-H.PL
- c. *va tha thet ti ngim*
 va ta thet ti ngiem
 PURP₁ 3H.PL.I go.FUT 3H.PL.II look.PRES
- d. *nani chama arutha vēk kama aurki.*
 nani kama a=ru-ta pēt kama a=ur-ki
 for ART₁ SPEC=person-H.PL at ART₁ SPEC=bush-F.SG
 ‘And they [the soldiers] sent their spies who they called the Kembes
 to go out and look for people in the bush.’
 (lit: ‘... in order that they would go out and look for people in the bush.’)

In example (17.8), there happens to be a different subject in the second clause than the first clause. However, as example (17.9) shows, there are also examples in which the same subject occurs in each clause.

- (17.9) a. *Kē chuar nacha*
 kē chuar na=ka
 3M.SG.II say.NPRES PREP=3M.SG.III

- b. *ia chē vētuvēs*
 ia kē vēt=avē=pēs
 REL₁ 3M.SG.II dive.NPRES=3M.SG.POSS=head
- c. *va sik kē vang sava sravētki.*
 va asik kē vang sa=av=a sravēt-ki
 PURP₁ IRR 3M.SG.II run.NPRES with=3M.SG.POSS=SPEC clothes-F.SG
 ‘He told him to dive so that he could run away with his clothes.’

The conventionalised way to encode inceptive aspect is to use the basic purposive marker after the existential predicate *pe*. The existential predicate *pe* is also used to encode imperfective aspect (§13.3.2.A). Example (17.10b) shows *pe* in both these functions and the basic purposive contributing to the inceptive reading.

- (17.10)a. *Sa nguave ngu tnaik tik*
 sa ngua=pe ngu tnaik ithik
 NEF 1.SG.I=there 1SG.II drink.PRES ADV.PROX.DEM
- b. *ia ngua ve va vlaik.sē ngo ia.*
 ia ngua pe va vlaik.sē ngo ia
 REL₁ 1SG.I there PURP₁ emerge.NPRES 1SG.III yes
 ‘I’m drinking now, so I’m going to come out.’

B. Intentional purposive *iva* ‘intending to’

Intentional purposive clauses are introduced by *iva*. This form is probably comprised of the reason clause marker *i* (§17.2.2) and the purposive *va*. Intentional purposive clauses focus on the desires, intentions and plans of the protagonists in the clause they modify. There is not necessarily an expectation that the goals or expectations of the protagonists will be fulfilled. An example is provided in (17.11).

- (17.11)a. *Paimga dē tha mu cha*
 paim-ka da ta mu ka
 dog-M.SG and 3H.PL.I put.PAST 3M.SG.III
- b. *iva sik kē svo thēcha mundēm.*
 iva asik kē svo tēm=kē=a mundēm
 PURP₂ IRR 3M.SG.II steal.NI THEME=ART₃=SPEC fire
 ‘They instructed the dog to steal the fire.’
 (lit: ‘Dog, they put (on) it intending that it would steal the fire.’)

C. Controlled purposive *diva* ‘so that’

Controlled purposive clauses are introduced by *diva*. This form appears to be built on the intentional purposive, additionally making use of the coordinator *da*. Controlled purposive clauses encode the expectation or very often the knowledge that the desires and plans of the protagonists will be or have been fulfilled.

Thus, the contrast between intentional purposive clauses and controlled purposive clauses has to do with causation. This contrast may to some extent compensate for the lack of a causative construction in the language. In (17.12), the controlled purposive is used. The contrast between (17.8) and (17.12), in which the basic purposive is used, relates to the

control the soldiers have over the events they are seeking to organise. They are able to force people to carry things for them in (17.12) but they cannot force people to be found in (17.8).

- (17.12) a. *Tha thēt kama chēluingda*
 Ta that kama chēluing-ta
 3H.PL.I get.FUT ART₁ black-H.PL
- b. *diva tha tat.nēthēmda sathēva guangithong.*
 diva ta tat.nēthēm=ta sa=athēv=a guang-ithong
 PURP₃ 3H.PL.I help.PRES=3H.PL.III with=3H.PL.POSS=SPEC thing-DIM.PL
 ‘They [the soldiers] got the black people in order to help them with their things.’

17.2.2 Reason clauses

Reason clauses are formed using the clause marker *i*. Example (17.13) shows a reason clause introduced by *i* in line d.

- (17.13) a. *Auk, sa cha bubang sa secha*
 auk sa kē=a bubang sa sek-ka
 well NEF ART₃=SPEC next.day NEF hero-M.SG
- b. *sa cha rēm kēlan*
 sa ka rēm klan
 NEF 3M.SG.I know.NPRES like
- c. *ia bubang sa ma rndam kia thēn*
 ia bubang sa ma rndam kia thēn
 REL₁ next.day NEF ART₂ witch 3F.SG.I arrive.FUT
- d. *i askok ma thalias ava lugutki*
 i as=kok ma thalias av=a lugut-ki
 because yet=just ART₂ wizard 3M.SG.POSS=SPEC spouse-F.SG
- e. *achik kia ve.*
 achik kia pe
 F.SG.CONTR.DEM 3F.SG.I there
 ‘Well, then the next day the hero already knew that the witch would come because one of the wizard’s wives was still there.’

The reason clause marker may also be used in conjunction with the discourse marker *mēndu* ‘before’: *i + mēndu*. These clauses identify prior causes for the events described in the main clause. An example is provided in (17.14c).

- (17.14) a. *Ia, ithik da mamēr ia*
 ia ithik da mamēr ia
 yes ADV.PROX.DEM and possible REL₁
- b. *sa chule nge nginaut*
 sa chule nge ngi=na=ut
 NEF stay.NPRES 2SG.III 2SG.II=ASSOC=1PL.III

- c. *i mundu masa ut mat.malengeik.nange*
i mēndu masa ut mat.malengeik.na=nge
 because before certainly 1PL.I believe.NI=2SG.III
- d. *ia kusek ma nge ngia met inamēk,*
ia kusek ma nge ngia met i-na-mēk
 REL₁ only ART₂ 2SG.III 2SG.I go.PAST DER₁-DER₃-down
- e. *ngia vang glan avik.*
ngia vang klan avik
 2SG.I run.NPRES like ADV.DIST.DEM
 ‘Yes, now it’s all right for you to stay with us because we certainly believe
 that only you came up from down there, you ran away like that.’

Causation may also be shown by the discourse marker *mēndu* ‘earlier’ plus the relator *ma* introducing a clause providing additional information about earlier events contributing to the relevant state of affairs. Example (17.15) shows *mēndu* with the relator *ma*.

- (17.15) a. *Amusnēng ngē mēn vemga sēvēt*
amusnēng ngē muēn pem=ka sa=pēt
 idea 3N.I arrive.PAST in=3M.SG.III to=at
- b. *kama Siapan’ga ia sok ka vēlēngga*
kama Siapan-ka ia sok ka vēlēng=ka
 ART₁ PN-M.SG REL₁ really 3M.SG.I kill.NPRES=3M.SG.III
- c. *mēndu ma cha tlu chama Siapanga plēng*
mēndu ma ka tlu kama Siapan-ka pēlēng
 before REL₂ 3M.SG.I see.PRES ART₁ PN-M.SG kill.PRES
- d. *kama rura chēlan*
kama ru-ta klan
 ART₁ person-H.PL only
 ‘He decided about the Japanese man that he really would kill him
 because he had seen the Japanese man kill the people.’

There are also examples, such as (17.16), in which the discourse marker *mēndu* acts as a reason clause subordinator in its own right.

- (17.16) *Koiku na anggung mēndu masa chia vēlēng ngēt.*
koiku na anggung mēndu masa kia vēlēng ngēt
 NEG PREP CN.INDEF.DEM before certainly 3F.SG.I kill.NPRES 3N.III
 ‘There was nothing because it certainly killed them.’

17.2.3 Elaboration and consequence clauses

Elaboration and consequence clauses are introduced by the subordinator *dai*. Example (17.17) comes from a story describing the provenance of a special kind of decorative plant (this class of plants is called *tangets* in PNG English). The second sentence in (17.17), which is introduced by *dai*, provides elaboration on the first.

- (17.17) a. *Ta tu.thē athēva vēt*
 ta tu.thēm athēv=a vuēt
 3H.PL.I decorate.PRES 3H.PL.POSS=SPEC village
- b. *ura athēva lat.*
 ura athēv=a lat
 or 3H.PL.POSS=SPEC garden
- c. *Dai chēvithi kuar ia chama mangbēchēng*
 dai kēvi=ti kuar ia kama mangbēchēng
 thus CONTR=3H.PL.II say.PRES REL₁ ART₁ decorative.plant
- d. *dinak kēvicha cha muēn*
 da=kinak kēvi=ka ka muēn
 and=indeed CONTR=3M.SG.III 3M.SG.I arrive.PAST
- e. *bivi viavik.*
 pa=avi vi=avik
 LOC=here EMPH=ADV.DIST.DEM
 ‘They decorate their village or their garden. Thus, as they say,
 the *tangets*, just that one, it arrived there like that.’

The subordinator *dai* is often found introducing consequence clauses in conditional constructions as the following section shows. Note that *dai* can also occur after the predicate in an adverbial function. This is discussed in (§14.4).

17.2.4 Conditional clauses

Conditional clauses are introduced by the irrealis marker *asika* with a second clause-initial marker introducing the clause encoding the possible consequences of the action. The form *asika* is related to *asik*, the irrealis marker for non-conditional clauses (see also §14.2.1). In (17.18) the conditional *asika* is used in the ‘if’ clause and the subordinator *dai*, which functions as a consequence marker ‘thus’ introduces the ‘then’ clause. The fact that (17.18) refers to hypothetical events is also indicated by the future tense verb in the second clause.

- (17.18) a. *Asika aslek.pēthachi nēcha rucha*
 asika aslek.pēt=ki na=kē=a ru-ka
 if be.willing.NI=3F.SG.III PREP=ART₃=SPEC person-M.SG
- b. *vakpik,*
 avak=vik
 M.SG.DIST.DEM=EMPH
- c. *dei thi vondēmgi sagēlēmgā*
 dai ti vondēm=ki sa=gēlēm=ka
 thus 3H.PL.II give.away.NPRES=3F.SG.III to=near=3M.SG.III
- d. *da kule chi chi nacha.*
 da kule ki ki nē=ka
 and stay.PRES 3F.SG.III 3F.SG.III ASSOC=3M.SG.III
 ‘If she’s willing to marry that particular man then they will give
 her to him and she stays with him.’

The non-conditional irrealis marker *asik* may also be used in the ‘consequence’ clause. Note that in example (17.19) the additive coordinator *da* is also present in each clause.

- (17.19) a. *Dasika athēva anga lēvopki chia ve,*
 da=asika athēva anga lēvop-ki kia pe
 and=if 3H.PL.POSS NSPEC female-F.SG 3F.SG.I there
- b. *da sik thi vondēmgi save ...*
 da asik ti vondēm=ki sa=pe
 and IRR 3H.PL.II give.away.NPRES=3F.SG.III to=there
 ‘And if they had a woman, they will give her to there’

Finally, note that coordinators can also be used to introduce the consequence clause. In (17.20) there are two hypothetical conditional propositions. The proposition ‘if you can’ in the first clause is in the future tense. The alternative ‘but if not’ is given in a coordinated clause rather than in a new conditional clause. The contents of the predicate are omitted here. In (17.20a) the ‘then’ clause is introduced by the unmarked coordinator *da*. The second ‘then’ clause is introduced by the elaboration and consequence subordinator *dai*. This subordinator indicates that the second ‘then’ clause is an alternative to the first.

- (17.20) a. *Dasika mamēr vēthange dē ngian buit*
 da=asika mamēr pēt=nge da ngi=thēn vuit
 and=if possible at=2SG.III and 2SG.II=arrive.FUT up.TERM
- b. *daka angēmbēs dai ngi vuinēm.*
 dak angēmbēs dai ngi vuinēm
 but NEG thus 2SG.II return.NPRES
 ‘And if you can, [then] go higher, but if not, [then] return.’

18 *Discourse organisation I*

This chapter draws on the work of de Vries (2005, 2006) to explore some features of discourse organisation in Mali. Here we cover thematisation (§18.1), clause level boundary phenomena (§18.2), contrastive reference marking (§18.3), tail-head linkage and intersentential clause chaining (§18.4), sentence level clause chaining (§18.5), and the use of ellipsis (§18.6). Chapter 19 also discusses discourse organisation but with a focus on the behaviour of inflectional categories (tense, noun class and number) in the context of the wider discourse. The use of reported speech is also dealt with in Chapter 19.

18.1 Thematization

De Vries (2005, 2006) notes that the use of thematisation strategies is an areal feature in the discourse organisation of the languages of Papua New Guinea and that the normal term within Papuan linguistics for ‘thematic or setting markers’ is ‘topic’ (de Vries 2006:814). The constituents that are commonly found in this position in Mali encode the time and one or more of the participants in the discourse.

An example of a prepositional phrase in this slot with adverbial function encoding the time of the event is given in (18.1a). (In these examples square brackets mark main clauses.)

- (18.1) a. *Dasip* *nē* *bangang*
 da=asip na bangang
 and=later.on PREP night
- b. [*di* *chia* *chuar* *natha* *ruachi* ...]
 da kia chuar na=at=a rua-ki
 and 3F.SG.I say.NPRES PREP=3F.SG.POSS=SPEC friend-F.SG
 ‘And later at night she said to her friend ...’

Temporal adverbs also commonly occur in this position. Example (18.2) shows that the topic position can contain quite elaborate series of constituents as it contains three different attempts at providing a temporal setting ((18.2a) and (18.2b)) in addition to a complex clause describing the participants with reference to a previous discussion ((18.2c)-(18.2d)).

- (18.2) a. *Mir,* *ta.ithik* *da* *ngēmbēs,*
 mir ta=ithik da angēmbēs
 long.ago EMPH=ADV.PROX.DEM and NEG

- b. *mir pe ma autha morta,*
 mir pe ma aut=a mor-ta
 long.ago there REL₂ 1PL.POSS=SPEC big-H.PL
- c. *chlan mali ngua thondem naruer ia*
 klan mali ngua thondem naruer ia
 like earlier 1SG.I recount.NPRES firstly REL₁
- d. *kama ngēkaochēna [ti mbon.dēchama*
 kama angēt=kao-kēna ti bon.dēm=kama
 ART₁ 3N.POSS=maternal.uncle-H.PL 3H.PL.II give.away.PRES=ART₁
- e. *lēvopki sanggēl athama chumeska]*
 lēvop-ki sa=gēl athama chumes-ka
 woman-F.SG to=with 3F.SG.POSS man-M.SG
 ‘Long ago, not now, long ago, when [in the time of] our ancestors,
 as I recounted before, the uncles, they give the woman to her man
 [i.e., husband].’

If a core argument of the clause is thematised, Mali uses a strategy reminiscent of left-dislocation to shift the NP to clause-initial position with the concordial pronoun remaining within the clause. When a speech act participant occurs in the topic slot, a class III concordial pronoun is used. An example of the second person singular pronoun *nge* is shown in this position in (18.3).

- (18.3) *Asik nge [dē ngia vang] [dē dēng.nange choe?]*
 asik nge da ngia vang da dēng.na=nge kue
 IRR 2SG.III and 2SG.I run.NPRES and stop.NI=2SG.III where
 ‘You ran and where did you stop?’

In example (18.4), the topic *kama vuspemgi* ‘the eruption’ functions as the A argument in the main clause. The NP occurs to the left of the clause and the concordial pronoun appears in the preverbal slot as expected for A/S_A arguments.

- (18.4) a. *Kama vuspemgi [da kia don kama ivētki]*
 kama vuspem-ki da kia don kama ivēt-ki
 ART₁ eruption-F.SG and 3F.SG.I throw.away.PRES ART₁ earth-F.SG
- b. *[da kama dul ama mor].*
 da kama dul ama mor
 and ART₁ stone REL₃ big
 ‘The eruption, it threw the earth and the big stones.’

In (18.5) there is an example of an S_A argument in this slot.

- (18.5) *Achumeska [da saisa chē vuinēm.]*
 a=chumes-ka da sai=sa kē vuinēm
 SPEC=male-M.SG and again=NEF 3M.SG.II return.NPRES
 ‘The man, he will go back again.’

An example of a thematised O argument is given in (18.6).

- (18.6) Arucha achēk nainathē
 a=ru-ka achēk na=i-na-ithē
 SPEC=person-M.SG M.SG.CONTR.DEM from=DER₁-DER₃-here
veia Marungga
 pe=ia Marungga
 there=REL₁ PN
 [dacha Siapan'gēna tha mēthacha
 da=kē=a Siapan-kēna ta mat=ka
 and=ART₃=SPEC PN-H.PL 3H.PL.I get.PAST=3M.SG.III
 [diva thēva thatalvemga nacha.]]
 diva athēv=a thatalvem-ka na=ka
 PURP₃ 3H.PL.POSS=SPEC carrier-M.SG PREP=3M.SG.III
 'One of the men from Marunga, the Japanese got him for their carrier.'

In (18.7) there is an example of a thematized S_O argument.

- (18.7) Authiaikkēna [da rusta.]
 aut=iaik-kēna da arus=ta
 1.PL.POSS=grandfather-H.PL and refuse.NI=3H.PL.III
 'Our grandfathers' people, they refused.'

Note that, as shown in (18.6) and (18.7), the use of left-dislocation is the only means of allowing a full NP plus a concordial pronoun for an O/S_O argument in the sentence.

18.2 Boundary phenomena

One of the difficulties that the strategy of thematisation poses for the listener is to identify where the thematisation ends and the main clause begins. Coordinators and discourse markers (§14.2–§14.3) have secondary functions in marking clause boundaries.

As shown by the examples in §18.1, the unmarked coordinator *da* frequently occurs after the thematized elements at the start of the main clause. The fact that the unmarked coordinator *da* has additional functions is clear from the fact that in narrative and conversation it is not unusual for the speaker to start a new sentence with *da*. Examples (18.8) and (18.9) are sentences uttered in sequence during a narrative. These examples show the unmarked coordinator *da* in three different functions. In (18.8) the coordinator marks the clause boundary, following a left-dislocated NP. The new sentence in (18.9) starts with *da*. This is clearly a new sentence as the final form in (18.8) is the tag question *ura* 'isn't it?'. Within (18.9) there are two clauses coordinated by *da*.¹

- (18.8) a. Angēmēng [da kosa cha ndang] ma
 angē=mēng da kosa ka dang ma
 3N.POSS=tree and just 3M.SG.I burn.PRES REL₂
 b. [cha ndang samēk sēmēt avēchuar mo] ura?
 ka dang sa=mēk sa=mēt avē=chuar mo ura
 3M.SG.I burn.PRES to=down to=within 3M.SG.POSS=root all or
 'The trees, it just burnt, um, it burnt down to its roots, didn't it?'

¹ The third person possessive pronoun here is a dummy pronoun. The speaker is treating 'trees' as an inalienably possessed noun (see also §11.4).

- (18.9) [*Da ka ndang*] [*da kosa vuthemga mēk ...*]
 da ka dang da kosa vuthem=ka mēk
 and 3M.SG.I burn.PRES and just fall.NPRES=3M.SG.III down
 ‘And it burnt and it just fell down ...’

Examples (18.10) and (18.11) represent adjacent turns at talk by different speakers. When the second speaker starts in (18.11) they use the adversative coordinator *dak* for the beginning of their turn.

- (18.10) ... *sa cha munggun bono.*
 sa ka mugun vono
 NEF 3M.SG.I sit.PAST up.slope
 ‘... then he settled up there.’
- (18.11) a. *Dak kama rura, ngi kuar ia*
 dak kama ru-ta ngi kuar ia
 but ART₁ person-H.PL 2SG.II say.PRES REL₁
- b. *tha thēk ngēt nēchama kapa.*
 ta thēk ngēt na=kama kapa
 3H.PL.I build.NPRES 3N.III PREP=ART₁ corrugated.iron
 ‘And the people, you say that they built it with corrugated iron.’

The coordinators, particularly *da*, have secondary functions in marking a clause boundary but it is important to note that this is an optional strategy. In (18.12) the boundary falls after the proper name *Nguingimga*. This boundary is indicated prosodically (indicated orthographically by a comma) by the speaker and *da* is not used.

- (18.12) a. *Katiketka vak ma tha teska*
 katiket-ka avak ma ta tes=ka
 catechist-M.SG M.SG.DIST.DEM REL₂ 3H.PL.I call.PRES=3M.SG.III
- b. *Nguingimga, in nēp.nautha mēthamon ...*
 Nguingimga in nēp.na=aut=a mēthamon
 PN 3DU.I translate.NPRES=1PL.POSS=SPEC language
 ‘That catechist who they call Nguingimga, the two of them translated our language ...’

Other clause-initial constituents may also have this secondary function and, again, in this case *da* may not be used. This is shown in (18.13) where the boundary falling between the thematized element in (18.13a) and the main clause in line (18.13b) is indicated prosodically and with the irrealis marker *asik*. In (18.13c) *da* is functioning as a coordinator proper and co-occurs with other clause-initial elements.

- (18.13) a. *Mundu ma autha morta,*
 mēndu ma aut=a mor-ta
 before REL₂ 1PL.POSS=SPEC ancestor-H.PL
- b. *asik kama Butamgēna tha tet*
 asik kama Butam-kēna ta tet
 IRR ART₁ Butam-H.PL 3H.PL.I go.PRES

- c. *dasik ti pēlēng sēvēt authama authiaikkēna*
 da=asik ti pēlēng sa=pēt authama aut=iaik-kēna
 and=IRR 3H.PL.II kill.PRES to=at 1PL.POSS 1PL.POSS=grandfather-H.PL
 ‘Long ago our ancestors, the Butam would go and they’d kill our ancestors.’

18.3 Contrastive reference

Mali has a range of determinatives and pro-forms that tend to occur in NPs in topic position and that have the function of indicating contrast between competing referents. This is consistent with the observation by de Vries (2006:825) that ‘[d]emonstratives, or in some cases, specialized thematic markers, are used to mark thematic nominal phrases.’ In Mali, the system of contrastive marking is spread across three grammatical categories, but in every case the segment *kē* is an element in the resulting forms. These forms include: the contrastive pronouns, all of which take the proclitic *kēvi=* (§18.3.1), the contrastive demonstratives, all of which are based on the stem *chēk(ē)* plus the relevant noun class marking (§18.3.2), and the NP article *kē* (§18.3.3).

18.3.1 Contrastive pronouns

All contrastive pronouns make use of the proclitic *kēvi=*. The paradigm for contrastive pronouns is set out in §5.2.5. Example (18.14) (see also (18.18) below) comes from a story about a group of six men who are planning to kill a crocodile. They are all feeling quite nervous as they only have one iron spear between them and do not usually hunt crocodiles. The man who found the crocodile asks ‘who is going to spear it?’ and is informed:

- (18.14) *Sok ma chēvinge, ma mali ngia luchi.*
 sok ma kēvi=nge ma mali ngia lu=ki
 really ART₂ CONTR=2SG.III REL₂ earlier 2SG.I see.NPRES=3F.SG.III
 ‘That’s definitely you, who saw it before.’

The diminutive singular form is shown in (18.15a).

- (18.15)a. *Dak sai chēvi.ngini*
 dak sai kēvi=ngini
 but again CONTR=DIM.SG
- b. *dē ngini ngē slavo avi munggurup.*
 da ngini ngē slavo avi munggurup
 and DIM.SG 3N.I mess.up.NI there middle
 ‘But the little one had messed things up right in the middle (of it all).’

The contrastive pronouns are especially common in contexts in which there are two entities with similar grammatical values to track. Example (18.16) makes reference to two women, one who can see and one who is blind. When the subject switches (18.16c) and (18.16d) the contrastive pronoun is used.

- (18.16)a. *Da chama amanangiēmgi*
 da kama a=manangiēm-ki
 and ART₁ SPEC=sighted-F.SG

- b. *chia chuar nēchama susurki ia*
 kia chuar na=kama susur-ki ia
 3F.SG.I say.NPRES PREP=ART₁ blind-F.SG REL₁
- c. *kēvichi chi vēn*
 kēvi=ki ki vēn
 CONTR=3F.SG.III 3F.SG.II climb.NPRES
- d. *dak kēvichi da chule chi mēk.*
 dak kēvi=ki da chule ki mēk
 but CONTR=3F.SG.III and stay.NPRES 3F.SG.III down
 ‘Then the one who could see said to the blind woman that she [that is, the sighted one] should climb and she [that is, the blind one] would stay down on the ground.’

The contrastive pronoun can also occur in the modifier position within an NP. An example is given in (18.17a). This example contains a relativised NP functioning as a clause.

- (18.17) a. *Alenge.angēthieik chēvicha*
 a=lenge.angēthieik kēvi=ka
 SPEC=leader CONTR=3M.SG.III
- b. *ma asik chē tēp.ma thondēm sēvēt kama mēsmēski.*
 ma asik kē tēp.ma thondēm sa=pēt kama mēsmēs-ki
 REL₂ IRR 3M.SG.II make.PRES rule to=at ART₁ feast-F.SG
 ‘That leader is the one who makes the rules for the feast.’

Contrastive pronouns are only found in topic position. Example (18.18b) and (18.18c), both contain contrastive pronouns in topic position. In the preceding clause someone asked, ‘who is going to spear the crocodile?’ As all of the people in the story are afraid of the crocodile, not having ever seen one before, they reply by scapegoating the first speaker:

- (18.18)a. *Uthi chuar na cha chlan daithik ia,*
 uthi chuar na ka klan ta=ithik ia
 1PL.II say.NPRES PREP 3M.SG.III like EMPH=ADV.PROX.DEM REL₁
- b. “*Sok ma chēvinge ma mali ngia lu chi.*
 sok ma kēvi=nge ma mali ngia lu ki
 really ART₂ CONTR=2SG.III REL₂ earlier 2SG.I see.NPRES 3F.SG.III
- c. *Da sik ma chēvinge ngi chut.mēchi.”*
 da asik ma kēvi=nge ngi chut.mēt=ki
 and IRR ART₂ CONTR=2SG.III 2SG.II spear.NPRES=3F.SG.III
 ‘We told him like this, “That’s definitely you who saw it first. Only you will spear it.”’

18.3.2 Contrastive demonstratives

The paradigm for contrastive demonstratives is given in §5.2.6.C. All these forms are based on a stem with the form *chēk(ē)*. However, as they are not fully analysable, the members of this paradigm are treated as non-segmentable forms in the glosses below. Contrastive demonstratives fulfil demonstrative functions (such as modifying a noun) as well as some functions of anaphoric pronouns (such as being possessed). Example (18.19)

shows the reduced plural emphatic contrastive demonstrative modifying the noun *vlēm vap* ‘piglets’ and the non-emphatic version of the same demonstrative as the head of a possessed NP.

- (18.19)a. *Kama vlēm vap chēkē vap*
 kama a=plēm-vap chēkē vap
 ART₁ SPEC=pig-RCD.PL EMPH.RCD.PL.CONTR.DEM
- b. *dēma Andrēu avēchē vap.*
 da=ma Andrēu av=chē vap
 and=ART₂ PN 3M.SG.POSS=CONTR.DEM.RCD.PL
 ‘Those piglets, they are Andrew’s piglets.’

Like contrastive pronouns, contrastive demonstratives typically occur in topic position. The masculine singular contrastive demonstrative *achēk* is shown in topic position in (18.20b) and (18.20c). In other positions in the clause, as dependent elements within an NP, the contrastive demonstratives encode enumerative, sequential and distributional meanings (§10.5).

- (18.20)a. *Kule ngaiom, ka muēn dē chule ngaiom*
 kule ngaiom ka muēn da chule ngaiom
 stay.PRES M.DL 3M.SG.I arrive.PAST and stay.NPRES M.DL
- b. *dēmna. Achēk ka munggun*
 tēmna achēk ka mugun
 together M.SG.CONTR.DEM 3M.SG.I sit.PAST
- c. *doki achēk ka munggun.*
 da=koki achēk ka mugun
 and=also M.SG.CONTR.DEM 3M.SG.I sit.PAST
 ‘The two stayed, he arrived and the two stayed together. One sat, and the other just sat.’

The contrastive demonstratives have abbreviated and emphatic forms (§5.2.6.C). Example (18.21) shows the diminutive singular emphatic contrastive demonstrative *chēkēni*. This demonstrative is used when the contrast between participants is surprising or remarkable. Example (18.21) comes from a story in which a tiny bird cleverly tricks an eagle (‘the king of the birds’). After describing the eagle’s rather predictable behaviour, the narrative shifts to the *dingding* bird.

- (18.21)a. *Dak kinai, pēs.dē chēkēni,*
 dak kinai pēs.dē chēkēni
 but in.contrast at.that.moment EMPH.DIM.SG.CONTR.DEM
- b. *ma dingdingini, dinai ngē sekmes nave.*
 ma dingding-ini da=kinai ngē sekmes na=pe
 REL₂ PN-DIM.SG and=in.contrast 3N.I get.up.NI from=there
 ‘But instead, at that moment, that little one, the dingding bird, it took off from there.’

18.3.3 NP article *kē* in contrastive NPs

As discussed in §10.3.3, the NP article *kē* is associated with uniquely identifiable referents established within the discourse. In addition to reintroducing established topical referents and referents that the speaker is asserting the hearer should already be able to place, this NP article is also associated with contrastive mentions of competing referents.

Both clauses in (18.22) have NPs in topic position. This example comes from a text about the trials that a man and a woman who elope together must traditionally face. The focus is mainly on the man but periodically, as in (18.22b), the story shifts to describing the woman. The NP article *kē* reintroduces the woman and, by virtue of this function, indicates to the hearer that a new, contrasting participant is becoming active in the discourse.

- (18.22) a. *Achumeska da saisa chē vuinem.*
 a=chumes-ka da saisa kē vuinem
 SPEC=male-M.SG and once.again 3M.SG.II return.NPRES
- b. *Kē lēvopki dē sei chi vuinem*
 kē lēvop-ki da sai ki vuinem
 ART₃ female-F.SG and again 3F.SG.II return.NPRES
- c. *sanggēl at kēvēk.*
 sa=gēl at kēvēk
 to=with 3F.SG.POSS relatives
 ‘The man goes back again. The woman goes back to her relatives again.’

18.4 Tail-head linkage and intersentential clause chaining

As de Vries (2005:364-365) has noted, tail-head linkage is an areal feature of discourse organisation within the New Guinea area. He recognises two types of tail-head linkage: a ‘nominalising’ type that involves the recapitulation of key clauses within a text and indicates thematic discontinuity, and a ‘chaining’ type that is used to preserve thematic continuity by recapitulating clauses. In Mali it is possible to recognise the chaining type of clause linking where the links in the chain are provided by clauses that are repeated across sentence boundaries as an indicator of thematic continuity.

A typical example for a Mali narrative is given in (18.23). In this example, there are two stretches of talk linked via recapitulation. The first stretch describes the journey of some spies into the bush (lines a–e). The second stretch describes the capture of some people in the bush (lines f–j). The recapitulation at line f serves to link the two events. An expansion of lines f–g is given in lines h–i and this too is organised along the lines of recapitulation. (Because this example is so long, the free translation is included after each line.)

- (18.23) a. *Achasesta avathē vik*
 a=chases-ta avathē vik
 SPEC=spy-H.PL H.PL.DIST.DEM EMPH
 ‘Those particular spies
- b. *ta met nēk kama aiska inamēk*
 ta met na=pēt kama a=is-ka i-na-mēk
 3H.PL.I go.PAST from=at ART₁ SPEC=road-M.SG DER₁-DER₃-down
 ‘they went up from the road

- c. *dē tha thon.dēm ma Mēndai saivuk*
 da ta thon.dēm ma Mēndai sa=i-vuk
 and 3H.PL.I follow.NPRES ART₂ PN to=DER₁-up
 ‘and they went along the Mundai River up
- d. *dē tha muēn vēk kama mbangēm*
 da ta muēn pēt kama a=bang-ēm
 and 3H.PL.I arrive.PAST at ART₁ SPEC=village-RCD.SG
 ‘and they came to the village
- e. *ma tha tes ngam ia Maslabe.*
 ma ta tes ngam ia Maslabe
 REL₂ 3H.PL.I call.PRES RCD.SG REL₁ PN
 ‘which they call Maslabe.
- f. *Ta muēn.bētha ngam*
 Ta muēn.vēt ngam
 3H.PL.I find.PAST RCD.SG
 ‘They found it (the village)
- g. *dē tha chēthep kama arutha.*
 da ta chēthep kama a=ru-ta
 and 3H.PL.I grab.NPRES ART₁ SPEC=person-H.PL
 ‘and they captured the people.
- h. *Ta muēn.bētha ngam*
 ta muēn.vēt ngam
 3H.PL.I find.PAST RCD.SG
 ‘They found it
- i. *dē tha chēthep kama rutha ama adēvaung natha.*
 da ta chēthep kama ru-ta ama adēvaung na=ta
 and 3H.PL.I grab.NPRES ART₁ person-H.PL REL₃ three.M PREP=H.PL
 ‘and they captured three people.
- j. *Da arutha tha mo dē tha vang.*
 da a=ru-ta ta mo da ta vang
 and SPEC=person-H.PL 3H.PL.I all and 3H.PL.I run.NPRES
 ‘And all the other people ran away.’

The languages that we typically think of in relation to tail-head linkage involve clause chaining with switch reference marking. Mali is not a language of this type and there is no syntactic indication that the clause that is repeated closes one ‘sentence’ and then opens another. However, the prosody of recapitulative clauses noted by de Vries, that is ‘[t]he tail clause has a falling final intonation and the head clause a rising intonation, with slow pronunciation, and often pauses or pause marking elements after the head clause (2005:378)’, is present to some extent in examples such as (18.23). A clear falling prosody occurs at the word *Maslabe* in (18.23e) and a rising intonation occurs in (18.23f). These two utterances are shown here in Figures 18.1 and 18.2.

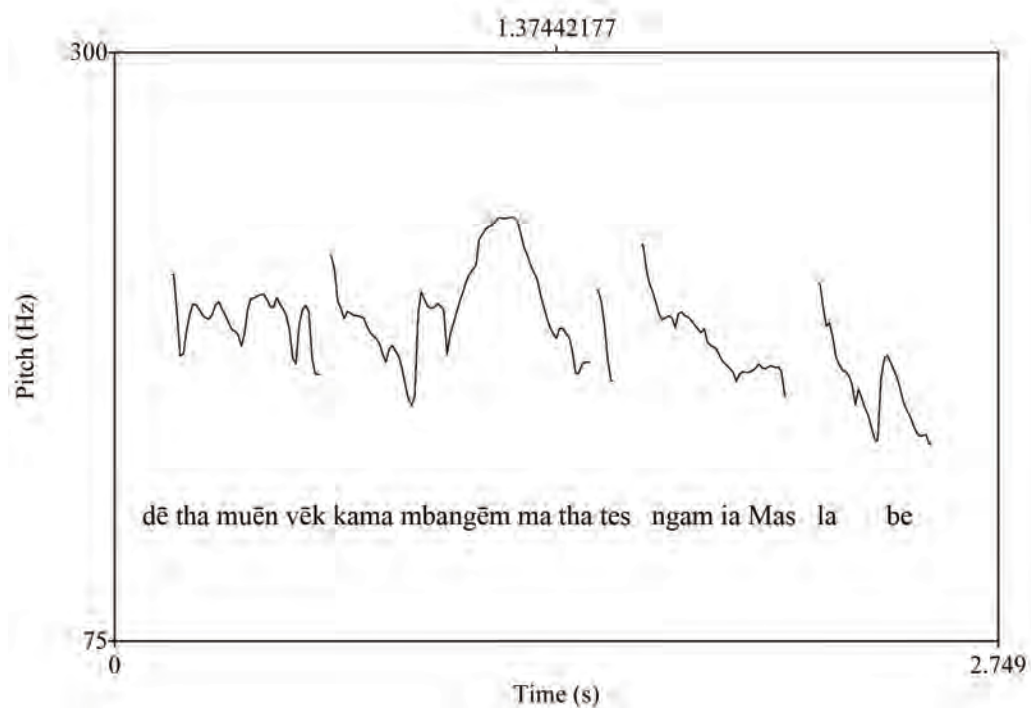


Figure 18.1: The tail clause following line d and ending in line e from (18.23)

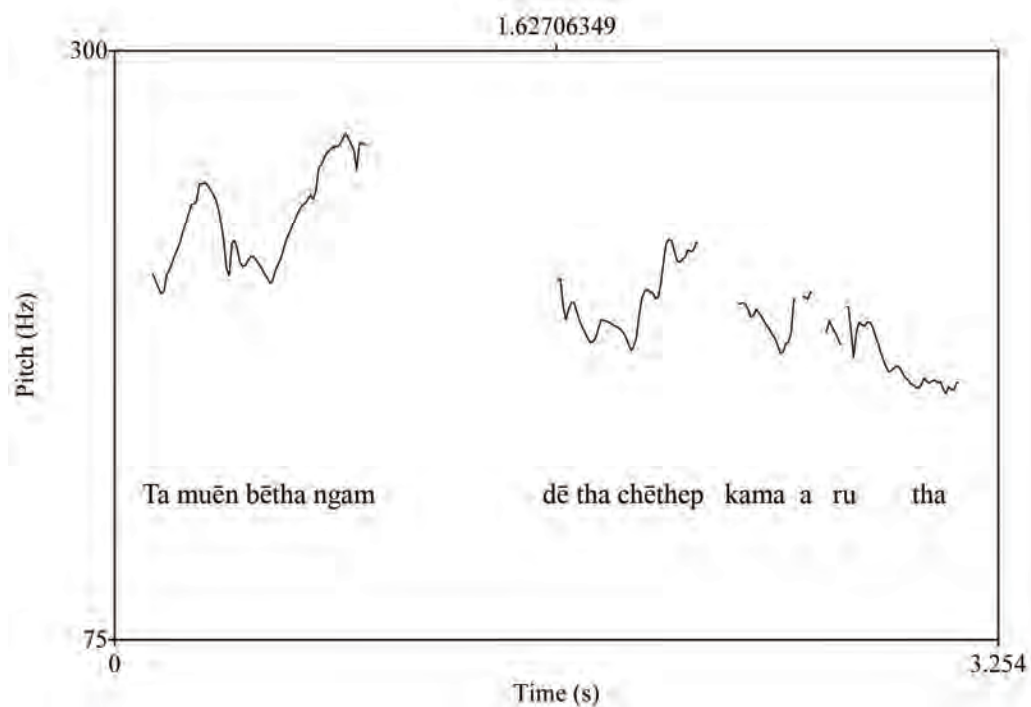


Figure 18.2: The head clause in line (f) completed by (18.23g)

A similar prosody is present in lines (h)–(i) which recapitulate on (f)–(g) for the purpose of expansion rather than thematic continuity. In this case the falling prosody is on the word *arutha* in the tail clause shown in line (g) (Figure 18.2 above). In line (h) (Figure 18.3), rather than a rising prosody with slow pronunciation, the speaker's prosody shows typical downstepping and fast delivery until the end of the sentence with only the key words *adēvaung natha* 'three of them' have the rising prosody and slower pronunciation expected in a head clause.

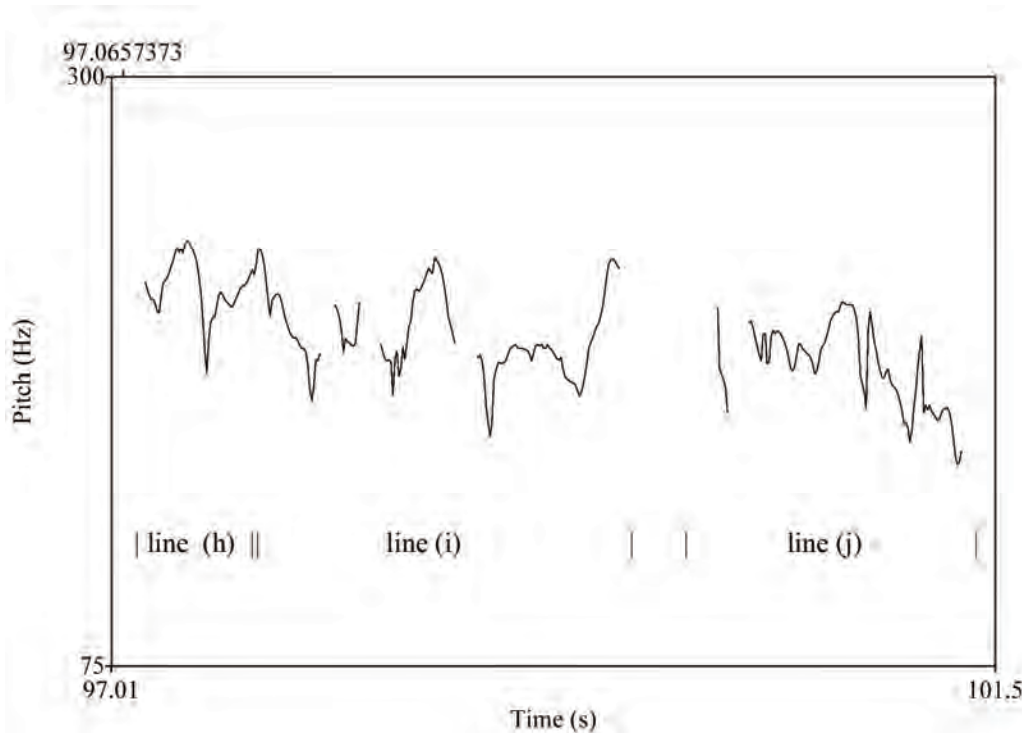


Figure 18.3: Recapitulating head clause in lines (h)–(i) completed by (18.23j)

De Vries (2005:367) notes that in many Papuan languages there is a preference for establishing the participants in a series of thematic statements and for minimising the use of NPs in the discussion of events. Mali shows a tendency to using this strategy. For example, the stretch of narrative presented in (18.23) shows the preference for clauses in the body of a Mali narrative to be limited to one NP referent, typically an O argument or a PP indicating location.

18.5 Sentence level clause chaining

The term 'clause chaining' is also applicable to a specific sentence level syntactic construction in Mali in which strings of short clauses are marked with a distinctive tense pattern on the final verb. These clause chains typically refer to a series of actions that make up a larger event that can be viewed as a unified whole.

The final verb in the chain is always in the present tense (see §19.1 and the system of tense marking discussed in §4.2). Example (18.24) shows a class II concordial pronoun associated with the final Type B verb in the present tense.²

- (18.24) *Dē tha thēk.nathēvama chasesta ...*
 da ta thēk.nē=athēvama chases-ta
 and 3H.PL.I send.NPRES=3H.PL.POSS spy-H.PL

 va [tha thet ti ngim] nani chama arutha ...
 va ta thet ti ngim nani kama a=ru-ta
 PURP₁ 3H.PL.I go.FUT 3H.PL.II look.PRES for ART₁ SPEC=person-H.PL
 ‘And they sent their spies ... to go out and look for people ...’

A similar example is provided in (18.25). The first two verbs are in the past tense and the final verb is in the present tense (Type B verb *pēk*).

- (18.25) a. *Elton [ka met ka thor*
 Elton ka met ka thor
 PN 3M.SG.I go.PAST 3M.SG.I wash.NPRES

 b. *kē pēk ava plastiki].³*
 kē pēk av=a plastik-ki
 3M.SG.II fill.PRES 3M.SG.POSS=SPEC bottle-F.SG
 ‘Elton went, washed, (and) filled his bottle.’

A single verb may be repeated in a chain of clauses in order to encode durativity. An example is given in (18.26). In this example, the speaker also drew out the word *inamēk* to indicate the length of the journey. In this example there is again a change in the tense marking on the final verb to the present tense. In this case the class I concordial pronoun is consistent with present tense marking on a Type A verb.

- (18.26) a. ... *kia met nacha dē [kia met*
 kia met na=ka da kia met
 3F.SG.I go.PAST from=3M.SG.III and 3F.SG.I go.PAST

 b. *kia met kia tet] inamēk.*
 kia met kia tet i-na-mēk
 3F.SG.I go.PAST 3F.SG.I go.PRES DER₁-DER₃-down
 ‘... she went away from him, she went and went and went up.’

It is possible to have a coordinator between each clause in the chain. As shown in (18.27), the use of present tense marking described above is also observed in these examples. In this case, as in (18.26), there is a class A verb with a class I concordial pronoun encoding present tense as expected on the final verb.

² A relative clause describing the spies has been omitted from the first line and a peripheral prepositional phrase describing the location has been omitted from the second.

³ In fact my notes for this sentence, which was elicited in connection with trying to explore the directionals, has the class I concordial pronoun *ka* before the final verb. Given that these notes were made early in the research I strongly suspect that this is an error on my part rather than evidence of an anomalous use of the pronoun.

- (18.27)a. *Da cha namu, dē cha namu,*
 da ka namu da ka namu
 and 3M.SG.I continue.NI and 3M.SG.I continue.NI
- b. *dē cha namu, dē cha ndēn buk.*
 da ka namu da ka dēn vuk.
 and 3M.SG.I continue.NI and 3M.SG.I arrive.PRES up
 ‘And he kept on going, and he kept on going, and he kept on going,
 and he arrived up high.’

An alternative analysis of this type of construction would be that it is an example of a serial verb construction. The pattern of placing a present tense verb in final position in the sequence is an obvious problem for this approach since serial verbs are expected to share inflectional values for tense. For this reason I have not taken this approach here.

18.6 Ellipsis

Ellipsis is not common in Mali and there is no ellipsis of pronominal NPs in the language. Occasional examples of other types of ellipsis are found. In (18.28b) there is an example of ellipsis of the A argument and the verb together. The A argument and the verb are underlined in the first and third clauses. Although ellipsis is rare in Mali, this example shows that it is possible.

- (18.28)a. ... *uer kia rut.natha* *lēchērithom,*
 uer kia rut=na=at=a *lēchar-ithom*
 first 3F.SG.I push.NPRES=DETR₁=3F.SG.POSS=SPEC leg-DIM.DL
- b. *sa chule sa at kēndēnggi,*
 sa kule sa at kēndēng-ki
 NEF later NEF 3F.SG.POSS body-F.SG
- c. *sa chule sa kosa chia rut.nanas* *mo ...*
 sa kule sa kosa kia rut=na=nas *mo*
 NEF later NEF just 3F.SG.I push.NPRES=DETR₁=REFL all
 ‘... first she pushed through her two small legs, then [she pushed] her body,
 then she just pushed herself through completely ...’

Another apparent example of ellipsis occurs with some verbs of hearing and seeing. In examples (18.29) and (18.30) there are two clauses but the subordinator *ia* is not present (see also the discussion in §16.4.2) and the clauses seem to share one of the arguments. In example (18.29) the NP *athēva bangga* is apparently the O NP of the first clause or the A NP of the second clause. The same is true of the NP *ma Peter* in (18.30). Without the subordinator *ia* there is no strong case for arguing that one interpretation is more adequate.

In examples, I have indicated the complement clause interpretation ‘they saw: their house was all burnt down’ in round brackets for the main clause and square brackets for the complement clause. The interpretation involving apposition of two clauses ‘they saw their house: it was burnt down’ is marked by braces around each clause.

- (18.29) ({*dē tha lu* [*athēva bangga*]
 da ta lu athēv=a bang-ka
 and 3H.PL.I see.NPRES 3H.PL.POSS=SPEC house-M.SG

{*sa cha mang mo ...*}}))
sa ka mang mo
 NEF 3M.SG.I burn.PAST all
 ‘They saw their house all burnt down ...’

- (18.30) ({*Ngua nari* [*ma Peter* }
ngua nari ma Peter
 1SG.I hear.NPRES ART₂ PN
 {*chē pēs.mēt kama abiulki.*}}))
kē pēs.mēt kama abiul-ki
 3M.SG.II blow.PRES ART₁ conch.shell-F.SG
 ‘I heard Peter blow the conch.’

Finally, we should note that there are occasional examples of gapping in coordinated clauses in Mali. An example is provided in (18.31).

- (18.31) *Cha vondēm chama twistis baut*
ka vondēm kama twistis pa=ut
 3M.SG.I give.away.NPRES ART₁ PN BEN=1PL.III
dēchoki batha.
da=koki pa=ta
 and=also BEN=3H.PL.III
 ‘He gave the Twisties to us and also to them.’

Question strategies involving ellipsis are discussed in §15.3.3.

19 *Discourse organisation II*

Some key structural properties of discourse organisation in Mali were discussed in Chapter 18. Here, in Chapter 19, we focus on interactions between inflectional systems of nouns and verbs and the wider discourse context. The manipulation of the tense of the clause to manage information status is described in §19.1. Discourse effects on noun class marking are discussed in §19.2. The use of reported speech is described in §19.3, and strategies for expressing comparisons are discussed in §19.4.

19.1 Tense in discourse

In addition to encoding temporal distinctions, tense is used to organise information within the discourse. As a result, in narratives it is very common for the tense of the verb to disagree with the time reference of the text. Specifically, the present tense is used in many contexts that relate to events in the past. This use of the present tense in a past time context indicates that the events being related are of present relevance. The present tense is also common in hypothetical and instructional texts which are in some sense ‘timeless’.

The following four examples are taken from a story about a Mali man who has been forced to work as a carrier for the Japanese during the war. He is asked to carry a sick soldier’s gun and decides to kill the soldier in revenge for earlier crimes he has seen the soldier commit. The narrator begins by introducing the theme of war, describing the main participants in the war (the Japanese, Americans and Australians, as well as the man in the story) and explaining the role of carriers. He also explains what the man and the soldier were doing when the main events in the story took place. All of this information is given in the present tense as it is relevant to understanding the story at hand. The final present tense clause at the start of the story is given in (19.1). This use of the present tense is reminiscent of the historical present tense in English but is much less stylistically marked in Mali. The present tense is indicated by the form of the verb. The verb ‘walk’ is a Type A verb with the form *tet* in the present tense only (see also §4.2.1).

- (19.1) *Siapan’ga sa ngabēs nava anga cherot*
Siapan-ka sa angēmbēs na=av=a anga cherot
PN-M.SG NEF NEG PREP=3M.SG.POSS=SPEC NSPEC strength
da cha tet nasot.
da ka tet nasot
and 3M.SG.I go.PRES behind
‘The Japanese man had no strength and he walked (lit: walks) behind.’

The next sentence (19.2) marks the turn of the narration to the key events in the story. This sentence is in the past tense, consistent with the time the events took place. The verbs *bon* ‘give’ and *kuer* ‘go first’ are Type B verbs that have fricative consonants and take class I A/S_A pronouns in the past tense (see also §4.2.).

- (19.2) *Cha von ma Lēmuthēmga nava vilēchi*
 ka von ma Lēmuthēmga na=av=a vilēk-ki
 3M.SG.I give.NPRES ART₂ PN PREP=3M.SG.POSS=SPEC gun-F.SG
da cha chuer sēchi.
 da ka chuer sa=ki
 and 3M.SG.I go.first.NPRES with=3F.SG.III
 ‘He gave Lēmuthēmga his gun and he went first with it.’

After a sentence describing their route, still in the past tense, the narrator gives (19.3), again in the past tense.

- (19.3) *Amusnēng ngē mēn vemga*
 a=musnēng ngē muēn pem=ka
 SPEC=idea 3N.I arrive.PAST in=3M.SG.III
sēvēt kama Siapan’ga ia sok ka vėlēngga.
 sa=pēt kama Siapan-ka ia sok ka vėlēng=ka
 to=at ART₁ PN-M.SG REL₁ really 3M.SG.I kill.NPRES=3M.SG.III
 ‘He decided about the Japanese man that he really would kill him.’

Then, when explaining the reason why the carrier decides to kill the soldier, the narrator reverts to the present tense for the clause in (19.4). With this clause the narrator is reverting to providing contextually relevant information. Once the explanation is complete (another clause later), the narrator goes back to the events he is focussing on and uses the past tense until the end of the story.

- (19.4) *Mēndu ma chē tlu*
 mēndu ma kē tlu
 before REL₂ 3M.SG.II see.PRES
chama Siapan’ga plēng kama rura chēlan.
 kama Siapan-ka pēlēng kama ru-ta klan
 ART₁ PN-M.SG kill.PRES ART₁ person-H.PL only
 ‘Because he had seen the Japanese man kill the people.’

These examples show the present tense being used to refer to contextually relevant information. The present tense may also be used to highlight an event. This seems to be the case in the next set of examples. The passage in (19.5)–(19.8) is a sequence of clauses from a narrative. All of the events narrated happened in the past. However, after the past time reference is set up in (19.5) and (19.6), the present tense forms begin to be used from (19.7). In this case the motivation may be to convey the drama and immediate personal relevance to the speaker of the events being described.

- (19.5) *Auk, chule dē chē Tangamēta tha met*
 auk kule da kē Tangamēt-ta ta met
 well later and ART₃ PN-H.PL 3H.PL.I go.PAST

dē tha vesnas ...
da ta vesnas
 and 3H.PL.I get.nothing.NPRES
 ‘Well, then those Tolais went up there and got nothing ...’

- (19.6) *Sa chule sa ivi*
sa kule sa i-vui
 NEF later NEF DER₁-upwards

Sa chule sa tha vēnaseng nēchē gamar navi.
sa kule sa ta vēnaseng na=kē gamar na=avi
 NEF later NEF 3H.PL.I start.NPRES PREP=ART₃ fight from=there
 ‘So from then on the fighting started.’

- (19.7) *Sa chē gamar ngēthi bēnaseng navi vuit ...*
sa kē gamar ngēthi bēnaseng na=avi vuit
 NEF ART₃ fight 3N.II start.PRES from=there up.TERM
 ‘So the fighting starts from there on ...’

- (19.8) *Da sik kama Thangameta*
da asik kama Thangamet-ta
 and IRR ART₁ PN-H.PL

dē thi pēlēng autha morta.
da ti pēlēng aut=a mor-ta
 and 3H.PL.II kill.PRES 1PL.POSS=SPEC ancestor-H.PL
 ‘And the Tolais, they kill our ancestors.’

These examples show that speakers may have varying motivations for moving into the present tense in a past time context. In all cases a change to present tense is an indicator of the present relevance of the material in the clause.

19.2 Noun class marking in discourse

Two topics are addressed in this section: the lack of noun class marking on common NPs used to refer to anthropomorphised non-human referents (§19.2.1), and the lack of noun class marking on entities referred to only incidentally in the text (§19.2.2).

19.2.1 Anthropomorphising and noun class marking

As described in §10, proper and common nouns are readily distinguished in Mali because they frequently have different discourse status and typically take different articles. The article *ma* is associated with inherently uniquely identifiable referents within the discourse, often proper nouns, while common nouns are more usually associated with the unmarked NP article *kama*. Common nouns referring to characters in stories are often treated as proper nouns during the main part of a narrative, taking the article *ma*. This is consistent with the anthropomorphising of characters that is central to the plots of many stories. During the course of the narrative, referents become unique individuals with particular characters requiring proper noun designation. In (19.9) both the wallaby and the rooster take the NP-article *ma* in association with the common noun terms used to refer to these animals:

- (19.9) ... *dē mā chaelka da chave chē*
 da ma a=kael-ka da ka=pe kē
 and ART₂ SPEC=wallaby-M.SG and 3M.SG.I=there 3M.SG.II
- tlu mā duraika mavo ...*
 tlu ma duraik-ka mavo
 see.PRES ART₂ chicken-M.SG badly
 ‘... Wallaby was feeling jealous of Rooster ...’

In this context, the bare noun stem may be used as an address term. In example (19.10) the stem for ‘chicken(s)’ *duraik* is used by the wallaby to address the rooster in the story:

- (19.10) *Auk, duraik, nge di.nai ngia thet save*
 auk duraik nge da=kinai ngia thet sa=pe
 well chicken 2SG.III and=in.contrast 2SG.I go.FUT to=there
- sdēngētham dak ma ngo nasot.*
 sdē=angēt=am dak ma ngo nasot
 at=3N.POSS=front but REL₂ 1SG.III behind
 ‘Well, Rooster, you must go to the front and I will sit in the back.’

The use of the NP-articles *kama* and *ma* changes through a story. When a character is strongly anthropomorphised, the noun used to refer to them has the status of a proper noun. When a character is mentioned in a more detached way, the noun is treated as a common noun. Introductory sentences make use of the common noun NP-article *kama* to introduce the participants. Then the speaker typically switches to the proper noun NP-article *ma* for the main part of the story, where the actions and motivations of the character are highlighted. The common noun NP-article appears again as the story draws to a close. Sentences such as (19.11) return the participants to an external perspective on events, making use of the common noun NP-article:

- (19.11) *Sa thaithik sa ngēni lu ia vaimga*
 sa ta=ithik sa ngēni lu ia a=paim-ka
 NEF EMPH=ADV.PROX.DEM NEF 2PL.II see.NPRES REL₁ SPEC=dog-M.SG
- da cha tēs chama asnok dak chama*
 da ka tēs kama a=snok dak kama
 and 3M.SG.I eat.PRES ART₁ SPEC=excreta but ART₁
- chalega da achuvēt ava thichithom.*
 a=kael-ka da a=chuvēt av=a tik-ithom
 SPEC=wallaby-M.SG and SPEC=short 3M.SG.POSS=SPEC hand-DIM.DL
 ‘So now you see that the dog eats excreta and the wallaby has two short paws.’

19.2.2 Noun class marking and incidental entities

In this section we consider common nouns that refer to less central referents within the discourse. Common nouns are typically not marked for number unless the item in question is of high pragmatic salience. In Mali, new entities are often introduced without noun class markers. Examples (19.12) and (19.13) (separated by seven clauses in the original text) show that the referent (a rope) gains a noun class marker when it becomes an explicit part of the action:

- (19.12) *Sa chule sa tha thek.nēma Mathews ...*
sa kule sa ta thek.nē=ma Mathews
 NEF later NEF 3H.PL.I send.NPRES=ART₂ PN
diva chaēt kama ses.
diva ka=that kama ses
 PURP₃ 3M.SG.I=get.FUT ART₁ rope
 ‘Afterwards they sent Mathews ... to get the rope.’
- (19.13) *Sa ngua thon kama seska batha ...*
Sa ngua thon kama ses-ka pa=ta
 NEF 1SG.I throw.away.NPRES ART₁ rope-M.SG BEN=3H.PL.III
 ‘Then I threw the rope to them ...’

Most nouns that do not receive a noun class marker are assigned neuter gender. Although, as we saw in §8.5.1, nouns acting as proper names continue to trigger gender agreement in accordance with their underlying noun class, the following examples show that new entities with low pragmatic salience do not. They are treated as count neutral nouns within the noun class system and neuter nouns in the gender system. This is shown in the following two examples in which the masculine noun *en’ga* {*en-ka* iron.spear-M.SG} ‘iron spear’ is treated as having neuter gender and belonging to the count neutral noun class at its first mention (19.14) but is masculine singular when it becomes a more central part of the action (19.15). In (19.14) the emphatic demonstrative *pachēvang* ‘that very one’ is from the count neutral noun class in agreement with the noun *en* ‘iron spear’.

- (19.14) *Sa chule sa tha tēt ka en pachēvang.*
sa kule sa ta tat kē en pachēvang
 NEF later NEF 3H.PL.I get.PRES ART₃ iron.spear EMPH.CN.DIST.DEM
 ‘Then they got the spear, that one.’

Example (19.15) is reported speech.

- (19.15) *Dak ngia thik.tēchama en’ga klan.*
dak ngia thik.tēm=kama en-ka klan
 but 2SG.I pick.NPRES=ART₁ iron.spear-M.SG only
 ‘You just throw the spear at it.’

Similar patterns for noun class marking have been noted by Aikhenvald (2000:321-322) for languages such as Motuna (Papuan), in which gender agreement is only required with topics, Gola (West Atlantic), in which definite nouns take noun class markers but indefinite nouns do not, and Nunggubuyu and Warray (Australian), in which noun class markers are associated with givenness or definiteness.

One additional context in which nouns have low pragmatic salience is their non-referential use in adverbial constructions. In adverbial constructions, the entity the noun refers to is not in focus, it simply serves as a marker of direction. Consider the different meanings of *I’m going to my home* and *I’m going home*. In the second case, *home* can actually refer to any number of locations, depending on my current situation and the discourse context. It may be the city of my birth, the hotel I am staying in, or the place where I currently live. In Mali, noun class markers are not used on nouns in adverbial constructions and this is consistent with their non-referential use and low pragmatic salience in that context. Example (19.16) shows that the noun *bang* ‘house’ in the construction *sēva bang*

'home' {to=PURP house} does not have a masculine noun class marker, as it would if functioning as an argument NP.

- (19.16) *Kule dē cha thalka sēva bang*
 kule da ka thal=ka sa=pa bang
 later and 3M.SG.I carry.NPRES=3M.SG.III to=LOC house

dē ka var ka ...
 da ka var ka
 and 3M.SG.I cook.NPRES 3M.SG.III
 'Then he carried it (a pig) home and cooked it ...'

Noun class marking has the function of assisting in establishing the identity of referents within the discourse. Common nouns with low discourse salience, which do not need to be identified because they are unimportant, do not receive noun class marking as this information is not necessary for effective communication. Proper nouns, whose reference is unique, also tend not to receive noun class marking for the same reason. The information encoded by noun class markers is redundant in the contexts in which proper nouns are used. Common nouns with high discourse salience do require noun class marking as the clear identification of their referents is important for communicating clearly.

19.3 Reported speech

This section discusses the use of reported speech in Mali. Both direct and indirect speech reports are frequently used in Mali narratives. Direct speech has the effect of enlivening the story and heightening the drama, and narrators often take the opportunity to deliver theatrical effects. General information about speech report constructions is presented in §19.3.1 and direct and indirect speech are distinguished in §19.3.2. Extensions of the reported speech construction are described in §19.3.3. In this section reported speech is underlined and other constituents that are relevant to the discussion are marked by square brackets.

19.3.1 Speech report constructions

Mali has a single type of multi-clausal speech report construction used for both direct and indirect speech. Reported speech in Mali is usually introduced by the relator *ia* (§16.4.3). Contextual information is required to determine whether the reported speech is direct or indirect speech and there are a few situations in which the type of speech report (direct or indirect) cannot be readily determined (§19.3.2 and §19.3.3). There are no examples of discontinuous speech reports in the corpus.

The speech report follows the speech verb and the addressee if it is mentioned. Examples (19.17)–(19.19) show typical uses of direct speech. They cover all sentence types: imperatives (19.17), declaratives (19.18), and interrogatives (19.19). Prosodically, the *ia* belongs with the main clause but syntactically it belongs with the clause containing the reported speech.

- (19.17) ... *cha nēs ia,*
 ka nēs ia
 3M.SG.I call.NPRES REL₁

“*Chule ngia na thu ngo!*”
 kule ngia na thu ngo
 NEG.IMP 2SG.I IRR.FOC shoot.NPRES 1SG.III
 ‘... he called, “Don’t shoot me!”’

- (19.18) *Ki kuar ia, “Ia, chok kusek ma chēvingo*
 ki kuar ia ia kok kusek ma kēvi=ngo
 3F.SG.II say.PRES REL₁ yes just only ART₂ CONTR=1SG.III
ngua met ta.ithik, ngua vang.”
 ngua met ta=ithik ngua vang
 1SG.I go.PAST EMPH=ADV.PROX.DEM 1SG.I run.NPRES
 ‘She said, “Yes, it was only me who came here, I ran away.”’

- (19.19) [*Arura*]_A ti snan
 a=ru-ta ti snan
 SPEC=person-H.PL 3H.PL.II ask.NI
ia, “Ngē va mēnia ta.ithik?”
 ia ngē va mēnia ta=ithik
 REL₁ 3N.I PURP₁ how EMPH=ADV.PROX.DEM
 ‘They asked, “What’s going on?”’

Examples (19.20)–(19.22) show that the same range of clause types may appear in indirect speech. The presence of the new event frame marker *sa* in example (19.20) indicates that it is an imperative clause since this marker is required to form first person dual and plural imperatives (§15.4.1.C).

- (19.20) ... *di chi chuar nacha ia sa ini sing.*
 da ki chuar na=ka ia sa ini sing
 and 3F.SG.II say.NPRES PREP=3M.SG.III REL₁ NEF 3DL.II chew.NI
 ‘... she told him that they’d chew now.’
- (19.21) *Dak uthi chuar ia mēndik ama chēndichēn ngē met.*
 dak uthi chuar ia mēndik ama chēndichēn ngē met
 but 1PL.II say.NPRES REL₁ years REL₃ many 3N.I go.PAST
 ‘But we say that many years went by.’
- (19.22) *Ngi kuar nango ia nquat [anggiom]_O*
 ngi kuar na=ngo ia ngu=that agiom
 2SG.II say.PRES PREP=1SG.III REL₁ 1SG.II=get.FUT M.DL.NSPEC
[nēmēt gi uratki]_{pp}?
 na=mēt gi urat-ki
 from=within 2SG.POSS basket-F.SG
 ‘Which two did you tell me to get from your basket?’

19.3.2 Distinguishing direct and indirect speech

The distinction between direct and indirect speech in Mali reflects the degree to which the person making the speech report shifts into the view and expressive behaviour of the original speaker. Depending on the stylistic choices of the speaker, a common way of distinguishing between the two is intonation as special prosodic effects are common with

direct speech. One additional way of distinguishing between direct and indirect speech is to shift the deictic centre from the perspective of the original speech to the perspective of the reported speech. Person, tense and deictic expressions can be shifted in this way.

In Mali, shifts in person are very common. In (19.23) (repeated from (19.22)) the assignment of person values in the reported speech are shifted to the reporting context. The roles of speaker and hearer in (19.23) have been swapped when compared with the original context, which seems to have involved instructions we can summarise as second person get two things from first person's basket. Note that in (19.23) the tense of the verb stays future, as it would have been when it was first said. Since the person is still unclear about what they're supposed to be getting and apparently still intends to get something (this seems to be the motivation for the question), the future tense also fits with the context in which the clause is uttered, so a shift is not required.

- (19.23) *Ngī kuar nango ia nquat [anggiom]o*
 ngī kuar na=ngo ia ngu=that agiom
 2SG.II say.PRES PREP=1SG.III REL₁ 1SG.II=get.FUT M.DL.NSPEC
 [*nēmēt gi uratki*]_{pp}?
 na=mēt gi urat-ki
 from=within 2SG.POSS basket-F.SG
 'Which two did you tell me to get from your basket?'

Shifts in temporal and spatial deixis are less common in Mali speech reports. In (19.24) there is no shift in temporal deixis (encoded by the demonstrative *ithik* 'now') resulting in what we may call a semi-direct reading.

- (19.24) ... *di chia chuar nacha*
 da kia chuar na=ka
 and 3F.SG.I say.NPRES PREP=3M.SG.III
ia, ithik dē cha thet samui
 ia ithik da ka thet sa=mui
 REL₁ ADV.PROX.DEM and 3M.SG.I go.FUT to=sideways
 [*sēk ambangēm ama mor ngam.*]_{pp}
 sa=pēt a=bang-ēm ama mor ngam
 to=at SPEC=village-RCD.SG REL₃ big RCD.SG
 '... and she told him that he must return to the main village now.'

Shift is only an issue with proximate demonstratives. With the distal demonstrative in (19.25) either reading (a shift, as required by indirect speech, or no shift, as would be found for direct speech) would be acceptable.

- (19.25) *Dē thi kuar nacha ia asika chave*
 da ti kuar na=ka ia asika ka=pe
 and 3H.PL.II say.PRES PREP=3M.SG.III REL₁ if 3M.SG.I=there
*asik kaet [save sēva vēt]*_{pp}
 asik ka=thet sa=pe sa=pa vuēt
 IRR 3M.SG.I=go.FUT to=there to=LOC village

da sik kēna thondem
 da asik kē=na thondem
 and IRR 3M.SG.II=IRR.FOC recount.NPRES

[i-thēm kama lagun'ga avak.pik]_{PP}
 i-tēm kama lagun-ka avak=vik
 DER₁-THEME ART₁ decorative.plant-M.SG M.SG.DIST.DEM=EMPH
 'They said that if he goes to his village he must not explain about that particular decorative plant.'

There are cases in which the directness of the speech is difficult to determine. Cases with third person referents have obvious potential for ambiguity ((Talking about Harry) John told Fred that ("he should go too.")). In the corpus, however, there is not a single example like this, in which ambiguity was a problem. In the corpus, ambiguity is avoided because the addressee of the direct speech is always mentioned in the reported speech. If the addressee is treated as second person in the reported speech, then we can conclude that the speech report contains direct speech as in (19.26).

- (19.26) ... dē [chama chulumda]_A thi kuar natha
 da kama chulum-ta ti kuar na=ta
 and ART₁ white-H.PL 3H.PL.II say.PRES PREP=3H.PL.III
- ia, "Kule ma ngēni dlen ut."
 ia kule ma ngēni dlen ut
 REL₁ NEG.IMP REL₂ 2PL.II be.afraid.PRES 1PL.III
 '... and the white people said to them, "Do not be afraid of us."'

If the addressee is treated as third person in the reported speech then we can conclude it is indirect speech as it is in (19.27).

- (19.27) Ti kuar.natha ia that tu
 ti kuar.na=ta ia ta tu
 3H.PL.II tell.PRES=3H.PL.III REL₁ 3H.PL.I put.PRES
- [athēthik]_O [mēt kama sol]_{PP}
 athēv=tik mēt kama sol
 3H.PL.POSS=finger within ART₁ salt
 'They told them to put their fingers in the salt.'

In the corpus used here, the examples that are ambiguous contain first person arguments. In examples (19.28) and (19.29), we do not know whether the speaker is reporting the speech from a perspective inside the discourse (direct speech) or outside of it (indirect speech). If Mali distinguished between first person plural inclusive and first person plural exclusive the plural ones would be resolved (see the possible translations of (19.28)).

- (19.28) ... da ngu chuar natha ia ut thet pono
 da ngu chuar na=ta ia ut thet vono
 and 1SG.II say.NPRES PREP=3H.PL.III REL₁ 1PL.I go.FUT up.slope

dak ti kuar ia ut thet mano.
 dak ti kuar ia ut thet mano
 but 3H.PL.II say.PRES REL₁ 1PL.I go.FUT down.slope
 ‘... and I said to them that we (excl.) should go up but they said we’d (excl.)
 go down.’ or ‘... and I said to them “We (incl.) should go up.” but they said
 “We’ll (incl.) go down.”’

- (19.29) *Sa ngua chuar natha ia sik ngua thet minia.*
 sa ngua chuar na=ta ia asik ngua thet mēnia
 NEF 1SG.I say.NPRES PREP=3H.PL.III REL₁ IRR 1SG.I go.FUT how
 ‘Then I said to them, “How will I walk?”’ or ‘I said to them [I didn’t know]
 how would I walk.’

19.3.3 Extensions of reported speech

The line between reported speech and related phenomena is blurred in Mali by the fact that verbs of cognition, emotion, and perception may also introduce reported speech. Many of these verb types are discussed in connection with the relator *ia* in §16.4.1.¹ Furthermore, onomatopoeic expressions may be introduced by intransitive verbs of movement.

In the examples provided below, the performativeness of the speech report overrides considerations such as the accuracy of the report or the consistency of shifts in deixis. Direct speech reports can be made of such things as secret thoughts and thoughts that are attributed to entire groups. In both cases the original thought was not uttered as it is being reported.

Example (19.30) reports the thoughts of a group of people encountering an escapee from a Japanese prison camp during the Second World War. The interjection of surprise indicates that the thoughts are presented as direct speech. The expression *tu athē sēneng* ‘think’, lit. ‘put their heart’, introduces the reported speech.

- (19.30) ... *dē tha tu athē sēneng glan da.ithik*
 da ta tu athēv sēneng klan ta=ithik
 and 3H.PL.I put.PRES 3H.PL.POSS thought like EMPH=ADV.PROX.DEM
ia, “O, asik nēmailu cha ruchu ithaiktik
 ia o asik nēmailu kē=a ru-ki ithaik=tik
 REL₁ oh IRR maybe ART₃=SPEC person-F.SG F.SG.PROX.DEM=EMPH
kia ve chia vang da.ithik.”
 kia pe kia vang ta=ithik
 3F.SG.I there 3F.SG.I run.NPRES EMPH=ADV.PROX.DEM
 ‘... and they thought like this, “Oh, maybe this particular woman has run
 away now.”’

Example (19.31), an earlier episode in the same story, reports the internal speech of the main protagonist.

¹ Reesink (1993) reports on a related phenomenon in mainland Papuan languages in which the verb ‘to say’ may introduce ‘inner speech’. In Mali there is a range of specific verbs that explicitly refer to other types of activities that may introduce speech content.

- (19.31) *Amusnēng ngē muēn.vēt guauk*
 a=musnēng ngē muēn.vēt gu=uauk
 SPEC=idea 3N.I find.PAST 1SG.POSS=grandmother
klan da.ithik ia, “Ngo
 klan ta=ithik ia ngo
 like EMPH=ADV.PROX.DEM REL₁ 1SG.III
da vandi ngu vlēk ia ngu vang.”
 da vandi ngu vlēk ia ngu vang
 and DESID 1SG.II want.NPRES REL₁ 1SG.II run.NPRES
 ‘An idea came to my grandmother like this, “I want to try and run away.”’

Verbs of perception may also introduce speech reports. Again, in example (19.32) the report is of internal speech and is presented as direct speech for narrative effect.

- (19.32) ... *di chi ben.sachong ia, “Asik, asip [nēp bangang]_{PP}*
da ki ben.sachong ia asik, asip na bangang
 and 3F.SG.II check.NI REL₁ IRR later.on PREP night
da asik ngua thet kuenai?”
 da asik ngua thet kuenai
 and IRR 1SG.I go.FUT where
 ‘... and then she, right there where my grandmother was working, she looked around, “Later at night, where can I go?”’

In example (19.33) a perception verb appears to introduce a speech report without the relator *ia*. The speech report is presented in apposition to the preceding clauses as a performed utterance to highlight the feelings of the main character at that time. The speech report itself is also interesting as it contains an interjection, suggesting direct speech, but the person values of the participants have not been shifted. The participants are referred to in the third person from the perspective of the narrator. The prosody of the third clause indicates that the narrator is acting out the responses of the main protagonist even while maintaining the person values of the main narration.

- (19.33) ... *kia ingim di chia lu.da*
kia ingim da kia lu.da
 3F.SG.I look.NPRES and 3F.SG.I realise.NPRES
aichua, angēmbēs ka lu chi
 aichua angēmbēs ka lu ki
 oh NEG 3M.SG.I see.NPRES 3F.SG.III
 ‘... she looked and she realised [that], oh, he didn’t see her.’

Emotion verbs may also introduce reported speech. In example (19.34) the speech report is essentially a summary of what would actually have been said.

- (19.34) *Duk [chēvichi]_A chlan sai ki tnok sēcha*
 da=kok kēvi=ki klan sai ki tnok sa=ka
 and=just CONTR=3F.SG.III only again 3F.SG.II cry.PRES with=3M.SG.III

ia chule [giom]_{so} dēmna dai.
 ia chule kiom tēmna dai
 REL₁ stay.NPRES M.DL together thus
 ‘And she just cried again with him for them to be together again.’

Onomatopoeia is introduced by intransitive verbs (or prepositions functioning as intransitive verbs of movement) that denote activity not speech. My corpus only contains two examples of this pattern, both for animal noises, see (19.35). Other sounds are expressed with morphologically complex verbs based on ideophones such as *kēlē mēt* ‘rattle’.

- (19.35) Naruer dē cha tichina chlan da.ithik
 naruer da ka tichina klan ta=ithik
 firstly and 3M.SG.I do.NSPEC.PRES like EMPH=ADV.PROX.DEM
- ia, “Wo-wo-wo-wo-wo-wo-wo.”
 ia wo-wo-wo-wo-wo-wo-wo
 REL₁ wo-wo-wo-wo-wo-wo-wo
 ‘First it does something like this “Wo-wo-wo-wo-wo-wo-wo.”’

The only example in the corpus in which a verb clearly cannot be viewed as a reporting verb is in (19.36). This example shows that *ia* can introduce indirect speech after a noun encoding the speech act.

- (19.36) [Karla]_A cha mēn sē[chama mēthamon’gi
 Karla ka muēn sa=kama mēthamon-ki
 PN 3M.SG.I arrive.PAST with=ART₁ message-F.SG
- [ia [guavek]_A ta thet ti vēt [ma Peterus
 ia guavek ta thet ti vēt ma Peterus
 REL₁ H.PL.INDEF.DEM 3H.PL.I go.FUT 3H.PL.II bury.NPRES ART₂ PN
- ma cha ingip [peia Marungga]_{PP}]_O.
 ma ka ingip pe=ia Marungga
 REL₂ 3M.SG.I die.NPRES there=REL₁ PN
 ‘Charles came with a message that some people would go and bury Peterus who died at Marunga.’

This is very similar to the examples discussed in §16.4.1 in which the relator introduces elaboration by expressing information about time, location and manner in clauses that modify NPs and stand in apposition to them.

19.4 Comparison

Although there is a mono-clausal comparative construction in Mali (§19.4.1), a much more frequent strategy for expressing comparison in Mali is the strategy of juxtaposing two clauses attributing opposite values to the entities under discussion (§19.4.2). There is no special structure to express superlatives. Instead, markers of degree are used with the standard of comparison being implied (§19.4.3). Inherently comparative lexemes include contrastive demonstratives (§19.4.3) and other lexemes in the semantic domain of competition (§19.4.4).

19.4.1 Comparative construction

Although it is not a very common strategy for expressing comparison, Mali does have a mono-clausal comparative construction. This construction is shown in (19.37) and (19.38). The preposition *daer* ‘over’ (referring to location only) acts as the index of comparison and the mark of the standard in this construction.²

- (19.37)
- | | | | | | |
|--------------------|-----------|-------------------------|--|-----------------|--------------------------|
| Comparee | | Parameter | | Index/Mark | Standard |
| Topic | | Predicate | | PREP | oblique NP |
| [<i>Kēvicha</i>] | <i>da</i> | [<i>arēmali</i> ka] | | [<i>daer</i>] | [<i>ma ngo</i>]. |
| kēvi=ka | da | a=rēmali-ka | | daer | ma ngo |
| CONTR=M.SG | and | SPEC=clever.person-M.SG | | over | ART ₂ 1SG.III |
- ‘He is a more clever person than me.’
- (19.38)
- | | | | | | |
|-------------------------------|-----------|------------------|--|-----------------|----------------------------------|
| Comparee | | Parameter | | Index/Mark | Standard |
| Topic | | Predicate | | PREP | oblique NP |
| [<i>Kama duraika</i>] | <i>da</i> | [<i>morka</i>] | | [<i>daer</i>] | [<i>kama vaimini</i>]. |
| kama duraik-ka | da | a=mor-ka | | daer | kama a=paim-ini |
| ART ₁ chicken-M.SG | and | SPEC=big-M.SG | | over | ART ₁ SPEC=dog-DIM.SG |
- ‘The rooster is bigger than the puppy.’ (lit: ‘The rooster is big [over] the puppy.’)

An example of *daer* ‘over’ in its more usual function as preposition is given in (19.39).

- (19.39)
- | | | | | |
|--------------------------------------|------------|-----------|------------------|------------------|
| <i>Kama srucha</i> | <i>cha</i> | <i>mu</i> | <i>chama</i> | <i>sospen’gi</i> |
| kama sru-ka | ka | mu | kama | sospen-ki |
| ART ₁ elderly.person-M.SG | 3M.SG.I | put.PAST | ART ₁ | saucepan-F.SG |
- daer kama mundēm.*
 daer kama mundēm
 over ART₁ fire
 ‘The elderly man put the saucepan over the fire.’

19.4.2 Comparative strategy

The main comparative strategy in Mali involves the juxtaposition of two verbless clauses attributing opposite values to the entities under discussion. This is a more common strategy for expressing comparison than the construction described in §19.4.1.³ An example is given in (19.40) with two attributive clauses and the feminine singular emphatic proximate demonstrative *ta.ithik* (referring to one of the two coconuts) functioning as the topic.

- (19.40)
- | | |
|---------------------|----------------------|
| Topic | Predicate |
| [<i>Da.ithik</i>] | <i>da [amorki]</i> , |
| ta=ithik | da amor-ki |
| EMPH=ADV.PROX.DEM | and big-F.SG |

² Square brackets indicate constituency in this section.

³ The few examples I have so far are suggestive of an animacy split. The multi-clausal comparative strategy (19.40) is apparently preferred with inanimates. However, more data would be required to investigate this further.

Topic	Predicate
[<i>tha.ithik</i>]	<i>da</i> [<i>alelki</i>].
ta=ithik	da alel-ki
EMPH=ADV.PROX.DEM	and small-F.SG
‘This coconut is bigger than that coconut.’	
(lit: ‘(These two coconuts) this one is big; this one is small.’)	

19.4.3 Markers of degree

There is no grammatical encoding of the superlative. When translating superlatives, markers of degree are used. In (19.41) and (19.42) the standard of comparison is implied but not stated. The markers of degree are underlined.

- (19.41) *Sok lamēsachi ma morki.*
 sok lamēs-ki ma mor-ki
 really coconut-F.SG REL₂ big-F.SG
 ‘This coconut is the biggest of all.’ (lit: ‘This coconut is really big.’)

- (19.42) ... *ngi ngiem nani kama mulichi*
 ngi ngiem nani kama muli-ki
 2SG.II search.PRES for ART₁ orange-F.SG
ma mērki mamer.
 ma mēr-ki mamer
 REL₂ good-F.SG properly
 ‘... you find the best orange.’ (lit: ‘... you search for a good orange properly.’)

In example (19.43), the superlative reading arises because there is an implied comparison between the two clauses. The idea of comparison arises in part because of the use of the contrastive masculine singular demonstrative *krak*. The demonstratives from this paradigm are generally used to signal that the speaker is contrasting one discourse participant with another (see also §18.3.2).

- (19.43) *Ka naingim ia nēma chē chēthep*
 ka na=ingim ia nēma kē chēthep
 3M.SG.I IRR.FOC=look.NPRES REL₁ who 3M.SG.II grab.NPRES
angama thaembam dak ka thonanas
 angama at=oem-vam dak ka thonanas
 INDEF 3F.SG.POSS=offspring-RCD.SG but 3M.SG.I jump.NPRES
sēthēchē plēmga chrak ama morka.
 sa=tēm=kē plēm-ka krak ama mor-ka
 to=goal=ART₃ pig-M.SG M.SG.CONTR.DEM REL₃ big-M.SG
 ‘He looked and wasn’t going to grab any small one, but he threw himself onto the very biggest pig.’

Example (19.44) shows the diminutive singular emphatic contrastive demonstrative *chēkini*. It is used when the narrator switches from describing the activities of a big strong eagle to describing the activities of the small (but clever) bird. In this case there is no implicit comparison, simply a contrast between the two participants.

- (19.44) *Dak kinei, pēs.dē chēkini,*
 dak kinai pēs.dē chēkini
 but in.contrast at.that.moment EMPH.DIM.SG.CONTR.DEM
ma dingdingini, dinai ngē sekmes nave.
 ma dingding-ini da=kinai ngē sekmes na=pe
 REL₂ bird.sp-DIM.SG and=in.contrast 3N.I get.up.NI from=there
 ‘But instead, at that moment, that little one, the dingding bird, it took off
 from there.’

19.4.4 Inherently comparative lexemes

In addition to the contrastive demonstratives discussed in §19.4.3, there is a set of lexemes based on the root *-ēr* ‘first’ that relate to the semantic domain of games and winning: *sēr* ‘first’ (ADV), *erna* ‘compete’ (V), *oerna* ‘game, competition’ (N). An example of the adverb *sēr* ‘first’ is provided in (19.45).

- (19.45) *Asik nēma da chule cha maulul*
 asik nēma da chule ka maulul
 IRR who and stay.NPRES 3M.SG.III long.time
da asik nēma da ser vus.sēcha?
 da asik nēma da ser vus.sē=ka
 and IRR who and first come.up.NPRES=3M.SG.III
 ‘Who would stay under longest and who would come out first?’

The marker of comparison mentioned in §19.4.2 uses a metaphor of height (*daer* ‘over’). Winning is also expressed using lexemes encoding relationships of height (for example, *savuit* ‘on top, victorious’). This seems to reflect something about spatial metaphors relating to competition in Mali. There are no comparatives of inferiority. Equality is encoded by the adverb *kla* ‘be like’. An example is given in (19.46).

- (19.46) *Kama chevungga kla kama aio.*
 Kama chevung-ka kla kama aio
 ART₁ bamboo.sp-M.SG like ART₁ bamboo
 ‘The chevungga is like bamboo.’

20

Lexical expansion

This chapter describes some strategies used in Mali for expanding the lexicon: particularly the use of formulaic sequences (§20.1), borrowing (§20.2) and code-switching (§20.3). The derivational strategies available in Mali were discussed in §6 and are not dealt with again in this section except insofar as they are used in conjunction with the strategies described here. Another strategy to expand the lexicon, semantic shift, was explored in relation to changes in noun class membership in §8.3 and §8.4. In addition, a number of the formulaic sequences that are prominent in the Mali lexicon (for example, prepositional verbs) have been dealt with elsewhere. They are listed with cross-references in §20.1.

20.1 Formulaic sequences

Formulaic sequences standing for core referential concepts usually found in everyday vocabulary are common in Mali. The six main types of referential formulaic sequences apparent in the Mali lexicon are listed below. Each of them is relatively frequent and can be used productively:

- (i) Compounds (§6.3),
- (ii) Prepositional nouns and verbs (§7.4–§7.5),
- (iii) Modified (relativised) NPs (§20.4.1),
- (iv) Possessed NPs (§20.1.2),
- (v) Conventionalised clauses (§20.4.3), and
- (vi) Resultant state predicates (§14.2.1.E).

Formulaic sequences of clause linking devices are discussed in §14.3.

This section covers the following formulaic sequences: modified NPs (§20.1.1), possessed NPs (§20.1.2), and conventionalisation of clauses (§20.1.3).

20.1.1 Modified NPs

Mali makes use of post-head modifiers introduced by a relator: N + REL + clause. These relators are introduced and compared in §16.3–§16.6. Mali has two relators that are available in this function: *ma* and *ama*.¹ The difference between them is based on the status of the

¹ A third relator, glossed as REL₁, is used to introduce clauses or NPs that have the same syntactic status as the NP or AdvP head they are dependent upon: <A=B>.

content they introduce in relation to the head. The relator *ma* (REL₂) introduces clauses or NPs that provide additional information about the NP or AdvP head they are dependent upon: <A≈B>. The relator *ama* (REL₃) introduces clauses or NPs that describe or refer to one particular characteristic of the NP head they are dependent upon: <B is a characteristic of A>. An example of each type of relative clause is given in (20.1). In this example, the relator is underlined and the constituent it introduces is indicated by square brackets.

- (20.1) *Sa chiat kama amilatki ama [morki]*
 sa kia=that kama a=milat-ki ama mor-ki
 NEF 3F.SG.I=get.FUT ART₁ SPEC=plate-F.SG REL₃ big-F.SG
- ma [thi kiar.vēt kama lamēs sēvemgi].*
 ma ti kiar.vēt kama lamēs sa=pem=ki
 REL₂ 3H.PL.II scrape.PRES ART₁ coconut to=in=3F.SG.III
 ‘She gets a big dish to scrape the coconut into.’

Note that within formulaic sequences the modifying element is usually restricted to a single predicate, often a non-verbal clause containing an adjective functioning as the predicate. Examples of formulaic sequences that are modified NPs include:

- *bangga ma umeska* ‘men’s house’ {*bang-ka ma umes-ka* house-M.SG REL₂ male-M.SG};
- *ambanggi ma tha tas vemgi* ‘dormitory’ {*a=bang-ki ma ta tas pem=ki* SPEC=house-F.SG REL₂ 3H.PL.I sleep in=3F.SG.III}; and
- *amethamēn ama dēvēthēng* ‘Tok Pisin’ {*a=methamēn ama tē=avē=thēng* SPEC=language REL₃ THEME=3M.SG.POSS=back}.²

These examples take noun bases and form units that may head NPs. They are themselves headed and concord tends to be with the head of the expression. For example the noun *bangga ma umeska* ‘men’s house’ {*bang-ka ma chumes-ka* house-M.SG REL₂ male-M.SG} is a masculine singular noun and triggers masculine singular agreement in the adjective *chumes* ‘male’ within the sequence as well as with the subject pronoun of the main clause underlined in (20.2) because the head of the sequence that heads the NP is *bangga* ‘house’, masculine singular.

- (20.2) *Mubang sa ambangga ma umeska chē sēpmes.*
 mubang sa a=bang-ka ma chumes-ka kē sēpmes
 next.day NEF SPEC=house-M.SG REL₂ male-M.SG 3M.SG.II get.up.NI
 ‘The next day the men’s house goes up.’

There is no evidence of phonological fusion of word boundaries in these types of examples, and for speakers of the language with appropriate stores of cultural knowledge they are semantically transparent, if sometimes specialised in meaning. As the example *ambanggi ma tha tas vemgi* ‘dormitory’ indicates, the use of a modified NP to refer to a new cultural category associated with modern life in Papua New Guinea is a widely used strategy.

² The sequence *dēvēthēng* could be glossed as ‘unconnected’. It is also used to describe children whose fathers are not known. Melanesian Pidgin is known as *Tok Pisin* in Papua New Guinea. Tok Pisin stands in contrast to various local languages called *Tok Ples* or ‘village language’. The word *dēvēthēng* is used to describe things that have no known source; thus Tok Pisin is a language without a source village.

They are also used in terms for different species of animals: *aulan'gi ama vonbon'gi* {snake[generic]-F.SG REL₃ vine.species-F.SG} is the name for a species of edible, silver coloured snake.

20.1.2 Possessed NPs

Possessed noun phrases in Mali are structured as follows: Possessor NP + Possessed N + (modifiers of possessed N). The possessor NP is often indexed by a possessive pronoun, as in (20.3), or may contain a lexical noun preceding the possessive pronoun, as in (20.4).

- (20.3) ... *da gi nanēk kia thal nge choe?*
 da gi nanēk kia thal nge kue
 and 2SG.POSS mother 3F.SG.I carry.NPRES 2SG.III where
 ‘... and where did your mother give birth to you?’

- (20.4) ... *ma charuvaika ava sravētki ama mērki.*
 ma a=karuvaik-ka av=a sravēt-ki ama amēr-ki
 ART₂ SPEC=earlybird-M.SG 3M.SG.POSS=SPEC shirt-F.SG REL₃ good-F.SG
 ‘... Earlybird’s good shirt.’

Some body part nouns (with extended applications encoding part-whole relationships) and consanguineal kinship terms in Mali are inalienable, as are a few other nouns such as *angēthēpki* ‘personal name’ {*angēt=?-ki* 3N.POSS=?-F.SG} (§11.4.2). Inalienable nouns are found in formulaic sequences with their bound pronouns. In most cases the form is not completely fixed and the possessive pronoun varies with the gender and number of the possessor.

Evidence of the nonsegmentability of the possessive prefixes on inalienable nouns comes from examples such as (20.5), in which the third person neuter pronoun, used when the gender of the referent is not known, is not deleted in spite of the masculine singular possessive marking also in the clause.

- (20.5) *Kama mēngga avama angēthichini dē vėl.sē=ngini.*
 kama mēng-ka avama angē=tik-ini da vėl.sē=ngini
 ART₁ tree-M.SG 3M.SG.POSS 3N.POSS=hand-DIM.SG and break.NPRES=DIM.SG
 ‘The branch of the tree broke.’

Possessed NPs are used to form formulaic sequences of four semantic types: semantic extensions (A), relational nouns (B), numerals (§9.2), and address and reference terms (§11.4).

A. Semantic extensions

A great many concepts and things that have entered the Mali world view since colonisation by Germans and then Australians have been introduced into the Mali lexicon through the use of formulaic sequences in the form of possessed noun phrases, where the possessor describes a new type of the category referred to by the head noun. This is an example of sense extension; the sense of the head noun is extended by the possessor noun and a new concept is named. Examples of possessive NPs that form formulaic sequences include:

- *ivētki atha aila* ‘map’ {*ivēt-ki at=a aila* earth-F.SG 3F.SG.POSS=SPEC image}
- *achēlel angētha iska* ‘urinary system, urethra’ {*a=chēlel angēt=a is-ka* SPEC=urine 3N.POSS=SPEC path-M.SG}
- *achabapta athēva mēthamēn* ‘the English language’ {*a=chabap-ta athēv=a mēthamon* SPEC=white-H.PL 3H.PL.POSS=SPEC language}

Note that this strategy is quite old in the language as many long-standing concepts and goods may also be named in this way:

- *ambangga av amgi* ‘house opening’ {*a=bang-ka av am-ki* SPEC=house-M.SG 3M.SG.POSS mouth-F.SG} (See also comments on relational nouns from body part terms in paragraph C below.)
- *amundik ava laurka* ‘northwest wind’ {*a=mundik ava laurka* SPEC=pitpit 3M.SG.POSS wind-M.SG} (This wind comes when the pitpit, a wild sugarcane (*Saccharum spontaneum*), is ripe.)
- *milatka avuouk* ‘flood’ {*milat-ka av=uauk* scraper-M.SG 3M.SG.POSS=grandmother} (The scraper referred to here is a half coconut shell, used to scrape small weeds from food gardens. This makes use of the term grandmother to refer to something gigantic. This type of flood is so powerful that it ‘scrapes’ away trees from the banks of the river.)

The kinship terms *nanēk* ‘mother’ and *oes* ‘children’ are used within flora and fauna terminology to denote metaphorical relationships based on relative size or preferred environment or some other distinctive trait:

- *gēmēl angēt nanēk* ‘fish sp.’ {*gēmēl angēt nanēk* fish.sp 3N.POSS=mother} (Both species named in this example have essentially the same appearance but the ‘mother’ species is larger.)
- *achun’ga voes* ‘sand flies’ {*a=chun-ka av=oes* SPEC=sand-M.SG 3M.SG.POSS=offspring}.
- *chuaramgi at sachong* ‘red stemmed native spinach’ {*chuaram-ki at sachong* bird.sp-F.SG 3F.SG.POSS eyes} (The bird referred to here is black and has red eyes.)

Although the newer terms are transparent, many of the more archaic forms are semantically opaque to an outsider.

As well as the semantic extensions to grandmother, mother and children, one other interesting use of possessed kin terms is in avoidance vocabulary. The conventional way to refer to one’s husband is the doubly possessed *guae athē mamēk* {*gu=a=oes athēv mamēk* 1SG.POSS=SPEC=offspring 3H.PL.POSS father; lit: ‘My children their father.’}.

B. Relational nouns

Inanimate common nouns occur in possessive NPs, mainly to denote locations with reference to body part terms. Many body part terms are inalienably possessed and in this construction generally do not take noun class marking. If the possessor is not clear from context, the third person neuter possessive pronoun *angēt* is used. Other body part terms used in this way include *angēthik* ‘side’ (*angēt-tik* 3N.POSS-hand), *angētkeng* ‘edge’

(*angēt-keng* 3N.POSS-tooth), *angēthut* ‘base’ (*angēt-thut* 3N.POSS-base), *angētpēs* ‘top’ (*angēt-pēs* 3N.POSS-head), *angētham* ‘front’ (*angēt-am* 3N.POSS-mouth). For example, (20.6) and (20.7b) show the body parts *keng* ‘tooth’ and *pēs* ‘head’ in their relational functions meaning ‘edge’ and ‘top’ respectively.

(20.6) ... *din mungavem pē chama renggi thēcheng* ...
 da=in mu=ngavem pēt kama reng-ki at=keng
 and=3.DL.I put.PAST=F.DL at ART₁ river-F.SG 3F.SG.POSS=tooth
 ‘... and put them at the side of the river ...’

(20.7) a. ... *dē chē tanger.vēt*
 da kē tanger.vēt
 and 3M.SG.II break.off.PRES

b. *kē lagun’ga uvēs.*
 kē lagun-ka avē=pēs
 ART₃ decorative.plant-M.SG 3M.SG.POSS=head
 ‘... and he breaks the top off the decorative plant.’

See also example (11.3), which shows the body part noun *thēng* ‘back’ in the phrase *kama tevolki atha thēng* {*kama tevol-ki at=a thēng* table-F.SG 3F.SG.POSS back} ‘the top of the table’.

20.1.3 Conventionalisation of clauses

Traditional proper names in Mali are based on conventionalised clauses. For example the name of the Mali man who assisted in the first translations of religious materials into Mali was called *Nguingimga* {*Ngu=ingim=ka* 1SG.II=look.NPRES=3M.SG.III} ‘I can see him’. Since this clause functions as a unique identifier for this person, it seems clear that it is a formulaic expression (cf. Wray 2002:3-4). This strategy is also available to create new common nouns. Example (20.8) shows a fairly typical use of a conventionalised clause that functions as a noun: *thatalvemga* ‘carrier’ is analysed as {*ta-tal-pem-ka* 3H.PL.I-carry-in-M.SG}. The lexical status of this example is particularly clear, as it heads an NP introduced by a possessive pronoun.

(20.8) ... *dacha Siapan’gēna tha mēthacha*
 da=kē=a Siapan=kēna ta mat=ka
 and=ART₃=SPEC PN=H.PL 3H.PL.I get.PAST=3M.SG.III
 thatalvemga nacha.
 diva athēv=a thatalvem-ka na=ka
 PURP₃ 3H.PL.POSS=SPEC carrier-M.SG PREP=3M.SG.III
 ‘... the Japanese got him for their carrier.’

Conventionalised clauses are included in the dictionary where they behave like common nouns. The dictionary only includes proper nouns referring to locally relevant ethnic groups. Naming practices in the Mali community today vary. Both family names and nicknames are still composed in this way, but Western style personal and family names (sometimes adapted from older Mali style names) are also ubiquitous.

20.2 Borrowing

The Mali lexicon shows evidence of borrowing from Tok Pisin, English, and Latin. In most cases it seems safest to assume that borrowings from English and Latin have entered Mali via Tok Pisin. However, the sociolinguistic history of the community suggests that some caution should be taken when applying this view, as access to Latin and English was made possible by contact with missionaries from the Catholic Church, and speakers of Mali may well have encountered a number of English and Latin words from this source before Tok Pisin was widely spoken within the Mali community.

The vast majority of borrowings into Mali are from English (probably via Tok Pisin) or directly from Tok Pisin. A much smaller number of borrowings in the semantic domain of Christian religion ultimately come from Latin. These include examples in which it is impossible to know whether the borrowing comes via Tok Pisin: *Deo* ‘God’, *salve* ‘greetings’, *misa* ‘mass’, as well as examples in which the influence of Tok Pisin is apparent: Latin *paccatus* gave rise to Tok Pisin *pekato* ‘sin’ which is also used in Mali.

A particularly nice example of a borrowing from Latin is the Mali word *gelucha* ‘angel’ {*gelu-ka* angel-M.SG} which probably came via Latin *angelo* and has been reanalysed such that the initial [a] is treated as the specific article and removed from the stem and the velar nasal is reanalysed as a velar stop, since the nasalisation is understood to have been caused by the specific article (cf. §3.3). In addition to the word ‘angel’ with masculine noun class marking, the stem may also take the associative human plural marker *-kēna*: *gelochēna* ‘heavenly host’.

It is possible to identify words that are borrowed directly from Tok Pisin (TP) where these words do not also occur in English. Examples of this type include: *achais* ‘lefthand side’ {*a=kais* SPEC=left} from TP *kais* ‘left hand side’, *kapaigēl* ‘corrugated iron’ {*kapa-igl* sheet.iron-EXC.SG} from TP *kapa* ‘corrugated iron’, *kinacha* ‘kina coin’ {*kina-ka* kina-M.SG} from TP *kina* the national unit of currency (a term also borrowed into English), and *patocha* ‘duck’ {*pato-ka* duck-M.SG}.

In many other cases, the word clearly originates in English but the stem in Mali is identical to the word in Tok Pisin and the phonological changes that have taken place during the process of borrowing the stem could just as well be attributed to Tok Pisin or to Mali phonology. Examples of this type include: *baniska* ‘bandage’ {*banis-ka* bandage-M.SG}, *bechi* ‘bag’ {*bek-ki* bag-F.SG}, *paelka* ‘file’ {*pael-ka* file-M.SG}, and *sensocha* ‘chainsaw’ {*senso-ka* chain.saw-M.SG}.

As many of the above examples illustrate, Mali morphology is available in association with these borrowings. As we noted in §3.4.1.A, one morphophonological rule that no longer applies to borrowings is the lenition of noun stem initial voiceless stops in the environment of a specifier article. The rule would predict that the surface form for the string {*a=tun-ki*} ‘tuna’ would be *thun’gi* (on analogy with the pattern for {*a=tangam-ki*} *thangamgi* ‘banana’). According to Mali speakers I consulted, they could remember speakers who were senior adults in the 1960s using words such as *thun’gi* but this is no longer a form used by anyone in the community. The form used in *atun’gi*. This shift applies to loanwords generally.

20.3 Code-switching

Code-switching can be distinguished from borrowing by the lack of phonological and morphological assimilation involved. There are many examples of code switching for only one or two words as well as examples of code switching for longer sequences.

In the corpus, code-switching is mostly of only one or two words in semantic domains where Mali is overshadowed by Tok Pisin and English. Since these switches are small and sporadic, we could consider them to be nonce loans. However, one reason for not treating these words as nonce loans is that speakers who are trying to speak ‘good Mali’ correct themselves if they notice these words. Speakers vary in their awareness of the distinctions between the vocabularies of Tok Pisin and Mali. Younger speakers occasionally presented Tok Pisin words to me as if they were Mali words. At the other extreme, some older speakers would object to the use of Tok Pisin borrowings (as indicated by the appropriate use of Mali noun class marking) if they were aware that another older and less well known Mali form existed.

In our everyday encounters in the village we noted a typical range of pragmatic uses of code switching over longer sequences. Pragmatic functions of code-switching were identified by Romaine (1995:148-151) as covering the following types of behaviour that were also typical in Mali conversation:

- transactional switching (switching when the communicative task changes, for example from personal to official talk),
- direct versus reported speech (switching to indicate the voice of a character within a narrative),
- interjections and fillers,
- repetition and qualification (switching for emphasis or clarification),
- different audiences (to indicate a shift in the intended addressee),
- different commitment to the information (to indicate a shift in epistemic stance).

An example of code switching for emphasis is given in (20.9a). This example also contains code switching used to indicate a shift from direct to reported speech in (20.9c) and assimilated borrowings for ‘catechist’ *katiket* and ‘Catholics’ *Katulikta* in (20.9d) and (20.9e). Code switches and borrowings in the example are underlined.

- (20.9)a. *Auk, kule sa ngua met nave ngu bighet ...*
 auk kule sa ngua met na=pe ngu bighet
 well later NEF 1SG.I go.PAST from=there 1SG.II be.stubborn.NI
- b. *dē cha chuar nango ia*
 da ka chuar na=ngo ia
 and 3M.SG.I say.NPRES PREP=1SG.III REL1
- c. *“Uraet, ngi bighet nango ...*
 uraet ngi bighet na=ngo
 all.right 2SG.II be.stubborn.NI PREP=1sg.III
- d. *Ngi katiket ta.ithē*
 ngi katiket ta=ithē
 2SG.II catechist EMPH=here

- e. *dē nge sep.mēchama rutha diva thi Katulik,*
 da ngi sep.mē=kama ru-ta diva ti Katulik
 and 2SG.II change.NI=ART₁ person-H.PL PURP₃ 3H.PL.II Catholic
- f. *ta.ithē ve ka mbangēm dēchēm.”*
 ta=ithē pa kē=a bang-ēm tēchēm
 EMPH=here LOC ART₃=SPEC village-RCD.SG RCD.SG.PROX.DEM
 ‘Well then I went from there, I was stubborn ... and he [the priest] said to me,
 “‘All right, you’re stubborn with me ... You’re the catechist here and you must
 make the people become Catholic, here in this village.”’

The most typical trigger for extended code switching is the introduction of a topic relating to governance, education or health where the necessary vocabulary is lacking in Mali. As noted in §1.5, the membership of the audience is also an important consideration. If a non-Mali person joins a conversation or is to be included in a conversation then code switching to Tok Pisin is the norm.

Example (20.10) contains code-switching from numbers and the word *sensis* ‘census’ from an elderly speaker of Mali (the same speaker who produced (20.9)). It illustrates the types of domains in which code-switching is especially likely. In unmonitored speech it is likely that at some stage during an utterance like this, the switch to Tok Pisin would have been maintained and Mali would have been abandoned. This is particularly likely in the unmonitored speech of younger speakers of the language. Code switches in the example are in bold typeface. (An emphatic proximate adverbial demonstrative was omitted from the end of line c.)

- (20.10)a. *Ngo da koi ngua ndrēm sēvanas mamēr*
 ngo da koi ngua drēm sa=pēt=nas mamēr
 1SG.III and NEG 1SG.I know.PRES to=at=REFL properly
- b. *dak gua mundik da mailu chlan da.ithik*
 dak gu=a mēndik da mailu klan ta=ithik
 but 1SG.POSS=SPEC years and maybe like EMPH=ADV.PROX.DEM
- c. *ia, ithik da mailu sa **seventi-siks...***
 ia ithik da mailu sa **seventi-siks**
 REL₁ ADV.PROX.DEM and maybe NEF seventy-six
- d. *Mundu vea **sensis** pea **seventi-po.***
 mēndu pe=ia sensis pe=ia **seventi-po.**
 before there=REL₁ census there=REL₁ seventy-four
 ‘I don’t know exactly, but my age now may be around, maybe seventy-six ...
 Because it was seventy-four when they took the census.’

Longer sequences of code switching are rare in the corpus because the aim of the corpus was to collect examples of the Mali language and there was pressure from the community to do this ‘right’; so this is an area in which further study would be very interesting.

Appendix A: Glossary

This glossary is a list of the forms that occur in the second and third lines of the interlinearised examples along with part of speech labels. The list also contains the words that are cited within the text in italics and the glosses that are used alongside them. This list does not include all of the forms listed in paradigmatic tables (most of these are included in Chapter 5). Also excluded here are the prepositional verbs listed in Chapter 7 (see the tables there) unless they have occurred in the examples or the texts in appendix B. The *Mali (Baining) dictionary* provides a more complete set of information about the range of senses associated with particular words, their variant forms and so on. This glossary also includes glosses of words that are code-switches and borrowings from Tok Pisin that appear in the examples and texts (marked with a * following). See §20.2–§20.3 for more on this topic. Items in brackets either represent possible additions to the gloss or else widely known Tok Pisin terms that I include to supplement the less established English term.

Mali form	Part of speech	Gloss/translation
<i>a</i>	SPEC	
<i>abilēm</i>	N	abandoned settlement
<i>abilta</i>	N	those from the old village
<i>abiul</i>	N	conch shell
<i>achabap</i>	ADJ	white
<i>achabapka</i>	N	white person
<i>achabavēs vēt</i>	V	be white
<i>achapdēthēm</i>	N	stout fish sp.
<i>achēdichēn</i>	QUANT	many
<i>achēk</i>	DEM	M SG CONTR DEM
<i>achelach mēt</i>	V	be soft
<i>achelachuas</i>	N	grass sp. (has seeds that stick to people's legs)
<i>achēlēsacha</i>	N	a man who has been trained to always be alert
<i>achērot</i>	N	power
<i>achērot</i>	ADJ	strong
<i>achēruaka</i>	N	side branch of river with seasonal flow
<i>achēvap</i>	DEM	CONTR RCD PL DEM
<i>achēvu mēt</i>	V	be over done
<i>achik</i>	DEM	F SG CONTR DEM
<i>achini</i>	DEM	DIM SG CONTR DEM

Mali form	Part of speech	Gloss/translation
<i>achrnas</i>	ADJ	hot
<i>achrnas tēm</i>	V	be hot NI
<i>achuan</i>	N	sand
<i>achumer</i>	ADJ	clean
<i>achumes</i>	ADJ	male
<i>achumeska</i>	N	man
<i>achutkut</i>	N	drawing
<i>achuvēt</i>	ADJ	short
<i>adēdēn</i>	ADJ	odd, crazy, delirious
<i>adedēr</i>	ADJ	tight
<i>adēvaung</i>	NUM	three M
<i>adigl</i>	N	a piece of taro
<i>adildil</i>	ADJ	dried up
<i>aduguavap</i>	NUM	three RCD
<i>adungdung</i>	ADJ	empty
<i>agapgap</i>	ADJ	weightless
<i>agareski</i>	N	the sea
<i>agia</i>	PRO	which
<i>agicha</i>	PRO	M SG NSPEC
<i>agiom</i>	PRO	M DL NSPEC
<i>agit</i>	PRO	CN NSPEC
<i>agithom</i>	PRO	DIM DL NSPEC
<i>aguvang</i>	PRO	everything
<i>ai</i>	N	branch
<i>ai</i>	INTERJ	oh
<i>aicheru</i>	ADJ	new
<i>aichil</i>	N	native spinach
<i>aichua</i>	INTERJ	Oh, I see
<i>aie</i>	INTERJ	careful!
<i>aika</i>	N	side branch of river always flows
<i>aila</i>	N	image
<i>ailotka</i>	NUM	one hundred
<i>ailotki</i>	N	image, picture
<i>ain</i>	PRO	2DL POSS, 3DL POSS
<i>aingēpki</i>	N	death
<i>aio</i>	N	bamboo
<i>airas</i>	N	lie
<i>airiar</i>	ADJ	green
<i>airiarvēs vēt</i>	V	be greenish
<i>ais</i>	N	road
<i>ais</i>	N	waist ropes
<i>ais</i>	N	wet
<i>ais vēt</i>	V	be wet NI
<i>aiskias</i>	V	be cold NI
<i>aisvēt</i>	V	wet

Mali form	Part of speech	Gloss/translation
<i>alat</i>	N	garden
<i>alēchar</i>	INTERJ	oh dear!, oh my goodness! [lit: Oh legs!]
<i>alek mēt</i>	V	be open minded
<i>alel</i>	ADJ	small
<i>alengeiki</i>	N	truth
<i>alēngini</i>	N	shoulder
<i>alevavet</i>	NUM	four
<i>alilu</i>	QUANT	many
<i>alolka</i>	N	red
<i>alolves mēt</i>	(ADJ)	reddish
<i>am</i>	N	front, mouth, shore, doorway
<i>ama</i>	[relator]	REL ₃
<i>amanangiēm</i>	N	sighted one
<i>ambraso</i>	N	eagle
<i>amēl</i>	N	islands
<i>amēl</i>	ADJ	loose, foreign
<i>amēlmēl</i>	ADJ	wobbly
<i>amēng</i>	N	tree, wood
<i>amenggi</i>	N	large tree
<i>amēngigl</i>	N	board
<i>amēnia</i>	INTERROG	how many
<i>amēr</i>	ADJ	good
<i>amēr gēlēm</i>	V	be happy NI
<i>amēr pēt</i>	V	be happy NI
<i>amēr vem</i>	V	be happy NI
<i>amēsmēs</i>	N	food
<i>amēsmēski</i>	N	feast
<i>amēspēthithong</i>	N	side dishes
<i>amētēmna</i>	N	side dish
<i>amēthacha</i>	N	gift
<i>amgi</i>	N	mouth
<i>amor</i>	N	big
<i>amumēthathopki</i>	N	nurse
<i>amusnēng</i>	N	idea, thought
<i>ana</i>	INTERJ	I'll take it
<i>anga</i>	ART	NSPEC
<i>angama</i>	ART	INDEF
<i>angau*</i>	N	administrator
<i>angē</i>	PRO	3N POSS
<i>angelka vem</i>	V	be clever NI
<i>angēmbēs</i>	[negator]	NEG
<i>angēt</i>	PRO	3N POSS
<i>angēthama, angētha ma</i>	PRO	3N POSS
<i>angēthiki</i>	N	hand
<i>angēthutki</i>	N	area beneath overhanging cliff

Mali form	Part of speech	Gloss/translation
<i>angēvuski</i>	N	head
<i>anggun</i>	DEM	CN INDEF DEM
<i>angia</i>	PRO	which
<i>angitha</i>	PRO	someone
<i>angon</i>	N	flying foxes
<i>ani</i>	INTERJ	take this!
<i>arem</i>	V	have a fever
<i>arenggi</i>	N	river
<i>ariar</i>	ADJ	green
<i>aron</i>	ADJ	satisfied
<i>arongda</i>	N	those from a cold place
<i>arucha</i>	N	man, boy
<i>aruchi</i>	N	woman, girl
<i>arura</i>	N	people
<i>arus</i>	V	refuse NI
<i>as</i>	DISC	yet
<i>asēgēvēs</i>	NUM	ONE FLAT SG
<i>asevaik pēt</i>	V	be joyful, rejoice
<i>asik</i>	DISC	IRR (marks irrealis and hypothetical clauses)
<i>asika</i>	SUBORD	if (marks conditional clauses)
<i>asingal</i>	N	snakes, forest spirits
<i>asip</i>	DISC	later on
<i>aslek pēt</i>	V	be willing NI
<i>asnēng</i>	N	idea
<i>asok</i>	ADJ	solid
<i>at</i>	PRRO	3F SG POSS
<i>athama</i>	PRO	3F SG POSS
<i>athavēr</i>	ADJ	wide
<i>athavēr mēt</i>	V	be wide
<i>athē</i>	PRO	3H PL POSS
<i>athē</i>	PRO	H PL INDEF
<i>athēchasepka</i>	N	morning
<i>athēv</i>	PRO	3H PL POSS
<i>athēvama</i>	PRO	3H PL POSS
<i>athir</i>	N	new growth
<i>athoemini</i>	N	baby
<i>athoes</i>	N	children
<i>athoi</i>	N	ow!
<i>athondem</i>	N	law
<i>atun'gi</i>	N	tuna
<i>auk</i>	INTERJ	well
<i>aulul</i>	ADJ	long, tall
<i>auluvēkmētkā</i>	N	coward
<i>aun</i>	PRO	1PL POSS

Mali form	Part of speech	Gloss/translation
<i>aun'gi</i>	N	darkness
<i>aung</i>	PRO	M SG INDEF DEM
<i>aungiom</i>	NUM	two M
<i>aupia</i>	N	valley
<i>aupka</i>	N	valley floor
<i>auravu</i>	N	native spinach
<i>aut</i>	PRO	1PL POSS
<i>authama</i>	PRO	1PL POSS
<i>av</i>	PRO	3M SG POSS
<i>avaik</i>	DEM	F SG DIST DEM
<i>avak</i>	DEM	M SG DIST DEM
<i>avama</i>	DEM	3M SG POSS
<i>avang</i>	DEM	CN DIST DEM
<i>avathē</i>	DEM	H PL DIST DEM
<i>avē</i>	PRO	3M SG POSS
<i>avēchēs</i>	DEM	FLAT SG CONTR DEM
<i>avēchit</i>	DEM	EXT SG DIST DEM
<i>avēgleng</i>	DEM	EXC PL DIST DEM
<i>avēnēk</i>	DEM	EXT PL DIST DEM
<i>avēni</i>	DEM	DIM SG DIST DEM
<i>avēnivik</i>	DEM	DIM SG DIST DEM
<i>avēvap</i>	DEM	RCD PL DIST DEM
<i>avēvēs</i>	DEM	FLAT SG DIST DEM
<i>avi</i>	DEM	there
<i>avik</i>	DEM	ADV DIST DEM
<i>avinos</i>	V	play around NI
<i>avithēm</i>	N	earth oven (mumu)
<i>avong</i>	[onomatopoeic root]	whir
<i>avu</i>	N	sin
<i>bafalo*</i>	N	buffalo
<i>baiavini</i>	N	small black bush frog
<i>bal tēm</i>	V	knock over PRES
<i>balus*</i>	N	plane
<i>bang</i>	V	run PRES
<i>bang</i>	N	house
<i>bang</i>	N	village
<i>bang bēt</i>	V	take without permission PRES, remember PRES, run over PRES
<i>bang buinem</i>	V	wander around PRES
<i>banganggi</i>	N	night
<i>banis*</i>	N	bandage
<i>bar</i>	V	cook PRES
<i>bas*</i>	N	barge
<i>basiochi</i>	N	crocodile
<i>baul</i>	N	sarong (laplap)
<i>baulēm</i>	N	old sarong (laplap), piece of rag

Mali form	Part of speech	Gloss/translation
<i>ben</i>	V	bend PRES
<i>ben sachong</i>	V	check NI
<i>bēn sēlēp</i>	V	question NI
<i>bēnaseng</i>	V	start PRES
<i>bēng bēt</i>	V	wrap up PRES
<i>bias</i>	V	step on PRES
<i>big het*</i>	V	be stubborn NI
<i>bing</i>	V	bend PRES, curve PRES
<i>bing pēthanas</i>	V	circle around PRES
<i>blingim</i>	N	lightning
<i>boding*</i>	N	boarding school
<i>bom*</i>	N	bomb
<i>bomim*</i>	V	bomb NI
<i>bon</i>	V	give PRES
<i>bon dēm, bondēm</i>	V	pay PRES, give away PRES
<i>botol*</i>	N	bottle
<i>braingia</i>	N	small creek
<i>brem</i>	N	boil
<i>bremdēm</i>	V	be angry NI
<i>bruder*</i>	N	brother
<i>bubang</i>	ADV	tomorrow, next day
<i>bubu</i>	V	be dull in colour
<i>buinem</i>	V	return PRES
<i>buk*</i>	N	book
<i>buthi</i>	N	spine
<i>changēthacha</i>	N	vine sp.
<i>chaseska</i>	N	spy
<i>chau</i>	N	uncle (mother's brother)
<i>chaun</i>	N	rice
<i>chavat tēm</i>	V	commit adultery with NPRES
<i>chēk</i>	DEM	M SG CONTR DEM
<i>chēkēvap</i>	DEM	EMPH RCD PL CONTR DEM
<i>chēkini</i>	DEM	EMPH DIM SG CONTR DEM
<i>chēkrak</i>	DEM	EMPH M SG CONTR DEM
<i>chēkrang</i>	DEM	EMPH CN CONTR DEM
<i>chēlel</i>	N	urine
<i>chēlevu</i>	ADJ	purple
<i>chēlol</i>	V	report NPRES
<i>chēlucha</i>	N	brother-in-law (male speaker)
<i>chēluchi</i>	N	sister-in-law (female speaker)
<i>chēluing</i>	ADJ	black
<i>chēlutha, chēluvek</i>	N	same sex in laws
<i>chen'gen</i>	N	earthquake
<i>chen'gen bēt</i>	V	tremble NI
<i>chēndichēn</i>	QUANT	many

Mali form	Part of speech	Gloss/translation
<i>chep</i>	N	spear
<i>chērak</i>	DEM	EMPH M SG CONTR DEM
<i>chērnaska</i>	N	heat
<i>cherot</i>	ADJ	strong, strength
<i>chērtēp</i>	V	chop NPRES
<i>chēru</i>	N	branch of a river
<i>chēsēk</i>	V	thirsty NPRES
<i>chēseng</i>	N	hair
<i>chēsengia</i>	N	a long straight hair
<i>chēsengves</i>	N	feather
<i>chēthep</i>	V	grab NPRES, catch NPRES
<i>chēthiacha</i>	N	blue
<i>chētikkētika</i>	N	grasshopper sp.
<i>chēvap</i>	DEM	CONTR RCD PL DEM
<i>chēvek</i>	N	relatives
<i>chevung</i>	N	bamboo sp.
<i>chiar vēt</i>	V	scrape NPRES
<i>chinap</i>	N	ashes
<i>chinipki</i>	N	hearth
<i>chlok</i>	N	soul
<i>chop</i>	V	hang NPRES
<i>chop sē</i>	V	fasten NPRES
<i>chrētki</i>	N	policeman
<i>chuan</i>	N	sand, rice
<i>chuar</i>	N	root
<i>chuar</i>	V	say NPRES
<i>chuaram</i>	N	bird sp.
<i>chuer</i>	V	go first NPRES
<i>chule</i>	V	stay NPRES
<i>chule nge chēlan</i>	INTERJ	bye! (lit: You just stay!)
<i>chule sa</i>	INTERJ	wait a minute! (lit: Stay for a while!)
<i>chulumga</i>	N	white person
<i>achumes</i>	ADJ	male
<i>achumeska</i>	N	man
<i>chunaik</i>	V	swallow NPRES, drink NPRES
<i>chunēnggunēng dēm</i>	V	be apparent NPRES, be real NPRES
<i>chut</i>	V	lean NPRES
<i>chut</i>	V	shoot NPRES, spear NPRES, stab NPRES
<i>chut ma</i>	V	write NPRES
<i>chut mē</i>	V	shoot NPRES, spear NPRES, stab NPRES
<i>chut mes</i>	V	shoot randomly at NPRES
<i>chut mēt</i>	V	spear NPRES
<i>chut na</i>	V	descend NPRES
<i>chutigl</i>	N	half
<i>da</i>	COORD	and
<i>daer</i>	PREP	over

Mali form	Part of speech	Gloss/translation
<i>dai</i>	SUBORD	thus
<i>dak</i>	SUBORD	but
<i>dalias</i>	ADV	squattingly
<i>dam</i>	N	lump, mountain
<i>dang</i>	V	burn PRES, catch fire PRES
<i>dēdēn</i>	V	be confused NI
<i>dēdēng</i>	N	finish, last
<i>dēl</i>	[onomatopoeic root]	ring
<i>dēm</i>	V	be sour NI
<i>dēm</i>	V	itch NI
<i>dēn</i>	V	arrive PRES
<i>dēng</i>	ADV	end, until
<i>dēng na</i>	V	stop NI
<i>Deo</i>	N	God
<i>dēvaung</i>	NUM	three M
<i>dēvēthik</i>	DIR	beside
<i>dī</i>	N	taro
<i>dingding</i>	[onomatopoeic root]	bird sp.
<i>dingdingga</i>	N	bird sp.
<i>dīs*</i>	N	dish
<i>disse</i>	V	faint NI
<i>diva</i>	SUBORD	PURP ₃ ('so that')
<i>dlen</i>	V	be afraid PRES
<i>dodem</i>	V	recount PRES
<i>dokta*</i>	N	doctor
<i>don</i>	V	go in PRES
<i>don</i>	V	go in PRES
<i>don</i>	V	throw away PRES
<i>don nē</i>	V	throw PRES
<i>donanas</i>	V	jump PRES
<i>donbathēm na</i>	V	check PRES
<i>donel</i>	V	hunt PRES
<i>dong</i>	V	turn something PRES
<i>drēm</i>	V	know PRES
<i>dul</i>	N	stone, money
<i>duligl</i>	N	silver coin
<i>dungdung</i>	ADJ	empty
<i>duraik</i>	N	chicken
<i>e</i>	INTERJ	oh!
<i>-ēm</i>	[noun class marker]	-RCD SG
<i>en*</i>	N	iron spear
<i>er</i>	N	first
<i>eraer</i>	N	dawn
<i>erna</i>	V	compete NI
<i>galēp</i>	N	palm sp.

Mali form	Part of speech	Gloss/translation
<i>galicha</i>	N	mountain range
<i>gamar</i>	N	fight, war
<i>gamar</i>	V	fight NI
<i>garēs</i>	N	beach, coast, sea
<i>gawun</i>	N	edible ferns
<i>gēk pēt</i>	V	burp NI
<i>gēl</i>	PREP	with
<i>gēlē</i>	PREP	near
<i>geling</i>	N	place
<i>gelu</i>	N	angel
<i>gēmēl</i>	N	fish sp.
<i>genaing</i>	N	cerebrum, phlegm
<i>genainggenaing mēt</i>	V	be snotty NI
<i>ger</i>	V	bend NI
<i>gēthēp</i>	N	trouble
<i>gethon</i>	ADJ	yellow
<i>gi</i>	PRO	2SG POSS
<i>gicha</i>	PRO	whatnot M SG
<i>gingēt</i>	PRO	whatnot CN
<i>gis</i>	N	pebbles
<i>gisnēng</i>	V, SUBORD	seem as if NI, as if
<i>gisnia</i>	SUBORD	as if
<i>gling</i>	N	place
<i>gu</i>	PRO	1SG POSS
<i>guachēm</i>	DEM	RCD SG INDEF DEM
<i>guanguangmo</i>	ADJ	greedy
<i>guama</i>	PRO	1SG POSS
<i>guamelēk</i>	DEM	FLAT PL INDEF DEM
<i>guang</i>	N	thing
<i>guangithong</i>	N	things
<i>guasem</i>	DEM	LONG DL INDEF DEM
<i>guavam</i>	DEM	RCD DL INDEF DEM
<i>guavap</i>	DEM	RCD PL INDEF DEM
<i>guavek</i>	DEM	H PL INDEF DEM
<i>guer</i>	V	fume NI, scold NI
<i>guingini</i>	N	buds of fruit
<i>guling</i>	N	group
<i>gum</i>	V	cough PRES
<i>guvang</i>	ADJ	bad
<i>hat*</i>	N	hat
<i>i-</i>	[derivational prefix]	DER ₁
<i>i</i>	N	bamboo
<i>i</i>	SUBORD	because
<i>i</i>	INTERJ	oh, oh no!
<i>-ia</i>	[noun class marker]	-EXT SG
<i>ia</i>	PRO	EXT SG

Mali form	Part of speech	Gloss/translation
<i>ia</i>		REL ₁
<i>ia</i>	INTERJ	yes
<i>iaik</i>	N	grandfather
<i>ichēru</i>	ADJ	raw
<i>ichēt</i>	N	enclosure
<i>ichum</i>	N	flood
<i>-igl</i>	[noun class marker]	-EXC SG
<i>igl</i>	PRO	EXC SG
<i>-igleng</i>	[noun class marker]	-EXC PL
<i>igleng</i>	PRO	EXC PL
<i>iii</i>	INTERJ	I don't know, maybe
<i>ila</i>	N	image
<i>-imelēk</i>	[noun class marker]	-FLAT PL
<i>imelēk</i>	PRO	FLAT PL
<i>in</i>	PRO	2 DL I
<i>in</i>	PRO	3 DL I
<i>inangna</i>	V	be popular NI
<i>-inēk</i>	[noun class marker]	-EXT PL
<i>inēk</i>	PRO	EXT PL
<i>ingim</i>	V	look NPRES, search NPRES
<i>ingip</i>	V	die NPRES
<i>inguing</i>	N	crab
<i>-ini</i>	PRO	DIM SG
<i>ini</i>	PRO	2DL II
<i>ini</i>	PRO	3DL II
<i>ini</i>	PRO	DIM SG
<i>-iom</i>	[noun class marker]	-M DL
<i>iom</i>	PRO	M DL
<i>iras</i>	V	lie NI
<i>iras sēvanas</i>	N	liar
<i>iras tēm</i>	V	lie to NI
<i>irēs</i>	V	feel sad NI
<i>iri ma</i>	ADV	very fast
<i>iriar</i>	ADJ	green
<i>irit</i>	N	unlucky
<i>is</i>	N	path, road, ridge
<i>is</i>	N	rope
<i>isem</i>	PRO	LONG DL
<i>-isem</i>	[noun class marker]	-LONG DL
<i>isēm</i>	N	bird, aeroplane
<i>isia</i>	N	ridge
<i>ithaik</i>	DEM	F SG PROX DEM
<i>ithak</i>	DEM	M SG PROX DEM
<i>ithang</i>	DEM	CN PROX DEM
<i>ithathe</i>	DEM	H PL PROX DEM

Mali form	Part of speech	Gloss/translation
<i>ithē</i>	DEM	here
<i>ithēgl</i>	DEM	EXC SG PROX DEM
<i>ithēp</i>	N	rooster tail
<i>ithēvam</i>	DEM	RCD DL PROX DEM
<i>ithēvem</i>	DEM	F DL PROX DEM
<i>ithigleng</i>	DEM	EXC PL PROX DEM
<i>ithik</i>	DEM	ADV PROX DEM
<i>ithir</i>	N	new growth
<i>-ithom</i>	[noun class marker]	-DIM DL
<i>ithom</i>	PRO	DIM DL
<i>-ithong</i>	[noun class marker]	-DIM PL
<i>ithong</i>	PRO	DIM PL
<i>iva</i>	PURP ₂	intending to
<i>ivēt</i>	N	earth
<i>ka</i>	PRO	3M SG I
<i>ka</i>	PRO	3M SG III
<i>-ka</i>	[noun class marker]	-M SG
<i>ka</i>	PRO	M SG
<i>kacham</i>	ADJ	empty
<i>kael</i>	N	wallaby
<i>kakau*</i>	N	cocoa, cocoa tree
<i>kalasung</i>	N	sweet potato
<i>kalun</i>	N	singapore taro
<i>kama</i>	ART ₁	
<i>kanu*</i>	N	canoe
<i>kao</i>	N	maternal uncle
<i>kapa*</i>	N	corrugated iron
<i>kapaigl</i>	N	sheet of corrugated iron
<i>karuvaik</i>	N	bird sp., ‘earlybird’
<i>katekismo</i>	N	catechism
<i>katiket*</i>	N	catechist
<i>Katulik*</i>	N	Catholic
<i>kaur</i>	N	vein
<i>kavat</i>	N	adulterer
<i>kavat</i>	N	spirit that causes illness
<i>kē</i>	PRO	3M SG II
<i>kē</i>	ART ₃	
<i>kēchēm</i>	DEM	RCD SG CONTR DEM
<i>kēdeng</i>	N	body
<i>kēkrak</i>	DEM	EMPH M SG CONTR DEM
<i>kēlep</i>	V	feel embarrassed PRES
<i>kēlēr</i>	[onomatopoeic root]	squawk, rattle
<i>kēlēr kēlēr</i>	V	rattle
<i>kēlēr mēt</i>	V	rattle NI
<i>kēlēr kēlēr mēt</i>	V	rattle NI
<i>kēlol</i>	V	report PRES

Mali form	Part of speech	Gloss/translation
<i>kem*</i>	N	camp
<i>kēm</i>	DEM	RCD SG CONTR DEM
<i>kēmēk</i>	N	breast
<i>kēna</i>	PRO	H PL
<i>kēndēng</i>	N	body
<i>keng</i>	N	tooth, edge
<i>kēngēt</i>	DEM	CN CONTR DEM
<i>kērora</i>	N	banana flower
<i>kērtēp</i>	DEM	chop PRES
<i>kēsēk</i>	V	be thirsty PRES
<i>kēseng</i>	N	hair
<i>kēthep</i>	V	catch PRES, grab PRES
<i>kēthia</i>	N	blue
<i>kēthik mēt</i>	V	bind PRES
<i>kēthik pēt</i>	V	tie PRES
<i>kēthik sēthēm</i>	V	fasten PRES
<i>kēthik tēm</i>	V	tie on PRES
<i>kēthop</i>	N	pool, sap
<i>kēvak</i>	DEM	M SG CONTR DEM
<i>kēvek</i>	N	relatives
<i>kēvēl</i>	N	piece
<i>kēvēs</i>	DEM	FLAT SG CONTR DEM
<i>kēvēsnia</i>	INTERROG	when
<i>kēvi</i>	[contrastive marker]	CONTR
<i>-ki</i>	[noun class marker]	F SG
<i>ki</i>	PRO	3F SG II
<i>ki</i>	PRO	3F SG III
<i>ki</i>	PRO	F SG
<i>kia</i>	PRO	3F SG I
<i>kiar</i>	V	scrape PRES
<i>kiar vēt</i>	V	scrape PRES
<i>kina*</i>	N	coin (kina)
<i>kinai</i>	DISC	in contrast
<i>kinak</i>	INTERJ	indeed, yes, all right
<i>kinas</i>	DISC	just, recently
<i>kiom</i>	DEM	M DL DEM
<i>kiskisa</i>	V	sneeze NI
<i>klan</i>	ADV	like
<i>klan</i>	ADV	only, for nothing
<i>klēmēn</i>	N	fool
<i>klom</i>	N	shellfish sp.
<i>koi</i>	[negator]	NEG
<i>koiku</i>	[negator]	NEG
<i>kok</i>	DISC	just, already
<i>koki</i>	DISC	also

Mali form	Part of speech	Gloss/translation
<i>kos*</i>	N	coast
<i>kosa</i>	DISC	just, simply
<i>kraik</i>	DEM	F SG CONTR DEM
<i>krak</i>	DEM	M SG CONTR DEM
<i>krang</i>	DEM	CN CONTR DEM
<i>krētkrēt sē</i>	V	rustle NI
<i>Krismas*</i>	N	Christmas
<i>krtēp</i>	V	chop PRES
<i>kuar</i>	V	say PRES
<i>kuar na</i>	V	tell PRES
<i>kuares</i>	V	say PRES
<i>kudi</i>	N	rotten log
<i>kue, kuenai</i>	INTERROG	where
<i>kuer</i>	V	go first PRES
<i>kuēvanas</i>	V	shake oneself PRES
<i>kuiep</i>	V	shake PRES
<i>kule</i>	ADV	later
<i>kule</i>	[negative imperative]	NEG.IMPER
<i>kule</i>	V	stay PRES
<i>kule klan</i>	INTERJ	never mind [lit: Stay only]
<i>kulēp</i>	N	pool
<i>kulēs</i>	N	smoke
<i>kulum</i>	N	shellfish sp.
<i>kumēngas*</i>	N	prison, camp
<i>kumer</i>	V	be clean PRES
<i>kundu*</i>	N	hand drum
<i>kunēng</i>	N	sun, daytime, day
<i>kur, kuar</i>	N	vein
<i>kurem</i>	N	betelnut
<i>kurēn</i>	N	slope
<i>kurēs</i>	V	say PRES
<i>kus</i>	N	mud
<i>kus kus</i>	[onomatopoeic root]	hiss
<i>kusek</i>	ADV	only
<i>kut</i>	V	spear PRES, stab PRES
<i>kut ma</i>	V	write PRES
<i>kutigēl tēm</i>	V	chop PRES
<i>lachuaski</i>	N	pools that form in the reef at low tide
<i>lagun</i>	N	decorative plant
<i>lairini</i>	N	small ridge
<i>lalēt</i>	N	root
<i>lamēs</i>	N	coconut
<i>lamēsigl</i>	N	a piece of coconut, coconut plantation, spleen
<i>lamēski</i>	N	coconut palm
<i>lamon</i>	N	waves

Mali form	Part of speech	Gloss/translation
<i>lat</i>	N	garden
<i>laur</i>	N	wind
<i>lavaitigl</i>	N	placenta
<i>lavaitki</i>	N	navel
<i>laver</i>	N	sugarcane
<i>lēchar</i>	N	leg
<i>lek</i>	N	hole
<i>lel</i>	N	small
<i>lel tēm</i>	V	gather NI
<i>lēmēr</i>	V	clean NI
<i>lēmu</i>	N	ally
<i>lēmu</i>	V	clean NI
<i>lēmu tēm</i>	V	look after NI
<i>len</i>	V	be afraid NPRES
<i>lenge angēthieik</i>	N	leader
<i>lengeik</i>	N	truth
<i>lengeini</i>	N	social event, meeting
<i>lengena</i>	V	be renowned NI
<i>ler</i>	V	break NI
<i>lēr</i>	V	tear NI
<i>ler dē</i>	V	tear NI
<i>ler mēt</i>	V	tear NI
<i>lēr sēnas</i>	V	split apart NI
<i>lēr tēm</i>	V	break apart NI, tear NI
<i>lēt tē</i>	V	light NI
<i>levavēt</i>	NUM	four
<i>lēvop</i>	ADJ	female
<i>lēvopki</i>	N	woman
<i>levovini</i>	N	old woman
<i>li</i>	N	carrying pole
<i>lik dēm</i>	V	be sudden NI
<i>lik mēt</i>	V	break NI
<i>likdēm, lik dēm</i>	V	be sudden NI
<i>liki</i>	N	younger sister
<i>limbung*</i>	N	palm sp.
<i>livēr</i>	V	hurry NI
<i>livinēm</i>	N	short carrying poles
<i>lol</i>	N	red
<i>lotu*</i>	V	worship NI
<i>lotu vem, lotuvem</i>	N	church
<i>lu</i>	V	see NPRES
<i>lu da</i>	V	realise NPRES
<i>luchup, luchuap</i>	N	space, place
<i>lugut</i>	N	spouse
<i>lugutka</i>	N	husband

Mali form	Part of speech	Gloss/translation
<i>lugutki</i>	N	wife
<i>lugutvek</i>	N	people who are married
<i>lugutvēt</i>	N	couple
<i>lulen</i>	N	boat
<i>ma</i>	[NP article]	ART ₂
<i>ma</i>	[relator]	REL ₂
<i>machēlak</i>	ADV	a little bit, slowly
<i>machuisēr</i>	ADV	sideways, diagonally
<i>madēng</i>	ADV	carelessly, unconcernedly
<i>maila</i>	ADV	maybe
<i>maila chuvēsnia</i> or <i>mailu chuvēsnia</i>	DISC	last time, the other time
<i>mailu</i> or <i>nēmailu</i>	DISC	maybe, possibly
<i>main</i>	V	dance PAST
<i>mair</i>	V	stand PAST
<i>mair senas</i>	V	stand alone PAST
<i>mal</i>	V	stop NI
<i>mala</i>	N	bush hen
<i>mali</i>	DISC	earlier
<i>malilu</i>	ADV	repeatedly
<i>maling</i>	V	flip over NI
<i>malos</i>	N	grass sp.
<i>malvēt</i>	V	rest NI
<i>mambu*</i>	N	song
<i>mambumētkā</i>	N	singer
<i>mamēk</i>	N	father
<i>mamēr</i>	ADV	good, properly, well
<i>mamēr</i>	V	possible
<i>mamor</i>	ADV	a lot, fast, loudly
<i>manangiēm</i>	N	sighted
<i>manangiēmga</i>	N	sighted man
<i>manangiēmgi</i>	N	window, torch, sighted woman
<i>manēp</i>	DIR	down TERM
<i>mang</i>	V	burn PAST
<i>mang</i>	ADJ	ripe, cooked
<i>mangbēchēng</i>	N	decorative plant
<i>mano</i>	DIR	down slope
<i>marasin*</i>	N	medicine
<i>maricha</i>	INTERJ	oh!, hey!
<i>marik</i>	DISC	really, truly
<i>maru</i>	ADV	really, at all
<i>marup</i>	N	cassowary
<i>mas</i>	V	sleep PAST
<i>masa</i>	DISC	certainly, too much
<i>masēchas</i>	ADV	clearly
<i>mat</i>	N	older sibling

Mali form	Part of speech	Gloss/translation
<i>mat</i>	V	get PAST
<i>mat malengeik na</i>	V	believe NI
<i>mathēchasep</i>	ADN	in the morning
<i>mathēchasepka</i>	N	morning
<i>matki</i>	N	older sister
<i>maulul</i>	ADV	long time
<i>mavan</i>	N	ginger
<i>mavangam</i>	PRO	everywhere
<i>mavērēt</i>	ADV	suddenly, urgently
<i>mavo</i>	ADV	badly
<i>mēchēvēs</i>	ADV	sometimes, once
<i>mēk</i>	DIR	down
<i>mēl</i>	ADJ	foreign
<i>mēl</i>	N	island
<i>mēliar</i>	N	small parrot
<i>mem</i>	V	suckle NI
<i>mēnaman na</i>	V	be quiet NI
<i>mēnap</i>	V	sleep NI
<i>mēnap mēt</i>	V	sleep NI
<i>mēndik</i>	N	years
<i>mēndu</i>	DISC	before
<i>mēng</i>	N	tree, wood
<i>mēni</i>	DIR	on
<i>mēnia</i>	INTERROG	how
<i>mēr</i>	ADJ	good
<i>mēr</i>	V	pull up PAST
<i>mēr ba</i>	V	feel relieved NI
<i>mērmēr</i>	ADV	always
<i>(-/ =)mes</i>	[detransitiviser]	(-/ =)DETR ₂
<i>mēs</i>	V	eat PAST
<i>mēsana</i>	V	do something INDEF PAST
<i>mēsēng</i>	N	ground
<i>mēsmēs</i>	N	feast
<i>mēstēmna</i>	N	side dishes
<i>met</i>	V	go PAST
<i>mēt</i>	PREP	within
<i>mēthamēn</i>	V	speak PAST
<i>mēthamēngi</i>	N	language, word, order
<i>methamon</i>	N	message, language
<i>methanas</i>	N	miracle
<i>mēthik</i>	DIR	aside
<i>milani</i>	ADV	yesterday
<i>milat</i>	N	plate, scraper
<i>mir</i>	DISC	long ago
<i>misa*</i>	N	mass

Mali form	Part of speech	Gloss/translation
<i>mithu</i>	DISC	(much) later on
<i>mo</i>	ADV	all, completely
<i>mon</i>	V	go in PAST
<i>mon dēm</i>	V	gather PAST
<i>monel</i>	V	hunt PAST
<i>mono</i>	DIR	across slope
<i>mononamucha</i>	N	crossbeam
<i>mor</i>	N	adult
<i>mor</i>	N	ancestor
<i>mor</i>	N	big
<i>mu</i>	V	put PAST
<i>mubang</i>	ADV	tomorrow, next day
<i>mudēm, mundēm</i>	N	fire
<i>muēn</i>	V	arrive PAST
<i>muēn vēt</i>	V	find PAST
<i>mugun</i>	V	chase PAST
<i>mugun, munggun</i>	V	sit PAST
<i>mui</i>	DIR	sideways
<i>muit</i>	DIR	across TERM
<i>muk</i>	DIR	across
<i>mulengi</i>	N	fear
<i>muli*</i>	N	orange
<i>mulichēm</i>	N	spike on orange tree
<i>mundik</i>	N	pitpit
<i>mundros na</i>	V	stop suddenly NI, freeze NI
<i>munggurup</i>	DIR	between
<i>musasot</i>	V	change PAST
<i>musnēng</i>	N	idea, thought
<i>muthēmmēs</i>	N	decorations
<i>muvēt</i>	N	punishment
<i>na-</i>	[derivational prefix]	DER ₃₋
<i>(-/)=na</i>	[detransitiviser]	(-/)=DETR ₁
<i>(-/)=na</i>	[reciprocal marker]	(-/)=RECIP
<i>na</i>	PREP	from
<i>na</i>	[irrealis focus marker]	
<i>naeng</i>	N	hunger
<i>nainavi</i>	DIR	from there
<i>naingēm</i>	V	shine NI
<i>naingim</i>	V	look NI
<i>naingis</i>	N	foreigner, stranger
<i>namas</i>	V	lie down NI
<i>namu</i>	V	continue NI
<i>nan'gi</i>	N	mum
<i>nanēk</i>	N	mother
<i>nangas</i>	N	smoke, tobacco plants, cigarettes
<i>nangger</i>	V	be bent NI

Mali form	Part of speech	Gloss/translation
<i>nani</i>	PREP	for
<i>nania</i>	PREP	for
<i>nari</i>	V	hear NPRES
<i>naruer</i>	ADV	firstly, before
<i>(-/=)nas</i>	<i>(-/=)</i> REFL	
<i>nasot</i>	ADV	after, later, behind
<i>nathēk</i>	N	point
<i>nē</i>	[associative marker]	
<i>nēkethop</i>	N	eel
<i>nēma</i>	PRO	who
<i>nēmgi</i>	PRO	who F SG
<i>nemon'gi</i>	N	door
<i>neng</i>	V	dodge NPRES
<i>nengias</i>	V	be hungry NI
<i>ngimēlēk</i>	PRO	FLAT PL
<i>nēngur</i>	N	decorative leaves
<i>nēp na</i>	V	translate NPRES
<i>nep nē</i>	V	turn over NPRES
<i>nes</i>	V	bite NPRES
<i>nēs</i>	V	call NPRES
<i>nēs</i>	V	put NPRES
<i>nesnes vēt</i>	V	be spiky NI
<i>ngaiom</i>	PRO	M DL
<i>ngaip</i>	V	hide NI
<i>ngam</i>	PRO	RCD SG
<i>ngas</i>	PRO	FLAT SG
<i>ngavam</i>	PRO	RCD DL
<i>ngavap</i>	PRO	RCD PL
<i>ngavem</i>	PRO	F DL
<i>ngavet</i>	PRO	LONG SG
<i>nge</i>	PRO	2SG III
<i>ngē</i>	PRO	3N I
<i>ngēk dē</i>	V	gasp NI
<i>ngeleng</i>	N	small stone
<i>ngēn</i>	PRO	2PL I
<i>ngēn</i>	PRO	2PL III
<i>ngēngeng dēm</i>	V	squeak NI
<i>ngēni</i>	PRO	2PL II
<i>nges mē</i>	V	dig in NI
<i>ngēt</i>	PRO	3N III
<i>ngēthi</i>	PRO	3N II
<i>ngi</i>	PRO	2SG II
<i>ngia</i>	PRO	2SG I
<i>ngia</i>	PRO	2SG POSS
<i>ngiēm</i>	V	look PRES, search PRES

Mali form	Part of speech	Gloss/translation
<i>ngiēmngiēmgi</i>	N	lookout
<i>nginēm</i>	PRO	EXT DL
<i>nging dē</i>	V	spy on NI
<i>nging dēm</i>	V	duck NI
<i>ngini</i>	PRO	DIM SG
<i>ngip</i>	V	die PRES
<i>ngis</i>	ADV	apart, separate
<i>ngithom</i>	PRO	DIM DL
<i>ngo</i>	PRO	1SG III
<i>ngu</i>	PRO	1SG II
<i>ngua</i>	PRO	1SG I
<i>ngua</i>	PRO	1SG POSS
<i>nguthes</i>	N	student
<i>nia</i>	[frustrative/mirative marker]	FRUST, MIR
<i>nimulichi</i>	N	slut
<i>not*</i>	ADJ	north
<i>not</i>	N	taro
<i>nugul</i>	N	boundary
<i>nun</i>	N	sap
<i>nunguik vēt</i>	V	shout
<i>o</i>	INTERJ	oh
<i>oem</i>	N	baby, offspring
<i>oerna</i>	N	game, competition
<i>oes</i>	N	children, offspring
<i>oes</i>	N	fruit
<i>oo</i>	INTERJ	goodbye!
<i>pa</i>	PREP	LOC, BEN
<i>pachēvak</i>	DEM	EMPH M SG DIST DEM
<i>pachēvang</i>	DEM	EMPH CN DIST DEM
<i>pael*</i>	N	file
<i>pai</i>	V	fall down PRES
<i>paik dem, paikdēm</i>	V	jump PRES
<i>paim</i>	N	dog
<i>pais</i>	V	bind PRES
<i>paiv*</i>	NUM	five
<i>paivang</i>	DEM	EMPH CN DIST DEM
<i>paivathe</i>	DEM	EMPH H PL DIST DEM
<i>palang, plang*</i>	N	plank
<i>palkochuik</i>	V	disobey PRES
<i>par</i>	V	pull PRES
<i>par dēm</i>	V	drag PRES
<i>par dēm mes</i>	V	crawl PRES
<i>paranda</i>	N	veranda
<i>pato*</i>	N	duck
<i>pavēchēm</i>	DEM	EMPH RCD SG DIST DEM

Mali form	Part of speech	Gloss/translation
<i>pavēches</i>	DEM	EMPH FLAT SG DIST DEM
<i>pavēvap</i>	DEM	RCD PL DIST DEM
<i>pavēvem</i>	DEM	EMPH F DL DIST DEM
<i>paviom</i>	DEM	M DL DIST DEM
<i>pe</i>	PRO	3M SG POSS
<i>pe</i>	DEM	there
<i>pēk</i>	V	fill PRES
<i>pekato*</i>	N	sin
<i>pēl tē</i>	V	collapse PRES, break PRES
<i>pēlēk</i>	V	want PRES, like PRES, love PRES
<i>pēlēm</i>	N	pig
<i>pēlēng</i>	V	kill PRES
<i>pelet, plet</i>	N	plate
<i>pēlike sē</i>	V	slip PRES
<i>pem</i>	PREP	in
<i>pendē</i>	V	fall PRES
<i>pepa*</i>	N	paper
<i>pepaves</i>	N	paper
<i>pērēk mēt</i>	V	be torn PRES, rip PRES
<i>pērēn</i>	V	smell PRES
<i>pēs</i>	V	blow PRES
<i>pēs</i>	V	cook PRES
<i>pēs</i>	N	head, top
<i>pēs dē</i>	V	be at that moment NI
<i>pēs mēt</i>	V	blow PRES
<i>pēt</i>	PREP	at
<i>pēthen</i>	N	lime
<i>pētpēt na</i>	V	fall PRES, scatter PRES
<i>pīam</i>	N	Tahitian chestnut (galip nut)
<i>pilēk</i>	N	gun
<i>pipti*</i>	NUM	fifty
<i>pīru</i>	V	writhe
<i>pis</i>	V	swell
<i>pis dēm</i>	V	be swollen
<i>plaik sē</i>	V	come out NPRES
<i>plam</i>	N	pigs
<i>plastik*</i>	N	plastic bottle, container, or bags
<i>plēm</i>	N	pig
<i>plēng</i>	N	tree sp.
<i>ples balus*</i>	N	airport
<i>po*</i>	NUM	four
<i>poti*</i>	NUM	forty
<i>povar, pavar</i>	DIR	on top
<i>prap</i>	V	fly
<i>prset</i>	N	strange mark

Mali form	Part of speech	Gloss/translation
<i>pul*</i>	V	paddle NI
<i>pus pēm</i>	V	erupt PRES
<i>pus sē</i>	V	squeeze out though a narrow gap PRES
<i>radēmga</i>	N	cave
<i>raik dēm</i>	V	scream NI
<i>rais*</i>	N	rice
<i>raun</i>	N	sound
<i>rem</i>	N	cause
<i>rem</i>	V	know NPRES, realise NPRES
<i>rēm</i>	N	illness
<i>rēm</i>	ADJ	sick
<i>rēmali</i>	N	clever person
<i>remanas na</i>	V	recognise PRES
<i>reng</i>	N	river, water
<i>rēprēpka</i>	N	fencepost
<i>rer dē</i>	V	crumble NPRES
<i>rndam</i>	NV	witch
<i>ron</i>	N	be satisfied NI
<i>rongga</i>	N	person from cold place, high altitudes
<i>ronggi</i>	N	area at high altitude
<i>ru</i>	N	person
<i>rua</i>	N	friend
<i>rut</i>	V	push NPRES
<i>rut nē</i>	V	push NPRES, push in NPRES
<i>sa</i>	DISC	for a while
<i>sa</i>	[contrastive event focus marker]	NEF
<i>sa</i>	PREP	to, with
<i>sachong</i>	N	eye(s), glasses
<i>saeng</i>	N	rain
<i>sai</i>	DISC	again
<i>saika</i>	DISC	possibly
<i>saisa</i>	DISC	once again
<i>saisavi</i>	INTERJ	look out!
<i>salve*</i>	INTERJ	greetings
<i>samor</i>	V	get bigger NI
<i>sana</i>	V	do something INDEF NPAST
<i>sana</i>	V	do INDEF NPAST
<i>sandri*</i>	N	sentry
<i>sangar</i>	V	hold NI
<i>sangar</i>	V	arrest NI
<i>sangau</i>	N	net
<i>savuit</i>	DIR	on top, victorious
<i>sdamēr</i>	ADV	directly, correctly
<i>sdē</i>	PREP	at
<i>sdēm</i>	N	ear(s)

Mali form	Part of speech	Gloss/translation
<i>sēgēk</i>	NUM	one M
<i>sek</i>	N	hero
<i>sek</i>	V	husk NI
<i>sek</i>	V	lift NI
<i>sek</i>	N	story
<i>sek</i>	N	trap
<i>sēk</i>	V	marry NI
<i>sēk alugut</i>	V	be married NI
<i>sek na</i>	V	get married NI
<i>sekmes</i>	V	get up NI
<i>sēm</i>	V	trim NI
<i>sen</i>	N	executioner
<i>sen</i>	N	knife
<i>sēna, sna</i>	ADV	simultaneously
<i>senbes</i>	N	wall woven from leaf stems
<i>sēneng</i>	N	thought
<i>sēnēngacha</i>	N	heart
<i>sēng</i>	PREP	at the bottom of, at base
<i>sensis*</i>	N	census
<i>senso*</i>	N	chain saw
<i>sēp</i>	V	fall NI
<i>sep mē</i>	V	change NI, make NI
<i>sēpmes</i>	V	get up NI
<i>ser</i>	V	be first NI
<i>ser</i>	V	weave NI
<i>ses</i>	N	rope
<i>sēs</i>	N	childless person
<i>sēsēkpes</i>	ADV	readily, easily
<i>set</i>	ADV	very fast
<i>seven*</i>	NUM	seven
<i>seventi*</i>	NUM	seventy
<i>siks*</i>	NUM	six
<i>siling</i>	N	old string bag
<i>silingēm</i>	N	old string bag
<i>simen*</i>	N	cement
<i>sing</i>	V	chew NI
<i>singal</i>	N	bad spirit
<i>sip*</i>	N	ship
<i>sipun*</i>	N	spoons
<i>sisel*</i>	N	chisel
<i>sisis*</i>	N	scissors
<i>skruim*</i>	V	continue NI
<i>skul*</i>	N	school
<i>slameng dēm</i>	V	read NI
<i>slamēr</i>	V	fix NI, tidy NI

Mali form	Part of speech	Gloss/translation
<i>slavo</i>	V	mess up NI
<i>slēp</i>	N	bone
<i>slēp pēt</i>	V	be thin NI
<i>slēpka</i>	N	pen, pencil
<i>slēpki</i>	N	bone
<i>slēvini</i>	N	leg
<i>slik</i>	N	meat
<i>snaing</i>	N	thigh
<i>snan</i>	V	ask NI
<i>snandēvēr</i>	V	ask NI
<i>snania</i>	PREP	against
<i>snēng</i>	N	heart
<i>snēng</i>	N	idea, thought
<i>snengini</i>	N	idea, plan
<i>snok</i>	N	excreta
<i>sok</i>	DISC	really
<i>sol*</i>	N	salt
<i>soldia*</i>	N	soldier
<i>sospen*</i>	N	saucepan
<i>sot</i>	V	finish NI
<i>sravēt</i>	N	clothes, shirt
<i>sravo</i>	ADV	in surprise
<i>srēvēm</i>	N	dwarf
<i>sru</i>	N	elderly person
<i>srumēnga</i>	N	a man who has been trained to react suddenly and violently to unusual disturbances
<i>su</i>	V	teach NI
<i>su</i>	V	try NI
<i>su ba</i>	V	make signs NI
<i>suchul</i>	N	post
<i>suchulia</i>	N	very long post
<i>suchup</i>	V	sweep NI
<i>suchut</i>	V	push NI
<i>suchut nanas</i>	V	try out NI
<i>suk dēm</i>	V	fall down NI, forget NI
<i>sukderut nē</i>	V	wither NI
<i>sul</i>	N	reef stone
<i>sunas</i>	V	learn NI, study NI
<i>sunas</i>	N	school
<i>sunasvem</i>	N	teacher
<i>sunasvemiom</i>	N	two teachers
<i>sunasvemka</i>	N	male teacher
<i>sunasvemki</i>	N	female teacher
<i>susur</i>	N	blind
<i>sutka</i>	N	ridgepole
<i>svo</i>	V	steal NI

Mali form	Part of speech	Gloss/translation
-ta	[noun class marker]	-H PL
ta	PRO	3H PL I
ta	PRO	3H PL III
ta	[emphatic marker]	EMPH
ta	PRO	H PL
tain	V	dance PRES
tair	V	stand PRES
tak	DEM	M SG PROX DEM
tal	V	carry PRES, bear PRES
talias	N	wizard
tambu*	N	in-law
tamon	V	speak PRES
tangam	N	banana tree
tangambes	N	area of bananas, banana leaf
tangamigl	N	piece of banana, banana plantation
tanger vêt	V	break off PRES
tapaigl	N	writing slate
tar	N	fall
tar sē	V	fall out PRES, pour out PRES
tas	V	sleep PRES, lie down PRES
tat	V	get PRES
tat nēthēm	V	help PRES
tē	PRO	3F SG POSS
tē-	[derivational prefix]	DER ₂
tēbērnān	N	small person
tēbut	N	stamp feet
tēbut tēbut	N	stamping
tēchēm	V	feel PRES
tēchēm	DEM	RCD SG PROX DEM
tēchen	V	groan PRES
tēchēp	V	be full PRES, fill PRES
tēchep nē	V	be full of PRES
tēk	V	do PRES, work PRES
tēk mamēr	V	explain PRES
tēk mē	V	work PRES
tēk vêt	V	touch PRES
tēlēng	N	leaf, paper
tēlēngbes	N	leaf
tem	ADJ	whole
tēm	PREP	GOAL, PATH, THEME
tēmna	DIR	together
tēn	V	hang PRES
tēp	N	hell
tēp ma	V	make PRES
tepmaun	V	squeeze PRES

Mali form	Part of speech	Gloss/translation
<i>tēranas</i>	V	leave PRES
<i>tes</i>	V	call PRES, read PRES
<i>tēs</i>	V	eat PRES
<i>tet</i>	V	go PRES
<i>tethuk</i>	V	slide PRES
<i>tēthuk pēt</i>	V	slide PRES
<i>tēvēng</i>	V	sing PRES
<i>tevol</i>	N	table
<i>thabu</i>	N	spiders
<i>thaneng, mathaneng</i>	ADV	hanging on
<i>thain</i>	V	dance FUT
<i>thal</i>	V	carry NPRES
<i>thal</i>	V	give birth to NPRES
<i>thal</i>	N	net bag (bilum)
<i>thalias</i>	N	wizard
<i>thamon</i>	V	speak FUT, recount FUT
<i>thanger pēt</i>	V	break off NPRES
<i>thap</i>	V	cut NPRES
<i>tharesini</i>	N	trouble
<i>thas</i>	V	lie down FUT
<i>that</i>	V	get FUT
<i>thatalvem</i>	N	carrier
<i>thēchēm</i>	V	realise NPRES
<i>thēchēnmu</i>	N	sacred place
<i>thēchēnmu</i>	N	taboo thing
<i>thēchēp</i>	V	be full NPRES
<i>thēk</i>	V	build NPRES, do NPRES, wear NPRES, work NPRES
<i>thēk mē</i>	V	make NPRES
<i>thēk na</i>	V	make PRES, do NPRES
<i>thēk nē</i>	V	send NPRES
<i>thēk vēt</i>	V	touch NPRES
<i>thēkdēngēthamgi</i>	N	porch
<i>thēktēk</i>	N	work, job
<i>thēktēkini</i>	N	job
<i>thēn</i>	V	arrive FUT
<i>thēn pēt</i>	V	find NPRES
<i>thēn sē</i>	V	grow well FUT
<i>thēng</i>	N	back
<i>thēp ma</i>	V	make NPRES
<i>thēs</i>	V	eat FUT
<i>thesdēm</i>	V	agree NPRES
<i>thet</i>	V	go FUT
<i>thēvusiom</i>	N	a pair of in laws
<i>thēvuska</i>	N	father in law, uncle in law, son in law, nephew in law
<i>thēvuski</i>	N	mother in law, aunty in law,

Mali form	Part of speech	Gloss/translation
		daughter in law, niece in law
<i>thi</i>	V	hurry NI
<i>thia</i>	[realis focus marker]	REL.FOC
<i>thichina</i>	V	do NSPEC NPRES
<i>thik tē(m)</i>	V	pick NPRES
<i>thinēm</i>	N	fish
<i>thir</i>	V	grow quickly NPRES
<i>thon</i>	V	go in FUT
<i>thon</i>	V	put in NPRES
<i>thon</i>	V	throw away NPRES
<i>thon bathēm</i>	V	check NPRES
<i>thon dēm</i>	V	follow NPRES
<i>thon na</i>	V	throw NPRES
<i>thon nanas, thonanas</i>	V	jump NPRES, throw oneself NPRES
<i>thon nē</i>	V	throw NPRES
<i>thondēm</i>	N	law, rule
<i>thondēm</i>	V	recount NPRES
<i>thong</i>	N	tree sp.
<i>thong</i>	V	turn NPRES
<i>thongmēs</i>	V	turn NPRES
<i>thor</i>	V	wash NPRES, baptise NPRES
<i>thoret</i>	V	crawl NPRES
<i>thu</i>	V	put FUT
<i>thu</i>	V	shoot NPRES
<i>thu na</i>	V	shoot at NPRES, shoot with NPRES
<i>thu samor sē</i>	V	make fun of FUT
<i>thuchun</i>	V	sit FUT
<i>thut</i>	N	base
<i>thuvēt</i>	V	answer NPRES
<i>ti</i>	PRO	3H PL II
<i>tichina</i>	V	do NSPEC PRES
<i>tichina nē, thichina nē</i>	V	make NSPEC PRES
<i>tigil mēt</i>	V	split PRES
<i>tik</i>	EMPH	
<i>tik</i>	N	hand, arm, finger
<i>tiktēm vēt</i>	V	break PRES
<i>tlavuchi</i>	N	kindness
<i>tlu</i>	V	see PRES
<i>tlu vēt</i>	V	look after PRES
<i>tluvemka</i>	N	watchman
<i>tnaik</i>	V	drink PRES
<i>tnari</i>	V	hear PRES, feel PRES
<i>tneng</i>	V	dodge PRES
<i>tnēp</i>	V	tip PRES
<i>tnēs</i>	V	call PRES

Mali form	Part of speech	Gloss/translation
<i>tnok</i>	V	cry PRES
<i>tondēm</i>	V	recount PRES
<i>tor</i>	V	wash PRES
<i>tor tēm</i>	V	swim PRES
<i>trinitas</i>	N	trinity
<i>trong</i>	V	be stiff PRES
<i>tu</i>	V	put PRES
<i>tu</i>	V	shoot PRES
<i>tu*</i>	NUM	two
<i>tu asuchut</i>	V	make signs PRES
<i>tu ba</i>	V	set a rule PRES
<i>tu ma</i>	V	make fun PRES
<i>tu na</i>	V	throw PRES, shoot PRES
<i>tu thēm</i>	V	decorate PRES
<i>tuchun</i>	V	chase PRES
<i>tuchun</i>	V	sit PRES
<i>tugas</i>	V	play PRES
<i>tusavus</i>	V	wriggle PRES
<i>tuthēm mēs</i>	V	decorate oneself PRES
<i>tuthēm mēspēt</i>	V	be glorious PRES
<i>tuvēt</i>	V	reply PRES
<i>uauk</i>	N	grandmother
<i>uer</i>	ADV	first
<i>ulan</i>	N	snake
<i>ulul</i>	ADJ	long, tall
<i>ulung</i>	N	grade
<i>un</i>	PRO	1DL I
<i>un</i>	N	darkness
<i>un'gi</i>	N	darkness
<i>unbem</i>	NUM	two F
<i>ungiom</i>	NUM	two M
<i>uni</i>	PRO	1DL II
<i>up</i>	N	valley
<i>ur</i>	N	bush
<i>ur</i>	N	witch
<i>ura</i>	COORD	or
<i>uraet*</i>	DISC	all right
<i>urat</i>	N	basket
<i>urathini</i>	N	small basket
<i>uratki</i>	N	basket
<i>uratpes</i>	N	coconut frond for making a basket
<i>urēn</i>	N	crayfish, prawn
<i>usup</i>	N	sky
<i>ut</i>	PRO	1PL I
<i>ut</i>	PRO	1PL III
<i>uthi</i>	PRO	1PL II

Mali form	Part of speech	Gloss/translation
<i>va</i>	PURP ₁	in order to
<i>vaia*</i>	N	wire
<i>vaiait</i>	N	a strand of wire
<i>vaiaves</i>	N	sheet of arcmesh wire
<i>vaik</i>	V	jump NPRES
<i>vaim</i>	V	fold NPRES
<i>vaimbap</i>	N	puppies
<i>vaisdēm vēt</i>	V	tie up NPRES
<i>vaivang</i>	DEM	EMPH 3N DIST DEM
<i>vak</i>	DEM	M SG DIST DEM
<i>vali</i>	V	roll NPRES
<i>valing</i>	V	turn PRES
<i>-vam</i>	[noun class marker]	-RCD DL
<i>vam</i>	PRO	RCD DL
<i>vandi</i>	[desiderative marker]	DESID
<i>vang</i>	V	run NPRES
<i>vangam</i>	DEM	RCD SG DIST DEM
<i>vanggal</i>	V	suck in belly NPRES
<i>vanim</i>	V	roll PRES
<i>vanis tēm</i>	V	beat up NPRES
<i>-vap</i>	[noun class marker]	-RCD PL
<i>vap</i>	PRO	RCD PL
<i>var</i>	V	cook NPRES
<i>var sē</i>	V	catch NPRES
<i>varia</i>	N	breadfruit tree
<i>varkurai</i>	N	court
<i>vat</i>	V	plant NPRES
<i>vavu</i>	INTERJ	wow
<i>vēcham</i>	DEM	RCD SG DIST DEM
<i>vek</i>	PRO	H PL
<i>vēl sē</i>	V	break NPRES
<i>vel te</i>	V	break out NPRES
<i>vēlek</i>	N	grandchild
<i>vēlēng, vlēng</i>	V	kill NPRES
<i>vēlik</i>	N	sling
<i>-vem</i>	[noun class marker]	-F DL
<i>vem</i>	PRO	F DL
<i>vēm</i>	PRO	RCD DL
<i>vēn</i>	V	climb NPRES
<i>vēn</i>	V	corner NPRES
<i>vēn</i>	N	mound
<i>vēn bēt</i>	V	search for NPRES
<i>venaseng</i>	V	start NPRES
<i>veng vēt</i>	V	cover NPRES
<i>vēngbēng</i>	N	envelope

Mali form	Part of speech	Gloss/translation
<i>vēr mē</i>	V	grab NPRES
<i>vereng</i>	V	cover NPRES
<i>ves</i>	V	blow NPRES
<i>vēs</i>	V	cook NPRES
<i>-ves, -vēs</i>	[noun class marker]	-FLAT SG
<i>ves, vēs</i>	PRO	FLAT SG
<i>vesnas</i>	V	get nothing NPRES
<i>vēsves</i>	N	magic
<i>-vet</i>	[noun class marker]	-LONG SG
<i>vet</i>	PRO	LONG SG
<i>vēt</i>	V	bury NPRES
<i>vēt</i>	V	dive NPRES
<i>vēthēp</i>	N	axe
<i>vi</i>	[emphatic marker]	EMPH
<i>viavik</i>	DEM	ADV DIST DEM
<i>vik</i>	[emphatic marker]	EMPH
<i>vilēcha</i>	N	crack of lightning
<i>vilēchi</i>	N	gun
<i>vilēk</i>	N	gun
<i>ving</i>	V	go around NPRES
<i>vingbing</i>	N	Baining
<i>vingbingbap</i>	N	Bainings
<i>vingul</i>	N	bolt of lightening
<i>viring</i>	N	apron
<i>viula</i>	N	mango, mango tree
<i>vlaik sē</i>	V	emerge NPRES
<i>vlēk</i>	V	like NPRES, want NPRES
<i>vlem</i>	N	pig
<i>vlēmbap</i>	N	piglets
<i>vlēng</i>	N	tree sp.
<i>vlochēm</i>	N	spot
<i>vok bus*</i>	V	go on patrol NI
<i>von</i>	V	give NPRES
<i>von dēm</i>	V	pay NPRES, give away NPRES
<i>vondēm</i>	N	gift, prize
<i>vondēm mēt</i>	V	buy NPRES
<i>vono</i>	DIR	up slope
<i>vaseng na</i>	V	remove NPRES
<i>vreng</i>	V	spread NPRES
<i>vru</i>	N	enemy
<i>vuēt</i>	N	building, house, village
<i>vui</i>	DIR	upwards
<i>vuinem</i>	V	return NPRES
<i>vuit</i>	DIR	up TERM
<i>vuk</i>	DIR	up
<i>vulik dēm</i>	V	slip away NPRES

Mali form	Part of speech	Gloss/translation
<i>vun</i>	N	turtle
<i>vungbungga</i>	N	a type of firedancer
<i>vur</i>	V	grow NPRES
<i>vus</i>	V	blow up NPRES
<i>vus</i>	V	burn NPRES
<i>vus sē</i>	V	come up NPRES
<i>vusding</i>	V	cover NPRES
<i>vuse, vus sē</i>	V	emerge NPRES
<i>vuski</i>	N	head
<i>vuspem</i>	V	erupt NPRES
<i>vuspem</i>	N	eruption
<i>vuthem</i>	V	fall NPRES
<i>waioi</i>	INTERJ	ow!
<i>weil*</i>	N	whale
<i>wunak</i>	V	twist NPRES
<i>yachun</i>	N	month

Appendix B: Texts

Text 1

This text is presented here because it is the source of so many of the example sentences included in the grammar. Fidel Lemka was the only woman to record texts for the corpus used in this research. She is a resident of Marunga and the daughter of two fluent speakers of Mali. In addition to speaking the Arongda dialect of Mali as her first language, Mrs Lemka also speaks fluent Tok Pisin and good English. Mrs Lemka was in her mid thirties at the time of this recording. The text as it is represented here is a slightly edited written version that she and her father, Mr Julius Tayul, produced together from the recording. This editing process was associated with preparing the text for use in a collection intended for community use. In this process, a small number of borrowings from Tok Pisin were replaced with Mali words and sentence boundaries were determined.

(T1.1)

Asecha sēvēt ma Veronika Tēchēnam
a=sek-ka sa=pēt ma Veronika Tēchēnam
SPEC=story-M.SG to=at ART₂ PN PN

ma chia vang nēmēt kama Siapan'gēna
ma kia vang na=mēt kama Siapan-kēna
REL₂ 3F.SG.I run.NPRES from=within ART₁ PN-H.PL

athēvama chumēngas veia Masarau.
athēvama a=kumēngas pe=ia Masarau
3H.PL.POSS SPEC=prison there=REL₁ PN

Story about Veronica Techernam who escaped from the Japanese prison camp at Masarau.

(T1.2)

Nguave ngu thondēm sēvēt ma guauk
ngua=pe ngu thodēm sa=pēt ma gu=uauk
1SG.I= there 1SG.II recount.NPRES to=at ART₂ 1SG.POSS=grandmother

ma Veronika Tēchēnam mir mēt kama gamar.
ma Veronika Tēchēnam mir mēt kama gamar
ART₂ PN PN long.ago within ART₁ war

I am going to recount about my grandmother, Veronica Techernam, long ago during the war.

(T1.3)

Naruer dē ma guauk
naruer da ma gu=uauk
firstly and ART₂ 1SG.POSS=grandmother

ma Veronika Tēchērnām da asēski.
ma Veronika Tēchērnām da a=sēs-ki
ART₂ PN PN and SPEC=childless.person-F.SG
At that time my grandmother, Veronica Techernam, was a young woman (lit: childless).

(T1.4)

Pe mēt kama gamar da kēvichi
pe mēt kama gamar da kēvi=ki
there within ART₁ war and CONTR=3F.SG.III

dai chia tas peia Maslabe.
dai kia tas pe=ia Maslabe
thus 3F.SG.I sleep.PRES there=REL₁ PN
During the war, that one at that time she lived (lit: slept) at Maslabe.

Atha mbang ivuk peia Maslabe
at=a a=bang i-vuk pe=ia Maslabe
3F.SG.POSS=SPEC SPEC=house DER₁-up there=REL₁ PN

ve vēt ma Mēndai thēvus.
pe pēt ma Mēndai at=a=pēs
there at ART₂ PN 3F.SG.POSS=SPEC=head
Her village [was] up there at Maslabe, there at the head of the Mundai River.

(T1.5)

Dak kama Siapan'gēna da tha thēk.mathēva mbang
dak kama Siapan-kēna da ta thēk.mē=athēv=a bang
but ART₁ PN-H.PL and 3H.PL.I make.NPRES=3H.PL.POSS=SPEC house

ura tha tes ia athēva kem peia Masarau.
ura ta tes ia athēv=a kem pe=ia Masarau
or 3H.PL.I call.PRES REL₁ 3H.PL.POSS=SPEC camp there=REL₁ PN
And the Japanese, they built their village, or they called it their camp, at Masarau.

(T1.6)

Masarau, ama Siapan'gēna vathē vik,
Masarau ama Siapan-kēna avathē vik
PN REL₃ PN-H.PL H.PL.DIST.DEM EMPH

dē kule tha via Masarau.
da kule ta pe=ia Masarau
and stay.PRES 3H.PL.III there=REL₁ PN
Masarau, where those particular Japanese were, they stayed there at Masarau.

(T1.7)

Dē tha thēk.nathēvama chasesta
 da ta thēk.nē=athēvama a=kases-ta
 and 3H.PL.I send.NPRES=3H.PL.POSS.EMPH SPEC=spy-H.PL

ma ta tes ta ia chama Kembechēna
 ma ta tes ta ia kama Kembe-kēna
 REL₂ 3H.PL.I call.PRES 3H.PL.III REL₁ ART₁ PN-H.PL

va tha thet ti ngim nani chama arutha
 va ta thet ti ngim nani kama a=ru-ta
 PURP₁ 3H.PL.I go.FUT 3H.PL.II search.PRES for ART₁ SPEC=person-H.PL

vēk kama aurki.

pēt kama a=ur-ki

at ART₁ SPEC=bush-F.SG

And they sent their spies, who they called the Kembes, to go out and look for people in the bush.

(T1.8)

Achasesta avathē vik
 a=chases-ta avathē vik
 SPEC=spy-H.PL H.PL.DIST.DEM EMPH

ta met nēk kama aiska inamēk
 ta met na=pēt kama a=is-ka i-na-mēk
 3H.PL.I go.PAST from=at ART₁ SPEC=road-M.SG DER₁-DER₃-down

dē tha thon.dēma Mēndai saivuk
 da ta thon.dēm=ma Mēndai sa=i-vuk
 and 3H.PL.I follow.NPRES=ART₂ PN to=DER₁-up

dē tha muēn vēk kama mbangēm
 da ta muēn pēt kama a=bang-ēm
 and 3H.PL.I arrive.PAST at ART₁ SPEC=village-RCD.SG

ma tha tes ngam ia Maslabe.
 ma ta tes ngam ia Maslabe
 REL₂ 3H.PL.I call.PRES RCD.SG REL₁ PN

Those particular spies they went up from the road and they went along the Mundai River up and they came to the village which they call Maslabe.

(T1.9)

Ta muēn.bētha ngam
 ta muēn.vēt ngam
 3H.PL.I find.PAST RCD.SG

dē tha chēthep kama arutha.
 da ta chēthep kama a=ru-ta
 and 3H.PL.I grab.NPRES ART₁ SPEC=person-H.PL

They found it and they captured the people.

(T1.10)

Ta muēn.bētha ngam
 ta muēn.vēt ngam
 3H.PL.I find.PAST RCD.SG

dē tha chēthep kama rutha ama adēvaung natha.
 da ta chēthep kama ru-ta ama adēvaung na=ta
 and 3H.PL.I grab.NPRES ART₁ person-H.PL REL₃ three.M PREP=3H.PL.III
 They found it and they captured three people.

(T1.11)

Da arutha tha mo dē tha vang.
 da a=ru-ta ta mo da ta vang
 and SPEC=person-H.PL 3H.PL.I all and 3H.PL.I run.NPRES
 And all the [other] people they ran away.

(T1.12)

Arutha avathē vik
 a=ru-ta avathē vik
 SPEC=person-H.PL H.PL.DIST.DEM EMPH

dai ma guauk ma Veronika Tēchērnām
 dai ma gu=uauk ma Veronika Tēchērnām
 thus ART₂ 1SG.POSS=grandmother ART₂ PN PN

dak kama alēvopki achik
 dak kama a=lēvop-ki achik
 but ART₁ SPEC=woman-F.SG F.SG.CONTR.DEM

dak atha lunggutka.
 dak at=a lugut-ka
 but 3F.SG.POSS=SPEC spouse-M.SG
 Those particular people then were my grandmother, Veronica Tchernam,
 and one woman and her husband.

(T1.13)

Kēvi tha, ma dēvaung natha.
 kēvi ta ma dēvaung na=ta
 CONTR 3H.PL.III REL₂ three.M PREP=3H.PL.III
 Those ones, the three of them.

(T1.14)

Ta matha tha nave ia Maslabe,
 ta mat ta na=pe ia Maslabe
 3H.PL.I get.PAST 3H.PL.III from=there REL₁ PN

dē tha met sē tha marik save ia Masarau,
 da ta met sa ta marik sa=pe ia Masarau
 and 3H.PL.I go.PAST with 3H.PL.III truly to=there REL₁ PN

sēmēt kama kumēngas, via Masarau.

sa=mēt kama kumēngas pe=ia Masarau

to=within ART₁ prison there=REL₁ PN

They got them from Maslabe, and they took them truly to Masarau, into the prison, there at Masarau.

(T1.15)

Kule tha veia Masarau

kule ta pe=ia Masarau

stay.PRES 3H.PL.III there=REL₁ PN

dē kunēngga achēk nasot

da kunēng-ka achēk nasot

and day-M.SG M.SG.CONTR.DEM after

da chama arucha achēk ma chumēska,

da kama a=ru-ka achēk ma chumēs-ka

and ART₁ SPEC=person-M.SG M.SG.CONTR.DEM REL₂ male-M.SG

sa ta mēthamon sēthēmna

sa ta mēthamon sa=tēm=na

NEF 3H.PL.I speak.NPRES to=GOAL=RECIP

ia asik ti vėlēng ga.

ia asik ti vėlēng ka

REL₁ IRR 3H.PL.II kill.NPRES 3M.SG.III

They stayed there at Masarau and one day later one person, a man, so they [the Japanese] said to each other that they'd kill him.

(T1.16)

Ta vēr.mēcha dē tha chuar ia

ta vēr.mē=ka da ta chuar ia

3H.PL.I grab.NPRES=3M.SG.III and 3H.PL.I say.NPRES REL₁

“Ithik nge ma chumēska vak

ithik nge ma chumēs-ka avak

ADV.PROX.DEM 2SG.III REL₂ male-M.SG M.SG.DIST.DEM

ngi mbang ngiaet nasotha ut.”

ngi bang ngia=thet nasot ut

2SG.II run.PRES 2SG.I=go.FUT after 1PL.III

They grabbed him and they said, “Now you particular man, you come with us.”

(T1.17)

Da thamo tha met sēcha save

da ta=mo ta met sa=ka sa=pe

and 3H.PL.I=all 3H.PL.I go.PAST with=3M.SG.III to=there

ia asik ti vėlēng ga ve.

ia asik ti vėlēng ka pe

REL₁ IRR 3H.PL.II kill.NPRES 3M.SG.III there

And they all went with him to there where they'd kill him.

(T1.18)

Dē tha nges.mēchama alechi
 da ta nges.mē=kama a=lek-ki
 and 3H.PL.I dig.in.NI=ART₁ SPEC=hole-F.SG

dē tha chuar nacha
 da ta chuar na=ka
 and 3H.PL.I say.NPRES PREP=3M.SG.III

ia “Ithik nge ama chumēska
ia ithik nge ama chumēs-ka
 REL₁ ADV.PROX.DEM 2SG.III REL₃ male-M.SG

ngia thon samuk sēmēt kama lechi.”
ngia thon sa=muk sa=mēt kama lek-ki
 2SG.I go.in.FUT to=across to-within ART₁ hole-F.SG

And they dug a hole and they said to him, “Now, you man, you get down into the hole.”

(T1.19)

Ka mon samuk sēmēt kama lechi
 ka mon sa=muk sa=mēt kama lek-ki
 3M.SG.I go.in.PAST to=across to=within ART₁ hole-F.SG

dē chule cha ve.
 da chule ka pe
 and stay.NPRES 3M.SG.III there
 He got down into the hole and he stayed there.

(T1.20)

Dē tha chuar nacha
 da ta chuar na=ka
 and 3H.PL.I say.NPRES PREP=3M.SG.III

ia, “Gianga mēthamon nga ve
ia gianga mēthamon ngē pe
 REL₁ 2SG.INDEF.POSS message 3N.I there

va sik ngia thamēn nangēt
 va asik ngia thamēn na=ngēt
 PURP₁ IRR 2SG.I speak.FUT PREP=3N.III

sēvēt gia lugutki?”
 sa=pēt gi=a lugut-ki
 to=at 2SG.POSS=SPEC spouse-F.SG

And then they said to him, “Is there any message of yours for you to tell your wife?”

(T1.21)

Da cha methamēn ia, “Ia.”
 da ka methamēn ia ia
 and 3M.SG.I speak.PAST REL₁ yes

And he said, “Yes.”

(T1.22)

Ka methamēn

ka methamēn

3M.SG.I speak.PAST

ma, “Gua mēthamonbes ngē ve
ma gu=a mēthamon-ves ngē pe
 REL₂ 1SG.POSS=SPEC message-FLAT.SG 3N.I there

va sik ngua thamēn sēvēt gua lunggutki.”
va asik ngua thamēn sa=pēt gu=a lugut-ki
 PURP₁ IRR 1SG.I speak.FUT to=at 1SG.POSS=SPEC spouse-F.SG
 His message which was “My message is there for me to say to my wife.”

(T1.23)

Dē chule dē chave cha tamēn

da kule da ka=pe ka tamēn

and later and 3M.SG.I= there 3M.SG.I speak.PRES

sēthēm ava lunggutki
sa=tēm av=a lugut-ki
 to=GOAL 3M.SG.POSS=SPEC spouse-F.SG

“Gu lunggutki asik ngi tlu.vēthanas mamēr.”
gu lugut-ki asik ngi tlu.vēt-nas mamēr
 1SG.POSS spouse-F.SG IRR 2SG.II look.after.PRES-REFL properly
 And then he said to his wife, “My wife, you must look after yourself properly.”

(T1.24)

Ka thon amēthamēnbes avēchēs pik kēlan.

ka thon a=mēthamēn-ves avēchēs vik klan

3M.SG.I give.FUT SPEC=message-FLAT.SG FLAT.SG.CONTR.DEM EMPH only

He gave only that particular message.

(T1.25)

Dē chule da mbēs maulul

da kule da angēmbēs maulul

and later and NEG long.time

da kosa chama sen’ga viavik
da kosa kama sen-ka vi=avik
 and just ART₁ executioner-M.SG EMPH=ADV.DIST.DEM

ka mēt ka sen’gi
ka mat kē=a sen-ki
 3M.SG.I get.PAST ART₃=SPEC knife-F.SG

dē chania krtēp.
da ka=nia kērtēp
 and 3M.SG.I=MIR chop.PRES

And then, not long, just like that the executioner, he got the knife and he chopped.

(T1.26)

Ka chērtēp savē chēn'gi.
ka chērtēp sa=avē a=kēn-ki
3M.SG.I chop.NPRES to=3M.SG.POSS SPEC=neck-F.SG
He chopped through his neck.

(T1.27)

Chi donanas imono, imono
ki donanas i-mono i-mono
3F.SG.II jump.PRES DER₁-across.slope DER₁-across.slope

dē chule dē kosa cha ingip.
da kule da kosa ka ingip
and later and just 3M.SG.I die.NPRES
[The body] it jumped and rolled over and over and then he just died.

(T1.28)

Ka sēp mēk sē ka lechi
ka sēp mēk sa kē=a lek-ki
3M.SG.I fall.NI down to ART₃=SPEC hole-F.SG

dē chule cha ve.
da chule ka pe
and stay.NPRES 3M.SG.III there
He fell down into the hole and he stayed there.

(T1.29)

Nainavi vik,
na=i-na-avi vik
from=DER₁-DER₃-ADV.PROX.DEM EMPH

sa chule sa alēvovem bavēvem bik
sa kule sa a=lēvop-vem pavēvem vik
NEF later NEF SPEC=woman-F.DL EMPH.F.DL.DIST.DEM EMPH

sei tha vuinem sēmēk veia thi tēk pe,
sai ta vuinem sa=mēt pe=ia ti tēk pe
again 3H.PL.I return.NPRES to=within there=REL₁ 3H.PL.II work.PRES there

mēk kama kumēngas.
mēk kama kumēngas
down ART₁ prison

From there, then later those two particular women, they returned again to there where they worked inside the prison.

(T1.30)

Da sa arucha vak pik
da sa a=ru-ka avak vik
and NEF SPEC=person-M.SG M.SG.DIST.DEM EMPH

da sa angēmbēs nacha, sa cha ingip.
da sa angēmbēs na=ka sa ka ingip
 and NEF NEG PREP=3M.SG.III NEF 3M.SG.I die.NPRES
 And so that particular man he was not with them, he had died.

(T1.31)

Kusek ma ngavem ama unbem in vuinem.
kusek ma ngavem ama unbem in vuinem
 only ART₂ F.DL REL₃ two.F 3.DL.I return.NPRES
 Only the two women returned.

(T1.32)

Kusek ma ngavem ama unbem in buinem
kusek ma ngavem ama unbem in buinem
 only ART₂ F.DL REL₃ two.F 3.DL.I return.PRES

save sēmēt kama kumēngas
sa=pe sa=mēt kama kumēngas
 to=there to=within ART₁ prison

sa in be ini tēk,
sa in pe ini tēk
 NEF 3DL.I there 3DL.II work.PRES

ini tēk, ini tēk, ini tēk.
ini tēk ini tēk ini tēk
 3DL.II work.PRES 3DL.II work.PRES 3DL.II work.PRES

Only the two women returned to the prison then they worked, and worked, and worked, and worked.

(T1.33)

Amusnēng ngē muēn.bēt guauk klan da.ithik
a=musnēng ngē muēn.vēt gu=uauk klan ta=ithik
 SPEC=idea 3N.I find.PAST 1SG.POSS=grandmother like EMPH=ADV.PROX.DEM

ia, “Ngo da vandi ngu vlēk ia ngu vang.”
ia ngo da vandi ngu vlēk ia ngu vang
 REL₁ 1SG.III and DESID 1SG.II want.NPRES REL₁ 1SG.II run.NPRES

Da asik ngua sana?”

da asik ngua sana
 and IRR 1SG.I do.PRES.INDEF.NPAST

An idea came to my grandmother like this, “I want to try to run away. But how will I do that?”

(T1.34)

Auk, sa sndamēr peia thi tēk
auk sa sdamēr pe=ia ti tēk
 well NEF directly there=REL₁ 3H.PL.II work.PRES

muk mēkama kumēngas,
muk mēt=kama kumēngas
 across within=ART₁ prison

kama kumēngas, dē ve mēkama ichēthachi avaik pik,
kama kumēngas da pe mēt=kama ichēt-ki avaik vik
 ART₁ gaol and there within=ART₁ enclosure- F.SG F.SG.DIST.DEM EMPH

dē tha vaisdēm.pēthachi
da ta vaisdēm.vēt=ki
 and 3H.PL.I tie.up.NPRES=3F.SG.III

ma nēchama vaia ma nesnes.pēthangēt.
ma na=kama vaia ma nesnes.vēt=ngēt
 REL₂ PREP=ART₁ wire REL₂ be.spiky.NI=3N.III

Well, right there where they work at the prison, there in that particular enclosure the one they wrapped around it with barbed wire.

(T1.35)

Dē chule dē ki,
da kule da ki
 and later and 3F.SG.III

sndamēr veia guauk ki tēk
sdamēr pe=ia gu=uauk ki tēk
 directly there=REL₁ 1SG.POSS=grandmother 3F.SG.II work.PRES

di chi ben.sachong
da ki ben.sachong
 and 3F.SG.II check.NI

ia, “Asik, asip nēp bangang
ia asik asip na bangang
 REL₁ IRR later.on PREP night

da asik ngua thet kuenai?”
da asik ngua thet kuenai
 and IRR 1SG.I go.FUT where

And then she, right there where my grandmother was working, she looked around,
 “Later at night, where can I go?”

(T1.36)

Dē chule di chiave chi ngim,
da kule da kia=pe ki ngim
 and later and 3F.SG.I= there 3F.SG.II search.PRES

ki ngim imono, imono,
ki ngim i-mono i-mono
 3F.SG.II search.PRES DER₁-across.slope DER₁-across.slope

chi tēk da kia lu chama lechi.
ki tēk da kia lu kama lek-ki
 3F.SG.II do.PRES and 3F.SG.I see.NPRES ART₁ hole-F.SG
 And then she searched, she searched down, down, she felt [around] and she saw the hole.

(T1.37)

Asik vus.sēchi ve.
asik vus.sē=ki pe
 IRR emerge.NPRES=3F.SG.III there
 She could slip out there.

(T1.38)

Asip nēp bangang dē chule tha,
asip na bangang da chule ta
 later.on PREP night and stay.NPRES 3H.PL.III

ta sot nēvēt athēktēk vēt kunēng.
ta sot na=pēt a=thēktēk pēt kunēng
 3H.PL.I finish.NI from=at SPEC=work at day
 Later at night they stayed, they had finished their work for the day.

(T1.39)

Da sip nē bangang
da asip na bangang
 and later.on PREP night

di chia chuar natha ruachi achik,
da kia chuar na=at=a rua-ki achik
 and 3F.SG.I say.NPRES PREP=3F.SG.POSS=SPEC friend-F.SG F.SG.CONTR.DEM

ma ta tat klom nēvētha chi
ma ta tat klom na=pēt ki
 REL₂ 3H.PL.I get.PRES shellfish.sp. from=at 3F.SG.III

ia, “Gua ruachi, mamēr ia
ia Gu=a rua-ki mamēr ia
 REL₁ 1SG.POSS=SPEC friend-F.SG possible REL₁

unmo uni vang nēmēt kama kumēngas?”
un=mo uni vang na=mēt kama kumēngas
 1DL.I=all 1DL.II run.NPRES from=within ART₁ prison
 And later at night she said to her friend, who was a Sulka, (lit: ‘who they get shellfish from her’) “My friend, would it be possible for us to run away from the prison?”

(T1.40)

Dak atha ruachi di chia len.
dak at=a rua-ki da kia len
 but 3F.SG.POSS=SPEC friend-F.SG and 3F.SG.I be.afraid.NPRES
 But her friend was afraid.

(T1.41)

Chule sa atha ruachi avaik pik
kule sa at=a rua-ki avaik vik
 later NEF 3F.SG.POSS=SPEC friend-F.SG F.SG.DIST.DEM EMPH

di chia len das kule chi ve.
da kia len da=as kule ki pe
 and 3F.SG.I be.afraid.NPRES and=yet stay.PRES 3F.SG.III there
 Then her friend she was afraid and she stayed there.

(T1.42)

Dak kusek ma guauk kia met nē bangang.
dak kusek ma gu=uauk kia met na bangang
 but only ART₂ 1SG.POSS=grandmother 3F.SG.I go.PAST PREP night
 So only my grandmother she went at night.

(T1.43)

Di chia met di chia ngim nani chama alechi
da kia met da kia ngim nani kama a=lek-ki
 and 3F.SG.I go.PAST and 3F.SG.I search.PRES for ART₁ SPEC=hole-F.SG
ma mali chia luchi save.
ma mali kia lu=ki sa=pe
 REL₂ earlier 3F.SG.I see.NPRES=3F.SG.III to=there
 And she went and she searched for the hole that she had seen there.

(T1.44)

Sa chi suchut.nanas mēt ki.
sa ki suchut.nanas mēt ki
 NEF 3F.SG.II try.out.NI within 3F.SG.III
 Then she tried to go through it.

(T1.45)

Di chia suchut.nanas,
da kia suchut.nanas
 and 3F.SG.I try.NI

uer kia rut.natha lēchērithom,
uer kia rut.nē=at=a lēchar-ithom
 first 3F.SG.I push.in.NPRES=DETR₁=3F.SG.POSS=SPEC leg-DIM.DL

sa chule sa at kēndenggi,
sa kule sa at kēdeng-ki
 NEF later NEF 3F.SG.POSS body-F.SG

sa chule sa kosa chia rut.nanas mo
sa kule sa kosa kia rut.nē=nas mo
 NEF later NEF just 3F.SG.I push.in.NPRES=DETR₁=REFL all

dē vus.sēchi.

da vus.sē=ki

and emerge.NPRES=3F.SG.III

She tried, first she pushed her two [small] legs, then her body, then she just pushed herself completely and she came out.

(T1.46)

Vus.sēchi nave

vus.sē=ki na=pe

emerge.NPRES=3F.SG.III from=there

nēmēt kama kumēngas avēchēs pik

na=mēt kama kumēngas avēchēs vik

from=within ART₁ prison FLAT.SG.DIST.DEM EMPH

peia Masarau.

pe=ia Masarau

there=REL₁ PN

She got out from there from that particular prison at Masarau.

(T1.47)

Da kosa chia vēn sdē cha damgi

da kosa kia vēn sa=tēm kē=a dam-ki

and just 3F.SG.I climb.NPRES to=THEME ART₃=SPEC mountain-F.SG

du chule di chia chut.na inavuk.

da kule da kia chut.na i-na-vuk

and later and 3F.SG.I descend.NPRES DER₁-DER₃-up

And she climbed the mountain and then she came down.

(T1.48)

Di chia muēn mano mēni cha iska.

da kia muēn mano mēni kē=a is-ka

and 3F.SG.I arrive.PAST down.slope on ART₃=SPEC road-M.SG

And she arrived down there on the road.

(T1.49)

Da kosa chia tet inamēk.

da kosa kia tet i-na-mēk

and just 3F.SG.I go.PRES DER₁-DER₃-down

And she just went up.

(T1.50)

Dē sdamēr nēchama sandricha chēk

da sdamēr na=kama sandri-ka chēk

and directly PREP=ART₁ sentry-M.SG M.SG.CONTR.DEM

pia ma nugul

pe=ia ma nugul

there=REL₁ ART₂ boundary

di chi ngim sēvēt ava sachong
 da ki ngim sa=pēt av=a sachong
 and 3F.SG.II search.PRES to=at 3M.SG.POSS=SPEC eyes

ia kave chē tlu chi ura angēmbēs.
 ia ka=pe kē tlu ki ura angēmbēs
 REL₁ 3M.SG.I= there 3M.SG.II see.PRES 3F.SG.III or NEG

And right there was one of those sentries at the boundary and she looked into his eyes
 did he see her or not.

(T1.51)

Kia ingim
 kia ingim
 3F.SG.I look.NPRES

da angēmbēs ka rucha vak
 da angēmbēs kē=a ru-ka avak
 and NEG ART₃=SPEC person-M.SG M.SG.DIST.DEM

kave ka lu chi.
 ka=pe ka lu ki
 3M.SG.I= there 3M.SG.I see.NPRES 3F.SG.III
 She looked and that man didn't see her.

(T1.52)

Sa mēr.bachi di chia tet.
 sa mēr.ba=ki da kia tet
 NEF feel.relieved.NI=3F.SG.III and 3F.SG.I go.PRES
 She was relieved and she went on.

(T1.53)

Kia tet ivi
 kia tet i-vui
 3F.SG.I go.PRES DER₁-upwards

kia met sa sēvēt kama sandricha chēk
 kia met sa sa=pēt kama sandri-ka achēk
 3F.SG.I go.PAST for.a.while to=at ART₁ sentry-M.SG M.SG.CONTR.DEM

ma aun'giom nacha via Chlasachi.
 ma a=un'giom na=ka pe=ia Chlasachi
 REL₂ SPEC=two.M PREP=3M.SG.III there=REL₁ PN

She went along she went to that sentry who was second at Chlasachi Creek.

(T1.54)

Ki ngim sai sēvēt avē sachong,
 ki ngim sai sa=pēt avē sachong
 3F.SG.II search.PRES again to=at 3M.SG.POSS eyes

kia ingim di chia lu.da,
 kia ingim da kia lu.da
 3F.SG.I search.NPRES and 3F.SG.I realise.NPRES

aichua, angēmbēs ka lu chi.
aichua angēmbēs ka lu ki
 oh NEG 3M.SG.I see.NPRES 3F.SG.III

She looked again at his eyes, she looked and she realised oh, he didn't see her.

(T1.55)

Sai chia ve chia met,
sai kia pe kia met
 again 3F.SG.I there 3F.SG.I go.PAST

kia met nacha
kia met na=ka
 3F.SG.I go.PAST from=3M.SG.III

dē kia met, kia met, kia tet inamēk.
da kia met kia met kia tet i-na-mēk
 and 3F.SG.I go.PAST 3F.SG.I go.PAST 3F.SG.I go.PAST DER₁-DER₃-down

Again she was going along, she went away from him, she went, and went, and she went up.

(T1.56)

Di chia chuar ia,
da kia chuar ia
 and 3F.SG.I say.NPRES REL₁

“Auk, sa ngua met nēcha rutha vathē vik.”
auk sa ngua met na=kē=a ru-ta avathē vik
 well NEF 1SG.I go.PAST from=ART₃=SPEC person-H.PL H.PL.DIST.DEM EMPH
 And she said, “Well, I've gone away from those particular people.”

(T1.57)

Kia tet inamēk sa
kia tet i-na-mēk sa
 3F.SG.I go.PRES DER₁-DER₃-down for.a.while

save ia Bulus tēnamēk.
sa=pe ia Bulus tē-na-mēk
 to=there REL₁ PN DER₂-DER₃-down
 She kept going up to Bulus, a little further up.

(T1.58)

Sa chia muēn.bēt kama aruchēm,
sa kia muēn.vēt kama a=ru-ēm
 NEF 3F.SG.I find.PAST ART₁ SPEC=person-RCD.SG

mbēs ia ulul ngam, achuvēt ngam.
angēmbēs ia ulul ngam achuvēt ngam
 NEG REL₁ tall RCD.SG short RCD.SG
 She found a small person, not tall, he was short.

(T1.59)

Di chia nia kia thet inamēk da ngēmbēs,
da kia nia kia thet i-na-mēk da angēmbēs
 and 3F.SG.I FRUST 3F.SG.I go.FUT DER₁-DER₃-down and NEG

ngam ngē sek angēthik tēmgi.
ngam ngē sek angē=tik tēm=ki
 RCD.SG 3N.I lift.NI 3N.POSS=hand GOAL=3F.SG.III

And she tried to go around but no, the short one lifted his hand at her [to frighten her].

(T1.60)

Vandi vangam ngēthi thonanas sēthēmgi.
vandi vangam ngēthi thonanas sa=tēm=ki
 DESID RCD.SG 3N.II throw.oneself.NPRES to=GOAL=3F.SG.III

The short one wanted to block her.

(T1.61)

Dē chule di chia nia ki ving mēthik,
da kule da kia nia ki ving mēthik
 and later and 3F.SG.I FRUST 3F.SG.II go.around.NPRES aside

sei ngam ngē ving mēthik
sai ngam ngē ving mēthik
 again RCD.SG 3N.I go.around.NPRES aside

sdamēr nachi.

sdamēr na=ki

directly PREP=3F.SG.III

And then she tried to go around him, and again the short one moved sideways towards her.

(T1.62)

Sai chia nia chi ving mēthik
sai kia nia ki ving mēthik
 again 3F.SG.I FRUST 3F.SG.II go.around.NPRES aside

ngam ngē met sai sdamēr nachi.
ngam ngē met sai sdamēr na=ki
 RCD.SG 3N.I go.PAST again directly PREP=3F.SG.III
 Again she tried to go around again he went towards her.

(T1.63)

Kia nia chia mēt kama ngēmēngga
kia nia kia mat kama angē=mēng-ka
 3F.SG.I MIR 3F.SG.I get.PAST ART₁ 3N.POSS=wood-M.SG

ma vlēngacha vēthiki.
ma vlēng-ka avē=tik-ki
 REL₂ tree.sp.-M.SG 3M.SG.POSS=branch-F.SG

At once she picked up a [piece of] wood a branch of a 'vlengacha' tree.

(T1.64)

Di chia nia savuit sa manēp.
 da kia nia sa=vuit sa manēp
 and 3F.SG.I MIR to=up.TERM to down.TERM
 And she [hit him] up and down.

(T1.65)

Kia vanis.tēngam
 kia vanis.tēm=ngam
 3F.SG.I beat.up.NPRES=RCD.SG

dē ngēk.dēngam bēcham bui ngē tet.
 da ngēk.dē=ngam vēcham vui ngē tet
 and gasp.NI=RCD.SG RCD.SG.DIST.DEM upwards 3N.I go.PRES
 She beat the short one and he grunted loudly and away he went.

(T1.66)

Ngam bēcham bui ngē tet,
 ngam vēcham vui ngē tet
 RCD.SG RCD.SG.DIST.DEM upwards 3N.I go.PRES

ngam bēcham bui ngē tet
 ngam vēcham vui ngē tet
 RCD.SG RCD.SG.DIST.DEM upwards 3N.I go.PRES

da kosa mēr.bachi vik.
 da kosa mēr.ba=ki vik
 and just feel.relieved.NI=3F.SG.III EMPH
 Up the short one went, up the short one went, and she was really relieved then.

(T1.67)

Dakosa chi vaik namēk
 da=kosa ki vaik na=mēk
 and=just 3F.SG.II jump.NPRES from=down

kia tet nēka iska.
 kia tet na=kē=a is-ka
 3F.SG.I go.PRES from=ART₃=SPEC road-M.SG
 And she just jumped up and went along the road.

(T1.68)

Kia tet, kia tet, kia tet, vik
 kia tet kia tet kia tet vik
 3F.SG.I go.PRES 3F.SG.I go.PRES 3F.SG.I go.PRES EMPH

dē nē bangang, kia tet,
 da na bangang kia tet
 and PREP night 3F.SG.I go.PRES

kia tet, kia tet, kia tet,
 kia tet kia tet kia tet
 3F.SG.I go.PRES 3F.SG.I go.PRES 3F.SG.I go.PRES

kia tet inamēk.

kia tet i-na-mēk

3F.SG.I go.PRES DER₁-DER₃-down

She went, and went, and went, like that at night, she went, and went, and went, and went, she went up.

(T1.69)

Sa chi don.dēcha

iska save

sa ki don.dēm=kē=a is-ka sa=pe

NEF 3F.SG.II follow.PRES=ART₃=SPEC road-M.SG to=there

sēvatha bangēm beia Maslabe.

sa=pa=at=a bang-ēm pe=ia Maslabe

to=LOC=3F.SG.POSS=SPEC village-RCD.SG there=REL₁ PN

Then she followed the road there to her village there at Maslabe.

(T1.70)

Kia tet inamēk

kia tet i-na-mēk

3F.SG.I go.PRES DER₁-DER₃-down

di chia muēn beia Maslabe nēp bangang.

da kia muēn pe=ia Maslabe na bangang

and 3F.SG.I arrive.PAST there=REL₁ PN PREP night

She went up and she arrived there at Maslabe at night.

(T1.71)

Kia muēn beia tha tas ve

kia muēn pe=ia ta tas pe

3F.SG.I arrive.PAST there=REL₁ 3H.PL.I sleep.PRES there

dē kia lu da ngēmbēs nanga rutha.

da kia lu da angēmbēs na=anga ru-ta

and 3F.SG.I see.NPRES and NEG PREP=NSPEC person-H.PL

She arrived there where they sleep, and she couldn't see any people.

(T1.72)

Banganggi di chi tēk.vēt klan.

bangang-ki da ki tēk.vēt klan

night-F.SG and 3F.SG.II touch.PRES only

It was night and she could only feel around.

(T1.73)

Di chia thēk.vēchama vēn'gi.

da kia thēk.vēt=kama vēn-ki

and 3F.SG.I touch.NPRES=ART₁ mound-F.SG

She felt a mound.

(T1.74)

Aichua, arucha ithak tik
 aichua a=ru-ka ithak tik
 oh SPEC=person-M.SG M.SG.PROX.DEM EMPH

kinas ka ingip dē tha vēt ka.
 kinas ka ingip da ta vēt ka
 just 3M.SG.I die.NPRES and H.PL.I bury.NPRES 3M.SG.III
 Oh, this person he just died and they buried him.

(T1.75)

Chule di chi sekmes nave di chia tet.
 kule da ki sek=mes na=pe da kia tet
 later and 3F.SG.II lift.NI=DETR₂ from=there and 3F.SG.I go.PRES
 Then she got up from there and she went.

(T1.76)

Kia tet nēka isia
 kia tet na=kē=a is-ia
 3F.SG.I go.PRES PREP=ART₃=SPEC ridge-EXT.SG

ivi save ma Chenangia,
 i-vui sa=pe ma Chenangia
 DER₁-upwards to=there ART₂ PN

ivono va ur,
 i-vono pa ur
 DER₁-UP.SLOPE LOC bush

ivuk mēni ma Chenangia angēt vuski.
 i-vuk mēni ma Chenangia angēt a=pēs-ki
 DER₁-up on ART₂ PN 3N.POSS SPEC=head-F.SG
 She went along the ridge along to Chenangia ridge, up in the bush, up at the head of Chenangia ridge.

(T1.77)

Di chia mas mēkama ngēmēnggi at lalēt.
 da kia mas mēt=kama angē=mēng-ki at lalēt
 and 3F.SG.I sleep.PAST within=ART₁ 3N.POSS=tree-F.SG 3F.SG.POSS root
 And she slept at the base of a big tree.

(T1.78)

Kia mas mē ka ngēmēnggi
 kia mas mēt kē=a angē=mēng-ki
 3F.SG.I sleep.PAST within ART₃=SPEC 3N.POSS=tree-F.SG

at lalēt avik
 at lalēt avik
 3F.SG.POSS root ADV.DIST.DEM

dē chule chi ve.
da chule ki pe
 and stay.NPRES 3F.SG.III there
 She slept at the base of that tree and she stayed there.

(T1.79)

Bubang mathēchasep kia tēranas nave
bubang mathēchasep kia tēranas na=pe
 next.day in.the.morning 3F.SG.I leave.PRES from=there

di chia tet,
da kia tet
 and 3F.SG.I go.PRES

kia met nēk ka iska inamēk
kia met na=pēt kē=a is-ka i-na-mēk
 3F.SG.I go.PAST from=at ART₃=SPEC path-M.SG DER₁-DER₃-down

di chia muēn beia Chroria gēl ka rutha,
da kia muēn pe=ia Chroria gēl kē=a ru-ta
 and 3F.SG.I arrive.PAST there=REL₁ PN with ART₃=SPEC person-H.PL

athama ithathē at kēvek peia Chroria.
athama ithathē at kēvek pe=ia Chroria
 3F.SG.POSS H.PL.PROX.DEM 3F.SG.POSS relatives there=REL₁ PN

The next morning she left there and she went and she went up along the track and she arrived at Chroria village with the people her ones, her relatives at Chroria village.

(T1.80)

Di chia muēn ve,
da kia muēn pe
 and 3F.SG.I arrive.PAST there

di chia muēn.bēt ma Kualka mamēkēna ve,
da kia muēn.vēt ma Kualka mamēk-kēna pe
 and 3F.SG.I find.PAST ART₂ PN father-H.PL there

at kēvek avathē vik.
at kēvek avathē vik
 3F.SG.POSS relatives H.PL.DIST.DEM EMPH

And she arrived there and she found Kaulka's father's people there, her particular relatives.

(T1.81)

Dē tha luchi
da ta lu=ki
 and 3H.PL.I see.NPRES=3F.SG.III

dē tha tu athē sēnēng glan da.ithik
da ta tu athēv snēng klan ta=ithik
 and 3H.PL.I put.PRES 3H.PL.POSS idea like EMPH=ADV.PROX.DEM

ia, “O, asik nēmailu cha ruchi tha.ithaik tik
ia o asik nēmailu kē=a ru-ki ta=ithaik tik
 REL₁ Oh IRR maybe ART₃=SPEC person-F.SG EMPH=F.SG.PROX.DEM EMPH

kia ve chia vang da.ithik.”
kia pe kia vang ta=ithik
 3F.SG.I there 3F.SG.I run.NPRES EMPH=ADV.PROX.DEM

And they saw her and they thought like this, “Oh, maybe this particular woman she has run away now.”

(T1.82)

“Di chia ve chia vang
da kia pe kia vang
 and 3F.SG.I there 3F.SG.I run.NPRES

sathanga lunggutvek inamēk
sa=athanga lugut-vek i-na-mēk
 with=3F.SG.INDEF.POSS spouse-H.PL DER₁-DER₃-down

ama Kembechēna
ama Kembe-kēna
 REL₃ PN-H.PL

ithik sa sik ta thaut ta.ithik.”
ithik sa asik ta that=ut ta=ithik
 ADV.PROX.DEM NEF IRR 3H.PL.I get.FUT=1PL.III EMPH=ADV.PROX.DEM

“And she might have run away with any of her in-laws up this way, the Kembes this time they will get us.”

(T1.83)

Dē chē snandēvēr nachi mamēr,
da kē snandēvēr na=ki mamēr
 and 3M.SG.II ask.NI PREP=3F.SG.III properly

ma Kaulka mamēk.
ma Kaulka mamēk
 ART₂ PN father

And he asked her to make sure, Kaulka’s father.

(T1.84)

Kē snandēvēr nachi mamēr,
kē snandēvēr na=ki mamēr
 3M.SG.II ask.NI PREP=3F.SG.III properly

“Ai, sok kama lengeiki nange
ai sok kama lengeik-ki na=nge
 oh! really ART₁ truth-F.SG PREP=2SG.III

a chusek ma nge ngia met avi namēk?
ia kusek ma nge ngia met avi na=mēk
 REL₁ only ART₂ 2SG.III 2SG.I go.PAST there from=down
 He asked her to be sure, “Oh, are you really telling the truth that only you,
 you came up this way [by yourself]?”

(T1.85)

Ki kuar ia, “Ia, chok kusek ma chēvingo
ki kuar ia ia kok kusek ma kēvi=ngo
 3F.SG.II say.PRES REL₁ yes just only ART₂ CONTR=1SG.III

ngua met ta.ithik, ngua vang.”
ngua met ta=ithik ngua vang
 1SG.I go.PAST EMPH=ADV.PROX.DEM 1SG.I run.NPRES
 She said, “Yes, it was only me I came here, I ran away.”

(T1.86)

Dē cha namu chē bēn.sēlēp sanggēlēmgī,
da ka namu kē bēn.sēlēp sa=gēlēm=ki
 and 3M.SG.I continue.NI 3M.SG.II question.NI to=near=3F.SG.III

“Sok kama lengeiki nange?”
sok kama lengeik-ki na=nge
 really ART₁ truth-F.SG PREP=2SG.III
 And he continued to question her closely, “Is that really the truth?”

(T1.87)

Ki kuar ia, “Ia.”
ki kuar ia ia
 3F.SG.II say.PRES REL₁ yes
 She said, “Yes.”

(T1.88)

Dē chule dē ka snandēvēr nachi,
da kule da ka snandēvēr na=ki
 and later and 3M.SG.I ask.NI PREP=3F.SG.III

di cha chuar
da ka chuar
 and 3M.SG.I say.NPRES

ia, “Ngia thamon sēthēm ngo marik,
ia ngia thamēn sa=tēm ngo marik
 REL₁ 2SG.I speak.FUT to=GOAL 1SG.III truly

asik tiathik kēlan, asik ngu chut.mēnge
asik ta=ithik klan asik ngu chut.mēt=nge
 IRR EMPH=ADV.PROX.DEM only IRR 1SG.II spear.NPRES=2SG.III

nēgua chepki thiathik.

na=gu=a chep-ki ta=ithik

PREP=1SG.POSS=SPEC spear-F.SG EMPH=ADV.PROX.DEM

And then he asked her, and he said, “You speak to me truly, otherwise this time I’ll shoot you with this spear of mine.

(T1.89)

Asik ngi ngip.”

asik ngi ngip

IRR 2SG.II die.PRES

You’ll die.”

(T1.90)

Kia chuar ia, “Nguā tamēn marik,

kia chuar ia nguā tamēn marik

3F.SG.I say.NPRES REL₁ 1SG.I speak.PRES truly

kusek ngo marik

kusek ngo marik

only 1SG.III truly

angēmbēs nguā ve nguā met

angēmbēs nguā pe nguā met

NEG 1SG.I there 1SG.I go.PAST

sa anga chumēsta inamēk.”

sa anga chumēs-ta i-na-mēk

with NSPEC male-H.PL DER₁-DER₃-down

She said, “I speak truly, truly only me, I didn’t come with any men up this way.”

(T1.91)

Auk, kia tamēn biavik

auk kia tamēn viavik

well 3F.SG.I speak.PRES ADV.DIST.DEM

dē chule dē ta nari nanggēlēmgī

da kule da ta nari na=gēlēm=ki

and later and 3H.PL.I hear.NPRES from=near=3F.SG.III

ia, “Aichua, sok alengeiki viavik.”

ia aichua sok a=lengeik-ki vi=avik

REL₁ oh really SPEC=truth-F.SG EMPH=ADV.DIST.DEM

Well, she spoke like that and then they believed her, (lit: listened closely to her)

“Oh, it’s really true.”

(T1.92)

Alengeiki nēchama aruchi avaik pik.

a=lengeik-ki na=kama a=ru-ki avaik vik

SPEC=truth-F.SG PREP=ART₁ SPEC=person-F.SG F.SG.DIST.DEM EMPH

This particular woman is telling the truth.

(T1.93)

Kia ve chia tamon sēthēm da viavik
 kia pe kia tamēn sa=tēm ta vi=avik
 3F.SG.I there 3F.SG.I speak.PRES to=GOAL 3H.PL.III EMPH=ADV.DIST.DEM

dē tha mat.malengeik.nachi.
 da ta mat.malengeik.na=ki
 and 3H.PL.I believe.PAST=3F.SG.III
 She told them like that and they believed her.

(T1.94)

Auk, chule dē tha chuar nachi
 auk kule da ta chuar na=ki
 well later and 3H.PL.I say.NPRES PREP=3F.SG.III

ia, “Ia, ithik da mamēr
 ia ia ithik da mamēr
 REL₁ yes ADV.PROX.DEM and possible

ia sa chule nge nginaut
 ia sa chule nge ngi=nē=ut
 REL₁ NEF stay.NPRES 2SG.III 2SG.II=ASSOC=1PL.III

i mundu ma sa ut mat.malengeik.nange
 i mēndu ma sa ut mat.malengeik.na=nge
 because before REL₂ NEF 1PL.I believe.PAST=2SG.III

ia kusek ma nge ngia met inamēk,
 ia kusek ma nge ngia met i-na-mēk
 REL₁ only ART₂ 2SG.III 2SG.I go.PAST DER₁-DER₃-down

ngia vang glan avik.”
 ngia vang klan avik
 2SG.I run.NPRES like ADV.DIST.DEM

Well, then they said to her, “Yes, now it’s all right for you to stay with us because we really believe you that only you came up from down there, you ran away like that.”

(T1.95)

“Ithik sa chule nge nginaut ta.ithē.”
 ithik sa chule nge ngi=nē=ut ta=ithē
 ADV.PROX.DEM NEF stay.NPRES 2SG.III 2SG.II=ASSOC=1PL.III EMPH=here
 “Now you’ll stay with us here.”

(T1.96)

Sa chia met di chia muēn.bēthatha
 sa kia met da kia muēn.vēt=ta
 NEF 3F.SG.I go.PAST and 3F.SG.I find.PAST=3H.PL.III

veia athēva bangēm
 pe=ia athēv=a bang-ēm
 there=REL₁ 3H.PL.POSS=SPEC village-RCD.SG

peia tha tes ia Chroria
 pe=ia ta tes ia Chroria
 there=REL₁ 3H.PL.I call.PRES REL₁ PN

da sa tha mo kule tha thēmna ve.
 da sa ta mo kule ta tēmna pe
 and NEF 3H.PL.I all stay.PRES 3H.PL.III together there
 So she went and she found them there at their village there which they call Chroria
 and they all stayed together there.

(T1.97)

Ia, kusek piavik.
 ia kusek viavik
 yes only ADV.DIST.DEM
 Yes, that's all.

(T1.98)

Asecha vak pik
 a=sek-ka avak vik
 SPEC=story-M.SG M.SG.DIST.DEM EMPH

sēvēt ma guauk ma Veronika Tēchērnām.
 sa=pēt ma gu=uauk ma Veronika Tēchērnām
 to=at ART₂ 1SG.POSS=grandmother ART₂ PN PN
 The particular story about my grandmother, Veronika Techernam.

Text 2

This text is an excerpt from an interview between Julius Tayul and Thomas Kul. It explores Mr Kul's memories of his childhood in the prewar period as well as his experiences during the war and later in life. Both Mr Tayul and Mr Kul are senior adult speakers of the Arongda dialect. The interview was transcribed by Mr Tayul, who also edited it to prepare it for inclusion in a story collection intended for community use. The main result of the editing process was the reordering of the narrative so that events were addressed in chronological order. These changes have been kept in the present version. The Tok Pisin code-switching in the story was not replaced during editing.

(T2.1) Tayul

Ia, ma Thomas,

ia ma Thomas

yes REL₂ PN

thik da ngua ve ngu snandēvēr nange ia,
ithik da ngua pe ngu snandēvēr na=nge ia
 ADV.PROX.DEM and 1SG.I there 1SG.II ask.NI PREP=2SG.III REL₁

ngia tu gisneng ia
ngia tu gi=sneng ia
 1SG.I put.PRES 2SG.POSS=idea REL₁

gia mundik ama minia ta.ithik?
gi=a mēndik ama amēnia ta=ithik
 2SG.POSS=SPEC year REL₃ how/many EMPH=ADV.PROX.DEM
 Yes, Thomas, now I'll ask you, how old do you think you are?

(T2.2) Kul

Ngo da koi ngua ndrēm sēvanas mamēr
ngo da koi ngua drēm sa=pa=nas mamēr
 1SG.III and NEG 1SG.I know.PRES to=LOC=REFL properly

dak gua mundik da mailu chlan da.ithik ia,
dak gu=a mēndik da mailu klan ta=ithik ia
 but 1SG.POSS=SPEC year and maybe like EMPH=ADV.DIST.DEM REL₁

ithik da mailu sa seventi siks ta.ithik.
ithik da mailu sa seventi siks ta=ithik
 ADV.DIST.DEM and maybe NEF seventy six EMPH=ADV.DIST.DEM
 I don't know exactly, but my age now may be around, now maybe seventy-six.

(T2.3) Kul continued

Mundu vea sensis pea seventi po.
mēndu pe=ia sensis pe=ia seventi po
 before there=REL₁ census there=REL₁ seventy four
 Because it was seventy-four when they took the census.

(T2.4) Tayul

Mamēr, dak nge da gi nanēk kia thal nge choe?
 mamēr dak nge da gi nanēk kia thal nge kue
 good but 2SG.III and 2SG.POSS mother 3F.SG.I carry.NPRES 2SG.III where
 Good, and you, where did your mother give birth to you?

(T2.5) Kul

Kia thal ngo veia Aringgia kinas ivono.
 kia thal ngo pe=ia Aringgia kinas i-vono.
 3F.SG.I carry.NPRES 1SG.III there=REL₁ PN just DER₁-up.slope
 She had me up there at Aringgia .

(T2.6) Tayul

Sa chule sa peia ma gi nanēk
 sa kule sa pe=ia ma gi nanēk
 NEF later NEF there=REL₁ REL₂ 2SG.POSS mother

ki thal nge
 ki thal nge
 3F.SG.II carry.NPRES 2SG.III

da sik ngia lu ma Pater Mayerhoper
 da asik ngia lu ma Pater Mayerhoper
 and IRR 2SG.I see.NPRES ART₂ PN PN

ma cha muēn ura ngēmbēs?
 ma ka muēn ura angēmbēs
 REL₂ 3M.SG.I arrive.PAST or NEG

Then after your mother gave birth to you, did you see Father Mayerhoffer,
 had he arrived or not?

(T2.7) Kul

As koiku, as ka thoemga nango.
 as koiku as ka at=oem-ka na=ngo
 yet NEG yet 3M.SG.I 3F.SG.POSS=offspring-M.SG PREP=1SG.III
 Not yet, I was still a child.

(T2.8) Kul continued

Sa cha muēn sa morka nango.
 sa ka muēn sa mor-ka na=ngo
 NEF 3M.SG.I arrive.PAST NEF big-M.SG PREP=1SG.III
 He arrived when I was an adult.

(T2.9) Tayul

Aichua, da sa ngia muēn
 aichua da sa ngia muēn
 I.see and NEF 2SG.I arrive.PAST

sa chule sa Pater Alphonse ka muēn?
 sa kule sa Pater Alphonse ka muēn
 NEF later NEF PN PN 3M.SG.I arrive.PAST
 I see, so you were born (lit: arrived) and then afterwards Father Alphonse arrived?

(T2.10) Kul

Ia.
 ia
 yes
 Yes.

(T2.11) Tayul

Asik ma Pater Alphonse cha thor nge?
 asik ma Pater Alphonse ka thor nge
 IRR ART₂ PN PN 3M.SG.I wash.NPRES 2SG.III
 Did Father Alphonse baptise you?

(T2.12) Kul

Ka thor ngo da samor ngo machelak.
 ka thor ngo da samor ngo machelak
 3M.SG.I wash.NPRES 1SG.III and get.bigger.NI 1SG.III little.bit
 He baptised me when I got a bit bigger.

(T2.13) Tayul

Ia. Da kule nge
 ia da kule nge
 yes and stay.PRES 2SG.III

veia ambangēm bavēchēm
 pe=ia a=bang-ēm pavēchēm
 there=REL₁ SPEC=village-RCD.SG EMPH.RCD.SG.DIST.DEM

da ngu nari tha tes kama mbangēm
 da ngu nari ta tes kama a=bang-ēm
 and 1SG.II hear.NPRES 3H.PL.I call.PRES ART₁ SPEC=village-RCD.SG

ia Vaingait.
 ia Vaingait.

REL₁ PN

Yes. And you stayed there at that village and I heard they call the village Vaingait.

(T2.14) Kul

Pater ka munggun be.
 Pater ka mugun pe.
 PN 3M.SG.I sit.PAST there
 Father stayed there.

(T2.15) Tayul

Aichua, da ngi thondem saisavi ia Vaingait
 aichua da ngi thodem sai=sa=avi ia Vaingait
 I.see and 2SG.II recount.NPRES again=to=there REL₁ PN

ia ma Pater ka munggun
 ia ma Pater ka mugun
 REL₁ ART₂ PN 3M.SG.I sit.PAST

da ava mbang ngēt minia viavik,
 da av=a bang ngēt mēnia vi=avik
 and 3M.SG.POSS=SPEC village 3N.III how EMPH=ADV.DIST.DEM

da tha thēk ava mbang namangit?
 da ta thēk av=a bang na=agit
 and 3H.PL.I build.NPRES 3M.SG.POSS=SPEC village PREP=CN.NSPEC
 I see, and will you recount again about Vaingait how Father stayed, and what his house looked like, and what they built his house with?

(T2.16) Kul

Naruer peia cha muēn glan
 naruer pe=ia ka muēn klan
 firstly there=REL₁ 3M.SG.I arrive.PAST only

dē tha thēk kama mbang
 da ta thēk kama a=bang
 and 3H.PL.I built.NPRES ART₁ SPEC=house

ma choiku ia kapa, ama tēlēng glan.
 ma koiku ia kapa ama tēlēng klan
 REL₂ NEG REL₁ corrugated.iron REL₃ leaves only
 At first when he came they built the houses, not with corrugated iron, only leaves.
 (T2.17) Kul continued

Sa chule nasot sa cha munggun mamēr.
 sa kule nasot sa ka mugun mamēr
 NEF later after NEF 3M.SG.I sit.PAST properly
 Then later he really settled in.

(T2.18) Kul continued

Sa ta thēk cha nēchama kapa pono,
 sa ta thēk ka na=kama kapa vono
 NEF 3M.SH.I build.NPRES 3M.SG.III PREP=ART₁ corrugated.iron up.slope

pe ma Vaingait mamēr.
 pe ma Vaingait mamēr
 there REL₂ PN properly
 Then they built it with corrugated iron, up there at Vaingait.

(T2.19) Kul continued

Mundu dē cha munggun mano ve ngē thut,
 mēndu da ka mugun mano pe angē thut
 before and 3M.SG.I sit.PAST down.slope there 3N.POSS base

sa cha munggun bono.
 sa ka mugun vono.
 NEF 3M.SG.I sit.PAST up.slope
 Before he settled down there, then he settled up there.

(T2.20) Tayul

Dak kama rura, ngi kuar ia
 dak kama ru-ta ngi kuar ia
 but ART₁ person-H.PL 2SG.II say.PRES REL₁
 tha thēk ngēt nēchama kapa.
 ta thēk ngēt na=kama kapa
 3H.PL.I build.NPRES 3N.III PREP=ART₁ corrugated.iron
 And the people, you say that they built it with corrugated iron.

(T2.21) Tayul continued

Da tha thal kama kapa minia viavik?
 da ta thal kama kapa mēnia viavik
 and 3H.PL.I carry.NPRES ART₁ corrugated.iron how EMPH.ADV.DIST.DEM
 How did they carry it?

(T2.22) Kul

Ta thal ngēt da thēva lang.
 ta thal ngēt da athēv=a lang
 3H.PL.I carry.NPRES 3N.III and 3H.PL.POSS=SPEC shoulder
 They carried it on their shoulders.

(T2.23) Kul continued

Tha thal ngēt ta.ithē namuk
 ta thal ngēt ta=ithē na=muk
 3H.PL.I carry.NPRES 3N.III EMPH=here from=across

nave ia Vunapope
 na=pe ia Vunapope
 from=there REL₁ PN

di nai tha thal ngēt nainathē mano,
 da kinai ta thal ngēt na=i-na-ithē mano
 and in.contrast 3H.PL.I carry.NPRES 3N.III from=DER₁-DER₃-here down.slope

ma Rara nanamuk.

ma Rara na=na-muk

ART₂ PN from-DER₃-across

They carried it here [Arabam] from down at Vunapope and then they carried it from down at Rara back over.

(T2.24) Kul continued

Dē thi tal ngēt nēchama is ma va ur.
 da ti tal ngēt na=kama is ma pa ur
 and 3H.PL.II carry.PRES 3N.III PREP=ART₁ path REL₂ LOC bush
 And they carried it on the road in the bush.

(T2.25) Tayul

Kusek kama kapa klan?
 kusek kama kapa klan
 only ART₁ corrugated.iron only
 Was it only corrugated iron?

(T2.26) Kul

Kapa ura palang, ti tal ngēt.
 kapa ura palang ti tal ngēt
 corrugated.iron or plank 3H.PL.II carry.PRES 3N.III
 Corrugated iron or planks, they carried them.

(T2.27) Tayul

Sa chule sa tha thēk kama lotuvemgi avi
 sa kule sa ta thēk kama lotuvem-ki avi
 NEF later NEF 3H.PL.I build.NPRES ART₁ church-F.SG there
dē tha thēk ma Pater Alphonse
 da ta thēk ma Pater Alphonse
 and 3H.PL.I build.NPRES ART₂ PN PN

ava mbangga nēchama palang ngēnēchama simen.
 av=a bang-ka na=kama palang ngē=nē=kama simen
 3M.SG.POSS=SPEC house-M.SG PREP=ART₁ plank 3N.I=ASSOC=ART₁ cement
 Then afterwards they built the church there and they built Father Alphonse's house
 with planks and cement.

(T2.28) Tayul continued

Dak ngu snandēvēr nange ia
 dak ngu snandēvēr na=nge ia
 but 1SG.II ask.NI PREP=2SG.III REL₁
asik ma Pater ka mathangama arutha
 asik ma Pater ka mat=angama a=ru-ta
 IRR ART₂ PN 3M.SG.I get.PAST=INDEF SPEC=person-H.PL

ma thi sunas?
 ma ti sunas
 REL₂ 3H.PL.II learn.NI
 But I ask you, did Father get any people to learn?

(T2.29) Kul

Ka mat kama athoes kēngēt
 ka mat kama at=oes kēngēt
 3M.SG.I get.PAST ART₁ 3F.SG.POSS=offspring CN.CONTR.DEM
ma nēvēt kama mbangbap
 ma na=pēt kama a=bang-vap
 REL₂ from=at ART₁ SPEC=village-RCD.PL

ama kēm, kēm, kēm,
ama kēm kēm kēm
 REL₃ RCD.SG.CONTR.DEM RCD.SG.CONTR.DEM RCD.SG.CONTR.DEM

diva tima sēmēt kama boding.
diva ti=ma sa=mēt kama boding
 PURP₃ 3H.PL.II=REL₂ to=within ART₁ boarding.school
 He got some children from each of the villages around to stay in the boarding school.

(T2.30) Kul continued

Ka mat avama anguthes iva kē su tha
ka mat avama a=nguthes iva kē su ta
 3M.SG.I get.PAST 3M.SG.POSS SPEC=student PURP₂ 3M.SG.II teach.NI 3H.PL.III

diva mithu thi sangar ka lotu
diva mithu ti sangar kē=a lotu.NI
 PURP₃ later.on 3H.PL.II hold.NI ART₃=SPEC worship

pēt ka mbangbap.
pēt kē=a a=bang-vap
 at ART₃=SPEC SPEC=village-RCD.PL

He got some students to teach them so that later on they could hold church in the villages.

(T2.31) Kul continued

Boding natha iva sa chule
boding na=ta iva sa kule
 boarding.school PREP=3H.PL.III PURP₂ NEF later

dē thi katiket pēkama mbangbap.
da ti katiket pēt=kama a=bang-vap
 and 3H.PL.II catechist at=ART₁ SPEC=village-RCD.PL

They were at boarding school so that later they'd be catechists in the villages.

(T2.32) Kul continued

Da naruer mamēr mamēr dē chama katiketkēna ma naingista.
da naruer mamēr mamēr da kama katiket-kēna ma naingis-ta
 and firstly properly properly and ART₁ catechist-H.PL REL₂ stranger-H.PL
 And the first group of catechists were from other tribes.

(T2.33) Kul continued

Sa chule sa cha mēt
sa kule sa ka mat
 NEF later NEF 3M.SG.I get.PAST

kama thoes paivathe
kama at=oes paivathe
 ART₁ 3F.SG.POSS=OFFSPRING EMPH.H.PL.DIST.DEM

diva ta that kama mēthamon,
diva ta that kama mēthamon
 PURP₃ 3H.PL.I get.FUT ART₁ language

ma ve ia that
ma pe ia ta=that
 REL₂ there REL₁ 3H.PL.I=get.FUT

kama Morka ava thēktēk
kama Morka av=a thēktēk
 ART₁ PN 3M.SG.POSS=SPEC work

diva thi bang vēt kama bangbap.
diva ti bang pēt kama bang-vap
 PURP₃ 3H.PL.II run.PRES at ART₁ village-RCD.PL

Then afterwards he got those particular children so they'd get words, then once they got the Lord's work they'd spread out in the villages.

(T2.34) Kul continued

Ti sangar ka thēktēk nasothatha.
ti sangar kē=a thēktēk nasot=ta
 3H.PL.II hold.NI ART₃=SPEC work after=3H.PL.III

They'd get the jobs after them.

(T2.35) Tayul

Dak peia ma Pater Alphonse ka munggun be,
dak pe=ia ma Pater Alphonse ka mugun pe
 but there=REL₁ ART₂ PN PN 3M.SG.I sit.PAST there

peia Vaingait mamēr,
pe=ia Vaingait mamēr
 there=REL₁ PN properly

da ngi ndrēm sēvēt angama katiketkēna ve?
da ngi drēm sa=pēt angama katiket-kēna pe
 and 2SG.II know.PRES to=at INDEF catechist-H.PL there

And when Father Alphonse stayed there, right at Vaingait, did you know any of the catechists there?

(T2.36) Tayul continued

Ta munggun tinēcha veia Vaingait.
ta mugun ti=ASSOC=ka pe=ia Vaingait.
 3H.PL.I sit.PAST 3H.PL.II=and=3M.SG.III there=REL₁ PN

They stayed with him there at Vaingait.

(T2.37) Kul

Ia, gi mamēk.
ia gi mamēk
 yes 2SG.POSS father
 Yes, your father.

(T2.38) Kul continued

Nge gi mamēk,
nge gi mamēk
 2SG.III 2SG.POSS father

kusek ma nge gi mamēk da naruerka,
kusek ma nge gi mamēk da naruer-ka,
 only ART₂ 2SG.III 2SG.POSS father and first-M.SG

pe ma Vaingait marik.

pe ma Vaingait marik

there REL₂ PN truly

You, your father, only you, your father was really first at Vaingait.

(T2.39) Kul continued

Dak kama katiketkēna athē

dak kama katiket-kēna athē

but ART₁ catechist-H.PL H.PL.INDEF

da tha nēchama mbangbap ma thēmono.

da ta na=kama a=bang-vap ma tē-mono

and 3H.PL.I PREP=ART₁ SPEC=village-RCD.PL REL₂ DER₂-across.slope

And the other catechists they were at other villages all around.

(T2.40) Tayul

Dak ta.ithik da ngu snan ia

dak ta=ithik da ngu snan ia

but EMPH=ADV.DIST.DEM and 1SG.II ask.NI REL₁

dak kama ithang ma nauthama methamon,

dak kama ithang ma na=authama methamon

but ART₁ CN.PROX.DEM REL₂ PREP=1.PL.POSS LANGUAGE

ma chama bukvap ura ngēt

ma kama buk-vap ura ngēt

REL₂ ART₁ book-RCD.PL or 3N.III

da sik ma nēma cha sucha them ngēt,

da asik ma nēma ka su=ka tēm ngēt

and IRR REL₂ who 3M.SG.I teach.NI=3M.SG.III THEME 3N.III

ka mathangēt ka chut.ma ngēt?

ka mat=ngēt ka chut.ma ngēt

3M.SG.I get.PAST=3N.III 3M.SG.I write.NPRES 3N.III

And now I ask, those things that are in our language, the books or whatever, who taught him about that, to understand it and write it?

(T2.41) Kul

Katiketka chēk ma tha tes ka ia

katiket-ka achēk ma ta tes ka ia

catechist-M.SG M.SG.CONTR.DEM REL₂ 3H.PL.I call.PRES 3M.SG.III REL₁

Nguingimga.

Nguingimga

PN

A catechist who they call Nguingimga.

(T2.42) Kul continued

Koiku ia cha sunas mēthangama sunaski.
 koiku ia ka sunas mēt=angama sunas-ki
 NEG REL₁ 3M.SG.I learn.NI within=INDEF school-F.SG
 He didn't learn at any school.

(T2.43) Kul continued

Dak ngaiom in nēp.nēchama methamon pema Rara.
 dak ngaiom in nēp.na=kama methamon pe=ma Rara
 but M.DL 3DL.I translate.NPRES=ART₁ language there=REL₂ PN
 But the two of them translated the language at Rara.

(T2.44) Kul continued

Sa chule sa in met sa vono ma Vaingait.
 sa kule sa in met sa vono ma Vaingait
 NEF later NEF 3DL.I go.PAST NEF up.slope ART₂ PN
 Then afterwards they went up to Vaingait.

(T2.45) Kul continued

Mali ma Pater ka mēthangēt
 mali ma Pater ka mat=ngēt
 earlier ART₂ PN 3M.SG.I get.PAST=3N.III

dē ka chut.mangēt ma save
 da ka chut.ma=ngēt ma sa=pe
 and 3M.SG.I write.NPRES=3N.III REL₂ to=there

da ti slamengdēm ngēt da maila minia ia
 da ti slamengdēm ngēt da maila mēnia ia
 and 3H.PL.II read.NI 3N.III and maybe how REL₁

sa ngēt nga ve vēt kama buk.
 sa ngēt ngē pe pēt kama buk
 NEF 3N.III 3N.I there at ART₁ book

When the Father got it and he wrote it and they were reading it and maybe that's how it got to be in the book.

(T2.46) Tayul

Ia, dak ngia snia sndamēr dē ma Pater
 ia dak ngia gisnia sndamēr da ma Pater
 yes but 2SG.I as.if straight and ART₂ PN

dē cha ndrēm mamēr,
 da ka drēm mamēr
 and 3M.SG.I know.PRES properly

ka livēr ka mat autha methamon.
 ka livēr ka mat aut=a methamon
 3M.SG.I hurry 3M.SG.I get.PAST 1H.PL.POSS=SPEC language
 Yes, and you know that Father knew it properly, he learnt our language quickly.

(T2.47) Kul

Ka livēr, ka mat autha methamon.
 ka livēr ka mat aut=a methamon
 3M.SG.I hurry 3M.SG.I get.PAST 1H.PL.POSS=SPEC language
 He got our language quickly.

(T2.48) Kul continued

Ia, marki, peia methamon ma Mali.
 ia marik pe=ia methamon ma Mali
 yes truly there=REL₁ language REL₂ PN
 Yes truly, in the Mali language.

(T2.49) Kul continued

Katiketka vak
 katiket-ka avak
 catechist-M.SG M.SG.DIST.DEM

ma tha teska Nguingimga,
 ma ta tes=ka Nguingimga
 REL₂ 3H.PL.I call.PRES=3M.SG.III PN

in nēp.nautha methamon nēchama katekismo
 in nēp.na=autha methamon na=kama katekismo
 3dl.i translate.NPRES=1.PL.POSS language PREP=ART₁ catechism

dak kama anen dēchama mambu.
 dak kama a=nen da=kama mambu
 but ART₁ SPEC=prayer and=ART₁ song

That catechist who they call Nguingimga, the two of them translated our language, the catechism and the prayers and the songs.

(T2.50) Tayul

Da piavik ama pus.pechama damgi
 da viavik ama pus.pe=kama dam-ki
 and EMPH.ADV.DIST.DEM REL₃ erupt.PRES=ART₁ mountain-F.SG

ma ngi kuar ia vus.pemgi vea ma Rabaul,
 ma ngi kuar ia vus.pem=ki pe=ia ma Rabaul
 REL₂ 2SG.II say.PRES REL₁ erupt.NPRES=3F.SG.III there=REL₁ ART₂ PN

ti kuar ia mundēmbes
 ti kuar ia mundēm-ves
 3H.PL.II say.PRES REL₁ fire-FLAT.SG

da nge da chulenge choenai?
 da nge da chule=nge kuenai
 and 2SG.III and stay.NPRES=2SG.III where

And then the mountain erupted and you said it erupted at Rabaul, they say there was a huge fire, and you, where did you stay?

(T2.51) Kul

Kule ngo ve ma Vaingait
kule ngo pe ma Vaingait
 stay.PRES 1SG.III there REL₁ PN

ve mēt ma Pater ava bang marik.
pe mēt ma Pater av=a bang marik
 them within ART₂ PN 3M.SG.POSS=SPEC house truly
 I was at Vaingait there at Father's house actually.

(T2.52) Kul continued

Ut mair da uthi tlu
ut mair da uthi tlu
 1H.PL.I stand.PAST and 1PL.II see.PRES

chama amundēmbēs pavēches.
kama a=mundēm-ves pavēches
 ART₁ SPEC=fire-FLAT.SG EMPH.FLAT.SG.DIST.DEM
 We stood and we saw the huge fire that particular one.

(T2.53) Kul continued

Ngē nden dēchama blingim nēmēt kama chulēski
ngē den da=kama blingim na=mēt kama a=kulēs-ki
 3N.I arrive.PRES and=ART₁ lightning from=within ART₁ SPEC=smoke-F.SG

ama morki, ama morki, ama morki.
ama mor-ki ama mor-ki ama mor-ki
 REL₃ big-F.SG REL₃ big-F.SG REL₃ big-F.SG

It came and the lightning from inside the smoke which was huge, huge, huge.

(T2.54) Kul continued

Da chule sa sip di chia vereng vəkama usupki mo
da kule sa asip da kia vereng pēt=kama usup-ki mo
 and later NEF later.on and 3F.SG.I cover.NPRES at=ART₁ sky-F.SG all

ma sok kulēs vap klan da choiku ut naingim.
ma sok kulēs vap klan da koiku ut na=ingim
 REL₂ really smoke RCD.PL only and NEG 1PL.I IRR.FOC=look.NPRES

And then later it covered the whole sky, it was really full of smoke and we couldn't see.

(T2.55) Kul continued

Ma aunia dē bubang, kama aunia
ma a=un-ia da bubang kama a=un-ia
 REL₂ SPEC=dark-EXT.SG and next.day ART₁ SPEC=dark-EXT.SG

vekama aurki mo.
pēt=kama a=ur-ki mo
 at=ART₁ SPEC=BUSH-F.SG all

It was dark the next day, there was darkness in all of the bush.

(T2.56) Kul continued

Koiku ia aerki mundu kama mundēmbes
 koiku ia aer-ki mēndu kama mundēm-ves
 NEG REL₁ light-F.SG before ART₁ FIRE-FLAT.SG

angēthama chulēsia.

angēthama a=kulēs-ia.

3N.POSS SPEC=smoke-EXT.SG

There was no light because of the fire's haze.

(T2.57) Kul continued

Ngēna vusding vēt kama chunēngga avē sachong
 ngē=na vusding pēt kama a=kunēng-ka avē sachong
 3N.I=IRR.FOC cover.NPRES at ART₁ SPEC=sun-M.SG 3M.SG.POSS eye

da chok kama unia mērmēr.

da kok kama un-ia mērmēr

and just ART₁ dark-EXT.SG always

It covered the face of the sun and there was just darkness all the time.

(T2.58) Tayul

Kama kunēng ama minia ama un'gi
 kama kunēng ama amēnia ama un-ki
 ART₁ day REL₃ how/many REL₃ dark-F.SG

mēt kama chunēngga va sachong?

mēt kama a=kunēng-ka av=a sachong

within ART₁ SPEC=sun-M.SG 3M.SG.POSS=SPEC eye

How many days was darkness over the sun?

(T2.59) Kul

Kunēng dē koiku ngua ndrēm ia
 kunēng da koiku ngua drēm ia
 day and NEG 1SG.I know.PRES REL₁

levavēt ura dēvaung.

alevavēt ura dēvaung

four or three.M

Days, I don't know, three or four.

(T2.60) Tayul

Kama aunia chēlan.

kama a=un-ia klan

ART₁ SPEC=dark-EXT.SG only

Only darkness.

(T2.61) Kul

Kama vuspemgi dē kia don gama ivētki
 kama vuspem-ki da kia don kama ivēt-ki
 ART₁ eruption-F.SG and 3F.SG.I go.in.PRES ART₁ earth-F.SG

dē chama dul ama mor ma chia mēthangēt
 da kama dul ama mor ma kia mat=angēt
 and ART₁ stone REL₃ big REL₂ 3F.SG.I get.PAST=3N.III

nēmēni chama ivētki dē chia thonangēt
 na=mēni kama ivēt-ki da kia thon=ngēt
 from=on ART₁ earth-F.SG and 3F.SG.I throw.away.NPRES=3N.III

sai monēp ma not kos.
 sai manēp ma not kos
 again down.TERM REL₂ north coast

The eruption, it threw the earth and the stones, big ones that it got from the ground and it threw them down on the north coast.

(T2.62) Tayul

Kia thonangēt sai muanēp.
 kia thon=ngēt sai manēp
 3F.SG.I throw.away.NPRES=3N.III again down.TERM
 It threw them over there.

(T2.63) Kul

Ia. Dēchama rutha athēva lat ura manggit.
 ia da=kama ru-ta athēv=a lat ura agit
 yes and=ART₁ person-H.PL 3H.PL.POSS=SPEC garden or CN.NSPEC

dama chus klan mundu ma kia vēt ngēt.
 da=ma a=kus klan mēndu ma kia vēt ngēt
 and=ART₂ SPEC=mud only before REL₂ 3F.SG.I bury.NPRES 3N.III

Yes. And the people's gardens and what else, were all muddy because it buried them.

(T2.64) Kul continued

Kia vēlēng ngēt.
 kia vēlēng ngēt
 3F.SG.I kill.NPRES 3N.III
 It killed them.

(T2.65) Kul continued

Maimonēp, ithē da ambēs,
 ma=i-manēp ithē da angēmbēs
 REL₂=DER₁-down.TERM here and NEG

kama laurka cha tēthachi thia ithemonēp.
 kama laur-ka ka tat=ki thia i-tē-manēp
 ART₁ wind-M.SG 3M.SG.I get.PRES=3F.SG.III REL.FOC DER₁-DER₂-down.TERM
 That's over there, not here, the wind got it just over there.

(T2.66) Kul continued

Dēchama rutha tha vang vēthana.
 da=kama ru-ta ta vang pēt=na
 and=ART₁ person-H.PL 3H.PL.I run.NPRES at=RECIP
 And the people ran anywhere.

Dēchama sip ma misin'gēna athēva sip
 da=kama sip ma misin-kēna athēv=a sip
 and=ART₁ ship REL₂ mission-H.PL 3H.PL.POSS=SPEC ship

ngē mēt kama rutha nave ia Matupit
 ngē mat kama ru-ta na=pe ia Matupit
 3N.I get.PAST ART₁ person-H.PL from=there REL₁ PN

dē ma Talvat dēm.
 da ma Talvat tēm
 and ART₂ PN GOAL

And the ship belonging to the mission people got the people from Matupit and Talvat off.

(T2.67) Kul continued

Ta mutha ithē ma Takuba, thēchēp!
 ta mu=ta ithē ma Takuba thēchēp
 3H.PL.I put.PAST=3H.PL.III here REL₂ PN be.full.NPRES
 They put them here at Takubar, [it was] full up!

(T2.68) Tayul

Da kinai ngu snan sai sēchama mundēmbes klan
 da kinai ngu snan sai sa=kama mundēm-ves klan
 and in.contrast 1SG.II ask.NI again to=ART₁ fire-FLAT.SG only

da.ithik ma nēp bangang
 ta=ithik ma na bangang
 EMPH=ADV.PROX.DEM REL₂ PREP night

ura chlan peia nebanganggi,
 ura klan pe=ia na=bangang-ki
 or like there=REL₁ PREP=night-F.SG

da chok ngēni tlu chama mundēm?
 da kok ngēni tlu kama mundēm
 and just 2PL.II see.PRES ART₁ fire

And I'm going to ask again about the huge fire like this, at night or when, during the night, and could you all just see the fire?

(T2.69) Kul

Ia, ma vingulithong nangēt, ma chama blingim.
 ia ma vingul-ithong na=ngēt ma kama blingim
 yes REL₂ bolt.of.lightening-DIM.PL from=3N.III REL₂ ART₁ lightening
 Yes, the small bolts of lightning from it, the lightning.

(T2.70) Tayul

Da sik kama rutha tha drēm ia anggit?
 da asik kama ru-ta ta drēm ia agit
 and IRR ART₁ person-H.PL 3H.PL.I know.PRES REL₁ CN.NSPEC
 Did the people know what it was?

(T2.71) Kul

Koiku, thi kuar ia mundēmbes ngave ngē nden.
 koiku ti kuar ia mundēm-ves ngē=pe ngē den
 NEG 3H.PL.II say.PRES REL₁ fire-FLAT.SG 3N.I= there 3N.I arrive.PRES
 No, they said that a huge fire was coming.

(T2.72) Kul continued

Kēvēs mautha morta.
 kēvēs ma=aut=a mor-ta
 FLAT.SG.CONTR.DEM REL₂=1PL.POSS=SPEC ancestor-H.PL
 The one our ancestors [saw].

(T2.73) Kul continued

Dē thi kuares klan ia singalki.
 da ti kuares klan ia singal-ki
 and 3H.PL.II say.PRES only REL₁ bad.spirit-F.SG
 They said it was a bad spirit.

(T2.74) Kul continued

Das mundu choiku tha lungēt
 da=as mēndu koiku ta lu=ngēt
 and=yet before NEG 3H.PL.I see.NPRES=3N.III

dak kinai chama mundēmbes ma chēlan
 dak kinai kama mundēm-ves ma klan
 but in.contrast ART₁ fire-FLAT.SG REL₂ only

gēl autha morta.
 gēl aut=a mor-ta
 with 1PL.POSS=SPEC ancestor-H.PL

And still before they didn't see it but instead the huge fire was with our ancestors.

(T2.75) Kul continued

Dē thi kuar ia methanasia ura.
 da ti kuar ia methanas-ia ura
 and 3H.PL.II say.PRES REL₁ miracle-EXT.SG or
 And they said it was a miracle, wasn't it?

(T2.76) Kul continued

Koiku ia chlan da.ithik ma sa pusvemgi
 koiku ia klan ta=ithik ma sa pusvem-ki
 NEG REL₁ like EMPH=ADV.PROX.DEM REL₂ NEF eruption-F.SG

dak kinai kok ma ngēt, ngē tethanas kama ivētki.
 dak kinai kok ma ngēt ngē tet=nas kama ivēt-ki
 but instead just REL₂ 3N.III 3N.I go.PRES=REFL ART₁ earth-F.SG
 Not like now when there's an eruption but instead it consumed the earth.

(T2.77) Tayul

Aichua, da ngeni tlu chama amundēmbēs.
aichua da ngeni tlu kama a=mundēm-ves
 I.see and 2PL.II see.PRES ART₁ SPEC=fire-FLAT.SG
 I see, and you all saw the huge fire.

(T2.78) Tayul continued

Da ta.ithik ngia tamon
da ta=ithik ngia tamon
 and EMPH=ADV.PROX.DEM 2SG.I speak.PRES

sēchama achen'gen'gi avaik da morki?
sa=kama a=chen'gen-ki avaik da mor-ki
 to=ART₁ SPEC=earthquake-F.SG F.SG.DIST.DEM and big-F.SG
 And now will you speak about that earthquake, the big one?

(T2.79) Kul

Achen'gen'gi ama morki, ler.dēchama dam
a=chen'gen-ki ama mor-ki ler.dē=kama dam
 SPEC=earthquake-F.SG REL₃ big-F.SG tear.NI=ART₁ mountain

dē chama ivētki ler.mētki chlan da.ithik
da kama ivēt-ki ler.mēt=ki klan ta=ithik
 and ART₁ earth-F.SG tear.NI=3F.SG.III like EMPH=ADV.PROX.DEM

ma gisnia chama gareski lik.mētki.
ma gisnia kama garēs-ki lik.mēt=ki
 REL₂ as.if ART₁ sea-F.SG break.NI=3F.SG.III

A big earthquake tore up the mountains and the earth tore like this, just as if the sea broke it.

(T2.80) Tayul

Kule ngēn guenai,
kule ngēn kuenai
 stay.PRES 2PL.I where

machlan beia achen'gen'gi chia ve chi kuiep?
ma=klan pe=ia a=chen'gen-ki kia pe ki kuiep
 REL₂=like there=REL₁ SPEC=earthquake-F.SG 3F.SG.I there 3F.SG.II shake.PRES
 Where did you all stay at the time the earthquake was heaving (lit: shaking)?

(T2.81) Kul

Kule ut puk, mailu chama Morka
kule ut vuk mailu kama Morka
 stay.PRES 1PL.I up maybe ART₁ PN

cha lu.vēthaut da mbēs vel.te anga mbang
ka lu.vēt=ut da angēmbēs vel.te anga bang
 3M.SG.I look.after.NPRES=1PL.III and NEG break.NPRES NSPEC house

sēmēt kama mundēm.
 sa=mēt kama mundēm.
 to=within ART₁ fire

We stayed up there, maybe God was looking after us and not one house broke into fire.

(T2.82) Kul continued

Angambēs, kama mundēm kule ngēt muk.
 angēmbēs kama mundēm kule ngēt muk
 NEG ART₁ fire stay.PRES 3N.III across
 No the fire did not come in there.

(T2.83) Kul continued

Pel.tēcha mbang ngēmo.
 pel.tē=kē=a a=bang ngē=mo.
 break.PRES=ART₃=SPEC SPEC=house 3N.I=all
 All those houses broke [into flames].

(T2.84) Tayul

Da sik kok mamēr ia ngia mair senas ura?
 da asik kok mamēr ia ngia mair sa=nas ura
 and IRR just possible REL₁ 2SG.I stand.PAST to=REFL or
 And was it impossible to stand up or [not]?

(T2.85) Kul

Koiku mamēr ia chen'gen.bēthange
 koiku mamēr ia chen'gen.bēt=nge
 NEG possible REL₁ tremble.NI=2SG.III

mundu ma achen'gen'gi dē choi ia lelki.
 mēndu ma a=chen'gen-ki da koi ia lel-ki
 before REL₂ SPEC=earthquake-F.SG and NEG REL₁ small-F.SG
 It was impossible, you really trembled because the earthquake was not a small one.

(T2.86) Tayul

Peia chen'gen'gi, dē pēthama chunēng ama minia?
 pe=ia chen'gen-ki, da pēt=kama a=kunēng ama amēnia
 there=REL₁ earthquake-F.SG and at=ART₁ SPEC=day REL₃ how/many
 How many days did the earthquake last?

(T2.87) Kul

Koiku ia chunēngga ma sēnggēk
 koiku ia a=kunēng-ka ma sēgēk
 NEG REL₁ SPEC=day-M.SG REL₂ one.M.SG

mundu ma chok mali chama chen'gen'gi ama morki
 mēndu ma kok mali kama chen'gen-ki ama mor-ki
 before REL₁ just earlier ART₁ earthquake-F.SG REL₃ big-F.SG

da nasot dē chok kama ivētki
 da nasot da kok kama ivēt-ki
 and later and just ART₁ earth-F.SG

dē maila kok ki kuievanas
da maila kok ki kuiep=nas
 and maybe just 3F.SG.II shake.PRES=REFL

dēng beia gamar ngē muēn.
dēng pe=ia gamar ngē muēn
 end there=REL₁ war 3N.I arrive.PAST
 Not just one day because first it was the big earthquake and later the earth just shook itself until the war came.

(T2.88) Tayul

Dak sai ngu nari athē
dak sai ngu nari athē
 but again 1SG.II hear.NPRES H.PL.INDEF

dē thi dondem glan da.ithik ia
da ti dodem klan ta=ithik ia
 and 3H.PL.II recount.PRES like EMPH=ADV.PROX.DEM REL₁

rer.dēchama ndam sēmēni chama reng.
rer.dē=kama a=dam sa=mēni kama reng
 crumble.NPRES=ART₁ SPEC=mountain to=on ART₁ river
 And again I heard others recount that the mountains crumbled into the rivers.

(T2.89) Kul

Ia tethuk sēmēt ngēt.
ia tethuk sa=mēt ngēt
 yes slide.PRES to=within 3N.III
 Yes, they slid into them.

(T2.90) Kul continued

Dēchama ichum ngē vėlēng gama thinēm,
da=kama ichum ngē vėlēng kama thinēm
 and=ART₁ flood 3N.I kill.NPRES ART₁ fish

ngē vėlēng gama nekethop.
ngē vėlēng kama nekethop
 3N.I kill.NPRES ART₁ eel
 And the floods they killed the fish and the eels.

(T2.91) Tayul

Ma ichum minia viavik?
ma ichum mēnia viavik
 REL₂ flood how EMPH.ADV.DIST.DEM
 Why were there floods?

(T2.92) Kul

Mundu ma rer.dēchama ndam
mēndu ma rer.dē=kama a=dam
 before REL₂ crumble.NPRES=ART₁ SPEC=mountain

sēmēni chama renggi
 sa=mēni kama reng-ki
 to=on ART₁ river-F.SG

da chule dē saeng dē chama athemuan
 da kule da saeng da kama a=themuan
 and later and rain and ART₁ SPEC=landslide

angēthama ivētki avaik ma mali ler.
 angēthama ivēt-ki avaik ma mali ler
 3N.POSS earth-F.SG F.SG.DIST.DEM REL₂ earlier break.NI
 Because the mountains crumbled into the river and then it rained and the earth
 from that landslide had broken.

(T2.93) Kul continued

Dēchama ivētki avaik kia vēt kama athinēm
 da=kama ivēt-ki avaik kia vēt kama a=thinēm
 and=ART₁ earth-F.SG F.SG.DIST.DEM 3F.SG.I bury.NPRES ART₁ SPEC=fish

dēchama nekethop dēchama urēn.
 da=kama nekethop da=kama urēn
 and=ART₁ eel and=ART₁ prawn
 And that earth buried the fish and the eels and the prawns.

(T2.94) Kul continued

Koiku na anggung mundu masa chia vėlēng ngēt.
 koiku na anggung mēndu masa kia vėlēng ngēt
 NEG PREP CN.INDEF.DEM before certainly 3F.SG.I kill.NPRES 3N.III
 There was nothing because it certainly killed them.

(T2.95) Tayul

Auk sa piavik ma kule nge vono
 auk sa viavik ma kule nge vono
 well NEF EMPH.ADV.DIST.DEM REL₂ stay.PRES 2SG.III up.slope

ma vea Vaingait
 ma pe=ia Vaingait
 REL₂ there=REL₁ PN

sa chule sa ma Pater minia nacha
 sa kule sa ma Pater mēnia na=ka
 NEF later NEF ART₂ PN how PREP=3M.SG.III

iva cha ingip?
 iva ka ingip
 PURP₂ 3M.SG.I die.NPRES

Well then at that particular time you stayed up at Vaingait, then how did Father die?

(T2.96) Kul

Koiku as kuk kule cha maulul.
 koiku as kok kule ka maulul
 NEG yet just stay.PRES 3M.SG.III long.time
 Not straight away, he just stayed for a long time.

(T2.97) Kul continued

Ngua drēm i anga minia mundik nga met,
 ngua drēm ia anga amēnia mēndik ngē met
 1SG.I know.PRES REL₁ NSPEC how/many year 3N.I go.PAST

sa chule sa kē vok.bus
 sa kule sa kē vok.bus
 NEF later NEF 3M.SG.II go.on.patrol.NI

ma ka tet sa mano sēva nggares.
 ma ka tet sa mano sa=pa a=garēs
 REL₂ 3M.SG.I go.PRES to down.slope to=LOC SPEC=coast
 I know that some years passed then afterwards he went on patrol, he went down to the coast.

(T2.98) Kul continued

Dē cha tet gēl kama rutha vēt kama bangbap.
 da ka tet gēl kama ru-ta pēt kama bang-vap
 and 3M.SG.I go.PRES with ART1 person-H.PL at ART₁ village-RCD.PL
 And he was with the people in the villages.

(T2.99) Kul continued

Kē tlu chama katiketkēna vēt kama bangbap.
 kē tlu kama katiket-kēna pēt kama bang-vap
 3M.SG.II see.PRES ART1 catechist-H.PL at ART₁ village-RCD.PL
 He saw the catechists in the villages.

(T2.100) Kul continued

Sa chule sa ka met inamēk
 sa kule sa ka met i-na-mēk
 NEF later NEF 3M.SG.I go.PAST DER₁-DER₃-down

ka mat kama rēmgi.
 ka mat kama rēm-ki
 3M.SG.I get.PAST ART₁ illness-F.SG
 Then afterwards he came up, he got sick.

(T2.101) Kul continued

Masa gamar ngē muēn sēvēthacha.
 masa gamar ngē muēn sa=pēt=ka
 certainly war 3N.I arrive.PAST to=at=3M.SG.III
 He was there when the war arrived.

(T2.102) Tayul

Dak peia gamar ngē muēn
 dak pe=ia gamar ngē muēn
 but there=REL₁ war 3N.I arrive.PAST

da sik kama gamar ngē munggun angēn ma vono
 da asik kama gamar ngē mugun ngēn ma vono
 and IRR ART1 war 3N.I sit.PAST 2PL.III REL₂ up.slope

ura chok askok kule ngēn be ngēnnēma Pater?
 ura kok as=kok kule ngēn pe ngēn=nē=ma Pater
 or just yet=just stay.PRES 2PL.III there 2PL.III=ASSOC=ART₂ PN
 And when the war arrived, did it chase you all up higher, or did you all just stay there with Father?

(T2.103) Kul

Kule ut pe da sa cha sa cha ingip.
 kule ut pe da sa ka sa ka ingip
 stay 1PL.III there and NEF 3M.SG.I NEF 3M.SG.I die.NPRES
 We stayed there and he had died.

(T2.104) Tayul

Ka sa cha ingip.
 ka sa ka ingip
 3M.SG.III NEF 3M.SG.I die.NPRES
 Him, he died.

(T2.105) Tayul continued

Auk, save ia cha ingip
 auk sa=pe ia ka ingip
 well to=there REL₁ 3M.SG.I die.NPRES

da sik ta vētka chue?
 da asik ta vēt=ka kue
 and IRR 3H.PL.I bury.NPRES=3M.SG.III where
 Well, when he died, where did they bury him?

(T2.106) Kul

Ut vētka vea Vaingait.
 ut vēt-ka pe=ia Vaingait
 1PL.I bury.NPRES=3M.SG.III there=REL₁ PN
 We buried him up at Vaingait.

(T2.107) Kul continued

Mithu sa ta thal avama slēp.
 mithu sa ta thal avama slēp
 later.on NEF 3H.PL.I carry.NPRES 3M.SG.POSS bone
 Later they moved his bones.

(T2.108) Tayul

Dak asik kule ngēn be
 dak asik kule ngēn pe
 but IRR stay 2PL.III there

sa chule sa kama gamar ngē muēn?
 sa kule sa kama gamar ngē muēn
 NEF later NEF ART₁ war 3N.I arrive.PAST
 And did you all stay there when the war arrived?

(T2.109) Kul

Gamar ngē muēn dē tha bomim ut
 gamar ngē muēn da ta bomim ut
 war 3N.I arrive.PAST and 3H.PL.I bomb.NI 1PL.III

sa ut pang mavangam.
 sa ut bang mavangam
 NEF 1PL.I run.PRES everywhere
 The war came and they bombed us and we ran anywhere.

(T2.110) Tayul

Ta thon.nēchama bom savono ia Vaingait?
 ta thon.na=kama bom sa=vono ia Vaingait
 3H.PL.I throw.NPRES=ART₁ bomb to=up.slope REL₁ PN
 They threw bombs onto Vaingait?

(T2.111) Kul

Ia, ngē vus Pater ava bang,
 ia ngē vus Pater av=a bang,
 yes 3N.I blow.up.NPRES PN 3M.SG.POSS=SPEC house

ngē vus avang bono.
 ngē vus avang vono
 3N.I blow.up.NPRES CN.DIST.DEM up.slope
 Yes they blew up Father's house, they blew up those ones on top.

(T2.112) Kul continued

Ambang ngē mang.
 a=bang ngē mang
 SPEC=house 3N.I burn.PAST
 The houses burnt.

(T2.113) Tayul

Ta thu.nangēt nēk kama balus navuk?
 ta thu.na=ngēt na=pēt kama balus na=vuk
 3H.PL.I shoot..withNPRES=3N.III from=at ART₁ plane from=up
 They shot them down from a plane in the sky?

(T2.114) Kul

Ia, kama lotuvemgi dē kia mang.
 ia kama lotuvem-ki da kia mang
 yes ART₁ church-F.SG and 3F.SG.I burn.PAST
 Yes, the church burnt.

(T2.115) Kul continued

Sunaski kia mang.
 sunas-ki kia mang
 school-F.SG 3F.SG.I burn.PAST
 The school burnt.

(T2.116) Kul continued

Ma bruder ka thēk ma Pater ava mbang.
 ma bruder ka thēk ma Pater av=a bang
 ART₂ brother 3M.SG.I build.NPRES ART₂ PN 3M.SG.POSS=SPEC house
 The brother built Father's house.

(T2.117) Kul continued

Sa chule sa ut pang.
 sa kule sa ut bang
 NEF later NEF 1PL.I run.PRES
 Then we ran away.

(T2.118) Tayul

Asik nge dē ngia vang
 asik nge da ngia vang
 IRR 2SG.III and 2SG.I run.PAST

dē dēng nange choe?
 da dēng.na=nge kue
 and stop.NI=2SG.III where
 Where did you stop running?

(T2.119) Kul

Marungga.
 Marungga
 PN
 Marunga.

(T2.120) Tayul

Asik dē chule dē ngia met save ia Marungga
 asik da kule da ngia met sa=pe ia Marungga
 IRR and later and 2SG.I go.PAST to=there REL₁ PN

da sik kule da ngen met
 da asik kule da ngen met
 and IRR later and 2PL.I go.PAST

sēvēt angama mbangēm guachēm?
 sa=pēt angama a=bang-ēm guachēm
 to=at INDEF SPEC=village-RCD.SG RCD.SG.INDEF.DEM
 Well, and then you went to Marunga, and then which village did you all go to?

(T2.121) Kul

Baski chia mēthaut save ma Spalengan
 bas-ki kia mat=ut sa=pe ma Spalengan
 barge-F.SG 3F.SG.I get.PAST=1PL.III to=there REL₂ PN

gēl kama Sulkachēna dē chule ut pe
 gēl kama Sulka-kēna da chule ut pe
 with ART₁ PN-H.PL and stay.NPRES 1PL.III there

sa dēdēng ia gamar ngē sot nanas.
 sa dēdēng ia gamar ngē sot na=nas
 to finish REL₁ war 3N.I finish.NI DETR₁=REFL

The barge took us to Spalengan with the Sulka people and we stayed there until the end of the war.

(T2.122) Kul continued

Sa tha mathaut nanamēk.
 sa ta mat=ut na=na-mēk
 NEF 3H.PL.I get=1PL.III from=DER₃-down
 Then they took us back up there.

(T2.123) Kul continued

Bas kia thal ut nanamēk
 bas kia thal ut na=na-mēk
 barge 3F.SG.I carry.NPRES 1PL.III from=DER₃-down

sathe sēva bang.
 sa=ithe sa=pa bang
 to=here to=LOC village
 The barge carried us back up to the village.

(T2.124) Tayul

Da ma nēmda ivatha ma tha mēthangen save?
 da ma nēma=ta iva=ta ma ta mat=ngen sa=pe
 and ART₂ who=H.PL PURP₂=3H.PL.I REL₂ 3H.PL.I get.PAST=2PL.III to=there
 And who was it who took you all there?

(T2.125) Tayul continued

Siapan'gēna ura?
 Siapan-kēna ura
 PN-H.PL or
 Japanese was it?

(T2.126) Kul

Choiku, ma Australiachēna.

koiku ma Australia-kēna

NEG ART₂ PN-H.PL

No, the Australians.

(T2.127) Tayul

Ia, ta mēthangēn saisavi

ia ta mat=ngēn sai=sa=avi

yes 3H.PL.I get.PAST=2PL.III again=to=there

ta mu ngēn dēmna avi.

ta mu ngēn tēmna avi

3H.PL.I put.PAST 2PL.III together there

Yes, they took you all there again, they put you there together.

(T2.128) Kul

Ti tlu.vēthaut.

ti tlu.vēt=ut

3H.PL.II look.after.PRES=1PL.III

They looked after us.

(T2.129) Kul continued

Ti lu.vēthaut ma chama soldiachēna

ti lu.vēt=ut ma kama soldia-kēna

3H.PL.II look.after.NPRES=1PL.III REL₂ ART₁ soldier-H.PL*thi nēchama Angau.*

ti nē=kama angau

3H.PL.II ASSOC=ART₁ administrator

They looked after us, the soldiers and the administrator.

(T2.130) Kul continued

Angau chē tlu.vēthaut sa ma mēsmēs.

angau kē tlu.vēt=ut sa ma mēsmēs

administrator 3M.SG.II look.after.PRES=1PL.III with ART₂ food

The administrator looked after us with food.

(T2.131) Kul continued

Dēng beia gamar ngē sot nanas

dēng pe=ia gamar ngē sot na=nas

end there=REL₁ war 3N.I finish.NI DETR₁=REFL*du ut puinem nanamēk*

da ut buinem na=na-mēk

and 1PL.I return.PRES from=DER₃-down*save sēvēt autha mbang.*

sa=pe sa=pēt aut=a bang.

to=there to=at 1PL.POSS=SPEC village

Until the war finished, then we returned back up to our village.

(T2.132) Kul continued.

Sa chule ut pe.
 sa chule ut pe
 NEF stay.NPRES 1PL.III THERE
 So we stayed there.

(T2.133) Kul continued

Sa uthi skruim autha lat
 sa uthi skruim aut=a lat
 NEF 1PL.II continue.NI 1PL.POSS=SPEC garden

ama mundu ut vat.
 ama mēndu ut vat
 REL₃ before 1PL.I plant.NPRES
 So we continued making gardens that we planted before.

(T2.134) Kul continued

Sa uthi thēk dak athē
 sa uthi thēk dak athē
 NEF 1PL.II work.NPRES but H.PL.INDEF

dē ta mat.nēthēm da sēchama amēsmēs.
 da ta mat.nēthēm ta sa=kama a=mēsmēs
 and 3H.PL.I help.PAST 3H.PL.III with=ART₁ spec=food
 So we worked but others, they helped them with food.

(T2.135) Kul continued

Da bas kia vonda rais ura gia mēsmēs
 da bas kia von=ta rais ura agia mēsmēs
 and barge 3F.SG.I give.NPRES=3H.PL.III rice or which food

ma tha thēk.nangēt nasothatha.
 ma ta thēk.nē=ngēt nasot=ta
 REL₂ 3H.PL.I send.NPRES=3N.III after=3H.PL.III
 A barge gave them rice or other food which they sent after them.

(T2.136) Kul continued

Ut da ngēmbēs.
 ut da angēmbēs
 1PL.III and NEG
 Not us.

(T2.137) Kul continued

Ut da chok autha lat marik.
 ut da kok aut=a lat marik
 1PL.III and just 1PL.POSS=SPEC garden truly
 We just had our own gardens.

(T2.138) Tayul

Ia, kusek ngu snandēvēr nange chlan avik
 ia kusek ngu snandēvēr na=nge klan avik
 yes only 1SG.II ask.NI PREP=2SG.III like ADV.DIST.DEM

da sik klan ia, mundu viavik
 da asik klan ia mēndu viavik
 and IRR like REL₁ before EMPH.ADV.DIST.DEM

ma ngēni mbang ba ur
 ma ngēni bang pa ur
 REL₂ 2PL.II run.PRES LOC bush

da sik ngen dēs ama git pēt kama urki?
 da asik ngen tēs ama agit pēt kama ur-ki
 and IRR 2PL.I eat.PRES REL₃ CN.NSPEC at ART₁ bush-F.SG

Yes, I'll just ask you about this, like this, before when you all ran away in the bush, what did you eat in the bush?

(T2.139) Kul

Kule ut pa ur.
 kule ut pa ur
 stay.PRES 1PL.III LOC bush
 We stayed in the bush.

(T2.140) Kul continued

Nengias ut da slēp.pēthaut.
 nengias ut da slēp.pēt=ut
 be.hungry.NI 1PL.III and be.thin=1.PL.III
 We were hungry and we were thin.

(T2.141) Kul continued

Da ut tēs kama thong, ut tēs kama galēp
 da ut tēs kama thong ut tēs kama galēp
 and 1PL.I eat.PRES ART₁ tree.sp. 1SG.I eat.PRES ART₁ palm.sp

ma limbung nave nēk ka urki.
 ma limbung na=pe na=pēt kē=a ur-ki
 REL₂ palm.sp. from=there from=at ART₃=SPEC bush-F.SG

And we ate wild growing fruit, we ate wild growing nuts and forest palm from the bush.

(T2.142) Kul continued

Dak klan i vlam ama uthi plēng ngēt.
 dak klan ia a=plam ama uthi pēlēng ngēt
 but like REL₁ SPEC=pig REL₃ 1PL.II kill.PRES 3N.III
 And the same with pigs that we killed.

(T2.143) Kul continued

Du ut tēs ngēt ma ron
 da ut tēs ngēt ma ron.NI
 and 1SG.I eat.PRES 3N.III REL₂ be.satisfied

daka koiku anga mēsmēs ma nēva lat, angēmbēs.
 dak koiku anga mēsmēs ma na=pa lat angēmbēs
 but NEG NSPEC food REL₂ FROM=LOC garden NEG
 We ate them to be satisfied but no other foods from the garden, none.

(T2.144) Kul continued

Naenggi chia tēs ut
 naeng-ki kia tēs ut
 hunger-F.SG 3F.SG.I eat.PRES 1PL.III

da achendichen natha
 da a=chendichen na=ta
 and SPEC=many PREP=3H.PL.III

ta slēp.pēthatha mamēr.
 ta slēp.pēt=ta mamēr.
 3H.PL.III be.thin.NI=3H.PL.III properly
 Hunger ate [at] us and many of them, they were terribly thin.

(T2.145) Kul continued

Da kule dē tha mēthaut.
 da kule da ta mat=ut.
 and later and 3H.PL.I get.PAST
 And later they got us.

(T2.146) Kul continued

Auk, sa thi tlu.vēthaut sēchama rais ura anggit.
 auk sa ti tlu.vēt=ut sa=kama rais ura agit
 well NEF 3H.PL.II look.after=1PL.III with=ART₁ rice or CN.NSPEC
 Well then they looked after us with rice or whatever.

(T2.147) Kul continued.

Auk kule sa chusa kama gamar ngē sot nanas
 auk kule sa kosa kama gamar ngē sot na=nas
 well later NEF simply ART₁ war 3N.I finish DETR₁=REFL

sa ngia drēm ia sa tha vuinemaut
 sa ngia drēm ia sa ta vuinem=ut
 NEF 2SG.I know.PRES REL₁ NEF 3H.PL.I return.NPRES=1PL.III

sēva utha mbang
 sa=pa aut=a bang
 to=there 1PL.POSS=SPEC house

dak kok ut tēs ka mēsmēs marik.
 dak kok ut tēs kē=a mēsmēs marik
 but just 1PL.I eat.PRES ART₃=SPEC food truly
 Well then the war just finished itself so you know that they returned us to our villages and we just ate proper food.

(T2.148) Kul continued

Iva sa dēng beia sa kama krismas krak
 iva sa dēng pe=ia sa kama krismas krak
 PURP₂ NEF END there=REL₁ NEF ART₁ Christmas M.SG.CONTR.DEM

ma ti kuar ia
 ma ti kuar ia
 REL₂ 3H.PL.II say.PRES REL₁

kama gamar ngē sot nanas ma poti paiv.
 kama gamar ngē sot na=nas ma poti paiv
 ART₁ war 3N.I finish DETR₁=REFL REL₂ forty five
 Until Christmas, that one when they said the war finished, forty-five.

(T2.149) Kul continued

Sa chule sa asipki chia tu
 sa kule sa a=sip-ki kia tu
 NEF later NEF SPEC=ship-F.SG 3F.SG.I put.PRES

chama Paterkēna ve ka mbangvap.
 kama Pater-kēna pe kē=a a=bang-vap
 ART₁ PN-H.PL there ART₃=SPEC SPEC=village-RCD.PL
 Then a ship put the priests at their villages.

(T2.150) Kul continued

Sa ki tal ka sai save ia Anggini.
 sa ki tal ka sai sa=pe ia Anggini
 NEF 3F.SG.II carry.PRES 3M.SG.III again to=there REL₁ PN
 Then it carried him to Anggini.

(T2.151) Kul continued

Save ma Anggini naruer,
 sa=pe ma Anggini naruer
 to=there REL₂ PN firstly

dē chule das koiku ma Marungga.
 da kule da=as koiku ma Marungga
 and later and=yet NEG REL₂ PN
 To Anggini at first and then, not yet Marunga.

(T2.152) Kul continued

Sa chule sa uthi lotu veia Anggini
 sa kule sa uthi lotu pe=ia Anggini
 NEF later NEF 1PL.II worship.NI there=REL₁ PN

sa as koia tha thēk kama lotuvemgi maru, koiku.
 sa as koi=ia ta thēk kama lotuvem-ki maru koiku
 NEF yet NEG=REL₁ 3H.PL.I build.NPRES ART₁ church-F.SG really NEG
 Then we worshipped at Anggini although they hadn't built a church permanently yet.

(T2.153) Kul continued

Sa chule sa nasot sa tha thēk ngēt
 sa kule sa nasot sa ta thēk ngēt
 NEF later NEF later NEF 3H.PL.I build.NPRES 3N.III

pe ma Marungga.

pe ma Marungga

there REL₂ PN

Afterward, later they built it at Marunga.

(T2.154) Kul continued

Dak kule da tha chuar na ut ia
 dak kule da ta chuar na ut ia
 but later and 3H.PL.I say.NPRES PREP 1PL.III REL₁

ut ta.ithathe

ut ta=ithathe

1PL.I EMPH=H.PL.PROX.DEM

da ut thet sēmēt ka sunaski veia Vuvu.
 da ut thet sa=mēt kē=a sunas-ki pe=ia Vuvu
 and 1PL.I go.FUT to=within ART₃=SPEC school-F.SG there=REL₁ PN
 But then they said to us that we, these ones, we'd go to school at Vuvu.

(T2.155) Tayul

Nge, nginēmda?

nge ngi=nē=nēm=ta

2SG.III 2SG.II=ASSOC=who=3H.PL.III

You and who else?

(T2.156) Kul

Ngu nēma Aluis ka mēk ma Marungga,
 ngu nē=ma Aluis ka mēk ma Marungga
 1SG.II ASSOC=ART₂ PN 3M.SG.I down REL₂ PN

Kamnge dēma Simon Brasak,

Kamnge da=ma Simon Brasak

PN and=ART₂ PN PN

ut paivathe ut met savuit.

ut paivathe ut met sa=vuit

1.PL.III EMPH.H.PL.DIST.DEM 1PL.I go.PAST to=up.TERM

Me and Alius from Marunga, Kamnge and Simon Brasak, we were the ones who went up.

(T2.157) Kul continued

Anguthemiom giom ut mo ut met savuit
 a=nguthem-iom kiom ut mo ut met sa=vuit
 SPEC=student-M.DL M.DL.CONTR.DEM 1PL.III all 1PL.I go.PAST to=up.TERM

sēmēt ka sunaski

sa=mēt kē=a sunas-ki

to=within ART₃=SPEC school-F.SG

dak koki athē tha met sēmēt kama skul katikēt
 dak koki athē ta met sa=mēt kama skul katikēt
 but also H.PL.INDEF 3H.PL.I go.PAST to=within ART₁ school catechist

dak ut athē ut met save ia St.Mary's peia Vuvu.
 dak ut athē ut met sa=pe ia St.Mary's pe=ia Vuvu
 but 1PL.III H.PL.INDEF 1PL.I go.PAST to=there REL₁ PN there=REL₁ PN
 Two other boys, we all went up to school but others just went to the chatechists school,
 but others of us went to St Mary's at Vuvu.

(T2.158) Tayul

Agia mundika ivak?
 agia mēndik-ka ia=avak
 which year-M.SG REL₁=M.SG.DIST.DEM
 What year was that?

(T2.159) Kul

Amundika ma ut met pe ia poti seven.
 a=mēndik-ka ma ut met pe ia poti seven
 spec=year-M.SG REL₂ 1PL.I go.PAST there REL₁ forty seven
 The year when we went was forty-seven.

(T2.160) Kul continued

Dē ngua met save ia Kininigunan peia pipti tu.
 da ngua met sa=pe ia Kininigunan pe=ia pipti tu
 and 1SG.I go.PAST to=there REL₁ PN there=REL₁ fifty two
 And I went to Kininigunan in fifty-two.

(T2.161) Kul continued

Sa chule ngo vē kama mundik
 sa chule ngo pēt kama mēndik
 NEF stay.NPRES 1SG.III at ART₁ year

ama dēvaung pe ma Kininigunan.
 ama dēvaung pe ma Kininigunan
 REL₃ three.M there REL₂ PN

Then I stayed there at Kininigunan for three years.

(T2.162) Kul continued

Sa chule sa pipti po sa ngua met save sēva mbang.
 sa kule sa pipti po sa ngua met sa=pe sa=pa bang
 NEF later NEF fifty four NEF 1SG.I go.PAST to=there to=at house
 Then in fifty-four I went home.

(T2.163) Kul continued

Dē ngua met save sēva mbang
 da ngua met sa=pe sa=pa bang
 and 1SG.I go.PAST to=there to=LOC house

da guama tambu cha mēthango.
 da guama tambu ka mat=ngo
 and 1SG.POSS in.law 3M.SG.I get.PAST=1SG.III
 I went home and my in-law got me.

(T2.164) Kul continued

Johanes amamēk ka mathango save sēva Merai.
 Johanes avē=mamēk ka mat=ngo sa=pe sa=pa Merai
 PN 3M.SG.POSS=father 3M.SG.I get.PAST=1SG.III to=there to=LOC PN
 John's father got me to go to Merai.

(T2.165) Kul continued.

Auk, kule sa ngua met nave ngu big.het
 auk kule sa ngua met na=pe ngu big.het
 well later NEF 1SG.I go.PAST from=there 1SG.II be.stubborn.NI

dē ngua met navi
 da ngua met na=avi
 and 1SG.I go.PAST from=there

dē chule dē ngua met save ma Char.
 da kule da ngua met sa=pe ma Gar
 and later and 1SG.I go.PAST to=there REL₂ PN
 Well then I went from there, I was stubborn and I went from there and then I went to Gar.

(T2.166) Kul continued

Sa Pater ka von ngo nēchama movētkā
 sa Pater ka von ngo na=kama movēt-ka
 NEF PN 3M.SG.I give.NPRES 1SG.III PREP=ART₁ punishment-M.SG

dē cha chuar nango ia
 da ka chuar na=ngo ia
 and 3M.SG.I say.NPRES PREP=1SG.III REL₁

“Uraet, ngi big.het nango du chule nge ithē.
 uraet ngi big.het na=ngo da chule nge ithē
 all.right 2SG.II be.stubborn.NI PREP=1.SG.III and stay.NPRES 2SG.III here
 Then Father gave me a punishment and he said to me, “All right, you’re stubborn with me so you stay there.

(T2.167) Kul continued

Ngi katiket ta.ithē dē ngi sep.mēchama rutha
 ngi katiket ta=ithē da ngi sep.mē=kama ru-ta
 2SG.II catechist EMPH=here and 2SG.II change=ART₁ PERSON-H.PL

diva thi Katulik ta.ithe
 diva ti Katulik ta=ithe
 PURP₃ 3H.PL.II Catholic EMPH=here

ve *ka* *mbangēm* *dēchēm.*”

pe *kē=a* *a=bang-ēm* *tēchēm*

there ART₃=SPEC SPEC=village-RCD.PL RCD.SG.PROX.DEM

You’re the catechist here and you must make the people here in this village
become Catholic.”

References

- Aikhenvald, Alexandra Y., 2000, *Classifiers. A typology of noun categorization devices*. Oxford: Oxford University Press.
- 2006, Serial verb constructions in a typological perspective. In Alexandra Y. Aikhenvald and R.M.W. Dixon, eds *Serial verb constructions: a cross-linguistic typology*, 1-87. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. and Tonya N. Stebbins, 2007, Languages of New Guinea. In Osahito Miyaoka, Osamu Sakiyama and Michael E. Krauss, eds *The vanishing languages of the Pacific Rim*, 239-266. Oxford: Oxford University Press.
- Bennardo, Giovanni, ed., 2002, *Representing space in Oceania: culture in language and mind*. Canberra: Pacific Linguistics.
- Burger, Friedrich, 1913, *Die Küsten- und Bergvölker der Gazellehalbinsel. Ein Beitrag zur Völkerkunde von Neuguinea unter besonderer Hervorhebung rechtlicher und sozialer Einrichtungen*. Stuttgart: Verlag von Strecker und Schröder.
- Burgmann, Arnold, 1962, J. Schneiders Grammatik der Sulka-Sprache (Neuarbeiten). *Anthropos* 57.193-196.
- Carrington, Lois, 1996, *A linguistic bibliography of the New Guinea area*. Canberra: Pacific Linguistics.
- Dixon, R.M.W., 1982, *Where have all the adjectives gone? and other essays in semantics and syntax* (Janua Linguarum, Series Maior 107). Berlin: Mouton.
- 1994, *Ergativity*. Cambridge: Cambridge University Press.
- 1997, *The rise and fall of languages*. Cambridge: Cambridge University Press.
- Dryer, Matthew S., 2006, Descriptive theories, explanatory theories, and basic linguistic theory. In Felix K. Ameka, Alan Dench, and Nicholas Evans, eds *Catching language: the standing challenge of grammar writing*, 207-234. Berlin; New York: Mouton de Gruyter.
- Fajans, Jane, 1997, *They make themselves: work and play among the Baining of Papua New Guinea*. Chicago: The University of Chicago Press.
- Foley, William A., 1986, *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.
- 2000, The languages of New Guinea. *Annual Review of Anthropology* 29:357-404.
- 2005, Semantic parameters and the unaccusative split in the Austronesian language family. *Studies in Language* 29.2:385-430.

- Frawley, William, 1992, *Linguistic semantics*. Hillsdale, N.Y.: Lawrence Erlbaum Associates.
- Futscher, Otto, 1959, Taulil-Grammatik und naturwissenschaftliche Sammelarbeiten (Neubritannien, Südsee). *Micro-Bibliotheca Anthropos*, vol. 30. Microfilm.
- Greenberg, Joseph H., 1966, *Language universals, with special reference to feature hierarchies*. The Hague: Mouton.
- Hesse, Karl and Theo Aerts, 1979, *Baining dances*. Port Moresby, Papua New Guinea: University of Papua New Guinea.
- Himmelmann, Nikolaus, 2001, Articles. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher and Wolfgang Raible, eds *Language Typology and Language Universals*, 831-841. Berlin: de Gruyter.
- Hopper, Paul J. and Sandra A. Thompson, 1980, Transitivity in grammar and discourse. In *Language* 56.2:251-299.
- Kleintitschen, August, 1906, *Die Küstenbewohner der Gazellehalbinsel: Neupammern-deutsche Südsee: ihre Sitte und Gebräuche*. Hilstrup-bei-Münster: Herz-Jesu-Missionshaus.
- Peter Ladefoged and Ian Maddieson, 1996, *The sounds of the world's languages*. Oxford: Blackwell.
- Laufer, Carl, 1950, Die Taulil und ihre Sprache auf Neubritannien. *Anthropos* 45:627-640.
- 1959a, P. Otto Futscher, M.S.C., Taulil-Grammatik und naturwissenschaftliche Sammelarbeiten (Neubritannien, Südsee). *Anthropos* 54:213-217.
- 1959b, P. Futschers Aufzeichnungen über die Butam Sprache (Neubritannien). *Anthropos* 54:193-212.
- Lindrud, Stellan and Ruth Nicholson, n.d., Notes on the Taulil language of East New Britain. Unpublished MS. Ukarumpa: Summer Institute of Linguistics.
- Mayerhofer, Alphonse, 1940, Grammatik und Wörterbuch der Kairak-Sprache. Unpublished MS.
- Müller, Hermann, 1907, Die Sprache der Sulka. In Parkinson, 328-335.
- Neuhaus, Karl, nd. Wörterbuch und Beispielsammlung der Taulilsprache. MS.
- Neumann, Klaus, 1992, *Not the way it really was: constructing the Tolai past*. Honolulu: University of Hawaii Press.
- Palmer, Bill, 2002, Absolute spatial reference and the grammaticalisation of perceptually salient phenomena. In Giovanni Bennardo, ed. *Representing space in Oceania: culture in language and mind*, 107-157. Canberra: Pacific Linguistics.
- Parker, Jim and Diana Parker, 1974, A tentative phonology of Baining (Kaket dialect). *Workpapers in Papua New Guinea Languages* 4:5-43.
- and ———, 1977, Baining grammar essentials. Unpublished MS. Ukarumpa: Summer Institute of Linguistics.
- Parkinson, Richard, 1907, *Dreißig Jahre in der Südsee: Land und Leute, Sitten und Gebräuche im Bismarckarchipel und auf den deutschen Salomoinseeln* (herausgegeben von Dr. B. Ankermann). Stuttgart: Strecker und Schröder.

- Pool, Jeremy, 1984, *Objet insaisissable ou anthropologie sans objet? Field Research among the Northern Baining, New Britain (1969-1970)*. *Journal de la Société des Océanistes* 40.79:219-233.
- Rascher, Matthäus, 1900, Versuch der Grammatik des Bainingsprachen. Unpublished MS.
- 1904, Grundregeln der Bainingsprache. *Mitteilungen des Seminars für Orientalische Sprachen zu Berlin* 7.1:31-85.
- 1907, Die Bainingsprache. In Parkinson, 322-328.
- Reesink, Ger P., 1993, 'Inner Speech' in Papuan languages. *Language and Linguistics in Melanesia* 24. 2:217-225.
- 1994, Domain-creating constructions in Papuan languages. In Ger P. Reesink, ed. *Topics in descriptive Papuan linguistics*, 98-121. (Semaïar 10) Leiden: Vakgroep Talen en Culturen van Zuidoost-Azië en Oceanië.
- 2005, Sulka of East New Britain: a mixture of Oceanic and Papuan traits. *Oceanic Linguistics* 44.1:145-193.
- Rohatynskyj, Marta A., 2000, The enigmatic Baining: the breaking of an ethnographer's heart. In Sjoerd R. Jaarsma and Marta A. Rohatynskyj, eds *Ethnographic Artifacts: Challenges to a Reflexive Anthropology*, 174-94 Honolulu: University of Hawai'i Press.
- Romaine, Suzanne, 1995, *Bilingualism*. 2nd ed. Oxford: Blackwell.
- Ross, Malcolm D., 1996, Contact induced language change and the comparative method: cases from Papua New Guinea. In Mark Durie and Malcolm D. Ross, eds *The comparative method revisited: irregularity and regularity in language change*, 180-217. New York: Oxford University Press.
- 2001, Is there an East Papuan phylum? Evidence from pronouns. In Andrew Pawley, Malcolm D. Ross and Darrell Tryon, eds *The boy from Bundaberg: studies in Melanesian linguistics in honour of Tom Dutton*, 301-321. Canberra: Pacific Linguistics.
- Schnee, Heinrich, 1904, *Bilder aus der Südsee, unter den kannibalischen Stämmen des Bismarck-Archipels*. Berlin: Reimer.
- Schneider, Joseph, 1962, Grammatik der Sulka-Sprache, Neubritannien. *Micro-Bibliotheca Anthropos*, volume 36. Posieux-Freiburg, Schweiz: Anthropos.
- Schneider, Joseph, n.d., Wörterbuch und Grammatik der Sulkasprache. Unpublished MS.
- Senft, Gunter, ed., 1997, *Referring to space: studies in Austronesian and Papuan languages*. Oxford: Clarendon Press.
- Stanton, Lee, 2007, Topics in Ura phonology and morphophonology, with lexicographic application. MA thesis. University of Canterbury.
- Stebbins, Tonya N., 2004, Mali Baining perspectives on language and culture stress. In *International Journal of the Sociology of Language, (Small Languages and Small Language Communities)*, 169:161-175.
- 2005, Nominal classification in Mali. *Anthropological Linguistics*, 47:1.77-131.
- 2009, with the assistance of Julius Tayul, *Mali (Baining) texts*. Canberra: Pacific Linguistics.

- forthcoming, with the assistance of Julius Tayul, *Mali (Baining) dictionary*. Canberra: Pacific Linguistics.
- Stebbins, Tonya N. and Mark Planigale, 2010, Explaining the unknowable: accessibility of meaning and the exegesis of Mali Baining songs. *Australian Journal of Linguistics* Special issue on 'The Language of Song.' 30.1:141-154.
- Stehlin, Johannes, 1905-06, Wörterbuch: Baining-Deutsch. Unpublished ms.
- Tayul, Julius and Tonya N. Stebbins, 2004, *Asek dēchama Mambu nēva Bang: stories and songs from the village*. Melbourne: Planigale Publications.
- Terrill, Angela, 2002, Systems of nominal classification in East Papuan languages. In *Oceanic Linguistics* 41.1:63-88.
- Tharp, Doug and Carol Tharp, 1989, Sulka grammar essentials. Typescript. Ukarumpa: Summer Institute of Linguistics.
- n.d., Sulka dictionary. Typescript. Ukarumpa: Summer Institute of Linguistics.
- de Vries, Lourens, 2005, Towards a typology of tail-head linkage in Papuan languages. *Studies in Language*, 29.2:363-384.
- 2006, Areal pragmatics of New Guinea: thematization, distribution and recapitulative linkage in Papuan narratives. *Journal of Pragmatics*, 38:811-828.
- Volmer, Hermann, 1926, Wörterbuch Baining-Deutsch. Unpublished ms.
- 1928, Grammatik des Bainingischen. Typescript.
- Whitehouse, Harvey, 1995, *Inside the cult: religious innovation and transmission in Papua New Guinea*. Oxford: Clarendon Press.
- Wray, Alison, 2002, *Formulaic language and the lexicon*. Cambridge: Cambridge University Press.

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