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A grammar of Mundabli

A Bantoid (Yemne-Kimbi) language of Cameroon

Proefschrift

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List of abbreviations

ADJ	adjective
ATR	advanced tongue root
C	consonant
DB	database
G	glide
IAV	immediate after verb position
IBV	immediate before verb position
IPA	international phonetic alphabet
intr.	intransitive
n.	noun
N	nasal
NP	noun phrase
O	object
PB	Proto Bantu
PRO	pronoun
S	subject
sp.	species (used for animal and plant species and for different versions of an object, like e.g. baskets)
SVC	serial verb construction
tr.	transitive
V	vowel
v.	verb
vcl.	voiceless
vcd.	voiced

List of glosses

1, 2, 3	first, second, third person
(a), (b), (c)	verb tone classes in gloss
A, B, C	verb tone classes in text
ADVLZ	adverbializer
CL*n*	noun class *n*
COM	comitative
COMP	complementizer
COND	conditional
CONSEC	consecutive
COP	copula
CS.QUOT	current speaker quotative marker
CS.QUOT.Q	initial question marker in current speaker quotatives
DAT	dative/benefactive
DEM	demonstrative
DET	determiner
DIST	distal
DS	dummy subject
F1	hodiernal future
F2	non-hodiernal future
FRUST	frustrative
FUT	future
HAB	habitual
IDEO	ideophone
IMP	imperative
IMP.PL	plural addressee imperative marker
IMPERS	impersonal pronoun
INF	infinitive
IPFV	imperfective
INTERJ	interjection

IRR	irrealis
LOC	locative
NCS.QUOT.Q	initial question marker in non-current speaker quotatives
NEG	negative morphemes
NMLZ	nominalizer
NPVB	non-preverbal
NCS.QUOT	non-current speaker quotative marker
P0	immediate past/present perfect
P1	hodiernal past
P2	hesternal past
P3	distant past
PFV	perfective
PL	plural
POSS	possessive
PP	special pronoun form used when a pronoun is object of a postposition
PROHIB	prohibitive
PROX	proximal
PVB	preverbal
Q	question marker
QTAG	question tag
QUOT.Q	final question marker in quoted questions
RED	reduplicant
REL	relativizer
SG	singular
SUBJ	subjunctive
SUBORD	subordinator
VER.FOC	verum focus

The glosses used here adhere to the glossing conventions introduced by the Leipzig Glossing Rules (Comrie et al. 2008). As suggested there, when a single object-language element is rendered by several metalanguage elements (words or abbreviations), these are separated by periods. If an object-language element (words only) is neither formally nor semantically segmentable and only the metalanguage happens to lack a single-word equivalent, the underscore is used instead of the period Rule 4a.

List of symbols

◇	marks an elicited example
-	morpheme break
;	morpheme break without exact location (in gloss)
=	clitic boundary
.	separates labels (in the gloss) when a single object-language element is rendered by several metalanguage category labels
_	separates words (in the gloss) when a single object-language element is rendered by several metalanguage words
/	separates alternative glosses
~	connects reduplicant and reduplicated morpheme
~	marks phonological variants
<...>	mark orthographic forms
??	gloss unknown

Lists of affixes, clitics and particles

This section contains a list of affixes and bound forms including noun class and agreement prefixes and a list of free particles.

affix	gloss	
kī-∼kə̄-	NMLZ	nominalizer
Ñ=	1SG.PVB	preverbal form of first person singular pronoun; procliticizes to the verbal core
N-…-n∼N-	INF	infinitive prefix/circumfix; choice depends on the shape of the verb stem
bə-∼b-	CL2	Class 2 agreement prefix
bi-∼b-	CL8	Class 8 agreement prefix
bə-∼b-	CL2	Class 2 nominal prefix and agreement prefix
fi-	CL19	Class 19 nominal prefix and agreement prefix
ki-∼k-	CL7	Class 7 agreement prefix
mu(N)-∼m-	CL18	Class 18 agreement prefix
mu(N)-∼m-	CL6a	Class 6a agreement prefix
wu-∼w-	CL1	Class 1 agreement prefix
wu-∼w-	CL3	Class 3 agreement prefix
wu-∼w-	CL5	Class 5 agreement prefix
yi-∼y-	CL9	Class 9 agreement prefix
yi-∼y-	CL10	Class 10 agreement prefix

particle	gloss	
à	Q	polar question particle; finishes off original (as opposed to quoted) polar questions
à∼nà	P1	hesternal past
ā	COM	preposition 'with'; used with comitative and instrumental semantics, licenses additional verb argument, invokes special tonal pronoun form
ā	NEG	preverbal negative marker; directly precedes the verb, following tense/aspect markers
ā́	ADVLZ	adverbializer; precedes adverbs and adverbial phrases
āmɨ̀	'and'	conjunction; conjoins NPs or phrases
bɔ̀	FRUST	frustrative
dɪ́	F1	hodiernal future
fə̄	P1	hodiernal past
ɪ́	LOC	locative preposition
kā́	F2	non-hodiernal future
kə̀	P3	distant past
kə̄	COND	conditional marker; introduces a conditional clause
kə̄́	HAB	habitual marker; TAM marker
mə́	CS.QUOT	current speaker quotatitive marker
mɛ̀	NCS.QUOT.Q	marks non-current speaker quoted questions; follows the complementizer **yɛ̄** which introduces sequences of reported speech
mɪ̄, **mɪ́**	CONSEC	consecutive marker, 'and (then)'; clausal conjunction; with a mid tone in P3, F1 and F2 clauses and with a high tone in P0, P1 and P2 clauses
nà∼à	P2	hesternal past
ná	as	as, like
nɔ̌	QTAG	question tag; follows a clause, turning it into a tag question; used in positive lead questions
nɔ̰̄∼nə̄	SUBORD	subordinator; also introduces relative clauses
nɪ́	IMP.PL	follows verbs in plural imperatives
tā́∼ʃā́	PROHIB	prohibitive
tə́	VER.FOC	verum focus
wɔ̄	NEG	negative particle; follows the verbal core; always co-occurs with the preverbal negation marker **ā**
yɛ̄	COMP	complementizer; precedes complement clauses, including utterance complements
yɛ̄∼ɛ̄∼ā	QUOT.Q	question marker in quoted questions; can finish off quoted polar and content questions

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Finally, Dad, although you're not able to see this anymore: Thank you for your love, for always having believed in me, and having encouraged me in everything I do!
In case you do not find your name here, but feel you should, please feel included!

CHAPTER 1

Introduction

1.1 The Mundabli language

1.1.1 Geography and infrastructure

Mundabli is spoken in a village generally known by the name *Mundabli* (for more on this name, see §1.1.3). The village is located in the Northwest region of Cameroon and more specifically in a region called Lower Fungom. Figure 1.1 shows a map of this region. Lower Fungom is part of the Fungom subdivision of Menchum division, which corresponds to the administrational *commune* of Zhoa. Lower Fungom does not form a separate administrative unit but it is distinguished from the rest of Fungom by its lower elevation and the ecological characteristics that go with it.

Lower Fungom is a mountainous area with elevations ranging roughly from 500 to 900 meters in elevation.[1] The Mundabli village is situated on top of a steep hill, at a height of about 900 meters, overlooking all of Lower Fungom. The farming plots are found at lower elevations, close to the rivers Mbum and Kimbi, at a walking distance of up to around 7 kilometers. Mundabli is also spoken in two smaller settlements, **ndʒə̂m**, also known as "Mundabli overside", and **būm ā ndʒàŋ**, a small settlement near the heritage site **kwè kūmbə̰̀** (see Di Carlo (2011: fig.2, p.58)), and in a few detached hamlets which are scattered in the bush adjacent to the village and form part of the chiefdom of Mundabli. While **būm ā ndʒàŋ** is situated on top of a hill across the Mbum

[1] The highest point of Fungom division lies at about 1300 meters.

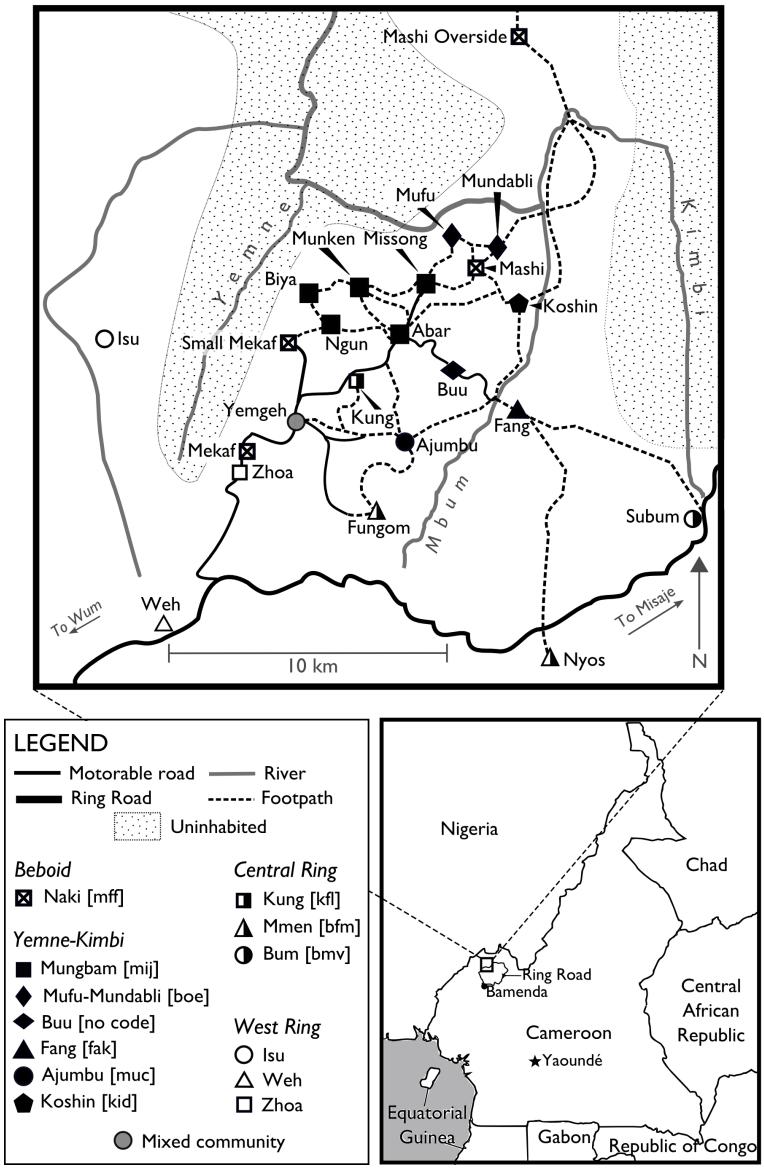

Figure 1.1: Lower Fungom Language Map, courtesy of Pierpaolo Di Carlo

river, also at a height of about 900 meters, **ndʒə̂m** and most of the smaller hamlets are found at lower elevations, close to the river.

In order to get to Mundabli from the closest town (Wum), it is possible to take a pickup truck which goes to Abar once a day (see map in Figure 1.1).

Although the distance is only around 26 kilometers by road, the ride takes several hours due to the extremely bad condition the road is in. The road gets fixed every couple years, but in such a manner that by the time the rainy season has reached its full height, the road has become impassable again and only courageous motorbike taxi drivers take the risk. From Abar, it is still a two to three hour walk to Mundabli on a foot path which crosses through the villages Missong and Mashi. Up to Mashi (at ca. 770 meters elevation), at the foot of the Mundabli hill, the path is good enough for a motorbike to drive on, but from there on only steep and narrow paths lead up to the village itself, which is thus only accessible by foot. It is not uncommon for Mundabli people to walk to Weh (the closest marketplace on the Ring Road) or to Wum, in order to save the fare for public transport.
Footpaths connect all the villages in the area. The Nigerian border, which is at a distance of about 30 kilometers as the crow flies, can also be reached on foot. The closest market is Abar market, which takes place once a week. Other markets frequented by Mundabli people are Yemgeh, Weh and (less commonly) Wum market. The closest health station is also found in Abar. The closest hospital is in Wum. However, in many cases, people attend traditional doctors before or instead of turning to a nurse or physician. There is one traditional doctor in Mundabli whose reputation attracts people from Wum and even further away. Mundabli has a primary school which was accredited by the government of education, a few years ago, after it had been run as a community school for several years. The closest secondary school is found in Missong. For further education, teenagers move to Wum where many of them live with relatives or better-off Mundabli people. Mundabli has a make-shift radio station which is operated by Tembo Adamu Mohammed and broadcasts in Mundabli. Due to the high altitude of the village, the station can be received over a great distance. In 2012, there were two generators in the village which were in private possession and which were mainly used to operate a corn mill and to play dance music at special occasions. Access to clean water is restricted to two springs located on the side of the Mundabli hill. Water must be carried up from the springs along a steep dirt path. In the rainy season, rain water for doing the laundry and for consumption is collected in the village, which is fortunate because in the rainy season the steep path that leads to the village from the spring resembles a slippery mud slide. In the dry season, one may have to wait half an hour for the little pool to refill in order to get drinking water. Sometimes, the spring closer to the village dries up completely. In order to save time and energy, people wash themselves and their clothes at streams on the hillside.

1.1.2 The Mundabli people - Culture and economic activities

Mundabli is a chiefdom led, at the time of publication, by chief Tem Nyungfu and sub-chief Mambo Goodboy Bumnyam, in collaboration with the village

council which is headed by the chief. Mundabli is neither itself part of another chiefdom, nor does it incorporate any other villages in its own chiefdom. While many villagers are Christians and a handful are Muslims, probably everyone also practices the local traditional religion. As pointed out in §1.1.1, the village is organized in quarters which are geographically separate. The people who live in a quarter form a separate exogamous kin group (Di Carlo 2011: 62). Names are often connected with certain quarters so that one can deduct from a person's name which quarter they belong to.

The main economic activity in Mundabli is farming. Probably the most important source of income for the Mundabli is palm oil. As Lower Fungom is at a relatively low altitude, it is suitable to grow palm trees. Palm oil is made in the village and sold at local markets. Coffee and cocoa are also grown for trade, but only in small quantities. Other crops are corn, peanuts (locally known as 'groundnuts'), plantains, cassavas, cocoyams, pumpkin seeds (locally known as 'egussi'), gourds, calabashes, okras, etc. Other economic activities in Mundabli include hunting, trapping, animal breeding and fishing. Nowadays mainly small animals are hunted, e.g., cane rat (in Pidgin 'cutting grass'), rat mole, rock hyrax (in Pidgin 'stone beef'), different kinds of squirrels, snakes and monkeys, certain birds, such as e.g. the francolin (in Pidgin 'bush fowl') and, rarely, antelopes. In the past buffalos (in Pidgin 'bush cows'), african wild pigs (in Pidgin 'bush pigs') and gorillas were also hunted, but due to extensive hunting, they have nearly disappeared from this area. While meat is a special treat for people in the village, it is also something that can be traded. Dried and smoked "bush meat" is very popular with Cameroonians. The Mundabli also gather plants including various wild vegetables and wild spices such as e.g., 'bush pepper' (*Piper guineense*) and 'njangsa' (*Ricinodendron heudelotii var. africanum*), mushrooms, fruit and certain insects, for subsistence or in order to sell them at the market. People breed chickens and occasionally ducks for eggs and meat, and goats and sheep for consumption and sale. The rivers that cross Mundabli territory are home to various species of fish which people catch with rods and nets, and to crabs which are caught by hand. Due to the lack of employment opportunities in the area, many young people move to Southwest Cameroon (or other places) to work on plantations, on oil pipelines, in factories, in the port, to do business and so on. These people often invest in the village and many of them come back at some point of time to marry and eventually to settle down and spend their retirement in the village.

1.1.3 The name "Mundabli"

'Mundabli' is the English name for the Mundabli people, their home village and their language. The speakers of Mundabli refer to themselves and their village as **ndʒə̀n**. In the Mundabli language, a Mundabli person is referred to as **mɔ̀ ndʒə̀n**, the Mundabli people are the **bə̀ndʒə̀n**, their language is **ɲɔ̄ ndʒə̀n** and the Mundabli village is referred to as **ndʒə̀n kú**. However, the Mundabli also acknowledge the name "Mundabli" and they use it when conversing with

outsiders. It is unknown where the English name "Mundabli" (also Mundabili or more rarely Ndabile[2]) originated from. People in Mundabli think the name may be based on a misunderstanding. They think that someone must have mistaken part of a greeting ceremony as the language name. According to this theory, the original phrase must have been something like **mī̀ n = dā̌ lǐ** 'As for me, I am still well.' or **bī dā̌ bə̄-lī** 'We are still well.'.

In the way they are used by the Mundabli speakers and their neighbours, the names ndʒə̀n and Mundabli represent only the variety spoken in Mundabli, i.e. in the village and associated hamlets. They do not include the variety spoken in Mufu, although the two varieties are so close that, from a linguistic standpoint, the two can be viewed as dialects of a single language.

In opposition to local use, the Ethnologue entry "Mundabli" (ISO 639-3 code: boe, Lewis et al. 2009) represents three varieties: Mundabli, Mufu and Buu.[3] Whereas Mundabli and Mufu are reasonably close and could be considered dialects of the same language, Buu is so different from Mundabli and Mufu that it should be considered a separate language (see §1.1.4 for details). The use of the name "Mundabli" to subsume all three varieties falsely implies that we are dealing with a single language. But also to represent only Mundabli and Mufu,

The name Mundabli is also a bad choice for representing only Mundabli and Mufu, because in its public use, it refers only to the Mundabli dialect, to the exclusion of Mufu. Mufu people would most certainly feel offended if their variety were called a dialect of Mundabli. I suggest instead using the compound name Mufu-Mundabli to represent this dialect-cluster. While the existence of a common name implies that the two varieties are so close that they can be considered a single language for linguistic reasons, the fact that the name is a compound made up of the names of the two varieties reflects at the same time that these two dialects have independent socio-political status.

It must be remarked though that such a common name represents a purely linguistic entity. While Mundabli and Mufu are "culturally closer to each other than to any other Lower Fungom society." Di Carlo (2011: 87), they still form separate politically distinct socio-cultural groups. In this description, I use the name "Mundabli" to refer only to the Mundabli dialect, as spoken in the Mundabli chiefdom, including the village and associated settlements and hamlets (thus excluding Mufu and Buu).

1.1.4 Contact and cross- and intra-dialectal variation

Mundabli is in contact with other Yemne-Kimbi languages, Ring languages and Jukunoid (to the north, see Hombert (1980: footnotes 3-4)), Cameroon

[2]The name "Ndabile" is primarily found in (Chilver and Kaberry 1968) and sources based on it.

[3]Ngako Yonga (2013: VII) suggests renaming the language from Buu with a long <uu> to Bu with a short <u> because the language does not have long vowels. However, I stick to the name 'Buu', for reasons laid out in Good et al. (2011: 124).

Pidgin, English and - to a much lesser degree - French.

For purely linguistic reasons, Mundabli may be viewed as one of two dialects of a common language called Mufu-Mundabli. The name is composed of the English names of the two chiefdoms in which these varieties are spoken. Although the dialects have a lot in common and are mutually intelligible, at the same time there are striking differences which make the two clearly distinguishable. Acoustically, the most striking difference is that Mundabli uses pharyngealized vowels where Mufu has syllable-final velar stops. More research is needed in order to determine the exact relationship between the two varieties. In spite of their closeness, Mundabli and Mufu are viewed by their speakers as different languages, mainly for socio-political reasons. As is characteristic of Lower Fungom villages, each of the two villages has its own chief and forms its own socio-political unit.

According to the speakers of Mundabli, there is no dialectal variation within the Mundabli variety and speakers of the different quarters, as well as those living in detached hamlets all speak more or less the same way. However, there is a certain degree of intra-lectal variation based on age rather than on the affiliation to a certain quarter or lineage. This variation seems to reflect an ongoing process of language change. Younger speakers (approximately up to the age of 40-50) speak differently from older speakers. The elders variety is perceived to be more correct. E.g., the chief is said to speak "real" Mundabli, whereas younger people are allegedly corrupting the language. The most prominent difference is the gradual loss of final **l** in younger speakers, which is accompanied by a change in vowel quality (cf. Table 1.1). The version used by the chief and other older people is regarded as the "correct" form, but speakers use the other form just as often.

older speakers	younger speakers	gloss
kwə̀l	kwè	homestead, sacred grove
kwá̰l	kwḛ́	house rat
bwɛ̀l	bwè	calabash (used as oil container)
də̄l	dē	weight
tà̰l	tḛ̄	pull (v)

Table 1.1: Age-based variation in the pronunciation of original CVl stems

In the past, Mundabli has been viewed as part of the "Ji cluster" (Good et al. 2011: 124), together with Mufu and Buu, because these three languages seem to share certain similarities. However, recent studies led by myself and by Doriane Ngako (2013) on Buu and Mundabli suggest that Buu is a separate language. This is supported by the findings presented in Di Carlo (2015) on the linguistic prehistory of Lower Fungom. It had already been noticed by Hamm et al. (2002: 12) that the status of Buu regarding its affiliation to Mufu-Mundabli was unclear, but Hamm et al. (2002: 12) did not draw any consequences from this and lumped the three together.

Although impressionistic judgements on the degree of closeness of Mufu and Mundabli on the one hand, and between Mufu-Mundabli and Buu on the other can be made, these statements are still hypothetical due to a lack of data on Mufu and Buu. While a comparison of some aspects of Buu and Mundabli phonology has been carried out by Ngako Yonga (2013) based on Buu data collected by herself and on my Mundabli data, a comparison of Mundabli or Buu with Mufu is more difficult because only very little Mufu data have been collected. Statements on the similarity between Mundabli and Mufu are based on my own intuitions, but also on statements of Mundabli speakers and, to a certain degree, on the collected Mufu data.

1.1.5 Classification

Mundabli (ISO 639-3: boe, Glottocode: mund1328) is part of the Southern branch of Bantoid, itself a subbranch of Benue-Congo in the Niger-Congo language phylum. Mundabli used to be included in the "Beboid" branch of Southern Bantoid; see Figure 1.2.

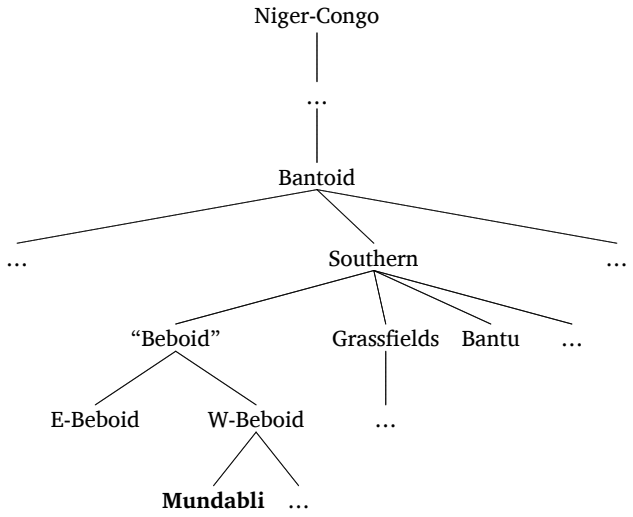

Figure 1.2: Niger-Congo family tree, adapted from Schadeberg (2003: 155)

The term "Beboid" was first used by Hombert (1980). Hombert (1980) includes Mundabli in the group of "Western Beboid" languages, an alleged subgroup of what he refers to as the "Beboid" languages. However, former "Western Beboid" is no longer accepted by all as closely related to "Eastern Beboid". For lack of substantiating evidence for either a "Western Beboid" subgroup or any close affinity between "Western Beboid" and "Eastern Beboid", Good et al. (2011: 108) abandon the label "Western Beboid" - along with its associated genetic hypotheses - and instead propose the name 'Yemne-Kimbi'

for this group of languages; see Figure 1.3. This label references two rivers that are found at the western and eastern borders of the Lower Fungom region. It is intended to be a purely referential label without any implications regarding the genetic affiliation or coherence of the languages it includes.

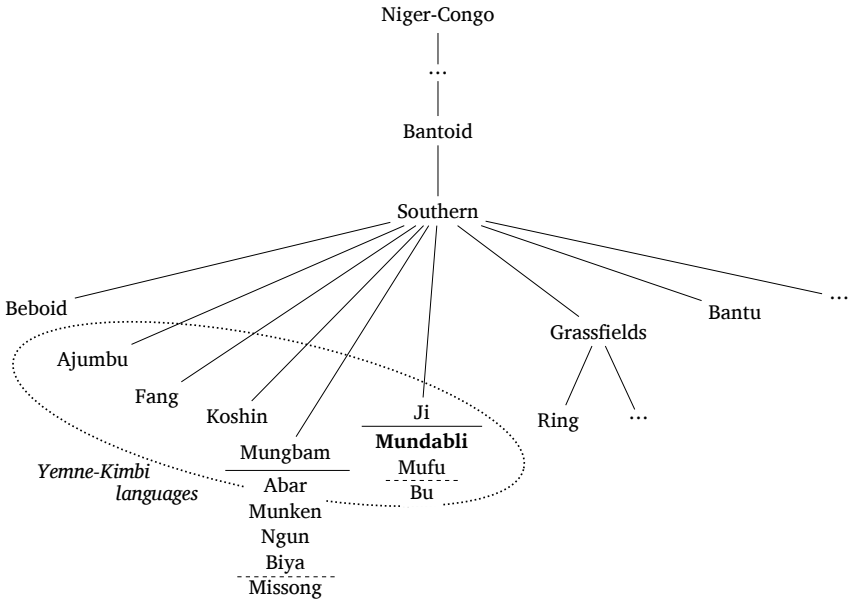

Figure 1.3: Bantoid family tree, following Glottolog (Hammarström et al. 2017)

The Yemne-Kimbi group contains several clusters of closely related languages or dialects, one of which is the 'Ji-cluster'. The Ji-cluster comprises the varieties Mundabli, Mufu and Buu. While Mundabli and Mufu are close enough to be considered dialects of a single language, Buu is different enough that it should be considered a separate language (Good et al. 2011: 105). In accordance with the purely referential character of the label "Yemne-Kimbi", e.g. Glottolog (Hammarström et al. 2017) does not recognize a Yemne-Kimbi subgroup and instead lists all languages and language clusters which are subsumed under the reference label Yemne-Kimbi as isolates at the same level as Beboid (with the more recent interpretation of this term, which corresponds roughly to former "Eastern Beboid"), Grassfields and Bantu. Note that the subclassification within all of Southern Bantoid is preliminary.

The Grassfields and Bantu languages are especially relevant because they are closely related to Mundabli and the Grassfields languages in particular are potential contact languages. Grassfields includes the Ring-languages, which

are spoken in the direct vicinity of the Lower Fungom region, where Mundabli and the other Yemne-Kimbi languages are spoken. The Grassfields languages have received some attention, even outside of Niger-Congo Studies, since the Grassfields Working Group did extensive fieldwork on these languages in the 1970s and 1980s (cf. Heine and Nurse (2000: 34) for details). There is an interesting historical link between the Bantu languages and the Grassfields and Yemne-Kimbi languages, as the area where the latter are spoken is believed to be the cradle of the Bantu languages.

1.2 Description and analysis of Mundabli

1.2.1 Previous research on Mundabli

Little work has been published exclusively on Mundabli. In the last decades, Mundabli was included in a survey of noun classes in what Hombert (1980) referred to as Beboid[4] (Hombert 1980) and in survey work done by SIL (Hamm 2002; Hamm et al. 2002) which includes a word list for Mundabli, albeit without tone. More recently, a few articles have been published on specific aspects of Mundabli grammar, namely Voll (2010) on tonal inflection in the tense system, Voll (2014) on the grammaticalization of body part terms in Mundabli and an article on the structure of relative clauses in Mundabli and Mungbam (ISO 639-3 code: mij), a dialect cluster belonging to Yemne-Kimbi, which includes the dialects Munken, Ngun, Biya, Abar and Missong (Lovegren and Voll 2017).

Information on Mundabli is also included in some recent more general articles. Good et al. (2011) contains some basic grammatical information on Mundabli, including data on phonology, the noun class system and verb morphology. Good (2012) contains an overview of the Mundabli noun class system and a theoretical discussion of its implications. Di Carlo (2011), Di Carlo and Pizziolo (2012) and Di Carlo and Good (2014) discuss the settlement and migration history of Mundabli and the history of the Mundabli language.

In the last decade, some material has been published on other Yemne-Kimbi languages. An excellent multi-dialectal grammar of Mungbam has been published by Lovegren (2013) who has also written articles on specific aspects of Mungbam phonetics and phonology (Lovegren 2011b;a). Ngako Yonga (2013) has published a phonological and morphological sketch of Buu, which is of special relevance because Buu is one of the three dialects which supposedly make up the "Ji cluster", the others being Mundabli and Mufu. Ngako Yonga (2013) also contains a brief comparison of some aspects of Mundabli and Buu phonology and morphology. Finally, Mve (2013) published a phonological description of Fáŋ (ISO 639-3 code: fak), another Yemne-Kimbi language.

[4]Hombert assumed that Beboid (Good et al. 2011) and Yemne-Kimbi (Good et al. 2011) were related. He referred to them accordingly as "Eastern Beboid" and "Western Beboid" which he believed made up the genealogical group "Beboid".

The data resources I used other than my own recordings are restricted to a wordlist compiled by SIL (Hamm 2002) and recordings of elicitation sessions of about five hours each by Scott Farrar and Jeff Good. The work of Jesse Lovegren, who published his multi-lectal grammar of Mungbam in 2013, was a great inspiration.

1.2.2 Fieldwork setting

This description is based on recordings made during three field trips (2008, 2009 and 2012) to Cameroon totalling a period of 9 months. During these trips, I spent about half of my time in the Mundabli village and the other half in the nearby town of Wum, where I worked with Mundabli-speakers. While the village setting allowed me to make recordings of authentic natural speech data, working in town facilitated elicitation and transcription, especially because electricity is practically unavailable in Mundabli. Therefore, most stories and conversations were recorded in the Mundabli village and only a few in Wum. Recordings of spontaneous speech were transcribed and glossed with the help of consultants. Part of the translation and elicitation work was done in the Mundabli village with the help of my main consultant in Mundabli, Jacqueline Ntie Kimba and, to lesser parts, with Alfred Ngasha Shami and Barnabas Nyambong. The rest of the elicitation and translation work was done in Wum (and also in Bamenda during a later trip), where I worked together with my main consultant in town, Donatus Yung Kungmba, and, to a lesser extent, with Jonathan Yessa and a few other speakers. Elicitation was done partly in English and partly in Cameroon Pidgin. I am aware of the pitfalls of elicited data, such as the danger of direct translation from English/Cameroon Pidgin, or the possibility of eliciting unnatural utterances. Ideally, a description would be entirely based on natural speech data. However, elicitation allows one to selectively extract comprehensive information on specific topics, which is necessary given temporal restrictions.

My database comprises digital audio recordings of a total length of around 200 hours, of which a few hours are transcribed and glossed. It comprises recordings of spontaneous and planned speech, such as natural conversations, biographies, anecdotes, narratives, riddles, songs, and instructions, as well as numerous recordings of elicitation sessions. For a discussion of the use of elicited data vs. natural speech data, see Lovegren (2013: 8-10).

All recordings were made with a flash recorder (Edirol R-09), in wav quality. I used the in-built microphone to record natural conversations and more generally recordings with more than two speakers. For elicitation, I used either the in-built microphone of the flash recorder or a headset (Sennheiser PC 131). Only in a few cases, I used a directional condenser microphone (Rode NTG-2). I also made a video recording of one elicitation session. In order to transcribe and store the recordings, I later transferred the sound files to my computer. For notes and primary transcriptions, I used an old-fashioned paper note book, especially in the village, where access to electricity is strongly

restricted. For transcription and annotation, I used computer programs, such as ELAN and, to a lesser extent, Toolbox. Due to practical restrictions, not all recordings are translated, transcribed and glossed, yet.

1.2.3 Presentation of data

This description contains in-text examples and numbered examples. In-text examples are written in bold letters and, when they contain a translation, the translation is enclosed in single quotation marks. Other examples are numbered continuously, from the beginning to the end of the book. They consist of three lines: a source language line, a line with morphological glosses, and a translation in English. The English translation may in some cases contain Cameroon Pidgin terms which are attested neither in Standard British English nor in Standard American English. Elicited examples are marked with a small diamond symbol "◇" preceding the translation. This is done in order to raise awareness: elicited data may be subject to interference from English or Cameroon Pidgin, which were used as meta-languages in elicitation.

1.2.4 Practical transcription

The current orthography is based on the International Phonetic Alphabet (IPA) but is partly adjusted to resemble the "General Alphabet of Cameroon Languages" (Tadadjeu and Sadembouo 1979), henceforth simply referred to as the 'Cameroonian alphabet', in order to try to conform to Africanist standards, to enhance comparability with other Cameroonian languages and, last but not least, to make this work more accessible to the language community and eventually make it easier for the language community to develop a practical orthography. Thus, the grapheme <y> is preferred over IPA <j> to represent a palatal approximant because it conforms both to its use in English (the language of education) and in orthographies of other local languages. The orthography was not discussed with the speech community and it is not meant to function as a practical orthography to be used for writing or in teaching the language. A practical orthography should be developed in collaboration with the speech community based on practical considerations, giving priority to language use rather than language description. The graphemes used here widely coincide with the IPA symbols. However, there are a few exceptions. In what follows, I first discuss vowel graphemes, then tone marks, and finally consonant graphemes.

The use of vowel symbols in the current orthography diverges only slightly from their use in the IPA or in Tadadjeu and Sadembouo (1979). Table 1.2 contains an overview of the vowel graphemes used in this book.

The diacritics which mark pharyngealized vowels in the left column are neither found in the Cameroonian alphabet (Tadadjeu and Sadembouo 1979), nor in the IPA. As there is no conventionalized symbol for pharyngealized

grapheme	IPA symbol	Tadadjeu and Sadembouo (1979)	description
a	a	a	low front unrounded vowel
æ	æ	æ	near-low front unrounded vowel
ɛ	ɛ	ɛ	low-mid front unrounded vowel
e	e	e	high-mid front unrounded vowel
ə	ə	ə	mid central vowel
ɪ	ɪ	–	near-high near-front unrounded vowel
i	i	i	high front unrounded vowel
i̤	–	–	pharyngealized high front unrounded vowel
ɨ	ɯ	ʉ	high back unrounded vowel
ɨ̤	–	–	pharyngealized high back unrounded vowel
u	u	u	high back rounded vowel
ṳ	–	–	pharyngealized high back rounded vowel
ʊ	ʊ	–	near-high near-back rounded vowel
o	o	o	close-mid rounded vowel
ɔ	ɔ	ɔ	low-mid back rounded vowel
ɒ	ɒ	ɑ	low back unrounded vowel

Table 1.2: List of vowel graphemes compared with IPA symbols and symbols used in the Cameroonian alphabet (Tadadjeu and Sadembouo 1979)

vowels, I had to find a different solution. The diacritic chosen here to represent pharyngealization, two dots arranged horizontally below the vowel, as in <i̤>, is the IPA diacritic for breathy voice. This diacritic was chosen because the articulation mechanisms of pharyngealization and breathy voice resemble each other and because, to the best of my knowledge, the two do not coexist in any language. Breathy voice is not attested in Mundabli and it is rare in this part of the world in general. The chosen diacritic also has a practical advantage: it occurs below the vowel and does not interfere with tone marking. The second point in which the vowel transcription system used here does not conform with the IPA on the one hand and with the Cameroonian alphabet on the other is the use of the grapheme <ɨ> to represent a high unrounded back vowel. The grapheme <ɨ> was chosen rather than IPA <ɯ>, because the former is commonly used in Cameroonian orthographies, while the use of the symbol <ɯ> is not. Whereas Tadadjeu and Sadembouo (1979: 15) recommend the use of the grapheme <ʉ> for a high back unrounded vowel, I chose to use <ɨ> instead, because the IPA uses <ʉ> to represent a *rounded* vowel.

The high front and back [-ATR] vowels are represented by the IPA symbols

<ɪ> and <ʊ>. The use of IPA symbols is necessary to distinguish between [+ATR] and [-ATR] vowels. Tadadjeu and Sadembouo (1979: 13) completely lack graphemes to express this distinction. Finally, the use of IPA <ɒ> to represent a low back rounded vowel is preferred over the use of <ɑ>, as suggested by Tadadjeu and Sadembouo (1979: 13). In the IPA the symbol <ɑ> corresponds to a low back *unrounded* vowel.

Tone is marked with diacritical tone marks. There are four tone levels: low, mid, high and superhigh, marked by diacritics above the vowels, as e.g. in **kɛ̋** 'leg'. Two tone marks can be combined to form a complex tone pattern, as shown in Table 1.3.

diacritic	IPA	Tadadjeu and Sadembouo (1979)	description
◌̀	◌̀	◌̀	low
◌̄	◌̄	◌̄	mid
◌́	◌́	◌́	high
◌̋	◌̋	◌̋	superhigh
◌̌	◌̌	◌̌	low-high rising
◌̂	◌̂	◌̂	high-low falling
◌̀̄	◌̀̄	◌̀̄	mid-low falling
◌̄́	◌̄́	◌̄́	mid-high rising
◌̂́	◌̂́	◌̂́	high-mid falling

Table 1.3: List of tone marks compared with IPA symbols and symbols used in Tadadjeu and Sadembouo (1979)

Most consonants are also represented by IPA symbols. Only in a few cases did I choose to use symbols that fit better in a Cameroonian context. Table 1.4 shows the graphemes used to represent consonants.

For practical reasons, the tie-bars used in complex consonants in the IPA (cf. Table 1.4) are not used. Instead, complex consonants are simply represented by the relevant consonant combinations without tie-bars, as suggested by Tadadjeu and Sadembouo (1979). I chose to conform with the IPA in transcribing the affricates <tʃ> and <dʒ> rather than using the symbols <c> and <j> (or <č> and <ǰ>), as suggested by Tadadjeu and Sadembouo (1979). This is done in order to avoid the impression that the consonants in question are palatal plosives. While palatal plosives ([c] and [ɟ]) are not attested in Mundabli, they *are* attested in Mufu.[5] Having made this choice, I have decided to transcribe the palatal sibilant using <ʃ> rather than <sh> because it would be too awkward to have the sequences <tsh> and <dzh> represent single sounds, and it would be even worse to use <tʃ> for the

[5]Note that the distribution of palatal plosives in Mufu does not mirror the distribution of palatal affricates in Mundabli.

current grapheme	IPA symbol	(Tadadjeu and Sadembouo 1979)	description
p	p	p	voiceless bilabial plosive
t	t	t	voiceless alveolar plosive
k	k	k	voiceless velar plosive
kp	k͡p	kp	voiceless labial-velar plosive
b	b	b	voiced bilabial plosive
d	d	d	voiced alveolar plosiv
g	g	g	voiced velar plosive
gb	g͡b	gb	voiced labial-velar plosive
f	f	f	voiceless labio-dental fricative
s	s	s	voiceless alveolar fricative
ʃ	ʃ	sh	voiceless post-alveolar fricative
ts	t͡s	ts	voiceless alveolar affricate
tʃ	t͡ʃ	c, č	voiceless post-alveolar affricate
dz	d͡z	dz	voiced alveolar affricate
dʒ	d͡ʒ	j, ǰ	voiced post-alveolar affricate
m	m	m	bilabial nasal
n	n	n	alveolar nasal
ɲ	ɲ	ny	palatal nasal
ŋ	ŋ	ŋ	velar nasal
ŋm	ŋ͡m	ŋm	labial-velar nasal
l	l	l	lateral alveolar approximant
y	j	y	palatal approximant
ɥ	ɥ	–	labial-palatal approximant
w	w	w	labial-velar approximant

Table 1.4: List of consonant graphemes compared with IPA symbols and symbols used in Tadadjeu and Sadembouo (1979)

affricate but <sh> for the corresponding fricative. The graphemes for the palatal and velar nasal are identical with their IPA symbols <ɲ> and <ŋ>. On the one hand, this reflects their status as single segments and on the other hand, it eliminates ambiguity between the nasal [ŋ] and the sequence [ng]. The palatal approximant is represented by the grapheme <y> rather than IPA <j>. The use of <y> to represent a palatal approximant is standard in the area, wheras <j> commonly represents IPA [dʒ]. Finally, the IPA symbol for the labial-palatal approximant <ɥ> is sporadically used to show the phonetic realization, but the sound is usually written <yw> because it represents a consonant sequence rather than a single complex consonant (see §2.2). A nasal is syllabic when it bears a tone mark, otherwise it is not.

CHAPTER 2

Phonology

2.1 Tone

The tone system of Mundabli is characterized by four level tones and a number of contour tones. Tones are taken at their surface values. The only tonal process attested is low tone spread (see §3.4.2). Each syllable in Mundabli carries contrastive tone. Although nouns and verbs are nearly identical in their segmental setup, they differ considerably regarding their tonal behavior. While nouns generally retain their lexical tones, the tone patterns of verbs change depending on factors such as their syntactic position and the tense/mood/aspect in which they occur.

The remainder of the current section is organized as follows. Section 2.1.1 gives an overview of the tonal inventory, §2.1.2 deals with the phonetic realization of tones, and §2.1.3 briefly introduces noun and verb tone patterns. Noun and verb tone patterns are discussed in more detail in §3.2. An overview of all verb tone patterns is provided in Chapter 8.

2.1.1 Tonal inventory

The tone bearing unit in Mundabli is the syllable. There is no distinction in vowel length and the same tone combinations are possible in open and closed syllables. Mundabli has neither downstep nor phonetic downdrift. It is a “discrete level” language, i.e. tones are always realized at approximately the same pitch.

The four level tones are referred to as low (L), mid (M), high (H) and superhigh (S). Mundabli also has contour tones, namely a low-high rising tone (LH) and three falling tones: mid-low (ML), high-mid (HM) and high-low (HL). While the other contour tones are relatively common, HL is rare and occurs mainly in loanwords. Table 2.1 contains near-minimal pairs illustrating all level and contour tones.[1]

prose	symbol	diacritic	example	gloss
low	L	x̀	**kù**	'rope'
mid	M	x̄	**kū**	'ratmole'
high	H	x́	**kú**	'home.LOC'
superhigh	S	x̋	**kű**	'belly'
low-high	LH	x̌	**kǔ**	'grab' (clause-final)
mid-low	ML	x̄̀	**kū̀**	'clap' (clause-final)
high-mid	HM	x̄́	**kɔ́**	'wisdom'
high-low	HL	x̂	**gâŋ**	'gown'

Table 2.1: Tonal diacritics

The tone of a syllable is marked by diacritics on the vowel. In closed syllables, part of the tone is realized on the final sonorant. However, in the current orthography, the tone of a syllable is always marked on the (first) vowel, as e.g. in **gɔ̀ŋ** 'spear' or **dʒwǎn** 'star', except when a syllable consists of a syllabic nasal, which then receives the tone mark.

2.1.2 Phonetic realization of tones

Whereas the mid, high and superhigh tones are phonetically level in both final and non-final position, the low tone is level in non-final position but phonetically falling before a pause. As this alternation is completely predictable, the low tone is always transcribed with a grave accent. A superhigh tone may be realized as LH when it is preceded by a low tone. In this case, it is transcribed as low-high rising tone. This process, which I refer to as low-tone spread, is described in §3.4.2.

Contour tones may occur in non-final position or before a pause. Their pronounciation is generally the same in final and in non-final position. Only the mid-low falling tone (ML) is realized as a mid tone (M) in non-final position unless followed by a low tone (L), so that the distinction between the ML and the M is neutralized in this context. In this case, I also transcribe it as a mid tone (M). Only before a pause or a low tone does the mid-low falling tone contrast with the mid tone, which is realized as phonetically level in final and non-final position. The nouns **tɔ̄** 'horn' and **tō** 'day', for example, bear different

[1] Verbs are given with the tone pattern specific for non-final position. In this and the following example though, verbs are given with the tone pattern characteristic of clause-final position, see §3.2.2.2 for details.

tones when pronounced in isolation, but their tone patterns are identical when they are followed by a determiner as in **tɔ̄ kɔ́** 'the horn' and **tō kɔ́** 'the day'.

Table 2.2 and Table 2.3 contain approximate pitch values of all level and contour tones for a male (Yung Donatus Kungmba) and a female (Ntie Jacqueline Kemba) speaker, respectively. The values represent approximations based on measurements of several tokens for each tone pattern. Where the pitch changes, the values for the beginning and end point of the phonetic contour are given, separated by the greater-than symbol '>'.

prose	symbol	final pitch	non-final pitch	example	gloss
low	L	115 > 100	115	**kù**	'rope'
mid	M	130	130	**kū**	'ratmole'
high	H	145	145	**kú**	'home.LOC'
superhigh	S	170	170	**kű**	'belly'
low-high	LH	115>145	115>145	**kě**	'fetch firewood'
high-mid	HM	145>125	145>125	**tí**	'pumpkin leaf'
mid-low/mid	ML/M	145>100	130	**kɛ̀**	'hand'
high-low	HL	145>100	145>100	**sê**	'front part of house'

Table 2.2: Approximate pitch values of level and contour tones for Yung Donatus Kungmba

prose	symbol	final pitch	non-final pitch	example	gloss
low	L	220>170	220	**kù**	'rope'
mid	M	260	260	**kū**	'ratmole'
high	H	280	280	**kú**	'home.LOC'
superhigh	S	325	325	**kű**	'belly'
low-high	LH	220>280	220>280	**kě**	'fetch firewood'
high-mid	HM	310>220	310>220	**tí**	'pumpkin leaf'
mid-low/mid	ML/M	260>200	260	**kɛ̀**	'hand'
high-low	HL	260>200	260>200	**sê**	'front part of house'

Table 2.3: Approximate pitch values of level and contour tones for Ntie Jacqueline Kemba

In both speakers, although more clearly in the pronunciation of the female speaker (see Table 2.3), the level tones are not evenly distributed across the pitch range. The M and H tone are somewhat huddled up around the center of the pitch range with a relatively small distance between them. The difference amounts to something around 15 Hz for Yung Donatus Kungmba (male) and 20 Hz for Ntie Jacqueline Kemba (female). This leaves a bigger distance between these two 'central' tones and the 'outlying' tones, L and S. The distance between level L and M amounts to ca.15 Hz for Yung Donatus Kungmba and 40 Hz for Ntie Jacqueline Kemba and the distance between H and S is around 25 Hz for Yung Donatus Kungmba and around 45 Hz for Ntie Jacqueline Kemba.

Furthermore, comparing the phonetic pitch of the ML and the HL falling tones, I could not discern a significant pitch difference between them in either of the two speakers. While ML is quite common, HL is rare and occurs mainly in loanwords. My consultant Yung Donatus Kungmba says that the two do sound different, i.e. that HL starts at a higher level and ML at a lower level. Even if ML and HL are phonetically identical, there is a phonological difference. ML is realized as level M in non-final position whereas HL is always realized as HL. Therefore, the two are transcribed as ML and HL, respectively. In general, the tone patterns are realized at a slightly lower pitch when the onset is voiced and slightly higher when the onset is voiceless.

2.1.3 Noun and verb tone patterns

Nouns and verbs show different tonal behavior. While nouns are lexically specified for noun class and retain their tonal patterns in all contexts (with the exception of Gender 9/10 nouns, cf. §3.2.1), each verb belongs to one of three tone classes (A,B and C). The tone of all verbs belonging to the same tone class is identical in a given context. However, the tonal pattern of verbs depends on various factors, such as tense, aspect, syntactic position etc. (see Chapter 8 for details).

2.2 Consonants

Mundabli has a rich consonant inventory consisting of 21 consonant phonemes. These phonemes are presented in Table 2.4.

Consonant glide sequences and nasal consonant sequences are not included in Table 2.4 because they are analyzed as sequences rather than complex segments, cf. §2.2.3. The consonants in Table 2.4 are sorted according to place (columns) and manner (rows) of articulation. Voicing is distinctive in plosives, but the labial plosive **b** does not have a voiceless equivalent, thus leaving a gap in the inventory in the place of **p**.[2] The phonemes **tʃ** and **dʒ** are analyzed as alveo-palatal affricates rather than palatal stops. Their pronunciation differs phonetically from that of the palatal stops [c] and [ɟ] which are attested in the Mufu variety. The Mundabli affricates are realized further to the front

	Labial	Alveolar	Alveo-Palatal	Velar	Labial-velar
Plosives		**t**		**k**	**kp**
	b	**d**		**g**	**gb**
Fricatives	**f**	**s**	**ʃ**		
Affricates		**ts**	**tʃ**		
		dz	**dʒ**		
Nasals	**m**	**n**	**ɲ**	**ŋ**	[**ŋm**]
Approximants		**l**	**y**, [**ɥ**]		**w**

Table 2.4: Inventory of consonant phonemes

than the Mufu palatal stops (, namely at the back of the alveolum) and they are released with more friction. Furthermore, the alveolar affricates **ts** and **dz** in Mundabli correspond to the palatal plosives **c** and **ɟ** in Mufu cognates, not the alveo-palatal affricates **tʃ** and **dʒ**.

While most consonants in the chart are represented by IPA symbols, a few of the symbols in the chart do not adhere to IPA standards. Sounds in Table 2.4 which are represented by more than one consonant, such as **kp** or **tʃ** represent single phonemes. Orthographic conventions are described in detail in §1.2.4.

Table 2.4 includes two sounds in square brackets, namely the labiovelar nasal [ŋm] and the labial-palatal glide [ɥ]. They are included in order to give a representative overview of the sound system, but the square brakets indicate that they are not part of the phoneme inventory. The labiovelar nasal [ŋm] only occurs in NC clusters with labiovelar plosives preceded by homorganic nasals. It is predictable and not phonemic. The rare labial-palatal glide [ɥ] is also not phonemic. It only occurs in a few lexical items such as **ywǒŋ** [ɥǒŋ] 'snake' and **ɲwə̀n** [ɲɥə̀n] 'bird'. In all cases the labial-palatal glide [ɥ] can be analyzed as a sequence of a palatal consonant and a labial glide.

2.2.1 Consonant phonemes and allophonic variation

This section contains descriptions of all consonant phonemes and their allophones. Since the morphology of Mundabli is mostly isolating, allophonic variation is restricted. Common allophonic alternations are spirantization of stops before the high vowels **i** and **u**, devoicing of coda sonorants and glottalization of final nasals. While the current section describes the realization of phonemes, allophonic variation as such is dealt with in §2.2.5.

[2]The lack of a voiceless equivalent of **b** is an areal phenomenon. It has been attested in numerous other languages in the area, e.g. Mungbam, Ajumbu, Koshin, Naki, see Watters and Leroy (1989) and Good et al. (2011). The same gap is attested in most Beboid (former Eastern Beboid) languages, such as e.g., Noni (Hyman 1981: 17–18), Kemezung (Cox 2005), Mungong (Boutwell 2011), Nchane (Boutwell and Boutwell 2014), in Ring languages (Aghem (Hyman 1979) etc.) and in Grassfields languages (e.g. Limbum (Fransen 1995)). For a brief discussion of this phenomenon and a map of the world-wide distribution of languages with the same gap in their consonant inventory, see Maddieson (2011).

2.2.1.1 Plosives

With the exception of the labial-velar plosive **kp**, voiceless plosives are slightly aspirated. Both voiced and voiceless plosives have a fricative release when they precede the [+ATR] high vowels **i** and **u**. This phenomenon is best seen as a side-effect of the friction which occurs throughout the vowels **i** and **u** (see §2.3.1).

The consonant t The voiceless alveolar plosive **t** is well represented by the IPA symbol [t] although its articulation varies slightly depending on the context. When it occurs in the onset, it is slightly aspirated. Examples are **tɛ̄** 'walking stick', **tɔ̀** 'horn' and **táŋ** 'buy'.

Before the high vowels **i** and **u**, **t** is more strongly aspirated than otherwise. Before **i**, it can be realized with slight affrication [t^{s}] as in **tǐ** 'his/her father' which is realized as [**t^{h}ǐ**] or as [**t^{s}ǐ**] or **tí** [**t^{s}í**] 'bed side of house'[3]The setup of traditional Mundabli houses generally follows a strict pattern. The entrance is on the front side. The side close to the entrance usually contains a bench. The bed is usually found on the side far from the door, and the back side inside of the house often serves as storage room for pots and other things. The noun **tí** refers to the side containing the bed. (see also §2.2.5.1 and §2.3.1). The friction in this case is weaker than in the affricate phoneme **ts**. The phonemic affricate **ts** never precedes the vowel **i**. Before **i**, the distinction between **ts** and **tʃ** is neutralized and both are realized as **tʃ** (see also §2.2.1.2). The phoneme **t** occurs in the syllable coda only in ideophones such as **kăt** which expresses that fact that something has been completely destroyed. When **t** stands in coda position, the closure is not released. E.g., **kăt** is phonetically realized as [kăt˺].

The consonant k The voiceless velar plosive **k** is pronounced [k]. Examples are **kàm** 'monkey, sp.', **kɛ́** 'leg' and **kɔ̀ŋ** 'love' (v.). Before the high vowels **i** and **u**, it is more strongly aspirated and before **u** it can be slightly spirantized, in which case it has a bilabial release an is realized [k^{ɸ}] as e.g., in **kù** [k^{ɸ}ù] 'clap' or in **kű** [k^{ɸ}ű] 'belly'. Just like **t**, **k** is found in coda-position only in ideophones like e.g., **dʒěk** 'sound of something breaking, collapsing'. In this case, the closure has no audible release and e.g. **dʒěk** is phonetically realized as [**dʒěk**˺].

The consonant kp The voiceless labial-velar plosive **kp** is pronounced [k͡p]. It is a consonant with two simultaneous places of articulation. Unlike the other voiceless plosives, it is not aspirated. The labial and the velar closure are released nearly at the same time. Due to the two simultaneous closures, it is

[3]The setup of traditional Mundabli houses generally follows a rather strict pattern. The entrance is on the front side. The side close to the entrance contains a bench. The bed is usually found on the side far from the door, and the back side inside of the house often serves as storage room for pots and other things. The noun **tí** refers to the side containing the bed.

sometimes realized with a nonpulmonic, slightly ingressive airstream. Examples are **kpā** 'shoe', **kpɨ́n** 'elbow' and **kpɨ́** 'die'.

The consonant b The voiced bilabial plosive **b** is well-represented by IPA [b]. Examples of words containing **b** are **bɔ̀** 'bag', **bʊ́ŋ** 'ash' and **bɨ́ŋ** 'roll' (v.). Besides the most common pronunciation [b], **b** has two allophones. It is slightly affricated and pronounced [b$^{\beta}$] when it precedes the [+ATR] high front and back vowels **i** and **u**. This affrication is best explained as a side-effect of the friction occurring throughout the vowels **i** and **u**. Further, **b** may be softened and pronounced as approximant [ʋ] in fast speech, especially when it occurs in a non-prominent position, e.g. in the onset of the determiners of Class 2 or Class 8 (both **bɔ́**) when they follow a noun.

The consonant d The plosive **d** is well-represented by IPA [d]. It is a voiced alveolar plosive. Examples of **d** are **də̌** 'machete' (in Pidgin 'cutlass'), **dàm** 'dream' (n.) and **dʊ́** 'remain'.

The consonant g The voiced velar plosive **g** is comparable to IPA [g]. Examples of words containing **g** are **gɪ̄gɪ̄** 'beard', **gɔ̀ŋ** 'spear' and **gɪ́** 'put'.

The consonant gb The consonant **gb** is a voiced labial-velar stop. It is well-represented by IPA [g͡b]. It is a single complex segment with two simultaneous closures. The two closures are released almost simultaneously. Sometimes a slight non-pulmonic ingressive airstream is created. Examples of **gb** are **gbàn** 'in-law', **gbɛ̀** 'pus' and **gbʊ̀** 'fall'.

2.2.1.2 Affricates

The consonant ts The voiceless alveolar affricate **ts** corresponds to IPA [t͡s]. Although it is represented by two symbols, it is not a sequence of phonemes but one complex segment. Examples of words containing the affricate **ts** are **tsà** 'mud', **tsʊ̌** 'witchcraft' and **tsɪ́** 'pass the night'.

The consonant tʃ The affricate **tʃ** is a complex alveo-palatal segment. It is articulated between the alveolus and palate and given the label "alveo-palatal". It is well represented by IPA [t͡ʃ] although it is a bit more fronted than e.g., English or German **tʃ**. Examples of words containing **tʃ** are **tʃʊ́ŋ** 'ear', **tʃɪ̄tʃɪ̄** 'heel' and **tʃʊ́** 'come'. Before the high vowel **i**, it does not contrast with the alveolar affricate **ts**.

The consonant dz The voiced alveolar affricate **dz** is pronounced [d͡z]. When it is preceded by a nasal, it is sometimes weakened and is pronounced [z], even in careful pronunciation. This happens e.g. in nouns like **ndzɨ̀** ([ndzɨ̀]∼[nzɨ̀])

'sheep'). Like **ts**, **dz** is not attested before the high front vowel **i**. Further examples of words containing **dz** are **dzē** 'cutting grass' (Thryonomys swinderianus), **dzān** 'mosquito' and **dzúŋ** 'quarrel' (v.).

The consonant dʒ The voiced alveo-palatal affricate **dʒ** is well-represented by IPA [d͡ʒ]. Like **tʃ**, it is articulated further in front than English **dʒ**. Examples of **dʒ** are **dʒǐ** 'dog', **dʒǔ** 'goat' and **dʒì** 'put'.

2.2.1.3 Fricatives

The consonant f The consonant **f** corresponds to IPA [f]. It is a voiceless labio-dental fricative, not different in pronunciation from its English equivalent. Examples of words containing **f** are **fɔ̄** 'head', **fúfù** 'beans, sp.' and **fʊ̀ŋ** 'catch crabs (by hand)'.

The consonant s The consonant **s** is comparable to IPA [s]. It is a voiceless alveolar fricative. Examples of **s** are **sə̀** 'clothes', **sɔ̃ŋ** 'flue' (in Pidgin 'catarrh') and **sɛ̀** 'laugh'.

The consonant ʃ The consonant **ʃ** is comparable to IPA [ʃ], i.e. it is a voiceless alveo-palatal fricative. Like the other alveo-palatal consonants, it is a bit more fronted than e.g., the English or the German fricative **ʃ**. Examples of **ʃ** are **ʃī** 'chicken' (in Pidgin 'fowl'), **ʃǎŋ** 'sand' and **ʃɔ̃ŋ** 'peel' (v.).

2.2.1.4 Sonorants

Sonorants which occur in syllable-final position, i.e. the nasals **m**, **n**, **ŋ** and **l** are usually devoiced towards the end, often to such an extent that especially **n** tends to be overheard by someone who is not familiar with the language.

The consonant m The bilabial nasal **m** is pronounced like IPA [m] when it occurs in the syllable-onset, as in **mɔ̀** 'person', **mā́n** 'name' or **mà̀l** 'slide' (v.). When it is in the coda, as in **tʃɛ̃́m** [**tʃɛ̃́m̥**] 'axe', **dà̀m** [**dà̀m̥**]'dream' (n.) or **mɔ̃́m** [**mɔ̃́m̥**] 'suck', the nasal is slightly devoiced towards the end. The nasal **m** is also attested as the initial consonant of an NC-cluster in nouns, where it is followed by a labial obstruent, as in **mbɔ̀ŋ** 'cow', **mfɔ̄** 'slave' or **mbɔ̄** 'spark'.

The consonant n The alveolar nasal **n** is well-represented by IPA [n]. In syllable final position, it is devoiced more than other nasals. Examples of words containing **n** in syllable- and word-initial position are **nɪ́** 'my/our mother', **nɨ́ŋ** 'thing' and **nà̀m** 'work' (v.). Examples of **n** in syllable- and word-final position are **yā́n** [yā́n̥] 'leaf', **tsǎn** [tsǎn̥] 'arm' and **gà̀n** [gà̀n̥] 'go'. The nasal **n** also occurs in NC sequences where it precedes alveolar obstruents, as in the words **ndʒà̀n** 'Mundabli', **ntà̀ŋ** 'hawk' and **ndām** 'tear(s)'.

The consonant ɲ The consonant **ɲ** corresponds to the palatal nasal [ɲ] in the IPA. Examples of **ɲ** are **ɲā** 'thirst', **ɲǎŋ** 'bush fowl' and **ɲóŋ** 'hum'. The nasal **ɲ** is the only nasal which is not attested in coda position. The nasal **ɲ** is attested in monomorphemic NC-clusters followed by alveo-palatal consonants, e.g. in **ɲdʒɔ́m** 'things', **ɲtʃé** 'armpit' and **ɲʃő** 'bird, sp.'.

The consonant ŋ The consonant **ŋ** is a velar nasal, pronounced like IPA [ŋ]. While it is often found in initial NC sequences preceding a velar stop, it is only attested without a following obstruent in the syllable-onset of a handful of words. In all but one of these, namely **ŋà** 'boast', it is followed by a labial glide, as in **ŋwà** 'write' and **ŋwǎŋ** 'xylophone'. The velar nasal commonly occurs in syllable-final position, e.g. in **sɔ̌ŋ** 'basket' (used for carrying seeds and collecting wild vegetables), **tɔ́ŋ** 'ram' (male sheep) and **láŋ** 'be happy'. The final devoicing attested in other final nasals is not quite as strong in velar nasals. Examples of **ŋ** in NC-clusters are **ŋgə̄** 'quarter head', **ŋgàŋ** 'hill' and **ŋkə́** 'spoon'.

The consonant l The lateral approximant **l** is pronounced [l]. It occurs in syllable-initial position in around thirty items, which is comparable to the frequency of e.g. **kp** in the onset. Examples are **lɔ̀ŋ** 'snot', **lòŋ** 'suffering' and **lɔ̄** 'go to the bush'. Whereas **l** is also attested in syllable-final position, my database contains only 15 cases of syllable-final **l**, which is a very low number compared to any of the final nasals. Examples of syllable-final **l** are **kwə̌l** 'crocodile', **fyĭl** 'whirlwind' and **tàl** 'pull'. The liquid **l** is the only non-nasal consonant which occurs in coda position in words other than ideophones. Just like the nasals, it is devoiced towards the end when it occurs in utterance-final position. Younger speakers have a tendency to drop final **l**. The omission commonly goes along with a fronting of the vowel. E.g., the verb **tàl** 'pull' is pronounced **tɛ̀** by younger speakers (see §1.1.4 for details).

The consonant y The palatal approximant **y** corresponds to IPA [j]. The symbol <y> was chosen here to avoid confusion. The use of <y> to represent a palatal approximant is standard in the area, while <j> commonly represents IPA [dʒ]. The palatal glide **y** is usually realized as an approximant, e.g. in the words **yə́n** 'leaf', **yɔ́m** 'bed' and **yɔ̄** 'throw'. However, when it precedes the high vowel **i**, the glide is spirantized and pronounced with friction, just like the vowel itself, e.g. **yí** [ji̯i̯] 'eat'. The palatal glide also occurs as the second consonant in CG-clusters, as in **fyĭl** 'whirlwind', **fyɛ́n** 'feast' and **lyàŋ** 'flicker' (of tongue). The palatal glide is not found in coda position.

The consonant w The labial-velar approximant **w** corresponds to IPA [w]. It commonly occurs in syllable-initial position or as the second element in syllable-initial CG-clusters. Examples of words containing the onset **w** are **wɛ́**

'bark, peel', **wấn** 'valley' and **wɔ̀ŋ** 'squish'. Examples of words containing CG-onsets with **w** are **gwɛ̀n** 'feathers', **dʒwǎn** 'star' and **kwɔ̀ŋ** 'snore'. The labial-velar glide is not found in coda position.

2.2.2 Minimal pairs

The selected (near) minimal pairs in Table 2.5 and Table 2.6 illustrate that the choice between the opposed sounds is not predictable from their context. Rather than comparing all consonant phonemes with each other, I present examples comparing only similar sounds, i.e. sounds of the same or a similar place and manner of articulation and sounds that are likely to be connected through sound changes, based on areal patterns of common sound changes. Where relevant, I also include NC sequences and consonant-glide clusters in the comparison. Verbs are given in the unmarked P0 tense (see §8.5.1) unless otherwise specified. In some cases the imperative form of a verb was chosen in order to create a (near) minimal pair.

consonants	examples	gloss	examples	gloss
t/k	**tấn**	'refuse'	**kấn**	'lack'
t/d	**tɔ̄**	'horn'	**dɔ̄**	'beans'
t/ts	**tǎn**	'Fly!' (IMP)	**tsǎn**	'arm'
t/tʃ	**tám**	'send'	**tʃấm**	'axe'
t/nt	**tāŋ**	'Buy!' (IMP)	**ntàŋ**	'hawk'
k/kp	**kɛ̀**	'hand, fingers'	**kpɛ̀**	'pot'
k/g	**kū**	'bone'	**gù**	'fire'
k/gb	**kɛ̀**	'hand, fingers'	**gbɛ́**	'wind'
k/tʃ	**kɛ̀**	'hand, fingers'	**tʃé**	'women'
k/ŋk	**kā**	'Fry!' (IMP)	**ŋkà**	'corn beer'
kp/b	**kpó̱**	'week'	**bó̱**	'shoulder'
kp/g	**kpű**	'wooden bowl'	**gù**	'fire'
kp/gb	**kpɛ̀**	'pot'	**gbɛ́**	'wind'
kp/kw	**kpā**	'shoe'	**kwā**	'frog'
kp/ŋmkp	**kpɔ̀ŋ**	'bulky part of head'	**ŋmkpǒŋ**	'stool (wooden)'
b/d	**bɔ̀**	'bag'	**dɔ̄**	'beans'
b/g	**bɛ̄**	'count'	**gɛ̄**	'corn'
b/gb	**bɔ̀**	'bag'	**gbɔ̄**	'house'
b/mb	**bān**	'waist'	**mbàn**	'fence'
d/g	**dūo**	'poison'	**gùo**	'grind'
d/dz	**dɔ̄**	'beans'	**dzɔ̄**	'hides'
d/dʒ	**dàn**	'container'	**dʒàn**	'connect pipes'
d/nd	**dàn**	'container'	**ndàn**	'branch'
g/gb	**gɛ̄**	'corn'	**gbɛ̄**	'pus'
g/gw	**gɔ̀ŋ**	'spears'	**gwɔ̀ŋ**	'open'
g/ŋg	**gâŋ**	'gown'	**ŋgàŋ**	'hill'

consonants	examples	gloss	examples	gloss
gb/gw	**gbɛ́**	'wind'	**gwɛ̀n**	'feathers'
gb/mŋgb	**gbǎŋ**	'Be spoiled!'	**mŋgbǎŋ**	'cheek'
ts/tʃ	**tsɛ̀**	'pots'	**tʃé**	'women'
ts/dz	**tsɛ̀**	'pots'	**dzē**	'cutting-grass' (Thryonomye swinderianus)
ts/dʒ	**tsű**	'hit'	**dʒû**	'word'
ts/nts	**tsǎ**	'shake a non-empty hollow object'	**ntsǎ**	'cricket'
tʃ/dʒ	**tʃū**	'iron'	**dʒû**	'word'
tʃ/dz	**tʃé**	'women'	**dzē**	'cutting-grass' (Thryonomye swinderianus)
tʃ/t	**tʃàŋ**	'cackle'	**táŋ**	'buy'
tʃ/ntʃ	**tʃé**	'women'	**ntʃē**	'clay pot'
dz/dʒ	**dzɔ̀**	'house'	**dʒɔ̀**	'bridge'
dz/ndz	**dzwɔ̀ŋ**	'garden egg'	**ndzwɔ̌ŋ**	'ball'
dʒ/ndʒ	**dʒà̄n**	'connect water pipes'	**ndʒà̄n**	'Mundabli'
t/s	**wù tǎm**	'S/he has shot.'	**sǎm**	'Play!' (IMP)
t/n	**tám**	'send'	**nàm**	'work'
t/l	**tǐ**	'father'	**lī**	'power'
b/m	**bɔ̀**	'bag'	**mɔ̀**	'person'
b/f	**bɔ̄**	'stroll' (n.)	**fɔ̄**	'head'
d/l	**də̀**	'see'	**lə̀**	'do'
ts/s	**tsɔ̀**	'rock dassie'	**sɔ̃́**	'face'
tʃ/s	**tʃé**	'women'	**sě**	'Laugh!' (IMP)
f/m	**fɔ̄**	'head'	**mɔ̀**	'person'
f/s	**fɔ̄**	'head'	**sɔ̀**	'meat'
f/ʃ	**fwɔ̀**	'borrow'	**ʃwɔ̀**	'detach'
f/mf	**fá**	'shave'	**mfǎ**	'inner stone in fire place'
s/ʃ	**sɨŋ**	'knife'	**ʃɨ́ŋ**	'fill up'
s/f	**sɔ̀**	'meat'	**fɔ̄**	'head'
s/n	**sām**	'heart'	**nàm**	'work'
s/l	**sɔ̀**	'split'	**lɔ̀**	'go to the bush'
s/ns	**sɔ̀**	'meat'	**nsɔ̀**	'basket, sp.'
ʃ/tʃ	**ʃű**	'outer stone in fire place'	**tʃű**	'come'
ʃ/nʃ	**ʃū**	'rat'	**nʃù**	'palm tree, sp.'
m/n	**mán**	'name'	**nǎn**	'Tie!' (IMP)
m/ɲ	**mán**	'name'	**ɲán**	'ant, sp.'
n/ɲ	**nǎn**	'Tie!' (IMP)	**ɲán**	'ant, sp.'

consonants	examples	gloss	examples	gloss
l/t	**láŋ**	'be happy'	**táŋ**	'buy' (IPFV)
l/d	**làŋ**	'reflect'	**dàŋ**	'cross'
l/n	**lɛ̀**	'get lost'	**nɛ̀**	'straighten'
w/y	**wấn**	'valley'	**yấn**	'leaf'

Table 2.5: Onset minimal pairs

consonants	examples	gloss	examples	gloss
l/n	**tàl** (∼**tè**)	'pull'	**tàn**	'fly' (v.)
m/n	**nàm**	'work' (v.)	**nàn**	'tie' (v.)
m/ŋ	**bő̀ŋ**	'pick up'	**bő̀m**	'circumcise'
n/ŋ	**bấn**	'clean' (v.)	**bấŋ**	'close' (v.)

Table 2.6: Coda minimal pairs

2.2.3 Consonant-glide (CG) sequences

Consonant-glide sequences and nasal-consonant sequences (§2.2.4) are the only kinds of consonant clusters attested. In the current analysis, there is no advantage in interpreting consonant glide sequences as complex segments, i.e. labialized and palatalized consonants rather than consonant clusters. While historically, consonant-glide sequences in Mundabli were probably derived in most cases, synchronically they are often mono-morphemic. Consonant-glide sequences are attested only in stem-initial position.

2.2.3.1 Cw sequences

Sequences of a consonant plus a labial glide Cw are common in Mundabli lexical roots. Table 2.7 shows all attested Cw sequences. Table 2.7 shows that the glide **w** can follow nearly any other consonant. Exceptions are the labial-velar plosives **kp** and **gb**. A phonological sequence of a palatal and a labial glide **yw** is phonetically realized as labial-palatal glide **ɥ**, as in **ywo̱** [**ɥwo̱**] 'bee' . Similarly, a sequence of a palatal nasal and a labial glide **ɲw**, as in **ɲwàn** 'bird', is pronounced [**ɲɥàn**]; see §2.2. For an overview of phonemes and their phonetic realizations, consult the introductory section of §2.2.

Some of the sequences are more common than others. The sequence **ŋw** for example occurs only in three roots: **ŋwà** 'write', **ŋwăŋ** 'xylophone' and **ŋwā** 'colourful'. Examples and total of the attested Cw sequence are given in Table 2.8.

		Labial	Alveolar	Alveo-Palatal	Velar	Labial-velar
Plosives	vcl.				**kw**	
	vcd.	**bw**	**dw**		**gw**	
Fricatives	vcl.	**fw**	**sw**	**ʃw**		
Affricates	vcl.		**tsw**	**tʃw**		
	vcd.		**dzw**	**dʒw**		
Nasals		**mw**	**nw**	**ɲw**	**ŋw**	
Approximants				**yw**		
Lateral approx.						

Table 2.7: Attested Cw sequences

consonants	examples	number of attested examples
kw	**kwà** 'box', **kwén** 'ladder'	18
bw	**bwɛ̀** 'claw', **bwē** 'sky'	7
gw	**gwɛ̀n** 'feather', **gwàn** 'be sick'	3
sw	**swān** 'ceiling'	2
ʃw	**ʃwá** 'choke', **ʃwín** 'wink with eye'	6
tsw	**tswān** 'monkey, sp.'	3
tʃw	**ntʃwá** 'porridge', **tʃwín** 'answer'	2
dzw	**dzwàn** 'disease'	1
dʒw	**dʒwǎn** 'star', **dʒwēn** 'Missong'	2
mw	**mwɛ̀** 'be sad', **mwǐn** 'cat'	5
nw	**nwǎl** 'hippopotamus'	1
ɲw	**ɲwàn** 'bird', **ɲwán** 'beg', **ɲwɛ́** 'knee'	6
ŋw	**ŋwǎŋ** 'xylophone', **ŋwà** 'write'	4
yw	**ywǒŋ** 'snake', **ywɛ̌n** 'grass', **ywɛ̀** 'pour'	8

Table 2.8: Examples and total of Cw sequences

2.2.3.2 Cy sequences

The number of attested Cy sequences is slightly smaller than that of Cw sequences. The labial-velar plosives **kp** and **gb** cannot be followed by a palatal glide, just as they cannot be followed by a labial glide. Further gaps in the inventory are shown in Table 2.9. Examples and total of the attested Cy sequences are given in Table 2.10.

		Labial	Alveolar	Alveo-Palatal	Velar	Labial-velar
Plosives	vcl.		**ty**		**ky**	
	vcd.	**by**	**dy**		**gy**	
Fricatives	vcl.	**fy**		**ʃy**		
Affricates	vcl.			**tʃy**		
	vcd.		**dzy**	**dʒy**		
Nasals		**my**				
Approximants						
Lateral approx.			**ly**			

Table 2.9: Attested Cy sequences

consonants	examples	number of attested examples
ty	**tyə̀ŋ** 'tear, be torn'	2
ky	**kyé** 'look', **kyáǹ** 'clear throat'	8
by	**byə̀n** 'breast', **mbyíl** 'feces'	7
dy	**dyé̋** 'heal', 'cool down' (intr.), **ndyíŋ** 'edge'	2
gy	**gyə̀ŋ** 'heal' (tr./intr.), **gyə̀** 'steal'	4
fy	**fyíŋ** 'be new', **fyé̋n** 'feast'	8
sy		none
ʃy	**ʃyə̌** 'ankle'	4
tsy		none
tʃy	**tʃyé** 'know'	4
dzy	**dzyə̀ŋ** 'call people to help'	1
dʒy	**dʒyè** 'cook', **dʒyá** 'creep'	3
my	**myé̋** 'oil'	4
ɲ	**ɲɔ̀** 'language', **ɲə̌ŋ** 'bush fowl'	35
ŋy		none
ly	**lyə̀ŋ** 'flicker' (of tongue)	4

Table 2.10: Examples and total of Cy sequences

2.2.4 Nasal-consonant (NC) sequences

Nasal-consonant (NC) sequences in Mundabli occur in three contexts:

1. Nominal stems belonging to certain noun classes commonly start in an NC sequence.
2. The prefixal part (N-) of the infinitive marker (see section 8.4.1) forms part of a word-initial poly-morphemic NC sequence.
3. The preverbal form of the first person singular (1SG) pronoun **N=** is procliticized to the left edge of the verbal core,[4] creating a polymorphemic NC sequence at the beginning of the verb or of a preceding TAM marker.

Whereas NC sequences are common in noun stems, in verb stems they are not attested at all.

Stem-initial prenasalized onsets occur in nouns of the following Genders: 1/2 (62 of ca. 150, e.g. **ŋkŏŋ** 'chief', **nsōŋ** 'friend', **ŋkɔ̀m** 'hoe'), 3/10 (4 of 9, e.g. **ŋgàŋ** 'hill', **ŋkwīn** 'mountain'), 7/8 (125 without an NC sequence and 24 with an NC sequence, e.g. **ntsè** 'headpad', **ŋmgbē** 'caterpillar'), 19/18a (nearly all underived nouns start in a nasal or an NC sequence, e.g. **ntấm** 'fruit', **ntʃō** 'wrist') and 6 (all start either in N or in NC, e.g. **ŋgī̀** 'water', **mbí́** 'palm wine'). Note that Class 9/10 nouns never start in an NC sequence in Mundabli. For more on noun classes, see Chapter 4.

In most of the listed noun classes, the stem-initial nasal cannot be analyzed as a prefix. First, it occurs both in singular and plural forms in all genders which exhibit a singular-plural distinction, such as in **ŋkế** 'spoon(s)' (Gender 7/8, different agreement). Second, it commonly co-occurs with a noun class prefix, as in **ŋkŏŋ** 'chief' vs. **bà-ŋkŏŋ** 'chiefs' in Class 2, 19 and 18a. Third, it does not occur in all stems of the noun classes in which it is attested (i.e. Class 1, 2, 3, 10, 19 and 18a). Only in the case of Class 6 nouns can the nasal be analyzed as a noun class prefix. There is no singular-plural distinction and all Class 6 nouns start in a nasal or a nasal consonant sequence. Only the possibility to combine class 6 nouns with the class 19 diminutive prefix **fi-** could be interpreted in favour of its analysis as part of the stem, however, this could also just be a combination of two prefixes. While it is impossible at the current stage to decide for sure whether the initial nasal in Class 6 nouns is a prefix, I will assume it is not a prefix but part of the stem. Table 2.11 shows examples of monomorphemic NC(G) sequences.

[4] See Chapter 8 for more on the structure of the verbal complex.

consonants	examples	number of attested examples
mb	**mbɔ̄** 'spark' (CL1/2), **mbɛ̌** 'twin' (CL1/2)	22
mbw	**mbwíǹ** 'flour' (CL6)	2
mby	**mbyɨ̄ŋ** 'crust' (CL7/8), **mbyíl** 'feces' (CL7/8)	4
nd	**ndām** 'tears' (CL6), **ndɔ̀n** 'branch' (CL3/10)	5
ndy	**ndyíŋ** 'edge' (CL19/18a)	1
ndz	**ndzā** 'worm, sp.' (CL7/8), **ndzɛ̄** 'urine' (CL6)	8
ndzw	**ndzwɔ̌ŋ** 'ball' (CL19/18a)	1
ndzy		none
ɲdʒ	**ndʒàn** 'Mundabli' (CL1/2), **ndʒín** 'vegetable, sp.' (CL1/2) (in Pidgin 'green')	6
ɲdʒw		none
ɲdʒy		none
mf	**mfǎ** 'inner stone in fire place' (CL1/2), **mfŏŋ** 'yam, sp.' (CL7/8) (in Pidgin 'cocoyam' or 'kolokosha')	7
mfw		none
mfy		none
ŋg	**ŋgī** 'water' (CL6), **ŋgàŋ** 'hill' (CL3/10)	11
ŋgw	**ŋgwò** 'blood relative' (CL1/2), **ŋgwēn** 'elephant grass' (CL19/18)	3
ŋgy	**ŋgyâ** 'traditional shelf' (CL1/2)	1
ŋmgb	**ŋmgbǎŋ** 'jaw, cheeck' (CL7/8), **ŋmgbɛ̀** 'upper grinding stone' (CL1/2)	8
ŋk	**ŋkà** 'corn beer' (CL6), **ŋkɛ́** 'spoon' (CL7/8)	22
ŋkw	**ŋkwē** 'ant, sp.' (CL19/18a), **ŋkwēn** 'chameleon' (CL19/18a)	4
ŋky	**ŋkyā** 'ant, sp.' (CL19/18a)	1
ŋmkp	**ŋmkpɔŋ** 'wooden stool' (CL7/8), **ŋmkpə́ntʃìn** 'jiggers' (CL1/2)	4
nl	**nlétʃì** 'cotton' (CL1/2)	1
ns	**nsɔ̀** 'basket, sp.' (CL7/8), **nsūŋ** 'friend' (CL1)	6
nsw	**nswēn** 'friends' (CL2)	1
nsy		none
nt	**ntàŋ** 'hawk' (CL1/2), **ntǎm** 'fruit' (CL19/18a)	7
ntw	**ntwɛ̌** 'throat' (CL1/2)	1
nty		none
nts	**ntsǎ** 'cricket, sp.' (CL1/2), **ntsɔ̀** 'tarantula' (CL1/2)	13
ntsw		none
ntsy		none

consonants	examples	number of attested examples
ɲtʃ	**ntʃē** 'clay pot' (CL19/18a), **ntʃō** 'wrist' (CL19/18a)	6
ɲtʃw	**ntʃwá** 'fufu' (CL8a) (stiff porridge)	1
ɲtʃy		none
ɲʃ	**nʃù** 'palm tree, sp.' (CL3/10), **nʃő** 'bird, sp.' (CL19/18a)	4
ɲʃw	**nʃwèn** 'Lung person' (CL1/2)	1
ɲʃy	**nʃyǎ** 'rabbit' (CL1/2)	1

Table 2.11: Monomorphemic NC(G) clusters

Table 2.11 shows that some logically possible NCG sequences are attested only once and others not at all. The sequence **nl** is only attested in one noun: **nlétʃì** 'cotton'. As its bisyllabic structure suggests, this word may be derived from a historical compound, possibly made up of an infinitive verb plus a noun. Thus, it is likely that the sequence in the example is historically polymorphemic.

In infinitive verbs, all onset consonants can follow the nasal in a nasal consonant sequence. In this case, the nasal's place of articulation is assimilated to the following consonant. Thus, only nasal-consonant clusters occur which are identical in place of articulation. When the first person singular preverbal pronoun **N=** is procliticized to the first element of the verbal core, which can be the verb or a TAM marker, it is assimilated in place of articulation to the consonant that follows it so that resulting clusters are identical in place of articulation.

2.2.5 Other issues relating to consonants

This section deals with phonetic or phonological questions. Some of these issues may be superficially treated in other sections but are repeated here in order to give them a more prominent place.

2.2.5.1 The phonetic effect of the high vowels i, u, i̱ and u̱ on preceding consonants

The high vowels **i** and **u** and their pharyngealized equivalents **i̱** and **u̱**, all of which involve a remarkable degree of friction (see §2.3.1) affect the phonetic realization of consonants which precede them. Consultants say that a consonant which precedes one of these vowels is generally "drawn out" or pronounced "stronger" than otherwise. This is a phonetic side-effect of the

extreme degree of closure of the high vowels rather than a phonological process. In fact, the realization of the preceding consonant is a cue to vowel quality about as prominent as the vowel itself. While nearly all consonants are affected, the high and close vowels have different effects on different consonants. Plosives, for example, which precede one of these vowels usually have a fricative release whose place of articulation does not have to coincide with that of the plosive. The alveolar plosive **t**, for example, may be realized with strong aspiration or it may be slightly affricated, as in **tĭ** [tˢĭ] ∼ [tʰĭ] 'father', when it precedes the high front vowel **i**. Meanwhile, the velar plosive **k** may be realized with aspiration or with a palatal release in this context, as e.g. in **kĭ** [kʰĭ] ∼ [kᶜĭ] 'his' (CL7). Plosives which precede one of the high back vowels **u** and **u̱** have a bilabial release, e.g. **kŭ** [kᵠŭ] ∼ [kᵠβ̆] 'belly', **kŭ̱** [kᵠŭ̱] ∼ [kβ̆] 'fog' and **bú** [bβú] ∼ [bβ́] 'give birth'. The fricative release fades into the vowel which involves friction at least at the beginning and often throughout the vowel. My consultants say that consonants other than plosives, such as fricatives or nasals, "are usually drawn out" before **i**, **u**, **i̱** and **u̱**, i.e., their closure phase is longer before these vowels than before other, more open vowels.

2.2.5.2 Prepausal devoicing of coda consonants

The sonorants **m**, **n**, **ŋ** and **l** are often devoiced towards the end when they are followed by a pause. Although no work exists which focuses specifically on this topic, utterance-final devoicing has been reported for other languages in the wider area (e.g. devoicing of voiced stops and of the vowels **i** and **u** in Eton, see (van de Velde 2008: 23,30); and devoicing of final **b** in Limbum, see (Fransen 1995: 52)).

2.2.5.3 Preglottalized nasals

Syllables of the structure **Cam**[5] or **Can** are often pronounced with glottalization towards the end of the vowel. A few cases are also attested in which **Cọm** syllables are glottalized. The realization ranges from [Cam], [Can] and [Cọm] without glottalization, via [Caʔm̰], [Caʔn̰] and [Cọʔm̰], with a glottal closure preceding the nasal to [Caʔam̰] and [Caʔan̰] with an echo-vowel separating the glottal stop from the final nasal. Devoicing of final sonorants, which is common before a pause (see §2.2.5.2), is even stronger when it co-occurs with glottalization.[6] It is not quite clear whether glottalization is associated with the nasal or the preceding vowel. The reason for the current analysis as

[4] In contrast to this, in other languages (e.g. Limbum (Fransen 1995) and Mambila (Connell 2007)) a similar process has been described which is restricted to the high central vowel **ɨ**.

[5] The letter **C** may represent any of the attested onset consonants.

[6] Breathy or "aspirated" nasals have been reported for Bantu and Khoisan languages (Ladefoged and Maddieson 1996: 106ff.).

part of the nasal is that it only occurs in syllables which end in the nasals **m** and **n**.

Although speakers are conscious of the phenomenon, I could not find any minimal pairs which are distinguished only by the presence vs. absence of glottalization. Therefore, I assume that glottalization is not phonemic. Furthermore, glottalization has been observed both on words with a mid tone, as e.g. **wān** [wāʔn] 'child', and words with a superhigh tone, such as **kấm** [kấʔm] 'squeeze', which renders the possibility that glottalization could be an effect of the tonal pattern unlikely. The fact that glottalization occurs in words whose structure otherwise resembles their Proto-Grassfields cognates which lack glottalization, such as e.g. **wān** 'child' (Proto-Grassfields: *-án Hyman (2007)) and **kấm** 'squeeze' (Proto-Grassfields: *kám Hyman (2007)), suggests that the glottalized quality is not a phonological trace of a deleted consonant but rather a recent phonetic effect. This is further supported by the absence of glottalization in Mufu cognates.

2.3 Vowels

The Mundabli vowel inventory consists of thirteen plain and four pharyngealized[7] vowels, i.e. seventeen vowels in total. These are shown below, in two separate charts for plain (Figure 2.1) and pharyngealized vowels (Figure 2.2). The location of the vowels in the vowel charts represents their phonological role rather than their exact phonetic pronunciation. Vowel length is not contrastive.

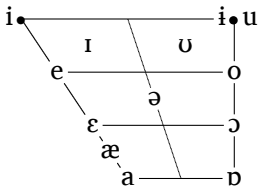

Figure 2.1: Inventory of plain vowel phonemes

A comparison of the two vowel charts in Figure 2.1 and Figure 2.2 reveals that only the high vowels **i**, **ɨ** and **u** and the mid vowel **o** have pharyngealized equivalents. Contrasts between the vowels are illustrated by the minimal pairs in §2.3.2.

[7] Pharyngealized vowels are transcribed with the diacritic commonly used to transcribe breathy vowels (e.g. according to IPA conventions), namely two horizontally arranged dots below the vowel symbol as in ṳ.

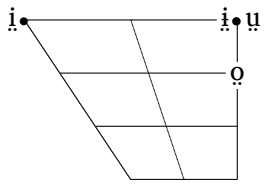

Figure 2.2: Inventory of pharyngealized vowel phonemes

2.3.1 Vowel phonemes and allophonic variation

2.3.1.1 Plain vowels

The vowel i The high unrounded front vowel **i** has a pronunciation that comes closest to IPA [i], but the tongue is raised higher than in IPA [i] and in most cases, the oral constriction is so small that the vowel is realized with friction, which can also affect preceding consonants. Examples of words containing the vowel **i** are **dʒǐ** 'dog', **tǐ** '(his/their) father' and **ʃī** 'fowl, chicken'. The friction usually starts off as affrication of the consonant preceding the vowel and fades into a more or less fricative vowel. In fact, the affrication or spirantization of the preceding consonant is often a more prominent clue for the vowel **i** than its actual vowel quality.

The behavior of verb stems containing the vowels **i** and **u** with regard to perfective vs. imperfective vowel alternations, as opposed to that of verb stems containing **ɪ** and **ʊ**, supports the hypothesis that the friction should indeed be analyzed as a feature of the vowel rather than of the consonant preceding it.

. While the high vowels **i** and **u** in perfective stems are replaced by the pharyngealized vowels **i̤** and **ṳ** in the imperfective when they occur in syllable-final position, the [-ATR] vowels, **ɪ** and **ʊ** do not change in the imperfective form.

The vowel ɪ The vowel **ɪ** is more centralized than the vowel **i**. It is reasonably close to IPA [ɪ]. Depending on the speaker, it has either about the same phonetic vowel height as the more tense **i** or is articulated with the tongue somewhat lower and closer to the mid vowel **e**. Its quality varies depending on the speaker. In Mundabli, the most reliable criteria for distinguishing **i** from **ɪ** is the friction which is commonly present in the tense vowel **i**, but absent in the more lax vowel [ɪ]. The phonological difference between **i** and **ɪ** is analyzed as a difference in tongue root position with **i** having the value [+ATR] and **ɪ** the value [-ATR]. Words containing the vowel **ɪ** include **tǐ** 'my/our father', **mǐ** 'sprinkle' (of water) and **ʃǐ** 'storm'.

The vowel ɨ The vowel **ɨ** is a high central unrounded vowel. Although it is more centralized than the back vowel **u**,[8] it is perceptually closer to the latter than to the front vowel **i** and probably corresponds phonetically to IPA [ɯ] rather than the more central IPA [ɨ]. The reason to choose the symbol **ɨ** rather than **ɯ** is discussed in §1.2.4. The vowel **ɨ** is analyzed as a [+ATR] vowel, in analogy with the other [+ATR] vowels, which also alternate with pharyngealized vowels in the imperfective. Examples of words containing the vowel **ɨ** are **gɨ́** 'put', **kpɨ́** 'die', **ndzɨ̀** 'sheep' and **dɨ́** 'be'.

The vowel u The vowel **u** is adequately represented by IPA [u] although, just like with the front high vowel **i**, the tongue is raised higher than in IPA [u] and the vowel is usually realized with friction which can cause affrication of a preceding consonant (just like with the front vowel **i**). It is sometimes difficult to hear the difference between [+ATR] **u** and [-ATR] **ʊ**. The main clue is the friction present in [+ATR] **u** but absent in [-ATR] **ʊ** rather than vowel height or quality. Words containing the [+ATR] high rounded back vowel are **kū** 'ratmole', **mù** 'take' and **tʃú** 'come'.

The vowel ʊ The high rounded back vowel **ʊ** corresponds to IPA [ʊ]. As mentioned in the previous section, it is sometimes difficult to distinguish from the [+ATR] vowel **u** while in other cases it resembles the mid vowel [+ATR] vowel **o**. Examples of words containing this vowel are **mʊ́** 'corner', **kʊ̄** 'bone' and **tʃʊ̄** 'iron'.

The vowel e The mid unrounded front vowel **e** can be adequately transcribed as IPA [e]. It is pronounced with a somewhat more raised tongue than IPA [e] and is perceptually close to the [-ATR] high front vowel **ɪ**. Examples of words containing **e** are **ŋkḗ** 'spoon', **tsè** 'pots' and **té** 'discuss'.

The vowel ɛ The mid unrounded front vowel **ɛ** is articulated lower than **e**, essentially like IPA [ɛ]. Examples of words containing **ɛ** are **kɛ̄** 'devil', **tsɛ́** 'foundation' and **tɛ́** 'collect honey'.

The vowel ə The mid unrounded central vowel **ə** is perceptually close to the low central vowel **a**. Nevertheless, it is more centralized and can be adequately transcribed as IPA [ə]. It is often difficult to distinguish from the low vowel **a** and sometimes also from **ɔ** when it occurs in an unstressed position, i.e. the preverbal subject pronoun **bɔ́** or determiners like **wɔ̄**, **kɔ́**, and so on. The following minimal pairs show that the distinction is indeed phonemic: **là** 'announce' vs. **lə̀** 'do' made' and **lɔ̀** 'go to the bush'. Examples of words containing **ə** are **gbə̀** 'body', **tsə̌** 'baboon' and **fə́** 'give'.

[8] Although the back vowels are all rounded, I do not see any advantage in calling them rounded rather than back vowels. The choice makes no difference for the current analysis.

The vowel æ The unrounded near-open front vowel **æ** sounds somewhat like the Standard British English vowel **æ** as in [bæd] 'bad', but towards the end the vowel is pronounced with friction. It is adequately represented by the IPA symbol [æ]. It is very rare. One example is **kǽ** 'back of head'. The near minimal pair **kɛ́** 'leg' vs. **kǽ** 'back of head' shows that **ɛ** and **æ** are distinctive.

The vowel a The unrounded open front vowel **a** is articulated to the front of the oral cavity. It can adequately be characterized as IPA [a]. In open syllables, the vowel **a** is commonly pronounced with some aspiration towards the end.

In closed syllables, the vowel **a** is pronounced longer than other vowels. There may be a length contrast in closed syllables which contain the vowel **a** and end in **m** or **n**, but the data suggest that the contrast is in vowel quality, i.e. specifically between the vowels **a** and **ə** and that the difference in duration is merely a phonetic effect. Examples for this contrast are **dzàm** 'grave' vs. **dzə̄m** 'back' and **ndə̀n** 'branches' vs. **n-də̀-n** 'see' (INF). Words which contain the vowel **a** are **bá** 'sheath', **tsà** 'mud' and **là** 'announce'.

The vowel o The vowel **o** is pronounced relatively close and can at times be hard to distinguish from the [-ATR] high back rounded vowel **ʊ**. The vowel corresponds to IPA [o] and is analyzed here as a [+ATR] mid back rounded vowel. A minimal pair involving the vowels **o** and **ʊ** is **bő** 'gall', 'bile' vs. **bű** 'ask'. More examples of words with **o** include **fő** 'hat', **cap**, **wő** 'traditional chalk' and **kó** 'cough' (v.).

The vowel ɔ The vowel **ɔ** is lower and more centralized than its [+ATR] equivalent **o**. It is also produced with less tension. It corresponds to IPA [ɔ]. The mid back vowels **ɔ** and **o** are usually easy to distinguish. It is sometimes difficult to distinguish between **ɔ** and **ə** on the one hand and between **ɔ** and the low rounded back vowel **ɒ**. The former is usually the case when the vowel occurs in less prominent syllables, as e.g. in the determiner (see also the paragraph on the vowel **ə**), especially in fast speech. In this case, **ɔ** can easily be mistaken for **ə**. Examples of words containing **ɔ** are **bɔ̀** 'bag', **Kɔ̄** 'Koshin' (a neighboring village) and **tsɔ́** 'witchcraft'. Also the distal demonstrative/determiner consists of the root **ɔ** which takes a prefix that agrees in noun class with the noun it modifies, as in **kɔ́** 'that' (CL7) or **wɔ̄** 'that' (CL2).

The vowel ɒ The vowel **ɒ** is a rounded back vowel and more open than **ɔ**. It is thus best represented by IPA [ɒ]. In my data, it only occurs in eight CV-shaped nouns. Some speakers pronounce it very similar to the mid vowel **ɔ** or the pharyngealized vowel **o̰**. Minimal pairs involving these vowels are **dzɔ́** 'mouths' vs. **dzɒ́** 'dew' and **bɔ̀** 'wing' vs. **bó̰** 'shoulder' (see also Table 2.12). A similar vowel has been reported for Aghem (Hyman 1979: 5-6)). Examples of words containing **ɒ** are **dzɒ́** 'dew', **kɒ́** 'forest' and **kpɒ́** 'money'.

One informant who has spent half of his life outside the village does not seem to distinguish between the low back rounded vowel **ɒ** and the pharyngealized vowel **o̰**. He instead pronounces both as **o̰**, e.g., the word **dzɒ̋** 'dew' is pronounced as **dző̰** by this speaker. For a few words, speakers also reported that there was variation between a pronunciation with **ɔ** and with **ɒ**. In the speech of some informants, the vowel **ɒ** has slightly diphthongal qualities. It may in fact be a diphthong or historically derived from one. Note that one speaker pronounced words containing **ɒ** with uvular friction after the vowel resulting in [ɒɣ], where others pronounce **ɒ**. This is interesting, especially as the neighboring variety Mufu usually has final (velar or glottal) stops where older Mundabli speakers use **ɒ**.

2.3.1.2 Pharyngealized vowels

The vowel ḭ The pharyngealized high unrounded front vowel **ḭ** comes close to what would be written [iˤ], following IPA conventions. While it is somewhat more centralized than **i**, sounding more like the [-ATR] vowel **ɪ** with an additional constriction in the throat (or more specifically in the pharynx area), its alternation with the [+ATR] high vowel **i** suggests that it is better represented by **ḭ** rather than **ɪ̰**. See §8.1.3 for details. At times, the vowel **ḭ** has a diphthongal quality with the place of articulation moving downward and backward, rendering [i͡əˤ].

The vowel **ḭ** is attested in two noun roots and three verb roots. Examples are **yḭ̌** 'ant, sp.', **tʃḭ̂** 'stir Akangwa soup' and **dzḭ́** 'travel'. It further occurs in the imperfective form of verbs which contain the vowel **i** in the perfective form. Some minimal pairs are **yí̋** (PFV) vs. **yḭ́** (IPFV) 'eat', **mî** (PFV) vs. **mḭ̄** (IPFV) 'swallow' and **ʃî** (PFV) vs. **ʃḭ̄** (IPFV) 'descend'.

The vowel ɨ̰ The pharyngealized high unrounded central vowel **ɨ̰** could be transcribed as IPA [ɨˤ]. It sounds like the mid vowel **ɨ** with a constriction in the pharynx area, only a bit more fronted. Note that the mid vowel **ɨ** has no [-ATR] equivalent.

The pharyngealized central vowel **ɨ̰** is neither found in noun stems nor in perfective verb stems. It is only attested in the imperfective form of CV-shape verbs whose perfective form contains the vowel **ɨ**. Examples are **gɨ́̋** (PFV) vs. **gɨ̰́** (IPFV) 'put, place' and **kpɨ́̋** (PFV) vs. **kpɨ̰́** (IPFV) 'die'.

The vowel ṵ The pharyngealized high rounded back vowel **ṵ** which could possibly be transcribed as [uˤ], following IPA conventions is more centralized, i.e. more fronted and lower, than its unmodified equivalent **u**. Additionally, there is a constriction in the back of the throat. It sounds somewhat like the IPA vowel **ʏ** with a constriction in the throat.

The vowel **ṵ** is found in seven nouns and six underived verb stems. Examples of **ṵ** in underived noun and verb stems are **dṵ̄** 'hole', **tsṵ́** 'banana' and **lṵ** 'bark' (v.). The vowel **ṵ** further occurs in the imperfective form of CV-shape

verbs which contain the [+ATR] vowel **u** in their perfective form. Examples are **tʃű** (PFV) vs. **tʃų́** (IPFV) 'come' and **gbù** (PFV) vs. **gbų̀** (IPFV) 'fall'.

The vowel ọ The pharyngealized mid rounded back vowel **ọ** could also be transcribed as IPA [oˤ]. It is more centralized than the [+ATR] mid back vowel **o** sounding more like IPA **œ** with a pharyngeal quality. Like in all pharyngealized vowels, there is a constriction in the pharynx area.

The vowel **ọ** is found in eight nouns and thirteen underived verb stems. Examples are **fọ̄** 'hair', **bọ́** 'shoulder' or **nọ̀** 'fight' (v.). The vowel occurs in an imperfective verb form only when it is also present in the perfective verb stem or when the vowel **o** in a CV-shape perfective verb stem is preceded by the labiovelar glide **w** (which may be phonetically realized as vowel [u]). Examples are **kwó** (PFV) vs. **kwọ́** (IPFV) 'enter' and **dwò** (PFV) vs. **dwọ̄** (IPFV) 'poison' (v.). For a detailed discussion of the perfective vs. imperfective verb stem alternation, see §8.1.3.

2.3.2 Minimal pairs

The selected (near) minimal pairs in Table 2.12 illustrate the phonemic contrast between the vowels in the inventory. Rather than comparing all vowel phonemes with each other, in this table, I only compare similar vowels. Verbs are given in the unmarked P0 tense unless otherwise specified (see §8.5.1 for more on tenses). The table contains minimal pairs for all (plain and pharyngealized) vowels.

vowels	examples	gloss	examples	gloss
i/ị	**fì**	'press'	**fị̄**	'press' (IPFV)
i/ɨ	**fì**	'press'	**fǐ**	'pass'
i/ɪ	**kǐ**	'his' (CL7;3SG.POSS)	**kǐ**	'our' (CL7-1PL.POSS)
i/e	**fì**	'press'	**fè**	'remove from fire'
ị/ɨ	**fị̄**	'press' (IPFV)	**fǐ**	'pass'
ị/ɪ	**yį́**	'eat' (IPFV)	**yǐ**	'eye'
ị/ị	**fị̄**	'press' (IPFV)	**fį́**	'pass' (IPFV)
ị/ụ	**fị̄**	'press' (IPFV)	**fụ̄**	'deceive' (IPFV)
ɨ/ɪ	**kpǐ**	'die'	**kpì**	'bend'
ɨ/u	**fǐ**	'pass'	**fù**	'raffia bamboo'
ɨ/ʊ	**fǐ**	'pass'	**fʊ̄**	'beans, sp.'
ị/ɨ	**fį́**	'pass' (IPFV)	**fǐ**	'pass'
ị/i	**fį́**	'pass' (IPFV)	**fì**	'press'
ị/ụ	**fį́**	'pass' (IPFV)	**fụ̄**	'deceive' (IPFV)
ɪ/e	**sɪ̀**	'dress'	**sè**	'laugh'
ɪ/ə	**kpɪ̀**	'shifter', 'winnow'	**kpə**	'burn'
e/ə	**kpè**	'pot'	**kpə**	'wife'
e/ɛ	**sè**	'laugh'	**sɛ̀**	'weed' (v.)

vowels	examples	gloss	examples	gloss
e/æ	**kḗ**	'fetch firewood'	**kǽ**	'occipital protruberance'
ɛ/æ	**kɛ́**	'leg'	**kǽ**	'occipital protruberance'
æ/a	**kǽ**	'occipital protruberance'	**kā́**	'fry'
u/ụ	**fù**	'raffia stem'	**fụ̀**	'deceive'
u/ʊ	**kù**	'clap'	**kʊ̀**	'cry'
u/o	**tú**	'scoop'	**tó**	'be smart'
ụ/ɨ	**fụ̀**	'deceive'	**fɨ́**	'pass'
ụ/ʊ	**fụ̀**	'deceive'	**fʊ̄**	'beans, sp.'
ʊ/o	**bʊ́**	'ask'	**bó**	'gall', 'bile'
o/ɔ	**tó**	'be smart'	**tɔ́**	'sting'
ọ/ɛ	**bọ́**	'shoulder'	**bɛ́**	'Abar' (a neighboring village)
ọ/ə	**kpọ̀**	'punch'	**kpə̀**	'burn'
ọ/o	**fọ̀**	'hair'	**fò**	'raffia stems'
ọ/ɔ	**fọ̀**	'hair'	**fɔ̄**	'head'
ọ/ɒ	**bọ́**	'shoulder'	**bɒ̀**	'wing'
ɔ/ɒ	**dzɔ́**	'mouths'	**dzɒ́**	'dew'
ə/a	**lə̀**	'do'	**là**	'announce'
ə/ɔ	**dzə̄m**	'back'	**dzɔ̄m**	'war'
a/ɒ	**kā́**	'fry'	**kɒ́**	'fold'

Table 2.12: Minimal pairs for vowels

2.3.3 Issues in vowel interpretation

In this section, a few unusual vowel characteristics are described in more detail.

2.3.3.1 Individual speaker variation in the phonetic proximity between high and mid vowels

One of the most difficult tasks regarding the perception and description of Mundabli vowels is to distinguish the [-ATR] high front and back vowels **ɪ** and **ʊ** from the [+ATR] high vowels **i** and **u** on the one hand, and from the [+ATR] mid vowels **e** and **o**, on the other. This may sound strange because it implies that the [-ATR] high vowels resemble the [+ATR] high vowels and the [+ATR] mid vowels at the same time.

However, this confusion can be explained by the unusual degree of individual speaker variation in the pronunciation of these vowels. While some speakers pronounce the [-ATR] high vowels **ɪ** and **ʊ** closer to the [+ATR] high

vowels **i** and **u**, others pronounce these closer to the [+ATR] mid vowels **e** and **o**. This was suggested by a comparison of vowel plots for several speakers and is reflected by nearly identical F1 and F2 values for the respective pairs (i.e., for **i** and **ɪ** and **u** and **ʊ**, respectively, for some speakers, and **ɪ** and **e** and **ʊ** and **o** for others).

Figure 2.3[9] contains a vowel plot of all plain vowels (to the exclusion of pharyngealized vowels) of one speaker. The vowels **ɨ** and **ɒ** are represented as **ɯ** and **ɔr** in the plot.

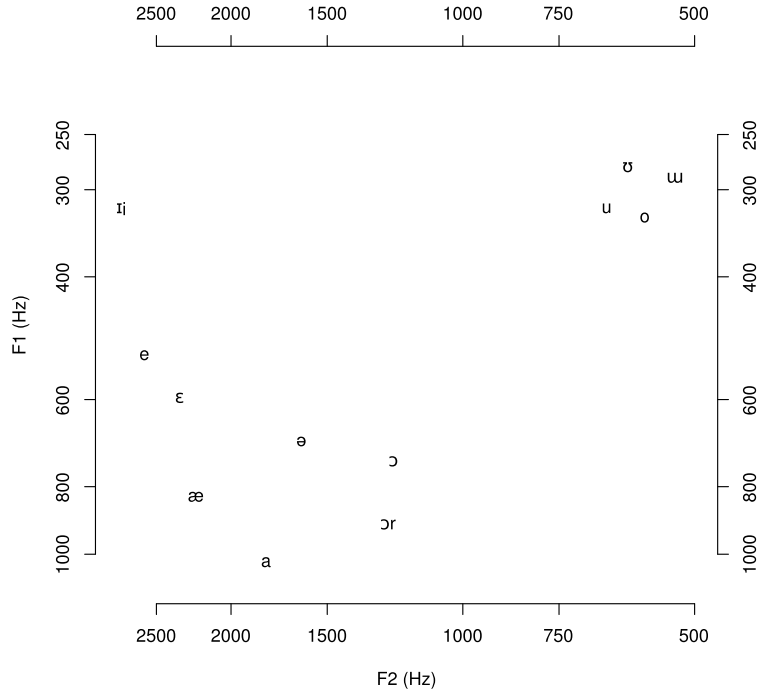

Figure 2.3: Vowel plot (speaker: Kemba Jacqueline Ntie)

The plot in image 2.3 is based on single utterances of open syllable words containing the relevant vowels, uttered by a female speaker (Kemba Jacqueline Ntie) in 2012. Clear and representative tokens were selected, although the values are not statistically relevant because they were taken from a single recording.

The plot confirms some of my intuitive judgements. At least in the chosen utterances, the high front vowels **i** and **ɪ** cannot be distinguished on the basis of their F1 and F2 values alone. I had a hard time learning to distinguish

[9]Thanks to Jesse Lovegren for creating this vowel plot.

between the two, and the distinction seems to be based on the presence vs. absence of friction more than anything else. The difficulty of distinguishing between the back vowels **u** and **ʊ** on the one hand, and **ʊ** and **o** on the other, are also reflected in their close proximity in the plot. The other vowels, which can be more easily distinguished from one another, are also further apart in the vowel plot.

2.3.3.2 Pharyngealized vowels: characteristics, distribution and origin

The existence of pharyngealized vowels has been reported for languages of several language families including Tungusic, Caucasian, Northern and Southern Khoisan (Ladefoged and Maddieson 1996: 306), but also for several Cameroonian languages including Mambay (Adamawa, Northern Bantoid, Niger-Congo, Anonby 2008) and Kwasio (Bantu (A80), Southern Bantoid, Niger-Congo, Duke and Martin 2012). The co-existence of an [ATR]-distinction on the one hand and pharyngealized vowels on the other, as attested for Mundabli, is unusual and might contribute new data to the theoretical discussion of pharyngealized vowels.

According to Ladefoged and Maddieson (1996: 306), pharyngealization involves active retraction of the tongue root. As Ladefoged and Maddieson (1996: 313) point out, [ATR], pharyngealized and strident vowels are characterized by some degree of pharyngeal narrowing and larynx raising and languages seldom use more than one of them. Mundabli seems to be one of the few exceptions to this tendency, having both a distinction in [ATR] and a distinction between plain vs. pharyngealized vowels. I am not aware of any other language which makes both of these distinctions.[10]

Pharyngealized vowels are predominantly found in the imperfective form of verbs, but also in a few underived verb and noun stems. The perfective vs. imperfective verb stem alternation comprises a vowel alternation in which a plain [+ATR] high vowel (**i**, **ɨ** or **u**) in the perfective verb form alternates with a pharyngealized vowel (**i̪**, **ɨ̪** or **u̪**, respectively) in the imperfective form if it occurs in an open syllable, as in **yí** (PFV) vs. **yí̪** (IPFV) 'eat', **tʃú** (PFV) vs. **tʃú̪** (IPFV) 'come' and **fĩ** (PFV) vs. **fɨ̪́** (IPFV). Notably, [-ATR] vowels do not take part in the alternation. While the alternation of [+ATR] high vowels with pharyngealized vowels is systematic, the picture becomes more complicated for non-high vowels due to the existence of the pharyngealized mid vowel **o̪**, which does not correlate with a plain vowel as clearly as the other pharyngealized vowels (see §3.3.5 for details).

There are two important restrictions on the occurrence of pharyngealized vowels: they are only found in lexical items and they are restricted to open syllables. Pharyngealized vowels are most commonly found in derived imper-

[10] Ladefoged and Maddieson (1996: 313) propose !Xóõ, a Southern Khoisan language which distinguishes plain, pharyngealized and strident vowels but lacks an [ATR] distinction, as a counterexample to the rule. They admit that "the most suitable phonological parameters to use in describing these vowels were not clear to [them]" at the time of writing.

fective verb forms. They are only sporadically attested in nouns and underived verb stems such as **bǫ̆** 'gorilla', **dzi̯** 'travel', **yĭ̯** 'ant (sp.)' and **dų̄** 'hole'.

While pharyngealized vowels have been attested in other Cameroonian languages, Mundabli is the only language with pharyngealized vowels in the immediate area (i.e., Lower Fungom and beyond). It is therefore not likely that the pharyngealized vowels have entered the language through contact. Instead, at least two factors point to their relatively recent emergence under the influence of a velar or glottal coda consonant and subsequent loss of that coda consonant. These factors are the presence of velar or glottal coda consonants in cognates in the related varieties Mufu and Buu (see §1.1.4 for more on these varieties and their relation to Mundabli; note that Mundabli allows obstruent codas only in ideophones) and the restriction of pharyngealized vowels to CV syllables.

Pharyngealized vowels are attested in two contexts: they occur in a few noun and verb stems of CV-shape and the imperfective form of a verb is derived from the perfective form by pharyngealizing the stem vowel under certain circumstances (stem vowels **i**, **i̯**, **u** and sometimes **o**, and a CV-shaped verb stem, see §8.1.3 for details). In both contexts, the pharyngealized vowel in Mundabli correlates with a closed syllable ending in a velar or glottal stop in Mufu.[11]

When a Mundabli noun or verb stem contains a pharyngealized vowel, its Mufu cognate generally ends in a velar or glottal stop. Thus, for example, the word for 'banana' is **tsų́** in Mundabli but **cuk**[12] in Mufu.

In the case of imperfective verb forms, there is also a correlation. While in Mundabli the imperfective verb form is derived from the perfective form by pharyngealizing the stem vowel (under the given circumstances), the imperfective verb form in Mufu is marked by the suffix **–k**.[13]

While all these facts seem to suggest that Mundabli pharyngealized vowels in their current form have developed due to the influence of syllable-final **k** or **q** and subsequent loss of that final consonant, this scenario is hypothetical and more research (on both varieties as well as on Buu) is needed to determine what exactly was the historical scenario which led to the emergence of pharyngealized vowels in Mundabli.

Apart from my own preliminary investigations, practically no research has been done on Mufu. Issues which should be investigated in the future are e.g., whether the imperfective suffix in Mufu is also used with closed syllable verb stems, and whether it can co-occur with all stem vowels or whether its co-occurrence is restricted to a few stem vowels, like pharyngealization in Mundabli. An imperfective suffix **-kə** is also attested in Buu.[14] The imperfec-

[11] Note that Mufu, unlike Mundabli, allows non-sonorant syllable codas.

[12] The symbol **c** represents a voiceless palatal stop. Tone is not marked in Mufu examples. Coda stops in Mufu are usually unreleased.

[13] The Mufu imperfective suffix is probably a reflex of the common Bantu marker **–a(ŋ)g-a** (IPFV) (Nurse and Philippson 2006: pp.190-192)

[14] This information is based on my own fieldwork and on an MA thesis on Buu phonology (Ngako

tive suffix **-kə** in Buu co-occurs with both open and closed syllables. I am not aware whether it co-occurs with all stem vowels or not.

2.4 Phonotactics

Mundabli has twenty-two consonant phonemes and seventeen vowel phonemes organized in syllables. Most words consist of a single syllable. This section contains a description of the syllable structures attested in stems and non-lexical items (including affixes) (§2.4.1), it deals with distributional restrictions on consonants (§2.4.2) and with possible CV sequences (§2.4.4), and it also contains sections on the phonotactics of ideophones (§2.4.5) and on loanword adaptation (§2.4.6).

2.4.1 Syllable structure

Mundabli has four syllable types: (N)C(G)V, (N)C(G)VC, V and N. The only coda consonants attested are the nasals **m**, **n** and **ŋ** and the lateral aproximant **l**. In order to describe the syllable adequately one must distinguish between lexical stem syllables and non-stem syllables (syllabic prefixes and suffixes, clitics and function words).

Most lexical stems are monosyllabic, so that in most cases the stem syllable is identical with the whole stem. The following syllable structures are attested in stem syllables: (N)C(G)V and (N)C(G)VC. Stem syllables always have an onset. This onset may consist of a consonant or one of the attested consonant clusters, i.e. a nasal consonant sequence, a consonant glide sequence or a combination of the two. Onset consonants in stem syllables are not restricted, i.e. any consonant or any attested consonant cluster can form the onset of a stem syllable. However, homorganic NC sequences and CG sequences are prevalent stem-initially. Unlike the range of onset consonants, the range of attested coda consonants is very restricted. Coda nasals are far more common than the liquid **l** which is only found in a few stems, e.g. **bwól** ‘dust’, **fyǐl** ‘whirlwind’, **mà̄l** ‘slide’ (v.) and **bű̄l** ‘castrate’. Younger speakers (up to the age of around forty) drop the final **l** in certain CVl words. In this case, the vowel in the resulting open syllable is usually more closed than in the original syllable with a coda **l**. Examples are **bwɛ̀l**∼**bwɛ̀** ‘calabash used as oil container’ and **tà̄l**∼**tɛ̀** ‘pull’. All vowels are attested in stem syllables.

Non-stem syllables, i.e. syllables in prefixes, suffixes, clitics and function words are subject to other restrictions than stem syllables. In non-stem syllables, only the syllable patterns CV, V and N are attested. Consonant clusters are not attested at all. Unlike stem syllables, non-stem syllables may lack an onset, such as e.g. the preverbal negative marker **ā** or the locative marker **ǐ́**. A non-lexical syllable may also consist of a nasal only, as in the case of the

Yonga 2013).

preverbal first person singular pronoun clitic which consists of a nasal, homorganic with the first element of the verbal core (i.e. either the verb or a TAM marker, see Chapter 8 for more on the verbal core) and which can be syllabic and bear a superhigh tone under certain circumstances, as in the following example: **ŋ̋=kà kʊ̀** 'I cried.' (P3); see also §6.1.

The syllable-structure of syllables in ideophones, interjections and unintegrated loans may diverge from those described above. For more on ideophones, loanwords and interjections, see §2.4.5, §2.4.6 and §10.7, respectively.

2.4.2 Distributional restrictions on consonants

This section deals with the distributional restrictions on the two most restricted consonants, the velar nasal **ŋ** (§2.4.2.1) and the palatal nasal **ɲ** (§2.4.2.2).

2.4.2.1 Distributional restrictions on the velar nasal ŋ

The velar nasal **ŋ** is frequently attested as syllable rhyme. It is also commonly found in stem-initial NC sequences, preceding a homorganic velar stop (as in e.g., **ŋgə̄** 'quarter head' and **ŋkáŋ** 'salt'). However, it rarely constitutes an onset on its own. Syllable-initial **ŋ** without a subsequent velar stop is only found in three words. Only in one of these, **ŋà** 'boast', **ŋ** alone constitutes the onset. In the other two cases, **ŋ** is followed by a labial glide: **ŋwà** 'write' and **ŋwǎŋ** 'xylophone'. In functional items, syllable-initial **ŋ** is not attested at all.

2.4.2.2 Distributional restrictions on the palatal nasal ɲ

The palatal nasal **ɲ** is restricted to stem-initial position; it is thus neither attested in the onset of non-stem syllables nor in coda position. It can either constitute an onset on its own, as in **ɲū** 'field' and **ɲām** 'fufu', or it can be part of a syllable-initial consonant cluster, in which case it can be followed by a labial glide within a consonant glide sequence (e.g., **ɲwé** 'fields' and **ɲwáǹ** 'beg'), or a homorganic obstruent (e.g., **ɲdʒà̀n** 'Mundabli' and **ɲtʃé** 'armpit').

2.4.3 Restrictions on VC sequences

As pointed out in §2.4.1, only the nasals **m**, **n** and **ŋ** and the lateral approximant **l** are attested as coda consonants. Table 2.13 shows which vowels cooccur with which of the attested coda consonants and where there are gaps. Vowels are given in the first row, coda consonants are given in the first column. Sequences marked by a checkmark are attested, those marked with a hyphen are not.

Except for the vowel **o̰**, pharyngealized vowels are restricted to open syllables. The vowel **o̰** is attested before coda **m** in a handful of words, including

	i	i̤	ɨ	ɨ̤	u	ṳ	ɪ	ʊ	e	o	o̤	ɛ	ɔ	æ	ə	a	ɒ
m	-	-	✓	-	-	-	✓	✓	-	✓	✓	✓	✓	-	✓	✓	✓
n	✓	-	✓	-	-	-	✓	✓	✓	-	-	✓	✓	-	✓	✓	-
ŋ	-	-	✓	-	-	-	✓	✓	-	-	-	✓	✓	-	✓	✓	-
l	-	-	-	-	-	-	-	✓	-	-	-	✓	-	-	✓	✓	-

Table 2.13: Possible combinations of vowels and coda consonants

dọ̄m ‘cure’, **nǫ̋m** ‘bite’ and **wǫ̋m** ‘shout’. While [-ATR] vowels such as **ɪ**, **ʊ**, **ɛ** and **ɔ** are commonly attested in closed syllables and can be followed by all coda consonants, the [+ATR] vowels **i**, **u**, **e** and **o** are only rarely attested in closed syllables. Examples are **nswēn** ‘friend’ and **twòm** ‘stomach’.

As shown above, not all combinations of vowels and coda consonants are attested. In fact, the set of vowels that can be combined with a particular coda consonant varies strongly. For example the range of vowels which are attested before coda **l** is very restricted (see below). In its degree of co-occurrence restrictions, **l** is followed by the velar nasal **ŋ** which can only be preceded by the following vowels: **ɨ**, **ɪ**, **ʊ**, **ɛ**, **ɔ**, **ə** and **a**. Finally, **m** and **n** show the least restrictions. Coda **n** can be preceded by **ɨ**, **ɪ**, **ʊ**, **ɛ**, **ɔ**, **ə** and **a**, like **ŋ** and in addition by **e**. Coda **m** can be preceded by **ɨ**, **ɪ**, **ʊ**, **ɛ**, **ɔ**, **ə** and **a**, like **ŋ** and **n** and additionally by **o**, **ɒ** and **o̤**. Notably, the mid high vowel **ɨ**, which seems to have the status of a [+ATR] vowel, is attested before all coda nasals, unlike the other [+ATR] high vowels **i** and **u**, whose occurrence in closed syllables is very restricted.

kwâl∼kwé	‘rat, sp.’
nwǎl	‘hippopotamus’
bwúl	‘dust’
wúl	‘beige’
kwə̌l	‘crocodile’
kwə̀l	‘sacred grove’
bwɛ̄l∼bwɛ̄	‘calabash used as oil container’
mbyíl	‘feces’
fyǐl	‘whirlwind’
fǐl	‘wisdom’
màl	‘slide’
sál∼sé	‘be hot’, ‘heat (up)’
tàl∼tɛ̀	‘pull’
yíl	‘be black/blue/green’
yì̀l	‘tickle’
búl	‘castrate’

Table 2.14: CVl words

As mentioned above, the range of vowels which can occur in CVl-syllables is especially restricted. However, the small number of vowels attested in CVl-syllables may be due to the small number of words (or syllables) ending in a lateral approximant. Only the vowels **a**, **ə**, **ɛ** and **ʊ** are attested before coda **l**. Table 2.14 contains all words ending in **l**. The loanword **skûl** 'school' is not listed in the table because it is an unadapted loanword.[15]

2.4.4 Restrictions on CV sequences

While the range of segments which can form a syllable coda is very restricted (see §2.4.1), the onset of a syllable can be represented by any of the attested consonants or consonant sequences. However, not all onset consonants can co-occur with all vowels. Table 2.15 shows which consonant-vowel sequences are attested and where there are gaps. Vowels are found in the first row and the onset consonants which precede them are found in the first column. Combinations marked with a checkmark are attested, those marked with a hyphen are not attested. Table 2.15 contains only simple onsets; at least some of the gaps may be accidental.

2.4.4.1 Neutralization of alveolar and alveo-palatal sibilants and affricates before the vowels i and u

The alveolar sibilants and affricates **s**, **ts** and **dz** generally do not precede the [+ATR] high vowels **i** and **u**; see Table 2.15. Instead, the alveo-palatal sibilants and affricates (**ʃ**, **tʃ**, **dʒ**) are commonly attested before these vowels, e.g. in **ʃī** 'market', **tʃű** 'come' and **dʒǔ** 'goat'. Thus, there seems to be a strong tendency to neutralize the opposition between alveolar and alveo-palatal sibilants in the given context. In other contexts, the distinction between alveolars and alveo-palatals is contrastive and thus phonemic. Due to the general lack of segmental morphology in Mundabli, no active process of alternation between alveolar and alveo-palatal consonants can be observed. While neutralization before **i** and **u** is the rule, my data contain two words in which an alveolar affricate precedes the [+ATR] high vowel **u**, namely **tsű** 'slap' and **tsú** 'contribute'.

2.4.5 Phonotactics of ideophones

The phonological structure of ideophones differs from that of both lexical and function words in several aspects including their syllable structure, their number of syllables and the occasional prolongation of segments. Ideophones may

[15] While the word also exists in Mundabli in a phonotactically more adapted shape, **ʃùkúlù**, younger speakers prefer the less adapted form **skûl** which is closer to the Standard English pronunciation. It is unknown whether the older word was originally borrowed as **ʃùkúlù** from an earlier version of Cameroon Pidgin or whether its phonotactics were adapted when it was borrowed (whether from Pidgin or from a neighboring language). See §2.4.6 for more on loanword adaptation.

	i	ɨ	u	ɪ	ʊ	e	o	ɛ	ɔ	æ	ə	a	ɒ	i̤	ɨ̤	ṳ	o̤
b	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	✓	✓
t	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	✓	✓
d	✓	✓	-	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
k	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-
g	✓	✓	✓	-	✓	✓	-	✓	✓	-	✓	✓	✓	-	✓	-	-
kp	-	✓	✓	✓	-	✓	-	-	✓	-	✓	✓	✓	-	✓	-	✓
gb	-	✓	✓	✓	✓	✓	-	✓	✓	-	✓	✓	-	-	-	-	-
ts	-	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
dz	-	✓	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-	✓
s	-	✓	-	✓	✓	✓	-	✓	✓	-	✓	✓	-	-	-	✓	-
tʃ	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	✓	-	✓	-
dʒ	✓	✓	✓	✓	✓	-	-	✓	✓	-	✓	✓	-	✓	-	-	-
ʃ	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-	✓	-	✓	-	-	-
f	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
m	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓	-	✓	✓
n	✓	✓	-	✓	-	-	✓	✓	✓	-	-	✓	-	-	-	-	✓
ɲ	-	✓	✓	✓	-	-	-	✓	✓	-	✓	✓	✓	-	-	-	-
ŋ	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
l	✓	-	✓	✓	✓	-	✓	✓	✓	-	-	✓	-	-	-	✓	-
w	-	-	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-	-	-	✓	✓
y	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓	✓

Table 2.15: Restrictions on consonant-vowel sequences (only simple onsets)

also contain segments which are not part of the regular phoneme inventory. Ideophones are treated in detail in §10.5.

Unlike other words, ideophones and unadapted loanwords allow coda consonants other than **m**, **n**, **ŋ** or **l** (see also §2.4.6). Final obstruents are attested exclusively in monosyllabic ideophones, such as **kpà?** 'sound of grabbing' and **kăt** 'showing that something is completely finished or destroyed'. Coda stops generally do not have an audible release.

Furthermore, ideophones frequently involve multiple reduplication and, unlike other words in the language, are often polysyllabic. Examples of such polysyllabic ideophones in the following utterances are underlined:[16] ◇**dzīŋ yɔ̄ myă áná wɔ̌ŋwɔ̌ŋwɔ̌ŋ(...)** 'Heavy rain is falling continuously.' and ◇**ŋkā mɔ́ mùbò áná tsàtsàtsà** 'That corn beer tastes awful.'. Cases of multi-syllabicity aside from reduplications commonly occur in sound imitation, often in combination with reduplication, such as e.g., ◇**ɲáŋkáŋkèŋkèŋkèŋ** 'call of bush fowl (**ɲăŋ**)'.

In order to add emphasis and make the conversation more lively, syllable rhymes in ideophones can be prolonged. This happens primarily in monosyl-

[16] The diamond marks elicited examples.

labic ideophones. In open syllables, the vowel is extended, as e.g. in ◇**kī dʒī áná dʒűűűűűű** 'It was really cold.' or ◇**nɨŋ kɔ́ yíl áná fììììì** 'That thing is pitch-black.'. In closed syllables, a final sonorant can be drawn out, as in ◇**wē bán áná ŋàŋŋŋŋ** 'The sun is burning down.'.

Finally, ideophones may exhibit sounds which are not part of the general phoneme inventory, such as the voiceless labial plosive **p**, as in **tấp∼pấp** 'showing that something is full up to the rim', or the glottal stop **ʔ**, as in **kpàʔ** 'sound of grabbing'.

2.4.6 Loanword adaptation

Loanwords are adapted to Mundabli phonotactics to varying degrees. In some cases, different forms of the same loanword which are adapted to different degrees co-exist in the language, as in the case of the word for 'school' which has various realizations: **skul∼skulu∼ʃukulu**. In fact, there are two more, probably older words for school, namely **ŋwàtɨ** (same as 'book') and **tấkèdā** (from Hausa *takàr̃dā* 'paper').[17] The choice of a variant depends on various factors such as speakers' age and level of education. This section is divided into loans from English and Cameroon Pidgin on the one hand, and loans from other languages on the other. However, I am much more familiar with English and Pidgin than with the other source languages (except for French) and I therefore do not say much about loanwords from other languages. More research is needed to identify loans from other local languages or to exactly determine when and how loans words made it into the language.

2.4.6.1 Loans from English and Cameroon Pidgin

For most if not all loanwords with English cognates, it is hard (if not impossible) to tell whether a loanword has been borrowed from English (locally known as 'grammar') or from Cameroon Pidgin, or whether it has been adopted from a neighboring language which had already borrowed the term from one of the two and then passed it on. Thus, it is in fact unclear to what extent the difference between the loanwords and their original sources is really due to loanword adaptation in Mundabli, and to what extent changes had happened before the words entered the language. In the remainder of this section, the changes are described assuming they were due to direct adaptation of English words to Mundabli phonotactics. Adaptation strategies include elimination of consonant clusters and obstruent-final syllables and replacement of foreign segments. The loanword **kěʃîmân** 'Christmas' illustrates various strategies of loanword adaptation, see sections below.

[17] Some of the loans whose ultimate source is assumed to be Hausa also exist in Fulfulde. Translations are taken from Newman (1990). The Hausa words are written in the standard Hausa orthography: <ā> denotes a long /a/, only low tones are marked, and unmarked tones are high.

Avoidance of consonant clusters Consonant clusters other than syllable-initial nasal consonant and consonant glide sequences do not exist in Mundabli. Therefore, they are usually eliminated in loanword adaptation, e.g. by means of consonant deletion or vowel epenthesis. An example for this is the word **kɛ̌ʃìmân** 'Christmas'. The **r** in the first syllable of 'Christmas' was deleted in order to avoid an onset cluster. In the more conservative pronunciation **ʃukulu** 'school' a vowel is inserted between the two initial consonants in order to break up the initial **sk** cluster. However, many younger speakers use less adapted forms like **skulu** or **skul**. In the words **fɛn** 'fence' and **dzîŋ** 'zinc' the final consonants, **s** and **k**, respectively, are deleted to avoid clusters in the coda.

Avoidance of obstruent-final syllables Various strategies are employed to avoid closed syllables. In the example **kɛ̌ʃìmân** 'Christmas' for example, two different strategies are used. The obstruent coda of the initial syllable of the word 'Christmas' is turned into the onset of a new syllable by means of vowel epenthesis. The obstruent coda **s** of the final syllable on the other hand is simply replaced by the sonorant **n**, resulting in a well-formed CVN syllable. In the pronunciations **ʃukuru** and **skulu** for 'school', a vowel is inserted in final position, resulting in an open syllable even though native words may end in the liquid **l**.

Replacement of foreign segments The third strategy for loanword adaptation is the replacement of alien segments with native ones. An example is the word **dzîŋ** 'zinc' in which the voiced fricative **z**, which is not part of the Mundabli inventory, is replaced by the voiced affricate **dz**.

2.4.6.2 Loans from languages other than English or Cameroon Pidgin

I cannot say much about the grade of adaptation of loans from languages other than English or Cameroon Pidgin, because I do not know enough about their original forms in the source languages and, in many cases, I may not even be aware that they are loanwords. The few examples I am aware of do not violate Mundabli phonotactics. Among these are **nāsɛ̄** 'white person' (orig. *nàsāřa*, Hausa) and **nănáá** 'pineapple' (orig. *ananas*, French). While the latter two loanwords have lost a syllable in the process, it is not known whether this happened when they were integrated into Mundabli or in another language from which they were then borrowed into Mundabli.

Another example is one of the words for school, **tấkèdā** (from Hausa *takàř-dā* 'sheet of paper, letter, book'). It is unclear whether this word was borrowed directly from Hausa or whether it was borrowed from another local language which may have borrowed it from another local language (possibly several times in turn) after it was borrowed from Hausa. And even if it was directly borrowed from Hausa, it is unclear which dialect form was borrowed.

CHAPTER 3

Morphophonology and phrasal phonology

In order to look at morpheme structure constraints, morphemes are subdivided into lexical stems, affixes and function words. Given the general lack of segmental morphology, the number of morphophonological alternations in Mundabli is comparatively small. However, morphophonological alternations may not only apply within words (§3.3) but also across word boundaries (§3.4). The remainder of this chapter deals with various aspects of morphophonology and phrasal phonology. Section 3.1 describes the phonological structure of morphemes, §3.2 deals with the interaction of morphology and tonal phonology, §3.3 deals with phonological alternations which apply when morphemes combine to form words, and §3.4 deals with phonological processes which work across word boundaries.

3.1 Morpheme structure constraints

Phonotactic patterns of words depend on their morphological structure. In order to describe them adequately, it is not enough to refer to phonological domains, such as the foot or the syllable. One has to refer to morphemes, morpheme types and type-specific morpheme structure constraints.[1] A comparison of the different morpheme types in Mundabli shows that lexical roots, affixes and function words are subject to different morpheme structure constraints, i.e. each of the three has a specific phonological make-up and specific phonotactics. Thus, while e.g. NC and CG clusters are frequently attested in stem-initial position (§3.1.1), they are completely absent from affixes (§3.1.2)

and function words (§3.1.3). This section describes the phonological structure of the three in turn.

3.1.1 Structure of lexical roots

The great majority of lexical roots are monosyllabic. The structure of nominal and verbal roots is nearly identical, although the two show different tonal behaviour (see §3.2). Root-syllables follow the template (N)C(G)V(S), where N represents a nasal homorganic with C, C representing any consonant, G represents a glide, and S represents a syllable-final sonorant (**m**, **n**, **ŋ** or **l**). Root syllables always have an onset and they may have a coda, too. Morpheme structure constraints applying to lexical roots may affect the root-initial onset (§3.1.1.1), the root-final coda (§3.1.1.2) or the core vowel (§3.1.1.3).

3.1.1.1 Root-initial position

All consonants are attested in root-initial position, either on their own, as in the examples in Table 3.1, or in combination with a homorganic nasal, a glide or both. In fact, tautomorphemic consonant clusters are restricted to root-initial position. They are not attested in affixes or function words.

Table 3.1 contains examples of nominal and verbal stems beginning with the different consonants. Verbs are given in their perfective form unless marked otherwise. Table 3.2 contains some examples of root-initial (N)CG sequences. For exhaustive lists of root-initial CG and NC sequences with examples, see §2.2.3 and §2.2.4, respectively.

Whereas nominal and verbal stems are otherwise identical in structure, initial NC sequences are restricted to nominal stems. Verbs never start in a tautomorphemic NC sequence. A few examples of nouns starting in an NC(G) sequence are provided in Table 3.3.

[1]The term ‘morpheme structure constraints’ is inspired by Booij (2011), but is used here in the literal sense, i.e. to refer to constraints on the phonological structure of morphemes.

consonants	examples	gloss
t	**tàn**	‘fly’
k	**kấ**	‘fry’
kp	**kpā**	‘shoe’
b	**bá**	‘sheath’
d	**dấn**	‘rhizome’
g	**gấ**	‘be(come) fat’
gb	**gbàn**	‘in-law’
f	**fá**	‘cut hair’
s	**sấ**	‘defecate’
ʃ	**ʃàn**	‘grass’
ts	**tsà**	‘mud’
tʃ	**tʃàŋ**	‘cackle’
dz	**dzān**	‘mosquito’
dʒ	**dʒàn**	‘connect’
m	**mấn**	‘name’
n	**nàn**	‘wear’
ɲ	**ɲà**	‘hurt’
ŋ	**ŋà**	‘boast’
l	**là**	‘announce’
y	**yà**	‘intestines’
w	**wá**	‘saw’ (n.)

Table 3.1: Stem-initial consonants

examples	gloss
dzwɔ̀ŋ	‘garden egg’
kwɔ̀ŋ	‘snore’
fyàŋ	‘canine’
kyēn	‘soul’
dʒwăn	‘star’

Table 3.2: Examples of stem-initial CG sequences

examples	gloss
mfɔ̀	‘slave’
mbɔ̀ŋ	‘cow’
ndām	‘tear(s)’ (n.)
ŋkăŋ	‘oath’
ŋkwīn	‘mountain’
ŋgyâ	‘traditional shelf’
ŋgwɛ̄n	‘elephant grass’
ŋmgbɛ̀	‘upper grinding stone’

Table 3.3: Examples of stem-initial NC(G) sequences

3.1.1.2 Root-final coda position

Tautomorphemic closed syllables are only found in lexical roots. All coda consonants, i.e., the nasals **m**, **n** and **ŋ** and the lateral glide **l** are attested in root-final position. Examples of lexical roots consisting of a closed syllable are **màl** 'slide' (v.), **bɔ̀m** 'antelope', **dʒwǎn** 'star' and **mbɔ̀ŋ** 'cow'. For more examples of closed syllable roots, see §2.2.1.4 and the comprehensive list of CVl roots in Table 2.14.

3.1.1.3 Root-vowels

The range of vowels attested in lexical roots exceeds the range attested in prefixes and function words. All attested vowels and vowel combinations can be found in roots. For restrictions on the co-occurrence of root-vowels with the different coda consonants, see §2.4.3. For examples of lexical roots with all attested vowels, see §2.3.1. Pharyngealized vowels are restricted to lexical items.

3.1.2 Structure of affixes

Mundabli has almost exclusively prefixes. Only the infinitive marker can be realized either as prefix **N-** or as circumfix **N-…-n**, depending on the structure of the verb (see §3.1.2.3 for details). Prefixes may consist of a consonant or of a CV syllable. Only the Class 6 and Class 18 prefixes have the shape CVN (for details, see §3.1.2.1). In the current section, affixes are subdivided into syllabic and non-syllabic prefixes. Special sections are devoted to the infinitive marker **N-…(-n)** and the clitical first person singular preverbal pronoun **N=**.

3.1.2.1 CV(N)- prefixes

Prefixes of the shape **CV(N)-** include noun class markers, such as the Class 19 prefix **fì-** in **fìdʒǐ** 'little dog' or the Class 6 prefix **mùN-** in **mùŋgī** 'a little bit of water'.[2] Concord markers on adjectives and numerals also have the shape **CV(N)-** (see §4.2 for an overview).

CV(N)- Prefixes always have simple onsets. The following consonants are attested initially in prefixes: **b**, **f**, **k**, **m**, **w**, **y**. Thus, the range of initial consonants attested in prefixes is much smaller than the range for lexical roots.

The range of vowels attested in prefixes is also more restricted than that in lexical roots. Not only are pharyngealized vowels completely absent from prefixes, but the range of simple vowels attested in prefixes is also very restricted. Only the vowels **i**, **u**, **ɔ** and **ə** are attested.

The prefix-final nasal which is only found in Class 6 and 18 prefixes is integrated into the onset of the first root syllable upon prefixation.

[2] Compare **ŋgī** 'water' without diminutive.

3.1.2.2 Non-syllabic prefixes

CV noun class prefixes drop their vowels when they are prefixed to vowel initial roots, such as the demonstrative roots **-ɛn** 'this' and **-ɔ** 'that' or non-first person pronouns. Examples are **níŋ k-ɔ́** 'that thing' (CL7), **gbɔ̄ w-ɛ́n** (CL3) 'this house' and **wān w-ɔ̄** 'that child' (CL1). The concord prefix also bears a specific tone which determines the tone of the resulting demonstrative/determiner. A more detailed discussion of consonantal concord prefixes is found in §5.2. Table 3.4 gives an overview of consonantal prefixes.

noun class	prefix	proximal demonstratives
1	**ẁ-**	**wɛ̄n**
2/8	**b-**	**bɛ́n**
3(/5)	**w-**	**wɛ́n**
4/10	**y-**	**yɛ́n**
(6/)7	**k-**	**kɛ́n**
8/2	**b-**	**bɛ́n**
9	**ỳ-**	**yɛ̄n**
19	**f-**	**fɛ́n**
6a/18a	**m-**	**mɛ́n**

Table 3.4: Consonantal agreement in demonstratives

The consonants of these consonantal prefixes are the same as those of **CV**-shaped concord prefixes.

3.1.2.3 The infinitive marker N-...-n/ N-

Apart from its specific tone pattern, the infinitive is characterized by a nasal infinitive affix which is realized either as a homorganic prefix **N-** or as a circumfix **N-...-n**. The vowel quality of the stem syllable and the presence vs. absence of a stem-final coda determine the shape of the affix. The criteria which condition the preference of the prefix over the circumfix are the same as those which condition ablaut in imperfective verb stems, see §3.3.5. The resulting imperfective stems usually do not meet the criteria for the use of the circumfix and instead take the homorganic prefix in the infinitive. Infinitives based on verbs of tone class B and C are realized with a ML falling tone, while verbs of class A are realized with a low tone (L), no matter whether the infinitive is based on the perfective or on the imperfective stem form.

In principle, both perfective and imperfective stem forms can serve as a base for the infinitive. However, the distinction between perfective and imperfective only surfaces in verbs which undergo ablaut in the imperfective. For all other verbs, the purely tonal distinction between perfective and imperfective is neutralized in the infinitive for which the tone pattern depends only on the tone class of the verb which forms its base, not on its aspectual form.

Regarding the criteria which determine the choice between prefix and circumfix, the circumfix is only used with verb stems which end in **i**, **ɨ**, **u**, **ə** or **ɔ** or in one of the sequences **wo** or **ye**, as exemplified by the infinitive forms in Table 3.5. It is never used with closed syllable stems. The lower case letters behind the translations in this and the following table represent the three verb tone classes (A, B and C) (see §2.1.3).

perfective	infinitive	gloss
yǐ	**ɲ-yì̀-n**	'eat' (b)
kpǐ	**ŋm-kpɨ̀-n**	'die' (b)
ku	**ŋ-kù-n**	'clap' (a)
kwó	**ŋ-kwɔ̀-n**	'enter' (c)
myé	**m-myɛ̀-n**	'lick' (c)
tʃyé	**ɲ-tʃyɛ̀-n**	'know' (c)
tsɨ́	**n-tsɨ̀-n**	'copulate' (c)
yə́	**ɲ-yə̀-n**	'climb' (c)
də̀	**n-də̀-n**	'see' (a)
yì̀	**ɲ-yì-n**	'bury' (a)
tsɔ̀	**n-tsɔ̀-n**	'show' (a)
sɔ̀	**n-sɔ̀-n**	'split' (a)

Table 3.5: Infinitives with the infinitive circumfix

In all other cases, including imperfective stems with ablaut, the prefixal form of the infinitive marker is used. More specifically, this is the case when the root consists of a closed syllable or the root syllable ends in a vowel or in a vowel sequence other than the ones listed above. This includes stems ending in **ɪ**, **ʊ**, **e**, **ɛ**, **a**, **ɒ**, **o** without a preceding **w**, or **e** without a preceding **y** and the few perfective stems which contain pharyngealized vowels. For a representative list of infinitive forms with the prefixal form of the infinitive marker, see Table 3.6; infinitives based on perfective open syllable stems are found above the dashed line, infinitives based on imperfective open syllable stems are found below the first dashed line, and those based on closed syllable stems are found below the second dashed line.

3.1.2.4 The first person singular preverbal clitic **N=**

The first person singular preverbal pronoun is a homorganic nasal **N=** which is phonologically attached to the left edge of the first element of the verbal core (see Chapter 8 for a definition of the verbal core), i.e. usually a TAM marker or the verb itself. The clitic is usually not syllabic except for specific exceptional cases in which it is syllabic and bears a superhigh tone (cf. §6.1.1).

perfective	infinitive	gloss
bǐ	**m-bǐ**	‘exit’ (b)
kʊ̀	**ŋ-kʊ̀**	‘cry’ (a)
kǎ	**ŋ-kà**	‘fry’ (b)
dzě	**n-dzè**	‘say’ (b)
yó	**ɲ-yɔ̀**	‘run’ (c)
fə̰̀	**m-fə̰̀**	‘tell’ (a)
lṳ̀	**n-lṳ̀**	‘bark’ (a)
kyɛ́	**ŋ-kyɛ̀**	‘look’ (c)
yḭ́	**ɲ-yḭ̀**	‘eat’ (b)
mṵ́	**m-mṵ̀**	‘drink’ (b)
màl	**m-màl**	‘slide’ (a)
yàm	**ɲ-yàm**	‘yawn’ (a)
bɔ́m	**m-bɔ̀m**	‘agree’ (c)
kóŋ	**ŋ-kʊ̀ŋ**	‘hunt’ (c)

Table 3.6: Infinitives with a prefix

3.1.3 Structure of functional items

Functional items include TAM markers, negation markers, clause linking particles, and others. They commonly consist of a single syllable, and rarely of two. The structure of function words differs from that of lexical roots in several regards. For example, neither complex onsets nor closed syllables – both common in lexical roots – are attested in functional items. This section contains a detailed description of structural constraints on function words.

3.1.3.1 Initial position in function words

Unlike lexical roots, function words may lack an onset. This is the case for words of the segmental shape **a** (including the second person preverbal pronoun **à**, the preverbal negative marker **ā**, the clause-final polar question marker **à**, a variant of the hesternal past marker **à**∼**nà**, the comitative marker **ā** and the adverbializer **á**), the locative particle **ǐ**, and a few bisyllabic items, namely the conjunction **āmì** and the particles **áná** ‘like that’ and **áká** ‘like’.

Function words may have onsets, too, but they only allow simple onsets. They never start in an NC or CG sequence. Furthermore, the range of consonants attested in the initial onset is much smaller in function words than it is in lexical stems. Many consonants (e.g., **g**, **ts**, **s**) are not attested in the onset of functional items. Table 3.7 contains an exhaustive list of initial consonants attested in functional items with examples. For a comprehensive list of functional items, see the Lists of affixes, clitics and particles at the beginning of this book.

onset	example	gloss	gloss
d	**dɨ́**	F1	hodiernal future
f	**fə̃**	P1	hodiernal past
k	**kə̀**	P3	distant past
m	**mɨ̄**	CONSEC	consecutive, 'and (then)', clausal conjunction for P3, F1 and F2
n	**nà** ∼ **à**	P2	hesternal past
t	**tə́**	VER.FOC	verum focus
w	**wɔ̄**	NEG	negative particle, follows the verbal core, generally co-occurs with preverbal negation marker **ā**
y	**yɛ̄**	COMP	complementizer, precedes quotations and complement clauses

Table 3.7: Initial consonants in function words

3.1.3.2 Lack of codas in function words

Syllables in function words are always open. Function words typically consist of one open syllable (e.g., the distal past marker **kə̀** or the comitative preposition **ā**) or rarely two (e.g., the conjunctions **āmɨ̀** 'and' and **ákā** 'like').

3.1.3.3 Vowels in function words

The most striking thing regarding vowels in function words is the fact that pharyngealized vowels are completely absent from function words. The range of non-pharyngealized vowels found in functional items is also smaller than that found in lexical roots. Only the vowels **ɨ**, **ɔ**, **ə**, **a** and **ɛ** are attested. The lack of pharyngealized vowels has an interesting parallel in the lack of closed syllables in function words. It may have implications for the phonological status of pharyngealized vowels (see §2.3.3.2 for a detailed discussion of pharyngealized vowels).

3.2 Morphotonology

While nouns and verbs are identical in most cases regarding their segmental shape – both usually being monosyllabic – they behave quite differently as regards their tonal setup. This section contains descriptions of the tonal behavior of nouns and verbs.

3.2.1 Noun tone patterns

Monosyllabic noun stems, which account for the great majority of nouns, may bear any of the eight single and contour tones. While more complex tonal

patterns are attested in bisyllabic noun stems, this is probably due to their morphological complexity, since have are usually arisen from historical compounds.

Nouns usually retain the same tone in all contexts. The tone of a noun is generally not influenced by adjacent elements or prosodic boundaries. However, M and ML nouns are only distinguished in utterance-final position and before a low tone (see below).

3.2.1.1 Tone of segmental noun class prefixes

While the nouns of most noun classes do not have segmental prefixes, a few classes, namely Class 2, 19 and 18, have retained their prefixes. All these segmental noun class prefixes (i.e., **bə̀-** CL2, **fì-** CL19 and **mù-** CL18) carry a low tone, which does not affect the tone of the root. Low tone spread (see §3.4.2) from the prefix to a superhigh root does not apply.

3.2.1.2 Tone in monosyllabic nouns of genders other than Gender 9/10

The respective singular and plural forms of nouns belonging to genders other than Gender 9/10, including their tones, are identical, apart from a few exceptions. They bear one of the tones shown in Table 3.8.

utterance-final	non-final	example	gloss	gender	number of lexemes
L	L	**ŋkɔ̀**	‘fist(s)’	7/8	39
LH	LH	**ŋkə̌n**	‘oath(s)’	7/8	22
M	M	**mbūŋ**	‘river(s)’	1/2	83
ML	M	**bɨ̂**	‘fish(es)’	3/7a	43
H	H	**bá**	‘sheath(s)’	7/8	34
HL	HL	**dʒû**	‘word(s)’	1/2	7 (mainly loans)
HM	HM	**fɔ̋**	‘cap(s)’	7/8	10
S	S	**yí́**	‘eye(s)’	3/7a	21

Table 3.8: Tones of nouns belonging to genders other than Class 9/10 in utterance-final vs. non-final position

As Table 3.8 shows, the distinction between M and ML falling nouns is neutralized in non-final position, where both are realized with a level mid tone (M).

The HL and the HM falling tones are not as frequent as the other tones. The HL falling tone is only attested in three nouns which are not obviously borrowed (**sê** ‘house front’, **ŋgyâ** ‘traditional shelf’ and **dʒû** ‘word’). The other nouns with a HL contour tone are all borrowings from Cameroon Pidgin or English, such as **gâŋ** ‘gown’, **kɔ̂** ‘cup’ or **dzîŋ** ‘zinc, corrugated iron sheet’.

The HM falling tone is also less frequent than the other tones, but the attested cases are native nouns (of Gender 1/2 and 7/8). Examples are **fő** 'cap' and **we̋** 'bark'.

There are a few exceptional nouns which belong to genders other than Gender 9/10 and which show different tones in their singular and plural forms; see Table 3.9. One noun of Gender 1/2 and three nouns of Gender 3/7a have a mid tone in the singular and a high tone in the plural. They are the only nouns which show this singular-plural tone change. All of them also involve singular-plural stem alternation.

singular	gloss	plural	gloss
wān	'child' (CL1)	**ɲwɔ́m**	'children' (CL2)
fɔ̄	'head' (CL3)	**fá**	'heads' (CL7a)
ɲū	'farm' (CL3)	**ɲwɛ́**	'farms' (CL7a)
tʃyē	'stone' (CL3)	**tɛ́**	'stones' (CL7a)

Table 3.9: Mid tone singular, high tone plural nouns

Furthermore, there are three words (two of Gender 1/2 and one of Gender 3/10) which have a low tone in the singular and a mid-low falling tone in the plural. They are listed in Table 3.10. Again, all these nouns also are subject to a singular-plural stem alternation. The same singular-plural tonal alternation is common in Gender 9/10 nouns, see section 3.2.1.4 for details. Interestingly, all these nouns also have a stem alternation. Some other Gender 1/2 and Gender 7/8 nouns exhibit less systematic tonal alternations, see Table 3.11.

singular	gloss	plural	gloss
mɔ̀	'person' (CL1)	**mbɛ̂**	'people' (CL2)
gbàn	'in-law' (CL1)	**gbwɔ̀m**	'in-laws' (CL2)
ndɔ̀n	'branch' (CL3)	**ndàn**	'branches' (CL10)

Table 3.10: Low singular, mid-low plural nouns

The singular-plural tonal alternation attested in the first two nouns, **mbɛ̌** and **ntɛ̌** (both nouns translate roughly as 'twin'), with a rising tone in the singular (Class 1) and a superhigh tone in the plural (Class 2), is also attested in Gender 9/10 nouns. However, the other two nouns, **kpə̀** 'wife', which has a ML falling tone in the singular (Class 2) and a mid tone in the plural (Class 2), and **syàŋ** 'squirrel, sp.' with a low tone in the singular (Class 7) and a mid tone in the plural (Class 8) are the only nouns showing these tonal alternations.

singular	gloss	plural	gloss
mbě	'twin' (CL1)	**mbḗ**	'twins' (CL2)
ntě	'twin' (CL1)	**ntḗ**	'twins' (CL2)
kpə̀	'wife' (CL1)	**kpə̄**	'wives' (CL2)
syàŋ	'squirrel, sp.' (CL7)	**syāŋ**	'squirrels, sp.' (CL8)

Table 3.11: Other tonal stem changes in non-Gender 9/10 nouns

3.2.1.3 Tone of polysyllabic nouns of Genders other than Gender 9/10

There are only a few bisyllabic nouns. The majority of these belong to Gender 1/2, Gender 7/8 or Gender 9/10. However, this may be accidental and the distribution may just reflect the relation of the quantity of lexical items assigned to these Genders (see §4.3). Table 3.12 contains examples of all tone patterns attested in nouns of Gender 1/2 and Gender 7/8, which generally have identical tone patterns in singular and plural forms. Gender 9/10 nouns will be treated separately in §3.2.1.4.

SG/PL tone	example		gloss	gender
	SG	PL		
L.L	**dìdə̀m**	**dìdə̀m**	'chest'	7/8
L.LH	**kpə̀kə̌**	**kpə̀kə̌**	'papaya'	1/2
M.M	**kūkwā**	**kūkwā**	'raffia fruit'	7/8
H.H	**kúkú**	**kúkú**	'butterfly'	7/8
S.S	**mbű́ntshā́**	**mbű́ntshā́**	'fishing net'	1/2
H.L	**fúfù**	**fúfù**	'beans, sp.'	7/8
M.L	**tɔ̄tɔ̀**	**tɔ̄tɔ̀**	'pepper'	1/2
L.M	**kàkwə̄l**	**kàkwə̄l**	'toad'	7/8
L.H	**tʃìtʃɛ́**	**tʃìtʃɛ́**	'grandparent'	1/2
L.HL	**dʒàkâ**	**dʒàkâ**	'donkey'	1/2
LH.L	**ndzə̌ndzà**	**ndzə̌ndzà**	'worm'	7/8
LH.M	**nǐŋlə̄**	**nǐŋlə̄**	'evening'	1/2
LH.H	**nə̌ná**	**nə̌ná**	'pineapple'	7/8
M.ML	**bwākɛ̀**	**bwākɛ̀**	'fingernail'	7/8
M.H	**gɔ̄ŋláŋ**	**gɔ̄ŋláŋ**	'dragon fly'	7/8
M.S	**ŋmgbīŋgbḯŋ**	**ŋmgbīŋŋmgbḯŋ**	'millipede'	7/8
S.L	**lítà**	**lítà**	'bottle'	1/2
S.M	**lɔ̋kɔ̄**	**lɔ̋kɔ̄**	'cassava'	7/8
S.H	**kpű́kpǫ́**	**kpű́kpǫ́**	'woodpecker'	7/8
L.ML	**ndzòkɛ̀**	**ndzòkɛ̀**	'knuckle'	1/2

Table 3.12: Tonal patterns of bisyllabic nouns (in isolation)

The nouns above the dashed line in Table 3.12 have tonal patterns which are commonly attested in monosyllabic stems. The tone patterns of the nouns below the dashed line, on the other hand, differ from those found in monosyllabic stems. The reason for this is probably that they are partly historically derived from compounds and partly results of reduplication. Some are also loanwords, such as **nǎná** 'pineapple' and **lítà** 'bottle'.

The number of nouns with more than two syllables is too small to make any generalizations. There are only a handful of trisyllabic nouns which are not or at least not obviously compounds: **ʃùkúrù** 'school' (CL1/2), **tʃìkàlə** 'strainer' (CL7/8), **kùŋkōlōŋ** 'tortoise' (CL7/8), and **tấkèdā** 'paper, letter, school' (CL1/2). While the origin of **tʃìkàlə** and **kùŋkōlōŋ** is unclear, **ʃùkúrù** and **tấkèdā** are borrowings.

3.2.1.4 Tone in Gender 9/10 nouns

Unlike nouns of other genders, Gender 9/10 nouns show a tonal singular-plural alternation. This alternation concerns both monosyllabic and bisyllabic words.

Monosyllabic Gender 9/10 nouns Class 9 (singular) and 10 (plural) nouns are distinguished from each other only by their tones. The tone of a Class 9 noun is usually lower relative to that of the corresponding Class 10 noun.

However, about a third of the Gender 9/10 nouns have a M tone in singular and plural (see Table 3.13). Table 3.13 shows the singular-plural tonal alternations of monosyllabic Gender 9/10 nouns.

tone CL9 (SG)	tone CL10 (PL)	CL9 example	CL10 example	gloss	number of lexemes
L	ML	**kù**	**kǔ**	'rope/s'	25
LH	S	**tsǒ**	**tsṍ**	'baboon/s'	24
M	M	**kū**	**kū**	'ratmole/s'	24
H	H	**dzáŋ**	**dzáŋ**	'sugar cane/s'	1
LH	ML	**tsǎŋ**	**tsə̀ŋ**	'palm kernel/s'	1

Table 3.13: Tones of Gender 9/10 nouns (in isolation)

The rightmost column shows how many lexemes with a given singular-plural tonal opposition are attested. Cases with stem alternation (see this section, below) are not counted.

The tonal patterns shown above the dashed line in Table 3.13 are attested frequently. The patterns below the line are exceptional, and are attested only once. The first noun below the dashed line, **dzáŋ** 'sugar cane', bears a high tone, which is not common in nouns of Gender 9/10. Unlike other Gender 9/10 nouns, it bears the same tone in singular (Class 9) and plural (Class

10). It has possibly only recently been reinterpreted as belonging to Gender 9/10. The other exceptional noun shows an irregular tone change. While the singular (Class 9) LH rising tone of **tsǎŋ** 'palm kernel' is regularly attested in Class 9 nouns, we would expect the plural to bear a superhigh tone rather than a ML falling tone (compare the regular tone change shown in the second row in Table 3.13). For a Class 10 (plural) noun with ML falling tone like **tsə̀ŋ** 'palm kernels', on the other hand, we would expect the corresponding Class 9 (singular) noun to bear a low tone (as in the regular tone change shown in the first row. Finally, there is one noun, not included in the table, namely 'ankle' which shows a regular form with a superhigh tone in the plural (Class 10, **ʃyā́**) but which has two tonal variants, **ʃyǎ** and **ʃyá** in the singular (Class 9). While the first variant has a LH rising tone as expected, the other tone pattern, with a H tone is irregular.

Two Gender 9/10 nouns (which are not included in the numbers given in the table) show stem alternation. The word for 'meat' is suppletive and has two different unrelated forms in the singular (Class 9: **ɲàm**) and the plural (Class 10: **sɔ̀**). The word for 'road' or 'path' also has two different forms, but in this case, they are related: **dʒī** (SG/CL9) and **dzɛ̂** (PL/CL10). These two nouns also show tonal alternations: the singular stem for 'meat' has a L tone and the plural stem has a ML falling tone, i.e. it has one of the common patterns found above the dashed line in Table 3.13. The singular (Class 9) stem for 'road' has a M tone and the plural (Class 10) stem a ML falling tone. This change does not match the common Class 9/10 tonal alternations.

Polysyllabic Gender 9/10 nouns The number of bisyllabic Gender 9/10 stems is extremely small. I know of only three bisyllabic Gender 9/10 stems which seem to be neither compounds nor loanwords. Their tonal patterns (see Table 3.14) are variations on the frequent tonal patterns of monosyllabic Gender 9/10 stems shown above the dashed line in Table 3.13.

tone CL9 (SG)	tone CL10 (PL)	CL9 example	CL10 example	gloss	number of lexemes
L.L	M.ML	**tàmà**	**tāmà**	'lion'	2
L.LH	S.S	**làmbǔ**	**lā́mbū́**	'orange'	1

Table 3.14: Tonal patterns of bisyllabic nouns of Gender 9/10 (in isolation)

The same pattern is either squeezed onto the second syllable or stretched out across two syllables. The third pattern which is commonly attested in monosyllabic Gender 9/10 nouns, in which both singular and plural bear a mid tone (see Table 3.14), is absent from bisyllabic Gender 9/10 nouns. However, this is probably just due to the small number of bisyllabic words.

There is one more bisyllabic Gender 9/10 word, **sìsyǎŋ** 'spider', which does not appear to be a compound synchronically. While the singular tone is L.LH,

there are two variants of the plural. It may either be interpreted as a Class 10 compound noun (**sīsyáŋ**) with the tonal pattern M.S,[3] or as a monomorphemic Class 8 noun (**sìsyǎŋ**), with the same tonal pattern as the singular form, L.LH.

Words consisting of more than two syllables are rare. I know of only two trisyllabic Gender 9/10 nouns: **sàbílì** 'soap' (loan; from Hausa *sàbulù* ∼ *sàbulì*) and **ʃɨ̄ŋkālā**∼**sīŋkālā** 'termite, sp.'. Their tonal patterns, L.H.L and M.M.M, respectively, are the same in singular and plural.

3.2.2 Verb tone patterns

3.2.2.1 Verb tone classes

Verbs are practically always monosyllabic. They can be subdivided into three verb tone classes (A, B and C). All verbs of a given tone class have the same tone pattern in a given context. The tone pattern changes systematically, depending on tense, aspect and other factors. Table 3.15 contains examples of all three verb tone classes. The tonal patterns in the table are representative of perfective verbs in P0 tense in utterance-final and non-final position.

verb tone class	final tone pattern	example	non-final tone pattern	example	gloss
A	ML	**ʃî**	L	**ʃì**	'descend'
B	LH	**mǔ**	S	**mū**	'take'
C	H	**kóŋ**	H	**kóŋ**	'hunt'

Table 3.15: Verb tone classes with examples of perfective present tense verbs in utterance-final and non-final position

While the distinction between verb tone classes can be neutralized in certain cases, e.g. in the infinitive verb form where verbs of Class A carry a low tone while those of Class B and C carry a mid-low falling tone (see §8.4.1), the constitution of the tone classes never changes. Verb tone patterns are not affected by adjacent words but, in some cases, tonal patterns depend on the syntactic position, with different tone patterns in utterance-final vs. non-final position.

3.2.2.2 Final vs. non-final verb tone patterns

As shown in Table 3.15, the tone pattern of a verb in non-final position (compare examples in (1)) is often different from its tone pattern in utterance-final

[3] In this case, the sequence is probably best analyzed as compound consisting of two stems, which results in the tonal patterns L-LH in the singular (Class 9) and M(L)-S in the plural (Class 10).

position (see examples in (2)), irrespective of the type of part of speech element following the verb (i.e. whether it is an object, an adverbial phrase, etc.) and of its tonal pattern.

(1) a. bī nàm ɲū
1PL work(a) CL3/7a.farm
◇'We have (just) tilled the field.'

b. bī kā́ ʃī
1PL fry(b) CL9.chicken
◇'We have (just) fried a chicken.'

c. bī kyɛ́ mɔ̀
1PL look(c) CL1.man
◇'We have (just) watched a man.'

(2) a. bī nàm
1PL work(a)
◇'We have (just) worked.'

b. bī kǎ
1PL fry(b)
◇'We have (just) fried [something].'

c. bī kyɛ́
1PL look(c)
◇'We have (just) looked [at something].'

The distinction of final and non-final tone patterns is not only attested in the P0 tense. It permeates nearly all TAM forms which distinguish at least two tone patterns and in which the verb can occur in final position. This excludes e.g. the future tenses, in which the tone class distinctions are completely neutralized, and most negative forms, as the latter involve postverbal negative markers, so that the verb cannot occur in utterance-final position. In the imperative, there is no tonal distinction between final and non-final verbs, either.

The different tone patterns of final vs. non-final verbs cannot be explained by utterance-final phonetic effects such as final lowering or the like. For instance, Class B verbs, which bear a superhigh tone (S) in non-final position, have a LH rising tone in final position. This cannot be due to the influence of a low boundary tone at the end. Instead, it looks as if the rise might be caused by a low tone (L) preceding the superhigh-toned verb (recall that a superhigh tone is usually realized as LH rising when it follows a low tone, see §3.4.2 for details).

Furthermore, a word bearing a mid-low falling tone (ML) in utterance-final position would be expected to bear a level mid (M) tone in non-final position, not a low tone (L) as in (1a), because a phonological rule causes non-final mid

tones, e.g. in nouns, to be realized as ML falling tones in utterance-final position (see §2.1.2). The opposition of final vs. non-final tone patterns has parallels with the conjoint-disjoint opposition mainly reported to exist in Bantu languages, but also in some other Niger-Congo languages. Although I am not aware of another language in which the conjoint-disjoint opposition is represented by a purely tonal contrast, having stripped down its morphology to a minimum, it would not be too surprising if Mundabli synchronically realized former segmental marking of conjoint vs. disjoint verb forms with a purely tonal distinction. However, following up on this hypothesis requires further investigation.

The tonal patterns of final and non-final verbs in the various TAM forms are described in Chapter 8.

3.2.2.3 Perfective vs. imperfective verb tone patterns

Another tonal opposition in verbs is the tonal difference between perfective and imperfective verb forms. The verb tone patterns of perfective and imperfective verbs in utterance-final and non-final position are shown in Table 3.16.

verb tone class	perfective (final)	perfective (non-final)	imperfective (final)	imperfective (non-final)
A	ML	L	ML	M
B	LH	S	H	H
C	H	H	H	H

Table 3.16: Perfective/imperfective tone patterns

Imperfective verbs do not generally show an opposition between final vs. non-final tone patterns. Only Class A verbs are pronounced differently in final vs. non-final position. However, this is due to a regular phonological process. If a word is realized with a ML falling tone in final position, it is always realized with a M tone in non-final position, see §2.1.2. Thus, there is no tonal distinction between final and non-final verbs in the imperfective. The tonal distinction between Class B and C verbs is completely neutralized in the imperfective.

3.2.2.4 Tone sandhi in verb sequences

Imperative verbs of Class A are subject to tone sandhi,[4] a phonological process by which lexical tones exhibit contextually determined alternations, when

[4] My choice of the term 'sandhi', which is more commonly associated with Sinitic languages, is influenced by Lovegren's (2013) description of a comparable phenomenon in Missong (a dialect of Mungbam), (Lovegren 2013: p.91, footnote 10).

they occur in non-initial position in a verb sequence. Declarative verbs are not subject to tone sandhi – at least not in the present/immediate past tense (P0); see §9.3 for more on the tonal realization of declaratives in verb sequences.

The tone pattern of an imperative Class A verb changes from LH to M whenever it occurs in non-initial position in a sequence of verbs, irrespective of the tone class of the preceding verb. Examples of Class A verbs preceded by another Class A verb, a Class B verb and by a Class C verb, respectively, are given in (3)-(5).

(3) yɛ̄ gǎn bɔ̄ŋ ʃū wān nɛ̌ w-ɔ̄
COMP go(a) call(a) come(b) CL1.child CL1.mother.2POSS CL1-DET

'[She said]: go and call your sister!'

(4) tʃū ʃī mɨ́ŋ gbə̀
come(b) go_down(a) 1.SG.PP house.LOC

◇'Come down to my house!'

(5) kyɛ́ yá gān f-ɔ́ ywʉ́, fì-yấn
look(c) go_up(c) go(a) PROX-DET CL1/2.hanging_dryer CL19-leaf
dzú dɨ́ fɨ́n, ā mū ʃī
certain be(b) there 2SG take(a) go_down(a)

'Look up at the hanging dryer! There is a certain leaf. You should take it down.'

In a sequence of three or more Class A verbs, not only the second verb in the sequence but all subsequent verbs take a mid tone, i.e. the altered tone pattern, as in (6).

(6) gǎn bɔ̄ŋ ʃī ɲùngfù
go(a) call(a) go_down(a) N.

◇'Go and call down to Nyungfu!'

The tone sandhi patterns described here resemble those attested by Lovegren (2013: pp.91-93) for Missong,[5] but they differ from the latter in several regards. In Missong, "[s]et A verbs in their irrealis form (a category which includes imperatives, remote past, and some types of subordinate clauses [...]) undergo a tone change which is triggered by an immediately preceding verb" Lovegren (2013: p.91). Thus, in Missong, just as in Mundabli, tone sandhi is

[5]Note that Missong is the only one among the Mungbam dialects which has tone sandhi in verb sequences.

attested in imperatives, but not in perfective declaratives in P0 tense,[6] and in both, only Class A verbs are subject to tone sandhi.[7]

The main difference however, is that whereas imperative Class A verbs in Mundabli always take the sandhi tone when they occur in non-initial position, in Missong sandhi tone is only triggered by preceding Class A and Class C verbs.[8] Further, whereas in Mundabli all non-initial verbs in a sequence of three or more verbs are realized with sandhi tone, in Missong only every other verb in a sequence of Class A verbs is realized with sandhi tone. Finally, while the process of tone sandhi underlies similar rules in Missong and in Mundabli, the tonal patterns in the two languages differ from each other. In Missong, irrealis Class A verbs take a mid tone in initial position, whereas in sandhi context, they take a superhigh tone. In Mundabli on the other hand, initial imperative Class A verbs take a LH rising tone when not subject to sandhi, but a mid tone in sandhi context.

Future research on tone in verb sequences may lead to a more revealing analysis of the Mundabli verb tone system in the style of Lovegren's analysis of the Mungbam system. Furthermore, the parallels between sandhi tone in Missong and in Mundabli in combination with the individual differences call for a comparative study.

3.3 Morphophonological alternations

This section deals with phonological processes which apply at morpheme boundaries. Due to the low degree of segmental morphology, the number of morphophonological alternations is restricted.

3.3.1 Place assimilation of nasals in NC sequences

While morpheme-internal NC sequences are only attested in nominal stems, there are several contexts in which an NC sequence arises when morphemes are conjoined to form words. In word-internal NC sequences,[9] whether tautomorphemic or not, the nasal assimilates in its place of articulation to the following consonant. It does not play a role whether the nasal is syllabic or not. However, place assimilation is not attested across word boundaries, except for a few exceptional lexically determined cases. Nominal stems contain-

[6] Whereas it is possible that Mundabli, just like Missong, also has an irrealis category and that *all* irrealis verbs are subject to tone sandhi, more research is needed in order to verify this.

[7] The tone classes in Mungbam and Mundabli widely coincide regarding labels and constellation, i.e., the constellations of the tone classes in the two varieties roughly coincide, with cognate verbs forming roughly the same sets. Verb tone classes in Mundabli and in Mungbam (Lovegren 2013) which contain cognate verbs are assigned the same labels in the two languages.

[8] To be precise, imperfective Class B verbs also trigger sandhi in Missong (Lovegren 2013: 92). It is unclear whether imperfective verbs also trigger sandhi in Mundabli.

[9] This concept requires some explanation. The term "word" here refers to the phonological word. It is meant to include sequences of the first person singular preverbal proclitic **N=** plus its phonological host.

ing NC sequences are treated in §2.2.4. The current chapter only deals with polymorphemic NC sequences. Such polymorphemic NC sequences arise in the following contexts:

1. The prefixal part (**N-**) of the infinitive marker, which is realized either as a circumfix **N-…-n** or as a prefix **N-** (in combination with a specific tonal pattern), forms part of a word-initial poly-morphemic NC-sequence.

2. The preverbal form of the first person singular (1SG) pronoun **N=** is procliticized to the left edge of the verbal core,[10] creating a polymorphemic NC sequence at the beginning of the verb or a preceding tense/aspect marker.

3. When the first stem of a nominal compound ends in a nasal, the result can be a polymorphemic NC sequence at the stem-boundary.

4. NC sequences arise between words when a word ending in a nasal is followed by another word which starts in a consonant, e.g. between a subject noun and a following TAM marker, between two verbs in a serial verb construction or between a verb and its object.

The prefixal part **N-** of the infinitive marker, which is realized either as circumfix **N-…-n** or as prefix **N-** on the verb stem, is a non-syllabic homorganic nasal. Its place of assimilation adapts to that of the initial consonant of the verb root it attaches to, see Table 3.17.

m-bì-n	‘to exit’
m-bù̀-n	‘to give birth’
m-fô	‘to blow’
ŋ-kù-n	‘to clap’
ɲ-yì̀-n	‘to eat’
ɲ-ʃì-n	‘to descend’
ŋm-kpɨ̀-n	‘to die’
ŋm-gbù-n	‘to fall’

Table 3.17: Homorganic nasals in infinitive verb forms

The examples in Table 3.17 are all based on the perfective stem form, although the infinitive can be derived from both the perfective and the imperfective stem form. For more on the infinitive verb form, see §8.4.1.

Another case of a tautomorphemic NC sequence arises when the first person singular preverbal pronoun **N=** is phonologically attached to whatever stands at the left edge of the verbal core, i.e. the verb itself or a preceding TAM marker. Example (7) contains three instances of the first person singular

[10] See Chapter 8 for more on the structure of the verbal complex.

preverbal pronoun in bold face, each articulated at a different place of articulation which is in each case identical with that of the following consonant, i.e. the initial consonant of the verb or TAM marker it is attached to.

(7) **n**=dǐ f-án, ā **ɲ**=tʃyé wɔ̄ nə̄ **ŋ**=kə̄
1SG=be(b) PROX-here NEG 1SG=know(c) NEG SUBORD 1SG=??
lə̄ ná
do(a) as

'I am here, I don't know what I can do.'

The clitic **N**= is usually not syllabic. Only in certain contexts can it be syllabic and bear a high tone (see sections §2.2.4 and §6.1.1 for details).

Another context in which nasal consonant sequences arise is when the first stem of a compound noun ends in a nasal and the second starts in an obstruent. In this case, the nasal is not integrated into the first syllable of the second stem. It remains a coda nasal and retains its place of articulation rather than assimilating to the following consonant. Examples are **wān-bwé** 'baby' and **wān-kpé** 'girl'.

Finally, nasal consonant sequences arise at the intersection of two words where one word ends in a nasal and a subsequent one starts in an obstruent. In general, there is no assimilation in this context. Thus, in examples (8a) and (8b) the nasals in NC sequences arising at word boundaries are not affected. The subject nominal **wān** in 8a and 8b is followed by the tense marker **kə̀** P3 and the verb **bɔ́m** 'agree', respectively. In both cases, the stem-final nasal of the subject nominal retains its place of articulation and does not adapt to the initial consonant of the following word.

(8) a. mɨ̄ wān kə̀ tʃíǎ lɛ́
1SG CL1.child P3 long_ago get_lost(a)

'My child got lost long ago.'

b. sèsǎŋ bɔ̃m
CL9.spider agree(c)

'The spider agreed.'

However, there are certain cases of lexicalized singular-plural stem alternations in which the stem-final nasal changes so that it is identical in place of articulation with the initial consonant of the corresponding concord marker both in the singular and in the plural. Table 3.18 shows three of the seven Gender 7/8 nouns which show-singular plural stem alternations.

However, this alternation is not due to a synchronic phonological process, but is rather lexicalized. It is restricted to a few stems and occurs irrespective of the presence or absence of the subsequent determiner. In most nouns of this gender, the final nasal does not change and thus differs in place from the

nɨ́ŋ (kɔ́)	'(that) thing'	**ndʒɔ́m (bɔ́)**	'(those) things'
tʃʊ́ŋ (kɔ́)	'(that) ear'	**tʃɔ̃m (bɔ́)**	'(those) ears'
ndzɪ̄ŋ (kɔ́)	'(that) house fly'	**ndzə̄m (bɔ́)**	'(those) house flies'

Table 3.18: Historical nasal assimilation across word boundaries in Gender 7/8 nouns

initial consonant of the concord prefix in the singular, the plural or both, see Table 3.19.

mfʊ̌ŋ (kɔ́)	'(that) coco yam'	**mfɛ̌n (bɔ́)**	'(those) coco yams'
ɲwà̰n (kɔ́)	'(that) bird'	**ɲwə̰̀m (bɔ́)**	'(those) birds'
swō̰m (kɔ́)	'(that) palm nut'	**ʃwō̰m (bɔ́)**	'(those) palm nuts'

Table 3.19: Lack of nasal assimilation in Gender 7/8 nouns

3.3.2 Initial consonant mutation in Gender 3/10 nouns

A handful of Gender 3/10 nouns undergo stem-intial consonant mutation, i.e. the initial consonant alternates between a labial-velar plosive in the singular (Class 3) and an alveolar affricate in the plural (Class 10). The alternation is described in more detail in §4.3.6). Table 3.20 shows examples of Gender 3/10 stems which exhibit this kind of consonant mutation.

Class 3	Class 10	gloss
kpān	**tswān**	'tree, firewood, drum'
kpɛ̀	**tsɛ̀**	'pot'
gbɔ̀	**dzɔ̀**	'house'
gbɪ̀	**dzɪ̀**	'rope'
gbɪ̀ŋ	**dzɪ̀ŋ**	'root'

Table 3.20: Examples of Gender 3/10 consonant mutation (taken over from §4.3.6)

3.3.3 Consonant mutation in the numerals 'two' and 'three'

There is a palatalization process in numerals which is similar to the one found in Gender 3/10 nouns (see §3.3.2 and §4.3.6 for details), except that numerals bear concord prefixes while nouns have lost the historical prefixes which are likely to have originally caused the palatalization process. See Kießling

(2010b) for a description and analysis of comparable processes in some other Yemne-Kimbi languages[11] and other Southern Bantoid languages.

The stem-initial consonant in the numerals **mfye** 'two' and **ntɔ** 'three' (citation forms) is palatalized when the stem is preceded by a concord prefix of the segmental shape **yi-**, i.e. the Class 4 prefix **yi-** and the Class 10 prefix **yi-**. Prefixes of the segmental shape **ki-**, such as the Class 7 prefix **ki-** do not cause palatalization. When the numeral roots **-fye** 'two' and **-tɔ** 'three' are preceded by a prefix of the shape **yi-**, they are realized as **ʃye** and **tsɔ**, respectively, as in **dʒɨ́ yíʃyé** 'two dogs' and **dʒű yítsɔ́** 'three goats'.

Examples (9) and (10) show the realization of the numeral root 'two' after the Class 2 prefix **bə̃-** and after the Class 10 prefix **yí-**, respectively.

(9) bə̃́ kə dɪ̄ bə̃́-fyé, wān mɔ̀nɔ̄ wù-mwɔ̀ āmɨ̀ wān
CL2 P3 be(b) CL2-two CL1.child CL1.man CL1-one and CL1.child
kpé wù-mwɔ̀
CL1.woman CL1-one

'They were two, one boy and one girl.'

(10) dʒī dā̋ā́ yí-ʃyé à kə̄ lə̄
CL9.path be(b):ADVLZ CL10-two 2SG COND make(a).COND
ŋkə̀
CL6.corn_beer

'There are two ways of making corn beer:'

Table 3.21 gives an overview of the stem changes in numerals which are triggered by concord prefixes.

gender	concords	'one'	'two'	'three'	'four'
1/2	ẁ-/b-	**wù-mwɔ̀**	**bə̃́-fyé**	**bə̃́-tɔ́**	**bɔ́-ǹdē**
3/10	w-/y-	**wű-mwɔ́**	**yí-ʃyé**	**yí-tsɔ́**	**yí-ǹdē**
3/7a	w-/k-	**wű-mwɔ́**	**kí-fyé**	**kí-tɔ́**	**kí-ǹdē**
7/8	k-/b-	**kí-mó̱**	**bí-fyé**	**bí-tɔ́**	**bí-ǹdē**
9/10	ỳ-/y-	**yì-mwɔ̀**	**yí-ʃyé**	**yí-tsɔ́**	**yí-ǹdē**
19/18	f-/m-	**fí-mwɔ́**	**mű́m-fyé**	**mű́n-tɔ́**	**mű́-ǹdē**

Table 3.21: Agreement in numerals (adopted from §7.1.5)

[11] As the article was written before the term Yemne-Kimbi was introduced, Kießling (2010b) refers to them as Beboid languages.

3.3.4 Pharyngealization in the numeral 'one'

Table 3.21 shows that the stem of the numeral **mwɔ** 'one' may also change to **mo̱** in the presence of a preceding concord marker. Unlike in the case of the numerals 'two' and 'three', the change in the numeral 'one' is triggered by the Class 7 prefix **ki-**. Thus, 'one goat' (CL9) is referred to as **dʒǔ yì-mwɔ̀** but 'one thing' (CL7) is **nɨ́ŋ kǐ-mɔ́**. Note that the numeral 'one' is **mak** in the related variety Mufu. This is especially relevant as Mundabli words which end in pharyngealized vowels commonly have Mufu cognates ending in velar stops.

3.3.5 Ablaut in perfective vs. imperfective verbal stems

Verb stems can occur in the perfective or in the imperfective form. Even infinitives can take either of the two as their base (see §8.4.1). The opposition between perfective and imperfective verb roots is encoded by different tone patterns on the one hand, and ablaut on the other. The same tone changes apply to all verbs belonging to the same verb tone class, irrespective of their segmental shape. Ablaut is restricted to certain open syllable stems. It commonly (but not always) involves an alternation between a plain and a pharyngealized vowel (see §2.3.3.2 for more on pharyngealized vowels). This section deals only with ablaut. The tonal changes involved in the perfective/imperfective opposition are discussed in §3.2.2.3.

Ablaut never occurs in closed syllables, and among open syllable roots, it is restricted to syllables containing the following vowels: **i**, **ɨ**, **u**, **ə**, **ɔ**, and the sequences **wo** and **ye**. Other stems (i.e., syllables containing **ɪ**, **ʊ**, **e**, **ɛ**, **a**, **ɒ**, **o** without preceding **w**, or **e** without preceding **y** and the few verbs which contain pharyngealized vowels in the perfective) do not alternate. Table 3.22 shows examples of verbs which do not undergo stem changes and whose segmental shape is thus identical in the perfective and imperfective.

The verb forms in Tables 3.22-3.25 were elicited by asking for the form of the verb in the frames *we have X-ed* and *we are X-ing*, with the indicated verb tones being the tones in sentence-final position.

Of the verb stems which show alternation in perfective vs. imperfective forms, those with the vowels **i**, **ɨ** and **u** and those with the sequences **wo** and **ye** are fully predictable. The basic vowels **i**, **ɨ**, **u** and the sequence **wo** in the perfective form alternate with their pharyngealized equivalents **i̱**, **ɨ̱**, **u̱** and **wo̱** in the imperfective form. The sequence **ye** in perfective verb stems alternates with the sequence **yæ** in their imperfective equivalents. Examples of such regular perfective/imperfective alternations involving pharyngealization are given in Table 3.23.

I have no explanation as to why the sequences **wo** and **ye** in perfective stems alternate with **wo̱** and **yæ**, respectively, in imperfective stems, but stems containing only the vowels **o** and **e** without preceding **w** and **y**, respectively, do not undergo ablaut (see Table 3.22).

perfective	imperfective	gloss
bɔ́m	**bɔ́m**	‘agree’ (c)
kŭŋ	**kúŋ**	‘kneel’ (b)
bán	**bán**	‘twist’ (c)
wɛ̀n	**wɛ̀n**	‘peel’ (a)
yɪ̀l	**yɪ̀l**	‘tickle’ (a)
dzě	**dzé**	‘speak’ (b)
fŏ	**fó**	‘blow’ (b)
kɔ̀	**kɔ̀**	‘cry’ (a)
wɛ́	**wɛ́**	‘argue’ (c)
wí	**wí**	‘whistle’ (c)
fo̰	**fo̰**	‘tell, report’ (a)
fṵ	**fṵ**	‘lie, deceive’ (a)

Table 3.22: Perfective vs. imperfective stems without ablaut

perfective	imperfective	gloss
bɪ̀	**bɪ̰**	‘exit’ (a)
yĭ	**yɪ́**	‘eat’ (b)
kpɨ̌	**kpɨ́**	‘die’ (a)
tsɨ̌	**tsɨ́**	‘spit’ (b)
kù	**kṵ**	‘clap’ (a)
bú	**bʊ́**	‘give birth’ (c)
gwɔ̀	**gwo̰**	‘grind’ (a)
kwó	**kwó**	‘enter’ (c)
byě	**byɛ́**	‘crack peanuts’ (b)
dʒyɛ̂	**dʒyæ̀**	‘cook’ (a)

Table 3.23: Regular ablaut in perfective/imperfective stems

More irregular cases of ablaut involve the vowels **ɔ** and **ə** in perfective stems. As Table 3.24 shows, the vowel **ɔ** in open syllable perfective stems usually corresponds to the sequence **ya** in imperfective stems. In the verb **yɔ̀** ‘throw’ it alternates with the sequence **wa** instead. However, two cases are attested in which **ɔ** alternates with the pharyngealized vowel **o̰** (see examples below the dashed line in Table 3.24).

The vowel **ə** in perfective stems does not always correspond to the same vowel in imperfective stems, either. Sometimes it corresponds to the vowel **a** (see examples above the first dashed line in Table 3.25), sometimes it corresponds to the sequence **ya** (just like perfective **ɔ**), and in two cases it corresponds with the vowel **æ** in the imperfective (see examples below the second dashed line in Table 3.25).

If one summarizes all attested ablaut patterns, one finds the patterns shown

perfective	imperfective	gloss
fɔ̃	**fyà**	‘carve’ (a)
lɔ̃	**lyà**	‘go to the bush’ (a)
sɔ̌	**syá**	‘swim’ (b)
tɔ̌	**tyá**	‘sting’ (b)
yɔ̃	**ywà**	‘throw’ (a)
kɔ̌	**kọ́**	‘catch’ (b)
tsɔ̃	**tsọ̀**	‘show’ (a)

Table 3.24: Ablaut with **ɔ** in perfective stems

perfective	imperfective	gloss
kpə̀	**kpà**	‘burn’ (a)
gbə̀	**gbà**	‘cut’ (a)
yə́	**yá**	‘climb’ (c)
tsə̌	**tsá**	‘pass’ (b)
də̃	**dyà**	‘see’ (a)
fə̃	**fyá**	‘give’ (b)
lə̃	**là**	‘do, make’ (a)
ɲə̃	**ɲà**	‘leave’ (a)

Table 3.25: Ablaut with **ə** in perfective stems

in Table 3.26. While in some cases the alternation is very systematic, in others the alternation is not completely predictable.

Table 3.26 covers only vowel alternations in open syllable stems. Perfective vowels which show no alternation in perfective vs. imperfective open syllable stems are shown above the first dashed line in Table 3.26, vowels which show a one-to-one correspondence with different (often pharyngealized) vowels in the imperfective are shown in between the two dashed lines, and vowels in the perfective form which have several correspondents in the imperfective are given below the second dashed line.

Although imperfective aspect is not encoded by a segmental affix, one can say that perfective verbs are morphologically unmarked, as is typical for Bantu languages (Nurse 2007: 164), containing plain “unmarked” vowels, while imperfective verb stems are more marked, often containing pharyngealized “marked” vowels. Pharyngealized vowels are marked both typologically and in the language itself. Apart from imperfective verb forms, they only occur in a few lexical stems. Furthermore, a comparison of Mundabli with related varieties suggests that synchronic pharyngealized vowels have their historical origin in CVk(V) sequences and eventually replaced the final velar stops.

Historically, the pharyngealized vowels probably arose simultaneously with the loss of an imperfective verb suffix cognate with the common Bantu marker

perfective	imperfective
ɪ	**ɪ**
ʊ	**ʊ**
e	**e**
o	**o**
ɛ	**ɛ**
a	**a**
ɒ	**ɒ**
ʉ̈	**ʉ̈**
ö̞	**ö̞**
ï̞	**ï̞**
i	**ï̞**
ɨ	**ɨ̞̈**
u	**ʉ̞̈**
ye	**yæ**
wo	**wo̞**
ɔ	**ɔ/ɔ̞/ya/a?**
ə	**ɛ/ya/a**

Table 3.26: Overview of perfective/imperfective ablaut patterns

–a(ŋ)g-a (IPFV) (Nurse and Philippson 2006). In the neighboring dialect Mufu, the imperfective form of an open-syllable verb is formed by suffixing **-k** (or sometimes [-ɣ] or [-ʔ]) to the verb stem.

3.4 Phrasal phonology

While the major domain for morphophonological alternations are words, morphophonological alternations can sometimes be observed when words are joined to form phrases or clauses. This section deals with vowel elision (§3.4.1) and low tone spread (§3.4.2), both processes which apply across word boundaries.

3.4.1 Vowel elision across word boundaries

Vowel elision is the only segmental phonological process which applies across rather than within word boundaries. Depending on its vowel quality, the final vowel of a word may be elided when it is followed by a functional word of the segmental shape **a** (i.e. the second person preverbal pronoun **à**, the preverbal negative marker **ā**, the clause-final polar question marker **à**, a variant of the hesternal past marker **à**, the comitative marker **ā** and the adverbializer **á̋**), in order to avoid vowel hiatus. The few other attested onsetless words, namely the locative preposition **ɪ̋**, the conjunction **āmɨ̀** and the particles **áná** ‘like that’

and **ā́ká** 'like' do not cause elision. This elision process is only attested in fast speech. When the same sequence is pronounced carefully, the vowel is not elided. Furthermore, the process is restricted to certain vowels. Only the vowels **ɨ**, **ɔ** and **ə** undergo elision when they precede an element of the shape **a**. Other vowels are not affected.

At least in some cases compensatory lengthening makes up for the loss of the vowel. Examples (11) - (13) show the elision of different vowels before **a**. In example (11), the vowel **ɨ** of the copula verb **dɨ́** 'be' is elided before the comitative marker **ā**. Example (12) shows the elision of the final vowel **ɔ** of the relative pronoun **bɔ́** before the comitative marker **ā**. The final vowel of the conditional marker **kə** also frequently gets elided when it precedes the second person singular preverbal pronoun **à**, as shown in example (13).

(11) wān wū bɔ́m yɛ̄ n=dā́ā mɔ̀nō
CL1.child CL1;3SG.POSS accept(c) COMP 1SG-COP.COM CL1.male

'Her child confirmed: I do have a husband.'

(12) à də ndʒɔ́m bī fɨ́ b-áā wà
2SG see(a) CL8.things CL8 pass(b) CL8-DET.COM 2SG

'You have seen the things that have happened to you, ...'

(13) káà mū ʃú gɛ̄ w-ɔ́ à mɨ̄
COND.2SG take(a) come(b) CL3/7a.maize CL3-DET 2SG CONSEC
kpè wǔ ŋgī mī sɨ́ yí-ʃyɛ́
soak(a) CL3 CL6.water in CL9/10.day CL10-two

'When you take the corn and soak it in water for two days, ...'

As pointed out above, vowels other than **ɨ**, **ə** or **ɔ** are not elided. E.g., in (14), the final vowel **u** of **tʃu** 'come' does not merge with the comitative marker **ā**.

(14) wù tʃú ā mbɨ́, bɔ́ mú
CL1 come(b) COM CL6.palm_wine CL2 drink(b)

'He brought wine [and] they drank.'

3.4.2 Low tone spread

A low tone causes a following superhigh tone to be realized as a LH rising tone. This happens, e.g. when a low tone subject pronoun like e.g., the third person singular (Class 1) pronoun **wù** 'he/she', precedes a superhigh verb of the tonal class B, as in example (15b).

(15) a. bə́ tʃʉ́ f-ání
CL2 come(b) PROX-this_way

'They have come here.'

b. wù tʃʉ̌ f-ání
CL1 come(b) PROX-this_way

'He has come here.'

When it is preceded by a low tone pronoun like the third person singular (Class 1) pronoun **wù** 'he/she', as in example (15b), the verb is realized with a rising tone (see 15b). When preceded by a non-low subject pronoun, the verb is realized with a superhigh tone (see 15a), unless is stands in utterance-final position.

However, low tone spread does not always apply when a low tone precedes a superhigh tone. It does not apply e.g. between a prefix and the nominal root it attaches to, between two nominal roots in nominal compounds or between two nominal roots in associative constructions. Superhigh nominal roots are not realized with a rising tone after low tone prefixes such as the Class 2 prefix **bà-**, as e.g. in **bà-nǐ́** 'mothers'. Nominal stems which usually bear a superhigh tone also retain their superhigh tone in the diminutive, which is formed by adding the low-toned Class 19 prefix **fì-** to the stem. This can be seen in the following examples: **fì-ŋkáŋ́** 'a bit of salt', **fì-ŋkɛ́́** 'little spoon' and **fì-tsáŋ́** 'little stick' (rather than ***fì-ŋkǎŋ**, ***fì-ŋkɛ̌** and ***fì-tsǎŋ**). Furthermore, a superhigh root is not affected by a preceding low tone within a possessive construction or a nominal compound based on one, as in **dzɔ̀-yǐ́** 'eyelid', **bɔ̀ nǐ́** 'the mother's bag' and **bɔ̀ ŋkíŋ́** 'my bag' (CL7).

CHAPTER 4

The noun class system

Mundabli has a fully-fledged agreement system, almost like a Bantu language. However, in some regards the Mundabli system differs considerably from a typical Bantu-like noun class system. In a Bantu-like noun class system, agreement is usually marked both on modifiers within the noun phrase and on the verb. Typically, noun classes are also overtly marked by prefixes (and/or suffixes) on the noun itself. Example (16) (taken from Corbett (1991: 43), ultimate source Welmers (1973: 171)) shows agreement marking in Swahili, a typical Bantu language. In example (16) the prefix **ki-** marks agreement or noun class, respectively, on the nominal modifiers, on the verb and on the noun itself.

(16) *ki*kapu *ki*kubwa *ki*moja *ki*lianguka
basket big one fell
'One large basket fell.'

In Mundabli, the agreement system is fully intact. Agreement is marked by segmental or, for Gender 9/10,[1] tonal prefixes. However, agreement in Mundabli is restricted to noun modifiers. The verb does not agree with its subject or object. Whereas this is not unusual for a Bantoid language, what is more unusual is the lack of noun class marking on the noun itself. Noun classes in Mundabli are in most cases covert, i.e. they are not detectable from the shape of the noun alone. Whereas most Yemne-Kimbi languages have a somewhat reduced nominal morphology and have lost overt noun class marking for some

[1] Singular-plural class pairings are referred to as "genders", see §4.2 for details.

noun classes[2] (Good et al. 2011), Mundabli and Mufu are the varieties whose overt noun class marking shows the highest degree of formal attrition.

The remainder of this chapter contains a section on previous treatments of Yemne-Kimbi noun class systems (§4.1) and an overview of the Mundabli noun class system (§4.2). It further contains descriptions of noun classes and noun class pairings (§4.3), a section on the noun class assignment of borrowed nouns (§4.4) and a section on the secondary classification or 'derivational' use of noun classes (§4.5). The last section contains a discussion of the current analysis of the noun class system and a comparison with an alternative purely language-internal analysis based on agreement classes (§4.6).

4.1 Previous treatments of Yemne-Kimbi noun class systems

The noun class systems of Yemne-Kimbi languages were first described in Hombert (1980), which is a description of the noun class systems of some languages belonging to a putative grouping which Hombert referred to as the "Beboid" languages (see §1.1.5 for details). His conspectus contains data from Buu, another Ji-variety (see §1.1.5 for clarification but none from Mundabli (or Mufu). A more recent overview of noun class systems of the Yemne-Kimbi languages, which includes a section on the Mundabli noun class system is provided in Good et al. (2011). Both Hombert (1980) and Good et al. (2011) adopt a comparative approach, analyzing the noun class systems in a way which focusses on possible relations with the reconstructed Proto-Bantu system and with noun class systems of other Bantoid languages. Analysis and numbering of noun classes in the current work differ in certain respects, such as e.g. the absence of a plural Class 4, from those in Good et al. (2011). Differences are pointed out in the relevant sections.

Aside from these more general works, there are two more recent works which also treat their noun class systems, one on the Ji-variety Buu (Ngako Yonga 2013) and one on Mungbam, a dialect cluster including the varieties Abar, Biya, Missong, Munken and Ngun (Lovegren 2013). Ngako Yonga (2013) describes the phonology and the noun class system of Buu, which she also compares with the noun class system of Mundabli, as described in Good et al. (2011). Lovegren (2013) is a multi-dialectal grammar of Mungbam. It contains a detailed description and analysis of the noun class system(s) of the Mungbam varieties and skillfully relates them to the reconstructed Proto-Bantu system and to noun class systems of related languages.

[2]Buu, another Ji variety, has retained most noun class prefixes, but they are dropped when the noun is modified by a possessive pronoun or a demonstrative (Ngako Yonga 2013: 111). Similar processes have been reported for Aghem (Ring, Hyman 1979: 27) and Ajumbu (Yemne-Kimbi, Good et al. 2011: 138). Whereas in Mundabli nominal prefixes sometimes alternate with zero, a clear correlation with the presence of noun modifiers, as in Buu is not discernible.

4.2 Overview of the noun class system

The aim of this section is to give an overview of the noun class system. The current description of the noun class system differs in some respects from descriptions in earlier publications, such as Good et al. 2011. A discussion of the current analysis and a comparison with a purely morphological noun class system can be found in §4.6.

Following Bantuist tradition (see e.g., Maho 1999 and Katamba 2003), the current analysis of the noun class system is based on agreement classes and numeral distinctions, however, class labels diverge from the traditional system in some cases. All nouns which have the same number value (singular, plural or uncountable) and show the same agreement patterns are assigned to a common noun class. Groups of nouns with identical agreement but different number values are split up into classes which are uniform regarding the number values of their members, i.e. all singular nouns are in one class and all plural nouns are in another, even if they trigger the same agreement patterns. In general, odd numbers represent singular classes and even numbers represent plural classes (classes of uncountable nouns are exempt from this rule).

Regarding noun class labels, when two or more classes show the same agreement but are distinguished based on their number values, their labels contain the same number, first plain, then accompanied by the lower case letters **a** and **b**. Thus, in the current system there is e.g., a singular Class 7, a plural Class 7a and an uncountable Class 7b (see Table 4.1). Only in the case of Class 6, which contains liquids and triggers the same agreement as Class 18, is the label Class 6 preferred over Class 18a because of its historical connection with Proto-Bantu Class 6a (see §4.3.7 for details). As in earlier publications, noun class labels are reminiscent of the Proto-Bantu noun classes to which they relate. As commonly done among Bantuists, I refer to singular-plural pairings of noun classes, such as e.g., Class 1 and Class 2 or Class 3 and Class 10 as "genders". In this system, a noun class may be part of two genders at the same time, such as singular Class 3, which pairs with plural Class 7a and plural Class 10 (see Table 4.1).

The current description treats the category 'number' as basically derivational (which is common practice among Bantuists). Section 4.6 relates the current analysis to an alternative analysis in which number is treated as inflectional category.

Table 4.1 lists all noun classes together with their nominal prefixes and pronouns[3] in order to give an overview of the current analysis of the noun class system. The low tone symbol in the prefix slot for Class 9 does not exactly represent a low tone prefix, but is meant to symbolise that there is a systematic

[3]Pronouns were chosen over agreement prefixes because pronouns show the greatest differentiation of noun classes. Agreement prefixes (both consonantal and syllabic) always neutralise the distinction between at least two classes, see Chapter 5 for details.

tonal opposition between Class 9 (singular) and Class 10 (plural) nouns with the tone patterns of Class 9 (singular) nouns tending to be lower than those of the corresponding Class 10 (plural) nouns.

singular noun class	noun class prefix	pronoun	plural noun class	noun class prefix	pronoun
1	–	**wù**	2	**Ø-, bə̀-**	**bə̋**
3	–	**wū**	7a	–	**kī**
3	–	**wū**	10	–	**yī**
7	**Ø-, kī-**	**kī**	8	**Ø-, bī-**	**bī**
9	**`-**	**yì**	10	–	**yī**
19	**Ø-, fì-**	**fī**	18	**Ø-, mù(N)-**	**mū**
6	–	**mū**			
8a	–	**bī**			
3a	–	**wū**			
7b	–	**kī**			
9a	–	**yì**			
10a	–	**yī**			

Table 4.1: Noun classes with corresponding nominal prefixes and pronouns

In Table 4.1, the noun classes are arranged in singular-plural pairings or genders with singular and unpaired classes on the left and plural classes on the right. Class 3 and Class 10 occur twice in the table because each of them is part of two singular-plural pairings. Unpaired classes or single genders are found below the dashed line. Each of the unpaired classes has agreement patterns found in one of the paired classes as well. The subdivision of nouns into noun classes as found in Table **??** as well as noun class labels in the current system differ slightly from those in earlier publications, such as e.g. Good et al. (2011). Motivations for the current classification and differences with earlier analyses are discussed in the relevant sections, see §4.3.1-§4.3.9.

Table 4.2 contains examples of nouns of all noun classes, exemplifying the shape of the noun and the presence vs. absence of a noun class prefix. The most common case is that noun class marking is completely covert, i.e. the noun does not bear a prefix and the noun class cannot be inferred from the shape of the noun itself, but is only detectable through agreement marking on noun modifiers.

singular noun class	noun class prefix	example	plural noun class	noun class prefix	example
1	–	**ŋkŏŋ** ‘chief’	2	**Ø-**, **bə̀-**	**ŋkŏŋ** ∼**bə̀ŋkŏŋ** ‘chief’
3	–	**yə́n** ‘tooth’	7a	–	**yə́n** ‘teeth’
3	–	**gbɔ̀** ‘house’	10	–	**dzɔ̀** ‘houses’
7	**Ø-**, **kī-**	**bɔ̀** ‘bag’	8	**Ø-**, **bī-**	**bɔ̀** ‘bags’
9	**`-**	**ywɔ̌ŋ** ‘snake’	10	–	**ywɔ̋ŋ** ‘snakes’
19	**Ø-**, **fī-**	**ntsī** ‘louse’	18	**Ø-**, **mù(N)-**	**ntsī** ‘lice’
6	–	**ŋgī** ‘water’			
8a	–	**ntsɔ̀** ‘medicine’			
3a	–	**bū** ‘hunger’			
7b	–	**kwù̱** ‘fog’, ‘mist’			
9a	–	**yù̱** ‘vapour’			
10a	–	**ntsɔ̀** ‘medicine’			

Table 4.2: Examples of noun classes showing noun class marking on the noun or lack thereof

4.3 Noun class pairings (‘genders’) and unpaired classes (‘single genders’)

Most nouns can be assigned to singular-plural pairings of noun classes, in the following referred to as ‘(paired) genders’. A smaller number of nouns form unpaired noun classes or ‘single genders’. Figure 4.1 shows all attested pairings of noun classes[4] and all unpaired classes. Singular classes (left) and plural classes (right) are connected with lines, each line representing a paired gender. Unpaired classes or ‘single genders’ are found in the lower half of the table. They are not assigned a number value (singular or plural).

As Figure 4.1 shows, there is a near one-to-one correspondence between singular and plural classes. Only Class 3 and Class 10 are connected to more than one other class. Class 3 nouns may take their plural form either in Class 7a or in Class 10 and Class 10 nouns may take their singular form either in Class

[4]Some of the noun classes are given different labels than in earlier publications, as e.g. Good et al. (2011). The noun class labels used here are discussed for each gender separately in §4.3.1-§4.3.9.

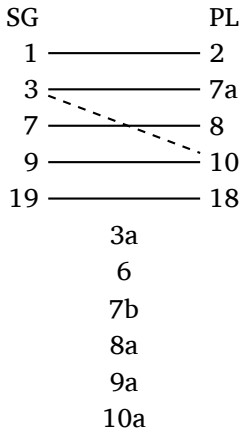

Figure 4.1: Singular-plural noun class pairings

9 or in Class 3. The dashed line connecting Class 3 with Class 10 in Figure 4.1 symbolises an exceptional gender which is made up of a small number of nouns. Only nine nouns are attested whose singular form triggers Class 3 agreement and whose plural form triggers Class 10 agreement. The number of Gender 3/7a nouns, on the one hand, and Gender 9/10 nouns on the other is much bigger than this (cf. Table 4.3). Gender 3/10 is also remarkable for another reason. Some Gender 3/10 nouns are subject to stem-initial consonant mutation, which suggests a historical connection with Proto-Bantu Gender 3/4, see §4.3.6 for details.

paired gender	number of nouns	percentage of total	unpaired gender	number of nouns	percentage of total
1/2	131	25	6	16	3
3/7a	62	12	8a	19	4
3/10	9	2	9a	9	2
7/8	128	25	7b	5	1
9/10	90	17	3a	13	2
19/18	34 (non-derived)	7	10a	2	0

Table 4.3: Relative frequency of singular-plural noun class pairings

The quantity of lexical items within each gender is shown in Table 4.3. Paired genders are listed in the first column, and single genders in the fourth column. Each of these columns is followed by a column with the number of nouns they contain and a column with their percentage of the total number of nouns in the subsequent columns.

Gender 1/2 and Gender 7/8 are the most common genders. They contain almost the same amount of lexical items. They are followed by Gender 9/10 and Gender 3/7a in the given order. Gender 19/18 contains 34 non-derived members, but the amount of lexical items within this gender is flexible because it also contains diminutives derived from nouns of the other noun classes. Of the paired genders, the irregular Gender 3/10 is by far the smallest. Unpaired genders generally contain fewer members than paired genders. The only exception to this rule is Gender 3/10 which, with only nine nouns, contains fewer nouns than some of the single genders. The single gender with the largest amount of lexical items is Gender 8a (with 19 nouns) which contains terms for uncountable substances and abstract (deverbal) nouns. It is closely followed by Gender 6 which contains mainly liquids. The smallest single gender is Gender 10a with only two nouns. Special sections are devoted to Gender 6 (§4.3.7) and Gender 8a (§4.3.8) because of their large frequency and their prominent role with regard to the history of the Mundabli noun class system. The remaining single genders are subsumed in §4.3.9. Finally, §4.3.1-§4.3.9 describe noun class marking and labels and discuss the history of the synchronic noun classes.

4.3.1 Gender 1/2

Gender 1/2 is the most common gender, closely followed by Gender 7/8. Most nouns referring to humans belong to this gender, but Gender 1/2 also contains numerous non-human nouns. The majority of loanwords are assigned to Gender 1/2.[5] Table 4.4 contains a selection of Gender 1/2 nouns.

Class 1	gloss	Class 2	gloss
mfɔ̀	‘slave’	**mfɔ̀**	‘slaves’
ŋkŏŋ	‘chief’	**ŋkŏŋ**	‘chief(s)’
tʃ̀ìndə	‘assistant of the chief’	**tʃ̀ìndə**	‘assistants of the chief’
bɛ̀	‘traditional cup’	**bɛ̀**	‘traditional cups’
kā́kā́	‘taro’	**kā́kā́**	‘taros’
mbɔ̀ŋ	‘cow’	**mbɔ̀ŋ**	‘cows’
mɔ̀	‘person’	**mbɛ̀**	‘people’
wān	‘child’	**ɲwɔ́m**	‘children’
kpé	‘woman’	**kpé∼tʃé**	‘women’

Table 4.4: Singular-plural pairings of Gender 1/2 nouns

The ratio of nouns with vs. nouns without stem alternations in Table 4.4 is not representative. In reality, the great majority of Gender 1/2 nouns have identical stem forms in Class 1 (singular) and Class 2 (plural) and only a handful of nouns show irregular stem alternation.

[5] Interestingly, a considerable amount of loanwords are also assigned to Gender 7/8. See §4.4 for more on the noun class assignment of loanwords.

Class 1 (singular) nouns do not take a prefix. Although around a third of the Gender 1/2 nouns (like e.g., **ŋkŏŋ** 'chief', **mbɔ̀ŋ** 'cow', **ŋkɔ̀m** 'hoe') start in a nasal, there are no morphological arguments for treating the nasal as a prefix in the synchronic system. It is present in the singular (Class 1) and the plural form (Class 2) and is not replaced by the Class 2 (plural) prefix **bà-**, e.g. in **bà-ŋkŏŋ** 'chiefs' or by the diminutive Class 19 prefix **fì-**, e.g. in **fì-mbɔ̀ŋ** 'a little cow' (Class 19). Although a nominal prefix exists which can be used with most if not all Class 2 nouns (including irregular stem forms, such as **ɲwʊ́m** 'children'), this prefix is not often used. Class 2 (plural) nouns more commonly take the form of bare stems. What exactly conditions the presence vs. absence of the Class 2 prefix is not quite clear. The only Class 2 nouns which commonly take a prefix in my data are the nouns **bà-nǐ́** 'mothers', **bà-tǐ** 'fathers' and **bà-ŋkŏŋ** 'chiefs', see e.g. example (17) and nouns which refer to nationalities or ethnic groups such as **bà-nàsɛ̄** 'white people', cf. example (18)

(17) bà-ŋkŏŋ bǒ tʃú (yɛ̄) bə̄ gɒ̄
CL2-CL1/2.chief also come(b) COMP IMPERS divide(a)

'The chiefs, too, came to divided [the land].'

(18) bà-nàsɛ̄ b-ɔ́ ʃɪ́ŋ ʧǐ́n mɪ̄ ánáá
CL2-CL1/2.white_person CL2-DET fill_up(b) there in like_that

'Whites are packed in it, like that.'

In combination with names and deictic noun stems, such as **bà-nǐ́** 'mothers' and **bà-tǐ** 'fathers' etc. the Class 2 prefix can function as an associative marker, as e.g. in **bà-Nyùŋfù ā Mán** 'Nyùŋfù ā Mán and his associates', see e.g. example (23). The interrogative pronoun **ndɛ̀** 'who' can also take a Class 2 prefix when it clearly refers to a group of people, as in (19). This could also be an instance of associative semantics.

(19) wo̩ bà-ndɛ̀
wash(b).IPFV CL2-who

'Who are [those who are] washing?'[6]

4.3.2 Gender 3/7a

Gender 3/7a contains body parts and tools but also various other things such as **yɪ̄ŋ** 'egg/s', **kpʊ́** 'week/s' or **ɲū** 'field', which can hardly be subsumed under a common term. With 62 attested nouns,[7] Gender 3/7a is the fourth most common gender (directly following Gender 9/10). Gender 3/7a nouns are not marked by segmental or tonal prefixes (see Table 4.5).

[6]This phrase is commonly used to warn people when approaching a stream where people are bathing naked.

[7]Compared with this, the nine nouns attested for the Gender 3/10 form an exception. See §4.3.6 for more on the exceptional Gender 3/10.

Class 3	gloss	Class 7a	gloss
tʃə̋m	'axe'	**tʃə̋m**	'axes'
yɪ̄ŋ	'egg'	**yɪ̄ŋ**	'eggs'
bì	'fish' (SG)	**bì**	'fish' (PL)
wə́ŋ	'nose'	**wə́ŋ**	'noses'
kpɔ́	'week'	**kpɔ́**	'weeks'

Table 4.5: Singular-plural pairings of Gender 3/7a nouns, examples of identical singular and plural forms

While most Gender 3/7a nouns are identical in Class 3 (singular) and Class 7a (plural) (see Table 4.5), my database contains 9 nouns which exhibit stem alternations including ablaut and consonant alternations, sometimes in combination with tonal changes. As Table 4.6 shows, stem alternations in Gender 3/7a nouns are not as systematic as the initial consonant mutation displayed by some Gender 3/10 nouns (see §4.3.6).

Class 3	gloss	Class 7a	gloss
ɲū	'field'	**ɲwɛ́**	'fields'
tʃyē	'stone'	**tɛ́**	'stones'
fɔ̄	'head'	**fá**	'heads'
byɛ̀	'foot'	**byɛ̀**	'feet'
wɪ̀n	'feather'	**gwɛ̀n**	'feathers'
wɔ̀ŋ	'spear'	**gɔ̀ŋ**	'spears'
fù	'raffia stem'	**fɔ̀**	'raffia stems'
ɲű	'knee'	**ɲwɛ́**	'knees'
dấn	'rhizome'	**dwɔ́ŋ**	'rhizomes'

Table 4.6: Irregular singular-plural stem alternation in Gender 3/7a nouns

The plural class in this noun class pairing is named 7a due to its formal resemblance with singular Class 7. Nouns of these two classes trigger the same agreement patterns and lack nominal prefixes. Thus, the label 7a is chosen for language-internal reasons and is not meant to imply that this class is historically derived from Proto Bantu Class 7. It is likely that Mundabli Class 7a may be cognate with Proto Bantu Class 13. The reader is referred to the discussion in Lovegren (2013: 137-141) for a detailed discussion of the issue for parallel phenomena in Mungbam languages.

4.3.3 Gender 7/8

Gender 7/8 contains inanimates and numerous other things, such as body parts, (mainly small) animals, fruit, nuts and vegetables, among others. Around

one quarter of all loanwords are also assigned to Gender 7/8 (see §4.4 for more on the gender assignment of loanwords).

Gender 7/8 contains nearly the same amount of lexical items as Gender 1/2. Together, these two form the most common genders with around 130 members each. Nouns in Gender 7/8 generally do not take noun class prefixes (see below for exceptions). Their tonal pattern is the same in the singular (Class 7) and in the plural (Class 8), see Table 4.7.

Class 7	gloss	Class 8	gloss
kū	'bone'	**kū**	'bones'
də̌	'machete'	**də̌**	'machetes'
tɔ̀	'horn'	**tɔ̀**	'horns'
kɛ́	'leg'	**kɛ́**	'legs'
bɔ̀	'bag'	**bɔ̀**	'bags'
fɔ̋	'hat', 'cap'	**fɔ̋**	'hats', 'caps'
kɔ́m	'horse'	**kɔ́m**	'horses'
tɔ̋ŋ	'ram' (male sheep)	**tɔ̋ŋ**	'rams'
tákpàm	'bean, sp.', 'stick bean'	**tákpàm**	'beans, sp.', 'stick beans'
gɔ̄ŋláŋ	'dragonfly'	**gɔ̄ŋláŋ**	'dragonflies'

Table 4.7: Singular-plural pairings of Gender 7/8 nouns, examples of identical singular and plural forms

While nouns are generally identical in the singular and the plural (Class 7 and Class 8), my data contain seven Gender 7/8 nouns which involve singular-plural stem alternations. The attested cases are shown in Table 4.8.

Class 7	gloss	Class 8	gloss
ɲwə̀n	'bird'	**ɲwɔ̀m**	'birds'
tʃə́ŋ	'ear'	**tʃɔ́m**	'ears'
nɨ́ŋ	'thing'	**ɲdʒɔ́m**	'things'
ndzɪ̄ŋ	'house fly'	**ndzə̄m**	'house flies'
swōm	'palm nut'	**ʃwōm**	'palm nuts'
mfŭŋ	'coco yam'	**mfɛ̆n**	'coco yams'
dzɛ́	'mouth'	**dzɔ́**	'mouths'

Table 4.8: Singular-plural pairings of Gender 7/8 nouns, examples of irregular stem alternation

Some of these irregular Gender 7/8 nouns end in a velar nasal (**ŋ**) in Class 7 (singular), but not in Class 8 (plural), while some end in a bilabial nasal (**m**) in Class 8, but not in Class 7. This may be due to the assimilatory effect of former Class 7 and 8 suffixes or of agreement prefixes starting in velar (Class 7) and bilabial stops (Class 8), respectively. For the rest, Gender 7/8 stem alternation does not seem very systematic.

Only two Gender 7/8 nouns with prefixes are attested: **bí-lúŋ** 'suffering' (20) and **bì-tsə̄m** 'boma snakes' (21). These forms co-exist with the prefix-less forms **lúŋ** and **tsə̄m** which can have the same (plural) meaning.

(20) wù fyá bì-lùŋ ɲwɔ́m b-ɔ́ lā
CL1 give(b).IPFV CL8-CL7/8.suffering CL2.children CL2-DET DAT
ā̋ mò̩mò̩, gɛ̄ ɲwɔ́m nī́ kə̀ wù ká
ADVLZ very_much while CL2.children CL1.mother without CL1 HAB
tʃyé bɔ̀
know(c) FRUST

'She made them suffer, not knowing that they were her siblings.'

(21) bì-tsə̄m b-ɔ́ ā̋ mɨ́ ŋgɔ̄
CL8-CL7/8.boma_snake CL8-DET still 1SG.PP upon

'The big snakes are also on me.'[8]

The interrogative pronoun **mān** 'what' can also (optionally) take a Class 7 prefix, rendering **kì-mān** 'what' (22). It is unclear what determines the presence vs. absence of a prefix in this case.

(22) dɨ̌ kì-mān nǭ [à yē kɛ̄ dzɔ̄ŋ k-ɔ́ kī́ ī́
be(b) CL7-what SUBORD 2SG start(a) return(c) again CL7-REL CL7 LOC
t-ā́n mɪ̄]
PROX-here in

'What is it that you are starting again in here?'

Regarding the historical origin of Class 7 and 8, it is likely that they are cognate with the Proto-Bantu singular-plural class pairing 7/8. The sporadic noun class prefixes attested in Mundabli Gender 7/8 nouns, **kì-** and **bì-** strongly resemble the prefixes reconstructed for Proto-Bantu Gender 7/8 ***kì** and ***βị̀** (Maho 1999: 51) and the concords are also consistent with this. The semantic content of the Mundabli and Proto-Bantu Gender 7/8 also coincide, at least to a certain extent.

4.3.4 Gender 9/10

Gender 9/10 is the third most frequent gender with 90 nouns. It contains animals and insects, but also various other things, such as body parts (**ʃyă** 'ankle', **tsăn** 'arm', **dzə̄m** 'back', **sĕn** 'calf of leg') and other things which cannot be easily subsumed under a common term. Very few loanwords are found in this gender (see §4.4 for more on the gender assignment of loanwords). Finally,

[8]The word **bìtsə̄m** refers to a special, big type of snake, commonly referred to as 'mboma' in Cameroon.

Gender 9/10 also contains deverbal nouns (other than infinitives), such as **nàm** 'work'(n) (plural **nàm**) and **kpī** 'death' (plural **kpī**).

Gender 9 (singular) and Gender 10 (plural) nouns are, with a few exceptions, segmentally identical but they involve systematic tonal alternations. The tone of a Class 9 (singular) noun is generally lower than that of a Class 10 (plural) noun, as can be seen in Table 4.9.

Class 9	gloss	Class 10	gloss
bɔ̀m	'antelope'	**bɔ̂m**	'antelopes'
dzwàn	'disease'	**dzwân**	'diseases'
tsə̌	'baboon'	**tsə̋**	'baboons'
sə̌ŋ	'basket, sp.'	**sə̋ŋ**	'baskets, sp.'
sām	'heart'	**sām**	'hearts'
tsō	'toilet'	**tsō**	'toilets'
ʃì	'chicken'	**ʃî**	'chickens'
tsə̌n	'arm'	**tsə̀n**	'arms'

Table 4.9: Singular-plural pairings of Gender 9/10 nouns showing tonal stem alternation

Most Gender 9/10 nouns bear one of the three tone patterns found above the dashed line in Table 4.9. The tone patterns low (L), mid (M) and low-high rising (LH) in Class 9 (singular) nouns correspond to a mid-low falling tone (ML), a mid tone (M) and a superhigh tone (S) in Class 10 (plural) nouns. For a detailed discussion of tonal alternations in Gender 9/10 nouns, see §3.2.1.4.

In addition to these regular tonal alternations, Table 4.9 contains two examples of irregular tonal alternations below the dashed line. Each of the two irregular tonal stem alternations is only found in two nouns: **tsə̌n** 'arm' and **tsə̌ŋ** 'palm kernel' have a low-high rising tone in Class 9 (singular) and a mid-low falling tone in Class 10 (plural), and **ʃì** 'chicken' and **dʒì** 'road' have a mid tone in Class 9 (singular) and a mid-low falling tone in Class 10 (plural). 'road' also involves a segmental stem change (**dʒì/dzɛ̀** 'road'/'roads'). So far, I have no explanation for these irregular tone patterns. However, it is worth noting that the tone patterns of the singular (CL9) and plural (CL10) forms of these nouns, i.e. M and LH for Class 9 (singular) nouns and ML for Class 10 (plural) nouns are all common in this Gender.

4.3.5 Gender 19/18

Gender 19/18 contains, most conspicuously, derived diminutives which are characterized by Class 19/18 nominal prefixes (see also §4.5.2 on diminutive derivation). However, Gender 19/18 also contains a number of nouns which are lexically specified as Gender 19/18 nouns and do not have diminutive semantics. These underived Gender 19/18 nouns form a rather random array of things, including e.g., **ŋmgbū** 'vein' (CL19), **ŋkə̌ŋ** 'oath' (CL19), **fɛ̂n** 'billy goat'

(CL19), **ntsɨŋ** 'bead' (CL19), etc. Underived Gender 19/18 nouns do not take nominal prefixes. They are segmentally and tonally identical in the singular (Class 19) and in the plural (Class 18). Examples are given in Table 4.10.

Class 19	gloss	Class 18	gloss
ŋmgbə̀	'wether'	**ŋmgbə̀**	'wethers'
ɲǎŋ	'bush fowl'	**ɲǎŋ**	'bush fowls'
ŋkǎn	'oath'	**ŋkǎn**	'oaths'
fɛ̂n	'billy goat'	**fɛ̂n**	'billy goats'
ntsī	'louse'	**ntsī**	'lice'
ɲʃúŋ	'necklace'	**ɲʃúŋ**	'necklaces'
ntấm	'fruit'	**ntấm**	'fruits'

Table 4.10: Singular-plural pairings of underived Class 19/18 nouns (without prefix)

Nominal prefixes for Class 19/18 are productively used to derive diminutive forms of nouns which are lexically specified as belonging to any noun class pairing, including Gender 19/18 itself, as in **mwǐn** 'cat' (Class 19) vs. **fì-mwǐn** 'little cat' (Class 19). Examples of derived Gender 19/18 nouns are given in Table 4.11. In addition to the derived nouns and their translations, Table 4.11 contains the lexical classes of the source nouns. In cases where singular and plural stems differ, the noun class marker is prefixed to the number-specific stem form (see Table 4.11). Diminutive derivation is discussed in more detail in §4.5.2.

Class 19	gloss	lexical noun class	Class 18	gloss	lexical noun class
fì-ntsī	'little louse'	19	**mù-ntsī**	'little lice'	18
fì-mɔ̀	'little man'	1	**mù-mbɛ̀**	'little men'	2
fì-gbɔ̌	'little house'	3	**mù-dzɔ̌**	'little houses'	10
fì-dʒǐ	'little dog'	9	**mù-dʒǐ́**	'little dogs'	10
fì-ŋkǔŋ	'little chief'	3	**mù-ŋkǔŋ**	'little chiefs'	10

Table 4.11: Singular-plural pairings of derived Gender 19/18 nouns (with prefix)

Mundabli Class 19 is formally similar to Proto-Bantu (henceforth PB) Class 19 (***pi̧-**) (Maho 1999: 51) and indeed, Class 19 is one of the "most oft-occurring diminutive classes" in Bantu (Maho 1999: 88). The label 18 for the plural Class corresponding to singular Class 19 was chosen based on the formal similarity of the derivational Class 18 prefix to the prefix of Proto-Bantu Class 18 (*mù-). However, it is not meant to imply that the two are cognate. In earlier works on comparable issues in related languages, this has been dealt

with by assigning names other than Class 18 to this class. While Hombert (1980: 92) refers to this class as 26, it is labelled 12 in Hyman's description of Noni (Hyman 1981: 15), but renamed Class 18a in Hyman (1980: 186). Hyman states clearly that "[...] it is identical in form to PB *mu-" but he does "not mean to suggest that the two are cognate in any way" (Hyman 1980: 187). I chose to call it Class 18 rather than 18a because the label 18a would imply that there is another class 18 in Mundabli, which there is not (although the spatial deictic meaning **in** may be related to the PB locative class 18, see §10.4). Instead, the use of lower case letters following the noun class number is reserved for cases in which two noun classes have identical agreement but differ with respect to their number value.

4.3.6 The exceptional Gender 3/10

With only nine nouns, Gender 3/10 is by far the smallest paired gender. Gender 3/10 nouns do not take nominal prefixes. Of the nine attested Gender 3/10 nouns, four have identical singular and plural forms. The remaining five exhibit a peculiar kind of stem-initial consonant alternation.[9] In these five nouns, the stem-initial consonant alternates between a labiovelar stop (**kp**, **gb**) in Class 3 (singular) nouns and an alveolar affricate (**ts**, **dz**) in Class 10 (plural) nouns (see Table 4.12).

Class 3	gloss	Class 10	gloss
kpɛ̀	'pot'	**tsɛ̀**	'pots'
gbɔ̀	'house'	**dzɔ̀**	'houses'
gbɪ̀	'rope'	**dzɪ̀**	'ropes'
gbɪ̀ŋ	'root'	**dzɪ̀ŋ**	'roots'
kpān	'tree, firewood, drum'	**tswān**	'trees, etc.'

Table 4.12: Singular-plural pairings of Class 3/10 nouns, examples showing initial consonant mutation

In four cases, the alternation is completely regular with **kp** alternating with **ts** and **gb** with **dz**. However, in the case of **kpān** 'tree', the affricate in the Class 10 (plural) stem **tswān** 'trees' is followed by a labial which is absent from the singular (Class 3) form. Gender 3/10 initial consonant mutation is described in more detail in §3.3.2.

Of the other four nouns which make up this gender, three are identical in singular (Class 3) and plural (Class 10), and one, namely **ndɔ̀n** 'branch', involves ablaut and a tone change but no consonant mutation (see Table 4.13). This is the only stem attested in this gender which also involves a tonal

[9] See Kießling (2010b) for a description and analysis of comparable processes in some other Yemne-Kimbi languages (which he refers to as Beboid languages) and other Southern Bantoid languages.

singular-plural opposition reminiscent of the tonal opposition typical of Gender 9/10 nouns.

Class 3	gloss	Class 10	gloss
ndɔ̀n	'branch'	**ndàn**	'branches'
ŋkwīn	'mountain'	**ŋkwīn**	'mountains'
ŋgàŋ	'hill'	**ŋgàŋ**	'hills'
ɲʃù	'palm tree, sp.'	**ɲʃù**	'palm trees, sp.'

Table 4.13: Singular-plural pairings of Class 3/10 nouns, examples without consonant mutation

In opposition to earlier treatments (e.g., Good et al. (2011)), the current analysis does not use the plural Class 4. What was formerly referred to as Gender 3/4 is renamed Gender 3/10 in the current analysis, even if this might conceal the historical origin of Gender 3/10. The plural forms of nouns lexically assigned to Class 3 and Class 9 trigger the same agreement and therefore form a single noun class synchronically. In fact, the initial consonant mutation encountered in Gender 3/10 nouns probably reflects the existence of former Class 3 and 4 prefixes with a rounded and an unrounded vowel.[10] However, in the current state of the language, Class 4 has merged with Class 10.

Of all the languages exhibiting comparable stem alternations, Mundabli seems to be the only one in which all alternating nouns start in a labiovelar stop in the singular (Class 3). At least two other Yemne-Kimbi languages, Koshin and Fang, also have a noun class pairing 3/4 which involves stem-initial consonant mutation with a plain labial consonant in Class 3 nouns and a plain palatal consonant in Class 4 nouns (cf. Good et al. 2011). However, the Mundabli cognates of those nouns which belong to Gender 3/4 in these languages and which show stem-initial consonant mutation but do not start in a labiovelar stop, such as **wí** 'eye' (Koshin, Class 3) and **dʒí**[11] 'eyes' (Koshin, Class 4), **wín** 'leaf, tooth' (Koshin, Class 3) and **dʒín** 'leaves', 'teeth' (Koshin, Class 4) (cf. Good et al. 2011: 144, Hombert 1980: 89 and Kießling 2010b: 25) fall into Mundabli Gender 3/7a which does not involve any stem changes. For a detailed discussion of stem-initial consonant mutation in Ring and Yemne-Kimbi languages, see Kießling (2010b).

4.3.7 Single Gender 6

Class 6 is not part of a singular-plural pairing. It forms a so-called 'single gender' consisting of only one class, unspecified for number. Class 6 contains mainly liquids and a few other non-countables, such as **ɲím̋** 'smoke', **mbwín**

[10] The Proto-Bantu prefixes for Class 3 and Class 4 are *mù- and *mì-, respectively (Maho 1999: 51).

[11] The original <j> in the Koshin examples has been replaced by [dʒ] here.

'flour' and **ŋkáŋ** 'salt'. My data contains the twelve[12] Class 6 nouns listed in Table 4.14.

Class 6	gloss
ŋgī	'water'
ŋkà	'corn beer'
mbí́	'palm wine'
myḗ	'oil'
ŋkīŋ	'palm kernel oil'
ɲtʃwá	'porridge'
ndzɛ̄	'urine'
mfṍm	'blood'
ndām	'tears'
ɲḯm	'smoke'
mbwḯn	'flour'
ŋkáŋ	'salt'

Table 4.14: Class 6 nouns

As Table 4.14 shows, all attested Class 6 nouns start with a nasal. Although the nasal is interpreted here as noun class prefix, it cannot be tested whether the nasal is a prefix or part of the stem because the noun only occurs in Class 6. Thus, there is no alternation in which an initial prefix would possibly get dropped. When the diminutive is derived by adding the Class 19 prefix, the nasal is not dropped.

Although plural Class 18 and unpaired Class 6 trigger the same agreement patterns, they are given different labels. Following the chosen conventions, I could have consequently labelled this class "18a". However, I decided to use the label "Class 6" in order to stay closer to common Bantoid conventions of noun class labelling. In fact, the liquid class, referred to as Class 6 here, is more commonly labelled 6a in the Bantoid literature. It can supposedly be traced back to the Proto-Benue-Congo liquid/mass class *ma- (PBC Class 6a) which has merged with the PBC class *a- in Narrow Bantu (Hyman 1980: 180). I do not include the lower case letter 'a' in the label in order to keep closer to the adopted conventions. However, I do not doubt that historically, Mundabli Class 6 is related to Proto-Benue-Congo liquid/mass class *ma- (commonly referred to as Class 6a, see e.g. Hyman 1980), rather than Proto-Bantu Class 6 (*mà-) (Maho 1999: 51). What is commonly referred to as Class 6 by Bantoid scholars, i.e. a reflexes of the PBS *a- class, is not attested in Mundabli.

[12]The low number of Class 6 nouns may be due to the nature of data collection which did not involve intense discussion of liquids other than water, beer and palm wine.

4.3.8 Single Gender 8a

Class 8a contains mass nouns, such as **tsà** 'mud' and **bwúl** 'dust', nouns denoting abstract concepts, such as **dàm** 'dream' and **tsə́** 'witchcraft', and deverbal manner nouns, such as **dʒű** 'shortness', **dʒīŋ** 'length' and **dzə́ŋ** 'beauty'. With nineteen attested members, of the unpaired classes Gender 8a contains the largest amount of lexical items. Table 4.15 contains some examples of Gender 8a nouns.

Class 8a	gloss
ɲām	'fufu'
dʒīŋ	'length'
dē∼dəl	'weight'
lī	'power'
ɲɔ̀	'language'
tsà	'mud'
mà	'clay'
dàm	'dream'
dʒɔ̀	'bridge'
bwúl	'dust'
dzə́ŋ	'beauty'
gā́	'fatness'
dʒű	'shortness'
tsə́	'witchcraft'
dzə̋	'dew'

Table 4.15: Class 8a nouns

As Table 4.15 shows, Class 8a nouns do not take prefixes. As the name suggests, Class 8a nouns and Class 8 nouns trigger the same agreement patterns. Neither of the two shows noun class marking on the noun. In order to be consistent, I refer to this Class as "Class 8a" because it differs from Class 8 only regarding its number value. Alternatively, this class could have been labelled "Class 14" because it seems to be related to Proto-Bantu Class 14 (and PBC Class *bu- (Wolf 1971)). Many abstract nouns, such as **lī** 'power' and **tsə́** 'witchcraft' are found in Mundabli Class 8a, just like in PB Class 14 (Maho 1999: 77). But even a few concrete nouns are found in this class. Among them is the noun **dʒɔ̀** 'bridge' which is also part of PB Class 14. The formal resemblance between Mundabli Class 14 (**bī-**) and PB Class 14 (***βù-**) is also strong enough to support a connection between the two. However, note that Mundabli Class 8a triggers the agreement prefix **bi-**, just like Class 8, rather than **bu-** or something similar.[13]

[13]Good et al. (2011) show that unpaired Class 8a = 14 and plural Class 8 have identical agreement in some Yemne-Kimbi languagages, but not in others.

4.3.9 Unpaired noun classes (single genders) other than Class 6 and 8a

There are a few other nouns which show no singular-plural distinction but whose agreement pattern is not that of Class 6 or Class 8a. They can be divided into small groups of nouns which trigger the same agreement patterns. All of them share their agreement patterns with those of a certain singular or plural class. However, due to their not having a singular-plural opposition, they are analyzed as distinct noun classes which form distinct single genders. Tables 4.16-4.19 contain comprehensive inventories of all remaining unpaired genders: Gender 3a, Gender 7b, Gender 9a and Gender 10a. Following the adopted conventions, the labels for these unpaired are composed of the number describing the singular/plural class with identical agreement plus the minor case letter 'a', or 'b' if 'a' is already taken.

Class 3a	gloss
bū	'hunger'
bwē	'sky'
wē	'sun'
gbḗ	'wind'
fū	'beans, sp.'
dɔ̄	'beans, sp', 'rice'
tswān	'bitter leaf'
bə́ŋ	'ash'
dʒɔ̀m	'honey'
dzɨ̀ŋ	'saliva'

Table 4.16: Single gender 3a, comprehensive list

Class 7b	gloss
gbə̀m	'God'
fǭ	'hair'
tɔ́	'cliff', 'rocks'
gbɛ̀	'pus'
kwṵ	'fog', 'mist'

Table 4.17: Single gender 7b, comprehensive list

4.4 Noun class assignment of borrowed nouns

Apart from a few exceptions like **tā́kèdā** 'book' and **tā́sā** 'enameled bowl', this treatment of loanwords is restricted to loans from English, Cameroon Pid-

Class 9a	gloss
dzɔ̀	'ground', 'soil'
yĭ	'sweat'
ʃyă	'fat', 'grease'
dzɪ̄ŋ	'rain', 'thunder'
yū̱	'vapour'
yə̋m	'music', 'song'

Table 4.18: Single gender 9a, comprehensive list

Class 10a	gloss
dzɔ̄	'ribs'
ntsɔ̄	'medicine'

Table 4.19: Single gender 10a, comprehensive list

gin and French. The number of French loanwords is restricted because the official language in the Northwest province is English. I sporadically include loanwords from other source languages when I am aware of them. However, in the light of my very limited knowledge of the other possible source languages, the origins of loanwords indicated in this section are based on my intuitions and should be taken with a grain of salt. To further complicate the issue, it is not easy in most cases to tell whether a loan is adopted from English or from Cameroon Pidgin or from another local language which has itself borrowed the word from English or Pidgin (or possibly from another local language which has borrowed it earlier, and so on). The same holds, of course, for loans from the other source languages. Table 4.20 contains selected examples of nominal loanwords from English and Pidgin and a few nominal loans from other source languages. English and Pidgin are given as alternative sources because it is (at this stage) impossible to tell them apart. The source languages listed in Table 4.20 should be taken as educated guesses and may sometimes represent the ultimate sources of words borrowed into Mundabli indirectly via other languages.

As Table 4.20 shows, borrowed nouns are assigned to three noun class pairings. While most loanwords (around three quarters of them) are assigned to Gender 1/2, a relatively large number of nouns (around one quarter) are assigned to Gender 7/8. Only very few loanwords are assigned to Gender 9/10. The number of loans in Gender 9/10 is so small (only 2, of which one (**yə̌**) may not be a loan) that I regard them as exceptions. Nevertheless, Gender 9/10 loans should be borne in mind during future investigations on loanwords in Mundabli.

example	gloss	gender	origin	source language
kɔ̂∼kɔ̂p	'cup'	1/2	*cup*	English/Pidgin
tā́kèdā	'book', 'school', 'sheet of paper' (old-fashioned word)	1/2	*takàrda* 'sheet of paper'	Hausa (<Tuareg<Latin <Greek)
skûl ∼ʃùkúrù ∼sùkúlù	*school*	1/2	'school'	English/Pidgin
dʒàkâ	'donkey'	1/2	*jàkā* 'female donkey'	Hausa
bɔ́tɨ̀	'bottle'	1/2	*bottle*	English/Pidgin
ʃɔ́gà	'sugar'	1/2	*sugar*	English/Pidgin
gâŋ	'gown'	1/2	*gown*	English/Pidgin
mɔ́tù ∼mɔ́ntù	'car'	1/2	*moto*	Pidgin
tábà	'tobacco'	1/2	*tābà*	Hausa
tā́sā	'enameled bowl'	1/2	*tāsà*	Hausa
nāsɛ̄	'white person'	1/2	*nàsārа* 'Christian, white person'	Hausa (orig. Arabic)
lítà	'bottle'	1/2	*liter* '1 liter bottle'	Pidgin
tɛ́bɨ̀	'table'	7/8	*table*	English/Pidgin
dzíŋ	'corrugated iron sheet'	7/8	*zinc* 'corrugated iron sheet'	English/Pidgin
kǔŋàm	'pig, pork'	7/8	*kunyam*	Pidgin (regional variety)
nǎnà	'pineapple'	7/8	*ananas*	French
yɔ̌ (PL **yɔ̋**)	'year'	9/10	*year*	English/Pidgin (?)
sàbɨ́lì	'laundry soap'	9/10	*sàbulǜ∼sàbulì*	Hausa (orig. Arabic)

Table 4.20: Selected nominal loans

As nouns of most noun classes in Mundabli (may) lack noun class prefixes, there is no particular class of prefix-less nouns which might attract the equally prefix-less loanwords as may happen "if a language has a [single] class in which nouns are devoid of overt class marker[s]" (Grinevald and Seifart 2004: 253). However, borrowed nouns are assigned to Gender 1/2 and Gender 7/8 which (like most other genders) generally lack overt noun class marking. It is possible that the nouns were borrowed during different periods and that the distribution of loans across two noun class pairings reflects a synchronic change in the noun class system. In other Bantoid languages borrowed nouns are also commonly assigned to the pairing 1/2[14] (e.g., Bafut (Tamanji 2009: 25) and Mankon (Leroy 1977: 81)), "just like all over the Bantu area" (Maho 1999: 54). Thus, the assignment of borrowed nouns to Gender 1/2 may have been the older strategy and loans may have been assigned to the pairing 7/8 more recently based on evidence from other constructions.[15] Gender 7/8 is the default gender synchronically. Another possibility is that Mundabli has been in contact with a language using a different strategy for the noun class assignment of loanwords and has adopted the strategy of that other language. However, I am not aware of any language in the wider area in which loanwords are assigned to Gender 7/8. Whatever the exact scenario may have looked like, the assignment of borrowed nouns to Gender 7/8 may have been introduced only recently. More research is needed to clearly determine the motivations behind the assignment of borrowed nouns to specific genders and the implications of the assignment of borrowed nouns to two different genders.

4.5 'Derivational' use of noun classes

Some noun class prefixes can be used 'derivationally', i.e. they can change the meaning of a noun. This meaning change goes along with a change of agreement patterns, as e.g. in **mɔ̀ w-ɔ̄** 'the man' (CL1) vs. **fì-mɔ̀ f-ɔ́** 'the little man' (CL19), unless the noun which forms the base of derivation already belongs to the derivational noun class, as e.g. in **mwɨ̌n f-ɔ́** 'the cat' (CL19) vs. **fì-mwɨ̌n f-ɔ́** 'the little cat' (CL19).

4.5.1 Associative plural with the Class 2 prefix (bə̀-)

The Class 2 prefix **bə̀-** is most commonly used with names and deictic expressions like 'father', 'mother' and 'chief' to express the "associative plural". As Daniel and Moravcsik (2011) define it, "[a]ssociative plural constructions

[14] In fact it is usually 1a/2. Bantuists use the label 1a for nouns which show the same agreement as Class 1 nouns but which do not take a noun class prefix. However, Class 1 nouns in Mundabli generally do not bear prefixes, so I do not distinguish between Class 1 and 1a.

[15] A Class 7 pronoun occurs as the default subject when no agent is involved. When resolving "gender conflict", i.e. a conflict in the choice of agreement which arises when two nouns are conjoined which are assigned to different noun class pairings, Class 8 is the plural class chosen to represent two non-human nouns of different genders.

consist of a noun X (typically of human reference, usually a person's name or a kin term) and some other material, most often an affix, a clitic, or a word. The meaning of the construction is 'X and other people associated with X'.". Example (23) shows the associative use of the Class 2 prefix in Mundabli. The Class 2 prefix in (23) is attached to the name **ɲùŋfù-ā-Mán**[16] with the resulting associative noun **bà-ɲùŋfù-ā-Mán** meaning "Nyungfu-a-Man and his associates".

(23) kə́ bà-ɲùŋfù-ā(n)-mán tʃú kóŋ kwó, tʃú kóŋ
COND CL2-N.-COM-M. come(b) hunt(c) enter(c) come(b) hunt(c)
kwó tʃű sɔ̀ bőŋmù mɨ̄ ā mbɛ̄ bə̄-dʒwē b-ɔ́
enter(c) come(b) first B. 1SG COM CL2.people CL2-many CL2-DET

'When Nyungfu-a-Man and his associates caught up, Bungmu and all those many people were the first ones to catch up with me.'

Associative plural constructions with relational nouns are shown in example (24).

(24) *then* ấká ɲwám bì-lùŋ bɔ̌, bő kấn b-ɔ́
then like CL2.children CL8a-suffering also CL2.PVB lack(b) CL2-REL
bà-tǐ ā bà-nǐ bɔ̌ āmɨ̀ mbɛ̄ dzwân
CL2-father COM CL2-mother 3PL.POSS and CL2.people CL10.illness
āmɨ̀ mbɛ̄ bì-lùŋ
and CL2.people CL8a-suffering

'[...] and also, for example, children who are suffering, who do not have parents, and sick people, and suffering people.'

More research is needed to determine the exact character and meaning of associative plural constructions in Mundabli.

4.5.2 Diminutive derivation with the Class 19/18 prefixes fì- and mùN-

The diminutive of a noun is derived by adding the Class 19 prefix **fì-** for singular nouns or the Class 18 prefix **mù(N)-** for plural nouns to the stem, as shown in (25)-(26). The same applies to inherent Gender 19/18 nouns, as e.g. in (26), which lack a noun class prefix (see §4.3.5) and do not have a diminutive meaning.

[16]The name **ɲùŋfù-ā-Mán** is composed of the name of the man himself, **ɲùŋfù**, and the name of his mother, **mán**. It means "Nyungfu with Man". The name **bőŋmù** literally means "pick-take". It is probably a nickname.

(25) kə́ wù kpə̄ ʃī gū w-ɔ́ tʃɔ́ŋ,
COND CL1 light(a) go_down(a) CL3/7a.fire CL3-DET CL1/2.fireplace
nǐ wū tɛ́n bǐ ʃì
3POSS.mother CL1;3SG.POSS drip(c) exit(b) go_down(a)
fì-ŋgī sɛ́
CL19-CL6.water CL3/7a.attic

'When she lit the fire in the fire place, her mother let a little bit of water drop down from the attic.'

(26) wù kwɛ̄ ʃú ā mù-dántʃɛ́n
CL1 return_from_bush(c) come(b) COM CL18-CL19/18.berry
mūŋ-dʒwē
CL18-many

'She came home with lots of little Dantshen berries.'

Segmental prefixes of other noun classes are dropped when the diminutive is derived, as in (27) where the diminutive of a Class 2 noun is formed by adding the Class 18 prefix **mù(N)-** to the bare stem. Example (27) also shows that the derived noun triggers Class 19/18 agreement, just like an inherent Class 19/18 noun.

(27) a. **bə̀-ŋkŏŋ b-ɔ́** 'those chiefs'

b. **mù-ŋkŏŋ m-ɔ́** 'those little chiefs'

In cases of singular-plural stem alternations (such as attested in the exceptional gender 3/10), the number-specific stem forms the base for affixation[17], as in (28).

(28) a. **fì-gbɔ̄** 'little house'

b. **mù-dzɔ̄** 'little houses'

c. **fì-dʒĭ** 'little goat'

d. **mù-dʒǐ́** 'little goats'

The diminutive can be used in a derogatory way, e.g. when calling someone **fì-mɔ̀** 'little man', instead of **mɔ̀** 'man', thus belittling and ridiculing a person. **fì-dʒĭ** 'little dog' can also be used to refer to a person in this way.

[17]The use of number-specific stems as the base for the diminutive is an argument for the existence of number as a grammatical category in Mundabli. As Maho (1999: 3) mentions in a footnote, "[n]ot all people agree that Bantu noun class pairings mark a singular-plural distinction"

4.5.3 Use of Gender 7/8 pronouns for derogatory reference

Gender 7/8 pronouns are commonly used for derogatory reference,[18] as e.g. in (29).

(29) bī ā wʉ́ wɔ̄ ɲɔ̄ nḯ
CL8 NEG hear(b).IPFV NEG CL8a.talk CL1/2.mother

'They are not listening to their mother's advice.'

In (29) a Class 8 pronoun is used to refer to modern girls, who are considered stupid because they destroy their lives rather than listen to their mothers' advice. The use of the Class 8 pronoun expresses a dismissive attitude.

4.6 Discussion of the current analysis of the noun class system

This section compares the current analysis, which distinguishes noun classes based - among other factors - on numeral distinctions, with a noun class system based on agreement only. Basing noun classes not only on agreement but also on number distinctions and on singular-plural noun class pairings may be confusing for anyone not familiar with this practice. As common in the Bantuist tradition, I split up agreement classes into groups of nouns with the same number value. Agreement Class **k(i)-**, for example, is split up into Class 7, which contains only singular nouns, Class 7a, which contains only plural nouns, and Class 7b, which contains uncountables, see Table 4.21 (based on Table 4.1). Table 4.22 compares the system used in the current publication with a pure agreement system, using a language-internal numbering system.

[18] Gender 7/8 also sporadically serves for augmentative derivation. However, this derivation process is not very productive and further research is required.

noun class	pronoun	noun class	pronoun
1	**wù**	2	**bɔ́**
3	**wū**	7a	**kī**
7	**kī**	8	**bī**
9	**yì**	10	**yī**
19	**fī**	18	**mū**
6	**mū**		
8a	**bī**		
3a	**wū**		
7b	**kī**		
9a	**yì**		
10a	**yī**		

Table 4.21: Noun classes, current system

agreement class	pronoun	singular-plural class pairings
AGR1	**wù**	singular nouns > plural in AGR2; uncountables (only infinitives)
AGR2	**bɔ́**	plural nouns > singular in AGR1
AGR3	**wū**	singular nouns > plural in AGR4 or (a small group) in AGR7; uncountables
AGR4	**kī**	singular nouns > plural in AGR5; plural nouns > singular in AGR3
AGR5	**bī**	plural nouns > singular in AGR4; uncountables
AGR6	**yì**	singular nouns > plural in AGR7; uncountables
AGR7	**yī**	plural nouns > singular in AGR6 or (a small group) in AGR3; uncountables
AGR8	**fī**	singular nouns (incl. SG diminutives) > plural in AGR9
AGR9	**mū**	plural nouns (incl. PL diminutives) > singular in AGR8; uncountables (liquids)

Table 4.22: Agreement classes

CHAPTER 5

Agreement

Mundabli has an elaborate system of noun class agreement. However, agreement is basically restricted to the noun phrase. The only exception is pronouns, which agree with their antecedents in noun class. Although pronouns are not usually covered in an agreement chapter, I include them here. Pronouns are treated in more detail in Chapter 6. Possessive pronouns are only treated in the current chapter, in §5.1.2, and in Chapter 7.

As overt noun class marking, i.e. marking on the noun itself, has been widely lost (see Chapter 4) and the verb does not agree with any of its arguments, either, agreement within the noun phrase is often the only means to identify the noun class of a noun. Agreement prefixes can consist of a purely tonal prefix, a consonant accompanied by a tone, or a whole syllable. This chapter gives an overview of the different agreement patterns encountered in noun modifiers and pronominal elements.

The agreement patterns are most clearly represented by personal pronouns. Unlike noun modifiers, which always neutralize the distinction between at least two noun classes, personal pronouns reflect all existing agreement distinctions. If two noun classes are represented by the same pronoun, their agreement patterns are also the same.[1] Table 5.1 gives an overview of the attested agreement patterns illustrated by personal pronoun forms.

Noun classes are found in the first column and the personal pronouns which represent them are found in the second column. Where more than one noun class label is found in the first column, these noun classes trigger the same

[1] In the current analysis nouns which are represented by the same personal pronoun but have different number values are considered to belong to different classes.

noun class	pronoun
1	**wù**
2	**bə́**
3	**wū**
10	**yī**
7,7a	**kī**
8,8a	**bī**
9	**yì**
19	**fī**
18,6	**mū**

Table 5.1: Overview of agreement patterns, illustrated by pronouns

agreement pattern but are distinguished due to their different number values. As Table 5.1 shows, there are nine different agreement patterns. The number of noun classes is higher than nine because, apart from agreement, noun classes are also based on number distinctions. As pointed out earlier, in this adopted system, a noun class can only contain nouns of one number value (singular, plural or undefined, cf. §4.2). The remainder of this chapter contains descriptions of the different forms of agreement found in pronouns (§5.1) and nominal modifiers (§5.2-§5.4) and ends in an overview of agreement patterns and a section on gender conflict resolution.

5.1 Agreement in pronouns

Unlike noun modifiers, pronouns agree with a mix of two intertwining agreement systems. While the third person pronouns agree with the noun class of their antecedent, first and second person pronouns agree with their antecedent in person and number. This section only deals with noun class agreement in personal pronouns and possessive pronouns. Person and number agreement is treated in Chapter 6.

5.1.1 Agreement in 3rd person singular personal pronouns

Third person singular personal pronouns lack a prefix-root structure. Instead, they look like bare prefixes. Third person singular personal pronouns represent the full variety of agreement patterns. If the 3SG personal pronouns of two classes are identical, then their agreement patterns are also the same.

The Class 1 and 9 non-preverbal 3SG pronouns have a low tone. All other non-preverbal 3SG pronouns bear a superhigh tone. Preverbal 3SG pronouns differ from the non-preverbal ones only regarding their tonal patterns. The Class 1 and Class 9 preverbal pronouns also bear a low tone. However, pre-

noun class	preverbal	non-preverbal
1	**wù**	**wù**
2	**bə̋**	**bə̋**
3	**wū**	**wű**
10	**yī**	**yǐ**
7,7a	**kī**	**kǐ**
8,8a	**bī**	**bǐ**
9	**yì**	**yì**
19	**fī**	**fǐ**
18,6	**mū**	**mű**

Table 5.2: Agreement in preverbal and non-preverbal third person singular pronouns for all noun classes

verbal 3SG pronouns of other classes have a mid tone, except for the Class 2 pronoun which bears a superhigh tone. A few examples of sentences containing 3SG personal pronouns (both preverbal and non-preverbal) are provided in (30)-(32). The pronouns are enclosed by square brackets.

(30) [wù] kə̀ dɪ̄ ā ɲwɔ́m bə̋
CL1 P3 be(b) COM CL2.children CL2;3SG.POSS

'She had her children.'

(31) [wū] ʃɪ́ŋ fǐ á ɲ-ʃɪ́ŋ
CL3 be_full(c) pass(b) ADVLZ INF-be_full(c)

'It was still full.'

(32) *any* nɪ́ŋ bī nɪ́ŋ k-ɔ́ [kǐ], bī ká kán [kǐ]
any CL7.thing 1PL want(c) CL7-REL CL7 1PL F2 have(c) CL7

'Anything we want, we will have it.'

The tonal difference between the preverbal pronouns in (30) and in (31) reflects tonal noun class agreement, with a low tone in Class 1 and a mid tone in Class 3. The non-preverbal Class 7 pronoun in (32) bears a superhigh tone.

5.1.2 Agreement in possessive pronouns

Just like personal pronouns, possessive pronouns belong to two intertwining agreement systems, agreeing with their antecedent (the possessor) in person and number, and with the modified noun (the possessee) in noun class. Table 5.3 gives an overview of all possessive pronouns. Only human possessors are considered.

noun class	my	your (SG)	his/her	our	your (PL)	their
1	**ŋgɪ̄**	**wā**	**wū**	**wī**	**wɛ̄n**	**bǔ**
2	**mɪ́ŋ**	**bā́**	**bʊ́**	**bɪ́**	**bɛ́n**	**bǔ**
3	**ŋgɪ́**	**wā́**	**wʊ́**	**wɪ́**	**wɛ́n**	**bǔ**
7,7a	**ŋkɪ́ŋ**	**kā́**	**kʊ́**	**kɪ́**	**kɛ́n**	**bǔ**
8,8a	**mɪ́ŋ**	**bā́**	**bʊ́**	**bɪ́**	**bɛ́n**	**bǔ**
9	**ŋgɪ̄**	**yā**	**yū**	**yī**	**yɛ̄n**	**bǔ**
10	**ŋgɪ́**	**yā́**	**yʊ́**	**yɪ́**	**yɛ́n**	**bǔ**
19	**mfɪ́ŋ**	**fā́**	**fʊ́**	**fɪ́**	**fɛ́n**	**bǔ**
18,6	**mɪ́ŋ**	**mā́**	**mʊ́**	**mɪ́**	**mɛ́n**	**bǔ**

Table 5.3: Agreement in possessive pronouns

Possessive pronouns can be subdivided into four groups which mark agreement in different ways. The first (and most atypical group) is represented by the third person plural (or Class 2) possessive pronoun **bǔ** 'their'. As shown in the last column of Table 5.3, this pronoun always has the same shape **bǔ**, just like English 'their'. It does not agree with the modified noun (i.e., the possessee). The second group contains possessive pronouns whose stem consists only of a vowel, namely the first person plural possessive pronoun with the stems form **-ɪ**, the second person singular possessive pronoun with the stems form **-a** and the second person plural possessive pronoun with the stems form **-ɛn** (see Table 5.3). These vowel-initial stems take consonantal prefixes which may come with their own tone.

In these possessive pronouns whose stem consists only of a vowel, Class 1 and Class 9 pronouns can only be distinguished from Class 3 and Class 10 pronouns by their different tonal realizations. All possessive pronouns bear a mid tone when they modify a noun of Class 1 or Class 9, whereas in all other cases they bear a superhigh tone, as e.g. the second person singular possessive pronouns for Class 1 and 3 **wā** (Class 1) vs. **wā́** (Class 3) and for Class 9 and 10 **yā** (Class 9) vs. **yā́** (Class 10).

The third group is represented by third person singular possessive pronouns. They lack a prefix-root structure and look as if they consisted only of agreement prefixes, just like third person personal pronouns. The tone is mid for Class 1 and 9 possessees and superhigh for all others; see Table 5.3.

Examples (33)-(36) show the use of 3SG/CL1 possessive pronouns. The Class 1 and Class 9 possessive pronouns in (33) and (35) bear a mid tone, and the Class 7 and Class 18 possessive pronouns in (34) and (36) bear a superhigh tone. The possessive phrase in the examples is enclosed by square brackets.

(33) wù tsē də [wān wū] bɔ̀
CL1 search(a) see(a) CL1.child CL1;3SG.POSS FRUST

'She did not find her child.'

(34) wù gɨ́ ʃī [tɛ̄ kɨ́] gbɔ̄ sɛ̂
CL1 put(b) go_down(a) CL7/8.walking_stick CL7;3SG.POSS CL3.house house_front.LOC

'Then she left her traveling stick in front of the door.'

(35) kə́ ʃɛ̄ ʃì wù, wù gān də [tʃɔ̄m yī]
COND want(a) go_down(a) CL1 CL1 go(a) see(a) CL9.co-wife CL9;3SG.POSS

'When she had just come down/she was about to come down, she went to see her co-wife.'

(36) yɛ̄ [mán mű] dɨ́ tɛ́là mwɔ́m
COMP CL18/19.name CL18;3SG.POSS be(b) T. M.

'[and the daughter said:] his name is Tela Mwom.'

Finally, the fourth and last group is constituted by first person singular possessive pronouns. Whereas tonally they behave just like regular possessive pronouns, with a mid tone in Class 1 and 9 and a superhigh tone in all other classes, their segmental agreement marking is rather special. Their structure is not simply decomposable into prefix and stem. Instead, they all start in a nasal, or a nasal consonant sequence and some end in a velar nasal (see Table 5.4).

noun class	1SG pronoun	prefixes
1,9	**ŋgɨ̄**	**ẁ-, ỳ-**
2,8,8a,18,6	**mɨ́ŋ**	**b-, b-, m-**
3,10	**ŋgɨ́**	**w-, y-**
7,7a	**ŋkɨ́ŋ**	**k-**
19	**mfɨ̋ŋ**	**f-**

Table 5.4: Agreement in 1SG possessive pronouns

In the first person singular possessive pronoun, some of the agreement distinctions found in other constructions are neutralized. Only five forms of the first person singular possessive pronoun are distinguished (see Table 5.4), instead of nine as in other pronouns. A few rules can be extracted which govern the realization of the first person singular possessive pronoun as compared to

the other possessive pronouns: for all noun classes whose agreement prefix starts in a glide (**w** or **y**), the segmental form is **ŋgɨ**, as in (37). Thus, the possessive pronouns for Class 1 and Class 9 **ŋgɨ̄** and those for Class 3 and Class 10 **ŋgɨ́** are identical, with the first (Class 1/9) differing from the second (Class 3/10) only regarding its tonal realization. Thus, the tonal pattern is the same as in other possessive pronouns. For all noun classes whose agreement prefix otherwise starts with a labial stop (**b-** or **m-**), namely Class 2, 8, 8a,18 and 6, the form of the pronoun is **mɨ́ŋ**, as in (38). For Class 7 and 7a, whose agreement prefix otherwise starts with **k**, the form is **ŋkɨ́ŋ**, as in (39), and for Class 19, whose agreement prefix starts withn **f**, the form is **mfɨ́ŋ**. The possessive phrase in the examples is enclosed in square brackets.

(37) nɨ́, [ɲwám ŋgɨ̄] dɨ́ f-án
CL1.mother, CL1/2.husband CL1;1SG.POSS be(b) PROX-here

'Mother, my husband is here.'

(38) tŭ ndɛ̀ [ŋgī mɨ́ŋ] yɛ̄
scoop(b) who CL6.water CL6;1SG.POSS QUOT.Q

'Who has carried my water?'

(39) f-ɔ́ fɨ́n dɨ̀ nə̄ [kpɨ́n ŋkɨ́ŋ] fɨ́
PROX-DET here be(b) SUBORD CL7/8.story CL7;1SG.POSS pass(b)
f-ɔ́
LOC-REL

'This is where my story ends.'

A different construction is attested for the noun **wān** 'child'. Rather than the expected **wān ŋgɨ̄**, it is more common to find the head-final construction **mɨ̄ wān**, in which the noun **wān** 'child' is simply juxtaposed to the non-preverbal form of the first person singular pronoun **mɨ̄**. This construction is only attested with the noun **wān** 'child'. Postpositional phrases involving derived postpositions, such as **wú dzɛ́** 'in his/her mouth' present a similar construction. They seem to be related to possessive phrases and often involve part-whole relations. Like the exceptional possessive construction **mɨ̄ wān**, these constructions are head-final. However, note that pronouns generally bear a high tone when headed by a postposition. For more on postpositions, see §10.2.2.

Furthermore, the relational nouns **nɨ́** 'mother', **tɨ̌** 'father' and **wān nɨ̌** 'sibling' have special stem forms which entail possessive meaning and person. For a more detailed description of the exceptional possessive constructions listed here with examples, see §7.2.1.3 and §10.2.2.1.

5.2 Agreement in demonstratives and determiners

The demonstratives **-én** PROXIMAL and **-ɔ́** DISTAL take consonantal agreement prefixes. In addition to the consonant, the prefix may bear a tone which affects the tone of the stem it is attached to. Table 5.5 shows agreement in demonstratives.

noun class	prefix	PROXIMAL	DISTAL
1	**ẁ-**	**wɛ̄n**	**wɔ̄**
2	**b-**	**bén**	**bɔ́**
3	**w-**	**wén**	**wɔ́**
10	**y-**	**yén**	**yɔ́**
7,7a	**k-**	**kén**	**kɔ́**
8,8a	**b-**	**bén**	**bɔ́**
9	**ỳ-**	**yɛ̄n**	**yɔ̄**
19	**f-**	**fén**	**fɔ́**
18,6	**m-**	**mén**	**mɔ́**

Table 5.5: Consonantal agreement in demonstratives

The consonantal agreement prefix is found in the second column. The low tone on the Class 1 and Class 9 prefixes does not represent an actual low tone, as the change from a high tone to a mid tone cannot be accounted for by the presence of a low tone. Instead, it is meant to signify that the demonstratives for Class 1 and 9 are relatively lower than those for the other classes. In fact, Class 1 and 9 demonstratives bear a mid tone, whereas demonstratives of all other (agreement) classes are realized with a high tone.

Examples of the proximal demonstrative **-én** 'this' are found in (40)-(43). The Class 1 demonstrative in (40) has a mid tone. All the others have a high tone.

(40) [wān w-ɛ̄n], dɨ́ wà nǭ̀ à lə̄ w-ɔ̄ nǫ́
CL1.child CL1-DEM.PROX be(b) 2SG SUBORD 2SG make(a) CL1-REL as
mɨ̄ wān w-ɔ̄ lɛ̄ f-án gbɔ̄
1SG CL1.child CL1-DET get_lost(a).IPFV PROX-here CL3.house
kóŋ
behind_house.LOC

'Child, you are the one who made my [other] child get lost here behind the house.'

(41) [dɔ̄ w-én] dɨ́ ná áná
CL3a.beans CL3a-DEM.PROX be(b) as like_that

'As this bean is like this, [...]'

(42) à dǐ yə́ ī́ [dʒɔ̄ b-ɛ́n] mɪ̄
2SG F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in

'You will go up on this bridge.'

(43) [kwɛ̄́ b-ɛ́n] ŋà t-án sɛ́
CL7/8.rat CL8-DEM.PROX boast(a) DIST-here CL3/7a.attic
t-ání, n=dī́ lá kpɪ́ mɛ́ [kwɛ̄́
DIST-this_way 1SG=F1 make(a) die(b) finish(a) CL7/8.rat
b-ɛ́n] t-án sɛ́ ō
CL8-DEM.PROX DIST-here CL3/7a.attic EMPH

'These rats which are showing off [up] there in the attic, I will kill all of them!'

It is rare to find examples in which the distal demonstrative (also used as determiner) clearly has a deictic meaning, as in (44) and (45). In (44), the demonstrative follows the possessive pronoun **wū**. Again, the Class 1 determiner in (44) bears a mid tone while the Class 7 determiner in (45) bears a high tone.

(44) wān kpé w-ɔ̄ gān mū mɛ̌ wù, wù
CL1.child CL1.woman CL1-DET go(a) take(a) finish(a) CL1 CL1
bǎŋ dzǽ [nsūŋ wū w-ɔ̄]
lock(b) CL7.mouth CL1.friend CL1;3SG.POSS CL1-DEM.DIST

'The woman went and closed the mouth of her friend.'

(45) dʒǔ nō̩ bɔ́ kə̀ lǎ kpɪ̄ y-ɔ̄ [tō
CL9.goat SUBORD CL2 P3 make(a) die(b) CL9-REL CL7/8.day
k-ɔ́] ŋgɔ̄ kə̀ bān áná būbūbūbū
CL7-DEM.DIST upon P3 be_white(b) like_that IDEO

◇'The goat which they killed on that day was completely white.'

5.3 Agreement in adjectivals

Adjectivals include a small closed group of adjectives (cf. §7.1.4 for details) and other noun modifiers which are formally similar to them, such as non-numeral quantifiers and the interrogatives **mwān** 'which' and **-mɪ̀ŋ** 'how many'. Adjectivals take purely tonal agreement prefixes for Class 1 and 9 and syllabic agreement prefixes for all other classes. In fact, in Mundabli it is only in adjectivals that the distinction between Class 9 and 10 is not purely tonal.[2]

[2]In most other Yemne-Kimbi languages, the distinction between Class 9 and 10 is purely tonal. Ngun, Abar and Ajumbu, in which the prefixes have different vowel qualities form an exception (Good, p.c.)

While the syllabic prefixes (i.e. prefixes other than Class 1 and 9) are segmentally identical for all adjectivals, the tone may vary across different modifiers. While most adjectival prefixes bear a mid tone (pattern A), high tone and low tone prefixes are restricted to the interrogatives **-mɨŋ** 'how many' and **mwān** 'which', respectively, see Table 5.6.

noun class	adjectives and 'all', 'many', 'a few', 'any', 'other'	**-mɨŋ** 'how many'	**mwān** 'which'
1	**`-**	**`-**	**`-**
2	**bā-**	**bá-**	**bà-**
3	**wū-**	**wú-**	**wù-**
7,7a	**kī-**	**kí-**	**kì-**
8,8a	**bī-**	**bí-**	**bì-**
9	**`-**	**`-**	**`-**
10	**yī-**	**yí-**	**yì-**
19	**fī-**	**fí-**	**fì-**
18,6	**mūN-**	**múN-**	**mùN-**

Table 5.6: Agreement prefixes in adjectivals, three different tone patterns: mid, high and low

The low tones given for Class 1 and 9 in Table 5.6 and in the following tables do not exactly represent low tone prefixes. While some tonal stem changes, such as the realization of the high tone stem **fyíŋ** 'new' as **fyǐŋ** with a rising tone following the tonal prefixes (see §5.3.1), can be accounted for by the presence of a low tone prefix,[3] for others, such as the realization of **lō** 'all' as **lǒ** when it modifies a Class 1 or Class 9 noun (see §5.3.2), there is no simple explanation. Mid tones are usually not influenced by preceding low tones. Thus, a low tone in the purely tonal prefixes in Table 5.6 is meant to show that the stems are generally realized with a relatively lower tone than those modifying nouns of other classes.

Adjectivals can be used attributively, directly modifying a noun, or they can be used predicatively, in which case they are preceded by a copula which is usually omitted in the present tense. However, adjectives are attested in a third construction which is actually very common. Adjectivals can occur within adverbial phrases, in which case they are preceded by the adverbializer **ā́**. An example is (46).

[3] A superhigh is commonly realized as low-high rising when preceded by a low tone, see §3.4.2

(46) mɔ̀ w-ɛ̄n nǭ wù lǣ w-ɔ̄ [ndʒɔ́m
CL1.man CL1-DEM.PROX SUBORD CL1 do(a).IPFV CL1-REL CL8.things
bī-dzɔ́ŋ ā́ bì-dʒwè] bī́ bɛ́
CL8-good ADVLZ CL8-many exit(b) Abar

◇‘This man, who has done so many good things, is from Abar.’

In the following sections, adjectivals with obligatory mid tone prefixes are dealt with first, followed by adjectivals with non-obligatory mid tone prefixes and the prefix-less modifier **dǭ** which can be roughly translated as ‘a certain’. Then interrogatives with high and low tone prefixes are dealt with.

5.3.1 Agreement in adjectives

There is a small and closed group of adjectives which describe property concepts (most property concepts are expressed by verbs). Table 5.7 contains a non-exhaustive list of adjectives. See §7.1.4 for a more detailed treatment of adjectives.

adjective	gloss
tsī́ŋ	‘big, great, important’
dʒŭ	‘short’
dʒīŋ	‘long’, ‘tall’
fyī́ŋ	‘new’
kū́	‘old’
dzɔ́ŋ	‘good’
bō	‘bad’
bā́n	‘white’, ‘clear’
yíl	‘black’
wól	‘beige’
ŋwā	‘multi-coloured’
tsám	‘dirty’
ntʃīm	‘thick (for fluids)’

Table 5.7: List of adjectives (not exhaustive)

Adjectives can be used attributively (directly modifying a noun) and predicatively (with a copula which is commonly omitted in the present tense). In addition, they are commonly attested in adverbial phrases, preceded by the adverbializer **ā́**. In all these constructions, adjectives take a low tone prefix when they modify a noun of Class 1 or 9 and a syllabic prefix with a mid tone for all other classes. An example of an underived adjective is the word **-fyī́ŋ** ‘new’, see Table 5.8. Like other adjectives, it takes either a low tone prefix (Class 1 and 9) or a syllabic prefix with a mid tone (all other classes).

noun class	prefix	example	gloss
1	**`-**	**ŋkŏŋ fyĭŋ**	‘a new chief’
2	**bə-**	**ŋkŏŋ bəfyíŋ**	‘new chiefs’
3	**wū-**	**kpān wūfyíŋ**	‘a new tree’
7,7a	**kī-**	**níŋ kīfyíŋ**	‘a new thing’
8,8a	**bī-**	**ndʒɔ́m bīfyíŋ**	‘new things’
9	**`-**	**dʒĭ fyĭŋ**	‘a new dog’
10	**yī-**	**tswān yīfyíŋ**	‘new trees’
19	**fī-**	**mwĭn fīfyíŋ**	‘a new cat’
18,6	**mūN-**	**mbĭ́ mūmfyíŋ**	‘new palmwine’

Table 5.8: Agreement prefixes and tonal alternation in adjectives, illustrated by the adjective **-fyíŋ** ‘new’.

Examples of adjectives in context are given in (47)-(51). In certain cases, the low tone prefix causes the adjective root to take on a low-high rising tone,[4] as in (48) and (51).

(47) bə ʃá dzē kɔ̀ [níŋ kī-bō]
IMPERS PROHIB say(b) even CL7.thing CL7-bad

‘They shouldn’t even say anything bad.’

(48) nsūŋ wū dzé wú lā yɛ̄ wà, à dĭ
CL1.friend CL1;3SG.POSS say(b) CL1PP DAT COMP 2SG, 2SG be(b)
[kpé bŏ]
CL1.woman CL1.bad

‘Her friend said to her: you are a bad woman!’

(49) ndʒān dĭ́ [mbɛ̄ bə-bō] ō
Mundabli be(b) CL2.people CL2-bad EMPH

‘The Mundabli are bad people!’

(50) [dzɔ̄ y-ɛ́n yī-fyíŋ] y-ɔ́
CL10.house CL10-DEM.PROX CL10-new CL10-DET

◇‘these new houses’

(51) [dʒĭ ŋgɨ̄ fyĭŋ] y-ɔ̄
CL9.dog CL9;1SG.POSS CL9.new CL9-DET

◇‘my new dog’

[4]The change from superhigh to low-high rising can be explained by a regular process in which a low tone spreads right onto a following superhigh syllable, causing a rise on that syllable, see §3.4.2. However, I do not have an explanation for the change from a mid to a rising tone, as in **bō** ‘bad’ in (48).

The tone of the adjectives **bō** 'bad' and **fyíŋ** 'new' is rising in (48) and (51) where they modify a Class 1 and a Class 9 noun, respectively. When the adjective modifies a noun of any other class, it bears a different tone: a mid tone for **bō** 'bad' and a superhigh tone for **fyíŋ** 'new'. While the change of a superhigh to a rising tone following a low tone is a regular process, the change from mid to rising is not.

5.3.2 The quantifier -lō 'all'

Like the other adjectivals described so far, the quantifier **-lō** 'all' (also 'every' or 'whole') takes a tonal agreement prefix for Class 1 and 9 and a mid tone syllabic prefix for all other classes, see Table 5.9. See §5.3 for reasons why I refer to quantifiers as adjectivals.

noun class	prefix	example	gloss
1	**`-**	**mɔ̀ lǒ**	'a whole person'
2	**bə-**	**mbɛ̄ bəlō**	'all people'
3	**wū-**	**kpān wūlō**	'a whole tree'
10	**yī-**	**tswān yīlō**	'all trees'
7,7a	**kī-**	**yɪ̄ŋ kīlō**	'a egg'
8,8a	**bī-**	**yɪ̄ŋ bīlō**	'all eggs'
9	**`-**	**dʒǔ lǒ**	'a whole goat'
19	**fī-**	**mwǐn fīlō**	'a whole cat'
18,6	**mūN-**	**mbǐ́ mūnlō**	'the whole palmwine'

Table 5.9: Agreement prefixes and tonal alternation in the quantifier **-lō** 'all'

As Table 5.9 shows, the root **lō**, which otherwise bears a mid tone, has a low-high rising tone when it modifies a Class 1 or a Class 9 noun. Unlike the change from superhigh to rising, the change from a mid tone to a rising tone is not a regular process and cannot be accounted for by the presence of a preceding low tone.

(52) tō bí-lō à mwē mɛ̌ m-mwè
CL7/8.day CL8-all 2SG grieve(a) only INF-grieve(a)

'Every day you are only sad.'

In fact, this and other modifiers are rarely attested directly modifying a noun. More frequently, they are preceded by the particle **á́** which generally precedes adverbial phrases. In this case, they do not belong to the same noun phrase as the noun; however, they still agree with it in noun class. The use of an adverbial phrase suggests some degree of definiteness. An example is (53).

(53) bɔ̄ kă ɲwán bǐ ndʒān lə nǫ́ bɔ̄ *feed*
CL2 F2 beg(b) 1PL Mundabli DAT SUBORD CL2 feed
[tʊ́m swɔ̄m ā́ bī-lō]
CL7/8.oil_palm_area CL7/8.palm ADVLZ CL8-all

'And they will be begging things from us, the Mundabli, because they [the Mundabli] will feed all the people in this oil palm area.'

5.3.3 The quantifier -dʒwē 'a lot of'

Just like **lō** 'all', the quantifier **-dʒwē** 'a lot of' (also 'much' or 'many') takes a tonal agreement prefix for Class 1 and 9 and a mid tone syllabic prefix for all other classes, see Table 5.10.

noun class	prefix	example	gloss
1	**`-**	**ŋgə̰̄m dʒwě**	'a lot of plantain'
2	**bə̄-**	**tʃē bədʒwē**	'many women'
3	**wū-**	**kpē wūdʒwē**	'a lot of pot'
7,7a	**kī-**	**mə̰̄ kīdʒwē**	'a lot of liver'
8,8a	**bī-**	**bɔ̀ bīdʒwē**	'many bags'
9	**`-**	**dʒǔ dʒwě**	'a lot of meat'
10	**yī-**	**tswān yīdʒwē**	'many trees'
19	**fī-**	**ntʃē fīdʒwē**	'a lot of clay pot'
18,6	**mūN-**	**ŋkā mūŋndʒwē**	'a lot of corn beer'

Table 5.10: Agreement prefixes and tonal alternation in the quantifier **-dʒwē** 'a lot of'

As Table 5.10 shows, the root **dʒwē**, which otherwise bears a mid tone, has a low-high rising tone when it modifies a Class 1 or a Class 9 noun (just like **lō** 'all'). As pointed out in §5.3.2, the change from a mid tone to a rising tone is not a regular process and an explanation why this change is attested with several adjectivals has yet to be found. Examples of the use of **dʒwē** are given in (54), (55) and (56).

(54) wù kwē̌ ʃú ā [mù-dántʃɛ́n
CL1 return_from_bush(c) come(b) COM CL18-Dantshen_berry
mūŋ-dʒwē]
CL18-many

'She came home with lots of little Dantshen berries.'

(55) *bikɔ* [kpő wū-dʒwē] dǐ ná, wū dǐ ā
because CL3/7a.money CL7a-much be(b) as CL7a be(b) COM
sátàn wǔ yū á̋ mò̩~mò̩
CL1/2.satan CL7a.PP behind ADVLZ one~RED

'Because a lot of money is like that, it always has plenty of devils behind it.'

(56) kə́ bə̀-ɲùŋfù-ā-mán tʃú kóŋ kwó, tʃú kóŋ
COND CL2-N.-COM-M. come(b) hunt(c) enter(c), come(b) hunt(c)
kwó tʃű sɔ̀ bő̀ŋmù mɨ̄ ā [mbɛ̄ bə̄-dʒwē b-ɔ́]
enter(c) come(b) first B. 1SG COM CL2.people CL2-many CL2-DET

'When Nyungfu-a-Man and his associates came walking and met up, Bungmu first came to meet me with those many people.'[5]

5.3.4 The quantifier -ɲtʃíŋ 'few'

The quantifier **-ɲtʃíŋ** 'few' (also 'small' or 'a little' and sometimes realized as **-ɲtʃín** with final **n**) takes a mid tone syllabic prefix for all classes except for Class 1 and 9, just like the adjectivals described above. However, the existence of a low tone prefix or a lowering of some sort for Class 1 and 9 cannot be ascertained because the tone of the root is the same for all classes. The root **tʃín** 'small' bears a high tone, no matter which noun it modifies, see Table 5.11.

noun class	prefix	example	gloss
1	**`-**	**mɔ̀ ɲtʃíŋ**	'a small person'
2	**bā-**	**ŋgō̩m (bā)ɲtʃíŋ**	'a few plantains'
3	**wū-**	**yīŋʃī wūɲtʃíŋ**	'a small egg'
10	**yī-**	**dʒű yīɲtʃíŋ**	'small goats'
7,7a	**kī-**	**yīŋʃī kīɲtʃíŋ**	'small eggs'
8,8a	**bī-**	**ndʒɔ́m bīɲtʃíŋ**	'small things'
9	**`-**	**dʒǔ ɲtʃíŋ**	'a small goat'
19	**fī-**	**mwǐn fīɲtʃíŋ**	'a small cat'
18,6	**mūN-**	**mwǐn mūɲtʃíŋ**	'small cats'

Table 5.11: Agreement prefixes on **-ntʃíŋ** 'a few', 'a bit', 'a little'

While a tone change from high to rising (or anything else) after a low tone is not expected, the same is the case for the mid tone roots described above, which are realized with a rising tone when they modify a Class 1 or Class 9 noun. Examples of **ntʃíŋ** 'few' are provided in (57) and (58).

[5]The VSO word order in the main clause expresses constituent focus on *Bungmu*; see Chapter 14 for more on information structure.

(57) kə́ wù dʒyè kɛ̌ ɲām b-ɔ́ wù là, kɛ̌ kì-mán
COND CL1 cook(a) even CL8a.fufu CL8a-DET CL1PP DAT even CL7-what
dō, kə́ wù yí wù yí wù yí, wù mū
remain(b) COND CL1 eat(b) CL1 eat(b) CL1 eat(b) CL1 take(a)
ʃú [nsɔ́m mū-ɲtʃín m-ɔ́], wù fə̄ gàn
come(b) CL19.crumb CL19-small CL19-DET CL1 give(b) go(a)
ɲwɔ́m b-ɔ́ lā
CL2.children CL2-DET DAT

'When she cooks, even fufu, for herself, even whatever [small thing] remains, when she eats, she eats and eats, she takes [only] small crumbs and gives them to the children.'

(58) gə̂m kú nǭ wū dǐ́ w-ɔ̄ [kwɛ́ ā́
Wum village.LOC SUBORD CL1 be(b) CL1-REL CL3/7a.village ADVLZ
fī-ɲtʃín], kī ā tʃɨ̄ŋ wɔ̄
CL18-small CL7 NEG be_far(a) NEG

◇'Wum, which is a small town, it is not far.'[6]

5.3.5 The nominal modifier -dzú 'other', 'certain'

In elicitation, forms with and without segmental agreement prefixes were provided for **dzú** 'other', 'certain' (also 'some'). However, in unelicited examples, **dzú** generally takes an agreement prefix. The pattern is the same as for other adjectivals, with a purely tonal (low-tone) prefix for Class 1 and 9 and syllabic mid-tone prefixes for the other classes. Whereas in Class 1 and 9, the stem bears a mid tone, for the other classes, it bears a high tone, whether the prefix is present or not; see Table 5.12.

noun class	prefix	example	gloss
1	**`-**	**ŋgǭ̀m dzū**	'a certain/ another plantain'
2	**bə̄-**	**ŋgǭ̀m (bə̄)dzú**	'certain/ other plantains'
3	**wū-**	**kpē (wū)dzú**	'a certain/ another pot'
10	**yī-**	**tsē (yī)dzú**	'certain/ other pots'
7,7a	**kī-**	**yīŋʃī (kī)dzú**	'certain/ other eggs'
8,8a	**bī-**	**mǫ́ (bī)dzú**	'certain/ other livers'
9	**`-**	**sɔ̀ dzū**	'certain/ other meat'
19	**fī-**	**mwǐn (fī)dzú**	'a certain/ another clay pot'
18,6	**mūN-**	**mwǐn (mūn)dzú**	'certain/ other cats'

Table 5.12: Agreement prefixes on the modifier **-dzú** 'certain', 'other'

[6]The language spoken in Wum is Aghem. The name Aghem is also sometimes used to refer to the town.

Examples (59)-(61) are taken from natural texts. When **dzú** modifies a Class 1 noun, it takes on a mid tone, as in (59). For classes other than Class 1 or 9, the stem takes a mid-tone syllabic prefix and retains its high stem tone, as in (60) and (61).

(59) [kpé dzū] kə̀ dɪ̄ fǐn
CL1.woman CL1.certain P3 be(b) there

'There once was a woman.'

(60) ntsŭŋkwɨ́n w-ɔ̄ ywó gàn nɨ̀m ʃì [kpān wū-dzú]
CL1/2.owl CL2-DET run(c) go(a) sit(a) go_down(a) CL3.tree CL3-other
wɔ̄
on

'The owl went and sat down on another tree.'

(61) [dzɔ̄ yī-dzú y-ɔ́] kə̀ bō̱ m-bò̱,
CL10.houses CL10-other CL10-DET P3 burn(b) INF-burn(b)
y-ɛ́n tá kwà dɪ́ ŋ-kwà
CL10-DEM.PROX VER.FOC break(a) be(b) INF-break(a)

'The other houses burnt down, these ones broke.'

5.3.6 The nominal modifier -dó̱m 'some'

Just like for **dzú**, forms with and without agreement prefixes were also given in elicitation for **-dó̱m** 'some' (also 'other' or 'any'); see Table 5.13.

noun class	prefix	example	gloss
1	**`-**	**ŋgō̱m dó̱m**	'some/ any plantain'
2	**bā-**	**ŋgō̱m (bā)dó̱m**	'some/ any plantains'
3	**wū-**	**kpē (wū)dó̱m**	'some/ any pot'
7,7a	**kī-**	**yīŋʃī (kī)dó̱m**	'some/ any eggs'
8,8a	**bī-**	**mó̱ (bī)dó̱m**	'some/ any livers'
9	**`-**	**sɔ̀ dó̱m**	'some/ any meat'
10	**yī-**	**tsē (yī)dó̱m**	'some/ any pots'
19	**fī-**	**mwǐn (fī)dó̱m**	'some/ any clay pot'
18	**mūN-**	**mwǐn (mūn)dó̱m**	'some/ any cats'

Table 5.13: Agreement prefixes on **-dó̱m** 'some', 'any', 'other'

When an agreement prefix is present, it takes the most common form of adjectival agreement with a zero (or tonal) prefix for Class 1 and 9 and a mid-tone syllabic prefix for the other classes. The tone of **dó̱m** is always high, even in Class 1 and 9. Thus, it behaves like **-ntʃíŋ** 'small' which also retains its tone,

no matter which noun it modifies. However, spontaneous text examples generally do not show agreement, see (62) and (63). If **dǫ́m** did show agreement, the form would be **kī-dǫ́m** in both examples, but it doesn't.

(62) [tō dǫ́m] lā bɔ́ yē n-dzʊ̀ŋ, bɔ́ ā
CL7/8.day some DAT CL2 start(a) INF-quarrel(c) CL2 COM
neighbour wū
CL1.neighbour CL1;3SG.POSS

'One day they started quarrelling, she and her neighbour.'

(63) n=sɛ́n bú mɔ́ à, fə̄ dɪ́ [nɪ́ŋ dǫ́m] à fə̄ *plan*
1SG=then ask(b) CS.QUOT Q, P1 be(b) CL7.thing some 2SG P1 plan
ā
QUOT.Q

'I then asked [him]: Is it something that you planned?'

5.3.7 The nominal modifier dǫ́ 'certain'

The adjective-like **dǫ́** 'certain', although similar in usage and meaning to **-dzú** and **-dǫ́m**, does not agree with the noun it modifies, see e.g. (64). It simply consists of the stem **dǫ́** which never changes and does not take an agreement prefix. If **dǫ́** did show agreement, the expected form in (64) would be **kīdǫ́**, but this is ungrammatical.

(64) n=lyā̌ ná f-án, n=dā̌ wú wɔ̄ yɛ̄
1SG=go_to_bush(a).IPFV as PROX-here 1SG=F1;NEG hear(b) NEG COMP
bɛ̄n fə̄ mù ʃŭ kpē tsyě w-ɛ̄n
CL2PL P1 take(a) come(b) CL3.pot CL1.father.2POSS CL3-DEM.PROX
w-ɔ́ wú-kwɛ́ w-ɔ́ yɛ̄ bɛ̄n lə̄ [nɪ́ŋ dǫ́] tʃín
CL3-that CL3-home CL3-that COMP 2PL do(a) CL7.thing certain there
mɪ̄
in

'As I am going to the bush, I don't want to hear [when I come back] that you have taken your father's traditional pot in order to do something in it.'

5.3.8 The interrogative quantifier -mɨ̀ŋ 'how much', 'how many'

In elicitation, the interrogative quantifier **-mɨ̀ŋ** 'how much'/'how many' was often given without an agreement prefix. However, in unelicited text examples, it usually takes an agreement marker. When it modifies a Class 1 or a

Class 9 noun, **mɨŋ** takes a zero (or tonal) prefix. For all other classes, the prefix is syllabic and bears a high tone (not a mid tone, like in the adjectivals treated so far). It is unclear whether there is a tonal prefix in Class 1 and 9 or not because the prefix has no effect on the tone of the root **mɨŋ**.

Examples (65) and (66) show how **mɨŋ** agrees with Class 2 and Class 7a, respectively. I have not found any unelicited example in which **mɨŋ** is used attributively.

(65) ǎʔǎ, mbɛ̄ dʒwɛ̀ bɔ̌ kpǎ f-án, wù bɔ̄ŋ yɛ̄
INTERJ CL2.people many CL2 abound(b?) PROX-here CL1 call(a) COMP
dɪ̄ [bɔ́-mɨŋ]
be(b) CL2-how_many

'People, too many of them - she is saying that [they] are how many?'

(66) bɛ̌ gān yɪ̄ŋ-ʃī k-ɔ́, kī dɪ́
count(a) go(a) CL3/7a.egg-CL9/10.chicken CL7a-DET CL7a be(b)
[kí-mɨŋ]
CL7a-how_many

◇'Count those eggs! How many are they?'

5.3.9 The selective interrogative mwān 'which'

The selective interrogative **-mwān** 'which' takes a zero (or tonal) prefix in Class 1 and 9, and a syllabic prefix with a low tone in all other classes. It is unclear whether there is a tonal prefix in Class 1 and 9 or not. The prefix has no effect on the tone of the root **-mwān**. It is unusual to have a low tone on agreement prefixes for noun classes other than Class 1 and 9.

Examples of the use of **mwān** are given in (67)–(69). Example (67) shows the lack of a segmental prefix when **mwān** modifies a Class 9 noun. Examples (68) and (69) show the low-toned prefix attested in noun classes other than Class 1 and 9.

(67) dɪ̌ [sɨŋ mwān y-ɔ̄] à lɛ̄ y-ɔ̄ ŋgɔ́
beb CL9.knife CL9.which CL9-DET 2SG do(a).IPFV CL9-REL upon

◇'Which knife do you use?' (lit.: It is which knife that you do [it] with?)

(68) [ʃǎŋ yì-mwān y-ɔ́]
CL10.sand CL10-which CL10-DET

◇'Which sand?'

(69) [fɔ̄ wù-mwān w-ɔ́]
CL3.head CL3-which CL3-DET

◇'Which head?'

In elicitation, **m̀mwān** was given as an alternative form which can be used for all noun classes. This form does not agree with the noun class of the modified noun.

5.4 Agreement in numerals

When they modify a noun, numerals from one to nine[7] take syllabic agreement prefixes, which are nearly identical in shape with the third person personal pronouns; see Table 5.14.

noun class	prefix
1	**wù-**
2	**bɔ̋-**
3	**wű-**
7,7a	**kí-**
8,8a	**bí-**
9	**yì-**
10	**yí-**
19	**fí-**
18,6	**mű́N-**

Table 5.14: Numeral agreement prefixes

The agreement prefixes for Class 1 and 9 bear a low tone, while all others bear a superhigh tone. The root **mwɔ** 'one' bears a low tone in Class 1 and 9 and a high tone in all other noun classes. Table 5.15 contains an overview of the numerals 'one' to 'four' in all noun classes.

noun class	prefix	'one'	'two'	'three'	'four'
1	**wù-**	**wù-mwɔ̀**	–	–	–
2	**bɔ̋-/bɔ́-**	–	**bɔ̋-fyɛ̄**	**bɔ̋-tɔ̄**	**bɔ́-ǹdē**
3	**wű-**	**wű-mwɔ́**	–	–	–
7,7a	**kí-**	**kí-mǫ́**	**kí-fyɛ̄**	**kí-tɔ̄**	**kí-ǹdē**
8	**bí-**	–	**bí-fyɛ̄**	**bí-tɔ̄**	**bí-ǹdē**
9	**yì-**	**yì-mwɔ̀**	–	–	–
10	**yí-**	–	**yí-ʃyɛ̄**	**yí-tsɔ̄**	**yí-ǹdē**
19	**fí-**	**fí-mwɔ́**	–	–	–
18	**mű(N)-**	–	**mű́m-fyɛ̄**	**mű́n-tɔ̄**	**mű́-ǹdē**

Table 5.15: Noun class agreement in numerals

[7] For more on numerals including higher numerals, see §7.1.5.

As Table 5.15 shows, the Class 10 prefix causes palatalization of root-initial **f** and **t**.[8] The shape of the root for 'two' changes from **-fyɛ́** to **-ʃyɛ́**, as in **yíʃyɛ́** and shape of the root for 'three' changes from **-tɔ́** to **-tsɔ́**. The numeral prefix is the only agreement prefix which such a process is attested for, although the Class 3/10 stem alternation must have a similar origin.[9] This morphophonological process is treated in detail in §3.3.3.

When the numeral modifies a noun of Class 7 or 7a a root-change is also attested. In this case, the numeral root **mwo** 'one' is realized as **mo̰**. As pharyngealization is a by-product of the historical loss of a final velar (or glottal) stop, I suspect that the root-change in the numeral for 'one' may be due to the influence of a former Class 7 (or 7a) suffix **-k** on the numeral root (cf. §3.3.4).

Example (70) contains instances of two different numbers and noun classes: **wù-mwò** 'one' (CL1) and **bɔ́-fyɛ́** 'two' (CL2). The tone of the Class 1 (and 9, see (71)) prefix is lower, as is generally the case. Example (71) also contains two examples of numerals modifying nouns. The first, **yì-mwò** 'one' shows the low tone typical for Class 9, the second example, **bə̌-tɔ́** shows an unexpected tone on the prefix. While we would expect a superhigh tone, the tone on the prefix is rising. This rise may be caused by a low tone on the preceding noun **mbɛ̄** 'people', which is realized **mbɛ̀** in isolation.

(70) bɔ́ kə̀ dɪ̄ [bɔ́-fyɛ́], [wān mɔ̀nɔ̄ wù-mwɔ̀] āmɪ̀ [wān
CL2 P3 be(b) CL2-two CL1.child CL1.man CL1-one and CL1.child
kpé wù-mwò]
CL1.woman CL1-one

'They were two, one boy and one girl.'

(71) [sɪ̌ yì-mwò] áná [mbɛ̄ bə̌-tɔ́] bɪ̌ fɪ́
CL9/10.day CL9-one like_that CL2.people CL2-three exit(b) pass(b)
gàn
go(a)

'On one day like that, three people die.'

[8] **f** is realized as **ʃ** and **t** changes to **ts** after the Class 10 prefix **yí-**. This process does not exactly fit the common pattern of palatalization. However, it is unclear what determines the precise consonant alternations.

[9] Palatalization is also attested in the few irregular Gender 3/10 nominal roots which show initial consonant mutation (see §3.3.2 and §4.3.6). However, the prefixes that must have originally caused palatalization in those Class 10 nouns which have their singular in Class 3, have disappeared.

5.5 Overview of agreement patterns

This section summarizes the previous sections, giving an overview of agreement patterns and the similarities and differences between them. Table 5.16 gives an overview of the regular agreement patterns, using examples from different types of noun modifiers.

noun class	adjectives (here: 'new')	demonstratives (here: distal)	numerals (here: 'one' and 'two')	indep. pronouns (here: preverbal form)	3SG.POSS pronouns
1	**fyɨ̌ŋ**	**wɔ̄**	**wùmwɔ̀**	**wù**	**wū**
2	**bāfyɨ́ŋ**	**bɔ́**	**bə̋fyɛ́**	**bə̋**	**bə̋**
3	**wūfyɨ́ŋ**	**wɔ́**	**wű̀mwɔ́**	**wū**	**wű**
7,7a	**kīfyɨ́ŋ**	**kɔ́**	**kḭ́mó̩**	**kī**	**kḭ́**
8,8a	**bīfyɨ́ŋ**	**bɔ́**	**bḭ́fyɛ́**	**bī**	**bḭ́**
9	**fyɨ̌ŋ**	**yɔ̄**	**yìmwɔ̀**	**yì**	**yī**
10	**yīfyɨ́ŋ**	**yɔ́**	**yḭ́ʃyɛ́**	**yī**	**yḭ́**
19	**fīfyɨ́ŋ**	**fɔ́**	**fḭ́mwɔ́**	**fī**	**fḭ́**
18,6	**mūmfyɨ́ŋ**	**mɔ́**	**mű̀mfyɛ́**	**mū**	**mű**

Table 5.16: Overview of agreement patterns, including prefixes and tonal changes, exemplified by different types of noun modifiers

Adjectives and numerals take syllabic agreement prefixes, but they differ in several respects. First of all, adjectives have no segmental prefixes for Class 1 and 9. Instead, the stem tone is commonly lower when the adjective agrees with a Class 1 or a Class 9 noun. Whether this is due to a low tone prefix is still unclear (see discussion below). The same agreement pattern is attested with other adjectivals, such as the quantifiers **-lō** 'all', **-dʒwē** 'a lot of'. However, there is no simple explanation for the tonal alternations attested in other adjectivals.

Demonstratives, with their vowel-initial roots, take segmental agreement prefixes. As with the other nominal modifiers, the stem tone is generally lower when a demonstrative modifies a noun of Class 1 or Class 9, than when it modifies a noun of another noun class. Finally, both personal and possessive pronouns consist of an agreement prefix only. In their preverbal form, the pronouns for Class 1 and 9 bear a low tone, while the others bear a mid tone, except for the 3PL or Class 2 pronoun which bears a superhigh tone. In non-preverbal position, the 3PL/Class 2 pronoun has the same tone as the other non-Class 1/9 pronouns. Possessive pronouns bear a mid tone for Class 1 and 9 and a superhigh tone for all other classes.

Most of the tonal stem alternations between nominal modifiers of Class 1 and 9 nouns on the one hand, and nouns of other classes on the other, cannot be accounted for by the effect of tonal prefixes. Given the existence of a general process called 'Low tone spread' (see §3.4.2), which changes a superhigh to a low-high rising tone after a low tone, the stem change from underlying **fyǘŋ** 'new' to **fyǐŋ** could be accounted for by the existence of a low tone prefix for Class 1 and 9. However, the change from high to mid, as attested in the quantifier **-ntʃíŋ** 'few' (see §5.3.4) and in demonstratives, is not a regular process. Neither is the change from mid to rising, as attested in the quantifiers **-lō** 'all' and **-dʒwē** 'a lot of' (see §5.3.2 and 5.3.3, respectively). For the other modifiers, the tonal opposition between Class 1 and 9 and the other noun classes cannot simply be accounted for by the existence of tonal prefixes, either. Thus, neither the change from mid to low in personal pronouns nor the change from superhigh to mid in possessive pronouns can be accounted for at this point.

5.6 Gender conflict resolution

Gender conflict arises when two nominals belonging to different genders (or noun class pairings) are conjoined, so that the resulting NP triggers agreement. Different languages use different strategies to resolve this problem. As agreement in Mundabli is restricted to the noun phrase, gender conflict can only arise within the noun phrase, as well.

In principle, there are two possible cases in which gender conflict could arise in Mundabli: (a) when a noun modifier modifies a conjunction of nominals belonging to different genders or (b) when a conjunction of nominals belonging to different genders is represented by a pronoun. In fact, I have not found a single example of a modifier modifying a conjunction of nouns or noun phrases of different genders. Instead each member of the conjunction tends to have its own modifier.

However, it is possible for conjunctions of nouns of different genders to be represented by a single pronoun, even though this is rarely the case in spontaneous speech. Therefore, this discussion will be restricted to gender-conflict in pronouns.

In a (symmetrical) conjunction of nominals, two nominals are connected with the conjunction **āmɨ** (see (72) and (73)). In these and the following examples, the conjunction is surrounded by square brackets.

(72) bə́ kə̀ dɪ̄ bə́-fyé, [wān mɔ̀nɔ̄ wù-mwò āmɨ̀ wān
CL2 P3 be(b) CL2-two CL1.child CL1.man CL1-one and CL1.child
kpé wù-mwò]
CL1.woman CL1-one

'They were two - one boy and one girl.'

(73) wù dzé ấấấ, yɛ̄ m=búŋ [mfɔ̀ ŋgɨ̄
CL1 say(b) INTERJ COMP 1SG=pick(b) CL1/2.slave CL1;1SG.POSS
kpé āmɨ̀ mfɔ̀ ŋgɨ̄ mɔ̀nɔ̄]
CL1.female and CL1/2.slave CL1;1SG.POSS CL1.male

'She said: Wow! I have picked my slave boy and my slave girl.'

However, when two nominals of different genders are involved, a comitative construction is preferred, with the second nominal occurring within a comitative phrase headed by the comitative marker **ā** 'with', as in (74).

(74) [sɔ̀ y-ɔ̄ ā ɲām b-ɔ́]
CL9.meat CL9-DET COM CL8a.fufu CL8a-DET

◇'the meat with the fufu'

The use of the comitative construction is more appropriate than the symmetrical construction when referring to nouns of different genders. Whereas Maho (1999: 114) lists the comitative construction as one means to avoid gender conflict by avoiding a conjunction, in Mundabli the use of the comitative construction does not resolve gender conflict. While, in this asymmetrical construction, the first nominal forms the head of the whole noun phrase, agreement is not (always) with the head noun, as shown in (75) where a Class 2 (or 3PL) pronoun represents the conjunction of a Class 1 and a Class 9 noun.

Instead, the choice of a pronoun representing a comitative construction depends on animacy. When nouns referring to humans and non-human animates are conjoined, they are represented by a Class 2 pronoun; see (75). Conjunctions of humans and non-animates are not attested in spontaneous speech.

(75) [mɔ̀ ā dʒǔ y-ɔ̄], m=fə̋ də̀ bɔ̌ lā
CL1.man COM CL9.goat CL9-DET 1SG=P1 see(a) CL2PP DAT

◇'The man with the goat, I saw them.'

Comitative constructions involving two (or more) nouns referring to inanimate objects are usually represented by a Class 8 pronoun, as shown in (76).

(76) a. sɔ̀ y-ɔ̄ ā ɲām b-ɔ́, n=dɨ́ yí bɨ́
CL9.meat CL9-DET COM CL8a.fufu CL8a-DET 1SG=F1 eat(b) CL8

◇'The meat with the fufu, I will eat them.'

b. sɔ̀ y-ɔ̄ ā lɔ́kɔ̄ b-ɔ́, n=dɨ́ yí
CL9.meat CL9-DET COM CL8a.cassava CL8a-DET 1SG=F1 eat(b)
bɨ́
CL8

◇'The meat with the cassava, I will eat them.'

c. sɔ̀ y-ɔ̄ ā dʒwō, n=dɨ́ yí bɨ́
CL9.meat CL9-DET COM CL1/2.ŋkɛnɛŋkɛnɛ 1SG=F1 eat(b) CL8

◇‘The meat with the ŋkɛnɛŋkɛnɛ,[10] I will eat them.’

A comitative construction involving two or more nominals, of which at least one refers to an animal (or other non-human animate) can be represented either by a Class 8 pronoun or by a Class 2 pronoun; see (77).

(77) a. n=dɨ́ lá kpɨ́ yí
1SG=F1 make(a) die(b) CL10

◇‘I will kill them [goats].’

b. n=dɨ́ lá kpɨ́ mű
1SG=F1 make(a) die(b) CL18a

◇‘I will kill them [cats].’

c. n=dɨ́ lá kpɨ́ bɔ́
1SG=F1 make(a) die(b) CL2

◇‘I will kill them [goats and cats].’

d. n=dɨ́ lá kpɨ́ bɨ́
1SG=F1 make(a) die(b) CL8

◇‘I will kill them [goats and cats].’

Examples (77a) and (77b) show the agreement of the nominals themselves when no comitative construction is involved. Examples (77c) and (77d) show the two possibilities that are available when the comitative construction is represented by a pronoun. A comitative construction involving two nominals of different genders, but both with animate referents, can be represented either by a Class 2 pronoun, as in (77c), or by a Class 8 pronoun, as in (77d).

[10]The Cameroon Pidgin word ‘ŋkɛnɛŋkɛnɛ’ refers to a soup with a slimy consistency, similar to okra soup.

CHAPTER 6

Pronouns

This chapter deals with pronouns, i.e. forms which replace a noun or, more specifically, a whole noun phrase. While pronouns usually stand on their own, they can also occur in apposition with a noun. They cannot function as noun modifiers. Noun modifiers which also sometimes head a noun phrase, such as e.g. demonstratives, possessive pronouns etc. are treated in Chapter 7. Personal pronouns, which were discussed in §5.1.1 with regard to agreement, are treated here in more detail (§6.1). They make up the greatest part of this chapter. Shorter sections are devoted to the tonal dummy subject (§6.2), the impersonal subject pronoun (§6.3), interrogative pronouns (§6.4) and indefinite pronouns (§6.5).

6.1 Personal pronouns

I use the term 'personal pronouns' to refer to all first, second and third person preverbal and non-preverbal pronouns, including third person pronouns of noun classes other than Class 1 or Class 2. Personal pronouns are morphologically and semantically simple,[1] consisting of a single morpheme and representing nouns with single referents. In Mundabli, first and second person personal pronouns inflect for number while third person pronouns inflect for noun class. Table 6.1 gives an overview of all personal pronouns.

[1] While earlier accounts, such as Good et al. (2011: 128-129) posited the existence of compound pronouns, I think that the phenomenon can be better described as a phrasal phenomenon, namely inclusory conjunction of pronouns. For details, see §7.2.2.2.

person	gender	SG		PL
1st		**mī**		**bī**
2nd		**wà**		**bɛ̄n**
3rd	1/2	**wù**		**bɔ̋**
	3/10	**wű**		**yí́**
	3/7a	**wű**		**kí́**
	7/8	**kí́**		**bí́**
	9/10	**yì**		**yí́**
	19/18	**fí́**		**mű**
	6a		**mű**	
	3a		**wű**	
	8a		**bí́**	
	10a		**yí́**	
	7b		**kí́**	

Table 6.1: Overview of personal pronouns (non-preverbal forms)

In order to keep things simple, Table 6.1 contains only non-preverbal forms. Mundabli personal pronouns distinguish three forms: a preverbal (PVB) form, a non-preverbal (NPVB) form, and a third form which is used when a pronoun is the object of a postposition (for more on postpositions and postpositional phrases, see §10.2.2 and §11.3). The distinction between so-called preverbal pronouns, which occur in direct preverbal position, and non-preverbal pronouns, which occur elsewhere, is attested in all Yemne-Kimbi languages. As Good et al. (2011: 113) point out, "all the languages of the area show at least a partial distinction between two sets of pronouns [...]. Functionally, the distinction falls roughly along the lines of subject/non-subject pronouns, but subjects can take on the non-preverbal forms in certain contexts (e.g., when they are in focus, which often entails not being immediately preverbal).". Table 6.2 and Table 6.3 show these three forms for all pronouns.

person	gender	SG			PL		
		PVB	NPVB	PP	PVB	NPVB	PP
1st		**N**	**mī**	**mɨ́**	**bī**	**bī**	**bí**
2nd		**à**	**wà**	**wá**	**bɛ̄n**	**bɛ̄n**	**bɛ́n**
3rd	1/2	**wù**	**wù**	**wú**	**bɔ̋**	**bɔ̋**	**bɔ̌**
	3/10	**wū**	**wű**	**wú**	**yī**	**yí́**	**yí**
	3/7a	**wū**	**wű**	**wú**	**kī**	**kí́**	**kí**
	7/8	**kī**	**kí́**	**kí**	**bī**	**bí́**	**bí**
	9/10	**yì**	**yì**	**yí**	**yī**	**yí́**	**yí**
	19/18	**fī**	**fí́**	**fí**	**mū**	**mű**	**mú**

Table 6.2: Preverbal, non-preverbal and object of postposition forms for 1st and 2nd person personal pronouns and paired genders

gender	PVB	NPVB	PP
6a	**mū**	**mű**	**mú**
3a	**wū**	**wű**	**wú**
8a	**bī**	**bǐ**	**bí**
10a	**yī**	**yǐ**	**yí**
7b	**kī**	**kǐ**	**kí**

Table 6.3: Preverbal, non-preverbal and object of postposition forms of single gender personal pronouns

The following features, which are relatively frequent in the wider area, do not exist in Mundabli: Mundabli has neither logophoric pronouns nor reflexive pronouns. Although logophoric pronouns are common in the wider area (e.g., Aghem (Hyman 1979: 50-51), Noni (Hyman 1981: 15-16) and Bafut (Tamanji 2009: 57-59)), they have not been reported for any of the Yemne-Kimbi languages.[2] Whether a pronoun is used in a logophoric or non-logophoric sense in Mundabli can only be inferred from the context. Thus, a sentence like (78) has two possible interpretations.

(78) wù dzě yɛ̄ wù dǐ tʃú
CL1 say(b) COMP CL1 F1 come(b)
She$_i$ says that she$_{i/j}$ will come (later today).

Reflexivity is not encoded grammatically. In some contexts in which other languages might use reflexive constructions, Mundabli uses constructions involving the nouns **gbə̄** 'body', as in (79), or **fɔ̄** 'head', often in conjunction with a possessive pronoun.

(79) wù ʃí gbə̄ wű
CL1 rub(c) CL3.body CL3;3SG.POSS

'She put on lotion.' (lit.: She rubbed her body.)

The lack of reflexive pronouns is not surprising as reflexive pronouns are not common in the area. They are neither attested for Noni (Beboid; Hyman 1981: 18) nor for Bafut (Mbam-Nkam; Tamanji 2009: 57-59, 70-74) or for any of the other Yemne-Kimbi languages.

Furthermore, Mundabli distinguishes neither inclusive and exclusive, nor dual and plural pronouns.[3] However, in Mundabli, inclusive or exclusive meanings are sometimes contained in the semantics of inclusory conjunction constructions. E.g., the inclusory conjunction **bī by-ā wà** could be translated as 'you and I', thus expressing the same reference as a first person dual inclusive pronoun in other languages (see §7.2.2.2 for details).

[2]The language Naki, on the other hand, which is spoken in lower Fungom but grouped with the Beboid languages, does have an antilogophoric pronoun (Good et al. 2011: 154).

[3]An inclusive/exclusive distinction does exist in Noni (Beboid; Hyman 1981: 15) and Aghem (Ring; Hyman 1979: 47).

6.1.1 Preverbal pronouns

The segmental shape of preverbal pronouns differs from that of non-preverbal pronouns only in the case of the first and second person singular pronoun. Preverbal pronouns take the shape **N** for the first person singular and **à** for the second person singular. The corresponding non-preverbal pronouns are **mɨ̄** and **wà**. The difference between the two forms reflects what Good et al. have observed for all Yemne-Kimbi languages: "[...] Preverbal pronouns tend to be phonologically reduced and, impressionistically, show prosodic dependence on the following verb, while Non-preverbal pronouns tend to be prosodically free." (Good et al. 2011: 113).

Table 6.4 gives an overview of all preverbal pronouns. The second person singular pronoun **à** and the Class 1 and Class 9 pronouns **wù** and **yì** bear a low tone. The other pronouns bear a mid tone,[4] except for the Class 2 (or third person plural) pronoun **bə́** which bears a superhigh tone. There is no simple explanation in terms of floating tones for the tonal difference between preverbal and non-preverbal pronouns. Neither of the two can be derived from the other by referring to regular tonal processes.

person	gender	SG	PL
1st		**N**	**bī**
2nd		**à**	**bɛ̄n**
3rd	1/2	**wù**	**bə́**
	3/10	**wū**	**yī**
	3/7a	**wū**	**kī**
	7/8	**kī**	**bī**
	9/10	**yì**	**yī**
	19/18	**fī**	**mū**
	6a	**mū**	
	3a	**wū**	
	8a	**bī**	
	10a	**yī**	
	7b	**kī**	

Table 6.4: Preverbal forms of personal pronouns

The first person preverbal pronoun **N** differs from the other pronouns regarding both its phonological and its syntactic behaviour. It is usually not syllabic and, specifically in negative sentences, its syntactic behaviour is different from that of other pronouns. Instead of preceding the negative marker **ā** like other pronouns do, see (80a) and (80b), the first person preverbal pronoun follows the negative marker, thus directly preceding the first element

[4]The first person singular pronoun can in rare cases be syllabic, in which case it bears a superhigh tone. However, it is not quite clear under which conditions this is the case. This grammar does not contain an example.

of the verbal core (80c). The relevant pronouns in these and the following examples are underlined.

(80) a. bɔ̋ ā tʃyé wɔ̄
CL2 NEG know(c) NEG

'He doesn't know.'

b. wà ā tʃyé wɔ̄
2SG NEG know(c) NEG

'You don't know.'

c. ā ɲ=tʃyé wɔ̄
NEG 1SG=know(c) NEG

'I don't know.'

Examples (81)-(84) contain instances of preverbal pronouns.

(81) ő, n=dɨ́ f-án, ŋ=kə́ kù kpɨ̄ mɨ̄
INTERJ 1SG=be(b) PROX-here 1SG=HAB cry(a) CL9/10.death 1SG
wān
CL1.child

'Oh! I am here mourning my child's death.'

(82) bī kù dzɨ́ gàn kyɛ̄n mɨ̄
1PL cry(a) walk_around(b) go(a) CL7/8.soul in

'We are crying in the soul.'

(83) wù sé dzǽ ā̋ mọ̀~mọ̀
CL1 be_hot(c) CL7.mouth ADVLZ one~RED

'She is very active!' (lit.: She is very hot in her mouth.)

(84) bɔ̋ dzɨ́ mɛ̌ mű́ntù mɨ̄ mű́ntù mɨ̄
CL2 travel(b) only CL7/8.car in CL7/8.car in

'They only ever travel by car.'

It is worth noting that second person singular pronouns take a mid tone when they form the subject of an "irrealis clause",[5] as in (85) and (86). More research is needed to determine the exact nature of this tone change.

(85) n=dɨ́ kə̄-fọ̄ dʒī wá lā yɛ̄ ā gān
1SG=be(b) NMLZ-report(a) CL9.road 2SG.PP DAT SUBORD 2SG go(a)
də̄ wān w-ā yɛ̄
see(a) CL1.child CL1-2SG.POSS QUOT.Q

[5]See Lovegren (2013: pp.91-93) on the 'irrealis' category in Mungbam.

'Can I show you the way to your child?'

(86) Pế bɔ̄ŋ kɛ̄ gān wù yɛ̄ ní ŋkɔ́ byé yɛ̄
P. call(a) return(c) go(a) CL1 COMP CL1.mother N. B. COMP
yə́ tʃū a̲ tʃū mū mū mbǐ
go_up(c) come(b) 2SG come(b) take(a) drink(b) CL6.palm_wine

'Pe called her to come back: Mother of Ngko of Bie! You should come and drink your wine.'[6]

6.1.2 Non-preverbal pronouns

Only the first and second person singular non-preverbal pronoun differ segmentally from the respective preverbal pronouns. Table 6.5 gives an overview of all non-preverbal pronouns. Like in the preverbal forms, the second person singular pronoun and the Class 1 and Class 9 pronoun bear a low tone and the other non-third person pronouns (first person singular and plural and second person plural) bear a mid tone. Unlike the respective preverbal pronouns, all other non-preverbal (third person) pronouns bear a superhigh tone.

person	gender	SG		PL
1st		**mī**		**bī**
2nd		**wà**		**bɛ̄n**
3rd	1/2	**wù**		**bɔ́**
	3/10	**wű**		**yǐ**
	3/7a	**wű**		**kǐ**
	7/8	**kǐ**		**bǐ**
	9/10	**yì**		**yǐ**
	19/18	**fǐ**		**mű**
	6a		**mű**	
	3a		**wű**	
	8a		**bǐ**	
	10a		**yǐ**	
	7b		**kǐ**	

Table 6.5: Non-preverbal forms of personal pronouns

Examples (87)-(90) show non-preverbal pronouns in context. The non-preverbal pronouns in the examples are underlined.

(87) yɛ̄ gǎn tsē mī̲ ā ntsɔ́m mū-ŋ-gɛ̄~ŋ-gɛ̄
COMP go(a) find(a) 1SG COM CL6.soil CL6-N-be_red(a)~RED

'...: Go and find me some red soil!'

[6]Pe is the short form for 'Petrus'.

(88) tɔ́ ə́ kə̀ dɪ̄ yɛ̄ bə̄ kə̀ bú sɔ̄ wù ā́ká
there P3 be(b) COMP IMPERS P3 give_birth(c) first CL1 like

'If they had born him first instead of...'[7]

(89) kə́ bɔ̋ kə̀ mū kpān, wù tsú bɔ̋
COND CL2 P3 drink(b) be_full(b) CL1 hit(b) CL2

'When they had drunk enough, he beat them.'

(90) à mɪ̄ tɛ́n wṹ kyà mɪ̄
2SG CONSEC dry(c) CL3 CL9.basket in

'and then you dry it [the soaked corn] in a basket.'

6.1.3 Pronouns as objects of the comitative preposition ā

All third person pronouns which normally bear a superhigh tone in non-preverbal position, i.e. all third person pronouns of classes other than Class 1 and 9, are realized with a LH rising tone when they are the object of a comitative preposition, as e.g. in (91).

(91) wù gān [ā bǒ] dʒwɔ̀
3SG go(a) COM CL2 CL1/2.water_place

'[and] he went with them to the stream.'

Pronouns with low tones retain their tones after the comitative preposition and nouns generally don't change their tone patterns. It is possible that the underlying tone pattern of the comitative preposition **ā** is in fact ML. The falling tone ML is commonly pronounced like a mid tone when it occurs in non-final position. A floating low, on the other hand, docks to the right, turning a subsequent superhigh tone into a LH rising tone, cf. §3.4.2. For more on the comitative construction, see §10.2.1.1 and §11.3.3.

6.1.4 Pronouns as objects of postpositions

Table 6.6 shows the form of pronouns when they are the object of a postposition. Segmentally, they are identical with the non-preverbal pronouns, but their tones differ. The Class 2 (or third person plural) pronoun is realized **bǒ** with a low/high rising tone and all other pronouns bear a high tone when headed by a postposition. Thus, the distinction between Class 1 and Class 3/3a and the distinction between Class 9 and Class 10/10a are neutralized when the pronoun is the object of a postposition.

[7] While the speaker was trying to come up with the name, the listener intervened: "Cypren".

person	gender	SG		PL
1st		**mɨ́**		**bí**
2nd		**wá**		**bɛ́n**
3rd	1/2	**wú**		**bǒ**
	3/10	**wú**		**yí**
	3/7a	**wú**		**kí**
	7/8	**kí**		**bí**
	9/10	**yí**		**yí**
	19/18	**fí**		**mú**
	6a		**mú**	
	3a		**wú**	
	8a		**bí**	
	10a		**yí**	
	7b		**kí**	

Table 6.6: Forms of personal pronouns when they are the object of a postposition

Examples (92)-(96) contain various instances of pronouns which are the object of a postposition. Postpositional phrases in the examples are enclosed in square brackets.

(92) wù fǫ̀ tʃʉ́ [mɨ́ lā], yɛ̄ lùŋ b-ɔ́
CL1 tell(a).IPFV come(b).IPFV 1SG.PP DAT COMP CL8.suffering CL8-DET
yɪ́ nɨ̀m tí mɨ̄
eat(b).IPFV sit(a).IPFV surprisingly 1SG

'She told me: I am suffering.'

(93) bɔ́ fǫ̀ tʃʉ́ [bí lā] yɛ̄ bɔ́ tsè
CL2 tell(a).IPFV come(b).IPFV 1PL.PP DAT COMP CL2 search(a)
dzɪ́ gàn kpɔ̋
walk_around(b) go(a) CL3/7a.money

'They are telling us that they are searching for money.'

(94) à bɔ̀ŋ gàn kpé (é), wù dzé tʃʉ́
2SG call(a) go(a) CL1.woman INTERJ CL1 say(b).IPFV come(b).IPFV
[wá lā] yɛ̄ (o) kpɔ́ wʉ̋ dɨ̋ mɛ̌
2SG.PP DAT COMP INTERJ CL3/7a.money CL3;3SG.POSS be(b) only
kām bī-kpɔ̄n, bwɛ̄
CL7/8.thousand CL8-five CL1/2.friend

'If you call a woman, she will tell you that her price is always 5000 francs, my friend.'

(95) nsūŋ wū dzé [wú lā] yɛ̄ wà, à dɨ̌
CL1.friend CL1;3SG.POSS say(b) CL1PP DAT COMP 2SG, 2SG be(b)
kpé bǒ
CL1.woman CL1.bad

'Her friend said to her: You are a bad woman!'

(96) bə̄ dzé gàn [bǔ lā] yɛ̄ bán bò á
IMPERS say(b) go(a) CL2PP DAT COMP CL1/2.outside be_bad(a) ADVLZ
kī-lī
NMLZ-be_strong(a)

'They are telling them that [the world] outside is very bad.'

The postposition **lā**, which roughly translates into English as 'for', is the postposition which is most common with pronominal objects. Other postpositions occur more commonly with full nouns as objects. However, there are also examples of pronouns as objects of other postpositions; see (97) and (98).

(97) à mɨ̄ nɨ̀m ʃì bá dɛ̀ nā bə̄
2SG CONSEC sit(a) go_down(a) exactly CL9.place SUBORD IMPERS
kpā f-ɔ́ gù, ā fì-ŋgī [wá
light_fire(a).IPFV LOC-REL CL3/7a.fire COM CL19-water 2SG.PP
kə̀n]
hands.LOC

'Then (you will) sit down exactly where they make fire, with a bit of water in your hand.'

(98) yə̌ nǭ ʃī y-ɔ́ kə̀ kpɨ̄ y-ɔ́
CL9/10.year SUBORD CL9/10.fowl CL10-DET P3 die(b) CL10-REL
[yí mɨ̄] ...
CL10.PP in ...

'The year in which the chickens died ...'

The first person pronoun is realized as **míŋ** with a final velar nasal when it precedes a postposition which begins with a velar consonant, see (99).

(99) m = bú má à, dɨ̌ mān nǭ à tán k-ɔ́
1SG = ask(b) CS.QUOT Q be(b) what SUBORD 2SG refuse(b) CL7-REL
mbí̌ m-ɔ́ [míŋ kə̀n] ā
CL6.wine CL6-DET 1SG.PP hands.LOC QUOT.Q

'I asked [her]: Why is it, that you refuse the wine from my hands?.'

The postposition **kə̀n**, as contained in (97) and (99), meaning roughly 'in someone's hands' is derived from the noun **kɛ̀** 'hand/s'. It is one of several

postpositions derived from body parts, many of which are formally identical to the body part nouns. The postpositional phrase involving the owner of the body part as the object of the postposition differs structurally from the possessive phrase involving body part and owner. For more on comparable constructions, see §10.2.2.1.

6.1.5 Benefactive pronouns

The first person singular pronoun **mɨ̄** '1SG' and the interrogative pronoun **ndɛ̀** 'who' have special benefactive forms. The label benefactive is meant to show that the referent of the pronoun is commonly the recipient or benefactor of an action. The forms are **ndá** for the first person singular pronoun and **ndyə́n** for the interrogative pronoun 'who'. The choice between the first person singular non-preverbal pronoun and the first person singular benefactive pronoun in this context seems to be free, but the benefactive pronoun is clearly preferred. For illustration, examples are given in (100). The postpositional phrase is enclosed in square brackets in this and the following examples. While example (100a) employs the first person singular non-preverbal pronoun, (100b) uses the special benefactive pronoun. The first person singular benefactive pronoun is followed by the postposition **lā** 'for'. Benefactive forms in this and the following examples are glossed DAT.

(100) a. à mɨ̄ tʃű fə̋ [mí lā]
2SG CONSEC come(b) give(b) 1SG.PP DAT

'[...] and then you come and give it to me!'

b. gbàm kə́ mɨ̄ tsɔ̀ dʒī dzɔ́ŋ [ndá lā]
CL7b.God COND CONSEC show(a) CL9.way CL9.good 1SG.DAT DAT
first, ...
first

'First, God would show me the right way...'

The interrogative benefactive pronoun **ndyə́n** 'for/to whom' can be followed by a postposition but is usually not. It often stands alone, representing the whole "postpositional phrase" as seen in (101b), which contrasts with (101a). Like with the first person singular pronoun, the use of the benefactive form **ndyə́n** is not obligatory, but it seems to be preferred.

(101) a. fə̀ fə̋ ndɛ̀ kpə̋ [ɪ́ ntí lā]
P1 give(b) who CL3.money LOC N. DAT

'Who gave Ntie money (earlier today)?'

b. ɲùŋfù fə̀ fə̋ kpə̋ w-ɔ́ [ndyə́n]
N. P1 give(b) CL3.money CL3-DET who.DAT

'Who did Nyungfu give the money to (earlier today)?'

The benefactive object can be preceded by the locative marker **ǐ́**, as in (102). However, the presence of the marker is not obligatory. For more on the encoding of benefactives (or datives), see §10.2 and §11.3.5.

(102) ā́ dʒū́ wǔ́ ŋgɔ̀ nǭ̀ wù kə̀ dzé w-ɔ́
ADVLZ CL3.word CL3;3SG.POSS upon SUBORD CL1 P3 say(b) CL3-REL
[ǐ́ ndá lā] yɛ̄ bī ká kán gbɔ̄ *school*
LOC 1SG.DAT DAT COMP 1PL F2 have(c) CL3.house CL1.school

'According to what he said to me, that we will have a school, [...]'

6.1.6 Compound pronouns

What had been analyzed as compound pronouns in (Good et al. 2011: 128-129) has been reanalyzed as a special case of inclusory conjunction and is treated accordingly in §7.2.2.2.

6.2 The dummy subject

The dummy subject consists of a floating low tone which precedes the verbal complex when the subject follows the verb. This is the case when the subject is in focus (see §14.2.3 for details). The dummy subject directly precedes the verb complex and causes a subsequent element with a superhigh tone, such as e.g., a class B verb, like **tsǔ́** 'hit' in (103) or the hodiernal past (P1) marker **fə̋** in (104), to be realized with a LH rising tone. When the subsequent element does not have a superhigh tone, as e.g. in (105), its tone pattern is not affected and the dummy subject is not detectable.

(103) tsǔ ŋkə̋́ ɲùŋfù
DS.hit(b) N. N.

◇'NGKO hit Nyungfu.'

(104) fə̀ fə̋́ ndɛ̀ kpə̋́ ǐ́ ntí lā
DS.P1 give(b) who CL3/7a.money LOC N. DAT

◇'Who gave money to Ntie?'

(105) yɨ́ŋ ndɛ̀ gbɔ̄ w-ɛ́ń
DS.build(c) who CL3.house CL3-DEM.PROX

◇'Who built this house?'

I use the term 'dummy subject' for convenience, although I am aware that the Mundabli phenomenon does not meet the common definition of the term. In the long run, it would be good to revise the current analysis. In fact, the phenomenon seems to be more reminiscent of the 'disfluentive verb forms' described in Good (2010: pp.8-10 and 18) for the related language Naki.

6.3 The impersonal subject pronoun bə̄

The impersonal subject pronoun **bə̄** is used when the identity of the agent is irrelevant, e.g. in cases where some languages would employ a passive. Examples of the impersonal subject pronoun **bə̄** are found in (106) and (107). The agent in both examples is human, but it is not a specific person or group of people. The impersonal pronoun **bə̄** is formally distinct from the Class 2 (or third person plural) pronoun **bʊ́**.

(106) *then* wù mɨ̄ mū ŋmkpʊ̌ŋ k-ɔ́ bə̄ ká nɨ̄m
then CL1 CONSEC take(a) CL7/8.stool CL7-DET IMPERS HAB sit(a)
k-ɔ́ kǐ wɔ̄, wù mū dɛ̀ y-ɔ̄ bə̄ kə́ nɨ̄m
CL7-REL CL7PP on CL1 take(a) CL9.place CL9-DET IMPERS HAB sit(a)
f-ɔ́, wù mū fyɛ́ dʒī ʃī ɪ́ dzɔ̀
LOC-REL CL1 take(a) turn(c) put(a) go_down(a) LOC down

'Then he took the stool that people sit on, he took the part that one sits on, he took it and turned it upside down.'

(107) à mɨ̄ gàn də̀ gbɔ̄ wān w-ā
2SG CONSEC go(a) see(a) CL3.house CL1.child CL1-2SG.POSS
sè bə̄ nàn tsə̀ fín *and then*
house_front.LOC IMPERS fix(a) CL7/8.bundle_of_grass there and then
bə̄ mɨ́ dʒì mù-ɲə́m ɪ́ gbɔ̄ w-ɔ́
IMPERS CONSEC put(a) CL18-cloth_strip LOC CL3.house CL3-DET
sɛ̀
house_front.LOC

'You will then go and see on the frontside of your child's house that a bundle of grass is fixed there, and small long strips of cloth are attached to the front of the house.'

In fact, the use of the impersonal pronoun in Mundabli essentially corresponds to the use of the French impersonal pronoun *on*. Like French *on*, it is also used in hortative-like constructions, as in (108).

(108) tʃū, bə̄ yī
come(b) IMPERS eat(b)

'Come, let us eat!'

6.4 Interrogative pronouns

Mundabli uses two interrogative pronouns: **ndɛ̀** 'who' and **mān** 'what'. While interrogatives are treated in detail in Chapter 15.1, here I will discuss those aspects which are relevant to the general discussion of pronouns.

The interrogative pronouns **mān** 'what' and **ndɛ̀** 'who' are treated in some detail in §15.1.2.10 which deals specifically with agreement in interrogative pronouns. They allow, or even require, noun class marking under certain circumstances. However, as pointed out in §15.1.2.10, both interrogative pronouns can only take one of the agreement prefixes, namely **ki-** (Class 7) for **mān** and **bɔ-** (Class 2) for **ndɛ̀**. The agreement prefixes are used when the speaker already has a referent in mind, i.e. it implies a certain degree of definiteness. Examples (109) and (110) illustrate the use of interrogative pronouns with and without agreement prefixes.

(109) ɲùŋfù fə̄ mān ntí lā
N. give(b) what N. DAT

◇'What did Nyungfu give Ntie?'

(110) dǐ kì-mān, ɲùŋfù fə̄ fə́ k-ɔ́ ǐ́ ntí lā
be(b) CL7-what N. P1 give(b) CL7-REL LOC N. DAT

◇'What is it that Nyungfu gave to Ntie?'

6.5 Indefinite pronouns

The indefinite pronoun **kìmān** 'whatever' or 'anything' is identical to the prefix-bearing form of the interrogative pronoun. This is a so-called 'free-choice indefinite' (Haspelmath 2011). As Haspelmath points out, "[i]ndefinites that express free choice, and more generally indefinites that translate as any-indefinites in English, seem to have a greater tendency to be interrogative-based than indefinites that are used in affirmative declarative realis sentences (roughly corresponding to English some-indefinites)". Mundabli seems to confirm this observation, since only its free-choice indefinites are based on interrogatives. Examples of indefinite pronouns are presented in (111) and (112).

(111) kə́ wù dʒyè kɛ̌ ɲām b-ɔ́ wú lā, kɛ̌ kì-mán
COND CL1 cook(a) even CL8a.fufu CL8a-DET CL1PP DAT even CL7-what
dō, kə́ wù yí wù yí wù yí, wù mū ʃú
stay(b) COND CL1 eat(b) CL1 eat(b) CL1 eat(b) CL1 take(a) come(b)
nsɔ́m mū-ntʃín m-ɔ́, wù fə̄ gàn ɲwɔ́m
CL19/18.crumb CL18-small CL18-DET CL1 give(b) go(a) CL2.children
b-ɔ́ lā
CL2-DET DAT

'When she cooks, even [if it's only] fufu, for herself, even whatever [small thing] remains, when she eats, she eats and eats, she takes [only] little crumbs and gives [them] to the children.'

(112) à dzě kì-mān wú lā, wù ā wṵ̀ wɔ̄
2SG say(b) CL7-what CL1PP DAT CL1 NEG hear(c).IPFV NEG
◇‘Whatever you say to him, he does not listen.’

CHAPTER 7

Noun modifiers and noun phrase structure

Noun phrases are "syntactic constituents which serve as arguments of the verb" (Dryer 2007b: 151). In Mundabli, they are usually headed by nouns or pronouns, but under certain circumstances, they may lack a head noun and instead be headed by noun modifiers, such as demonstratives, adjectives, numerals or possessive pronouns. Personal pronouns usually represent a minimal noun phrase of their own.

This chapter contains a section on simple noun phrases (§7.1), one on complex noun phrases (§7.2),[1] and one on word order in the noun phrase (§7.3).

7.1 Simple noun phrases

Simple noun phrases contain a noun or a pronoun with or without simple modifiers, such as articles, demonstratives, adjectives or numerals. As pronouns have already been treated in some detail in Chapter 6, the discussion of pronouns in this chapter will be restricted to their role as NP heads and to the modifiers which are attested in noun phrases headed by pronouns.

[1] The distinction between simple and complex noun phrases is based on Dryer (2007b: 151). However, whereas Dryer lists also noun phrases containing relative clauses among the complex noun phrases, these are not included in the current chapter. They are instead dealt with in Chapter 12. Unlike Dryer, I include conjoined NPs among the complex NPs in this chapter.

7.1.1 Lexical Nouns

Lexical nouns consist either of a bare stem or, more rarely, of a stem plus a noun class prefix. Although nouns often lack a prefix, they always belong to a lexical noun class or noun class pairing which triggers agreement on noun modifiers (see §4.2 and §4.3 for more on noun classes and §5.2-§5.4 for more on agreement). A lexical noun can form a noun phrase of its own, as in (113) and (114), or it can head a noun phrase in which it is modified by adjectives, determiners, numerals, etc. (see examples in the following sections). In the examples in this section, the noun is underlined.

(113) bə́ tsú dɔ̄
CL2 contribute(c) CL3a.beans

'They contributed beans.'

(114) bə́ gān mū ʃú kpɛ̀
CL2 go(a) take(a) come(b) CL3.pot

'They went to take the pot.'

A derived noun can also head a noun phrase, as e.g. in (115) and (116), where infinitives[2] form the heads of noun phrases.

(115) *so* bə mɨ̄ yē m-mṵ̀
so IMPERS CONSEC start(a) INF-drink(b).IPFV

'So, people will then start drinking.'

(116) [n-kwō-n nǭ bī kə̀ kwó gān w-ɔ̄ mɨ́ŋ
INF-enter(c)-INF SUBORD 1PL P3 enter(c) go(a) CL1-REL 1SG.PP
gbə̀], wù bú mà kpə̄ ŋgɨ̄ dɨ́ nā
house.LOC CL1 ask(b) QUOT;Q CL1.wife CL1;1SG.POSS be(b) where

'Just as we were entering into my house, she asked where my wife was.'

In (116), the deverbal infinitive noun is modified by a relative clause. The relativizer **wɔ̄** shows Class 2 agreement with the head nominal. The verb 'start', which takes an infinitive as its object in (115), can also take a pronominal object, like e.g. **kɨ́** in the relative clause in (117).

(117) dɨ̌ kì-mān nǭ [à yē kɛ̄ dzɔ̄ŋ k-ɔ́ kɨ́
DS.be(b) CL7-what SUBORD 2SG start(a) return(c) again CL7-REL CL7
ɨ́ tā́n mɨ̄]
LOC there in

'What is it that you are starting again in here?'

[2]Infinitives can be derived from perfective or imperfective verb stems. See §8.4.1 for more on infinitives.

7.1.2 Pronouns in appositive constructions

Pronouns can be followed by an appositive noun phrase, as in (118) and (119).

(118) bə kā́ ɲwán [bī́ ndʒān] lə nǫ́ bɔ̄ *feed*
IMPERS F2 beg(b) 1PL Mundabli DAT SUBORD CL2 feed
tɔ́m swɔ̄m ā́ bī-lō
CL7/8.palm_villages CL7/8.palm ADVLZ CL8-all

'And they will be begging things from us, the Mundabli, because they [the Mundabli] will feed all the people in this Mbanga area.'

(119) kə́ gbɔ̄ w-én dī́ ná ánā́ [bɛ̄n ɲwɔ́m
COND CL3.house CL3-DEM.PROX be(b) as like_that 2PL CL2.children
b-ɔ́], bɛ̄n yɪ́ŋ yə́ t-ɔ́ʔ tʃì t-ɔ́
CL2-DET 2PL build(c) go_up(c) DIST-there up DIST-DET

'As this house is like this, you, the children, you would be building up on top.'[3]

7.1.3 Demonstratives

Mundabli has two demonstrative stems: **-ɛn** 'this'/'these' (near speaker; from here or simply 'this') and **-ɔ** 'that'/'those' (far from speaker, also 'the aforementioned'; from here on 'that'). The demonstrative stems take a consonantal prefix which agrees in noun class with the head noun) see Table 7.1. Table 7.1, is an adapted version of Table 5.5 in §5.2.

gender	'this'/'these' (close to speaker)		'that'/'those' (far from speaker)	
	SG	PL	SG	PL
1/2	**wēn**	**bén**	**wɔ̄**	**bɔ́**
3/10	**wén**	**yén**	**wɔ́**	**yɔ́**
3/7a	**wén**	**kén**	**wɔ́**	**kɔ́**
7/8	**kén**	**bén**	**kɔ́**	**bɔ́**
9/10	**yēn**	**yén**	**yɔ̄**	**yɔ́**
19/18	**fén**	**mén**	**fɔ́**	**mɔ́**
6	**mén**		**mɔ́**	
3a	**wén**		**wɔ́**	
8a	**bén**		**bɔ́**	
9a	**yēn**		**yɔ̄**	
7b	**kén**		**kɔ́**	

Table 7.1: Demonstratives

[3]The speaker is explaining the concept of multiple story buildings.

Mundabli does not have a third 'that' (near hearer) demonstrative (as e.g., Noni (Hyman 1981)). It does not distinguish between different degrees of remoteness in distal demonstratives and it does not have an intensified form of the demonstrative (as has been reported to exist in Bafut (Tamanji 2009: 60ff.)).

Demonstratives can be used to modify a noun, as in (120)-(123) or as demonstrative pronouns, representing the whole noun phrase in the absence of a nominal head, as in (124)-(126). When used as modifiers, demonstratives generally follow the noun.[4] In the examples, noun phrases containing a demonstrative (either as head or modifier) are enclosed in square brackets.

(120) ká à mū ʃú [gɛ̄ w-ɔ́] à mɪ̄
COND 2SG take(a) come(b) CL3/7a.maize CL3-DET 2SG CONSEC
kpè wŭ ŋgī mɪ̄ sɪ́ yí-ʃyé
soak(a) CL3 CL6.water in CL9/10.day CL10-two

'When you take the corn and soak it in water for two days, ...'

(121) wù kə̆ tsé dyá bɔ̀ [tsʊ́ b-ɔ́]
CL1 P3.HAB search(a) see(a)IPFV FRUST CL7/8.banana CL8-DET

'He was searching for the bananas but he couldn't find them.'

(122) [kpé w-ɔ̄] sé dzǽ kpɪ̄
CL1.woman CL1-DET be_hot(c) CL7.mouth very_much

'That woman is very active.'

(123) [dzɔ̄ y-ɛ́n], [kwɛ́ w-ɛ́n] à, ā
CL10.houses CL10-DEM.PROX CL3/7a.home CL3-DEM.PROX Q ADVLZ
wú-lō à, wɛ́ à tá lə mɪ̄ ɛ̄
CL3-whole Q INTERJ P2 VER.FOC do(a) 1SG QUOT.Q

'These houses, this whole compound? Did *I* do it?'

(124) dzɔ̄ yī-dzú y-ɔ́ kə̀ bo̱ m-bo̱,
CL10.houses CL10-other CL10-DET P3 burn(b) INF-burn(b)
[y-ɛ́n] tá kwà dɪ́ ŋ-kwà
CL10-DEM.PROX VER.FOC break(a) be(b) INF-break(a)

'The other houses burnt down, these ones broke.'

[4]For exceptions from the general **N**+**DET** order, see §7.3.

(125) [k-ɛ́n] dɨ́ ŋkɨ́ŋ k-ɔ́, nɨ́ŋ nɔ̰̀
CL7-DEM.PROX be(b) CL7;1SG.POSS CL7-DET CL7.thing SUBORD
ɲ́ = də̀ k-ɔ́ kɨ́
1SG = see(a) CL7-DET CL7

'This is my own, the thing that I see.' (roughly: "This is the way I see it.")

(126) à mɨ̄ tʃyé yɛ̄ [w-ɔ́] gbɔ̄ wān
2SG CONSEC know(c) COMP CL3-DEM.DIST CL3.house CL1.child
w-ā yà
CL1-2SG.POSS EMPH

'And then you know that that [is] your child's house, you hear?'

The range of meanings covered by the distal demonstrative **-ɔ** 'that' includes that of demonstratives and of definite articles in other languages. In narrative texts, the distal demonstrative **-ɔ** is most frequently used for anaphoric reference ('the aforementioned') or to refer to a previously established discourse topic, rather than for deictic reference, see e.g. (120)-(121).

While the demonstrative **-ɔ** 'that' also serves as a definiteness marker, lack of a demonstrative is not always interpreted as marking indefiniteness; see (127). Example (127) is taken from an elicitation session using the picture story "Frog, where are you?" by Mercer Mayer (1980). At the time of utterance, the referent of the frog has already been established so that the translation 'He shook [the jar], [but] he still did not see ANY frog.' would not be appropriate. Although the noun **kwá** 'frog' in (127) refers to a specific frog and is thus a case of definite reference, the definite marker **kɔ́** 'CL7.that' is not used. As Dryer (2007b: 155) points out, it is cross-linguistically typical that demonstratives which are used as definiteness markers are not obligatory.

(127) wù nī, wù dǎ dà wɔ̄ [kwá] lā
CL1 shake_empty(a) CL1 be(b);NEG see(a) NEG CL7/8.frog DAT
'He shook [the jar], [but] he still did not see the frog.'

There is no indefinite article. Instead, indefinite noun phrases generally lack a demonstrative or determiner. Examples (128) and (129) contain indefinite NPs without determiners: **kyà** 'basket, sp.' (128) and **yán ŋgɔ̄m** 'banana leaves' (129). The examples are taken from a recipe for corn beer. In both cases, the noun phrases are introduced for the first time here and do not refer to specific entities.

(128) à mɨ̄ tɛ́n wɨ́ [kyà] mɨ̄
2SG CONSEC drip(c) CL3 CL9/10.basket in

'You then pour it [the corn beer] into a basket [to remove all the water].'

(129) *after*, à mɪ̄ tǎn tʃű [yán ŋgɔ̄m]
afterwards 2SG CONSEC cut(b) come(b) CL3/7a.leaf CL1/2.plantain

'After that, you collect plantain leaves.'

7.1.4 Adjectives

While most of the words that denote what is often called property concepts are grammatically verbs in Mundabli, there is a small and closed class of adjectives. A (non-exhaustive) list of adjectives is provided in Table 7.2. Most of these adjectives belong to one of the four core semantic types which are typically associated with both large and small adjective classes: dimension, age, value and color. This is exactly what one would expect from a small and closed class of adjectives according to Dixon (2010: 73).

adjective	gloss
tsű́ŋ	'big, great, important'
dʒǔ	'short'
dʒɪ̄ŋ	'long', 'tall'
fyű́ŋ	'new'
kű	'old'
dzɔ́ŋ	'good'
bō	'bad'
bā́n	'white', 'clear'
yíl	'black'
wól	'beige'
ŋwā	'multi-coloured'
tsám	'dirty'
ntʃīm	'thick (for fluids)'

Table 7.2: List of adjectives (not exhaustive), repeated from Table 5.7, §5.3.1

Adjectives always take an agreement prefix. The agreement prefix is purely tonal for Class 1 and Class 9 nouns, see e.g. (130), and syllabic for nouns of all other classes, see (131). When an adjective is used attributively, as in (130) or (131), it agrees with the subject, and when it modifies a noun, it agrees with its head nominal. For a detailed treatment of agreement in adjectives, see §5.3.

(130) nsūŋ wū dzé wú lā yɛ̄ wà, à dɪ̌
CL1.friend CL1;3SG.POSS say(b) CL1PP DAT COMP 2SG, 2SG be(b)
[kpé bǒ]
CL1.woman CL1.bad

'Her friend said to her: "You are a bad woman!"'

(131) ŋ́=kà á tʃyé wɔ̄ yɛ̄ ŋwàtɨ̀ dǐ ná, dǐ
1SG=P3 NEG know(c) NEG COMP CL7/8.book be(b) as be(b)
[nɨ́ŋ kə̄-dzɔ́ŋ]
CL7.thing CL7-good

'I did not know back then that reading and writing is like that, [that] it is a good thing.'

Adjectives can form a noun phrase of their own in the absence of a nominal head, as in (132).[5] As when they modify a noun, adjectives in elliptical constructions agree in noun class with the (omitted) head noun.

(132) à mɨ̄ tʃʉ́ fə̄ ndá lā yɛ̄ m=mɨ̄ myé
2SG CONSEC come(b) give(b) 1SG.DAT DAT COMP 1SG=CONSEC lick(c)
[mùn-dzɔ̀ŋ~dzɔ̀ŋ]
CL6-sweet~RED

'[...] and then come and give [it] to me so that I then lick the sweet [soil].'

Example (132) is taken from a story in which the antelope asks the girl to bring her some moist red soil for her to lick. The reduplicated adjective **mùn-dzɔ̀ŋ~dzɔ̀ŋ** 'the sweet one' in the example refers to this soil. Table 7.3 contains adjective agreement prefixes and examples of adjectives for all noun classes.

noun class	prefix	example	gloss
1	**`-**	**ŋkʉ̌ŋ fyɨ̌ŋ**	'a new chief'
2	**bɔ̄-**	**(bə̀)ŋkʉ̌ŋ bɔ̄fyɨ́ŋ**	'new chiefs'
3	**wū-**	**gbɔ̄ wūfyɨ́ŋ**	'a new house'
7a	**kī-**	**dzɔ̄ yīfyɨ́ŋ**	'new houses'
7	**kī-**	**nɨ́ŋ kīfyɨ́ŋ**	'a new thing'
8	**bī-**	**ndʒɔ́m bīfyɨ́ŋ**	'new things'
9	**`-**	**dʒɨ̌ fyɨ̌ŋ**	'a new dog'
10	**yī-**	**dʒɨ́ yīfyɨ́ŋ**	'new dogs'
19	**fī-**	**mwɨ̌n fīfyɨ́ŋ**	'a new cat'
18	**mūN-**	**mwɨ̌n mūmfyɨ́ŋ**	'new cats'
6a	**mūN-**	**ŋgī mūmfyɨ́ŋ**	'new water'
8a	**bī-**	**ɲām bīfyɨ́ŋ**	'new fufu'

Table 7.3: Adjective agreement prefixes

Note that, although in some cases homophonous, agreement prefixes in adjectives differ formally from subject pronouns (see §6.1.1). The same holds

[5]The adjective in (132) is reduplicated. This expresses intensity.

for noun and adjective prefixes. Most nominal prefixes are segmentally identical with the equivalent adjective prefix. However, the two generally have a different tonal structure. Whereas nominal prefixes always have a low tone, the corresponding segmental adjective prefixes have a mid tone. Only the non-segmental Class 1 and 9 adjective prefixes have a low tone.

It has already been mentioned that adjectives can be used predicatively or attributively. Predicative adjectives require the use of a copula, as in (133). While the copula is often omitted, only adjectives can possibly co-occur with a copula. When adjectives are used attributively, they generally follow the noun, as in (134) and in (131) above. There is no special marking strategy; they are simply juxtaposed to the noun they modify.

(133) [gbɔ̄] w-ɔ́ kə̀ dɨ́ [wū-bán]
CL3.house CL3-DET P3 be(b) CL3-white

◇'The house was white'

(134) mɔ̀ nǭ wù kə̀ fə̄ w-ɔ̄ sɨ̀ŋ y-ɔ̄ ɨ́
CL1.man SUBORD CL1 P3 give(b) CL1-REL CL9.knife CL9-DET LOC
ɲùŋfù lā kə̀ dɨ̄ [mɔ̀ kǔ]
N. DAT P3 be(b) CL1.man CL1.old

◇'The man who gave Nyungfu the knife was an old man.'

Adjectives can also be reduplicated, which has the effect of intensification. In this case, the fully reduplicated adjectival root is preceded by the adjective prefix which agrees in noun class with the head noun, see (135)-(137).

(135) n=ʧű̋ ā [kwō dzú kī-bán~bán] kī
1SG=come(b) COM CL7/8.rooster certain CL7-white~RED CL7
kān yɔ̀ kǫ̀
have(c) CL9.voice CL1/2.juju

'I've come with a very white rooster. It has the voice of a juju.'

(136) bɔ̀m tǎn n-tsǫ̀ [dʒī dzɔ́ŋ~dzɔ́ŋ]
CL9.antelope refuse(b) INF-show(a).IPFV CL9.road CL9.good~RED
wú lā
CL1PP DAT

'The antelope refused to show her the right way.'

(137) yɛ̄ gǎn tsē mɨ̄ ā [ntsɔ̃́m mū-ŋ-gɛ̄~ŋ-gɛ̄]
COMP go(a) find(a) 1SG COM CL6.soil CL6-N-be_red~RED

'...: Go and find me some red soil!'

In (136), the reduplicated adjective modifies a Class 9 noun. Based on analogy, I assume that the adjective takes a purely tonal prefix, although the presence of a tonal prefix is not detectable from the tonal shape of the root in this example.

7.1.5 Numerals

Mundabli has a decimal numeral system, i.e. the numeral 10 is used as a base to form higher numbers according to the pattern $xn + y$. Just like English, Mundabli makes use of exponentiation of the base with a special term for 10^2, namely **gbì** 'hundred', as well as one for 10^3, namely **kām** 'thousand'. Both terms are linguistically opaque, i.e. nothing formally relates these exponentials to their base.[6] However, see §7.1.5.3 for more on the etymology of these and other numerals.

Numerals in Mundabli have different morphosyntactic structures. Only the basic numerals from 1 to 10 function as noun modifiers (see §7.1.5.1). The word for 10, as employed in multiples of 10 (different from the numeral 10 itself) and the words for 100 and 1000 are represented by numeral nouns. Complex numerals, i.e. numerals representing two- or multi-digit numbers, in which at least two digits are represented by a number other than zero, are represented by numeral phrases which combine the relevant subparts. Basic and complex numerals are described in turn. Numerals were also discussed in earlier sections with regard to palatalization processes in §3.3.3 and agreement patterns in §5.4.

7.1.5.1 Basic numerals

Basic numerals, i.e. numerals which are morphologically simple,[7] include all numerals from 1 to 10. The numerals 1-9 consist of a numeral stem plus a prefix. Only the numeral **dzōfɨ̄** 'ten' does not take a prefix. Nevertheless, it is analyzed as a numeral rather than a noun because it cannot itself be multiplied. Instead, an alternative nominal form (**mbāŋ**) is used when referring to multiples of ten (see §7.1.5.2). The numeral **dzōfɨ̄** is only used as noun modifier and in counting.

When used for counting or absolute calculations, the numeral stems for 'one', 'two' and 'three' take a low tone nasal prefix which assimilates in place of articulation to the following consonant. The stem **ǹdē** 'four' also starts with a low-toned nasal, however its stem starts with a low-toned nasal anyway, and thus it is not possible to tell whether the nasal prefix is present in the absolute form or not. The numerals 5-10 in their absolute form consist of the bare numeral stems without a prefix. Table 7.4 lists all basic numerals (from 1 to 10) in their absolute form, i.e. the form used in calculating or counting.

[6] Information on the base of the numeral system is based on criteria listed in Comrie (2011).

[7] Some of the basic numerals actually seem to be based on historically complex forms, see §7.1.5.3. However, synchronically the forms are opaque.

number	form
1	**m̀mo̱**
2	**m̀fyé**
3	**ǹtɔ́**
4	**ǹdē**
5	**kpɔ̄n**
6	**tʃītā**
7	**nɔ̆tɔ̄**
8	**nènè**
9	**kpānè**
10	**dzōfɪ̄**

Table 7.4: The numerals 1 to 10 in their absolute form

When they modify a noun, the numerals 1-9 take an agreement prefix which agrees in noun class with the head noun (see Table 7.5 for an illustration of the agreement patterns).

gender	'one'	'two'	'three'	'four'
1/2	**wù-mwɔ̀**	**bɔ̋-fyé**	**bɔ̋-tɔ́**	**bɔ́-ǹdē**
3/10	**wű-mwɔ́**	**yí-ʃyé**	**yí-tsɔ́**	**yí-ǹdē**
3/7a	**wű-mwɔ́**	**kí-fyé**	**kí-tɔ́**	**kí-ǹdē**
7/8	**kí-mó̱**	**bí-fyé**	**bí-tɔ́**	**bí-ǹdē**
9/10	**yì-mwɔ̀**	**yí-ʃyé**	**yí-tsɔ́**	**yí-ǹdē**
19/18	**fí-mwɔ́**	**mű́m-fyé**	**mű́n-tɔ́**	**mű́-ǹdē**

Table 7.5: Agreement in the numerals 1 to 4

Table 7.5 shows noun class agreement in numerals, as exemplified by the numerals 1-4. The numerals 5-9 are not included in the table for reasons of space and because they do not exhibit any irregularities (such as stem changes). They bear the same prefixes as the numerals 2-4, shown in Table 7.5. Note that the Class 2 prefix bears a high tone when it precedes the root **ǹdē** 'four' while it bears a superhigh tone with all the other roots found in the table just like all the other prefixes, except for the Class 1 and 9 prefixes. I have no explanation for this tonal irregularity. shows even more tonal irregularities.

The stem forms of the numerals 1, 2 and 3 in Table 7.5 display some irregularities. The numeral 'one', whose stem generally takes the shape **m(w)ɔ́**, exhibits a stem change when it modifies a noun of Class 7. In this case, the numeral takes the agreement prefix **kí-** and the form of the stem is **mó̱** with a pharyngealized vowel. This vowel change is probably due to the historical loss of a final velar stop which is still pronounced in the neighboring variety Mufu. The change is comparable to vowel alternations in perfective vs.

imperfective verb forms in which the imperfective verb form frequently involves pharyngealization or diphthongization of the stem vowel (see §3.3.5). A different stem change can be observed in the numerals for 2 and 3, here the initial consonant of the numeral root is palatalized after the Class 10 prefix **yǐ-** (but not after other prefixes containing the vowel **i**, such as **kǐ-** or **fǐ-**). Thus, **-fyē** 'two' and **-tɔ̄** 'three' are realized as **-ʃyē** and as **-tsɔ̄**, respectively, when they agree with Class 10.[8] In (138)-(139), the numeral is used attributively.

(138) [sǐ yì-mwò] áná [mbɛ̄ bǎ-tɔ́] bǐ fǐ gàn
CL9.day CL9-one like_that CL2.people CL2-three exit(b) pass(b) go(a)

'On one day, three people die.'

(139) kâ ŋ=kpɨ́ ɲɛ̄ fǐ mbɛ̄ ndʒān
COND 1SG=die(b).IPFV leave(a).IPFV pass(b) CL2.people Mundabli
kán [yɔ̀ yì-mwɔ̀]
have(c) CL9.voice CL9-one

'If I die, the Mundabli people should have one voice.'

7.1.5.2 Complex numerals

All numerals greater than 10 are complex, i.e. they combine at least two numerals by multiplication or addition.

As pointed out earlier, 10 in multiples of 10 from 20 upwards (the numeral 10 itself has a different form which is not related to the noun), 100 and 1000 are represented by the numeral nouns **mbāŋ** 'multiple of ten' (CL10), **gbǐ̂** (CL3) 'hundred', with the plural form **dzǐ̂** (CL10) and **kām** (CL7/8) 'thousand'.

Multiples of 10, 100 and 1000 are formed by multiplication. The numeral noun is followed by the basic numeral between 1 and 9, by which it is multiplied. The latter agrees in noun class with the numeral noun (both in absolute calculations and when the numeral phrase modifies a noun).

Thus, multiples of 10, 100 or 1000 always have the same shape, no matter whether they are used in absolute counting or to modify a noun, and irrespective of the noun class of the modified noun. This can be seen e.g. in (140) where the numeral phrase is the complement of the copula. As of yet, I have no good explanation for the tonal irregularities in the numeral agreement prefixes in Table 7.6.

(140) kpɔ́ wǘ dǐ mɛ̌ [kām bī-kpɔ̄n],
CL3/7.money CL3;3SG.POSS be(b) only CL7/8.thousand CL8-five
bwɛ̄
CL1/2.friend

'Her price is always 5000 francs, my friend.'

[8] As Class 9 contains only singular nouns, the numerals 2 and 3 never modify a Class 9 noun.

number	form
20	**mbāŋ yíʃyɛ́**
30	**mbāŋ yítsɔ́**
40	**mbāŋ yínɗē**
50	**mbāŋ yíkpɔ̄n**
60	**mbāŋ yìtʃītā**
70	**mbāŋ yínɔ̌tɔ̄**
80	**mbāŋ yínènè**
90	**mbāŋ yìkpānè**
100	**gbì wǔmó**
200	**dzì yǐʃyɛ́**
300	**dzì yǐtsɔ́**
400	**dzī yínɗē**
500	**dzī yīkpɔ̄n**
600	**dzī yìtʃītā**
700	**dzī yínɔ̌tɔ̄**
800	**dzī yínènè**
900	**dzī yìkpānè**
1000	**kām (kḯmó̱)**
2000	**kām bífyɛ́**
3000	**kām bítɔ́**
4000	**kām bíɲdē**
5000	**kām bīkpɔ̄n**
etc.	

Table 7.6: Multiples of 10, 100 and 1000, the numeral nouns

More complex numerals combine multiples of thousand, hundred and ten with each other, starting with the highest digit and ending with the lowest. The numeral nouns are followed by basic numerals, and the resulting phrases are connected to each other with the comitative/instrumental preposition **ā** 'with'. The only exception is when the tens digit is 1, i.e. when the numeral phrase ends in 10. In this case, the complex numeral ends in the basic numeral **dzōfɪ̄** 'ten' which is preceded by **ā ntsɔ̀**, just like the single-digits (see below). The examples in Table 7.7 illustrate the described pattern. See Table 7.8 for an example of a numeral combining more than two multiples.

A basic numeral which modifies a numeral noun (e.g., **mbaŋ** 'multiple of ten' (CL9/10), **gbi** 'a hundred' (CL3/10) or **kam** 'a thousand' (CL7/8)) agrees in noun class with the numeral noun and not with the noun modified by the whole numeral phrase. Thus, when a multiple of 10, 100 or 1000 modifies a noun, there is no agreement with the modified noun, see e.g. (141) and (142).

number	form
110	**gbì wŭmwɔ́ ā ntsɔ̀ dzōfɪ̄**
120	**gbì wŭmwɔ́ ā mbāŋ yíʃyɛ̄**
1500	**kām kímǫ́ ā dzī yīkpɔ̄n**
4070	**kām bíǹdē ā mbāŋ yínɔ̌tɔ̄**

Table 7.7: A few examples of complex numerals combining multiples of 10, 100 and 1000

(141) dʒɨ́ mbāŋ yí-kpɔ̄n
CL10.dogs CL10.multiple_of_ten CL10-five

◇'fifty dogs'

(142) kwā mbāŋ yí-kpɔ̄n
CL8.frogs CL10.multiple_of_ten CL10-five

◇'fifty frogs'

When referring to money, the noun **yấn** is used for 100 Francs CFA instead of **gbì** (pl. **dzì**) 'hundred'. While older people use **yấn** only when counting money, younger people sometimes also use it when counting things other than money. While it is possible that the noun **yấn** may develop into a numeral, synchronically it is not a proper numeral, as it is generally restricted to counting money. The noun **yấn** 'a hundred Francs' is probably derived from **yấn** (CL3/7a) 'leaf' (or 'leaves').[9] The use of the word for leaf to refer to 100, 1000 or a million seems common in the area (Good p.c.). Mungbam also uses a word meaning 'leaf' with the meaning 1000 (or possibly 1,000,000 francs when used to refer to a sum of money); see Lovegren (2013: 164).

When a complex numeral ends either in 10 or in a one digit other than zero, the last non-zero digit is usually preceded by **ā ntsɔ̀**. The word **ntsɔ̀** may be dropped, but in most cases it is not. The single-digit numerals (1-9) show noun class agreement with the head noun when the numeral phrase modifies a noun or with the antecedent when the numeral is argument of the copula verb **dɪ́** 'be'. When the complex numeral is used in counting or for absolute calculations, the single-digit numeral has the same form as the basic numeral in counting or for absolute calculations, i.e. 1-3 take a nasal prefix, 4-9 consist of the bare stem (see above). The origin of the word **ntsɔ̀** is unclear. However, the fact that the single-digit numeral agrees with the head noun rather than with **ntsɔ̀** shows that it is not a numeral noun. For more on the etymology of **ntsɔ̀**, see §7.1.5.3.

[9] A semantic connection between the two is conceivable - a bill looks somewhat like a leaf. 100 Franc notes were used in Cameroon until they were replaced by coins in 1971 (Wikipedia 2017)

number	form
11	**dzōfɨ̄ ā ntsɔ̀ m̀mǫ́**
12	**dzōfɨ̄ ā ntsɔ̀ m̀fyé**
13	**dzōfɨ̄ ā ntsɔ̀ ǹtɔ́**
14	**dzōfɨ̄ ā ntsɔ̀ ǹdē**
15	**dzōfɨ̄ ā ntsɔ̀ kpɔ̄n**
16	**dzōfɨ̄ ā ntsɔ̀ tʃītā**
17	**dzōfɨ̄ ā ntsɔ̀ nɔ̆tɔ̄**
18	**dzōfɨ̄ ā ntsɔ̀ nènè**
19	**dzōfɨ̄ ā ntsɔ̀ kpānè**
21	**mbāŋ yíʃyé ā ntsɔ̀ m̀mǫ́**
22	**mbāŋ yíʃyé ā ntsɔ̀ m̀fyé**
23	**mbāŋ yíʃyé ā ntsɔ̀ ǹtɔ́**
26	**mbāŋ yíʃyé ā ntsɔ̀ tʃītā**
98	**mbāŋ yikpane ā ntsɔ̀ nènè**
110	**gbì wŭmwɔ́ ā ntsɔ̀ dzōfɨ̄**
108	**gbì wŭmwɔ́ ā ntsɔ̀ nènè**
2008	**kām bífyé ā nènè**
1523	**kām kím̀ǫ́ ā dzī yīkpɔ̄n ā mbāŋ yíʃyé ā ntsɔ̀ ǹtɔ́**

Table 7.8: Complex numerals which combine higher digits with the basic numeral 10, or with a single-digit numeral

The numerals in Table 7.8 are in their absolute form, i.e. the form used for absolute calculations or counting. In the referential form, on the other hand, the single-digit numeral agrees in noun class with the modified noun.

When the complex numeral contains a single-digit numeral preceded by **ā ntsɔ̀** (or simply **ā**), the final simple numeral agrees in noun class with the noun modified by the whole phrase. This shows that **ntsɔ̀** is not a numeral noun, as one might suspect. Examples (143)-(146) show that the single-digit numeral agrees with the noun modified by the complete numeral phrase.

(143) dʒɨ́ dzōfɨ̄ ā ntsɔ̀ yī-kpɔ̄n
CL10.dogs ten COM unit CL10-five

◇‘fifteen dogs’

(144) kwā dzōfɨ̄ ā ntsɔ̀ bī-kpɔ̄n
CL8.frogs ten COM unit CL8-five

◇‘fifteen frogs’

(145) dʒǐ kām kǐ-mǫ́ ā dzī yī-kpɔ̄n
CL10.dogs CL7/8.thousand CL7-one COM CL10.hundred CL10-five
ā mbāŋ yǐ-ʃyɛ́ ā ntsɔ̀ yī-kpɔ̄n
COM CL10.multiple_of_ten CL10-two COM unit CL10-five

◇'one thousand five hundred and twenty-five dogs'

(146) kwā kām kǐ-mǫ́ ā dzī yī-kpɔ̄n
CL7/8.frog(s) CL7/8.thousand CL7-one COM CL10.hundred CL10-five
ā mbāŋ yǐ-ʃyɛ́ ā ntsɔ̀ bī-kpɔ̄n
COM CL10.multiple_of_ten CL10-two COM unit CL8-five

◇'one thousand five hundred and twenty-five frogs'

7.1.5.3 Etymology of numerals

The numerals 6 to 9 appear to be morphologically complex. The root **tʃītā** 'six' involves the numeral 'three', **nɔ̌tɔ̄** 'seven' is composed of 'four' and 'three', **nènè** 'eight' probably comes from a reduplication of **ǹdē** 'four' and **kpānè** 'nine' is composed of **kpɔ̄n** 'five' and **ǹdē** 'four'. Thus, in this domain, the system is not decimal but 5-based.

The form of the numeral **dzōfɪ̄** 'ten' is almost the same as Naki **dzofu** (Jeff Good, p.c.) and similar to the forms used in Noni **yoofə** (Hyman 1981: 28) and in the Mungbam dialects Abar (**dʒūhɛ́**) and Missong (**dʒóhó**). The other three dialects use forms which are not cognate with **dzōfɪ̄**; see Lovegren (2013: 162).

The origin of the word **ntsɔ̀**, which precedes the last numeral in several-digit numbers, is unclear. My best guess is that it could be related to the verb **tsɔ̄** 'show'.[10]

Although **ntsɔ̀** is always preceded by the comitative preposition **ā** 'with', it does not seem to be a noun. Unlike with the numeral nouns, the following numeral (between 1 and 9) does not agree with **ntsɔ̀**, but with the noun modified by the whole numeral phrase.

The etymology of **mbāŋ** 'multiple_of_ten' is unclear. Lexical items which are similar in shape are **báŋ** 'meet' (c), **bā́ŋ** 'lock' (b) and **mbà̀ŋ** 'door'.[11] The numeral noun **gbɪ̀** (pl. **dzɪ̀**) 'hundred', on the other hand, is clearly derived from the noun **gbɪ̀** (pl. **dzɪ̀**) 'rope/string'. A word for 'hundred' derived from

[10] A word similar in form and function has been reported for Ajumbu (Chan 2013), Noni (Hyman 1981: 21)(**ncɔ̀w**) and Bafut (Tamanji 2009: 85): **ntsò**. In Bafut, **ntsò** has been interpreted as a conjunction meaning 'and', although it seems to be restricted to this context. In Bafut, it is the only element connecting the multiple of ten with the single-digit number. The interpretation as a conjunction does not work for Noni where the numeral 10 is completely replaced by **ncɔ̀w** in the numerals between 11 and 19. However, numerals above 20 have the same pattern as Bafut numerals, with only **ncɔ̀w** connecting the multiple of ten and the single digit numbers. In Mundabli, **ntsɔ̀** does not replace the numeral for 10. Furthermore, it is always preceded by the comitative preposition **ā**. It can hardly be interpreted as a noun because the following numeral (between 1 and 9) does not agree with its noun class.

the noun 'rope' has also been reported for other languages in the area, such as Mungbam (Lovegren 2013: 118). Finally, the noun **kām** 'thousand' is identical in form to the noun **kām** 'crab'. It even belongs to the same noun class pairing (Class 7/8). However, this is probably a coincidence. It is more likely that it is related to the word **ŋkə̌m**, which describes a special kind of basket, usually referred to as 'Kenja' in Pidgin (Good, p.c.). Naki also uses the same word for 'thousand' and for some kind of basket. While Bafut also uses a similar form (**ŋkâm**) for 1,000,000, different forms are attested in Mungbam, Noni and Aghem.

7.1.5.4 Borrowing of numerals

Apart from the existing indigenous numerals, numbers are commonly borrowed from Cameroon Pidgin English. Mainly, but not exclusively 'multiples of ten' and 'hundreds' are borrowed. In this process, simple numerals are simply replaced by English numerals, while numeral nouns are replaced by English numerals which are reinterpreted as nouns and trigger agreement in their modifiers. In the elicited examples (147) and (148) borrowed numerals are combined with the indigenous numeral **bəfye** and the numeral noun **gbì** 'hundred' to form complex numeral phrases. The borrowed numerals in the examples are underlined.

(147) gbì wŭ-mwɔ́ ā *ten* bə̋-fyé ā *fai*
CL3.hundred CL3-one COM CL1/2.ten CL2-two COM five

◇'one hundred and twenty-five'

(148) gbì wŭ-mwɔ́ ā *ten*
CL3.hundred CL3-one COM CL1/2.ten

◇'one hundred and ten'

This kind of borrowing is especially common in younger generations but can also be observed among older speakers. It is especially common in counting money, see (149).

(149) tsʉ́ b-ɔ́ kə̀ dɨ̄ *seventy-five*
CL7/8.banana CL8-DET P3 be(b) seventy-five

'The bananas were 75 francs.' (It was bananas for 75 Francs.)

7.1.5.5 Finger counting and signing numbers

There are two methods used in finger counting. The first is used as memory aid when actually counting and the second is used for signing numbers to others using one's fingers.

[11]Note that Noni (Beboid) also uses a similar form (**mbaaŋ**) for multiples of ten, see Hyman (1981: 28).

Counting (up to 10) is done by bending the fingers of one hand, one after the other, starting with the little finger of the left hand, using the index finger of the other. When signing numbers to others, the technique presented in Table 7.9 is used.

number	sign
1	index finger stretched out, the others bent with thumb holding the rest
2	index and middle finger stretched out, the others bent with thumb holding the rest
3	little, ring and middle finger stretched out, the others bent with thumb holding the rest
4	all fingers stretched out, thumb bent
5	all fingertips of one hand joined
6-9	5 + x either signed with both hands simultaneously or in sequence with the same hand
10	all fingertips of both hands joined
11-19	10 + x signed in sequence
20	10 + 10 signed in sequence
30	10 + 10 + 10 signed in sequence
25	10 + 10 + 5 signed in sequence
etc.	

Table 7.9: Signing numbers to others

7.1.6 Adverbials as noun modifiers

Certain adverbials can also modify a noun. Examples include the spatial demonstratives **fɔ́** and **tɔ́** and the spatial adverbials **fán** and **tán**. Like other modifiers, they follow the noun they modify. In (150), the spatial adverbial **tán** modifies the pronoun **bī** 'we'.

(150) yɛ̄ [bī t-án] bī lì ā́ mò̱~mò̱
COMP 1PL DIST-here 1PL be_strong(a) ADVLZ one~RED

'That we here, we are very strong.'

7.2 Complex noun phrases

This section treats complex noun phrases, i.e. noun phrases which contain more complex sorts of modifiers like possessive modifiers or phrasal modifiers, but also conjoined NPs, as the conjunction of NPs results in more complex NPs. Relative clauses also represent complex modifiers. However, they are not included in this chapter, as they are dealt with in detail in Chapter 12.

7.2.1 Associative constructions

Associative constructions consist of a possessor and a possessum. The possessor can be represented by a noun or a pronoun. Associative constructions with nominal and pronominal possessors are treated in turn in 7.2.1.1 and 7.2.1.2. Pronouns have been dealt with in §5.1.2; the focus here is mainly on nominal possessors.

There is no general distinction between alienable and inalienable possession in Mundabli, although certain constructions, such as reversed word order and an unmarked pronoun form in 'my child' (see §7.2.1.3) and constructions involving postpositions derived from body parts (see §10.2.2.1), suggest that the distinction plays a limited role.

7.2.1.1 Associative constructions with nominal possessor

When the possessor is represented by a full noun, possessum and possessor are juxtaposed to each other in the order **Possessum – Possessor** without an intervening segmental marker. Comparative evidence (cf. Meeussen 1967: 106) suggests that there once was a segmental marker. However, synchronically, it is absent and only minor tone changes have been discovered in the associative construction.

Examples (151)-(153) illustrate the structure of the associative construction.

(151) nǐ̋ à tʃǔ bǐ́ f-án [kpɨ̄ pă
CL1.mother.3POSS P2 come(b) exit(b) PROX-here CL9/10.death Pa
Fǎn] ŋgɔ̀
F. upon

'His mother came here for the death of Pa Fan.'[12]

(152) bī ā wʉ́̄ wɔ̄ [ɲɔ̄ nǐ̋]
CL8 NEG hear(b).IPFV NEG CL8a.talk CL1/2.mother

'[...] they will not be hearing their mother's advice.'

(153) ǎyī, bɔ̋́ ā dǐ̋ wɔ̄ ā [dɛ̀ fwɛ̋́n]
no CL2 NEG be(b) NEG COM CL9/10.place clear(b)

'No, they don't have a place to clear.'

There are two cases in which the tone of a noun in a genitive/associative construction differs from its tone in isolation. If the first noun, i.e. the possessum, has a superhigh tone in isolation, this tone changes to a high tone in the associative construction, irrespective of the tonal pattern of the possessor noun; see (154).

[12] 'Pa' is a respectful title for elder men, which is adopted from Pidgin.

(154) wān w-ɔ̄ gān mū ʃú dzə́ŋ́á ā
CL1.child CL1-DET go(a) take(a) come(b) again COM
[kpú tĭ], wú-mbɛ́ w-ɔ́
CL3/7a.wooden_bowl CL1.father CL3-country_fashion CL3-DET

'The child went again to bring its father's traditional wooden bowl.'

The second change also takes place in the first noun (i.e. the possessum). Where a possessum is pronounced with mid-low falling tone in isolation, it is pronounced with a level mid tone within the associative construction where it precedes the possessor; see (155). The noun **gbɔ̄** 'house' is realized with a mid-low falling tone in isolation. In the example though, it bears a mid level tone. This process is not restricted to associative constructions (see §2.1.2).

(155) à mɨ̄ gàn də̀ [gbɔ̄ wān w-ā]
2SG CONSEC go(a) see(a) CL3.house CL1.child CL1-2SG.POSS
sè bā nàn tsə̀ fín
house_front.LOC IMPERS fix/decorate(a) CL7/8.bundle_of_grass there

'You will then go and see that a bundle of grass is fixed [on the door] on the frontside of your child's house,'

Thus, associative constructions in Mundabli are not complicated by tonal associative markers, such as is the case in Fe'fe'-Bamileke (Hyman 1972) and other Grassfields languages.

7.2.1.2 Associative phrase with pronominal possessor

Possessive pronouns were already discussed with regard to noun class agreement in §5.1.2. They are used mainly as noun modifiers. Their use as pronouns, representing a whole noun phrase, is not very frequent in Mundabli. Possessive pronouns inflect for the person and number of the possessor on the one hand, and for the noun class of the possessum on the other. Possessive pronouns generally carry a mid tone when the possessum belongs to Class 1 or 9 and a superhigh tone when it belongs to any of the other noun classes. Only the third person plural possessive pronoun has the invariant form **bə̌** irrespective of the noun class of the possessum. In the first person singular possessive pronoun some of the noun class distinctions are neutralized. The structure of the possessive pronoun itself has been discussed in detail in §5.1.2. The current section therefore focuses on the morphosyntax of the whole phrase, and not on the pronoun itself.

Possessive pronouns occur very frequently as noun modifiers in spontaneous conversation. Like in N + N associative phrases, the order in N + PRO associative phrases is generally Possessum + Possessor, see e.g. (156)-(158). The associative phrase in the examples is enclosed in square brackets.

(156) wù tsē də [wān wū] bɔ̀
CL1 search(a) see(a) CL1.child CL1;3SG.POSS FRUST

'She did not find her child.'

(157) [gbàn ŋgɨ̄] tsú mɨ̄ *sűtéée*
CL1.in-law CL1;1SG.POSS beat(b) 1SG so_much

'My in-law beat me seriously.'

(158) [kɛ́ bǐ] b-ɔ́ ɲā áná dǐ ŋgāŋ
CL7/8.leg CL8;3SG.POSS CL8-DET hurt(a) like_that be(b) CL3/10.hill
y-ɔ́ ō
CL10-DET EMPH

'Her feet are hurting because of those hills.' (lit.: Those her feet hurt like that, [it] is those hills.)

While the tone of the possessive pronoun remains constant (and is determined by the noun class of the possessum, see above) the possessum exhibits the same tone changes as in a N + N associative phrase. Thus, a superhigh possessum is lowered to a high tone, as e.g. in (159) and (160). Both 'name' and 'eyes' are pronounced with a superhigh tone in isolation.

(159) yɛ̄ [mán mű] dǐ tɛ́là mwɔ́m
COMP CL18/19.name CL18;3SG.POSS be(b) T. M.

'[and the daughter said:] "His name is Tela Mwom."'

(160) [yí kǐ] bān bī tʃū mɛ̄ wū
CL3/7a.eye CL7;3SG.POSS clean(b) exit(b) come(b) finish(a) CL1
yɨ́ŋ yə́ gbɔ̄ wű
build(c) go_up(c) CL3.house CL3;3SG.POSS

'Let his eyes clear up, then he will build a house of his own.'[13]

7.2.1.3 Special cases of possessive marking

There are a few cases of possessive marking which deviate from the regular pattern. Among them are the construction **mī wān** 'my child' with its reversed word order and a few relational nouns which have special possessive forms. Derived locative postpositions will also be discussed, as they resemble possessive phrases and may have been derived from them historically.

In the construction **mī wān** 'my child' the order of possessor and possessum is reversed and instead of the expected possessive pronoun, an independent pronoun is used (cf. 161 and 162, with the relevant phrase enclosed in square brackets).

[13]The expression 'let his eyes clear up' means roughly 'wait until he grows up'.

(161) [mɨ̄ wān] kə̀ tʃíā̋ lɛ́
1SG CL1.child P3 long_ago get_lost(a)

'My child got lost long ago.'

(162) wù dzé yɛ̄, wɛ̀ɛ̋ɛ́, n=dɨ́ ná f-án, ŋ=kə̋
CL1 say(b) COMP INTERJ 1SG=be(b) as PROX-here 1SG=HAB
dʒə̣̀ kpɨ̄ [mɨ̄ wān]
mourn(a) CL9/10.death 1SG CL1.child

'She said: Alas! I am here, I am crying for the death of my child.'

In (162), the irregular possessive phrase **mɨ̄ wān** forms the possessor within the bigger possessive phrase **kpɨ̄ mɨ̄ wān**. This construction is also dealt with in §7.3.1.1.

A few nouns mark possession by a stem change. This phenomenon is limited to a few lexical items, namely the relational nouns **nɨ́** 'mother', **tɨ̌** 'father' and **wān nɨ̌** 'sibling'. These nouns have special stem forms which are used when the possessor is in the second person, **nɛ́** 'your mother' and **tyɛ̌** 'your father', or in the first person, **wɛ́** 'my sibling'. Although the special possessive form is more commonly attested without a modifier, as in (163) and (164), it may also co-occur with a possessive pronoun, as in (165).

(163) yɛ̄ gǎn bɔ̄ŋ ʃū wān nɛ̌ w-ɔ̄
COMP go(c) call(a) come(b) CL1.child CL1.mother.2POSS CL1-DET

'[...] Go and call your sister!'

(164) yɛ̄ wɛ́ fə̋ gàn twǒ kpē
COMP CL1/2.sibling.1SG.POSS P1 go(a) carry(b) CL3.pot
tɨ́ wú-mbɛ̋ w-ɔ́
CL1.father.3POSS CL3-twin CL3-DET

'[...] that "my sibling(s) went and carried their father's twin pot"'

(165) n=lyā́ ná f-án, n=dá wú wɔ̄ yɛ̄
1SG=go_to_bush(a).IPFV as PROX-here 1SG=F1;NEG hear(b) NEG COMP
bɛ̄n fə̋ mù ʃǔ kpē tyɛ̌ w-ɛ̄n
2PL P1 take(a) come(b) CL3.pot CL1.father.2POSS CL1-2PL.POSS
w-ɔ́ wú-kwɛ̋ w-ɔ́, yɛ̄ bɛ̄n lə̄ nɨ́ŋ dǫ̣́ tʃín
CL3-DET CL3-home CL3-that COMP 2PL do(a) CL7.thing certain there
mɨ̄
in

'"As I am going to the bush, I don't want to hear [when I get back] that you have taken your father's traditional pot in order to do something inside."'

Finally, postpositional phrases with derived locative postpositions should be discussed here, as they structurally and semantically resemble possessive constructions, and it may be that they were historically derived from the latter.[14] Locative postpositions are derived from body parts, meronyms and, in a few cases, toponyms. The postposition is often formally identical with the original noun and differs in grammatical behavior. When the postposition is modified by a pronoun, the pronoun appears in its independent segmental form but with a special tonal pattern; see (166). When it is modified by a noun, the noun is realized with the same tone pattern as in any non-utterance-final context; see (168). Postpositional phrases resemble possessive phrases in which two nouns are simply juxtaposed to each other because the postposition looks like a noun. However, unlike in a possessive phrase, the order is reversed and the phrase is head-final.

(166) wù tṵ́ fo̱ [wú fɔ̄]
CL1 grow(b) CL7b.hair CL1PP head.LOC

'She let the hair on her head grow.'

(167) wān w-ɔ̄ tsɨ́ bí ʃī dɔ̄ w-ɔ́
CL1.child CL1-DET spit(b) exit(b) go_down(a) CL3a.bean(s) CL3a-DET
[wú dzǽ]
CL1PP mouth.LOC

'The child spit out the bean from her mouth.'

(168) kə́ kə̀ ʃɛ̄ yɛ̄ lɔ̀ bī fwɛ́n w-ɔ́,
COND P3 want(a) COMP go_to_bush(a) 1PL CL3.clearing(b) CL3-DET
m=fwɛ́n [nɨ́ ɲū]
1SG=clear(b) CL1.mother farm.LOC

'When we went to the clearing, I cleared on my mother's field.'

All the postpositions included in these examples are segmentally identical with the nouns included in their locative meaning. It may be that postpositional phrases were originally derived from special inalienable possessive constructions in which the word order was reversed. This would also fit in well with the reversed word order in **mɨ̄ wān** 'my child'. However, synchronically, the two constructions are different. The pronoun in **mɨ̄ wān** does not bear a high tone, as it would if it were part of a postpositional phrase. Derived postpositions are treated in more detail in §10.2.2.1.

7.2.2 Conjunctive coordination of noun phrases

This section deals with different kinds of noun phrase conjunctions, namely conjunctions with **āmɨ̀** (§7.2.2.1) and inclusory conjunctions (§7.2.2.2).

[14] Postpositional phrases involving postpositions derived from body part nouns are analyzed as a special case of possessive phrases in Voll (2014).

When two noun phrases are conjoined, they together form a complex noun phrase. There are two ways in which noun phrases can be conjoined: (a) by use of the conjunctive element **āmɨ̀** 'and' or (b) within a form of inclusory conjunction (cf. Haspelmath 2007: 30). The two strategies are dealt with in §7.2.2.1 and §7.2.2.2.

Various factors play a role in the choice between the two conjunction strategies: (i) whether one of the conjuncts is a pronoun, (ii) the topicality of both referents, (iii) whether one, both or neither of the conjoined noun phrases has a human referent and (iv) the existence or absence of a conceptual connection between the referents of the conjoined noun phrases or of their actions. Agreement patterns for coordinated noun phrases are discussed in §5.6.

7.2.2.1 Conjunctive coordination of noun phrases with āmɨ̀ 'and'

Two noun phrases can be conjoined with the conjunction **āmɨ̀** 'and'. The conjunction **āmɨ̀** is a medial connective, i.e. it stands between the conjoined noun phrases, connecting them. While the medial connective is by far the most prominent option in overt marking of noun phrase conjunction world-wide, in sub-Saharan Africa, the strategy is a minor one, (cf. Stassen 2011).

When two noun phrases are connected with **āmɨ̀**, both **A āmɨ̀ B** and **B āmɨ̀ A** are syntactically equivalent. Of course, discourse factors will be involved in the positioning of the conjuncts, but this is not a syntactic issue. In this regard, the conjunction **āmɨ̀** differs from the preposition **ā** 'with'. The use of the preposition **ā** 'with' implies a certain imbalance, with the main agent modified by the prepositional phrase.

Examples (169)-(171) show instances of noun phrases conjoined with **āmɨ̀** 'and'.

(169) wù dzé ɲɔ̄ ndʒə̀n āmɨ̀ ɲɔ̄ dʒwɛ̄n
CL1 say(b) CL8a.language Mundabli and CL8a.language Missong

◇'She speaks Mundabli and Missong.'

(170) bə̋ kə̀ dɪ̄ bə̋-fyé, wān mɔ̀nɔ̄ wù-mwɔ̀ āmɨ̀ wān
CL2 P3 be(b) CL2-two CL1.child CL1.male CL1-one and CL1.child
kpé wù-mwɔ̀
CL1.woman CL1-one

'There were two of them, a boy and a girl.'

(171) wù dzé ə̋ə̋ə̋, yɛ̄ m=búŋ mfɔ̀ ŋgɪ̄
CL1 say(b) INTERJ COMP 1SG=pick(b) CL1/2.slave CL1;1SG.POSS
kpé āmɨ̀ mfɔ̀ ŋgɪ̄ mɔ̀nɔ̄
CL1.woman and CL1/2.slave CL1;1SG.POSS CL1.male

'She said: Wow! I have picked my slave boy and my slave girl.'

Although conjunctive coordination with **āmɨ̀** is symmetrical, since the order of the coordinands is not fixed and both noun phrases "have the same semantic relations with other surrounding elements" (Haspelmath 2007: 1), the coordinator **āmɨ̀** is prepositive on the second coordinand (cf. Haspelmath 2007: 6). This is illustrated here by cases of discontinuous order, as encountered in (172) and (173), where the whole conjunction is split up and the coordinator **āmɨ̀** aligns with the second coordinand, showing that it forms a constituent with the second coordinand rather than the first (see Haspelmath (2007: 8) for a list of constituency tests which are applicable to Mundabli).

In (172), the first coordinand **wān dzū** 'a certain child' stands alone at the end of the first clause. The rest of the complex noun phrase consisting of conjunctive element **āmɨ̀** and the second coordinand **dʒɨ̌ yī** 'his dog', follows as an afterthought, at the end of the utterance.

(172) tʃí b-ɔ́ ń̃=dà [wān dzū], wù kɔ́
CL7/8.picture CL8-DET 1SG=see CL1.child CL1.certain CL1 hold(b)
kē ŋmgbàŋ kí ŋgɔ̄, [āmɨ̀ dʒɨ̌ yī]
CL9/10.hand CL7.jaw CL7;3SG.POSS upon and CL9.dog CL9;3SG.POSS

'In the picture I see a child - he holds his jaws in his hands - and his dog.'

(173) wù gān də̄ gbɔ̄ wān wū w-ɔ̄ lā ā
CL1 go(a) see(a) CL3.house CL1.child CL1;3SG.POSS CL1-DET DAT COM
[mù-ŋā́m m-ɔ́] gbɔ̄ sɛ̀ [āmɨ̀
CL18-strip_of_cloth CL18-DET CL3.house house_front.LOC and
tsə̀]
CL7/8.bundle_of_grass

'She went in and saw the child's house with the pieces of cloth in front of the door and the traditional grass bundle.'

In most cases, when multiple noun phrases are conjoined, all but the last coordinator are omitted, as shown in the elicited examples (174) and (175).

(174) ŋ̃=kə̀ tāŋ [gɛ̄ tsɔ̄ŋmɨ̄ āmɨ̀ ŋkā́ŋ]
1SG=P3 buy(b) CL3/7a.corn CL7/8.groundnuts and CL6.salt

'I bought corn, groundnuts and salt.'

(175) ŋ̃=kə̀ dă [mbɔ̀ŋ kŭŋàm āmɨ̀ dʒű]
1SG=P3 see(a) CL1/2.cow CL7/8.pig and CL10.goats

'I saw cows, pigs and goats.'

7.2.2.2 Inclusory conjunction

In addition to conjoining of noun phrases with **amɨ** 'and', there is another strategy which is used to conjoin noun phrases, a special type of conjunction referred to as an 'inclusory conjunction' by Haspelmath (2007: 33). Inclusory conjunctions involve a coordination-like pairing of pronouns or nouns or combinations of the two. However, the interpretation of the coordinated pronouns is not strictly additive, since the first pronoun always has an incorporative interpretation. This incorporative reading is characteristic of inclusory conjunctions.[15] While it has been claimed in earlier publications (Good et al. 2011: 128-129) that Mundabli has compound pronouns, I now think that the constructions in question simply form a special case of inclusory conjunction constructions because their structure does not differ from inclusory conjunction constructions involving nouns. The underlying structure of the inclusory conjunction construction is analyzable as **NP^1 PRO^1-ā NP^2**. The first noun phrase (**NP^1**) may represent an inclusory plural pronoun or an inclusory plural noun (referring to the whole conjunct), or it may be a non-inclusory singular noun (referring only to the first conjunct). The conjunctive element **PRO^1-ā** is composed of an inclusory pronoun **PRO^1** whose reference includes both conjuncts, merged with the preposition **ā** 'with'.[16] The second noun phrase (NP^2) refers to the (second) conjunct and may be represented by a pronoun or by a noun.

I will start off by describing inclusory conjunction constructions involving two pronouns and combinations of pronouns and nouns, as these seem to be typologically more common patterns, and then treat the typologically more unusual case of inclusory conjunction constructions involving two full noun phrases.

In inclusory conjunction constructions conjoining two pronouns, **NP^1** is represented by an inclusory plural pronoun identical with **PRO^1**. Thus, their structure is analyzable as **PRO^1 PRO^1-*ā* PRO^2**, where **PRO^1** is an inclusory plural pronoun, phonologically merged with the preposition **ā** 'with' in the conjoining element, and **PRO^2** represents the second conjunct, as in (176).

(176) bī by-ā wù lɔ̀
1PL 1PL-COM CL1 go_to_bush(a)

'He and I went to the bush.'

Table 7.10 shows all combinations of pronouns attested in inclusory conjunction constructions. These data are based on elicitation and should be taken with a grain of salt. Furthermore, they were only elicited in preverbal position. Thus, it is unclear whether the equivalent non-preverbal forms differ in tone or not.

[15] It is also characteristic of compound pronouns (Cysouw 2003: 171).

[16] While the merged form is transparent in most cases, the form that results when **PRO^1** is represented by the second person plural pronoun **bēn**, namely **bɛ̄**, is not transparently composed of **bēn** and **ā**.

pronoun	gloss	interpretation	gloss
bī byā wà	'1PL 1PL.with 2SG'	1SG + 2SG	'me and you (SG)'
bī byā bēn	'1PL 1PL.with 2PL'	1SG/PL + 2PL	'me/us and you (PL)'
bī byā wù	'1PL 1PL.with 3SG'	1SG + 3SG	'me and him'
bī byā bɔ̌	'1PL 1PL.with 3PL'	1SG/PL + 3PL	'me/us and them'
bēn bē wù	'2PL 2PL.with 3SG'	2SG + 3SG	'you (SG) and him'
bēn bē bɔ̌	'2PL 2PL.with 3PL'	2SG/PL + 3PL	'you (SG/PL) and them'
bɔ́ báā wù	'3PL 3PL.with 3SG'	3SG + 3SG	'him$_i$ and him$_j$'
bɔ́ báā mɪ̄	'3PL 3PL.with 1SG'	3SG + 1SG	'him and me'
bɔ́ báā wà	'3PL 3PL.with 2SG'	3SG + 2SG	'him and you (SG)'

Table 7.10: Inclusory conjunction of pronouns

The underlying structure of the forms in Table 7.10 may be analyzable as PRO^1 PRO^1-*with* PRO^2, where the first part is a full plural pronoun, the second part consists of a repetition of the initial pronoun phonologically fused with the preposition **ā** 'with', and the last part is the second pronoun. However, if we adopt such an interpretation, it is somewhat obscure why the fusion of **bēn** and **ā** should result in the second person plural "intervening" form **bē**.

Inclusory conjunction of pronouns in Mundabli seems to contradict attested universals of inclusory conjunction structure. According to Haspelmath (2007: 34), the inclusory pronoun in inclusory conjunction is always higher on the person hierarchy (given the following scale: $1>2>3$) than the final pronoun which represents the second coordinand. The forms in Table 7.10 which start in **bī** 'we' and **bēn** 'you (pl)' confirm this claim. However, in the forms below the dashed line in Table 7.10, the final (non-inclusory) pronouns **mɪ̄** 'I' and **wà** 'you' are higher on the person hierarchy than the inclusory pronoun **bɔ́** 'they'. These two forms are also paradigmatically "redundant" since their semantics overlap with some of the forms above the dashed line in Table 7.10.

It remains to be verified whether Mundabli really contradicts the established universal tendencies for inclusory conjunction, or whether the collected data are insufficient. The data are only based on elicitation. In fact, inclusory conjunction of pronouns is hardly attested at all in non-elicited texts. The only spontaneous example of a compound pronoun is in (177). There, the compound pronoun is added as an apposition, in order to add more detail to a simple pronoun already present in the phrase. In this example, the compound pronoun is enclosed in brackets and the co-referent simple pronoun **bī** is underlined.

(177) wù dzé yɛ̄ wù nɨ́ŋ mɨ̄ gbɔ́ yɛ̄ n=ʃī
CL1 say(b) COMP CL1 want(c) 1SG house.LOC COMP 1SG=go_down(a)
ʃū yɛ̄ bī kán té, [bī by-ā wù]
come(b) COMP 1PL hold(c) CL??.discussion 1PL 1PL-COM CL1

'She said that she wants me in the house, that I should come down, that we should have a talk, her and me.'

While there is neither a dual form nor an inclusive/exclusive distinction in Mundabli, it is possible in some cases to express an inclusive/exclusive distinction or dual meaning by the use of an inclusory conjunction construction. The first pronoun in **bī byā wà** has an inclusive dual reading as in 'us including you (SG)', meaning 'the two of us'.

Inclusory conjunction constructions involving a noun and a pronoun have the following structure: **PRO[1] PRO[1]-ā NP[2]**. It is almost identical with inclusory conjunctions of pronouns with an inclusory pronoun representing **PRO[1]**, the only difference being that the second conjunct **NP[2]** is represented by a full noun phrase, instead of a pronoun, see e.g. (178).

(178) bī by-ā mbɛ̌ fə̋ lɔ̀ ɲū
1PL 1PL-COM M. P1 go_to_bush(a) CL3.field

'Me and Mbeh went to the field (earlier today).'

When two full noun phrases are conjoined by an inclusory conjunction, the structure is **NP[1] PRO[1]-ā NP[2]**. Just like in the constructions discussed so far (i.e. inclusory conjunction of two pronouns or of a pronoun and a noun), **PRO[1]** is represented by a plural inclusory pronoun, phonologically merged with the preposition **ā** and **NP[2]** is represented by the second coordinand, which is a noun in this case. It differs from an inclusory conjunction only by **NP[1]** being represented by a noun instead of a pronoun, and in that this noun may be either an inclusory plural noun (see (179)), or a singular noun representing the first conjunct (see (180)). In the other constructions, where **NP[1]** is represented by a pronoun, it is always the plural inclusory pronoun, i.e. the same as **PRO[1]**.

(179) ɲwám b-ɔ́ dzé, ǎy, [bə̀-tǐ bɔ́-ā nǐ́] fə̋
CL2.children CL2-DET say(b) no CL2-father CL2-COM CL1.mother P1
dzə́ yɛ̄ kə́ mɔ̀ tʃú f-án ǐ́
say(b) COMP COND CL1.person come(b) PROX-here LOC
nsɔ̄lā wù ɲwǎn nɨ́ŋ dǫ́ bí lā yɛ̄, bī
CL1/2.afternoon CL1 beg(b) CL7.thing some 1PL.PP DAT COMP 1PL
ʃā́ fə̄
PROHIB give(b)

'The children said: No. Our fathers and mothers said if anybody comes here in the afternoon, we should not give [them anything].'

(180) [ŋgàʃǎ bɔ́-ā/báā ɲùŋfù] à lyà ɲú
N. CL2-COM N. P2 go_to_bush(a).IPFV CL3.farm

◇‘Ngasha and Nyungfu went to the farm.’

The use of inclusory conjunctions seems to be restricted to human referents. When two (human) nouns are conjoined by an inclusory conjunction, the inclusory pronoun **PRO[1]** is a Class 2 pronoun.

When the first noun phrase is singular, the second noun phrase is obviously not included in its reference. In this respect, inclusory conjunctions of nouns differ from inclusory conjunctions in which at least the first coordinand is a pronoun. In the latter, the first (pronominal) conjunct is always inclusory (i.e. it includes the referent of the second noun phrase) and thus always plural.

Inclusory conjunction constructions do not always form a single constituent since the two conjuncts may also be split up. In this case, the conjunctive element **ā** ‘with’ aligns syntactically with the second coordinand with which it forms a single ‘phonological word’. This can be seen in (181)-(185), where the inclusory conjunction is split up and the conjunctive element aligns with the second coordinand. Examples (181)-(184) contain inclusory conjunctions of two nouns; in (185), a pronoun and a noun are conjoined. In all given examples where two nouns are coordinated, the first is a singular noun and represents the first coordinand.

(181) ɲwám b-ɔ́ dzé ǎy, [nǐ́] bǒ ʃɛ̄ wù
CL2.children CL2-DET say(b) no CL1.mother 3PL.POSS want(a) CL1
lɔ [bɔ́-ā tǐ] bɔ̋ mɨ̄ dzě yɛ̄ ká
go_to_bush(a) CL2-COM CL1.father CL2 CONSEC say(b) COMP COND
mɔ̀ tʃú f-án nsɔ̄lā yɛ̄ bī ʃá
CL1.person come(b) PROX-here CL1/2.afternoon COMP 1PL PROHIB
fə̄ nɨ́ŋ dǫ́ ǐ́ wú lā
give(b) CL7.thing some LOC CL1PP DAT

‘The children said: No, before our mother and father left for the bush, they told us that, if anybody comes here in the afternoon, we should not give him anything!’

(182) wān w-ɔ̄ dzé [nǐ́] lā yɛ̄ [bɔ́-ā tǐ]
CL1.child CL1-DET say(b) CL1.mother DAT COMP CL2-COM CL1.father
lā yɛ̄ mɔ̀ fə̄ tʃú f-án nsɔ̄lā
DAT COMP CL1.person P1 come(b) PROX-here CL1/2.afternoon

‘The child said to her mother and father: “A man came here in the afternoon.”’

(183) wān w-ɔ̄ dzé [nǐ́] lā [bɔ́-ā tǐ]
CL1.child CL1-DET say(b) CL1.mother DAT CL2-COM CL1.father
mɛ̀ bɛ̄n də yɛ̄
NCS.QUOT.Q 2PL see(a) QUOT.Q

'The child said to her mother and father: Do you see?'

(184) f-án f-ín dǐ́ nā [wān w-ɔ̄] gbū kwō
PROX-here PROX-here be(b) as CL1.child CL1-DET fall(a) enter(c)
ʃī f-ɔ́ dʒwó mɪ̄ gbū kwō ʃī
go_down(a) LOC-REL CL1.stream in fall(a) enter(c) go_down(a)
dʒwó [bɔ́-ā dʒǐ́ yī y-ɔ̄]
CL1.stream CL2-COM CL9.dog CL9;3.SG.POSS CL9-DET

'This is where the child fell into the stream, the child and his dog.'

(185) [bɔ̋] kə̌ té, [bɔ́ ā tʃɔ̄m yī]
CL2 P3.HAB discuss(c) CL2 COM CL9.co-wife CL9;3SG.POSS

'They discussed, she and her co-wife.'

Inclusory conjunctions in Mundabli are unusual regarding both areal and universal patterns. The Mundabli structure pattern has not been reported to exist in any other language. Inclusory conjunction of pronouns, as attested in Mundabli, may at first sight be mistaken for an instance of compound pronouns, a (semi-)grammaticalized form of inclusory conjunction of pronouns (Cysouw 2003: 340), which are "a clearly areal phenomenon" of "central-western Cameroon" (Cysouw 2003: 167,171). However, inclusory conjunctions in Mundabli differ from compound pronouns in several regards. This concerns, first of all, the structure of the inclusory conjunction construction. When two pronouns are conjoined within an inclusory conjunction construction, the structure is analyzable as **PRO^{1} PRO^{1}-ā PRO^{2}**, with the inclusory pronoun repeated and the second instance contracted with the following preposition **ā** 'with'. In all languages in which compound pronouns have been claimed to exist, they are analyzable as something along the lines of **PRO^{1} (with) PRO^{2}**, where the first pronoun is an inclusory plural pronoun.[17] While the use of a conjoining element **a** is common in Bantoid compound pronouns (Cysouw 2003: 181), the repetition of the first pronoun, as attested in Mundabli, is unusual. Only in Mundabli, does seem to be possible to use the same construction to conjoin a pronoun with a noun or even two nouns with each other. Of course, it is possible that such cases exist in other languages, but simply have not been reported in the literature. This remains an interesting topic for further research. However, for now I assume that comparable constructions do

[17] See e.g., Aghem (Hyman 1979: 52-55), Noni (Hyman 1981: 17-18), Limbum (Fransen 1995), Bafut (Tamanji 2009) for selected examples and Cysouw (2003: 330-337) for an overview of Bantoid compound pronouns.

not exist in other languages with compound pronouns. The fact that pronouns are conjoined using the same inclusory conjunction construction as used when conjoining nouns suggests that what may be mistaken for compound pronouns is just an instance of inclusory conjunction. While the apparent violation of the person hierarchy (see Table 7.10) also argues against a compound pronoun analysis,[18] it does not support an inclusory conjunction analysis, as the universality of the person hierarchy has been claimed for inclusory conjunction (Haspelmath 2007: 34). Overall, although the forms associated with this construction are functionally comparable to compound pronouns in nearby languages, they show salient formal and functional differences.

There is an interesting parallel between the structure of inclusory conjunction constructions in Mundabli, with the inclusory pronoun repeated, and reported cases of pronominal inclusory conjunctions used for conjoining two full noun phrases. Haspelmath (2007: 35) reports that "[s]ome languages (apparently especially in Polynesia) use pronominal inclusory conjunction also for conjoining two [full] NPs. The first conjunct precedes the inclusory pronoun, which is then followed by the other included conjunct(s) in the usual way". Thus, inclusory conjunction of two full noun phrases in those Polynesian languages, has exactly the same structure as inclusory conjunction in Mundabli, namely **NP[1] PRO[1]-ā NP[2]**, see example (186) from Samoan (taken from Mosel and Hovdhaugen (1992: 680), as cited in Haspelmath (2007: 35)).

(186) Peni laua ma Ruta
Peni they.DU with Ruta

'Peni and Ruta'

Haspelmath (2007) cites examples from Samoan (Mosel and Hovdhaugen 1992: 680) and Maori (Bauer et al. 1993: 128). As I have shown above, Mundabli, just like Samoan and Maori, uses pronominal inclusory conjunctions not only to conjoin pronouns but also to conjoin two full noun phrases. This strategy is quite rare cross-lingustically and its existence in Mundabli is remarkable as, to the best of my knowledge, it has not been reported to exist anywhere else in Africa. This may mean either that Mundabli is a unique case, or that researchers describing African languages have simply overlooked these constructions and more research would be needed to uncover them.

Thus, the formal strategy which Mundabli employs to use pronominal inclusory conjunction in order to conjoin two full noun phrases is actually exactly the same as in the Polynesian cases described by Haspelmath (2007: 35). What is unusual about Mundabli is that this strategy seems to have been generalized, so that even when the first conjunct is an inclusory pronoun (as in inclusory conjunction of a pronoun and a full noun phrase or of two full noun phrases), it is followed by a second (identical) instance of the same pronoun.

[18] In other reported cases of compound pronouns in the area, the first pronoun is never lower in the person hierarchy than the second pronoun (Cysouw 2003: 166–184).

7.2.3 Comitative phrases with the preposition ā 'with' as noun modifiers

A comitative phrase headed by the preposition **ā** 'with' may modify a nominal, "indicating some kind of material accompaniment or adornment", as Lovegren (2013: 293) puts it; see (187).

(187) wù gān də [gbɔ̄ wān wū w-ɔ̄] lā [ā
CL1 go(a) see(a) CL3.house CL1.child CL1;3SG.POSS CL1-DET DAT COM
mù-ɲə́m m-ɔ́ gbɔ̄ sɛ̀ āmɨ̀
CL18-strip_of_cloth CL18-DET CL3.house house_front.LOC and
tsə̀]
CL7/8.bundle_of_grass

'She went in and saw the child's house with the pieces of cloth in front of the door and the traditional grass bundle.'

Example (187) is complicated by the fact that the postposition **lā** breaks up the noun phrase, thus dividing the prepositional phrase (the second within square brackets) from the noun phrase it modifies (the first within square brackets). However, it is the only example I have of such an adornment construction. The same is the case for all examples Lovegren (2013: 293-294) provides for Mungbam. Here, the modifier of the comitative preposition is itself also modified by a locative phrase referring back to the affected part of the head nominal of the whole construction.

While the preposition **ā** 'with' covers both comitative and instrumental functions, only in its function as a comitative marker, can it modify a noun. A more comprehensive description of the use of **ā** 'with' (also including its instrumental function) can be found in §10.2.1.1.

7.2.4 Postpositional phrases with ŋgɔ̄ 'upon' can modify nouns

This section deals with the postposition **ŋgɔ̄** 'upon' only as the head of a noun-modifying postpositional phrase. For more on the postposition **ŋgɔ̄**, see §10.2.2.

When a postpositional phrase headed by the postposition **ŋgɔ̄** 'upon' modifies a noun, it always follows the head noun. The use of a postpositional phrase with **ŋgɔ̄** shows accompaniment, but is restricted to food.[19]

[19]The use of the postposition **ŋgɔ̄** 'upon' strongly reminds me of prepositions used in an unusual sense in German, but only in connection with Haute cuisine, as in "Pfifferling-Steinpilzrisotto an Salat" which literally means 'chanterelle-porcini-risotto **at** salad' instead of "Pfifferling-Steinpilzrisotto mit Salat", literally 'chanterelle-porcini-risotto **with** salad', which would be the more common thing to say. Nevertheless, Mundabli only allows **ŋgɔ̄** 'upon' only to be used in this context.

The first noun phrase, i.e. the head of the complex NP which refers to the main dish or food item is followed by its modifier, a postpositional phrase consisting of a noun phrase referring to the side dish or supplement, headed by the postposition **ŋgɔ** 'upon' as shown in the elicited examples (188) and (189) and in example (190) which is taken from a narrative.

(188) wù fə́ yí̋ ɲām b-ɔ́ [tswān ŋgɔ̀]
CL1 P1 eat(b) CL8a.fufu CL8a-DET CL3a.bitter_leaves upon

◇'He ate the fufu with bitter leaves.'

(189) wù fə́ yí̋ ɲām b-ɔ́ [mán ŋgɔ̀]
CL1 P1 eat(b) CL8a.fufu CL8a-DET what upon

◇'He ate the fufu with what?'

(190) kpé w-ɔ̄ mū wù mū wù mū wù mū
CL1.woman CL1-DET drink(b) CL1 drink(b) CL1 drink(b) CL1 drink(b)
wù mū ɲām b-ɔ́ [ŋgī m-ɔ́ ŋgɔ̀]
CL1 drink(b) CL8a.fufu CL8a-DET CL6.water CL6-DET upon

'The woman drank and drank and drank; she drank the fufu with the water.'[20]

7.2.5 Locative postpositional phrases headed by derived postpositions as noun modifiers

A postpositional phrase headed by a derived postposition (see §10.2.2.1 for details) may also modify a nominal, as in (191) and (192).

(191) kə́ à gān, à mī yá sɛ́, à mī nɨ̀m
COND 2SG go(a) 2SG CONSEC go_up(c) CL3/7a.attic 2SG CONSEC sit(a)
ʃì bə́ dɛ̀ nā bɔ̄ kpā f-ɔ́
go_down(a) exactly CL9/10.place SUBORD CL2 light_fire(a) LOC-REL
gù, ā [fì-ŋgī wá kə̀n]
CL3/7a.fire COM CL19-CL6.water 2SG hands.LOC

'When you go, you will go up to the attic. Then (you will) sit down exactly where they make fire, with a bit of water in your hand.'

[20]Fufu dissolved in water is probably the simplest dish and is consumed when other food is either not available or just not practical, as e.g., during the lunch break when working in the fields.

(192) wù gān də̄ gbɔ̄ wān wū w-ɔ̄ lā ā
CL1 go(a) see(a) CL3.house CL1.child CL1;3SG.POSS CL1-DET DAT COM
[mù-ɲə́m m-ɔ́ gbɔ̄ sɛ̀ āmɨ̀
CL18-strip_of_cloth CL18-DET CL3.house house_front.LOC and
tsə̀]
CL7/8.bundle_of_grass

'She went in and saw the child's house with the pieces of cloth in front of the door and the traditional grass bundle.'

7.3 Word order in the noun phrase

Modifiers within the noun phrase normally occur in a fixed order. Noun modifiers generally follow the head noun, except for a few exceptional cases which will be discussed in §7.3.1. If one considers the most common noun modifiers, the word order within the noun phrase is as shown in (193).

(193) **Noun + Possessive Pronoun/Possessor noun + Demonstrative + Adjective + Determiner + Numeral + Relative clause**

Examples which contain more than two or three modifiers are only attested in elicitation; see (194).

(194) a. dzɔ̄ ŋgə́ɨ́ y-ɛ́n yī-fyíŋ y-ɔ́
CL10.house CL10;1SG.POSS CL10-DEM.PROX CL10-new CL10-DET
yí-tsɔ̄
CL10-three

◇'these three new houses of mine'

b. dzɔ̄ y-ɔ́ yí-tsɔ̄ nǭ bī kə̀ yɨ́ŋ
CL10.house CL10-DET CL10-three SUBORD 1PL P3 build(c)
y-ɔ́ yɨ́
CL10-REL CL10

◇'these three new houses of mine which we built'

The determiner occurs toward the end of the noun phrase, following the adjective but preceding any numeral and/or relative clause. The relative clause generally stands at the end of the noun phrase.

7.3.1 Non-canonical word order

In at least three constructions, the word order deviates from the pattern described above. Such exceptions may be lexically motivated (see §7.3.1.1), they may have semantic effects, changing the semantics of the whole noun phrase (see §7.3.1.2), or they may have pragmatic effects (see §7.3.1.3).

7.3.1.1 Possessor + possessed order in possessive constructions

An exception from the given word order can be observed in certain possessive constructions, such as the possessive construction combining the relational noun **wan** 'child' with a 1SG possessor, as in **mɨ̄ wān** 'my child'. In this construction, the order of possessor and possessee is reversed and the possessor is represented by the independent 1SG pronoun **mɨ̄** rather than by the possessive pronoun **ŋgɨ̄**. For a more detailed discussion of this case, see §7.2.1.3.

Derived locative postpositions constitute a similar phenomenon. In postpositional phrases headed by locative postpositions derived from nouns, the postposition is preceded by an NP representing the whole within a part-whole relationship, e.g. the possessor of a body part. Some of these derived postpositions coexist with a noun of the same shape. In this case in particular, the postpositional phrase strongly looks like a possessive construction, only that the order between possessum and possessor is inverted, just as in **mɨ̄ wān** 'my child'. For details, see §7.2.1.3 and §10.2.2.1.

7.3.1.2 Determiner + noun order with distributive reading

Rather than occurring in its canonical position, the determiner can also precede the noun so that it occurs at the beginning of the noun phrase. In the case of a singular noun phrase, this may result in a distributive reading; see e.g. (195) (the noun phrases with determiner + noun order are enclosed in square brackets).

(195) bə́ dʒyē mɛ̄, [w-ɔ̄ wān] bɨ̌ wù gān mù
CL2 cook(a) finish(a) CL1-DET CL1.child exit(b) CL1 go(a) take(a)
ʃŭ kpű bɔ̌ gbə̀
come(b) CL3/7a.wooden_pot CL2.PP house.LOC

'They finished cooking. Each child went out and brought a wooden pot from their home.'

As Lovegren (2013: 182) points out for Mungbam, the relative rareness of the determiner + noun construction may be due to the existence of a comparable construction involving the loan *any*. The same holds for Mundabli, cf. (196)-(198).

(196) [*any* nɨ́ŋ] nə̄ kpé w-ɔ̄ là k-ɔ́ gbə̄,
any CL7.thing SUBORD CL1.woman CL1-DET do(a) CL7-REL house.LOC

'Anything the woman does in the house', [...]

(197) *any* nɨ́ŋ [bī nɨ́ŋ k-ɔ́ kɨ́], bī ká kán kɨ́
any CL7.thing 1PL want(c) CL7-REL CL7 1PL F2 have(c) CL7

'Anything we want, we will have.'

(198) *any* wān, wù dzě, nǐ́ dzé wú lə̄ yɛ̄ ká
any CL1.child CL1 say(b) CL1.mother say(b) CL1.PP DAT COMP COND
mɔ̀ tʃú f-án ǐ́ nsɔ̄lā yɛ̄ wù ɲwán
CL1.person come(b) PROX-here LOC CL1/2.afternoon COMP CL1 beg(b)
bɛ̄n ʃá fə̄
2PL PROHIB give(b)

'The mother told each child: if anyone comes here in the afternoon to beg, you should not give [them anything].'

The loan modifier *any* also precedes the noun. Semantically, the two constructions are roughly equivalent. The loan 'any' is translated into English as 'any', see e.g. (196) and (197), or as 'each, every', as in (198).

7.3.1.3 Numerals detached from the rest of the noun phrase

Numerals, which usually occur close to the end of the noun phrase following determiners and preceding relative clauses, may occur outside the NP in post-verbal position,[21] when they are focused, such as e.g., in (199) (the rest of the NP is enclosed in square brackets, the detached numeral is underlined). Further investigations are required in order to determine whether other noun modifiers can also occur in post-verbal position, detached from the rest of the noun phrase.

(199) [dɔ̄] gbū bí ʃī wű́-mwó
CL3a.beans fall(a) exit(b) go_down(a) CL3a-one

'One of the beans fell down.'

[21] The post-verbal position is an inherent focus position; see §14.2.2.1 for details.

CHAPTER 8

Verb morphology and the verbal complex

This chapter deals with the structure of the verb and the verbal complex, i.e. the verbal core and the elements that are closely associated with it like tense, mood and aspect markers, the bipartite negative marker, as well as, in the case of 1SG subjects, the subject marker (see §8.3). In the current chapter, the verbal core is mostly restricted to a single verb. Complex verbal cores or serial verb constructions are described in Chapter 9.

The current chapter contains descriptions of the verb stem and of verbal inflection (§8.1), the markers within the verbal complex (§8.2), the order of elements in the verbal complex (§8.3) and finally the constructions in which the markers are combined with verb stems, and their functions (§8.4 and §8.5).

8.1 Verb morphology

8.1.1 Segmental structure of the uninflected verb stem

Nearly all verbs in Mundabli consist of a bare monosyllabic stem. Stem syllables start in a consonant or a consonant glide sequence. Only nasal-consonant sequences are not attested word-initially in verbs. Verb stems may end in a vowel, a nasal or, in a few cases, the lateral glide **l**, thus representing nearly the whole range of attested syllable patterns. Table 8.1 contains examples of monosyllabic verb stems.

I am aware of only two bisyllabic verbs: **mwankə** 'forget' and **fʊŋmu** 'help'. Whereas synchronically they cannot be decomposed into two morphemes, I

suspect that they were historically complex, consisting of two stems (**fʊŋmu**) or a stem plus a suffix (**mwankə**).

Verbs in Mundabli lack predicative concord or any other segmental inflections, although it is debatable whether preverbal pronouns and tense markers are phonologically bound or independent. Only the first person singular preverbal pronoun has the status of a nasal clitic which phonologically attaches to the first onset of the verbal complex.[1] There is no verbal derivation, except for derivation of the two non-finite verb forms, the infinitive (§8.1.4.1) and the ability verb form (§8.1.4.2). Some semantic concepts which are expressed by derivational affixes in Bantu languages and in other Bantoid languages are expressed by periphrastic constructions, such as reciprocal meaning, which is expressed by a derivational affix in the Grassfields language Bafut (Tamanji 2009: 109-126), or by serial verb constructions (see Chapter 9). Verbal inflection is marked by tone changes (see §8.1.2) and ablaut (§8.1.3).

8.1.2 Verb tone classes and tonal inflection of verbs

Each Mundabli verb belongs to one of three inflectional classes, henceforth referred to as verb tone classes[2] or simply tone classes (A, B and C). This is best illustrated with imperatives (Table 8.1). The tone of imperatives is always the same, whether they occur at the end of an utterance or not.

tone class	tone	example	gloss
A	LH	**gǎn**	'Go!'
		ɲə̌	'Leave!'
		dǎŋ	'Cross (over)!'
		dʒyě	'Cook!'
B	M	**tʃū**	'Come!'
		yī	'Eat!'
		bōŋ	'Pick up!'
		fwēn	'Clear (farm)!'
C	H	**yə́m**	'Sing!'
		yó	'Run!'
		kúŋ	'Hunt!'
		té	'Discuss!'

Table 8.1: Tone patterns of (monosyllabic) imperative verbs of tone classes A, B and C with examples

Some examples of imperative verbs are given in (200) and (201).

[1] The first person singular preverbal pronoun does not attach to the onset-less preverbal negative marker **ā**.

[2] The verb tone classes were briefly mentioned in §2.1.3.

(200) bī mɨ̄ dzě gàn bǒ lā, yɛ̄ nɨ̌m nɨ́ ā
1PL CONSEC speak(b) go(a) CL2PP DAT COMP sit(a) IMP.PL COM
mɔ̀ kwɛ̋
CL1.man CL3/7a.home_village

'We are telling them: Stay and get married to a native man!'

(201) yɛ̄ gǎn kwó kɔ̋ mɨ̄
COMP go(a) enter(c) CL7/8.forest in

'[She said]: go into the forest!'

Tonal patterns vary from construction to construction, with all verbs of a single tone class showing the same tonal pattern in a certain construction. In some constructions, the distinction between two or all three verb tone classes is neutralized; e.g. imperfective verbs of class B and C bear the same tone pattern (see Table 8.2) and in the future tenses (F1 and F2) the distinction between the tone classes is completely neutralized and verbs of all three verb tone classes bear the same tone (see §8.5.1.6 and §8.5.1.7).

The tone patterns of the imperfective verbs given in Table 8.2 are characteristic of utterance-final position. In non-final position, Class A verbs bear a mid tone rather than a mid-low falling tone. The tone patterns of verbs often depend, among other factors, on their position in the sentence, i.e. whether they are in sentence-final position or not.

tone class	tone	example	gloss
A	ML	dyə̀	'see'
B	H	wʉ́	'feel, hear'
C	H	kɛ́	'return '

Table 8.2: Tone patterns of imperfective verbs of all three verb tone classes in utterance-final position with examples

8.1.3 Ablaut in perfective vs. imperfective verb stems

Roughly a third of all verb stems have two segmental shapes: the perfective and the imperfective stem form. Most verb forms (including e.g., infinitives and imperatives) may be based either on the perfective or on the imperfective stem form. The habitual construction is the only construction which only allows the imperfective verb form.

Imperfective verbs are characterized by tonal patterns which distinguish them from perfective verbs and by ablaut. Verb stems may undergo ablaut in the imperfective, depending on their syllabic structure and on the vowels they contain. Ablaut is restricted to open syllable stems containing one of a

restricted set of vowels. In this section, an overview of the more regular alternations (see Table 8.3) should suffice. For more detail, the reader is referred to §3.3.5, where all alternations are described in detail.

perfective	imperfective	gloss
bì	**bi̗**	'exit' (a)
yǐ	**yí**	'eat' (b)
kpǐ	**kpí**	'die' (a)
tsǐ	**tsí**	'spit' (b)
kù	**ku̗**	'clap' (a)
bú	**bú**	'give birth' (c)
gwò	**gwo̗**	'grind' (a)
kwó	**kwó**	'enter' (c)
byě	**byá**	'crack groundnuts' (b)
dʒyè	**dʒyæ̀**	'cook' (a)

Table 8.3: Regular ablaut in perfective/imperfective stems, repeated from Table 3.23

The perfective verb form is used without regard to the internal structure of the described action or event. In the absence of a preverbal marker, a perfective clause usually encodes perfect of recent past or perfect of result; see §8.5.1.2 for details. The imperfective verb form focusses upon the internal structure of the action or event.

Other constructions containing imperfective stem forms (e.g., the habitual construction 8.5.2.2) are described in §8.5.2.

8.1.4 Linear verb morphology (in non-finite verb forms)

Linear verb morphology, i.e. affixes on the verb stem, are restricted to non-finite verb forms, i.e. the infinitive and the prefixed verb form found in ability constructions.

8.1.4.1 The nasal infinitive prefix N- or circumfix N-...-n

The infinitive verb form is characterized by a specific tonal pattern (see §8.4.1) on the one hand and by a nasal prefix **N-** or circumfix **N-...-n** on the other. Either the perfective or the imperfective stem form can be the base for the infinitive. In both cases, verbs of Class A take a low tone and verbs of Class B and C take a mid-tone in non-final and a mid-low falling tone in utterance-final position. The nasal prefix or the preverbal part of the circumfix is homorganic with the initial consonant of the verb stem. The post-verbal part of the circumfix is an alveolar nasal. The choice between prefix and circumfix depends on the shape of the stem. Closed syllable stems only take a prefix. In open syllable stems, the choice between prefix and circumfix depends on the vowel quality;

see §3.1.2.3 for details. The occurrence of the circumfix **N-…-n** is restricted to open syllable stems ending in the vowels **i**, **i̱**, **u**, **wo**, **ye**, **ə** or **ɔ**; see Table 8.4.

perfective	infinitive	gloss
yǐ	**ɲ-yì̱-n**	‘eat’ (b)
kpǐ	**ŋm-kpì̱-n**	‘die’ (b)
kū	**ŋ-kù-n**	‘clap’ (a)
kwó	**ŋ-kwɔ̀-n**	‘enter’ (c)
myé	**m-myɛ̀-n**	‘lick’ (c)
tʃyé	**ɲ-tʃyɛ̀-n**	‘know’ (c)
tsɨ́	**n-tsì̱-n**	‘copulate’ (c)
yə́	**ɲ-yə̀-n**	‘climb’ (c)
də̄	**n-də̀-n**	‘see’ (a)
yì̱	**ɲ-yì-n**	‘bury’ (a)
tsɔ̄	**n-tsɔ̀-n**	‘show’ (a)
sɔ̄	**n-sɔ̀-n**	‘split’ (a)

Table 8.4: Infinitives with circumfix, repeated from Table 3.5, §3.1.2.3

The letters in parentheses behind the glosses represent the three verb tone classes (A, B and C), see §2.1.3 and 8.1.2. All infinitives in 8.4 and 8.5 are based on perfective stems. In all other cases, i.e. when the root syllable ends in a different vowel, including **o** or **e** without preceding **w** and **y**, respectively, or when a coda is present, the infinitive is marked by a prefix, see Table 3.6.

perfective	infinitive	gloss
bǐ	**m-bì̱**	‘exit’ (b)
kʊ̀	**ŋ-kʊ̀**	‘cry’ (a)
kă	**ŋ-kə̀**	‘fry’ (b)
dzě	**n-dzɛ̀**	‘say’ (b)
yó	**ɲ-yɔ̀**	‘run’ (c)
fō̱	**m-fò̱**	‘tell’ (a)
lū̱	**n-lù̱**	‘bark’ (a)
kyɛ́	**ŋ-kyɛ̀**	‘look’ (c)
mə̄l	**m-mə̀l**	‘slide’ (a)
yə̀m	**ɲ-yə̀m**	‘yawn’ (a)
bɔ́m	**m-bɔ̀m**	‘agree’ (c)
kʊ́ŋ	**ŋ-kʊ̀ŋ**	‘hunt’ (c)

Table 8.5: Infinitives with prefix, repeated from Table 3.6, §3.1.2.3

8.1.4.2 The prefix kə̄- on non-finite verbs expressing ability

Ability (or dynamic modality) is expressed by the use of a periphrastic construction involving the copula verb **dɪ́** and a main verb with the prefix **kə̄-**. The current section deals only with the prefixed verb form. The complete construction and its functions are described in §8.4.2.

The prefix **kə̄-** is prefixed to the verb stem. The prefix always has the same shape, both segmentally and tonally. The tone of the stem is mid for Class A and superhigh for Class B. I have not found any examples of a Class C verb in this construction. However, this is probably due to insufficient data. Table 8.6 illustrates the tone patterns of ability verb forms belonging to the three verb tone classes.

tone class	tone	example	gloss
A	M	kə̄-bɔ̄ŋ	'call'
B	S	kə̄-dzɛ́	'say'
C	ML	kə̄-bɔ̌m	'agree'

Table 8.6: Tone patterns of Class A, B and C ability verb forms

8.2 Tense markers and other preverbal markers

This section contains inventories and descriptions of tense markers (§8.2.1) and other markers which occur in the slot between subject and verb (§8.2.2).

8.2.1 Tense markers

Tense is marked by segmental tense markers, which immediately precede the verbal core (unless they are followed by a preverbal negative marker which separates them from the verbal core), and by tonal inflection of the verb stem. Mundabli has two future tenses (F1 and F2) and four non-future tenses (P0[3]-P3) (see 8.7). Only P0 lacks a segmental marker.

Table 8.7 contains only "true" tense markers. Other preverbal markers, such as the consecutive and the conditional markers, are described in §8.2.2.

The P2 marker has two realizations, **à** and **nà**, which seem to be in free variation. Due to low-tone spread (see §3.4.2), tense markers with an underlying superhigh tone, such as **fə́** P1 and **dɪ́** F1 (see (202)), are realized with a low-high rising tone when preceded by a low tone (see (203)).

[3]The label P0 is preferred over 'present', because (a) P0 does not always semantically represent present tense and (b) grouping it with the past tenses better reflects the different behaviour of the future vs. the non-future tenses with respect to tone.

tense	marker	label	period of time
P3	**kə̀**	remote past	a long time ago (from yesterday on)
P2	**à** ∼ **nà**	hesternal past	yesterday (or a few days ago)
P1	**fə́**	hodiernal past	earlier today
P0	∅	present, immediate past	present
F1	**dǐ́**	hodiernal future	later today
F2	**ká**	remote future	tomorrow or later

Table 8.7: Tense markers

(202) bɔ́ dǐ́ táŋ dʒʊ́ yɛ̄ bɔ́ lā kpɪ̄
CL2 F1 buy(b) CL9.goat COMP CL2 make(a) die(b)

◇‘They will buy a goat in order to kill it.’

(203) à dǐ yə́ ǐ́ dʒɔ̄ b-én mɪ̄
2SG.PVB F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in

‘You will go up on this bridge.’

Interestingly, superhigh markers are also realized with low-high rising tone when the tense marker starts the sentence and the subject follows the verb, as in (204); see §14.2.3 for details.

(204) fə̀ fə́ ndɛ̀ kpʊ́ ǐ́ Ntí lā
P1 give(b) who CL3/7a.money LOC Ntie DAT

◇‘Who gave Ntie money?’

A case of non-predictable tonal alternation is attested in the hodiernal past P1, where the tone of the tense marker depends on the position of the verb, i.e. whether it is in utterance-final position or not. The tense marker **fə́**, which usually bears a superhigh tone, is realized with a high tone **fə́** when the verb is in utterance-final position, as in (205).

(205) wù fə́ gə̀n
CL1 P1 go(a)

‘She went.’

The interplay of tense markers and tonal inflection will be dealt with in §8.4, where the resulting constructions are described.

8.2.2 Other preverbal markers

This section deals with markers other than tense markers which are closely related to the verb. Some of these markers occupy the same slot as the tense markers, while others may co-occur with the latter. The discontinuous negation marker **ā…wɔ̄** forms a special case, as it embraces the verbal core.

Whereas negation is expressed in different ways depending on tense and other factors, the current section only deals with the canonical negation marker, i.e. with the discontinuous marker **ā … wɔ̄**. Other negation strategies are dealt with in §8.5.3 and in §15.3. Table 8.8 contains a list of preverbal markers which occur in the slot between the subject and the object. The discontinuous negation marker is not included.

marker	gloss	function
kə̃́/ká	HAB	habitual
mī / mí	CONSEC	consecutive
tə́	VER.FOC	verum focus
ká	COND	conditional

Table 8.8: Non-tense preverbal markers and their functions

While tone and segmental structure of the conditional marker and the marker for verum focus are constant, the tone of the habitual and the consecutive marker may vary.

The habitual marker, which usually takes a superhigh tone, is realized with a rising tone when it follows a low tone subject (for an explanation, see §3.4.2). This is a purely phonological effect and completely predictable. In certain contexts however, the tone of the habitual marker is high rather than superhigh or rising, irrespective of the preceding tone. This seems to be the case whenever the habitual marker precedes a Class A verb, whether the latter stands in clause-final position or not (see (206) vs. (207)) and when it precedes a clause-final verb of Class B or C, as in (208) and (209). At the current stage, I cannot offer an explanation for this tonal alternation.

(206) wù ká kpɛ̄
CL1 HAB soak(a).IPFV

◇'He frequently soaks [things].'

(207) wù ká kpɛ̄ ā mī
CL1 HAB soak(a).IPFV COM 1SG.NPVB

◇'He frequently soaks [things] with me.'

(208) ŋgī m-ɔ́ ká dʒ̱ɪ̱́
CL6.water CL6-DET HAB be_cold(b).IPFV

◇'The water is usually cold.'

(209) ŋgī m-ɔ́ ká sé
CL6.water CL6-DET HAB be_hot(c).IPFV

◇'The water is usually hot.'

The second marker which shows a variable tone pattern, namely the consecutive marker, may bear either a mid tone (**mī**) or a high tone (**mí**). In this case, the choice depends on the tense of the preceding tense marked clause. The marker bears a high tone **mí** when the preceding clause is in P0 or P1 (cf. (258), P0) and a mid tone **mī** for all other tenses, namely P2-P3 and F1-F2 (see e.g., (256) for P3 and (257) for F1). More on the tone patterns of this and comparable constructions as well as on the consecutive tense marker can be found in §8.5.2.1 and §8.5.2.3.

The discontinuous marker **ā … wɔ̄** is used to negate declarative clauses in the present/recent past tense P0. It embraces the verbal core, which often consists of a single verb (210). However, the discontinuous marker is not a circumfix. It embraces the verbal core, rather than just a single verb. Negation is treated in more detail in section §8.5.3.

(210) wɛ́, wū ā dǐ wɔ̄ gbɔ̄ kúŋ ò
INTERJ CL1 NEG be(b) NEG CL3.house house_backside.LOC INTERJ

'Alas! She is not behind the house!'

8.3 Order of elements in the verbal complex

The verbal complex consists of the verbal core and the elements that are closely associated with it, like tense, mood and aspect markers, the bipartite negative marker, as well as, in the case of 1SG subjects, the subject marker. The verbal core consists of all subsequent verbs within a predicate. In serial verb constructions this may include several verbs. Multi-verb cores, i.e. serial verb constructions are dealt with in Chapter 9. The current section is mainly restricted to single verb phrases. The verbal core is represented as V in schemes presenting the verbal complex.

The order of the elements within the verbal complex is TAM–V, as in (211). In all examples in this section, the verbal complex under discussion is enclosed in square brackets.

(211) bī [à bī yə́] ntō~ntō yɛ̄ bī lɔ̄
1PL P2 exit(b) go_up(c) CL1/2.morning~RED COMP 1PL go_to_bush(a)
fwɛ́n
clear(b)

'We got up in the morning in order to go to the field and weed.'

In negated main clauses, the verbal complex including negation markers, generally has the structure: TAM–NEG1–V–NEG2, i.e. the subject is followed by the TAM marker(s), which are in turn followed by the verb, embraced by the discontinuous negation marker (NEG1 + NEG2), cf. (212).

(212) wù [fə̀ ā gàn wɔ̄] dʒwō ɲwɛ́n
CL1 P1 NEG go(a) NEG CL1/2.stream today

'She did not go to the stream today.'

However, the structure of negated clauses differs from the given scheme when the subject is in the first person singular and when tense and aspect are not marked segmentally. When no TAM marker is present, the preverbal 1SG pronoun procliticizes to the verb stem, following the first part of the negative marker, rather than preceding it: NEG1–1SG = V–NEG2, cf. (213).

(213) wù dzé gàn nǐ́ lā yɛ̄,
CL1 speak(b) go(a) CL1/2.mother.3POSS DAT COMP
nǐ́, [ā n = dǐ́ wɔ̄] ā mɔ̀nɔ̄
CL1/2.mother.1POSS NEG 1SG.PVB = be(b) NEG COM CL1.male

'The daughter will say to her mother: "Mother, I don't have a husband".'

8.4 Constructions involving non-finite verb forms

This and the following section (§8.5) deal with constructions in which segmental verb forms, tonal inflection and segmental markers interact. Both form and function of specific constructions are considered. The current section focuses on constructions with non-finite verb forms.

8.4.1 The infinitive

The segmental and tonal structure of the infinitive verb form has been described in some detail in §3.1.2.3 and §8.1.4.1. The infinitive verb form is derived from the canonical stem by means of a homorganic nasal prefix **N-** or a circumfix **N-…-n**, depending on the shape of the stem (see §8.1.4.1 for details).

Agreement in the post-verbal determiner in relative clauses (as e.g. in example (214)) shows that the infinitive is a deverbal noun of Class 1. The relative clause in (214) is enclosed in square brackets and the infinitive and the agreeing post-verbal determiner is underlined.

(214) [ŋ-kwō-n nō̰ bī kə̀ kwó gān w-ɔ̄ mɨ́ŋ
INF-enter(c)-INF SUBORD 1PL P3 enter(c) go(a) CL1-REL 1SG.PP
gbə̀], wù bú má à kpə̀ ŋgɨ̄ dɨ́ nā,
house.LOC CL1 ask(b) CS.QUOT.Q Q CL1.wife CL1;1SG.POSS be(b) where
wù bɔ̄ŋ mɛ̂ nɨ́ nàn fɨ̀ nā
CL1 call(a) CS.QUOT.Q;Q CL1.mother N. pass(b) where

'Just as we were entering my house, she asked where my wife was. She called out: "Where has Nan's mother gone?"'

Infinitives may describe an action or an activity, and they also occur as uninflected main verbs in certain constructions like e.g. the progressive construction (see §8.4.1.3).

The segmental affixes (i.e. prefix or circumfix) co-occur with specific tonal patterns. Only two different patterns are distinguished in the infinitive. The distinction between verb tone classes B and C is neutralized. Infinitives of Class A bear a low tone both in utterance-final and in non-final position, while those of Class B and C bear a mid tone in non-final position and a mid-low falling tone in utterance-final position. Table 8.9 gives an overview of the tonal patterns of the infinitive in non-final and in utterance-final position. The letter v in this table stands for 'verb'. Infinitive verbs form parts of various constructions which are described in the following sections.

verb tone class	non-final	final
A	**v̀**	**v̀**
B	**v̄**	**v̄̀**
C	**v̄**	**v̄̀**

Table 8.9: Tone patterns of the infinitive in utterance-final and non-final position, the contrast between Class B and C is neutralized

8.4.1.1 Infinitives as complements of 'start' and 'know'

A few verbs, like **yɛ̀** 'start' (a) in examples (215) and (216) and **tʃyé** 'know' (c) in (217), take an infinitive verb as their argument.[4]

(215) sèsǎŋ yē n-dà dʒɔ̄
CL9/10.spider start(a) INF-braid(a) CL8a.bridge

'The spider started to braid a bridge (with his rope).'

[4]Like the English verb 'know', the verb **tʃyé** is used to express both acquaintance and knowledge or ability, albeit the former is much more frequent.

(216) tō dǫ̀m lā bɔ́ yē n-dzʊ̀ŋ, bɔ́ ā
CL7/8.day certain DAT CL2 start(a) INF-quarrel(c) CL2 COM
neighbor wū
CL1.neighbor CL1;3SG.POSS

'One day they started quarrelling, her and her neighbor.'

(217) mɨ̄ nǭ m = bǐ́ w-ɔ̄ ǐ́ dʒwɛ̄n kú
1SG.NPVB SUBORD 1SG.PVB = exit(b) CL1-REL LOC Missong village.LOC
ɲǐ = tʃyé n-dzē ɲɔ̄ ɲdʒə̂n
1SG.PVB = know(c) INF-speak(b) CL8a.language Mundabli

'I, who I am from Missong, speak Mundabli.'

8.4.1.2 Infinitives as heads of preposed relative clauses, used to express simultaneity

Infinitives also surface in a subordinating construction used to express simultaneity. In this construction, an infinitive modified by a relative clause containing its finite equivalent precedes the main clause, as in (214) and (218). Agreement on the relative clause-internal determiner **wɔ̄** shows that infinitives belong to Class 1.

(218) [m-mù-n nǭ mấnfrè kə̀ mŭ fɨ̄ bī w-ɔ̄
INF-take(a)-INF SUBORD M. P3 take(a) pass(b) exit(b) CL1-REL
tʃə̋m w-ɔ́ ɲwɛ́n], Dăn ā nTŭŋ sɛ́n tʃú kɔ́ Pɛ̋́
CL3/7a.axe CL3-DET now D. COM T. then come(b) hold(c) P.
ɲwɛ́n
now

'Just as Manfred took out the axe now, Dan of Ntung came and held Pe now.' (lit.: Taking that Manfred took out the axe, ...)

8.4.1.3 Infinitives in the progressive construction

The infinitive verb form also forms part of the progressive construction. The progressive is expressed periphrastically and combines the finite auxiliary **fə́**, which may be translated as something along the lines of 'be occupied', with the relevant infinitive verb form, introduced by the preposition **ā** 'with', as in (219). The auxiliary is realized as **fə̆** with a LH rising tone when it is preceded by a low tone (see §3.4.2 for an explanation).

(219) [nǐ́ wū kə̀ fə̆ ā n-ɲwɔ̄m
CL1.mother CL1;3SG.POSS P3 be_occupied(b) COM INF-stir(b)
ɲām]
CL8a.fufu

'Her mother was stirring fufu.'

The progressive can be combined with any of the tenses. In such cases, the tense marker precedes the auxiliary, as in (220), where the remote past tense marker **kə̀** directly precedes the auxiliary **fā́** (here realized as **fă**).

(220) nī́ wū kə̀ [fă ā n-ɲwɔ̄m]
CL1.mother CL1;3SG.POSS P3 be_occupied(b) COM INF-stir(b)
ɲām
CL8a.fufu

'Her mother was stirring fufu.'

Note that in progressive SVCs, only the first verb in the sequence is in the infinitive; see (221).

(221) ntsŭŋkwɨ́n w-ɔ̄ ywó gàn nɨ̀m ʃì kpān wū-dzú
CL1/2.owl CL1-DET run(c) go(a) sit(a) go_down(a) CL3.tree CL3-other
wɔ̄, wù [fă ā n-kyɛ̄ kwō ʃì]
on CL1.PVB be_occupied(b) COM INF-look(c) enter(c) go_down(a)
nɨ́ŋ wù lɛ̄ k-ɔ́ kī́
CL7.thing CL1.PVB make(a).IPFV CL7-DET CL7.NPVB

'The owl went and sat down in another tree. It was looking down on what he [the child] was doing.'

In order to negate the progressive, the auxiliary **fā́** is negated with the common discontinuous marker **ā … wɔ̄** (see (222)). Otherwise, the construction is the same as when not negated.

(222) wù ā fā́ wɔ̄ ā n-ʃi̱
CL1.PVB NEG be_occupied(b) NEG COM INF-go_down(a).IPFV

◇'He is not going down.'

8.4.1.4 Infinitive as the object of its finite equivalent, for contrastive verb focus

The infinitive can be the object of its own finite equivalent, as in (223). This construction encodes verb focus.

(223) dzɔ̄ yī-dzú y-ɔ́ kə̀ bo̱ m-bo̱,
CL10.houses CL10-other CL10-DEM.DIST P3 burn(b) INF-burn(b)
y-ɛ́n tá kwà dɨ́ ŋ-kwà
CL10-DEM.PROX VER.FOC break(a) be(b) INF-break(a)

'The other houses BURNT DOWN, these ones BROKE.'

Usually, the finite verb is directly followed by the infinitive, as in **bo̱ m-bo̱** in (223). The construction **kwà dɨ́ ŋ-kwà** in the same example, with a copula

intervening, is rare. In many examples, the post-verbal adverb **mɛ̌** 'only' occurs between the finite and the infinite verb, see (224) and (225).

(224) tō bí-lō à mwē mɛ̌ m-mwè
CL7/8.day CL8-all 2SG.PVB be_sad(a) only INF-be_sad(a)

'Every day you are only sad.'

(225) ā́nā wù kə̀ fǭ bī gān áná, kpé w-ɔ̄
like_that CL1 P3 tell(a) go_out(b) go(a) like_that CL1.woman CL1-DET
kpɪ̄ mɛ̌ ŋ-kpɪ̄̂-n
die(b) only INF-die(b)-INF

'Immediately when she was reporting like that, the woman died on the spot.'

8.4.1.5 Infinitive inside adverbial phrase for emphasis

Example (226) is the only instance in my data of an infinitive verb being introduced by the adverbializer **ā́**. In this example, the adverbial phrase follows a sequence of the finite equivalent of the infinitive and the verb **fɪ́** 'pass'.

(226) dɔ̄ w-ɔ́ ʃɪ́ŋ fɪ́ ā́ n-ʃɪ̄ŋ
CL3a.beans CL3a-DET fill/be_full(c) pass(b) ADVLZ INF-fill/be_full(c)

'The beans still filled up [the pot].'

8.4.1.6 Infinitive as subject or object

The infinitive may be an argument of the verb, describing the action typically connected with the equivalent finite verb.

(227) wù kɔ̀ŋ n-sɔ̄
CL1.PVB love(a) INF-swim(b)

◇'S/he likes swimming.'

(228) m-bɔ̀ŋ ā lì wɔ̄
INF-read(a) NEG be_strong(a) NEG

◇'Reading is not difficult.'

8.4.2 The ability construction with auxiliary and prefixed main verb

The ability construction contains another non-finite verb form which only occurs in this construction. The non-finite verb in this case consists of the verb stem with the prefix **kə̄-**. It is introduced by the auxiliary **dɪ́** 'be'; see (229) and (230).

(229) m̀m, á ɲ=tʃyé wɔ̄ yɛ̄ bɔ́ dɨ́ kə̄-gān ā
INTERJ NEG 1SG.PVB=know(c) NEG COMP CL2 be(b) ABIL-go(a) COM
byɛ̂ ɔ̀
CL7a.foot EMPH

'I didn't know that they can still travel by foot.'

(230) wù dɨ̌ kə̄-dɔ́ bɔ̀
CL1 be(b) ABIL-stay(b) FRUST

'She cannot sit still.'

The tone of the verb stem in this construction is mid for Class A verbs (229) and superhigh for Class B verbs (230). I have not found any examples of Class C verbs in this construction.

The ability verb form is not adjectival (otherwise, it would take an agreement prefix). However, the prefix in the ability verb form is always **kə̄-**. The verb form is not nominal either, as it can take an object argument, as e.g. in (231).

(231) n=dɨ́ kə̄-fǭ dʒī wá lā yɛ̄ ā
1SG.PVB=be(b) ABIL-report(a) CL9.road 2SG.PP DAT COMP 2SG.PVB
gān də wān w-ā yɛ̄
go(a) see(a) CL1.child CL1-2SG.POSS QUOT.Q

'Can I show you the way, so that you [can] go see your child?'

The ability construction generally expresses dynamic modality, i.e. ability in the sense of the internal ability or willingness to do something (as in (229) and (230)). However, e.g. in (231), the ability construction is used in a deontic sense, when the spider is asking the woman for permission to show her the way to where her child has gone.

8.5 Constructions involving finite verb forms

The current section deals with the combination of TAM markers and verb morphology. It contains descriptions of constructions involving tense markers (§8.5.1) and other preverbal markers (§8.5.2), considering both form and function of such constructions. Both of these sections contain a description of the relevant verb tone patterns followed by individual descriptions of form and function.

8.5.1 Tense marking constructions

8.5.1.1 Verb tone patterns of tense marking constructions

This section is meant to give an overview of verb tone patterns attested in the various tenses. Subsequent sections simply refer back to this summary.

The tone pattern of a perfective verb depends on its tone class and (among other things) on its tense. Mundabli has six tenses, two future tenses F1-F2 and four non-future tenses P0-P3. §8.2.1 contains an overview of the segmental markers and the meaning of the tenses. The functions of individual tenses are treated in more detail in §8.5.1.2-§8.5.1.7. In connection with the tenses, three combinations of tone patterns are attested: one for the future tenses (F1-F2) one for P0-P2, and one for the distant past P3. Within each of these tense ranges, a verb of a specific tone class always bears the same tone. Table 8.10[5] contains an overview of the tone patterns attested across the tenses. The table also contains a column with the tense markers in order to illustrate possible effects of these markers on the tonal pattern of verbs.

tense	tense marker	non-final			final		
		A	B	C	A	B	C
P0		L	S	H	ML	LH	H
P1	**fə̃**	L	S	H	ML	LH	H
P2	**à∼nà**	L	[LH]	H	ML	LH	H
P3	**kə̀**	LH	M	H	ML	LH	H
F1	**dɪ́**	H	H	H	H	H	H
F2	**ka̋**	H	H	H	H	H	H

Table 8.10: Segmental tense markers and tone patterns of final and non-final perfective verbs of tone classes A, B and C in all tenses (P0-P3 and F1-F2)

To start with the least complicated case, in the future tenses, F1-F2, the distinction between the three verb tone classes is completely neutralized, and all verbs bear a high tone. In P0-P2, each verb tone class is assigned two tone patterns, depending on the position of the verb within the clause. In non-final position, Class A verbs are realized with a low tone, Class B verbs with a superhigh tone, and Class C verbs with a high tone. In utterance-final position, Class A verbs are realized with a mid-low falling tone, Class B verbs with a low-high rising tone, and Class C verbs with a high tone. Finally, in P3 the verb tone patterns in utterance-final position are the same as in the other past tenses for all three verb tone classes (see Table 8.10). However, the tonal patterns of non-final P3 verbs of Class A and B differ considerably from those of non-final verbs in the other past tenses. Non-final Class A verbs bear a low-high rising tone instead of a low tone, as in P0-P2. Non-final Class B verbs, which bear a

[5]Tone pattern in square brackets may be phonetic, and thus different from underlying patterns.

superhigh tone in the other past tenses, bear a mid tone in P3. Only Class C verbs carry a high tone in P3, just like in the other past tenses.

As Table 8.10 shows, the division into three tense combinations above is not completely water-tight. The tone pattern combination in P2 actually differs from those in P0-P1 because Class B verbs bear a low-high rising tone rather than a superhigh tone, in non-final position. This could be due to the influence of the preceding low tone P2 marker **à**∼**nà**, which causes the underlying superhigh to be realized as low-high rising tone, as implied by the square brackets around the rising tone, which indicate that the rise is phonetic, (see (232)).

(232) wù à tʃǔ ɲántɔ̄
CL1.PVB P2 come(b) yesterday

◇'He arrived yesterday.'

However, there is a problem with this explanation: the corresponding negative verb form also bears a low-high rising tone. In this case however, the explanation with the rising tone caused by the low-toned marker does not work, because in this case, the low-toned tense marker is separated from the verb by the mid tone negative marker **ā**; see §8.5.3.1 for details. The fact that the negative verb form has an underlying rising tone suggests that the same is the case for the affirmative verb. In this case, the rise cannot be explained, and P2 should be assigned its own characteristic combination of verb tone patterns, even if it deviates only slightly from those of P0-P1.

Tone patterns of negated verbs are generally the same as those of the corresponding non-final affirmative verb forms. Only in P3 are the tone patterns of negated Class A and B verbs not the same as those of the corresponding non-final affirmative verbs. In P3, negated verbs of Class A and B bear a low and a low-high rising tone, respectively, instead of a low-high rising and a mid tone, like the non-final affirmative verb forms; see Table 8.11. For a detailed treatment of negation, see §8.5.3.

verb tone class	A	B	C
non-final affirmative	LH	M	H
negated	L	LH	H

Table 8.11: Tone patterns of non-final affirmative perfective verbs and of negated perfective verbs in P3

As pointed out above, the tonal identity of affirmative and negative Class B verbs in P2 is rather surprising. It suggests that affirmative Class B verbs also have an underlying low-high rising tone in P2, and that P2 should be assigned its own combination of tone patterns.

8.5.1.2 P0 (present/immediate past) constructions without a segmental marker

The absence of a segmental tense marker in combination with the verb tone pattern characteristic of P0-P2 (see §8.5.1.1) marks verbs referring to actions or events which either took place directly before the time of the utterance, as in (233), or which are a precondition for the state of things at the time of the utterance.

(233) ń̄=də̀ fì-lǎpìn ŋgɔ̀ f-ɔ́ lā, yùŋnì
1SG.PVB=see(a) CL19-plastic_bag upon LOC-DET DAT thank
k-á
CL7-2SG.POSS

'I've seen the plastic bag. Thank you!'

(234) bɔ̀m tǎn n-tsə̰̀ dʒī dzɔ́ŋ~dzɔ́ŋ wú
CL9.antelope refuse(b) INF-show(c).IPFV CL3.road good~RED CL1.PP
lā
DAT

'The antelope refused to show her the right way.'

Example (233) is taken from a spontaneous conversation. The speaker was looking for a plastic bag and uttered the sentence when she finally found it. The sentence refers to an action that has taken place in the immediate past and is still relevant in the present. In this construction, it thus fulfills functions that are commonly assigned to perfect verb forms, namely the perfect of recent past and the perfect of result (Comrie 1976: 56ff). Example (234) is taken from a story which is set in the distant past tense. However, the present tense is used for stylistic reasons. Within the framework of the story, the example may refer to something that is taking place within the context of the story's time frame or that had taken place just before the utterance.

8.5.1.3 P1 (hodiernal past) constructions with the P1 marker fə̄

The marker **fə̄** in combination with the verb tone pattern characteristic for P0-P2 (see §8.5.1.1) marks verbs which refer to actions or events that have taken place on the same day, i.e. the hodiernal past tense, but not immediately preceding the utterance, as in (235) and (236).

(235) yɛ̄ wɛ́ fə̄ gàn twə̌ kpē
COMP CL1/2.sibling.1SG.POSS P1 go(a) carry(b) CL3.pot
tǐ wú-mbɛ́̄ w-ɔ́
CL1.father.1SG.POSS CL3-twin CL3-DET

'[She said]: my siblings went and carried my father's twin pot.'

(236) wù fə́ gàn
CL1 P1 go(a)

'She went.'

The first example (235) is taken from a story. When the mother comes back from the farm in the evening, the smallest child tells her what her siblings have done in the afternoon. The second example (236) is taken from a conversation and is a response to the claim: "She [the researcher] did not go to the stream today". The tone of the P1 marker is always high when nothing follows the verb, as in (236) (see also §8.2.1 and Table 8.12).

8.5.1.4 P2 (nonhodiernal past) constructions with the marker à∼nà

The marker **à** or **nà** occurs in combination with the tone pattern characteristic for P0-P2 (see §8.5.1.1). The two forms (**à** and **nà**) seem to be freely interchangeable. The P2 marker in combination with the P0-P2 tone pattern marks verbs which refer to actions or events that have taken place either on the preceding day (see example (232)), or earlier, as in (237), but are perceived by the speaker as relatively recent (in contrast with events marked as P3).

(237) nǐ̋ à tʃǔ bǐ̋ f-án kpɪ̄ pă fán
CL1.mother.3POSS P2 come(b) exit(b) PROX-here CL9/10.death Pa F.
ŋgɔ̀
upon

'His mother came here for the death of Pa Fan.'

The elicited example in (232) refers to an event that took place on the preceding day, as shown by the temporal adverbial **ɲántɔ̄** 'yesterday'. Example (237), which is part of a conversation, refers to an event that took place weeks before the conversation. The distinction between P1 and P2 is clear-cut, with P1 only referring to actions or events which have taken place on the same day, and P2 only referring to actions or events which have taken place at least one day earlier. The distinction between P2 and P3, however, is blurry. Sometimes the same action/event can be referred to either by a P2 verb or by a P3 verb, depending on its perception by the speaker as relatively recent or relatively long ago. Thus, the English sentence 'He arrived last week.' can be translated with a P2 clause, as in (238), or with a P3 clause, as in (239), depending on the perception of the speaker.

(238) wù à tʃǔ kpɔ́ wū-dzú w-ɔ́ ŋgɔ̀
CL1.PVB P2 come(b) CL3/7a.week CL3-other CL3-DET upon

◇'He arrived last week.'

(239) wù kə̀ tʃū kpɔ́ wū-dzú w-ɔ́ ŋgɔ̀
CL1.PVB P3 come(b) CL3/7a.week CL3-other CL3-DET upon

◇'He arrived last week.'

A phrase in P2 looks slightly different when the subject is in the first person singular. In this case, the 1SG preverbal pronoun is procliticized to the P2 tense marker **à∼nà** as well as to the first verb, as in (240).

(240) n=nà n=də̀ wù f-án ɲántɔ̄
1SG.PVB=P2 1SG.PVB=see(a) CL1.NPVB PROX-here yesterday

◇'I met him here yesterday.'

Example (240) is taken from Dahl's TAM questionnaire (Dahl 1985). It is the answer to the question 'Did you meet my brother here yesterday [as expected]?'.

8.5.1.5 P3 (distant past) constructions with the marker kə̀

The preverbal marker **kə̀**, which usually (in the perfective) occurs in combination with the P3 tonal pattern (see §8.5.1.1), marks events which took place relatively long ago, i.e. at least a few days before the utterance, but often months or years before.

(241) Pɛ́ kə̀ wɛ̌ fín áná fyàfyà
P. P3 breathe(a) there like_that IDEO

'Pe was breathing there like this: fyafya.'

(242) kpé dzū kə̀ dɪ̄ fín
CL1.woman CL1.certain P3 be(b) there

'There once was a woman.'

Example (241) is part of a report of an event that took place less than a week before the utterance. However, the speaker is using the distant tense, P3. Example (242) is taken from a story and refers to something that happened long ago (if it happened at all). P3 is never used to refer to actions or events of the same day. However, the choice between P2 and P3 often depends on the subjective perception of the speaker; see §8.5.1.4 for details.

8.5.1.6 F1 (hodiernal future) constructions with the F1 marker dɪ́

The marker **dɪ́** in combination with the F1-F2 tone pattern (see §8.5.1.1) marks verbs referring to events or actions which will take place later on the day of the utterance, i.e. F1. As shown in §8.5.1.1, the distinction of verb tone classes is completely neutralized in the future tenses and all verbs are realized with

a high tone. The position of the verb, i.e. whether it is utterance-final or not, does not play a roleeither. All perfective verbs are realized with a high tone in both future tenses. This is shown for F1 verbs of all three tone classes in (243)-(245).[6]

(243) n = [dɨ́ tsɔ́ ʃí] dʒī dɛ̀ nǭ
1SG.PVB = F1 show(a) go_down(a) CL3.road CL9/10.place SUBORD
wān w-ā dɨ́ f-ɔ́
CL1.child CL1-2SG.POSS be(b) LOC-REL

'I will show you the way to the place where your child is.'

(244) bɔ́ [dɨ́ táŋ] dʒŭ yɛ̄ bɔ́ lā kpɨ̄
CL2 F1 buy(b) CL9.goat COMP CL2 make(a) die(b)

◇'They will buy a goat in order to kill [it].'

(245) à [dɨ̌ yə́] ɨ́ dʒɔ̄ b-ɛ́n mɨ̄
2SG.PVB F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in

'You will go up on this bridge.'

Examples (243) and (245) represent direct speech quotations, taken form a narrative. Both refer to actions that are to be carried out immediately after the time of utterance. Example (244) is elicited and also refers to something that will take place on the day of the utterance.

8.5.1.7 F2 (non-hodiernal future) constructions with the F2 marker kā́

The preverbal marker **kā́** in combination with the F1-F2 verb tone pattern (see §8.5.1.1) marks verbs referring to events or actions which will take place after the day of the utterance, i.e. on the next day or later. As pointed out earlier (§8.5.1.1 and §8.5.1.6), the distinction of verb tone classes is completely neutralized in the future tenses, and all verbs are realized with a high tone. This and the function of F2 are shown in (246)-(248).

(246) bī [ká də́] nǭ ndʒɔ́m ká fyɛ́ ná ndʒān kú
1PL F2 see(a) SUBORD CL8.things F2 turn(c) as Mundabli home.LOC
f-án
PROX-here

'[...] we will see how things will be changing here in Mundabli.'

[6]In (245), the hodiernal future marker **dɨ́** (F1) is realized with a low-high rising tone due to low-tone spread (see §3.4.2).

(247) bɔ̄ [ká ɲwán] bǐ ndʒān lə nǫ́ [bɔ̄ *feed*
CL2 F2 beg(b) 1PL.PP Mundabli DAT SUBORD CL2 feed
tɒ́m swɔ̄m á bī-lō]
CL7/8.palm_villager CL7/8.palm ADVLZ CL8-all

'And they will be begging things from us, the Mundabli, because they [the Mundabli] will feed all the people in this Mbanga area.'

(248) áńý nɨ́ŋ bī nɨ́ŋ k-ɔ́ kǐ, bī [ká kán] kǐ
any CL7.thing 1PL want(c) CL7-DET CL7 1PL F2 have(c) CL7

'Anything we want, we will have it.'

Examples (246)-(248) are taken from accounts of speakers in which they were asked to give their opinion on what life might look like in the Mundabli village 50 years into the future. All three refer to a distant (and in this case imagined) future. Another example of F2, taken from a conversation is (249).

(249) bɔ̋ ká mú ʃí ā bɔ̌
CL2 F2 take(a) descend(a) COM CL2

'They shall bring them down.'

In (249), the speaker claims that a boy from the village will bring his siblings down to his place once he is old enough to build a house.

8.5.1.8 Overview of tense markers and verb tone patterns in all tenses

This section gives an overview of the segmental tense markers and the verb tone patterns connected with them. Table 8.12 contains example sentences containing perfective verbs of all three verb tone classes in all tenses (P0-P3 and F1-F2), in utterance-final and in non-final position. All examples given in Table 8.12 are elicited.

tone class	position	tense	example	gloss
A	final	P0	**bī kpɛ̀**	We just soaked.
		P1	**bī fó kpɛ̀**	We soaked (earlier today).
		P2	**bī à kpɛ̀**	We soaked (yesterday).
		P3	**bī kà kpɛ̀**	We soaked (long ago).
		F1	**bī dǐ kpé**	We will soak (later today).
		F2	**bī ká kpé**	We will soak (after today).
	non-final	P0	**bī kpè gɛ̀**	We just soaked corn.
		P1	**bī fǒ kpè gɛ̀**	We soaked corn (earlier today).
		P2	**bī à kpè gɛ̀**	We soaked corn (yesterday).
		P3	**bī kà kpě gɛ̀**	We soaked corn (long ago).
		F1	**bī dǐ kpé gɛ̀**	We will soak corn (later today).
		F2	**bī ká kpé gɛ̀**	We will soak corn (after today).
B	final	P0	**bī yǐ**	We just ate.
		P1	**bī fó yǐ**	We ate (earlier today).
		P2	**bī à yǐ**	We ate (yesterday).
		P3	**bī kà yǐ**	We ate (long ago).
		F1	**bī dǐ yí**	We will eat (later today).
		F2	**bī ká yí**	We will eat (after today).
	non-final	P0	**bī yǐ ɲām**	We just ate fufu.
		P1	**bī fǒ yǐ ɲām**	We ate fufu (earlier today).
		P2	**bī à yǐ ɲām**	We ate fufu (yesterday).
		P3	**bī kà yi ɲàm**	We ate fufu (long ago).
		F1	**bī dǐ yí ɲām**	We will eat fufu (later today).
		F2	**bī ká yí ɲām**	We will eat fufu (after today).
C	final	P0	**bī yíŋ**	We just built.
		P1	**bī fó yíŋ**	We built (earlier today).
		P2	**bī à yíŋ**	We built (yesterday).
		P3	**bī kà yíŋ**	We built (long ago).
		F1	**bī dǐ yíŋ**	We will build (later today).
		F2	**bī ká yíŋ**	We will build (after today).
	non-final	P0	**bī yíŋ gbɔ̀**	We just built a house.
		P1	**bī fǒ yíŋ gbɔ̀**	We built a house (earlier today).
		P2	**bī à yíŋ gbɔ̀**	We built a house (yesterday).
		P3	**bī kà yíŋ gbɔ̀**	We built a house (long ago).
		F1	**bī dǐ yíŋ gbɔ̀**	We will build a house (lat. tod.).
		F2	**bī ká yíŋ gbɔ̀**	We will build a house (aft. tod.).

Table 8.12: Elicited example of verb-final and non-verb-final simple clauses containing perfective verbs of verb tone classes A, B and C, in all tenses (P0-P3 and F1-F2)

8.5.2 Constructions with preverbal markers other than tense markers

This section deals with constructions involving preverbal markers other than tense markers. Section 8.5.2.1 deals with the verb tone patterns in these constructions. The constructions are described in detail in §8.5.2.2-§8.5.2.5.

8.5.2.1 Verb tone patterns of constructions with markers other than tense markers

Not all constructions are given equal attention in this section. The presence of the verum focus marker, for example, has no influence on the form of the verb or the tense marker. Therefore, the verum focus construction (see §8.5.2.4) is not treated here at all. Due to a lack of data, the tone patterns of conditional verbs are not treated either, so that this section is restricted to the tone patterns of imperfective verbs, tonal variation in the habitual marker and the tone patterns of consecutive verb forms. Imperfective verbs, which feature in habitual constructions are also commonly used in other constructions, without the habitual marker.

In finite imperfective verbs, the distinction between Class B and Class C is neutralized. Class A verbs bear a mid-low falling tone in utterance-final position and a low tone in non-final position, as in (250).[7] Class B (cf. (251)) and Class C (cf. (252)) imperfective verbs always bear a high tone. Note that in perfective stems, the high tone is associated with verbs of Class C (see Table 3.16).

(250) wù kə̌ lyà á ntō
CL1.PVB HAB go_to_bush(a).IPFV ADVLZ CL1/2.morning

'He goes to the bush at night'

(251) yī kə́̄ bán á mɨ́ ŋgɔ̀
CL3/7a.moon HAB shine(b).IPFV ADVLZ 1SG.PP upon

'the moon shines on me, [...].'

[7] The habitual marker bears a superhigh tone **kə́̄** (cf. (251)), but is realized as **kə̌** (cf. (250)) with a low-high rising tone when preceded by a low tone. This is due to a regular process of low tone spread in which a superhigh tone is realized as low-high rising when preceded by a low tone (see §3.4.2 for details).

(252) wù fyá bílúŋ ɲwɔ́m b-ɔ́ lā á
CL1 give(b).IPFV CL8.suffering CL2.children CL2-DET DAT ADVLZ
mò̱~mò̱, gɛ̄ ɲwɔ́m nǐ̀ kə̀ wù ká
one~RED be_there CL2.children CL1.mother however CL1.PVB HAB
tʃyé bɔ̀
know(c).IPFV FRUST

'She made those children suffer, not knowing that they were her siblings.'

When the verb stands in utterance-final position, a Class A verb bears a mid-low falling tone (see (253)).

(253) wù ká kpɛ̀
CL1 HAB soak(a).IPFV

◇'He frequently soaks [things].'

In certain contexts, the tone of the habitual marker is high rather than superhigh or rising, irrespective of the preceding tone. For details, see §8.5.1.

Consecutive verbs also have their own specific tone pattern.[8] The tonal pattern of verbs introduced by a consecutive marker is different from that of the preceding tense marked clause. Table 8.13 gives an overview of the utterance-final verb tone patterns of perfective consecutive verbs across the tenses and compares them with the tone patterns of non-consecutive verbs.

tense	marker	A	B	C
non-consecutive				
P0		ML	LH	H
P1	fə̋	ML	LH	H
P2	à~nà	ML	[LH]	H
P3	kə̀	ML	[LH]	H
F1	dǐ́	H	H	H
F2	ká	H	H	H
consecutive				
P0	mɨ́	L	LH	H
P1	mɨ́	L	LH	H
P2	mɨ̄	M	S	HM
P3	mɨ̄	ML	LH	H
F1	mɨ̄	L	S	H
F2	ká mɨ̄	L	S	H

Table 8.13: Tone patterns of final perfective consecutive verbs in all tenses (P0-P3 and F1-F2)

[8] See §8.5.2.3 for the function of consecutive verbs.

The tone of the consecutive marker depends on the tense of the preceding tense-marked clause. The marker bears a high tone (**mɨ́**) when the preceding clause is P0 or P1 (cf. (258), P0) and a mid tone (**mɨ̄**) when for all other tenses, namely P2-P3 and F1-F2 (see e.g. (256) for P3 and (257) for F1). For more on consecutive constructions, see §8.2.2 and §8.5.2.3.

8.5.2.2 The marker kə̋ and the habitual aspect construction

The preverbal marker **kə̋** in combination with the imperfective verb form and its characteristic tonal and vocalic patterns (see §8.5.2.1 and §8.1.3, respectively) marks habitual aspect. The marker is found in constructions like those in (254) and (255). The habitual marker does not co-occur with a tense marker, i.e. its use is restricted to the unmarked present tense (P0). The habitual construction is the only construction which requires the imperfective verb form.[9]

(254) wù kə̌ lyà á ntō
CL1.PVB HAB go_to_bush(a).IPFV ADVLZ CL1/2.night

'He [regularly] goes to the bush at night.'

(255) bə̄ ʃə̄ bə̄ fyē nə̄ bə̄ kə̋
IMPERS want(a).IPFV IMPERS learn(a) SUBORD IMPERS HAB
lǣ ná ŋkà
make(a).IPFV as CL6.corn_beer

'We want to learn how one makes corn beer.'

The use of the habitual construction with the habitual marker **kə̋** and the imperfective verb, as in (254) and (255), implies that an action is carried out regularly or constantly over a longer period of time.

8.5.2.3 The marker mɨ̄/mɨ́ and consecutive constructions

The consecutive tense marker **mɨ̄/mɨ́** occurs in the same slot as the regular tense markers. It cannot co-occur with the latter. A sequence of one or more consecutive clauses always follows a tense-marked clause in a clause chain. The consecutive tense marker expresses the fact that the events or actions described in the individual clauses take place in the chronological order corresponding to the order of the clauses. The subsequent clauses may have the same subjects (as in (256) and (257)) or they may have different subjects (see (258)).

[9] In other tenses, habitual semantics are either expressed periphrastically or they are conveyed by the imperfective verb form alone, as in F1 and F2.

(256) kpé dzū kə̀ dɪ̄ fín [...] kpé
CL1.woman CL1.certain P3 be(b).P3 PROX-there? [...] CL1.woman
w-ɔ̄ mɪ̄ dzě ɲwɔ́m bɔ̋ b-ɔ́ lā
CL1-DET CONSEC say(b).CONSEC CL2.children 3SG.POSS CL2-DET DAT
yɛ̄
COMP

'There once was a woman. [...] The woman said to her children: ... '

(257) à dɪ̌ yə́ ɪ́ dʒɔ̄ b-ɛ́n mɪ̄, à mɪ̄
2SG.PVB F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in 2SG CONSEC
gàn də̀ gbɔ̄ wān wā sè,
go(a) see(a) CL3.house CL1.child CL1-2SG.POSS house_front.LOC
bə̄ nàn tsə̀ fín
IMPERS decorate(a) CL7/8.grass_bundle there

'You will go up on this bridge. You will then go and see that a grass bundle is fixed to the frontside of your child's house.'

(258) ɲwɔ́m nɛ́̋ tʃʉ́́ yɛ̄ bɔ̋ nīm ā wà,
CL2.children mother.2POSS come(b) COMP CL2 live(a) COM 2SG
à mɪ́ mù bɔ̌, à mɪ́ gɪ̌ yɛ̄ dɪ̌
2SG.PVB CONSEC take(a) CL2 2SG.PVB CONSEC put(b) COMP be(b)
mfɔ̄ y-ā́
CL9.slave CL9-2SG.POSS

'Your siblings have come to stay with you and you take them and make them your slaves.'

In (258) and (257), the actions or events described by the clauses marked by a consecutive marker follow those in the preceding clause in a temporal sequence. But the relation is not always one of chronological order, cf. (256). This can also be seen in the elicited example (259) where the first clause contains the subordinator **nə́** 'as, when' and the temporal relation is one of simultaneity rather than sequence.

(259) bɔ̋ kə̀ dɪ̄ nə́ ʃī mɪ̄ bɔ̋ mɪ̄ tăŋ
CL2.PVB P3 be(b) as CL9/10.market in CL2.PVB CONSEC buy(b)
dʒŭ
CL9.goat

◇'When they were at the market, they bought a goat.'

The future consecutive is often used to give polite instructions. In this function, the consecutive clause most commonly follows a conditional clause (260), but it may also follow an F1 or F2 clause (257), or an imperative clause (261).

(260) kə́ mū bí sɨ́ yí-ǹdē *or* yī-kpɔ̄n
COND CL6 germinate(b).COND CL9/10.day CL10-four or CL10-five
à mɨ̄ mū kɛ́ bǐ yá mű, ā
2SG.PVB CONSEC take(a) return(c) go_out(b) go_up(c) CL6a 2SG.PVB
mɨ̄ gwɔ̀
CONSEC grind(a)

'When it [the corn] has germinated for four or five days, you remove it and grind [it].'

(261) yɛ̄ gǎn tsē mɨ̄ ā ntsɔ̋m mū-ŋ-gɛ̄~ŋ-gɛ̄
COMP go(a) find(a) 1SG.NPVB with CL6a-soil CL6a-N-be_red~RED
à mɨ̄ tʃű fə̋ ndá lā yɛ̄ m=mɨ̄
2SG.PVB CONSEC come(b) give(b) 1SG.PP DAT COMP 1SG.PVB=CONSEC
myé mùn-dzɔ̀ŋ~dzɔ̀ŋ
lick(c) CL6a-good~RED

'...: Go and find me some red soil! Then you will come and give [it] to me so that I will then lick the sweet [soil].'

8.5.2.4 The marker tə́ and truth focus constructions

The marker **tə́** marks truth focus. It precedes the verb, and when a segmental tense marker is present, the truth focus marker precedes it, too. The presence of the marker has no influence on the form of the verb or the tense markers. Examples of constructions involving the marker **tə́** are given in (262)-(264).

(262) tɛ̋là mwɔ́m dzé hǎyì, dzē gbàn ŋgɨ̄ lā yɛ̄
T. M. say(b) INTERJ say(b) CL1.in-law CL1.1SG.POSS DAT COMP
n=tə́ tʃʉ́
1SG.PVB=VER.FOC come(b).IPFV

'Tela Mwom said: No! Tell my in-law that I am coming!'

(263) wù tə́ yə́ kwó tʃű, wù ā kù wɔ̄
CL1.PVB VER.FOC go_up(c) enter(c) come(b) CL1.PVB NEG cry(a) NEG
kɛ́ bǐ
CL7/8.leg CL8;3SG.POSS

'She has reached [here]. Is she not complaining [that] her legs [are hurting]?'

(264) yɛ̄, kə́ wū tǭ̣ mɛ̄ tʃū, wù tá ā
COMP COND CL1IRR grow_up(b) finish(a) come(b) CL1 VER.FOC NEG
lá kɔ̀ wɔ̄ sǎm, wù dǐ mɔ́sí yíŋ gbɔ̀ áná
do(a) ?? NEG CL1/2.play CL1 F1 must build(c) CL3.house like_that
nǐ́ tʃū nīm
CL1/2.mother.3POSS come(b) live(a)

'[...] that when he will have grown up fully, he will not play, he must build a house and bring down his mother.'

Example (262) is in the present tense and contains an imperfective verb. The tone of the Class B verb is high, as expected for an imperfective verb (see §8.5.2.1). The example is taken from a story and is an example of direct speech. When Tela Mwɔm's mother-in-law requests to see him, he first rejects her request. When his mother-in-law insists, Tela Mwɔm gives in (see (262)). By the use of the truth focus marker, he stresses that he *will* come to meet her. Example (263) is taken from a spontaneous conversation. The speaker pointed out that the researcher had indeed reached the village (on foot) and inquired whether she was complaining about her legs aching.

In example (264), which is taken from the same conversation as (263), the speaker is quoting a boy, Dya, who was telling everyone that when he will have grown up, he will build a house and have his mother move into the house. The speaker uses the truth focus particle in order to show how Dya was trying to convince people that he was serious.

8.5.2.5 The preverbal conditional marker kə́

The conditional 'tense' marker **kə́** may either occur in clause-initial position only, preceding the subject, or it may be repeated after the subject. The current section only deals with the second case, in which the marker is repeated after the subject, because we are mainly concerned here with the verbal complex, i.e. the verb and the markers in close association with it. Due to a lack of data, the tone patterns of conditional verbs are not described systematically.

In the construction under discussion, the marker **kə́** occurs twice in the conditional clause, once before the subject pronoun and once in preverbal position. The subsequent clause, which expresses the consequences, also contains an instance of the conditional marker, see (265).

(265) kə́ ŋ=kə́ kpɨ́ f-án, bɛ̄n kə́ mū
COND 1SG.PVB=COND die(b) PROX-here 2PL.PVB COND take(a)
tʃű ā dʒám, bɛ̄n kə́ mɨ̄ dʒì ʃì ĭ́
come(b) COM CL??.seed 2PL.PVB COND CONSEC put(a) go_down(a) LOC
dzàm ŋgɨ̄ wɔ̄
CL9/10.grave CL9;1SG.POSS on

'If I die here, you will bring a calabash seed, and then you will plant [the seed] on my grave.'

The conditional clause 'If I die here' in (265) expresses a hypothetical condition. The consequences are expressed by two clauses, 'you will bring a calabash seed' and 'and then you will plant [the seed] on my grave', each of which contains a conditional marker.

8.5.3 Negation in constructions involving finite verb forms

As pointed out in §8.2.2, the most basic form of negation is the discontinuous negative marker **ā … wɔ̄**. However, the realization of negation may vary.

8.5.3.1 Negation in tense marking constructions

In negative clauses, the preverbal tense marker is often merged with the preverbal negative marker **ā**. When the markers merge, the vowel **a** of the negative marker replaces the original vowel of the tense marker. The resulting tonal pattern of the combined marker is neither simply a combination of the tone of tense and the negation marker,[10] nor does the tone of one replace that of the other; see Table 8.14 for an overview of merged tense and negative markers.

tense	tense marker	negation + tense marker
P0		ā
P1	fə́	fā
P2	à∼nà	nă
P3	kə̀	kă
F1	dɨ́	dā
F2	kā	kā

Table 8.14: Tense markers and merged tense + pre-core negation markers

[10] Although the tone pattern of the merged marker is not exactly a combination of the two tone patterns involved, it reflects the relative height of the tones of the two markers, with e.g. a higher tone followed by a lower tone in the case of P1 **fā** or a lower tone followed by a higher tone in P2 **nă**.

As I have no simple explanation for the tonal changes, I restrict myself here to their description. Examples of P1 and P3 negative phrases with merged tense and negation markers are (266) for P1 and (267) for P3.

(266) wù [fā gàn wɔ̄] dʒwō ɲwén
CL1 P1;NEG go(a) NEG CL1/2.stream today

'She did not go to the stream today.'

(267) ŋ = wò mí yɛ̄ wù dzé lɔ̄~lɔ̄ *bìkɔ́*
1SG.PVB = think ? SUBORD CL1 say(b) empty~RED because
ŋ̋ = [kǎ tʃyé wɔ̄] yɛ̄ ŋwàtɨ̀ dǐ́ ná, dǐ
1SG.PVB = P3;NEG know(c) NEG COMP CL7/8.book be(b) as be(b)
nɨ́ŋ kə̄-dzɔ́ŋ
CL7.thing CL7-good

'So I was thinking that he was lying because I didn't know at that point that it is good to know how to read and write.' (lit,: [...] that book is like, is a good thing)

While the subject usually precedes the tense marker and the negative marker, the first person singular preverbal pronoun **N** = follows the first part of the negative marker **ā** and cliticizes to the verb when no preverbal TAM marker is present, i.e. in P0. In this case, the 1SG pronoun directly precedes the verbal core, as in (268) (copied from (80c)), see §6.1.1 for more on preverbal pronouns.

(268) [ā ɲ = tʃyé wɔ̄]
NEG 1SG.PVB = know(c) NEG

◇'I don't know.'

Table 8.15 compares the tone patterns of affirmative non-final verbs with those of negated verbs.

	negated			affirmative non-final		
tense	A	B	C	A	B	C
P0	L	S	H	L	S	H
P1	L	S	H	L	S	H
P2	L	LH	H	L	[LH]	H
P3	L	LH	H	LH	M	H
F1	H	H	H	H	H	H
F2	H	H	H	H	H	H

Table 8.15: Tone patterns of negated and of affirmative non-final perfective verbs of tone classes A, B and C in all tenses (P0-P3 and F1-F2)

In most tenses, the tone of the affirmative verb form in non-final position and that of the negative verb form are identical.[11] However, in two of the tenses, P2 and P3, the tone of the negative verb is different than expected. In the first case, the non-hodiernal past P2, the verb tone patterns of negative P2 clauses are the same as those of affirmative P2 clauses (see Table 8.15 for an overview of affirmative and negative tone patterns and Tables 8.16 and 8.17 for examples). However, while the low-high rising tone in affirmative P2 clauses could have been derived from an underlying superhigh tone, due to the effect of the preceding low P2 marker **à∼nà** (see §8.5.1.1), this explanation is not available for the low-high rising tone in negative P2 clauses, where the P2 marker is merged with the negative marker, resulting in **nă**. In this case, the low tone of the P2 marker should have no effect on the following verb. An example of a negated Class B verb in P3 is in (269), which is taken from Table 8.17.

(269) bī nă **yǐ** wɔ̄
1PL.PVB P2;NEG eat(b) NEG

◇'We didn't eat [yesterday].'

The second case of non-identical affirmative and negative verb tone patterns is the distant past P3. In P3, which also differs tonally from the other past tenses in affirmative clauses (see Table 8.15), the tones of affirmative non-final verbs and negative verbs are not the same for Class A and Class B verbs.

While the tone of verbs in affirmative P3 clauses is low-high rising for Class A and mid for Class B, the tones for the respective verb tone classes in negative P3 clauses are low for Class A (see (270)) and low-high rising for Class B (see (271)); see also Table 8.15, Table 8.16 and Table 8.17. Class C verbs always bear a high tone.

(270) wù kă ʃì wɔ̄
CL1.PVB P3;NEG go_down(a) NEG

◇'He did not go down.'

(271) wù kă ʃǐ wɔ̄
CL1.PVB P3;NEG spend_day(b) NEG

◇'He did not spend the day at home.'

Table 8.16 contains elicited examples of non-final affirmative verbs and Table 8.17 contains examples of negative verbs of verb tone classes A, B and C.

[11] When negated, the verb is followed by the post-verbal negation marker **wɔ̄** and thus non-final.

verb tone class	tense	example	gloss
A	P0	**bī kpè gɛ̀**	'We just soaked corn.'
	P1	**bī fə́ kpè gɛ̀**	'We soaked corn (earlier today).'
	P2	**bī à kpè gɛ̀**	'We soaked corn (yesterday).'
	P3	**bī kə̀ kpě gɛ̀**	'We soaked corn (long ago).'
	F1	**bī dǐ kpé gɛ̀**	'We will soak corn (later today).'
	F2	**bī káā kpé gɛ̀**	'We will soak corn (after today).'
B	P0	**bī yǐ nyām**	'We just ate fufu.'
	P1	**bī fə́ yǐ ɲām**	'We ate fufu (earlier today).'
	P2	**bī à yǐ ɲām**	'We ate fufu (yesterday).'
	P3	**bī kə̀ yī ɲàm**	'We ate fufu (long ago).'
	F1	**bī dǐ yí ɲām**	'We will eat fufu (later today).'
	F2	**bī ká yí ɲām**	'We will eat fufu (after today).'
C	P0	**bī yíŋ gbɔ̀**	'We just built a house.'
	P1	**bī fə́ yíŋ gbɔ̀**	'We built a house (earlier today).'
	P2	**bī à yíŋ gbɔ̀**	'We built a house (yesterday).'
	P3	**bī kə̀ yíŋ gbɔ̀**	'We built a house (long ago).'
	F1	**bī dǐ yíŋ gbɔ̀**	'We will build a house (later today).'
	F2	**bī ká yíŋ gbɔ̀**	'We will build a house (after today).'

Table 8.16: Elicited examples of affirmative non-verb-final simple clauses containing perfective verbs of Class A, B and C in all tenses (P0-P3 and F1-F2)

8.5.3.2 Negation in constructions with preverbal markers other than tense markers

The negative habitual is not marked by a discontinuous marker. Instead it only has the post-core negative marker **wɔ̄**. Thus, only the preverbal habitual marker **kə́** and the post-core negative marker **wɔ̄** are present (cf. (272) and (273)).

(272) mɔ̀ [kə̌ dyà wɔ̄] wú lā
CL1.person HAB see(a).IPFV NEG CL1.PP DAT

'Nobody [ever] sees him.'

verb tone class	tense	example	gloss
A	P0	**bī ā kpè wɔ̄**	'We did not just soak.'
	P1	**bī fā́ kpè wɔ̄**	'We did not soak (earlier today).'
	P2	**bī nǎ kpè wɔ̄**	'We did not soak (yesterday).'
	P3	**bī kǎ kpè wɔ̄**	'We did not soak (long ago).'
	F1	**bī dā́ kpé wɔ̄**	'We will not soak (later today).'
	F2	**bī ká kpé wɔ̄**	'We will not soak (after today).'
B	P0	**bī ā yí́ wɔ̄**	'We did not just eat.'
	P1	**bī fā́ yí́ wɔ̄**	'We did not eat (earlier today).'
	P2	**bī nǎ yĭ wɔ̄**	'We did not eat (yesterday).'
	P3	**bī kǎ yĭ wɔ̄**	'We did not eat (long ago).'
	F1	**bī dā́ yí wɔ̄**	'We will not eat (later today).'
	F2	**bī ká yí wɔ̄**	'We will not eat (after today).'
C	P0	**bī ā yɨ́ŋ wɔ̄**	'We did not just build.'
	P1	**bī fā́ yɨ́ŋ wɔ̄**	'We did not build (earlier today).'
	P2	**bī nǎ yɨ́ŋ wɔ̄**	'We did not build (yesterday).'
	P3	**bī kǎ yɨ́ŋ wɔ̄**	'We did not build (long ago).'
	F1	**bī dā́ yɨ́ŋ wɔ̄**	'We will not build (later today).'
	F2	**bī ká yɨ́ŋ wɔ̄**	'We will not build (after today).'

Table 8.17: Elicited examples of negative simple clauses containing perfective verbs of Class A, B and C in all tenses (P0-P3 and F1-F2)

(273) Pɛ̋ kə̌ sɛ́ gán mɔ̀ w-ɔ̄ yɛ̄
P. P3.HAB insult(c).IPFV go(a).IPFV CL1.person CL1-DET COMP
mɛ̀ mɔ̀ w-ɔ̄ [kə̋ nàm tʃyé wɔ̄]
NCS.QUOT.Q CL1.person CL1-DET HAB work(a).IPFV know(c).IPFV NEG
ná wù táŋ dzɨ́ tsʉ́ yɛ̄
as CL1.PVB buy(b) travel(b) CL7/8.banana QUOT.Q

'Pe was insulting the man [asking] whether the man doesn't know how to work as he [aimlessly] buys banana?'

In (272), the semantics are clearly habitual. The sentence could be translated literally as 'A person always does not see him'. The semantics of (273) are less obviously habitual.

The negative habitual, like the affirmative habitual requires the imperfective form of the verb. The tone patterns of verbs in the negative habitual are the same as in the affirmative habitual: low for Class A and high for Class B and C.

Due to a lack of data, this section only contains a description of the negated habitual. The description of negated consecutive, negated truth focus and

negated conditional constructions has to be postponed until more data is available.

8.5.3.3 Frustrative

Another way to express negation is the frustrative construction. This construction is marked by the right-modifying minor coverb **də̀** 'see' and of the postverbal frustrative marker **bɔ̀**, cf. example (274). A preverbal negation marker is not present. The use of the frustrative construction implies that someone has tried to do something and failed.

(274) wù kə̌ [tsé dyá] bɔ̀ tsʊ̣́ b-ɔ́
CL1 P3.HAB search(a).IPFV see(a).IPFV FRUST CL7/8.banana CL8-DET

'He was searching for the bananas but couldn't find them.'

While the frustrative marker more commonly immediately follows the verbal core, thus preceding the object as in (274), it may also follow the object, as in (275). The choice between these two options seems to be free. It is unclear how the choice between these two options influences the meaning, if at all.

(275) wù [tsē dā] wān wū bɔ̀
CL1 search(a) see(a) CL1.child CL1;3SG.POSS FRUST

'She did not find her child.'

In certain contexts, the frustrative marker occurs without the minor coverb **də̀** 'see'. This is the case, e.g., when the ability construction is negated, as in example (230) in §8.4.2. When the main verb is also a verb of cognition, such as **tʃyé** 'know' in (276), the minor coverb is absent.

(276) ə́à n=kū bí yə́é mə́
INTERJ 1SG.PVB=cry(a) go_out(b) INTERJ CS.QUOT
m̀=bwə́n míŋ gbə̀ ə́ lɔ̀~lɔ̀,
1SG.PVB=get_wounded(a) 1SG.NPVB? house.LOC ADVLZ empty~RED
kə̌ n=ká tʃyé bɔ̀ níŋ nʊ̣̄ ń̄=lə̄
even 1SG.PVB=HAB know(c) FRUST CL7.thing SUBORD 1SG.PVB=do(a)
k-ɔ́ kǐ
CL7-REL CL7.SG

'Ah! I cried out. Yeoh! I got wounded in my house for no good reason. I don't even know what I have done.'

8.5.3.4 The not-yet tense

In order to express the fact that an event has not yet taken place, or that an action has not yet been carried out, a different construction is used that

employs the common post-verbal negation marker **wɔ̄** in combination with the special preverbal marker **dā́** (glossed 'not yet', cf. (277)). The marker **dā́** is probably a merged form derived from the copula verb **dí** 'be' and the common preverbal negation marker **ā**. When the marker **dā́** is preceded by a low tone preverbal pronoun, as in (278), it is realized with a rising tone.

(277) bɔ̋ dā́ ʃì wɔ̄
CL1.PVB not_yet go_down(a) NEG

◇'They have not yet gone down.'

(278) wù dǎ ʃì wɔ̄
CL1.PVB not_yet go_down(a) NEG

◇'He has not yet gone down.'

CHAPTER 9

Serial verb constructions and verbal adverbs

This chapter presents a first inventory of Mundabli serial verb constructions (in the following referred to as SVCs). It also treats verbal adverbs,[1] which, like verbs, form part of the verbal core but are considered adverbials.

Serial verb constructions are split up into asymmetrical and symmetrical SVCs. The bulk of SVCs in Mundabli are asymmetrical but symmetrical SVCs are also attested. An integral part of my analysis are so-called coverbs. My use of the term 'coverb' is adopted from Lovegren (2013: footnote 3, 215). It describes any verb which forms part of a serial verb construction. The term 'major coverb' thus refers to the 'major verb' of an asymmetrical SVC, i.e. the verb from a semantically unrestricted class which determines the semantic core of the asymmetrical SVC, and 'minor coverb' refers to the verb from a semantically restricted class which modifies the major coverb. Thus a 'coverb' in this sense is simply a verb which forms part of a serial verb construction. An asymmetrical SVC consists of one major coverb and one or more minor coverbs. The major coverb comes from a semantically unrestricted class and determines the semantics of the whole construction. The minor coverb comes from a semantically restricted class. It semantically modifies the major coverb. Minor coverbs have a fixed place with respect to the major coverb. Depending on whether they precede or follow the major coverb, they may be referred to as right- or left-modifying coverbs. With one exception, minor coverbs in Mundabli are right-modifying. Symmetrical SVCs consist of two or more verbs from a semantically unrestricted class. Both together make up the semantics of the whole symmetric SVC. While the order of verbs in symmetrical SVCs is iconic,

[1] Kießling (2011: 241) refers to these verbal adverbs as 'hybrid adverbials'.

the order in asymmetrical SVCs may also be counter-iconic. While asymmetrical SVCs indicate simultaneity of event-components, symmetrical SVCs rather tend to express sequentiality. For detailed definitions, see Aikhenvald (2006: 21-22) and Kießling (2011: 30-36).[2]

Verbal adverbs are also treated here because they form part of the verbal core and resemble verbs in this respect. It is very likely that they are historically derived from minor coverbs in asymmetrical SVCs. They generally occur at the end of the verbal core, and in one case at the beginning - with nothing (except another hybrid adverbial) separating the two. Grammatically they differ from verbs in at least two respects: first, they cannot occur on their own, and second they usually do not fit into any of the three verb tone classes, although there are unclear cases. Kießling (2011: 241) suggests a number of other tests for verbal adverbs. The application of these tests to Mundabli would surely be an interesting future project, but practical restrictions prevent their application in the current study.

The remainder of this chapter contains a description of asymmetrical SVCs (§9.1) and symmetrical SVCs (§9.2), a description of the expression of grammatical categories in SVCs (§9.3.2) and a description of verbal adverbs (§9.4). Within the SVC sections SVCs are organized according to their semantic function. Asymmetrical SVCs are listed by the relevant coverb. In the examples in this chapter, relevant serial verb constructions are enclosed in square brackets. Within these SVCs, verbs of interest (to be specified in the relevant section) are underlined.

9.1 Asymmetrical SVCs

Asymmetrical serial verb constructions consist of one verb from a relatively large, open, or otherwise unrestricted class and one or more verbs from a semantically or grammatically restricted (or closed) class. Thus, an asymmetrical SVC may contain several minor coverbs. Their order is discussed in the relevant sections. However, the current description focusses mainly on asymmetrical SVCs with two verbs.

In Mundabli, the verb from the restricted class, i.e. the minor coverb, generally follows the verb from the unrestricted class, i.e. the major coverb, except for the causative construction whose unusual order may be due to its recent origin in a bi-clausal construction. Thus, minor coverbs are generally right-modifying. Semantic categories expressed by asymmetrical SVCs in Mundabli are motion (§9.1.1), aspectuality or aspect-related meanings (§9.1.2), valency (§9.1.3) and manner (§9.1.4).

[2]Kießling (2011) presents a detailed description and analysis of serial verb constructions in Isu (West-Ring), a closely related language spoken in the close vicinity of Mundabli. This chapter profits a lot from this work, as the structures of the two languages are extremely similar and of course, Kießling (2011) treats the topic at a depth which cannot be achieved in a general descriptive grammar.

9.1.1 Motion

One of the semantic fields expressed by asymmetrical SVCs in Mundabli is motion. As Aikhenvald (2006: 22) points out, this semantic field, which she refers to as "direction and orientation", "is extremely common in most productively serializing languages". Motion is understood to include deictic orientation (§9.1.1.1) and path (§9.1.1.2). Manner of motion is not usually expressed by coverbs in Mundabli because, on the one hand, many motion verbs conflate motion and manner and, on the other hand, manner is commonly expressed by clause-final manner adverbs like **á mò̱~mò̱** in (279). See §10.1 for more on manner adverbs.

(279) gbɔ́ ŋgɨ́ à wɛ́ mɪ̄ á mò̱~mò̱
CL3/7a.body CL3;1SG.POSS P2 pain(c) 1SG ADVLZ one~RED

'My body was hurting me very much.'

9.1.1.1 Deictic orientation

The motion verbs **tʃʉ́** 'come' and **gàn** 'go' are used as right-modifying coverbs and express spatial deixis, i.e. movement to or away from the deictic center. In this function, they co-occur with path verbs like 'go up', 'go down', 'return', etc., with verbs expressing a transfer of custody, such as 'take', 'give', 'sell' etc., and with speech verbs like 'say', 'ask', 'call', etc. in the function of a major coverb.

The verb **tʃʉ́** 'come' encodes movement towards the deictic center when it is used as a right-modifying coverb in an asymmetrical SVC, as e.g. in (280)-(282). The right-modifying coverb is usually pronounced **ʃʉ́**, starting with a fricative rather than an affricate. This pronunciation is only attested in the coverb and not when 'come' is used as a main verb. However, when pronounced carefully, the minor coverb may also be pronounced **tʃʉ́**. Otherwise, the form of the verb is the same, whether it is used as minor coverb or as independent verb.

(280) *after*, à mɪ̄ [tăn ʃʉ́] yán ŋgɔ̄m
after 2SG CONSEC cut(b) come(b) CL3/7a.leave CL1/2.plantain

'After that, you collect plantain leaves.'

(281) n=lyā̋ ná f-án, n=dā̋ wú wɔ̄ yɛ̄
1SG=go_to_bush(a).IPFV as PROX-here 1SG=F1.NEG hear(b) NEG COMP
bɛ̄n fə̋ [mù ʃŭ] kpɛ̄ tsyě w-ɛ̄n
CL2PL P1 take(a) come(b) CL3.pot CL1.father.2POSS CL1-2PL.POSS
w-ɔ́ wú-kwɛ́ w-ɔ́ yɛ̄ bɛ̄n lə̄ nɪ́ŋ dǫ́ tʃín
CL3-DET CL3-home CL3-DET COMP 2PL do(a) CL7.thing certain there
mɪ̄
in

'As I am going to the bush, I don't want to hear that you have taken your father's traditional pot in order to do something inside.'

(282) wù [kɛ́ tʃú], wù dzě nɪ́ lā yɛ̄
CL1 return(c) come(b) CL1 say(b) CL1.mother.3SG/PL.POSS DAT COMP

'She returned and said to her mother:'

In (280), the use of the minor coverb 'come' implies that the banana leaves are cut off in order to be kept rather than dropped or thrown away. In (281), 'come' is used as minor coverb to convey the meaning 'bring' rather than 'take (away)', and in (282), the child returns into the house (to the deictic center) after having briefly gone outside behind the house to look for her sister.

An example of the use of **tʃʉ́** 'come' as single core verb is (283). Here, the verb 'come' surfaces in its imperfective form.

(283) tɛ́là mwɔ́m dzé hǎyì, dzē gbàn ŋgɪ̄ lā yɛ̄
T. M. say(b) INTERJ say(b) CL1.in-law CL1.1SG.POSS DAT COMP
n=tə́ tʃʉ̱́
1SG=FOC come(b).IPFV

'[...] Tela Mwom said: Tell my in-law that I am coming!'

The use of the right-modifying coverb **gàn** 'go' conveys direction of movement away from the deictic center, as, e.g. in (284) - (286).

(284) [kwó gǎn] tɔ́ mɪ̄
enter(c) go(a) there in

'Go in there!'

(285) dyā̋ [yə́ gàn] tʃĭn, wù sé ā̋ mǫ̀~mǫ̀
D. climb(c) go(a) there CL1 be_hot(c) ADVLZ one~RED

'Dya goes up there, he is really hot.'[3]

[3]'Dya' is the short form for 'Dieudonné'.

(286) wù [bí gān] gbɔ̄ kúŋ
CL1 exit(b) go(a) CL3.house house_backside.LOC

'She went outside behind the house.'

The use of the right-modifying coverb 'go' in (284)-(286) shows that the subject in each of these examples moves away from the deictic center.

Examples of 'go' as a main verb are found in (287) and (288).

(287) wān w-ɔ̄ bí, wù gān gbɔ̄ kúŋ
CL1.child CL1-DET exit(b) CL1 go(a) CL3.house behind_house.LOC

'The child went out. She went behind the house.'

(288) yɛ̄ gǎn, kwó kɔ̋ mɨ̄
COMP go(a) enter(c) CL7/8.forest in

'[It said]: go into the forest!'

The verbs in (288) are interrupted by a pause and are therefore interpreted as independent verbs rather than parts of an SVC.

The right-modifying coverbs 'come' and 'go' may also be used when the major coverb is a verb of speech, like e.g. 'call' or 'say' in (289) and (290). These examples illustrate very well how discourse participants are assigned to the deictic center or not. Each of these examples contains two asymmetrical SVCs, each of which has a different subject, the first forming part of the deictic center while the second does not. Accordingly, in both examples, the right-modifying coverb of the first asymmetrical SVC is 'go', and that of the second is 'come'.

(289) à [bɔ̀ŋ gàn] kpé (é), wù [dzé
2SG call(a).IPFV go(a).IPFV CL1.woman INTERJ CL1 say(b).IPFV
tʃʉ́] wá lā yɛ̄ (o)
come(b).IPFV 2SG.PP DAT COMP INTERJ

'You call a woman, [and] she will tell you that [...]'

(290) bī mɨ̄ [dzě gàn] bǒ lā, yɛ̄ nɨ̌m nɨ́ ā
1PL CONSEC speak(b) go(a) CL2PP DAT COMP sit(a) IMP.PL COM
mɔ̀ kwɛ̋ (e), bɔ̋ [dzé ʃʉ́]
CL1.man CL3/7a.home_village INTERJ CL2 speak(b) come(b).IPFV
bí lā yɛ̄, ɲɔ́m kwɛ̋ ā
1PL.PP DAT COMP CL2.husbands CL3/7a.home_village NEG
fyá tí wɔ̄ bī
give(b).IPFV surprisingly NEG 1PL

'We are telling them: Stay and get married to a local man! They are telling us: The local men do not give us [anything].'

The deictic center in (289) is the addressee. The addressee's call "goes" out to a woman, while her answer "comes" back to the addressee. In (290), the use of the deictic coverbs establishes the speaker and those he refers to by the first person plural pronoun **bī** as the deictic center.

The verbs 'come' and 'go' are also found in initial position in SVCs, such as in (291) and (292). One logical option would be that 'come' and 'go' are variable minor coverbs which may be either right- or left-modifying. However, this is unlikely, because minor coverbs in Mundabli are generally right-modifying. Andeed, when these verbs occur at the left edge of the verbal core, they do not semantically modify the other verbs within the SVC like minor coverbs in asymmetrical SVCs do, and like 'come' and 'go' do when they are at the right edge of the verbal core. Instead, the SVCs in this case have a sequential or purposive reading, which suggests that we are dealing with symmetrical serial verb constructions. Thus, the movement verb 'go', in this case, represents the initial coverb of a symmetric serial verb construction (see §9.2) rather than a left-modifying coverb in an asymmetrical SVC.

(291) yɛ̄ [gǎn tsē] mī ā ntsɔ́m mū-ŋ-gɛ̄~ŋ-gɛ̄ à
COMP go(a) search(a) 1SG COM CL6-soil CL6-N-be_red~RED 2SG
mī [tʃű fə̋] ndá lā
CONSEC come(b) give(b) 1SG.DAT DAT

'[She said]: go and search for some red soil for me, and then you come and give [it] to me!'

(292) bə́ [gān mū ʃú] kpɛ̀
CL2 go(a) take(a) come(b) CL3.pot

'They went to take the pot.'

Example (291) contains two SVCs. One starts with 'go', and the other with 'come'. Both can have a sequential or purposive reading. In (292) the verb-core initial verb 'go' co-occurs within one SVC with the verb-core final right-modifying coverb 'come'. According to the current analysis, this SVC consists of an asymmetrical SVC 'take - come' which is nested it on a larger symmetrical SVC. This analysis is supported by the fact that the verb-core initial verb 'go' co-occurs within one SVC with the verb-core final right-modifying coverb 'come'. This supports the current analysis of verb core-initial deictic motion verbs as major coverbs of symmetrical SVCs rather than left-modifying minor coverbs of asymmetrical SVCs, because, having a deictic function, 'come' and 'go', which are antonyms, cannot co-occur as minor coverbs within the same asymmetrical SVC. For more on symmetrical SVCs, see §9.2.

9.1.1.2 Path

Path is encoded by asymmetrical SVCs employing motion verbs as right-modifying coverbs. Types of path expressed by asymmetrical SVCs are vertical di-

rection, goal-bounded path and source-bounded path. Path verbs are often clustered, i.e. several path verbs co-occur as minor coverbs in an asymmetrical SVC. The order of these clusters is fixed (at least to a certain extent). Path coverbs always occur in the following order: GOAL - SOURCE - VERTICAL, as can be seen in (307).

Vertical Direction Vertical direction is encoded by the right-modifying coverbs **yə́** 'ascend' ((293)-(294)) and **ʃ̄ì** 'descend'[4] ((295)-(297)).

(293) à mɨ̄ [wú bí̋ yə́] mű
2SG CONSEC drain(c) exit(b) go_up(c) CL6

'You then take it [the corn] out and drain it [...].'

(294) kə́ mū gé à [tŭ fɨ bì yə́] fɔ̄
COND CL6 settle(b) 2SG scoop(b) pass(b) exit(b) go_up(c) CL3.head
w-ɔ́
CL3-DET

'When it has settled, you remove the head.'

(295) wān w-ɔ̄ [tsɨ́ bí ʃ̄ī] dɔ̄ w-ɔ́
CL1.child CL1-DET spit(b) exit(b) go_down(a) CL3.bean(s) CL3-DET
wú dzǽ
CL1PP mouth.LOC

'The child spit the bean out of her mouth.'

(296) wù [gɨ́ ʃ̄ī] tɛ̄ kí̋ gbɔ̄
CL1 put(b) go_down(a) CL7/8.walking_stick CL7;3SG.POSS CL3.house
sə̂
house_front.LOC

'Then she put her traveling stick down in front of the house.'

(297) kə́ wù [kpə̄ ʃ̄ī] gū w-ɔ́ tʃɔ́ŋ,
when CL1 light(a) go_down(a) CL3/7.fire CL3-DET CL1/2.fireplace
nɨ́ wū [tɛ́n bí̋ ʃ̄ì] fì-ŋgī
CL1.mother CL1.CL1POSS drip(c) exit(b) go_down(a) CL6.water
sɛ́
CL3/7a.attic

'When she lit the fire in the fire place, her mother let a little bit of water drip down from the attic.'

[4]The verbs **yə́** 'ascend' and **ʃ̄ì** 'descend' are glossed in the examples as 'go_up' and 'go_down', respectively.

The coverbs encode the vertical direction of the action described by the main verb. The extent to which the encoding of vertical direction is obligatory is still unclear. The path coverbs **yə́** 'ascend' and **ʃì** 'descend' are often preceded by a goal or source bounded coverb such as **bí** 'exit' or **kwó** 'enter', as in (293), (294) and (295).

Examples of **yə́** 'ascend' and **ʃì** 'go_down' as main verbs are found in (298) and (299), respectively.

(298) à dǐ yə́ ǐ́ dʒɔ̄ b-ɛ́n mɪ̄
2SG F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in

'You will go up on this bridge.'

(299) Dyǎ sé yɛ̄, ká wù kán dǒ nɪ̀ŋ ŋgɔ̄
D. be_hot(c) COMP COND CL1 hold(c) stay(b) CL7.thing upon
nǐ́ ká ʃí
CL1.mother.3POSS F2 descend(a)

'Dya is very determined. If he continues like that, his mother will come down.'[5]

The minor coverb **ʃì** 'descend' may also co-occur with non-movement verbs, such as the major coverbs 'ask', 'show' and 'call' in examples (300)-(302).

(300) nǐ́ [bú ʃì] tí wú lā, yɛ̄ mɪ̄
CL1/2.mother ask(b) go_down(a) surprisingly CL1PP DAT COMP 1SG
wān, ŋwɔ́m w-ā dǐ́ tí nā (o)
CL1.child CL1.husband CL1-2SG.POSS be(b) surprisingly where INTERJ

'Her mother will ask her: My child, where is your husband?'

(301) n = dǐ́ [tsɔ́ ʃí] dʒī dɛ̀ nǭ wān
1SG = F1 show(a) go_down(a) CL3.road CL9.place SUBORD CL1.child
w-ā dǐ́ f-ɔ́
CL1-2SG.POSS be(b) PROX-REL

'I will show you the way to where your child is.'

(302) wù [gān [bɔ̄ŋ ʃí]] dzɔ́ŋǎ tɛ́là mwɔ́m
CL1- go(a) call(a) go_down(a) again T. M.

'She went again to call Tela Mwom.'

What exactly the coverb contributes to the overall meaning is unclear. In (300) and (301), **ʃì** may be translatable as something like 'reveal'. In (302), **ʃì** is used either because she is calling down to Tela Mwɔm[6] or because she is calling him to come down from where he is.

[5] In the given context, 'hot' means something along the lines of 'eager, determined'.

[6] Tela Mwɔm is in the bush, which is usually lower than the village, as villages are often situated on hilltops.

Goal-bounded path As stated in Kießling (2011: 112), "[g]oal bounded path verbs incorporate reference to an endpoint of the motion [...]". Attested goal-bounded path coverbs are **kwó** 'enter' and **ké** 'return'.

The verb **kwó** 'enter' denotes movement into a container and acts as the antonym of **bí** 'exit'. As minor coverb in asymmetrical SVCs, **kwó** 'enter' adds its meaning of 'movement into a hollow object' to the meaning of the core-verb, as in (305), (303) and (304).

(303) wān kpé w-ɔ̄ wù kə̀ dɪ̄ w-ɔ̄
CL1.child CL1.woman CL1-DET CL1 P3 be(b) CL1-REL
bwé~bwé wù kə̀ mɔ́m w-ɔ̄ byə̀n, wù mū
CL1.toddler~RED CL1 P3 suck(b) CL1-REL CL3/7a.breast CL1 take(a)
dɔ̄ w-ɔ́, wù [báŋ kwō] wú dzǽ
CL3.beans CL3-DET CL1 lock(b) enter(c) CL1PP CL7.mouth

'The baby girl, who was nursing, took the bean and put [it] into her mouth.'

(304) ká à dʒyē kpɛ̄ mű à mɪ̄ mū ʃú
COND 2SG cook(a) complete(a/c?) CL6 2SG CONSEC take(a) come(b)
ŋkā mū-nkɔ̄n mɔ́ à mɪ̄ [nūŋ
CL6.corn_beer CL6-strong_corn_beer CL6-DET 2SG CONSEC add(a?)
kwó ʃī] tʃín ŋgɔ́
enter(c) go_down(a) there upon

'When you have completed cooking, you then take the strong corn beer and you mix it in there.'

(305) tsə̄m b-ɔ́ [tʃú kwṓ] gbə́, tsű
CL7/8.python CL8-DET come(b) enter(c) house.LOC hit(b)
kpè w-ɔ̄ áná tsű wù áná tsű wù áná,
CL1.woman CL1.DET like_that hit(b) CL1 like_that hit(b) CL1 like_that
lyím wù, kù wù
wrap_around(b) CL1 tie(a) CL1

'The pythons came into the house, they beat the woman like that, beat her like that, beat her like that, wrapped around her and tied her.'

All attested SVCs with the minor coverb **kwó** 'enter' take a locative object, i.e. a locative phrase consisting of a noun plus a postposition, or the locative form of a noun, as in (305), just like the independent verb. An example of the independent use of **kwó** 'enter' is in (306).

(306) wù kwṓ gbə́
CL1 enter(c) house.LOC

'She entered the house.'

The verb **kɛ́** 'return' denotes movement back to a place which was visited earlier. It is used as a minor coverb in an asymmetrical SVC when movement back to a certain location is involved, as in (307) and may also be used when an event or action is repeated, as in (308).[7]

(307) kə́ mū bí sɨ́ yí-ǹdē *or* yī-kpɔ̄n, à
COND CL6 germinate(b) CL9/10.day CL10-four or CL10-five 2SG
mɨ̄ [mū kɛ́ bí yə́] mű, ā mɨ̄ gwɔ̀
CONSEC take(a) return(c) exit(b) go_up(c) CL6 2SG CONSEC grind(a)

'After germinating for four or five days, you then take it out again and grind [it].'

(308) bɔ́ yɨ́ŋ yə́ gbɔ̄, bɔ́ [yɨ́ŋ kɛ̄ yə́]
CL2 build(c) go_up(c) CL3.house CL2 build(c) return(c) go_up(c)
t-ɔ́ tʃì tɔ́
DIST-there up DIST-DET

'They build the house upwards. They build and go up again, up there.'

In example (308), the speaker explains how, in Europe, houses have several floors. In this case, **tɔ́ tʃì tɔ́** 'up there' refers to Europe.

The verb 'return' is attested as major coverb, as e.g. in (309) and as independent verb in elicited sentences.

(309) wù [kɛ́ tʃú], wù dzé nɨ́ lā yɛ̄
CL1 return(c) come(b) CL1 say(b) mother.3SG/PL.POSS DAT COMP

'She returned and told her mother: ...'

In (309), **kɛ́** heads an asymmetric verb construction. The girl, who had left the house and gone behind it, returns into the house, and thus into the deictic center. This explains the use of the minor coverb **tʃű**.

Source-bounded path Source-bounded path coverbs incorporate a reference to the initial point of a motion. The source-bounded path coverbs attested in Mundabli are **bí** 'exit' and **tɔ́** 'away, off'.

The verb **bí** 'exit' denotes movement out of a container. It is commonly used as path-specifying coverb, as e.g. in (310)-(313).

(310) wān wɔ̄ [tsɨ́ bí ʃī] dɔ̄ w-ɔ́
CL1.child CL1-DET spit(b) exit(b) go_down(a) CL3.bean(s) CL3-DET
wú dzǽ
CL1PP CL7.mouth

'The child spit out the bean from her mouth.'

[7] While a repeated action or event may be marked by the minor coverb **kɛ́** 'return', it is more commonly expressed by the hybrid adverbial **dzɔ́ŋā́** 'again'; see §9.4.1.4.

(311) dɔ̄ [gbū bí ʃī] wű-mwó
CL3.beans fall(a) exit(b) go_down(a) CL3-one

'One of the beans fell down.'

(312) kə́ wù kpə̄ ʃī gū w-ɔ́ tʃɔ́ŋ,
when CL1 light(a) go_down(a) CL3-7a.fire CL3-DET CL1/2.fireplace
nű́ wū [tɛ́n bí̋ ʃì] fì-ŋgī
CL1.mother CL1;3SG.POSS drip(c) exit(b) go_down(a) CL6-water
sɛ́
CL3/7a.attic

'When she lit the fire in the fire place, her mother let a little bit of water drop down from the attic.'

(313) kə́ mū bí sɨ́ yí-ǹdē *or* yī-kpɔ̄n
COND CL6 germinate(b).COND CL9/10.day CL10-four or CL10-five
à mɨ̄ [mū ké bí̋ yə́] mű́ ā mɨ̄
2SG CONSEC take(a) return(c) exit(b) go_up(c) CL6 2SG CONSEC
gwɔ̀
grind(a)

'After germinating for four or five days, you then remove it and grind.'

In all these examples, **bí̋** is understood in its literal sense as movement out of a container. Note also that, in all these examples, 'exit' co-occurs with a vertical coverb (see 9.1.1.2).

The coverb **bí̋** 'exit' can also be used in a figurative sense, as in (314) and (315).

(314) kə́ wù [nī bí̋] wú ŋgɔ̄ tʃɪ́n, dɛ̀ nǭ wù
COND CL1 shake(a) exit(b) CL1PP upon there CL9.place SUBORD CL1
kə̀ dɨ̄ f-ɔ́, kpé w-ɔ̄ gbə́, gbə̄
P3 be(b) PROX-REL CL1.woman CL1-DET house.LOC CL3/7a.body
wű sé, gbə̄ wű yē
CL3;3SG.POSS be_hot(c) CL3/7a.body CL3;3SG.POSS start(a)
n-sɛ̀
INF-be.hot(c)

'When he shook his body where he was, the woman in the house felt hot, she started feeling hot.' (lit.:...the woman in the house, her body was hot, her body started being hot.)

(315) ấnā wù kə̀ [fǫ̰ bī gān] áná, kpé w-ɔ̄
like_that CL1 P3 tell(a) exit(b) go(a) like_that CL1.woman CL1-DET
kpɨ̄ mɛ̌ ŋ-kpɨ̄-n
die(b) only INF-die(b)-INF

'Immediately when she was reporting like that, the woman died on the spot.'

In (314), **bí́** is used together with the major coverb **bī** 'shake'. The exact function of **bí́** here is unclear. In (315), where **bí́** co-occurs with the major coverb **fǫ̰** 'tell', it probably means something like 'reveal'.

An example of **bí́** 'exit' as an independent verb is found in (316)

(316) w-ɔ̄ wān bǐ́, wù gān mù ʃǔ
CL1-DET CL1.child exit(b) CL1 go(a) take(a) come(b)
kpű bɔ̌ gbə̀
CL3/7a.wooden_pot 3PL.POSS house.LOC

'Each child went out and brought a wooden pot from the house.'

The verb **tɔ́** which means 'kick' when used as an independent verb, functions as a sort of centrifugal marker when used as a right-modifying coverb in an asymmetrical SVC. In this case, it is translatable as something along the lines of 'away, off', see e.g. (317) and (318).

(317) wù bóŋ tɛ̄ k-ɔ́, wù [yɔ̄ tɔ̄]
CL1 pick(b) CL7.walking_stick CL7-DET CL1 throw(a) away(b)

'Then she picked up the stick and threw [it] away [from herself].'

(318) yɛ̄ wù kwɔ́ gbə́, wù də̄ bə̄ kə̀ [ʃyā tɔ̄]
COMP CL1 enter(c) house.LOC CL1 see(a) IMPERS P3 sweep(a) away(b)
gbɔ̄ wű
CL3.house CL3;3SG.POSS

'When she was about to enter the house, she saw [that] someone had swept her house.'

In (317), the centrifugal meaning is straightforward. In (318), the coverb illustrates the dirt being swept away. It seems that some kind of movement away from the body is implied. The same coverb **tɔ́** is commonly used in a non-literal sense, meaning something like 'cease to exist' or 'be(come) useless', as in (319) and (320), respectively.

(319) wù dzé āy, n=dǐ́ yə́ tʃín sé́, n=gān
CL1 say(b) INTERJ 1SG=F1 go_up(c) there CL3/7a.attic 1SG=go(a)
də nɨ́ŋ kī [lǣ ɲīm tō̰]
see(a) CL7.thing CL7 make(a).IPFV stop_burning(c).IPFV away(b).IPFV
k-ɔ́ gū w-ɔ́
CL7-REL CL3/7a.fire CL3-DET

'She said: Shiish! I will go up into the attic and find out myself what is putting out the fire.' (lit.: '[...] the thing which is putting out the fire.')

(320) *but* bī mɨ́ kán mbɛ̄ kī-dʒīn ā́ bɔ̄-dʒwē bɔ̌́
but 1PL CONSEC have(c) CL2.people ADJVZ-?? ADVLZ CL2-many CL2
nɨ́ŋ b-ɔ́ yɛ̄ bɔ̌́ [lā bō tɔ́] ndʒɔ́m
want(c) CL2-REL SUBORD CL2 do(a) be_bad(a) away(b) CL8.things
b-ɨ́
CL8-1PL.POSS

'But we have so many people who are hating us, who want to spoil our things.'

In (319), the coverb **tɔ́** accompanies the major verb **ɲím** 'stop burning'; in (320), it implies that the things referred to will be useless once they have been spoiled. The function of **tɔ́** 'kick, away' resembles that of **fɨ́** 'pass', which is often translatable as 'disappear' or 'cease to exist' (see below). I cannot provide a spontaneous example of the independent use of **tɔ́** 'kick', but it is attested in elicitation.

Center-bounded path Center-bounded path coverbs integrate a reference point along their path which is neither its beginning nor its end (Kießling 2011: 150). Center-bounded path verbs in Mundabli are **fɨ́** 'pass', **tsə́** 'surpass' (but is only attested in combination with **fɨ́**) and **dâŋ** 'cross'.

The semantics of the verb **fɨ́** 'pass' are somewhat blurred when the verb is used as a minor coverb; see (329). The coverb can often be translated as 'disappear' or 'cease to exist', as in (321) and (322).

(321) ɨ́ nsɔ̄lā mɨ̄ wān mɨ̄ [lɛ̂ fɨ̰́]
LOC CL1/2.afternoon 1SG CL1.child CONSEC get_lost(a) pass(b)

'And in the afternoon, my child went missing.'

(322) sǐ yì-mwò áná mbɛ̄ bə̌-tɔ́ [bǐ fɨ̰́
CL9/10.day CL9-one like_that CL2.people CL2-three exit(b) pass(b)
gàn]
go(a)

'On one day, three people pass away.'

In (321), the use of **fǐ́** implies that the child is gone. The same holds for (322). The same coverb is also used in a figurative sense, implying that something is 'lost', i.e. that it is either gone or useless beyond repair, as in (323) and (324).

(323) mɔ̀ nǭ́ ńǐ=kə̀ mǔ́ w-ɔ̄ wān wū
CL1.man SUBORD 1SG=P3 marry(a) CL1-REL CL1.child CL1.CL1POSS
kə̀ [fɛ̂l fɨ̄]
P3 be_blind(a?) pass(b)

'The man whose daughter I married was blind.'

(324) ndʒɔ́myīn (nǭ́) wù kə̀ ʃɛ̄ b-ɔ́ yɛ̄ wū yī kə̀
CL8.food SUBORD CL1 P3 want(a) CL8-REL COMP CL1 eat(b) P3
[bɔ̀ fɨ̄]
be(come)_bad(a) pass(b)

'The food which he wanted to eat was spoiled.'

The minor coverb **fǐ́** is also used to express comparative, as in (325) and (326).

(325) bī dzé gàn bɔ̌ lā yɛ̄, [tō fɨ̄] ā
1PL speak(b) go(a) CL2PP DAT COMP be_smart(b) pass(b) COM
yū y-ā (ò)
CL9/10.buttock CL9-2SG.POSS INTERJ

'We always tell them that they should be more careful with their sex-life.'

(326) pǐ́tà dzé yɛ̄ wù ā fyá wɔ̄ fì-mbǐ́
P. say(b) COMP CL1 NEG give(b).IPFV NEG CL19-palm_wine
f-ɔ́ mɨ́ lā, yɛ̄ fī [sɨ̀ŋ fɨ̄]
CL19-DET 1SG.PP DAT COMP CL19 be_small(a) pass(b)

'Peter said that he is not giving me that bit of wine, that it is too little.'

The verb **tsə̋́** 'surpass' is only attested together with **fǐ́**, which suggests that **tsə̋́ fǐ́** is a fixed expression rather than a combination of verbal adverb and verb. In combination with the coverb **fǐ́** 'pass', **tsə̋́** expresses comparative semantics, see e.g. (327).

(327) gbɔ̄ ŋgɨ́ [gə́ tsə̋́ fɨ́] gbɔ̄
CL3.house CL3;1SG.POSS be_fat(b) surpass(b) pass(b) CL3.house
w-ə́ lā
CL3-2SG.POSS DAT

◇'My house is bigger than yours.'

(328) wù [yə́m tsə̋ fɨ́]
CL1 sing(c) surpass(b) pass(b)

◇‘She sings most [of all].’

An example for the independent use of **fɨ́** ‘pass’ is found in (329).

(329) ń=tʃyé dɛ̀ nǭ wù fɨ́ f-ɔ́
1SG=know(c) CL9.place SUBORD CL1 pass(b) PROX-REL

‘I know the place which she had passed [through].’

The right-modifying minor coverb **dàŋ** ‘cross’ may specify the direction of a movement verb, as in (330).

(330) wù fă ā [ŋ-wɛ̄ dàŋ]
CL1 be_occupied(b) COM INF-smuggle(c) cross(a)

◇‘He is crossing secretly.’

Like **fɨ́** ‘pass’, the coverb **dàŋ** ‘cross’ may also express comparative semantics (331).

(331) kpɨ̄ tʃə́m y-ɔ́ f-ɔ́ à [lì dàŋ
CL9/10.death Tsham CL10-DET PROX-DET P2 be_strong(a) cross(a)
bǐ], hə́y
exit(b) INTERJ

‘Death in Tsham is really strong, hey!’

An elicited example of the independent use of **dàŋ** ‘cross’ is found in (332).

(332) mɔ̀ w-ɔ̄ fə́ ā n-dàŋ mbʊ̄ŋ ɪ́
CL1.person CL1-DET be_occupied(b) COM INF-cross(a) CL1/2.river LOC
dʒɔ̄ mɨ̄
CL8a.bridge in

◇‘The man is crossing the river via the bridge.’

9.1.2 Aspectuality or aspect-related

Asymmetrical serial verb constructions in Mundabli may also encode aspectuality or aspect-related meanings, which is cross-linguistically common for asymmetrical SVCs (Aikhenvald 2006: 23). Among the meanings expressed by asymmetrical SVCs are continuative (§9.1.2.1), completive (§9.1.2.2) and persistive (§9.1.2.3). Just like in other languages, posture verbs (‘stay’, ‘sit’) and verbs of termination (‘finish’) surface as coverbs in the relevant constructions (Aikhenvald 2006: 23).

9.1.2.1 dő 'stay, remain'

When it is used as a right-modifying coverb in an ASVC, the verb **dő** 'stay, remain' conveys continuative semantics, meaning roughly 'to keep on doing something', as in (333) (repeated here from (299)) and (334).

(333) dyấ sé yɛ̃, ká wù [kán dő] nìŋ ŋgɔ̄
D. be_hot(c) COMP COND CL1 hold(c) stay(b) CL7.thing upon
nḯ ká ʃí
CL1.mother.3POSS F2 descend(a)

'Dya is very determined. If he keeps on like this, his mother will come down.'.

(334) m = [bḯ yə́ dő] ɲwɛ́n *sűtɛ̋ɛe* tʃîn ɲwɛ́n, kɛ̌
1SG = exit(b) go_up(c) stay(b) now so_much there now even
n = ká yə́ bḯ bɔ̀ t-ɔ̋ wū t-ɔ́
1SG = P3 go_up(c) exit(b) FRUST DIST-there CL1? DIST-DET

'I've gotten up and stayed here for so long today, I did not even reach up there.'

Examples of **dő** 'stay' as a main verb are found in (335) and (336) .

(335) wān w-ɔ̄ mɨ̄ dǒ ấ wɔ̄m
CL1.child CL1-DET CONSEC stay(b) ADVLZ alive?

'The child stayed alive.'

(336) dō kī-dzɔ́ŋ
stay(b) ADVLZ-good(b)

'Stay well!'

The phrase in (336) is a greeting often used upon departure.

9.1.2.2 mɛ̀ 'finish'

The verb **mɛ̀** 'finish', when used as a right-modifying coverb, expresses completive aspect, as in (337)-(340). As Aikhenvald: 23 points out, this is cross-linguistically common for coverbs with similar semantics (Aikhenvald 2006: 23).

(337) yɛ̄ n = [ɲwɔ̋m mɛ̀] ɲām b-ɔ́
COMP 1SG = stir(b) finish(a) CL8.fufu CL8-DET

'[Tell her] that I've finished stirring the fufu!'

(338) bɔ́ yí dɔ̄ w-ɔ́, bɔ́ yí bɔ́ yí bɔ́ yí bɔ́
CL2 eat(b) CL3.beans CL3-DET CL2 eat(b) CL2 eat(b) CL2 eat(b) CL2
yí, bɔ́ [yí mɛ̄]
eat(b) CL2 eat(b) finish(a)

'They ate the beans. They ate and ate and ate until they had finished.'

(339) ká à [wɔ̄ŋ mɛ̄], kə́ m̀=mú, mɪ̄ n=tsɔ̀
COND 2SG squish(a) finish(a) COND 1SG=drink(b) 1SG 1SG=show(a)
dɛ̀ nā wān w-ɔ̀ kə̀ fɪ̄ f-ɔ́
place SUBORD CL1.child CL1-DET P3 pass(b) PROX-REL

'After you have finished squishing, after I have drunk, I will show you where your child has gone.'

(340) yɛ̄ gbɪ̀ŋ dɪ̌ [kɔ́ yí mɛ́] bɛ̄n
COMP CL9.leopard F1 catch(b) eat(b) finish(a) 2PL

'[...] that the leopard will catch and eat all of you.'

The use of this coverb implies that the action described by the main verb is not carried on, i.e. it is either completed or interrupted. The verb **mɛ̄** 'finish' is also attested as an intransitive main verb.

9.1.2.3 nɪ̀m 'sit'

The right-modifying coverb **nɪ̀m** 'sit' when used as a main verb, conveys persistive meaning, i.e. it shows that an action has been ongoing for a while and is still ongoing at the time of reference, as e.g. in (341) and (342).

(341) wù [kō nɪ̄m mɛ̌] ŋ-kù
CL1 cry(a) sit(a) only INF-cry(a)

'She was still only crying.'

(342) à [læ̀ nɪ̀m] mān
2SG do(a).IPFV sit(a).IPFV what

'What are you still doing [here]?'

Examples of **nɪ̀m** as a main verb are (343) and (344).

(343) bɔ́ nɪ̄m *sʉ́tɛ́ɛe*, bɔ́ tʃú ɲwén nswēn
3PL sit(a) extensively 3PL come(b) now CL2.friends

'They stayed [together] for a long time, they now have become friends.'

(344) à mɨ̄ [nɨ̀m ʃì] bā́ dɛ̀ nə̄ bɔ̄
2SG CONSEC sit(a) go_down(a) exactly CL9.place SUBORD IMPERS
kpā f-ɔ́ gù, ā fì-ŋgī wá kàn
light_fire(a) PROX-REL CL3/7.fire COM CL19-water 2SG.PP hands.LOC

'Then (you will) sit down exactly where they make fire, with a bit of water in your hand.'

While in example (343), **nɨ̀m** is the only verb, in (344), it forms the major verb of an asymmetrical SVC.

9.1.3 Valency

9.1.3.1 Causative SVCs with lə̀ 'do, make'

The only attested verb of causation in causative SVCs is **lə̀** 'do, make', which means that the initial coverb of a causative SVCs is extremely restricted. The second coverb in a causative SVC with **lə̀** 'make' is always intransitive; see e.g. (345)-(347). Causation of transitive verbs is expressed by multi-clausal constructions; see (350).

(345) *why* wù [lə̄ bwān] mɨ̄ yɛ̄
why CL1 make(a) be_wounded(a) 1SG QUOT.Q

'Why has he injured me?'

(346) kwɛ́ b-ɛ́n ŋà t-án sɛ́
CL7/8.rat CL8-DEM.PROX boast(a) DIST-here CL3/7a.attic
t-ání, n=dɨ́ [lə́ kpɨ́ mɛ́] kwɛ́
DIST-this_way 1SG=F1 make(a) die(b) finish(a) CL7/8.rat
b-ɛ́n t-án sɛ́ ō
CL8-DEM.PROX DIST-here CL3/7a.attic EMPH

'These rats which are showing off in this attic - I will kill all of them!'

(347) ŋgī m-ɔ́ [lə̀ ɲím tɔ́] gū
CL6.water CL6-DET make(a) stop_burning(c) away(c) CL3.fire
w-ɔ́ yà
CL3-DET INTERJ

'The water will put out the fire.'

The verb **lə̀** 'do, make' in causative asymmetrical SVCs represents the only attested case of a left-modifying coverb.

The verb 'do, make' is also attested as an independent main verb; see e.g. (348), which contains the imperfective form of the verb.

(348) kpé w-ɛ̄n, à kə̌ lə̀ mān
CL1.woman CL1-DEM.PROX 2SG HAB do(a).IPFV what

'Woman, what are you doing?'

As already pointed out, causation may also be expressed by a multi-clause construction involving the verb **lə̀** 'make' in the first clause, see e.g. (349) and (350).

(349) wān w-ɛ̄n, dǐ wà nō̰ à lə̄ w-ɔ̄ nó̰ mī
CL1.child CL1-DEM.PROX be(b) 2SG SUBORD 2SG do(a) CL1-REL as 1SG
wān w-ɔ̄ lɛ̄ f-án gbɔ̄
CL1.child CL1-DET get_lost(a).IPFV PROX-here CL3.house
kúŋ
backside_of_house.LOC

'Child, you are the one who made my child get lost behind this house.'

(350) mī wān kə̀ lə̌ mī n=tsŭ wù
1SG CL1.child P3 make(a) 1SG 1SG=beat(b) CL1SG

'My child$_i$ made me beat her$_j$.'

In (349), cause and effect clauses are linked by the connective **nó̰** which translates roughly as 'as'. In (350), cause and effect clauses are simply juxtaposed to each other. In the latter example, a multi-clause construction is the only possible solution because the effect verb **tsű** is transitive and causative SVCs only allow intransitive second verbs. However, the use of a multi-clause construction is also possible when the second verb is intransitive.

9.1.4 Manner

Manner may be expressed by clause-final manner adverbs (see §10.1) or by manner SVCs. Manner SVCs involve minor coverbs which describe the way in which the action referred to by the main verb is performed. However, adverbs are much more common. Only a very restricted inventory of manners can be expressed by manner SVCs. These are described in the current section.

9.1.4.1 dzḭ́ 'travel; aimlessly'

The use of the right-modifying coverb **dzḭ́** 'travel' implies that something is done aimlessly, as in (351)-(353).

(351) bì bó gàn bə̌ lā, yɛ̄ bɛ̄n [lə̀ dzḭ́]
1PL ask(b) go(a) CL2PP DAT COMP 2PL do(a).IPFV walk_around(b).IPFV
tí mān
surprisingly what

'We are asking them: What are you doing [aimlessly]?'

(352) bɔ́ fǫ̀ tʃṵ́ bí lā yɛ̄ bɔ́ [tsè
CL2 tell(a).IPFV come(b).IPFV 1PL.PP DAT COMP CL2 search(a)
dzɨ́ gàn] kpɔ́
walk_around(b) go(a) CL3/7a.money

'They are telling us that they are searching around for money.'

(353) Pɛ́ kə̌ sɛ́ gán mɔ̀ w-ɔ̄ yɛ̄
Petrus P3;HAB insult(c).IPFV go(a).IPFV CL1.man CL1-DET COMP
mɛ̀ mɔ̀ w-ɔ̄ kɔ́ nàm tʃyé wɔ̄ ná wù
NCS.QUOT.Q CL1.man CL1-DET HAB work(a) know(c) NEG as CL1
[táŋ dzɨ́] tsṵ́ yɛ̄
buy(b) travel(b) CL7/8.banana QUOT.Q

'Petrus was insulting the man [asking] whether the man doesn't know how to work as he [aimlessly] buys banana?'

In all these examples, the coverb **dzɨ́** adds a meaning of aimlessness to the meaning of the major verb. The verb **dzɨ́** 'travel' is also frequently used as main verb, as in (354).

(354) bɔ́ dzɨ́ mɛ̌ mű́ntù mɨ́ mű́ntù mɨ́
CL2 travel(b).IPFV only CL7/8.car in CL7/8.car in

'They only ever travel by car.'

9.1.4.2 bā́n 'be clean; be white; shine; clearly'

The verb **bā́n**, which may mean 'shine', 'be white' or 'be clean' when used as a main verb, means as much as 'clearly, really' when used as right-modifying coverb in an asymmetrical SVC; see e.g. (355). and (356). It can also have evidential meaning, as in (356).

(355) n = [gān də̄ bān] nɨ́ŋ kī lǣ ɲīm
1SG = go(a) see(a) be_clean(b) CL7.thing CL7 do(a).IPFV exit(c)
tǭ k-ɔ́ gū w-ɔ́
away(b) CL7-REL CL3/7.fire CL3-DET

'I will go to see clearly what is putting out this my fire.'

(356) yɛ̄ ń̄ = [nɨ́ŋ bā́n] yɛ̄ n = də̄ wú lā
COMP 1SG = want(c) be_clean(b) COMP 1SG = see(a) CL1PP DAT

'[She said]: I really want to see him.'

The verb **bā́n** 'clean; white' is also used as a main verb, as e.g. in (357).

(357) dʒǔ nǭ bɔ́ kə̀ lă kpɪ̄ y-ɔ̄ tō k-ɔ́
CL9.goat REL CL2 P3 make(a) die(b) CL9-REL CL7/8.day CL7-DET
ŋgɔ̄ kə̀ bān áná būbūbūbū
upon P3 be_white(b) like_that IDEO

◇'The goat which was killed on that day was completely white.'

9.2 Symmetrical SVCs

Following Aikhenvald (2006: 22), a serial verb construction is classified as a symmetrical serial verb construction (or symmetrical SVC) if all its components come from unrestricted classes. Unlike in asymmetrical SVCs, the order of components in symmetrical SVCs tends to be iconic, reflecting the temporal sequence of subevents. As Aikhenvald points out, symmetrical serial verb constructions are not 'headed' in the way asymmetrical ones are: all their components have equal status in that none of them determines the semantic or syntactic properties of the construction as a whole. A symmetrical SVC may contain an embedded asymmetrical SVC, as in (358), (359) or (360). Note that, in this case, the symmetrical SVC, strictly speaking, contains verbs from a restricted class, namely the minor coverbs in the embedded asymmetric SVCs. In Mundabli, symmetrical SVCs are rare as compared to asymmetrical SVCs. Only sequential events are expressed by symmetrical SVCs (§9.2.1). Fixed expressions which have the structure of symmetrical SVCs are described in §9.2.2.

Boundaries of symmetrical SVCs and embedded asymmetrical SVCs in the examples in this section are marked by square brackets. In asymmetrical SVCs, the major coverb is underlined.

9.2.1 Sequential events

Symmetrical serial verb constructions in Mundabli generally encode sequential events, i.e. they refer to a sequence of actions; see e.g. (358)-(360). In some cases, such as in (358), they may also have a purpose reading.

(358) yɛ̄ gbɨ̀ŋ dɨ́ [kɔ́ [yí mɛ́]] bɛ̄n, [...]
COMP CL9.leopard F1 catch(b) eat(b) finish(a) 2PL

'...that the leopard will catch and eat all of you, [...]'

(359) m̀, bə̄ kə́ tém kí́ áná, bə̄ mɨ̄ [tɛ̌m
yes IMPERS P1 shoot(b) CL7 like_that IMPERS CONSEC shoot(b)
[kwé ʃű]] ā fì-wān fí́ á́
return_from_bush(c) come(b) COM CL19-child CL19;3SG.POSS ADVLZ
fì-bwé
CL19-infant

'Yes. They shot it [the baboon] like that. They shot it and returned home with its little baby.'

(360) ā n=tʃyé wɔ̄, ń̄=kə̀ nɨ̌m yì̀ŋ, ń̄=kə̀
NEG 1SG=know(c) NEG 1SG=P3 sit(a) CL1/2.bush 1SG=P3
[[kwé ʃū] də̄] mū n-də̀-n, ń̄=kə̀
return_from_bush(c) come(b) see(a) CL18 INF-see(a)-INF 1SG=P3
tsɨ́ t-ɔ́ yì̀ŋ, m=mɨ̄
spend_night(b) DIST-DET CL1/2.bush 1SG=CONSEC
[[kwé ʃű] də̀] mù n-də̀-n
return_from_bush(c) come(b) see(a) CL18 INF-see(a)-INF

'I don't know. I stayed in the bush. I came home just to see them. I used to sleep there in the bush, and I came home just to see them.'

The symmetrical SVCs in (358) and (359) consist of major coverbs (**kɔ́** 'catch' and **tɛ̌m** 'shoot', respectively)[8] followed by asymmetrical SVCs with right-modifying coverbs (**yí mé** 'eat - finish' and **kwé ʃű** 'return home from the bush - come', respectively). In (360), the asymmetrical SVC **kwé ʃű** 'return home from the bush - come', also with a right-modifying coverb, precedes the second major coverb **də̀** 'see'.

9.2.2 Fixed expressions

This section deals with fixed expressions which have their origin in lexicalized symmetrical serial verb constructions. The verbs that make up these SVCs frequently co-occur. I am aware that it is problematic to assume that these are all symmetric SVCs. When one of the verbs does not occur on its own, it is hard to determine whether the whole SVC is symmetrical or not. I classify them here as symmetric SVCs because none of the verbs they consist of belongs to a closed class; however, the criteria which distinguish asymmetric from symmetric SVCs are somewhat problematic. The fixed expressions are listed in (361)-(364). In the headings they are provided without tone.

[8] In this paragraph, verbs are given with the tone patterns they bear in the relevant examples.

(361) **nɨm kɔm** 'wait':

Pɛ́ dzé yɛ̄ bī [nīm kɔ́m] ấyấn, yɛ̄ mɔ̀
Petrus say(b) COMP 1PL sit(a) wait(?) like_that COMP CL1.person
ɲàm, dʒíbrì ʃɛ̄ wū tāŋ tsʉ́
CL9.animal Gabriel want(a) CL1 buy(b) CL7/8.banana

'Pe said that we should wait, that animal man, Gabriel, wants to buy banana.'

(362) **fʊŋ mu** 'help':

hɛ́, yɛ̄ gbàm [fūŋ mū] mɨ̄
INTERJ COMP CL7.God ?? take(a) 1SG.NPBV

'Hey! God has helped me.'

(363) **bi ya** 'get up':

bī à [bī yə́] ntōntō yɛ̄ bī lɔ̄
1PL P2 exit(b) go_up(c) CL1/2.morning COMP 1PL go_to_bush(a)
fwɛ́n
clear(b)

'We got up in the morning in order to go to the bush and clear [the field].'

(364) **bɔŋ wu** 'pray':

kə́ ŋ=kə́ kán kpɔ́ ấ wū-dʒwē *first* nɨ́ŋ
COND 1SG=COND have(c) CL3.money ADVLZ CL3-much first CL7.thing
ŋ=ká lá k-ɔ́ kɨ́ dɨ́ yɛ̄ ŋ=ká [bɔ́ŋ wú]
1SG=F2 do(a) CL7-REL CL7 be(b) COMP 1SG=F2 call(a) hear(b)
gbàm
CL7a.God

'If I had a lot of money, the first thing I would do, I would pray to God.'

Fixed expressions derived from SVCs may contain verbs which are not attested on their own, such as **kɔ́m** in (361) and **fūŋ** in (362). However, it may also be the case that all verbs within a fixed expression are attested on their own, as in (363) and (364). In any case, the meaning of a fixed expression cannot be readily derived from the meaning of their parts. The meaning of **bi ya** in (363), for example, is 'get up', not just 'go out upwards'.

9.3 Expression of grammatical categories in SVCs

While some grammatical categories are only expressed once for the entire SVC, others are marked on each verb individually. Some categories also involve a combination of both.

9.3.1 Tone and mood in SVCs

Under certain circumstances, verbs which occur in non-initial position within a sequence of verbs may undergo sandhi phenomena. In particular, this is the case for imperative Class A verbs. For a detailed description of tone sandhi in imperatives, see §3.2.2.4. Declarative verbs are not subject to tone sandhi - at least not perfective verbs in the present/immediate past tense (P0). Other tenses and imperfective verbs have not been checked for tone sandhi. The tone pattern of perfective verbs in P0 declaratives is not altered when they occur within a sequence of verbs (see §8.5.1.8 for an overview of perfective verb tone patterns). Only phonetic effects can be observed, which are caused by adjacent tones and phrase boundaries (low tone spread is described in §3.4.2 and phrase-final vs. non-final tone patterns are described in §3.2.2.2). Due to a process referred to as low tone spread, perfective Class B verbs, which bear a superhigh tone in their canonical form, bear a rising tone when they are preceded by a low tone subject or by a Class A verb. In the case of Class A verbs, their position influences their tonal realization.

9.3.2 Perfective/imperfective aspect marking in SVCs

Verbs within an SVC may be perfective or imperfective. Perfective verbs, which represent the unmarked case, take the canonical stem form and are not explicitly marked in the gloss. In the unmarked case, all verbs within an SVC are in the perfective, as in (365). In imperfective aspect SVCs, the imperfective is marked on all verbs within SVC by specific tonal patterns, as in (366), and often by ablaut as well, as in the second verb in sequence in (366). For more on tone changes and ablaut in imperfective verbs, see §3.2.2.3 and §3.3.5, respectively.

(365) wù [tsē də̄] wān wū bɔ̀
CL1 search(a) see(a) CL1.child CL1;3SG.POSS FRUST

'She did not find her child.'

(366) wù kə̌ [tsé dyá] bɔ̀ tsʉ́ b-ɔ́
CL1 P3.HAB search(a).IPFV see(a).IPFV FRUST CL7/8.banana CL8-DET

'He was searching for the bananas but couldn't find them.'

It is unclear whether aspect may also switch from imperfective to perfective (or the other way around) within an SVC, as reported for Isu (Kießling 2011: 77-79).

9.3.3 Tense and polarity in SVCs

Tense is marked by a preverbal segmental tense marker (§8.2.1) and by specific verb tone patterns (§8.5.1.1). In the case of SVCs, a preverbal segmental tense marker precedes the complete verbal core, as in (367), and all verbs within the SVC take the appropriate tone pattern. Verbs within an SVC cannot take different tense markers.

(367) yɛ̄ gbɨ̀ŋ dɨ́ kɔ́ yí mɛ́ bɛ̄n, [...]
COMP CL9.leopard F1 catch(b) eat(b) finish(a) 2PL

'...that the leopard will catch and eat all of you, [...]'

Polarity is marked by the discontinuative marker **ā ... wɔ̄**, which embraces the verbal core. In the case of serial verb constructions, the marker **ā** precedes the initial element of the verbal core, which may be either the first verb of the sequence or a verb-core-initial adverbial. The marker **wɔ̄** follows the verbal core. To the best of my knowledge, verbs within SVCs cannot be individually marked for polarity. Thus, all verbs within an SVC take the same polarity value.

(368) tʊ̋m á bí-lō fán ā bɔ́m mṵ́
CL7/8.palm_village ADVLZ CL8-all here NEG agree(c).IPFV take(a).IPFV
wɔ̄ mɨ̄ kɛ̌ kɨ́-mó̱
NEG 1SG.NPVB even CL7-one

'None of the villages here agree with me – not a single one.'

9.3.4 Nominalization in SVCs

When SVCs are nominalized, only the first verb in the sequence takes a segmental marker. SVCs in infinitive constructions and in the ability construction are treated in §9.3.4.1 and §9.3.4.2.

9.3.4.1 Infinitive constructions involving SVCs

When an SVC occurs in the infinitive, as e.g. in the progressive construction[9] in (369), the segmental infinitive marker is affixed to the first verb of the sequence. All verbs within the SVC take the tone patterns characteristic for infinitives; see Table 8.9 in §8.4.1 for an overview of infinitive verb tone patterns.

[9]For more on progressive constructions, see §8.4.1.3.

(369) wù fă ā [n-kyɛ̄ kwō ʃì]
CL1.PVB be_occupied(b) COM INF-look(c) enter(c) go_down(a)
nɨ́ŋ wù lɛ̄ k-ɔ́ kɨ́̌
CL7.thing CL1.PVB make(a).IPFV CL7-DET CL7.NPVB

'It [the owl] was looking down on what he [the child] was doing.'

9.3.4.2 Ability constructions involving SVCs

In the ability construction (see §8.4.2), the first verb of a verb sequence also hosts the nominalizing prefix characteristic of the ability construction, as in (370). All verbs of the sequence bear the tone pattern characteristic for nominalized verbs in ability constructions.

(370) mə́ kpə̄ ŋgɨ̄ lɔ̄ ɲī fɨ́̌,
CS.QUOT CL1.wife CL1;1SG.POSS go_to_bush(a) leave(a) pass(b)
mə́ ā n=dɨ́̌ wɔ̄ [kə̄-gān mū] ā́ mɨ́ ndʒɛ̄n
CS.QUOT NEG 1SG=be(b) NEG ABIL-go(a) take(a) ADVLZ 1SG alone

'[I said]: my wife has gone to the bush, [I said] that I cannot go and take [the corn] on my own.'

9.4 Verbal adverbs

Verbal adverbs form part of the verbal core, as in (371), as opposed to manner adverbs (see §10.1) and adverbial clauses, which are generally found at the end of an utterance. The verbal adverb **mɛ̌** 'only' in (371) occurs at the right edge of the verbal core, preceding the post-core negative marker **wɔ̄**. In (371), the proximate future (F1) marker **dɨ́̌** and the pre-core negative marker **ā** are fused. The inner brackets mark the boundaries of the verbal core, the outer brackets mark those of the verbal complex.

(371) n=[dā́ [yí mɛ̌] wɔ̄] ɲām
1SG=F1;NEG eat(b) only NEG CL8.fufu

◇'I will not only eat fufu.'

Table 9.1 contains a non-exhaustive list of verbal adverbs. While the great majority occur at the right edge of the verbal core, I also found one verbal adverb which occurs in core-initial position. First the verb-core-final verbal adverbs are treated (§9.4.1), and then the verb-core-initial adverb **sɛ́n** (§9.4.2).

In analogy with Kießling's (2011) analysis of what he refers to as 'hybrid adverbials'[10] in Isu (West-Ring), I assume that at least part of the verbal adverbs have their origin in the minor coverbs which they have developed out of

[10]I use the term 'verbal adverbs' for the equivalent of Kießling's 'hybrid adverbials' in Mundabli in order to stress their similarity to verbs.

simplex (perfective)	position
tí 'surprisingly'	core-final
fúbɔ̌, bɔ̌ 'also'	core-final
mě 'only'	core-final
dzə́ŋá, **dzɔ̄ŋ** 'again'	core-final
bá 'exactly'	core-final
tá 'only'	core-final
sén 'then, subsequently'	core-initial

Table 9.1: Verbal adverbs

through grammaticalization. However, this assumption is highly speculative with regard to Mundabli.[11]

In order for a verb-like word which forms part of a complex verbal core to be assigned to the group of verbal adverbs rather than being analyzed as coverb in an asymmetrical SVC, it must meet at least one of the following two criteria:[12] The first criterion concerns the tonal pattern of the verb. While verb stems inflect tonally, depending on their tense/mood/aspect, adverbials do not exhibit comparable tone changes. The second criterion is syntactic independence, i.e. the ability to occur without another verb. Unlike adverbials, verbs can stand alone, as the main and only verb of a clause.

I have chosen to apply two criteria rather than just one, because neither criterion suffices on its own. Although they are analyzed as verbs, I have no evidence that some of the coverbs listed in the previous sections are attested as independent main verbs. On the other hand, coverbs of tone class C do not inflect tonally and thus do not pass the test for tonal inflection. The distinction between coverbs and verbal adverbs is not always clear-cut. More detailed research would probably result in a more fine-grained distinction, although a fuzzy boundary between the two is likely to remain (see Kießling (2011: 241) for a comparable situation in the Ring languages).

The remainder of this section describes verb-core-final (§9.4.1) and verb-core-initial adverbials (§9.4.2).

9.4.1 Verb-core-final verbal adverbs

As Table 9.1 shows, the majority of verbal adverbs occur in verb-core final position. The current section treats the listed verb-core final verbal adverbs in turn. They are listed by form and semantics.

[11] For a detailed account of the origin of verbal adverbs or 'hybrid adverbials' in Isu, which this assumption is based on, see Kießling (2011: 241).

[12] An additional criterion for verbal status may be the existence of perfective forms involving ablaut as described in §8.1.3. However, for the current study, the two listed criteria should be sufficient.

9.4.1.1 tí ‘surprisingly’

While the verbal adverb **tí** bears a high tone and is thus tonally not distinguishable from a verb of the tonal class C, **tí** does not exist as an independent verb and is therefore analyzed as an adverbial. In all attested examples, i.e. (372)-(375), **tí** occurs at the end of the verbal core. In (375), it further precedes the postverbal negation marker **wɔ̄**. The adverb **tí** is used to express astonishment or counter-expectancy.

(372) mɨ̄ wān [gàn fɨ́ tí] nə̄, mɨ̄ wān [gàn
1SG CL1.child go(a) pass(b) surprisingly where 1SG CL1.child go(a)
fɨ́ tí] nə̄
pass(b) surprisingly where

‘Where is my child going? Where is my child going?’

(373) bī bú gàn wú lā, yɛ̄ nǐ́, à [gwàn
1PL ask(b) go(a) CL1PP DAT COMP CL1/2.mother 2SG be_sick(a)
tí] mān yɛ̄
surprisingly what QUOT.Q

‘We ask her: mother, why are you ill?’

(374) bì bú gàn bɔ̌ lā, yɛ̄ bɛ̄n [lǽ dzí̱
1PL ask(b) go(a) CL2PP DAT COMP 2PL do(a).IPFV walk_around(b).IPFV
tí] mān
surprisingly what

‘We are asking them: What are you doing [aimlessly]?’

(375) bɔ̋ dzé ʃú̱ bí lā yɛ̄, ɲwɔ́m
CL2 speak(b) come(b).IPFV 1PL.PP DAT COMP CL2.husbands
kwɛ̋ ā [fyá tí] wɔ̄ bī
CL3/7a.home_village NEG give(b).IPFV surprisingly NEG 1PL

‘They are telling us: The local men do not give us [anything].’

9.4.1.2 fúbɔ̌, bɔ̌ ‘also’

The adverb **fúbɔ̌** (see (376)-(378)) translates as ‘also’. It has a tone pattern which does not fit in with any of the verb tone classes. Its tone pattern never changes either, unlike those of verbs of Class A and B. This and the fact that it is not attested as an independent verb support its status as an adverb.

(376) lòŋ b-ɔ́ yɨ́ nɨ̀m tí bǐ (e), bī
CL8.suffering CL8-that eat(b).IPFV sit(a) surprisingly CL8 INTERJ CL8
[yɨ́ fúbɔ̌] bī (o)
eat(b).IPFV also 1PL INTERJ

'Suffering is eating them up and it is also eating us up.'[13]

(377) à kyɛ́ wān nɛ̌ yū (e),
2SG look(c) CL1.child CL1/2.mother;2SG.POSS CL9/10.buttock INTERJ
mɔ̀ dzō [kyɛ́ fúbɔ̌] á yū
CL1.person CL1.other look(c) also 2SG.PP CL9/10.buttock

'If you look at your siblings buttocks, somebody will also look at your buttocks.' (meaning: "If you talk against your brother or your sister, somebody will also talk against you.")

(378) tɔ́ kə̀ dɨ̄ tǐ wū kə̀ [kwɛ́ fúbɔ̌],
there P3 be(b) CL1.father CL1.POSS P1 return_from_bush(c) also
tǐ wū [tʃú tsú bɔ̌] wān w-ɔ̄
CL1.father CL1POSS come(b) beat(b) also CL1.child CL1-DET

'When her father had also returned from the bush, her father came and also beat the child.'

The first syllable of the adverbial may be dropped so that the adverb is shortened to **bɔ̌**, see e.g. (378).

9.4.1.3 mɛ̌ 'only'

The adverb **mɛ̌** translates into English as 'only' or 'just'. Although it is segmentally identical with the verb **mɛ̂** 'finish', I do not think that the two are related. Whereas the verb **mɛ̂** 'finish' exhibits the characteristic tonal inflections of a Class A verb, the adverb **mɛ̌** 'only' always retains the same tone pattern. Furthermore, **mɛ̌** 'only' is not attested as main verb. Therefore, it is analyzed as an adverb.

(379) bɔ́ [dzɨ́ mɛ̌] mű́ntù mɨ́ mű́ntù mɨ́
CL2 travel(b).IPFV only CL7/8.car in CL7/8.car in

'They only ever travel by car.'

(380) à [mū mū mɛ̌] ŋgī
2SG take(a) drink(b) only CL6.water

'You should only drink water.'

[13]The Class 8 pronoun is used to refer to groups of people in an abusive way.

(381) n = [də mɛ̌] Pɛ́ kə̀ kwɔ̄ gbə́ áná mwàŋ
1SG = see(a) only Petrus P3 enter(c) house.LOC like_that IDEO

'I just saw Pe entering into the house'

9.4.1.4 dzɔ̋ŋɔ́∼dzɔ̄ŋ 'again'

The adverb **dzɔ̋ŋɔ́∼dzɔ̄ŋ** (see (382)-(384)) marks repetition of an action that has been carried out earlier and can be translated into English as 'again'. It does not fulfill the test for syntactic independence as it always co-occurs with another verb. It also always has the same tone pattern, which consists of a superhigh tone on both syllables (rather than a high tone, like a Class C verb). Therefore, it clearly qualifies as an adverb rather than a verb.

(382) wù [gān bɔ̄ŋ ʃí dzɔ̋ŋɔ́] tɛ́là mwɔ́m
CL1 go(a) call(a) go_down(a) again Tela Mwom

'She went to call Tela Mwom again.'

(383) bɔ̋ [gān mū ʃú dzɔ̋ŋɔ́] kpɛ̀
CL2 go(a) take(a) come(b) again CL3.pot

'They went again to take a pot.'

(384) dɔ̄ w-ɔ́ [ʃɨ̋ŋ fɨ́ dzɔ̋ŋɔ́]
CL3.beans CL3-DET fill/be_full(c) pass(b) again

'The beans were again more than the pot.'

Note that this adverb has an alternative monosyllabic form **dzɔ̄ŋ**, which bears a mid tone, instead of a superhigh tone like the bisyllabic form; see (385)-(386).

(385) à ʃá [dzɛ̄ dzɔ̄ŋ]
2SG PROHIB say(b) again

'Don't say [that] again!'

(386) dɨ̌ kì-mān nɔ̩̄ à [yɛ̄ kɛ̄ dzɔ̄ŋ] k-ɔ́ kɨ́ ɨ́
be(b) CL7-what SUBORD 2SG start(a) return(c) again CL7-REL CL7 LOC
t-ɑ́n mɨ̄
DIST-here in

'What is it that you are starting again in here?'

It is still unclear what exactly determines the choice between the bisyllabic and the monosyllabic form of the adverbial and why the tonal patterns of the two are different.

9.4.1.5 bā́ 'exactly'

The adverb **bā́** (see (387)-(389)) roughly translates into English as 'exactly'. It always bears a superhigh tone, whereas verbs of Class C always bear a high tone. Verbs of other classes change their tonal pattern. Furthermore, **bā́** never stands alone but always accompanies a verb. In all examples, it occurs at the end of the verbal core.

(387) à mɨ̄ [nɨ̀m ʃì bā́] dɛ̀ nǭ bə̄
2SG CONSEC sit(a) go_down(a) exactly CL9.place SUBORD IMPERS
kpā f-ɔ́ gù, ā fì-ŋgī wá
light_fire(a) PROX-REL CL3/7a.fire COM CL19-CL6.water 2SG.PP
kə̀n
hands.LOC

'Then (you will) sit down exactly where they make fire, with a bit of water in your hand.'

(388) kpé w-ɛ̄n, [dɨ̌ bā́] mān à mwē k-ɔ́
CL1.woman CL1-DEM.PROX be(b) exactly what 2SG be_sad(a) CL7-REL
tō ā́ bí-lō yɛ̄
CL7/8.day ADVLZ CL8-all QUOT.Q

'Woman, why are you sad every day?' (literally: This woman, what exactly is it that you grieve everyday?)

(389) n=tə́ kə̀ mű ʃū, m=[bí yə̄ bā́]
1SG=VER.FOC P3 take(a) come(b) 1SG=exit(b) go_up(c) exactly
tʃî, n=tú yə̄ ŋgī m-ɔ́
on_top 1SG=scoop(b) go_up(c) CL19.water CL19-DET
sūŋ mɨ̄
CL9/10.calabash in

'I then brought, I got up, really up, I carried up the water in a bowl.'

9.4.1.6 tá 'really'

The adverbial **tá** roughly translates as 'really'. It bears a high tone just like a Class C verb. However, it cannot occur without another verb, which gives reason to believe that it has adverbial status. Examples for the use of **tá** are found in (390) and (391).

(390) bɛ̄n nɛ́n láŋ *because* bɛ̄n nɨ́ŋ yɛ̄ bɛ̄n [yī tá]
2PL maybe be_happy(c) because 2PL want(c) COMP 2PL eat(b) really
ā́ bɛ́n ndʒɛ̄n
ADVLZ 2PL.PP alone

'Maybe you guys are happy because you just want to eat alone.'

(391) bī mɨ́ nɨ̀m fáńɨ́ (ē), bī dzé nɨ̀m tí mɛ̌
1PL CONSEC sit(a) here? INTERJ 1PL speak(b) sit(a) surprisingly only
yɛ̄, lʊ̀ŋ bɔ́ [dɨ́ tá mɛ̌] yɛ́n lā, bī kwó
COMP CL8.suffering CL8-DET be(b) really only Y. DAT CL8 enter(c)
fúbɔ̌ bí ŋgɔ̄
also 1PL.PP upon

'And we are sitting here, saying that only Yain is suffering, but the suffering has also attacked some of us.'

In (390), **tá** stands at the right edge of the verbal core, while in (391), it is followed by the verbal adverb **mɛ̌** 'only'.

9.4.2 The verb core-initial adverb sɛ́n 'then'

My data contain only one verbal adverb which stands at the beginning rather than at the end of the verbal core, namely **sɛ́n** 'then' (see (392)-(394)). The adverbial **sɛ́n** translates into English as 'then, subsequently'. It always bears a high tone and, on first glance, it would appear to be a verb of tone class C. However, it cannot stand on its own without a subsequent verb and is therefore analyzed as an adverb.

(392) n = [sɛ́n bó] má à, dɨ́ nɨ́ŋ dǫ́m à fə̄ *plan*
1SG = then ask(b) CS.QUOT Q, be(b) CL7.thing some 2SG P1 plan
ɛ̄
QUOT.Q

'I then asked [him]: Is it something that you planned?'

(393) m-mù-n nǭ mấnfrè kə̀ mŭ fɨ̄ bī w-ɔ̄
INF-take(a)-INF SUBORD M. P3 take(a) pass(b) exit(b) CL1-REL
tʃə́m w-ɔ́ ɲwɛ́n, dăn ā ntŭŋ [sɛ́n tʃú kɔ́] pɛ́
CL3/7a.axe CL3-DET now D. COM N. then come(b) hold(c) P.
ɲwɛ́n
now

'Just as Manfred took out the axe now, Dan of Ntung then came and held Pe, now.'

(394) w-ɔ̄ *time* nǭ kpə̄ ŋgɨ̄ [sɛ́n tʃú
CL1-DEM CL1/2.time SUBORD CL1.wife CL1;1SG.POSS then come(b)
kɔ́ kān kwō mɛ̌] mɨ̄ sə̄m ɲwɛ́n áná
catch(b) hold(c) enter(c) only 1SG heart/middle.LOC now like_that

'That was the time that my wife came and held me in the middle now, like this.'

CHAPTER 10

Other word classes

This chapter deals with all those word classes which have not been dealt with in the preceding chapters: adverbs (§10.1), adpositions (§10.2), temporal deictics (§10.3), spatial deictics (§10.4), ideophones (§10.5), the interjections 'yes' and 'no' (§10.6) and other interjections (§10.7).

10.1 Adverbs

This section deals exclusively with clause-final manner adverbs which are introduced by the adverbial marker **á̋**. In certain cases, manner can also be expressed by serial verb constructions (§9.1.4). Furthermore, there is a second type of adverbs called verbal adverbs. They are dealt with in §9.4. Finally, ideophones may also fulfill the function of manner adverbs. Ideophones are treated in §10.5.

Manner adverbs modify the meaning of the verb (cf. Givón (1984: 77,78)). They always occur in clause-final position, introduced by the particle **á̋** which is glossed 'ADVLZ' and may also introduce adverbial phrases. Clause-final manner adverbs are usually derived. They may be based on adjectives or they may be based on reduplicated monosyllabic stems, mostly of unclear origin, as in (395). The tonal pattern of manner adverbs with reduplicated stems is always Low - Low..

(395) m=bwán mí gbə̀ á̋ lɔ̀~lɔ̀, kɛ̌
1SG=get_wounded(a) 1SG house.LOC ADVLZ empty~RED even
n=ká tʃyé bɔ̀ níŋ nɔ̰̄ ń̋=lə̀ k-ɔ́ kí̋
1SG=HAB know(c) FRUST CL7.thing SUBORD 1SG=do(a) CL7-REL CL7

'I got wounded in my house for no good reason. I don't even know what I had done.'

Monosyllabic adverbials may be repeated several times for emphasis, as in (396). The repetition in this case is not to be confused with the reduplication found in other adverbs. This is confirmed by the fact that the tone here is not low, as in the latter (see above). The adverbial **dzú** in this example is probably related to the postposition **dzō** 'under'.

(396) ǹ=kwóm gān á̋ dzú dzú dzú, ʃī
1SG=creep(c) go(a) ADVLZ down down down CL3/7a.storm
k-ɔ́ kɔ̰́ ʃú mɪ̄ ā kē á̋ká
CL7a-DET catch(b).IPFV come(b).IPFV 1SG COM CL9/10.hand like
kɔ̰́ mbɛ̂
catch(b).IPFV CL2.person

'I crept [going] down [very low]. The storm was catching me with its hands as if it were people catching [me].'

The adverb **mɔ̰̀~mɔ̰̀** 'very much' (397) could be derived from the numeral **mɔ̰̀** 'one', however, its synchronic meaning is not related to the numeral.

(397) wù sé dzǽ á̋ mɔ̰̀~mɔ̰̀
CL1 be_hot(c) CL7.mouth ADVLZ one~RED

'She is very active!' (Lit.: She is very hot in her mouth.)

10.2 Adpositions

Mundabli has prepositions and postpositions. However, postpositions far outnumber prepositions. Prepositions are discussed in §10.2.1 and postpositions in §10.2.2.

10.2.1 Prepositions

There are only two prepositions: **ā** 'COM', which unites comitative and instrumental function and is roughly equivalent to English 'with' and the general locative preposition **ǐ**, which is usually optional and which always co-occurs in combination with a more specific locative or benefactive postposition within a circumpositional construction. In the examples, pre- and postpositions are underlined and their NP complement is enclosed in square brackets. The prepositions and their glosses and meanings are shown in Table 10.1. In the examples

in this section, pre- and postpositions are underlined and their NP complement is enclosed in square brackets.

preposition	gloss (meaning)
ā	'COM' ('with', comitative or instrumental)
ǐ	'LOC' (general locative marker)

Table 10.1: The two prepositions with glosses and meanings

10.2.1.1 The comitative/ instrumental preposition ā 'with'

The preposition **ā with** heads a prepositional phrase and may have comitative or instrumental function. Class pronouns for noun classes other than Class 1 and 9, which normally bear a superhigh tone in non-preverbal position, are realized with a LH rising tone when they are the object of the comitative preposition, as in §6.1.3.

The comitative phrase usually stands at the end of a clause, as in (398) and (399), but exceptions are possible; see (400).

(398) wù tʃú ā [mbǐ́], bɔ́ mú
CL1 come(b) COM CL6.palm_wine CL2 drink(b)

'He came with wine [and] they drank.'

(399) mɔ̀ w-ɔ̄ yǐ́ ndʒɔ́mɲyīn ā [kē yǐ́]
CL1.man CL1-DET eat(b) CL8.food COM CL10.fingers CL10;3SG.POSS

◇'The man eats the food with his hand.'

(400) ń̄=lɔ̀ ā [mbɔ̀ŋ mǐ́ŋ] yɨ̀ŋ
1SG=go_to_bush(a) COM CL1/2.cow(s) CL2;1SG.POSS CL1/2.bush

'I am going to the bush with my cows.'

In (400), the comitative phrase directly follows the verb, preceding the locative adjunct **yɨ̀ŋ** 'bush'.

The preposition **ā** also occurs in a certain construction with a transitive verb. Here, the direct object represents the benefactor of the action and the preposition **ā** introduces the undergoer in the form of an oblique argument, as in (401).

(401) yɛ̄ gǎn tsē mɨ̄ ā [ntsɔ́m mū-ŋ-gɛ̄-ŋ-gɛ̄]
COMP go(a) find(a) 1SG COM CL6a-soil CL6a-N-be_red-RED

'...: Go and find me some red soil!'

The same may be expressed by a different construction in which the undergoer is the direct object and directly follows the verb while the recipient is embedded in a circumpositional construction with the general locative preposition **ǐ́** preceding it and the dative postposition **lā** following it. For more on this construction, which is characteristic for the verb 'give', see §11.1.2.

10.2.1.2 The locative preposition ǐ́

The general locative preposition **ǐ́** is always part of a circumpositional construction in which it co-occurs with a semantically more specific postposition. The postpositions with locative semantics which co-occur with the preposition **ǐ́** include **wɔ̄** 'on' in (402) and **mɪ̄** 'in', and even derived postpositions, such as **sê** 'house_front.LOC' and the benefactive postposition **lā** 'for'; see (404) and (405). Its use is generally optional.

(402) kə́ ŋ=kə́ kpɨ́ f-án bɛ̄n kə́ mū tʃű ā
COND 1SG=COND die(b) PROX-here 2PL COND take(a) come(b) COM
dʒám, bɛ̄n kə́ mɪ̄ dʒì ʃì ǐ́
CL7/8.calabash_plant 2PL COND CONSEC put(a) go_down(a) LOC
[dzàm ŋgɪ̄] wɔ̄
CL9/10.grave CL9;1SG.POSS on

'If I die here, you will bring a calabash seed, and then you will plant [it] on my grave.'

(403) wù də̄ bə̄ kə gɨ́ tɛ̄ ǐ́ [gbɔ̄]
CL1 see(a) IMPERS P3 put(b) CL7/8.walking.stick LOC CL3.house
sê
front.LOC

'She saw that someone had put a walking stick in front of the house.'

(404) kpé w-ɔ̄ dʒyè ndʒɔ́myīn ǐ́ [**mɔ̀ w-ɔ̄**] **lā**
CL1.woman CL1-DET cook(a) CL8.food LOC CL1.man CL1-DET DAT

◇'The woman cooks food for the man.'

(405) ɲwə́m wān wū dzé ǐ́ [**gbàn**
CL1.husband CL1.child CL1;3SG.POSS say(b) LOC CL1/2.in-law
wū] **lā** yɛ̄
CL1;3SG.POSS DAT COMP

'Her child's husband said to his in-law: ...'

Certain speakers sometimes pronounce the locative preposition **á́** rather than **ǐ́**. This may be due to contact influence from Missong, where the general locative preposition has the form **á** (Lovegren 2013: 279ff.).

10.2.2 Postpositions

All postpositions are monosyllabic. Postpositions are often historically derived from nouns and in many cases, they are segmentally identical with the latter (see §10.2.2.1). Table 10.2 provides a list of all known postpositions and their glosses. A comparison of postpositions and cognate nouns is found in §10.2.2.1.

postposition	gloss
ʃī	'in front of'
dzə̄m	'behind'
gyɨ́ŋ	'next to'
dzō	'under'
wɔ̄	'on'
mɪ̄	'in', 'inside'
yà	'in' (rare)
ŋgɔ̀	'upon, at, on, by', 'with' (instrumental, comitative)
yū	'behind' (following someone)
sə́m	'in the middle of'
gbə́	'in house', 'at home'
sê	'in front of' (only with dwelling)
kúŋ	'behind' (only with dwelling)
kú	'in home village'
kə̀n	'in hands'
fɔ̄	'on head'
dzɛ́	'in mouth'
wúŋ	'in nose'
kúŋ	'around neck'
bān	'around waist'
lā	'for'

Table 10.2: comprehensive list of postpositions with glosses

Postpositions head postpositional phrases. They directly follow the noun phrase they head and they usually encode spatial location, as in (406)-(407).

(406) sèsǎŋ dā kwō wù yɔ́ kwō [bwē] yà
CL9.spider braid(a) climb(c) enter(c) CL1 enter(c) CL3a.sky in

'The spider braided [the bridge] until it reached heaven.'

(407) *bìkɔ́* kpɔ́ wū-dʒwē dɪ́ ná, wū dɪ́ ā
because CL3/7a.money CL3-much/many be(b) as CL3 be(b) COM
sə́tàn [wǔ] yū ā́ mò̩~mò̩
CL1/2.satan CL3.PP behind ADVLZ one~RED

'Because a lot of money always has many devils behind it.'

All postpositions may co-occur with the optional locative marker **ǐ́**, as in (408); see §10.2.1.2.

(408) wù ɲēn kwō ǐ́ [dzɛ́] dzō
CL1 hide(a) enter(c) LOC CL3/7a.rock under

'He hid under a rock.' (lit.: He hid entered rock under.)

Most postpositions have static spatial semantics. They express location relative to their complement NP. Direction of movement is not encoded by adpositions, but instead by verbs like 'come'/'go', 'ascend'/'descend', 'enter'/'exit' etc., which form part of serial verb constructions (see Chapter 9 for more on serial verb constructions).

The postposition **kə̀n** 'hands.LOC' can be used in a metaphorical sense, as exemplified in (409) and in (410). In (409), **kə̀n** is translated as 'away from'. A better translation would probably be 'from the clutches of'. Recall that direction is never marked on the locative phrase. Thus 'from the hands' is no different from 'in the hands'.

(409) wù yó tí [kū y-ɔ̄] kə̀n
CL1 run(c) surprisingly CL9.ratmole CL9-DET hands.LOC

'He ran away from the rat mole!'

(410) kɔ̄ kə́ yó tʃū [dzɔ̄m] kə̀n bɔ́ mɨ̄
Koshin P3 run(c) come(b) CL9/10.war hands.LOC CL2 CONSEC
tʃǔ kwó kúŋ bǐ́ yə́
come(b) enter(c) hunt(c) go_out(b) go_up(c)

'The Koshin people ran away from war. They then came in[to this area] and chased away [the Nshwen].'

Only two postpositions are also used in a non-spatial sense: the postposition **ŋgɔ̄** and the postposition **lā**. The former may be used in a spatial sense, as in (411), or in a temporal sense, as in (412).

(411) wē w-ɔ́ bán [mɨ́] ŋgɔ̄ ā́ kə̄-lī
CL3a.sun CL3a-DET shine(b) 1SG.PP upon ADVLZ NMLZ-strong

'The sun is shining on me strongly.'

(412) mɔ̀ wù kə́ dzé w-ɔ̄ dʒū̀ gbə̀m [tō
CL1.man CL1 P3 say(b) CL1-REL CL3/7a.word CL7b.God CL7/8.day
k-ɔ́] ŋgɔ̄ kə́ dɨ̄ pə̌ pǐ́tà kyə̌
CL7-DEM.DIST upon P3 be(b) Pa P. K.

'The person who was preaching on that day was Pa Peter Kia.'

It may also mark an instrumental noun phrase, as in (413). Example (413) is complicated by the fact that the postposition is part of a relative clause and its object NP is omitted, so that the postposition is stranded. When the object of the postposition **kí** is realized, the postposition bears its usual mid-low falling tone. When it is absent, as in (413), the high tone of the omitted object is realized on the postposition, replacing the tone of the postposition itself.

(413) dǐ [sɨŋ mwān y-ɔ̄] à lɛ̄ y-ɔ̄ ŋgɔ́
be(b) CL9.knife CL9.which CL9-DET 2SG do(a).IPFV CL9-REL upon

◇'Which knife do you use?' (lit.: It is which knife that you do with?)

The non-spatial postposition **lā** 'for' marks the recipient of an action, i.e. a dative/benefactive argument, as in (414). This construction is discussed in more detail in Chapter 11.

(414) kpé w-ɔ̄ dʒyè ndʒɔ́myīn ǐ́ [**mɔ̀ w-ɔ̄**] **lā**
CL1.woman CL1-DET cook(a) CL8.food LOC CL1.man CL1-DET DAT

◇'The woman cooks food for the man.'

10.2.2.1 Postpositions vs. nouns

Many, perhaps all, postpositions in Mundabli are historically derived from nouns. Often, the origin nouns refer to body parts or other meronyms. Such postpositions may coexist with a noun of identical segmental shape or with a noun similar in shape. Table 10.3 compares postpositions with the nouns they are derived from.

While postpositions are derived from nouns and are in some cases even segmentally identical with them, they differ from the latter in several regards. Specifically, they differ in syntactic behavior, and the tonal pattern of a postposition is often different from that of the corresponding noun, as in **kúŋ** 'around neck' vs. **kŭŋ** 'neck'. The syntactic behavior of postpositions is different from that of nouns. This is illustrated with the noun **yū** 'buttocks' in (415) and the postposition **yū** 'behind' in (416) which are formally identical, but differ in syntactic behavior.

(415) yū yǐ́
CL9/10.buttocks CL10;3SG.POSS

◇'his buttocks'

(416) wù bāŋ [kwā kǐ́ k-ɔ́] yū
CL1 follow(b) CL7.frog CL7;3SG.POSS CL7-DET behind

'He followed his frog.'

postposition	postposition gloss	noun	noun gloss
dzə̄m	'behind'	**dzə̄m**	'back'
yà	'in'	**yà**	'intestines'
yū	'behind'	**yū**	'buttock'
sê	'in front of (dwelling)'	**sê**	'front side of dwelling'
kúŋ	'behind (dwelling)'	**kúŋ**	'back side of dwelling'
gbɔ́	'in house, at home'	**gbɔ̄**	'house'
kú	'in home village'	**kwé**	'home'
fɔ̄	'on/at head'	**fɔ̄**	'head'
kàn	'in hands'	**kán** (v)	'hold'
dzǽ	'in mouth'	**dzǽ**	'mouth'
wúŋ	'in nose'	**wűŋ**	'nose'
kúŋ	'around neck'	**kŭŋ**	'neck'
bān	'around waist'	**bān**	'waist'

Table 10.3: Comparison of postpositions and cognate nouns

When a noun is modified by another NP in a possessive construction, the resulting noun phrase is head-initial, i.e. the possessum precedes the possessor, as in (415) where the noun **yū** 'buttocks' is followed by a possessive pronoun. A postpositional phrase, on the other hand, is head-final, i.e. the noun phrase precedes the postposition, as in (416), where the postposition **yū** 'behind' is preceded by the dependent noun phrase **kwā kí̋ k-ɔ́** 'that his frog'.

Finally, postpositions have a specific tonal effect on dependent pronouns. Pronouns which are the object of a postposition always bear a high tone. Their segmental shape is the same as that of independent pronouns (see §6.1 for details).

While there is a clear case for postpositions to be considered a different word class from nouns, grammaticalization is clearly underway with some postpositions.

10.3 Temporal deictics

Temporal deictics allow the speaker to specify the time of an event more precisely than grammatical tense. They are adjuncts, and their position within the sentence is relatively flexible. Table 10.4 contains a few selected temporal deictics.

Examples of temporal deictics are given in (417)-(422). They usually occur at the end of the clause, as in (417), but not necessarily so, see e.g., (419) where **ɲwɛ́n** 'now, today' is followed by a manner adverb. The temporal deictic in each example is underlined.

temporal deictic	gloss
ɲwén	'now, today'
ɲántɔ̄	'yesterday'
ŋgwé	'tomorrow'
tywőm	'long time away, past or future'

Table 10.4: Selected temporal deictics

(417) mɔ̀ w-ɔ̄ táŋ tsʊ́ b-ɔ́ ɲwɛ́n
CL1.person CL1-DET buy(b) CL8.banana CL8-DET now

'The man bought the banana now.'

(418) wù fə̀ ā gàn wɔ̄ dʒwō ɲwɛ́n
CL1 P1 NEG go(a) NEG CL1/2.stream today

'She did not go to the stream today.'

(419) yū y-ɔ̄ bò ɲwɛ́n ā kī-lī
CL9/10.buttock CL9-DET be_bad(a) now ADVLZ NMLZ-be_strong(a)
(e)
INTERJ

'Sex is very dangerous these days.'

(420) wù à tʃǔ ɲántɔ̄
CL1 P2 come(b) yesterday

◇'He arrived yesterday.'

(421) wù kā̀ ʃí ŋgwé
CL1 F2 spend_day(b) tomorrow

◇'He will spend the day at home tomorrow.'

(422) *só* ń=tʃyé yɛ̄ mɪ̄ wān kə̀ kpɪ̄ tywőm
so 1SG=know(c) COMP SG CL1.child P3 die(b) long_ago

'So I know that my child died long ago.'

10.4 Spatial deictics

Spatial deictics have not been elicited in detail. However, some of them occur commonly in natural speech. These include **tʃɪn**, **fɔ** and **tɔ**, all of which translate roughly as 'there'. The deictics are given here without tones because their tones may vary. Historically, **fɔ** and **tɔ** must have functioned as deictic

demonstratives, with the demonstrative root **-ɔ́** and the agreement prefixes **f-** (PB class 16) and **t-** (PB class 17). However, synchronically, they do not modify nouns. Instead, they are adjuncts.

Historically the difference was probably one between closeness (**fɔ**) and distance (**tɔ**). Examples (423)-(426) contain instances of **fɔ**, **tɔ** and **tʃɪn**. The deictic in the examples is underlined.

(423) kwó gān t-ɔ́ mɪ̄
enter(c) go(a) DIST-DET in

'Go in there!'

(424) wān w-ɔ̄ yə́m mɛ̌ t-ɔ́ gbɔ̄ kúŋ
CL1.child CL1-DET sing(c) only DIST-DET CL3.house behind_house.LOC

'The child continued to sing behind the house.'

(425) tō mɪ̄ wé ʃi̱ tí (e),
CL7/8.day CONSEC dawn(b).IPFV go_down(a).IPFV surprisingly INTERJ
wù kū nīm f-ɔ́ gbə́, (o)
CL1 cry(a) sit(a) PROX-there house.LOC INTERJ

'When day has broken, she is there in the house crying.'

(426) ŋkwīn nǭ bɔ́ nɪ̀m w-ɔ̄ wú/tʃʃín wɔ̄
CL1.hill SUBORD CL2 live(a) CL1-REL CL1PP/there on

◇'the hill on which they live'

fɔni and **tɔni** are two other forms used as spatial deictics and derived from **fɔ** and **tɔ**, see e.g. (427)-(429). Unlike **fɔ** and **tɔ**, which function as nominal modifiers or represent a whole NP, the locative adverbials **fɔni** and **tɔni** (also **fani** and **tani**) are adverbials and generally occur in clause-final position. They often co-occur with prenominal **fɔ tɔ**, **fán** or **tán**, as in (428)[1] and (429).

(427) bī mí nɪ̀m fə́ní (ē), bī dzé nɪ̀m tí mɛ̌
1PL CONSEC sit(a) here INTERJ 1PL speak(b) sit(a) surprisingly only
yɛ̄, lòŋ bɔ́ dɪ́ tá mɛ̌ yɛ́n lā, bī
COMP CL8.suffering CL8-DET be(b) specifically only Y. DAT CL8
kwó fúbɔ̌ bí ŋgɔ̄
enter(c) also 1PL upon

'And we are sitting here, saying that only Yain is suffering, but the suffering has also attacked some of us.'

[1]The italics on ***mɔ́sí*** 'must' show that the word is a borrowing. Obligation is usually expressed by a different construction.

(428) Dyā̋ kə̀ dzē tʃɨ́ń, ń-kə̀ dɪ̄ ná tʃɨ́ń t-ɔ́̋
D. P3 say(b) there 1SG=P3 be(b) as there DIST-there
ŋkwīn wɔ̄ tɔ́ní, yɛ̄, ká wū tǭ mɛ̄
CL1/2.mountain on there COMP COND CL1IRR grow_up(b) finish(a)
tʃū wù tā́ lá kɔ̀ wɔ̄ sə̌m, wù dɨ̌ *mɔ́sɨ́*
come(b) CL1 VER.FOC;NEG do(a) ?? NEG CL1.play CL1 F1 must
yɨ́ŋ gbɔ̀ áná nɨ́ tʃū nɪ̄m
build(c) CL3.house like_that mother.3POSS come(b) live(a)

'Dya said on that hill when I was there, that when he will have grown up fully, he will not play, he must build a house and bring down his mother.'

(429) kwɛ̄́ b-ɛ́n ŋà tán sɛ́ tání,
CL7/8.rat CL8-DEM.PROX boast(a) there CL3/7a.attic there
n=dɨ́̌ lá kpɨ́ mɛ́ kwɛ̄́ b-ɛ́n tán
1SG.PVB=F1 make(a) die(b) finish(a) CL7/8.rat CL8-DEM.PROX there
sɛ́ ō
CL3/7a.attic EMPH

'These rats which are showing off in this attic - I will kill all of them!'

While **fɔ** and **tɔ** seem to be widely interchangeable, in some contexts only one of them renders a grammatical construction. An example is the use of **fɔ** in relative clauses. The spatial deictic **fɔ́** is used as obligatory postverbal demonstrative in relative clauses which relativize on a locative expression. In this case, the spatial deictic **fɔ** occurs immediately after the verb of the relative clause, forming part of a paradigm with relativizers in the form of distal demonstratives which occupy this slot and which agree with the head of the relative clause in noun class, as in (430) and (431). The use of **tɔ** in this context is not attested. For more on relative clauses, see Chapter 12 and Lovegren and Voll (2017).

(430) ń=tʃyé dɛ̀ nǭ [wù fɨ́̌ f-ɔ́]
1SG=know(c) CL9.place SUBORD CL1 pass(b) PROX-REL

'I know the place which she had passed (through).' (lit.: ...where she had passed.)

(431) à mɨ̄ nɨ̀m ʃì̀ bā́ dɛ̀ nā [bɔ̄
2SG CONSEC sit(a) go_down(a) exactly CL9.place there CL2
kpā f-ɔ́ gù], ā fì-ŋgī wá
light_fire(a).IPFV PROX-there CL3/7a.fire COM CL19-water 2SG.PP
kə̀n
hands.LOC

'Then (you will) sit down exactly where they make fire, with a bit of water in your hand.'

10.5 Ideophones

Ideophones are used frequently in narratives and in spontaneous conversations. However, speakers differ in the quantity of ideophones they use, with a tendency for old people to use them more frequently than younger people. Ideophones are often accompanied by specific gestures. Some examples of ideophones are given in (432)-(435). In (432) and (433), the ideophones follow the adverbial pro-form **áná** 'like that', which links them with the rest of the sentence.

(432) n=də̄ mɛ̌ pɛ́ kə̀ kwɔ́ gbə́ áná mwàŋ
1SG=see(a) only P. P3 enter(c) house.LOC like_that IDEO

'I just saw Pe entering the house like that: "mwàŋ".'

(433) pɛ́ kə̀ wɛ̌ fɨ́n áná fyàfyà
P. P3 breath(a) there like_that IDEO

'Pe was breathing there like this: "fyafya".'

The ideophone **mwàŋ** as in (432), often with a drawn out nasal coda **mwàŋŋŋŋŋ**, depicts speed. The ideophone **fyàfyà** in (433) imitates the sound of heavy breathing, as after physical strain. In examples (434) (which contains two ideophones) and (435), the ideophones are simply attached to the end of the clause; the adverbial pro-form **áná** is not used.

(434) pɛ́ dʒī ʃī mbɨ́ m-ɔ́, ā́ *the very*
P. put(a) descend(a) CL6.palm_wine CL6-DET ADVLZ the very
mbɨ́ ŋgɔ́ m-ɔ́ ŋgɔ̄ tɨ̀ŋtɨ̀ŋ, byé-ā-ntí mū ʃú
CL6.palm_wine upon CL6-DET upon IDEO B.-COM-N. take(a) come(b)
kpà?, wù mú
IDEO CL1 drink(b)

'Pe put in the wine, still the very wine, the same one, exactly. Bie-a-Ntie grabbed it, "kpa?", and she drank.'

(435) wɛ̋ee, ndʒɔ́m tán mɛ̌ t-ɔ̋ bā́n t-ɔ́
INTERJ CL8.things fly(a) only DIST-there CL1/2.outside DIST-DET
wăaawăaa
IDEO

'Alas, things were flying outside there, "waaawaaa".'

The ideophones in (434) and (435) **tɨŋtɨŋ** are very specific ideophones expressing strong resemblance (**tɨŋtɨŋ**) and grabbing (**kpà?**) or imitating the sound of the storm (**wăaawăaa**). Most ideophones consist either of a single open or closed syllable or of two or more repetitions of a single syllable. Note that ideophones may end in an obstruent, as in **kpà?** (434) or **kăt̚**. This is an exception from the general phonotactics of Mundabli. Normally, a syllable can end only in a nasal or in the liquid **l**, see §2.4. The ideophone **kăt̚** illustrates that something is completely destroyed.[2] Vowels and final nasals in ideophones may be drawn out for intensity, such as in **mwàŋ** in (432) or **wăaawăaa** in (435) with multiple **a** and **ŋ** representing single segments with an exceptionally long duration.

Ideophones can be subdivided according to semantic criteria into expressions of visible impressions, temperature impressions, smell and taste impressions and audible impressions, as done in the first column of Table 10.5. The second column contains ideophones either isolated or in context. Here, the ideophones are written in bold letters. The third column contains descriptions of their use.

[2]The ideophone **kăt̚** is usually followed by the following gesture: lips are pursed and the index finger of the right hand is bent and moved over the pouched lips from right to left.

semantic criteria	ideophone	description
visible	**būbūbūbū**	'pure white'
	fìììì	'pure black'
	ŋàŋŋŋŋ	'burning down of sun; bright red'
	tìŋtìŋtìŋ	'strong resemblance'
audible	**wùùùùù**	'light storm or strong wind blowing'
	wàààààà	'light storm or strong wind blowing'
	ŋgìŋgìŋgìŋgìŋgìŋ	'strong storm blowing'
	wàààà	'rain falling heavily (before it stops abruptly); sound of water being pushed away with force'
	wɔ̌ŋwɔ̌ŋwɔ̌ŋ(...)	'rain falling heavily and continuously.'
	tʃàtʃàtʃàtʃàtʃàtʃà	'rain falling lightly but continuously.'
	nyǎŋkàŋkèŋkèŋkèŋ	'call of a bushfowl species called **nyǎŋ**'
	byábyábyábyábyábyá	'someone talking a lot'
	kpàkpàkpàkpàkpà	'someone talking a lot'
	wàwàwàwàwàwàwà	'someone shouting a lot'
	fyátfyát	'sound of blowing one's nose'
temperature	**dʒűűűűű**	'really cold'
	tsùtsùtsùtsùtsùtsù	'really hot'
	kpəkpəkpəkpəkpə	'really hot'
smell and taste	**tsàtsàtsà**	'bad smell'
other	**tìtìtìtì(tì(tì))**	'waiting for a long time'
	kìŋkìŋkìŋkìŋ	'walk stamping ones feet; work heavily; be healthy'
	tấp˥~pấp˥	'full to the rim'
	kǎt˥	'completely finished or destroyed'
	kpàʔ	'sound of grabbing something quickly'

Table 10.5: Ideophones, partly in context, with descriptions, sorted according to semantic criteria

10.6 'Yes' and 'No'

The words for 'yes' and 'no' (see Table 10.6) can serve as one-word answers to polar questions, can introduce more elaborate answers to polar questions, or can serve as general markers of agreement or disagreement, either on their own or followed by a more elaborate explanation. They thus have an ambiguous status between formulaic expressions and interjections.

variants	gloss
hm̀, **èɛ**, **èhě**	'yes'
ŋgàŋ, **ǎy**∼**ǎyī**, **ʔḿʔm̀**∼**ʔm̀ʔm̀**∼**hḿʔm̀**	'no'

Table 10.6: Variants of 'yes' and 'no'

The form **hm̀**[3] is used to express agreement or confirmation; the interjection **èɛ** 'yes' is more commonly used to signal interest and to encourage another speaker to continue, e.g. when reporting an event. The word **ŋgàŋ** 'no' is hardly ever used in spontaneous speech, except sometimes for emphasis. Among the other forms, **ǎyī** expresses more emphasis than **ǎy**. Both **ǎyī** and **ǎy** are stronger than the nasal forms (**ʔḿʔm̀**∼**ʔm̀ʔm̀**∼**hḿʔm̀**). In (436)-(439), **hm̀** 'yes' is used to express agreement, accompanied by a complete sentence.

(436) hm̀, wù dǐ kə-ʃī
INTERJ CL1 be(b) ABIL-descend(a)

'Yes, she can come down.'

(437) hm̀, wù kə dɪ̄ f-án
INTERJ CL1 P3 be(b) PROX-here

'Yes, she was here.'

(438) hm̀, wù kə tʃū tū ʃī fán
INTERJ CL1 P3 come(b) pluck(a) CL9/10.fowl there

'Yes, she came and plucked feathers here.'

(439) ʔm̀hm̌ ʔm̂, bɔ́ kán dɛ̀ yɪ̄ŋ lā gbɔ̌
yes INTERJ CL2 lack(b) CL9.place build(c) DAT CL3.house

'Yes. They don't even have space to build houses.'

In (440)-(443), **ǎy**∼**ǎyī** is used to mark disagreement. In all these examples, it is accompanied by a complete sentence.

[3]What is written here as <h> is phonetically a voiceless bilabial nasal.

(440) ǎy, yɛ̄ ŋ=gɨ́ kɔ́ yɛ̄ ǹ=ká də̌ ké, *nǒ*
no COMP 1SG=put(b) at? COMP 1SG=F2 see(a) ?? no

'No! That I should allow it so that I will see, right?!'

(441) ǎy, á n̄=dzɛ́ kɔ̀ wɔ̄ yɛ̄ à dzé lɔ̄~lɔ̄
no NEG 1SG=say(b) catch(b) NEG COMP 2SG say(b) empty~RED
bá, n=dzɛ́ yɛ̄ à dzé á ntʃǐn
CL2.PP;DAT 1SG=say(b) COMP 2SG say(b) ADVLZ CL1.truth

'No, I have not said that you are telling a lie (to them). I said that you are telling the truth.'

(442) ǎyī, wù dzě yɛ̄ t-ání wū ɲà
no CL1 say(b) COMP DIST-there CL1;3SG.POSS hurt(a)

'No, she said that this part hurts. '

(443) ǎyī, bɔ́ ā dɨ́ wɔ̄ ā dɛ̀ fwɛ́n
no CL2 NEG be(b) NEG COM CL9.place clear(b)

'No, they don't have a place to clear.'

My data also contain instances of ingressive fricatives, used to indicate agreement. The ingressive fricative may be articulated in different ways. The tokens I have found in my recordings are all from a particular speaker who is around 40 years old. An ingressive sound with assertive function has also been reported by Lovegren (2013: 274-275) to exist in Mungbam.

10.7 Interjections

In this section, I describe a few very salient interjections, in order to provide an impression of interjections in Mundabli. Interjections are used frequently in conversation, e.g. in order to express one's feelings or one's attitude or to express agreement or disagreement. Interjections expressing agreement or disagreement were already discussed in §10.6 and will not be repeated here. Many of the common interjections in Mundabli also exist in the regional variety of Cameroon Pidgin and probably in other languages in the area. Among these are **wɛ́** (444) which expresses dismay and **ǎʔǎ** (445) which expresses amazement and disbelieve with negative connotations. The interjection **ò** (444), which expresses emphasis and occurs at the end of a sentence, is also attested in Cameroon Pidgin.

(444) wɛ́, wū ā dɨ́ wɔ̄ gbɔ̄ kúŋ ò
INTERJ CL1 NEG be(b) NEG CL3.house house_backside.LOC INTERJ

'Alas! She is not behind the house!'

(445) yɛ̄ wù kwó gbɔ́, wù də̄ bə̄ kə̀
COMP CL1 enter(c) CL3.house.LOC CL3;3SG.POSS see(a) IMPERS P3
ʃyā tɔ̄ gbɔ̄ wű, ā́ʔā́, wù bú yɛ̄
sweep(a) away(c) house CL3.CL1.POSS INTERJ CL1 ask(b) COMP
mɛ̀, ā n=dǐ wɔ̄ ā nǐ́ ā n=dǐ
NCS.QUOT.Q NEG 1SG=be(b) NEG COM CL1.mother NEG 1SG=be(b)
wɔ̄ ā tǐ ā n=dǐ wɔ̄ ā wɛ́ ā
NEG COM CL1.father NEG 1SG=be(b) NEG COM CL1.sibling NEG
n=dǐ wɔ̄ ā mɔ̀ dzū, mɨ́ŋ gbə̀
1SG=be(b) NEG COM CL1.person CL1.certain 1SG house.LOC
ʃyà gǐ ndɛ̀ yɛ̄
sweep(a) put(a) who QUOT.Q

'When she was about to enter the house, she saw that someone had swept her house. Huh! She asked [herself]: I am [here] without a mother, without a father, without a sibling, without anyone. Who has swept my house?'

Examples (444) and (445) are taken from the same narrative. Example (444) contains two interjections, **wɛ́** and **ò**. The first interjection **wɛ́** expresses dismay at the fact that the sister is not behind the house as expected but has instead gone missing. The sentence-final interjection **ò** emphasizes the statement and gives it more weight. Example (445) contains the interjection **ā́ʔā́** expressing consternation and disbelief by the main character of the story at the fact that someone must have entered and swept her house while she was on the farm. Dismay or disbelief may also be expressed by ululation, which is widespread in the area. The interjection 'Wonderful!' [**wā́ndàfùl**], adopted from Pidgin and translatable as 'amazing, incredible' is more neutral and without necessarily having a negative or a positive connotation. Finally, an interjection which, to the best of my knowledge, does not exist in Pidgin or in related languages is **òǒō**, cf. (446) and (447). It expresses ignorance or lack of knowledge.

(446) m̀m, bə̄ kə̌ ním ā wān w-ɔ̄, tʃyé bɔ̋
yes IMPERS P3;HAB sit(a).IPFV COM CL1.child CL1-DET know(c) CL2
kə̀ fǎn yī wù è, òǒō
P3 sell(a) eat(b) CL1 INTERJ INTERJ

'Yes. They kept the child [of the gorilla]; whether they sold [it] and [someone] ate it? I don't know!'

(447) tʃyé bə̄ kə̀ yī è, òǒō, ā n=dǐ wɔ̄
know(c) IMPERS P3 eat(b) INTERJ INTERJ NEG 1SG=be(b) NEG
kə̄-tʃyɛ̋
ABIL-know(c)

'Whether they ate [it]? I don't know! I cannot know.'

The interjection **òǒō** is equivalent to saying ‘I don’t know’ or ‘I have no idea’ or shrugging one’s shoulders. There are also volitive interjections which are conventionally used to chase away different animals or even people. The sound **ʃʃʃ** is used to chase away fowl. Goats and sheep are chased away with the interjection **tsì**, and in order to chase away dogs or people (mostly children), the imperative form **bí** ‘Go out!’ is used.

CHAPTER 11

Basic clause structure

This chapter deals with the structure of basic clauses, i.e. pragmatically unmarked declarative main clauses. The discussion is restricted to verbal predicates. Non-verbal predicates are dealt with in Chapter 13. The current chapter starts off with a description of the attested types of argument frames (§11.1). Following this is a section on constituent order within the clause (§11.2), which is in turn followed by a detailed description of the different attested syntactic constituents (§11.3). Finally, the last section discusses the status of grammatical relations in Mundabli (§11.4).

11.1 Types of argument frames

This section deals with the argument structure of verbs. However, it is restricted to nominal arguments. In the case of complex verbal cores (or serial verb constructions), arguments should be understood as arguments of the whole verb complex rather than arguments of specific individual verbs. For ease of reference, I will simply refer to these complex verbal cores as verbs in this chapter. Lovegren (2013: 320) offers an account on how the argument structure of a verbal core can be deduced from the argument structure of the verbs it contains for the related language Mungbam. As the two languages behave nearly identically as regards the argument structure of verbs, his findings can most likely be transferred one-to-one to Mundabli.

A valency distinction based on the minimal number of core arguments makes no sense in Mundabli because arguments other than the subject can always be omitted when their content can be inferred from the context. This

includes not only oblique arguments, but also the second core argument, the object. Instead of a distinction based on the minimal number of core arguments, a distinction based on the maximal number of arguments is adopted. Verbs are thus regarded as intransitive only if they cannot take an object and they are regarded as transitive when they *can* take an object. This rather uncommon definition of transitive vs. intransitive verbs is based on Lovegren (2013: 280ff.) who proposes this definition for Mungbam and provides more elaborate argumentation in favour of such a definition. Intransitive verbs only have the subject as an argument,[1] cf. e.g., **bí́** 'exit' in (448). Transitive verbs can take two arguments: a subject and an object, like e.g., **tsú** 'contribute' and **mù** 'take' in (449) and (450).

(448) wān w-ɔ̄ bí́
CL1.child CL1-DET exit(b)

'The child went outside.'

(449) bɔ̋ tsú dɔ̄
CL2 contribute(c) CL3.beans

'They contributed beans.'

(450) wù mū ʃɨŋŋām
CL1 take(a) CL3/7a.fufu_stick

'She took the fufu stick.'

As pointed out above, the object in a transitive clause can always be omitted when it is understood from the context, as e.g. in the second clause in (451). There are no syntactic restrictions on object omission.

(451) wù bóŋ tɛ̄ k-ɔ́, wù yɔ̄ tɔ̄
CL1 pick(b) CL7/8.walking_stick CL7-DET CL1 throw(a) away(c)

'She then picked up the stick and threw [it] away [from herself].'

In addition to simple intransitive and transitive verbs, there are extended transitive and intransitive verbs. Extended intransitive verbs take a subject and an oblique constituent, but no object. Extended transitive verbs take a subject,

[1] It has been stated for other languages that any verb can occur with a cognate noun as object, see Heath (2013: 149ff.) for the Dogon of Beni and Lovegren (2013: 350-351) for Mungbam. This would mean that there are no real intransitive verbs. At first glance, I thought the same was the case in Mundabli. Mundabli has what I call the cognate deverbal noun construction (cf. §14.3.1) which expresses verb focus by adding an infinitive deverbal noun to the end of an intransitive or transitive clause. However, I believe that the deverbal noun is not an object in the case of Mundabli, because it can co-occur with an object in a transitive clause, in which case it generally follows the object. As it is not otherwise possible to have two objects in one clause, I believe that the infinitive in the cognate deverbal noun construction in Mundabli has an adverbial function, and that therefore there *are* true intransitive verbs which cannot take an object argument.

an object and an oblique constituent. This distinction was made by Dixon and Aikhenvald (2000: 3) and was adopted by Lovegren (2013) for Mungbam. The current chapter is strongly inspired by Lovegren's treatment of the same issues in Mungbam; see Lovegren (2013: 314ff.).

11.1.1 Extended intransitive verbs

There are a few extended intransitive verbs, i.e. verbs which take an oblique argument but no object. This section only deals with oblique arguments which are included in the verb semantics, although formally, they are no different from obliques which are not included in the verb semantics. The oblique argument in the examples is enclosed in square brackets.

The verb **də̀** 'see' usually takes a dative complement (452) rather than an object. However, the undergoer, which is usually expressed as dative, may also take the form of a direct object, in which case the verb is transitive (453). In (453), the verb is part of a relative clause and takes the CL7 pronoun **kǐ́** as its object.

(452) tō dǫ̣́m lā bɔ̀m də̄ [wú lā], wù kə̀ gān
CL7/8.day some DAT CL9.antelope see(a) CL1PP DAT CL1 P3 go(a)
dʒwɔ̄
CL1/2.water_place

'One day, an antelope saw her when she went to the stream.'

(453) k-ɛ́n dǐ́ ŋkǐ́ŋ k-ɔ́ nɨ́ŋ nǭ̣́
CL7-DEM.PROX be(b) CL7;1SG.POSS CL7-DET CL7.thing SUBORD
ń̃ = də̄ k-ɔ́ [kǐ́]
1SG = see(a) CL7-REL CL7

'This is my own thing that I see.'[2]

Another example of an extended intransitive verb is **fǐ́**, which takes a comitative complement when it means 'happen' (454).[3]

(454) à də̄ mɛ̄ ná ndʒɔ́m bī fǐ́ b-ɔ́ [ā wà]
2SG see(a) finish(a) as CL8.things CL8 pass(b) CL8-REL COM 2SG

'As you have already seen what happened to you...'

The movement verb **yó** 'run' is also attested as an extended intransitive, taking a locative postpositional phrase as its oblique argument, as in (455). In this case, it basically means 'run away from, escape'.[4]

[2] A less literal but better translation might be 'This is the way I see things.'
[3] In combination with other verbs in an SVC, **fǐ́** can mean 'disappear' or 'be useless'.
[4] The verb **yó** 'run' is also attested as a simple intransitive verb.

(455) kɔ̄ kə̀ yó tʃū [dzɔ̄m kə̀n] bɔ́ mɪ̄
Koshin P3 run(c) come(b) CL9/10.war hands.LOC CL2 CONSEC
tʃǔ kwó kúŋ bɪ́ yə́
come(b) enter(c) hunt(c) go_out(b) go_up(c)

'The Koshin people ran away from war, then they came in[to this area] and chased away [the Nshwen].'

(456) ɛ̀, wù ywó tī [kū y-ɔ̄ kə̀n]
yes CL1 run(c) surprisingly CL9.ratmole CL9-DET hands.LOC

'Yes, he ran away from the ratmole.'

The verb **nɪ̀m** 'be located, stay' is also attested as extended intransitive verb, in which case it takes a comitative complement (457).

(457) ɲwɔ́m nɛ́ tʃʉ́ yɛ̄ bɔ́ nɪ̄m [ā wà], à
CL2.children mother.2POSS come(b) COMP CL2 live(a) COM 2SG 2SG
mɨ́ mù bɔ̌, à mɨ́ gɨ̌ yɛ̄ dɨ̌ mfɔ̄
CONSEC take(a) CL2 2SG CONSEC put(b) COMP be(b) CL9.slave
y-ɑ́
CL9-2SG.POSS

'Your siblings have come to stay with you and you make them your slaves.'

11.1.2 Extended transitive verbs

There is at least one extended transitive verb, namely **fə̄** 'give'. The verb **fə̄** accepts two different argument frames, both of which involve an object and an oblique constituent.[5] One possibility is for the object to represent the recipient and for a prepositional phrase with the comitative preposition **ā** to represent the theme, as in (458). The second possibility is for the object to represent the theme and for an adpositional dative phrase to represent the recipient, as in (459) (see §11.3.5 for more on dative constituents).

(458) ɲùŋfù fə̄ ntí [ā kpə́]
N. give(b) N. COM CL3/7a.money

◇'Nyungfu gave Ntie money.'

(459) ɲùŋfù fə̄ kpə́ [ɪ́ ntí lā]
N. give(b) CL3/7a.money LOC N. DAT

◇'Nyungfu gave money to Ntie.'

[5]This alternation seems to be found throughout Lower Fungom (and in Naki) (Good, p.c.).

The choice between these two constructions is determined pragmatically. While adpositional phrases are not usually considered to be arguments of the verb, verbs like 'give' represent borderline cases, as their use demands the presence of an adpositional phrase. The verb 'give' is also attested as an extended transitive verb with the locative noun/postposition **kə̀n** 'in hands' as the locative argument (460). The object in (460) is not realized. Verbs of placement like **gɨ́** 'put' or **tén** 'pour' take locative complements, cf. e.g., (461) or (462).

(460) wù fə́ [wān nǐ wū-bwé dzū
CL1 give(b) CL1.child CL1.mother.3SG.POSS CL1-toddler CL1.other
kə̀n]
hands.LOC

'She gave [it] to her little sister.'

(461) wù də̄ bə̄ kə́ gɨ́ tɛ̄ [ǐ gbɔ̄
CL1 see(a) IMPERS P3 put(b) CL7/8.walking_stick LOC CL3.house
sɛ̀]
front.LOC

'She saw that someone had put a walking stick in front of the house.'

(462) à mɨ̄ tén wű [kyà mɨ̄]
2SG CONSEC pour(c).SUBJ CL3 CL9/10.basket in

'and you pour it into a basket [to remove all the water].'

11.2 Constituent order within the clause

The basic constituent order in Mundabli is SVO. The schema in Figure 11.1 shows the unmarked constituent order of a positive declarative main clause with neutral focus.

Subject – [...[**V**]$_{verbal\ core}$...]$_{verbal\ complex}$ – (**Object**) – (**Oblique Argument**) – (**X**)

Figure 11.1: Basic word order

While the presence of subject and verb are obligatory, none of the constituents following the verbal complex in the above schema have to be present, as indicated by the parentheses. Oblique arguments include dative or comitative arguments like **ā kə̌**[6] 'with a knife' in (463). The **X** in Figure (11.1) represents adverbial phrases (e.g., temporal and locative phrases), such as **ŋwɛ́n**

[6]The noun **kə̌** refers to a specific type of knife used by the so-called 'Aku people'. According to IWGIA (2017), the local term 'Aku' refers to the 'Galegi', a subgroup of the Mbororo. However, the source of this information is unclear.

'now' in (464). Alternatively, temporal adverbials can occur at the beginning of the sentence.

(463) yɛ̄ wǔ bwól bí yā bǐ ā
COMP CL1;F1 remove(c) exit(b) CL7/8.intestines CL8;3SG.POSS COM
kǒ
CL3/10.aku_knife

'[...], that he$_i$ will remove his$_j$ intestines with a knife.'[7]

(464) mɔ̀ w-ɔ̄ táŋ tsṵ́ b-ɔ́ ɲwɛ́n
CL1.person CL1-DET buy(b) CL7/8.banana CL8-DET now

'The man bought the banana now.'

Comparison with constituent order patterns in related languages shows that SVO constituent order, as attested in Mundabli, is typical for Grassfields languages (Watters 2003: 248). Looking at universal patterns of constituent order, the more detailed constituent order shown in Figure (11.1) is typical for SVO languages in general (Hyman 1981: 76). Different constituent order patterns are attested in clauses with a marked information structure. When the subject is focussed, it may occur after the verbal complex, i.e. in immediate after verb (IAV) position,[8] which is the prominent focus-position. When the object or an oblique argument are topicalized, the topicalized elements occur at the beginning of the sentence, before the verbal complex. Marked patterns of constituent order are discussed in Chapter 14, which deals with information structure. With no case marking and no agreement on verbs, constituent order is the only clue to the grammatical role of a full NP not functioning as the object of an adposition.

11.3 Syntactic arguments

This section gives an overview of syntactic arguments and their structure. While the arguments include subject, object and oblique constituents, the only obligatory argument in Mundabli is the subject. All other arguments, including the object, can be omitted when they can be inferred from the context. If one took obligatoriness as a criterion for argument status, i.e. if one considered only the minimally present constituents of a phrase as arguments, only the subject could ever be considered an argument of the verb. However, if we consider the maximally present constituents which can occur with a verb instead, more than one argument may be supported. While some verbs, such as

[7] In example (463), the subject pronoun **wù** and the F1 marker **dǐ** are contracted. The resulting form **wǔ** integrates the tone of the F1 marker with the shape of the subject pronoun. Phonological mergers like this are occasionally attested.

[8] For an explanation of this term, see first footnote in Chapter 14 of this thesis.

mwɛ̀ 'be sad' and **kwé** 'return from the bush' in (465)-(466) can take only one argument, namely a subject, others, such as **tsu** 'contribute', **dʒyɛ̀** 'cook' and **mù** 'take' in (467)-(469) can take an object as well.[9] If the object is omitted, as in (479), it is still semantically present, which supports the status of objects as verb arguments.

(465) wù mwɛ̄
CL1 be_sad(a)

'She was sad.'

(466) kpé w-ɔ̄ kwé dzɔ̋ŋā́
CL1.woman CL1-DET return_from_bush(c) again

'The woman came back again.'

(467) bɔ̋ tsú dɔ̄
CL2 contribute(c) CL3.beans

'They contributed beans.'

(468) bɔ̋ dʒyɛ̄ dɔ̄ w-ɔ́
CL2 cook(a) CL3.beans CL3-DET

'They cooked the beans.'

(469) wù mū ʃɨŋŋām
CL1 take(a) CL3/7a.fufu_stick

'She took the fufu stick.'

A syntactic distinction between non-core (oblique) constituents and adverbial phrases (or adjuncts, in each case non-arguments) is not warranted by formal criteria. For convenience, I will refer to all constituents other than the subject and object, i.e. all constituents which are formally flagged,[10] as non-core or oblique constituents. The following constituents are thus attested:

[9]Verbs in isolation are given with their citation tones, which differ in some cases from their tones in the examples.

[10]I use the term 'flag' as explained by (Haspelmath 2008: 506): "There is no widely accepted cover term for cases and adpositions, but the terms **flag** and **relator** have sometimes been used as terms which are neutral with respect to the case/adposition distinction.".

1. Subject (unflagged constituent, usually directly precedes the verb)
2. Object (unflagged constituent, usually directly follows the verb)
3. Comitative (preceded by the particle **ā**)
4. Locative (optionally preceded by the preposition **ǐ́**, followed by a spatial postposition; or unmarked)
5. Dative (optionally preceded by the preposition **ǐ́**, followed by the dative postposition **lā**)

Locative and Dative are both optionally preceded by the preposition **ǐ́** (glossed LOC) and obligatorily followed by a postposition. While one could lump them together, I chose to split them because this allows for a more detailed treatment. In the remaining sections, the listed constituents are discussed in the given order.

11.3.1 Subject

The subject is a bare noun phrase which, in a sentence with neutral information structure, precedes the verb complex, as in the intransitive sentence in (470) and the transitive sentence in (471).

(470) mɨ̄ wān kə̀ tʃíā́ kpɨ́
1SG CL1.child P3 long_ago die(b)

'My child died long ago.'

(471) nǐ́ w-ɔ̄ ɲwɔ́m ɲām b-ɔ́
CL1.mother CL1-DET stir(b) CL8a.fufu CL8a-DET

'The mother stirred the fufu.'

When the subject is in focus, it occurs in the position immediately after the verb complex (472) with the object following it.[11]

The canonical subject position immediately before the verb complex is then filled with a purely tonal dummy subject. However, consisting of a low tone, this dummy subject is only detectable when it precedes a Class B verb and only in certain inflectional forms, causing the superhigh tone of the Class B verb to be realized as low-high rising tone, as e.g., in (472) (cf. §3.4.2 and §14.2.3 for details).

(472) tsŭ ŋkɔ̌ ɲùŋfù
DS.hit(b) N. N.

◇'NGKO hit Nyungfu.'

[11] See §14.2.3 for more on subject focus.

The subject is the only obligatory argument. While objects are freely omitted when they can be inferred from the context, subjectless sentences are extremely rare. The only two cases of subject ellipsis attested are (473) and (474). This strategy seems to be restricted to stylistic repetition and enumeration. Subject ellipsis is neither attested in multi-clause sentences, nor in sequences of main clauses.

(473) wù tsú wù sűtɛ́ɛ, tsű wù tsű wù tsű wù tsű wù
CL1 hit(b) CL1 so_much hit(b) CL1 hit(b) CL1 hit(b) CL1 hit(b) CL1

'She beat her, so much, beat her again and again.'

(474) tsə̄m b-ɔ́ tʃú kwɔ́ gbə́, tsű
CL7/8.python CL8-DET come(b) enter(c) house.LOC hit(b)
kpè w-ɔ̄ áná tsű wù áná tsű wù áná,
CL1.woman CL1-DET like_that hit(b) CL1 like_that hit(b) CL1 like_that
lyím wù, kù wù
wrap_around(b) CL1 tie(a) CL1

'The pythons came and entered the house. They beat the woman like this, beat her like this, beat her like this, wrapped themselves around her and tied her up.'

11.3.2 Object

Just like subject NPs, object NPs are not marked by adpositions. The object is distinguished from the subject mainly by its characteristic position within the sentence. In basic clauses, i.e. simple declarative clauses with pragmatically unmarked word order, the subject precedes the verbal complex, while the object follows it, as in (475). Only when the subject is in focus does it occur in the position immediately after the verb complex (cf. §11.3.1 and references therein).

(475) nǐ w-ɔ̄ ɲwɔ́m ɲām b-ɔ́
CL1.mother CL1-DET stir(b) CL8a.fufu CL8a-DET

'The mother stirred the fufu.'

When the object is defocalized, it precedes the verbal complex (476), which, in a subject focus sentence, results in O(X)VS order (477). For more on information structure and word order alternations, cf. §14.2. In clauses which are syntactically ambiguous and can be alternatively interpreted as SVO or OVS clauses, the structure is sometimes disambiguated by the presence of a tonal dummy subject (see §11.3.1).

(476) ɲām b-ɔ́ yí̋ mɨ̄
CL8a.fufu CL8a-DET eat(b) 1SG

◇'I ate the fufu.'

(477) [kpő̌ w-ɔ́] [ǐ ntí lā] fə̄ fə̋ [ndɛ̀]
CL3/7a.money CL3-DET LOC N. DAT DS.P1 give(b) who

◇'Who gave money to Ntie?'

The object of a verb is frequently omitted when it can be inferred from the context, cf. e.g. (478) and (479)). There are no known formal restrictions on the omission of an object.

(478) yɛ̄ gǎn tsē mɨ̄ ā ntsɔ̋m mū-ŋ-gɛ̄-ŋ-gɛ̄, à
COMP go(a) search(a) 1SG COM CL6-soil 6-N-be_red-N-be_red 2SG
mɨ̄ tʃű fə̋ ndá lā
CONSEC come(b) give(b) 1SG.DAT DAT

'[She said]: go and search for some red soil for me, and then you come and give [it] to me!'

(479) wù bóŋ tɛ̄ k-ɔ́, wù yɔ̄ tɔ̄
CL1 pick(b) CL7.walking_stick CL7-DET CL1 throw(a) away(c)

'She picked up the stick and threw [it] away [from herself].'

11.3.3 Comitative

The label "comitative" is chosen to indicate a constituent whose most common semantic interpretation is indeed comitative, but which may also have an instrumental function or may represent the theme in a transfer event. In the remainder of this section, a description of the structure of comitative constituents, illustrated mainly by examples with comitative semantics is followed by examples of the instrumental function and transfer events. Comitative phrases are headed by the preposition **ā**. The preposition can take either a full noun phrase (480) or a pronoun (481) as its object. Pronouns with a superhigh tone (i.e. non-preverbal pronouns of all noun classes other than Class 1 and 9) are realized with a low-high rising tone when they are the object of the comitative preposition,[12] like e.g. the Class 7 non-preverbal pronoun **kɨ́** in (481).

These and other data suggest that pronouns participate in a kind of case system, see §11.4.1 for more on this. Unlike postpositions, the preposition **ā** never gets stranded (cf. §12.3 on adposition stranding in relative clauses).

(480) wù tʃú [ā mbɨ́], bɔ̋ mú
CL1 come(b) COM CL6.palm_wine CL2 drink(b)

'He brought wine [and] they drank.'

[12]This tone change is described in §6.1.3.

(481) bə̄ mɨ́ kwé ʃű́ [ā kɨ̌]
IMPERS CONSEC return_from_bush(c) come(b) COM CL7

'They then returned home with it.'

The comitative constituent generally follows the verb and the object, occurring towards the end of the clause. Its position relative to other oblique constituents is not fixed. In (482), the comitative argument directly follows the verb, preceding the unmarked locative phrase **dʒwɔ̀** 'water place' (cf. §11.3.4 on unmarked locative phrases).

(482) wù gān [ā bɔ̌] dʒwɔ̀
CL1 go(a) COM CL2 CL1/2.water_place

'He went with them to the stream.'

Comitative constituents can also have other semantic functions. They can represent an instrument, as in (483) and (484), or the theme in a transfer event, as in (485) and (486).

(483) ʃī k-ɔ́ kǫ́ ʃú mɨ́ [ā kē]
CL3/7a.storm CL7a-DET catch(b).IPFV come(b) 1SG COM CL9/10.hand
ā́kɔ́ kǫ́ mbɛ̂
like catch(b).IPFV CL2.person

'The storm was catching me with its hands as if it were people catching [me].'

(484) n=dzé Pɛ́ lā yɛ̄ wù ʃá dzē dzɔ̄ŋ, mɔ̀ w-ɔ̄
1SG=say(b) P. DAT COMP CL1 PROHIB say(b) again CL1.man CL1-DET
kə̄ twó kú wű́ f-án [ā
ABIL? pierce(a) CL3/7a.stomach CL3;3SG.POSS PROX-here COM
kɔ̌]
CL3/10.aku_knife

'I told Pe that he should not talk again, so that the man shouldn't pierce his stomach with a knife.'

(485) n=dzé má *the best* nɨ́ŋ dɨ́ mɛ̌ ká à
1SG=say(b) CS.QUOT the best CL7.thing be(b) only COND 2SG
tʃǔ gbɔ́ kɔ́ ndʒɔ̃mŋyīn ā dɨ́ wɔ̄ bə̄ kán
come(b) house.LOC COND CL8.food NEG be(b) NEG IMPERS have(c)
yɛ̄ bə̄ tū fə̄ mɛ̌ wà [ā ŋgī]
COMP IMPERS fetch_water(b) give(b) only 2SG COM CL6.water

'I said that the best thing can only be, if you come home, if there is no food, they have to carry water and give it to you.'

(486) Pɛ́ bí yā tʃî, Pɛ́ tá kə̀ bī yá tí tʃî
P. exit(b) go_up(c) up P. VER.FOC P3 exit(b) go_up(c) surprisingly up
ā, Pɛ́ fá kɔ̀ mɨ́ [ā blô]
?? P. give(b) catch(b) 1SG COM CL1/2.blow

'Pe got up. As Pe got up, Pe gave me a punch.'

11.3.4 Locative

Locative constituents combine the optional general locative preposition **ɨ́** with either a noun phrase followed by a locative postposition,[13] as in (487-489), or a locative noun form, as in (490), which combines the function of a noun phrase and a postposition (cf. §10.2.2). While the optional particle **ɨ́** is used only in (489), its use would be grammatical in all these examples.

(487) à mɨ́ tɛ́n wű́ [kyà mɨ́]
2SG CONSEC pour(c) CL3 CL9.basket in

'And then you pour it into a flat basket.'[14]

(488) wù kwó [mbāŋ mɨ́]
CL1 enter(c) CL7/8.door in

'She entered the space behind the door.'

(489) wù də̄ bə̄ kə̀ gɨ́ tɛ̄ [ɨ́ gbɔ̄
CL1 see(a) IMPERS P3 put(b) CL7/8.walking_stick LOC CL3.house
sɛ̀]
house_front.PP

'She saw that someone had left a walking stick in front of the house.'

(490) wù kwɔ́ [gbə́]
CL1 enter(c) house.LOC

'She entered the house.'

The main function of locative constituents is to create a locational setting, i.e. to represent the ground[15] in an event of motion or location. By extension, locative constituents are sometimes used to create a temporal setting (491).

[13] Refer to §10.2.2 for more on postpositions (including a list of locative postpositions) and locative noun forms.

[14] Early during the process of making corn beer, the corn is poured into a flat basket which functions as a strainer, in order to remove the water which the corn has soaked in for a couple days.

[15] The term 'ground' was first introduced by Talmy. It refers to "the entity which acts as a spatial reference point for the motion/location of [a] figure" (Talmy 1972), as critically revised in (Croft et al. 2010: 2).

(491) mɔ̀ wù kə̀ dzé w-ɔ̄ dʒʉ́ gbàm [tō
CL1.man CL1 P3 say(b) CL1-REL CL3/7a.word CL7a.God CL7/8.day
k-ɔ́ ŋgɔ̀] kə̀ dɪ̄ pă pítà kyă
CL7-DET upon P3 be(b) Pa P. K.

'The person who was preaching on that day was Pa Peter Kia.'

Occasionally, locative constituents are attested which consist of a bare noun phrase, marked neither by the general locative preposition nor by a postposition, cf. e.g. (492) and (493). The relevant locative phrases in these examples are enclosed in square brackets. Example (493) contains two unflagged locatives: **tʃɔ́ŋ** 'fire place' and **sɛ́** 'attic'.

(492) tō dǫ̣́m lā bɔ̀m də̄ wú lā, wù kə̀
CL7/8.day certain DAT CL9.antelope see(a) CL1PP DAT CL1 P3
gān [dʒwɔ̀]
go(a).IPFV? CL1/2.water_place

'One day, an antelope saw her. She was going to the stream.'

(493) kə́ wù kpə̄ ʃī gū w-ɔ́ [tʃɔ́ŋ],
when CL1 light(a) go_down(a) CL3/7a.fire CL3-DET CL1/2.fire_place
nǐ́ wū tɛ́n bǐ́ ʃì
CL1.mother.3SG.POSS CL1;3SG.POSS drip(c) exit(b) go_down(a)
fì-ŋgī [sɛ́]
CL19-CL6.water CL3/7a.attic

'When she lit the fire in the fire place, her mother let a little bit of water drop down from the attic.'

11.3.5 Dative

The dative constituent is followed by the dative postposition **lā** and can be preceded by the optional locative preposition **ǐ́**. Thus, formally, the dative constituent is a special type of locative constituent. However, due to its special function, it is treated as a separate type of constituent and is dedicated a separate section.

The main semantic function of the dative is to indicate the recipient or beneficiary of an action, although it is also attested with other semantic functions. The dative adposition can take a full NP, as in (494) and (495), or a pronoun, as in (496) and (497), as its complement.

(494) fə̄ fə̃́ ndɛ̀ kpɵ́ [ǐ́ ntí lā]
DS.P1 give(b) who CL3/7a.money LOC N. DAT

◇'Who gave money to Ntie?'

(495) wù fyá bí-lúŋ [ɲwɔ́m b-ɔ́ lā] ā́
CL1 give(b).IPFV CL8-suffering CL2.children CL2-DET DAT ADVLZ
mò̩~mò̩, gɛ̄ ɲwɔ́m nī́ kə̀ wù ká tʃyé
very_much be_there[16] CL2.children CL1.mother ?? CL1 HAB know(c)
bɔ̀
FRUST

'She made them suffer, not knowing that they were her siblings.'

(496) nsūŋ wū dzé [wú lā] yɛ̄ wà, à dǐ
CL1.friend CL1;3SG.POSS say(b) CL1PP DAT SUBORD 2SG, 2SG be(b)
kpé bǒ
CL1.woman CL1/9.bad

'Her friend said to her: You, you are a bad woman!'

(497) bɔ̋ fò̩ tʃú́ [bí lā] yɛ̄ bɔ̋ tsè
CL2 tell(a).IPFV come(b).IPFV 1PL.PP DAT COMP CL2 search(a).IPFV
dzí̩ gàn kpɔ̋
travel(b).IPFV go(a).IPFV CL3/7a.money

'They are telling us that they are searching for money.'

Examples (494)-(497) contain verbs which commonly take a dative complement, such as **fɔ̄** 'give' (494 and 495), **dzɛ́** 'say' (496) and **fò̩** 'report' (497) (cf. §11.1). However, any active verb can take a dative complement in order to express the benefactor of the action, as in (498). This happens in a context where related Bantu languages would add a derivational applicative affix to the verb.

(498) kpé w-ɔ̄ dʒyē ndʒɔ́mɲyīn [ǐ mɔ̀ w-ɔ̄
CL1.woman CL1-DET cook(a) CL8.food LOC CL1.person CL1-DET
lā]
DAT

◇'The woman prepares food for the man.'

The dative exhibits a case-like alternation in two pronouns. The 1SG pronoun **mɪ̄** and the interrogative pronoun **ndɛ̀** 'who' have special dative forms, namely **ndə́** for the 1SG dative pronoun (499) and **ndyɛ́n** for the dative interrogative pronoun (500) (cf. §6.1.5 for details). These forms are only used in the dative. They cannot occur in (other) locative phrases.

The dative interrogative pronoun **ndyɛ́n** behaves differently from the dative 1SG pronoun in that it is obligatory in dative constituents and the postposition is absent when the dative interrogative pronoun is used. In (500), the

[16]A special section is devoted to the locative copula **gɛ̄**, cf. §13.2.5.4.

two forms of the interrogative pronoun, **ndɛ̀** (Subject) and **ndyɛ̄n** (Dative) are contrasted.

(499) gbàm kə́ mī tsɔ̀ dʒī dzɔ́ŋ [ndə́ lā] *first*
CL7.God F2 CONSEC show(a) CL9.way be_good(b) 1SG.DAT DAT first

'First, God will show me the right way.'

(500) fə̄ ndɛ̀ kì-mān [ǐ ndyɛ̄n]
DS.give(b) who CL7-what LOC who.DAT

◇'Who gave what to whom?'

While the use of the dative form **ndyɛ̄n** is obligatory in dative contexts, the 1SG dative pronoun form is in free variation with the unmarked 1SG pronoun **mī**, cf. (501).

(501) à mī tʃű fə̄ [mí lā]
2SG CONSEC come(b) give(b) 1SG.PP DAT

'[...] and then come and give it to me!'

11.4 Grammatical relations

Mundabli is a non-prototypical marked nominative language (cf. König (2006) for more on marked nominative languages). It has nominative-accusative alignment, but canonical subject pronouns are functionally more marked than object pronouns. Evidence for grammatical relations is relatively weak and evidence for the subject is stronger than for the object. The label "marked nominative" for Mundabli is based on the pronominal forms. While case is not marked in full NPs, the shapes of pronouns vary, depending on their syntactic function. The form used for out-of-focus preverbal subjects is used only in this function, while the form used for objects covers various functions, including postverbal in-focus subjects and elicitation forms. Overt coding properties for grammatical relations in Mundabli are word order and - in pronouns only - case morphology. Mundabli has no verb agreement. Noun phrases other than pronouns are not marked for case.

11.4.1 Case morphology in pronouns

Mundabli pronouns have various different case forms, including special dative forms for the 1SG pronoun **mī** and the interrogative pronoun **ndɛ̀** 'who'. Mundabli makes a distinction between preverbal pronouns and non-preverbal pronouns. The preverbal pronoun forms directly precede the verb complex. These forms only refer to topical subjects. They have no other syntactic function. The non-preverbal forms are used elsewhere for pronouns which are not

the object of a pre- or postposition. When a pronoun is the object of a (locative or dative) postposition, or of the comitative preposition **ā**, respectively, it surfaces with the same segmental shape as the non-preverbal forms, but with alternated tonal patterns. For an overview of such forms, see Table 11.1.

person	gender	SG				PL			
		PVB	NPVB	LOC	COM	PVB	NPVB	LOC	COM
1st		**N**	**mī**	**mí**	**mī**	**bī**	**bī**	**bí**	**bī**
2nd		**à**	**wà**	**wá**	**wà**	**bɛ̄n**	**bɛ̄n**	**bɛ́n**	**bɛ̄n**
3rd	1/2	**wù**	**wù**	**wú**	**wù**	**bɔ̋**	**bɔ̋**	**bɔ̌**	**bɔ̌**
	3/10	**wū**	**wű**	**wú**	**wŭ**	**yī**	**yű**	**yí**	**yĭ**
	3/7a	**wū**	**wű**	**wú**	**wŭ**	**kī**	**kű**	**kí**	**kĭ**
	7/8	**kī**	**kű**	**kí**	**kĭ**	**bī**	**bű**	**bí**	**bĭ**
	9/10	**yì**	**yì**	**yí**	**yì**	**yī**	**yű**	**yí**	**yĭ**
	19/18	**fī**	**fű**	**fí**	**fī**	**mū**	**mű**	**mú**	**mŭ**
single genders									
		PVB	NPVB	LOC	COM				
	6a	**mū**	**mű**	**mú**	**mŭ**				
	3a	**wū**	**wű**	**wú**	**wŭ**				
	8a	**bī**	**bű**	**bí**	**bĭ**				
	10a	**yī**	**yű**	**yí**	**yĭ**				
	7b	**kī**	**kű**	**kí**	**kĭ**				

Table 11.1: Preverbal, non-preverbal, object of postposition and object of comitative preposition forms of all personal pronouns, adapted from Table 6.2

When a pronoun which would otherwise bear a superhigh tone in non-preverbal position, i.e. any third person pronoun of a noun class other than Class 1 and 9, is the object of the comitative preposition **ā**, it is realized with a LH rising tone; otherwise the tone is the same as that of the non-preverbal pronoun; see also §11.3.3.

When they are the object of a postposition, all pronouns except for the Class 2 (or third person plural) pronoun bear a high tone. The Class 2 (or third person plural) pronoun is realized **bɔ̌** (with a low-high rising tone). All other pronouns bear a high tone when headed by a postposition.

When they are the object of the dative postposition **lā**, pronouns generally take the same form as when they are the object of a locative postposition. Only the first person singular pronoun **mī** '1SG' and the interrogative pronoun **ndɛ̀** 'who' also have special dative/benefactive forms; see Table 11.2.

While **ndyɛ́n** may occur on its own without a postposition, the 1SG benefactive pronoun **ndá** always co-occurs with the dative postposition **l**ā. Whereas the 1SG benefactive pronoun **ndá** can always be replaced by the "object of postposition"-form of the 1SG pronoun **mí**, the dative form **ndyɛ́n** 'to/for

	unmarked form	dative/benefactive form
1SG	**mɨ̄**	**ndá**
1SG	**ndɛ̀**	**ndyɛ̄n**

Table 11.2: Special dative/benefactive pronoun forms

whom' must be used to express the dative/benefactive of the interrogative pronoun **ndɛ̀**.

CHAPTER 12

Relative clauses

The current chapter is meant to give an overview of the most important characteristics of Mundabli relative clauses. The bulk of its content is nearly identical with the section on Mundabli relative clauses in Lovegren and Voll (2017). However, the current account contains some new information, especially regarding tone, the dummy subject and negation in relative clauses. In the remainder of this chapter, I treat the following typologically relevant parameters of relative clauses in turn: the linear order of the relative clause with respect to the head noun and with respect to other nominal modifiers (§12.1), marking of the relative clause, i.e. the elements that mark a relative clause as such (§12.2), representatives of the head nominal within the relative clause, i.e. the status of what are typically referred to as resumptive pronouns or "representative nominals" (§12.3) and the accessibility of different types of formally distinct grammatical relations to relativization (§12.4).[1] Finally, §12.5 describes how various inflectional categories, including tense and aspect, focus marking, illocutionary force and negation, are marked in relative clauses, and how this compares to main clauses. For a comparison of relative clauses in the two Yemne-Kimbi languages Mundabli and Mungbam and a more elaborate analysis, see Lovegren and Voll (2017).

[1] Here I refer to the concept developed in the works of Keenan and Comrie (1977; 1979a;b).

12.1 Position of the relative clause

In order to frame the following discussion on Mundabli relative clauses, it is important to take a look at the structure of the noun phrase and the position of the relative clause relative to the head nominal and to other noun modifiers.

As shown in §7.3, in the unmarked case, all modifiers within an NP occur to the right of the head noun. The head noun may be modified by possessive pronouns, demonstratives, adjectives, numerals and/or the definite determiner, all of which show concord with the noun class of the head noun, and by relative clauses. The relativizer also shows concord with the noun class of the head noun. See Chapter 4 for an overview of the Mundabli noun class system. Like all noun modifiers, the relative clause follows the head nominal. In nearly all examples of relative clauses found in spontaneous texts, the relative clause is the only noun modifier and is thus placed directly after the noun. If other modifiers are present the relative clause occurs at the end of the noun phrase, following all other noun modifiers, including the determiner.

The schema in Figure (12.1) shows the unmarked order of noun modifiers. Given that no other modifier follows the relative clause, it is difficult to determine whether the relative clause is to be treated as embedded in, or adjoined to, the matrix NP. However, it does not seem to be possible for anything to intervene between the relative clause and the rest of the NP.

N – Poss – Adj – Dem – Num – Det – Rel

Figure 12.1: Position of the relative clause relative to the head nominal and to other noun modifiers

(502) ŋwàtɨ̀ bí bī-fyíŋ̀ b-én bí-tɔ́ b-ɔ́
cl7/8.book cl8;3sg.poss cl8-new cl8-dem.prox cl8-three cl8-det
nɔ̄ [wù fə̀ táŋ b-ɔ́ Bàménd̀à]
subord cl1 p1 buy(b) cl8-rel Bamenda

◇‘these three new books of hers which she bought in Bamenda’

In all examples in this chapter, the head nominal and the representative of the head nominal within the relative clause (i.e., the resumptive pronoun) are underlined. In (502), the resumptive pronoun is omitted (see §12.3 for details). It is worth noting that the semantically bleached nouns **níŋ̀** ‘thing, matter’ and **dɛ̀** ‘place’ are frequently used as head nominals in cases where other languages might use a headless relative clause. Although head-less relative clauses are possible, they are rather uncommon.

12.2 Relative clause-marking

Having shown how the relative clause relates to its environment, this section discusses relative clause marking, i.e., the strategies used to identify a relative clause as such. Every relative clause is marked by a relativizer, which agrees in noun class with the head nominal and which I refer to as the "postverbal relativizer". It immediately follows the verbal complex. In addition, relative clauses are optionally introduced by the subordinating conjunction **nọ̄**, which does not show agreement. It also introduces certain kinds of adverbial clauses.

12.2.1 Postverbal relativizer

The postverbal relativizer, exemplified in (503), is identical in shape with the definite determiner and the distal demonstrative (cf. §5.2). It agrees with the head nominal in noun class and must immediately follow the verb complex of the relative clause, irrespective of the definiteness of the matrix NP or of the syntactic-semantic role of the head noun within the relative clause.

(503) wù dzé āyī, n=dǐ́ yə́ tʃín sɛ́, n=gān
CL1 say(b) no 1SG=F1 go_up(c) there CL3/7a.attic 1SG=go(a)
də̄ bān nɨ́ŋ [kī lɛ̄ ɲīm
see(a) clearly CL7.thing CL7 make(a).IPFV stop_burning(c).IPFV
tọ̄ k-ɔ́ gū w-ɔ́]
move_away(b).IPFV CL7-REL CL3/7a.fire CL3-DET

'She said: No! I will go up to the attic and find out what is putting out the fire.'

The postverbal relativizer is not to be confused with a resumptive pronoun. Firstly, as Table 12.1 shows, the two clearly differ in shape. The resumptive pronoun is represented by the second column in Table 12.1, headed preverbal pronoun,[2] and the postverbal relativizer is represented by the third column, headed determiner/relativizer, as determiners and relativizers are identical in shape. Secondly, although the resumptive pronoun is often absent, there are numerous cases (e.g., (504)) of relative clauses containing both a postverbal relativizer *and* a representative nominal in the form of a pronoun.

(504) first nɨ́ŋ nọ̄ [n=kā lə́ k-ɔ́ kɨ́] dǐ yɛ̄
first CL7.thing SUBORD 1SG=F2 do(a) CL7-REL CL7 be(b) COMP

'The first thing I will do is: […]'

[2]Non-preverbal pronouns of noun classes other than Class 1, 2 and 9 differ from preverbal pronouns in their tonal pattern (see §6.1). Non-preverbal pronouns of these other noun classes carry a superhigh tone. Apart from this tonal difference, preverbal and non-preverbal pronouns are identical.

noun class	preverbal pronoun	determiner/relativizer
1	**wù**	**wɔ̄**
2	**bɔ́**	**bɔ́**
3	**wū**	**wɔ́**
4	**yī**	**yɔ́**
5	**wū**	**wɔ́**
7	**kī**	**kɔ́**
8	**bī**	**bɔ́**
9	**yì**	**yɔ̄**
10	**yī**	**yɔ́**
19	**fī**	**fɔ́**
18b	**mū**	**mɔ́**
6a	**mū**	**mɔ́**
14	**bī**	**bɔ́**

Table 12.1: Preverbal pronouns and determiners/relativizers

Although the postverbal relativizer is cognate with the definite determiner and the distal demonstrative , the postverbal relativizer does not modify the head nominal. This is supported by its position in the middle rather than at the end of the relative clause (see (503) and (504)) and by the fact that the postverbal relativizer is always present, irrespective of the definiteness of the matrix NP or of the ability of the head nominal itself to be modified by a determiner. This latter point is illustrated by examples such as (505), which contains a postverbal relativizer even though the head nominal is a 2SG pronoun, which cannot be modified by a demonstrative or a determiner.[3]

(505) wān w-ɛ̄n, dǐ wà nō̰ [à lə w-ɔ̄ ná
CL1.child CL1-DEM.PROX be(b) 2SG SUBORD 2SG make(a) CL1-REL as
mī wān w-ɔ̄ lɛ̄ f-án gbɔ̄ kúŋ]
1SG CL1.child CL1-DET get_lost(a).IPFV PROX-here CL3.house behind

'Child, you are the one who made my [other] child get lost here behind the house.'[4]

[3]Relative clauses modifying pronouns as in (505) are possible, though not common. When the head nominal is a first or second person pronoun, the relative marker always shows Class 1 agreement.

[4]The phrase **mī wān** 'my child' is a fixed lexicalized expression. While possessive phrases are usually head-initial, consisting of a head noun followed by a possessive pronoun which agrees with the noun class of the head nominal, in this fixed expression, the noun 'child' is simply juxtaposed to the focus form of the 1SG pronoun.

12.2.2 Clause-initial subordinating conjunction

Relative clauses can be additionally introduced by the subordinating conjunction **nn̪**[5](glossed 'SUBORD'), as in (506). However, when introducing a relative clause, this subordinator always co-occurs with a postverbal relative marker; it never functions marks a relative clause on its own.

(506) dʒŭ nn̪ [bə̄ kə̀ lə̌ kpɨ́ y-ɔ̄ (yì) tō
CL9.goat SUBORD IMPERS P3 make(a) die(b) CL9-REL CL9 CL7/8.day
b-ɔ́ ŋgɔ̀] kə̀ bān áná būbūbūbū
CL8-DIST.DEM upon P3 be_white(b) like_that IDEO.white

◇'The goat which was killed on that day was completely white.'

Every relative clause can be introduced by this subordinator, but it is frequently absent and its presence is never obligatory. The same subordinator also introduces certain adverbial clauses, such as reason clauses and specific kinds of time and manner clauses.

12.3 The representative of the head nominal

According to (Keenan 1985: 147), the encoding of the role of the head noun in the embedded sentence is one of the most significant parameters from the viewpoint of typological variation. In Mundabli, the head nominal can nearly always be represented within the relative clause. The only exception is a certain type of locative relative clause (see below). The head nominal is generally represented by a pronoun which occupies the same position in the relative clause as in a main clause.

The presence of a representative nominal is obligatory when the representative nominal functions as the subject of the relative clause, as in (507), and when it functions as the possessor in a genitive phrase, as in (508).

(507) mɔ̀ [wù kə̀ dzé w-ɔ̄ dʒŭ gbàm
CL1.man CL1 P3 say(b).IPFV CL1-REL CL3a.word CL7/8.god
tō k-ɔ́ ŋgɔ̀] kə̀ dɨ̄ pə̌ pítà kyə̌
CL7/8.day CL7-DET upon P3 be(b) Pa P. K.

'The person who was preaching on that day was Pa Peter Kia.'

(508) mɔ̀ nn̪ [ń=kə̀ mŭ w-ɔ̄ wān
CL1.man SUBORD 1SG.PRO=P3 marry(a) CL1-REL CL1.child
wū] kə̀ fɛ̀l fɨ́
CL1-CL1POSS P3 be_blind(a) pass(b)

◇'The man whose daughter I married was blind.'

[5]The subordinator has a phonetic variant **nə̄** which often occurs in fast speech. The two variants occur in free alternation.

In all other types of relative clause, the use of a representative head nominal is optional. However, the conditions under which the resumptive pronoun may be omitted differ, according to the grammatical function of the representative nominal within the relative clause. While e.g., a resumptive pronoun in object function may simply be left out, this is not possible when the resumptive pronoun is the object of a comitative prefix. In this case, only the whole adpositional phrase can be dropped. In the remainder of this section, I describe the conditions under which a representative head nominal may be omitted, treating object relative clauses, dative relative clauses, different types of locative relative clauses and comitative relative clauses in turn.

An object relative clause, like in (506) may or may not contain a representative head nominal, i.e. the representative head nominal may simply be omitted.

A dative phrase is optionally introduced by the locative preposition **ǐ**, as in (509a), and requires the dative postposition **lā**. When the representative head nominal in a relative clause is the argument of a dative phrase, it can be omitted so that the dative phrase is stranded (509b). In this case, the locative marker **ǐ** is usually omitted as well, so that the dative postposition **lā** is left alone (509b). It is not possible to omit the whole dative phrase.

(509) a. mbɛ̄ nǭ [wù kə̀ ʤyě b-ɔ́ (ǐ) bɔ́
CL2.people SUBORD CL1 P3 cook(a).IPFV CL2-REL (LOC) CL2.LOC
lā], bə̋ kə̀ fə̂n
DAT CL2 P3 be_rich(a)

◇'The people for whom she used to cook were rich.'

b. mbɛ̄ nǭ [wù kə̀ ʤyě b-ɔ́ lā], bə̋ kə̀
CL2.people SUBORD CL1 P3 cook(a).IPFV CL2-REL DAT CL2 P3
fə̂n
be_rich(a)

◇'The people for whom she used to cook were rich.'

There are two different kinds of locative relative clauses: those which contain a locative postposition and which describes location in relation to a certain object or location and those which do not contain a locative postposition and which describe location at a certain place rather than in relation to an object or location.

In a locative relative clause of the former type, the object of the locative phrase may be omitted, as indicated by the parentheses in (510). In this case, the locative phrase is stranded. The use of the locative preposition **ǐ** (omitted in (510)) in this type of locative phrase is, as always, optional, so that the respective locative postposition may get stranded either together with the locative preposition or on its own, as in (510). The resumptive pronoun can also be replaced by the locative pro-form **tʃín** 'there'.

(510) kpē w-ɔ́ nǭ́ [bɔ̋ fə̋ dʒī kwō ʃī w-ɔ́
CL3.pot CL3-DET SUBORD CL2 P1 put(a) enter(c) go_down(a) CL3-REL
dɔ̄ w-ɔ́ (wŭ) mɪ̄], wū fə̋ gə́ ə́ mə̀mə̀
CL3a.beans CL3a-DET CL3 in CL3 P1 be_big(b) ADVLZ very

◇'The pot into which they put the beans was very big.'

Unlike the type of locative relative clause exemplified by (510), locative relative clauses which do not contain a locative postposition and which describe location at a certain place rather than in relation to an object or location, henceforth referred to as absolute locative relative clauses, never contain a representative nominal. They are unique in this regard. Absolute locative relative clauses always take the semantically bleached noun **dɛ̀** 'place' as their head nominal and their postverbal relativizer **fɔ́** shows locative agreement (511).[6]

(511) ká à wɔ̄ŋ mɛ̄, kə́ m̀=mū, mɪ̄ n=tsɔ̀
COND 2SG squish(a) finish(a) COND 1SG=drink(b) 1SG 1SG=show(a)
dɛ̀ nǭ́ [wān w-ā kə̀ fɪ̄ f-ɔ́]
CL9/10.place SUBORD CL1.child CL1-2SG.POSS P3 pass(b) LOC-REL

'After you have finished squishing [the small berries], after I have drunk [the juice], I will show [you] where your child has gone.'

Finally, in a comitative relative clause, the representative nominal can be omitted only if the comitative marker **ā**,[7] is also absent, as shown by the parentheses in (512) (see (516) for an example of a comitative relative clause in which the comitative phrase is not omitted).

(512) sɨ̀ŋ nǭ́ [wù fə̀ tə́n y-ɔ̄ sɔ̀ y-ɔ̄ (ā yì)]
CL9.knife SUBORD CL1 P1 cut(b) CL9-REL CL9.meat CL9-DET COM CL9
kɔ̆
be_sharp(b)

◇'The knife that she cut the meat [with] was sharp.'

The way in which representative nominals may be omitted in relative clauses has strong parallels in the possibility to omit pronouns in main clauses. Thus, for example, the subject, which cannot be omitted in a relative clause, is also the only obligatory argument in a main clause. Also stranding of locative phrases is possible in main clauses as well as in relative clauses. Alternatively, in both, the locative phrase can be omitted entirely. Concerning absolute locatives, the non-existence of locative pronouns may account for the absence

[6] It is likely that **fɔ́** is a remnant of Proto-Bantu locative class 16, which encodes location

[7] Although the marker has instrumental semantics in (512), I refer to this marker as comitative because this is its main semantic function.

of representative head nominals in absolute locative relative clauses. Finally, in a main clause, just like in a relative clause, a comitative phrase cannot be stranded. The comitative argument may only be omitted if the comitative marker is also omitted.

12.4 Accessibility to relativization

Another typologically relevant factor in relative clause structure concerns the permissible grammatical functions of the head nominal within the relative clause (Andrews 2007: 207). In Mundabli, there is no restriction on the grammatical relation of the representative nominal within the relative clause. The representative nominal within a relative clause may be the subject, the object, the dative argument or the comitative argument of the relative clause, it may be the argument of a locative phrase or the possessor in a genitive phrase (see (513) , (514) which repeats (506), (515), (516), (517) and (518), respectively).

(513) mɔ̀ [wù kə dzé w-ɔ̄ dʒú gbàm
CL1.man CL1 P3 say(b).IPFV CL1-REL CL3a.word CL7/8.god
tō k-ɔ́ ŋgɔ̀] kə dɪ̄ pă pítà kyă
CL7/8.day CL7-DEM.DIST upon P3 be(b) Pa P. K.

'The person who was preaching on that day was Pa Peter Kia.'

(514) dʒŭ nǭ [bə kə lə kpɪ́ y-ɔ̄ (yì) tō
CL9.goat SUBORD IMPERS P3 make(a) die(b) CL9-REL CL9 CL7/8.day
b-ɔ́ ŋgɔ̀] kə bān áná būbūbūbū
CL8-DET upon P3 be_white(b) like_that IDEO.white

◇'The goat which was killed on that day was completely white.' (repeated from example (506))

(515) wàn w-ɔ̄ nǭ [m=fə̋ fə̋ w-ɔ̄ kpő
CL1.child CL1-DET SUBORD 1SG=P1 give(b) CL1-REL CL3/7a.money
ǐ wú lā] ké tʃŭ á̋ kè-kè
LOC CL1.LOC DAT return(c) come(b) ADVLZ CL9.hand~RED

◇'The child who I gave the money to came back with empty hands.'

(516) ŋkɔ̀m nǭ [ntí fə̋ lɔ̄ w-ɔ̄ ā wù] kwâ
CL1/2.hoe SUBORD N. P1 go_to_bush(a) CL1-REL COM CL1 break(a)
fɪ́
pass(b)

◇'The hoe which Ntie went to the farm with broke.'

(517) kpē w-ɔ́ nǭ́ [bɔ̌ fə̌ dʒī kwō ʃī w-ɔ́
CL3.pot CL3-DET SUBORD CL2 P1 put(a) enter(c) go_down(a) CL3-REL
dɔ̄ w-ɔ́ mɨ́], wū fə̌ gə̌ á mǫ̀mǫ̀
CL3a.beans CL3a-DET in CL3 P1 be_big(b) ADVLZ very

◇'The pot which they put the beans into was very big.'

(518) wān nǭ́ [mán mű́ dɨ́ w-ɔ̄ ngàʃă]
CL1.child SUBORD CL19/18.name CL18;3SG.POSS be(b) CL1-REL N.
fə̌ lɔ̀ ɲű́
P1 go_to_bush(a) CL3/7a.farm

◇'The child whose name is Ngasha went to the farm.'

In Mundabli, it is impossible to form a relative clause with a head noun that plays no obvious grammatical role within the relative clause.[8]

12.5 Asymmetries between main and relative clause properties

Relative clauses and main clauses in African languages commonly differ regarding their inflectional or focus marking possibilities. Typically, fewer possibilities are available in relative clauses as compared to main clauses (Hyman and Watters 1984).

In Mundabli, inflectional possibilities are nearly the same in both main and relative clauses. All temporal and aspectual distinctions exist in main and relative clauses. However, while segmental tense markers are identical in main and relative clauses, tonal inflections in relative clauses differ from tonal inflections in main clauses. Focus marking is expressed in the same way in main and relative clauses, and interrogative relative clauses are also possible; these have basically the same structure as interrogative main clauses. Only the way in which negation is marked differs considerably between main and relative clauses. The remainder of this section treats all these aspects in turn.

Mundabli has no restrictions on the occurrence of temporal or aspectual distinctions in relative clauses. Tense is marked by preverbal particles and specific tone patterns on the verb, both in main and relative clauses. All tenses can occur in main clauses and in relative clauses, and the aspectual perfective/imperfective distinction marked by ablaut and specific verb tone patterns, also exists in both. However, while segmental tense markers are identical in main and relative clauses, tonal inflection in relative clauses differs partly from tonal inflection in main clauses. Table 12.2 compares tonal inflection in perfective verbs across tenses in main and relative clauses. While the overall

[8]This is worth mentioning because it is possible in the related language Mungbam; for details see Lovegren and Voll (2017).

structure of tonal inflections is the same in main and relative clauses, the actual tone patterns may differ. Imperfective verbs show the same tone patterns, namely mid for Class A verbs and high for Class B and Class C verbs.

tense	tense marker	main clause			relative clause		
		A	B	C	A	B	C
P0		L	S	H	M	S	HM
P1	**fə̋**	L	S	H	M	S	HM
P2	**à∼nà**	L	LH	H	LH	M	H
P3	**kə̀**	LH	M	H	LH	M	H
F1	**dǐ**	H	H	H	H	H	H(/HM)[9]
F2	**ká**	H	H	H	H	H	H

Table 12.2: Segmental tense markers and tone patterns of non-final perfective verbs of verb tone classes A, B and C in all tenses (P0-P3 and F1-F2) in main and relative clauses

The word order of the relative clause is the same as that of a main clause, and even focus-induced word order changes are possible. Focus marking is basically the same in main and relative clauses. In order to be focused, the subject of a main clause can occur in IAV position (cf. §14.2.3). The same happens in relative clauses, as can be seen in (519) and (520) which are opposed to a relative clause with an unmarked word order in (521). In (519), the representative nominal is in focus; in (520), a nominal other than the representative nominal is in focus. Note that the post-verbal relativizer precedes the focused subject.

(519) bī tsè mɔ̀ nǭ [fə̋ gyā w-ɔ̄ wù dʒǔ
1PL search(a) CL1.man SUBORD P1 steal(a) CL1-REL CL1 CL9.goat
y-ɔ̄]
CL9-DET

◇'We look for the man that [he] stole the goat.'

(520) ń=kɔ̀ŋ sə̄ k-ɔ́ (nǭ) [tə́ŋ k-ɔ́ ɲùŋfù
1SG=love(a) CL7/8.clothes CL7-DET SUBORD buy(b) CL7-REL N.
(kǐ)]
CL7

◇'I like the clothes that Nyungfu bought.'

[9]The tone of a Class C noun in F1 depends on the form of the tense marker. More research is needed to determine which contexts the form of the tense marker varies in.

(521) ń=kɔ̀ŋ sə̄ k-ɔ́ (nn̩̄) [ɲùŋfù tấŋ k-ɔ́
1SG=love(a) CL7/8.clothes CL7-DET SUBORD N. buy(b) CL7-REL
(kí)]
CL7

◇'I like the clothes that Nyungfu bought.'

Main clauses with subject focus, i.e. with the subject in IAV position, contain a tonal dummy subject which consists of a low tone and occupies the canonical subject position before the verb complex (cf. §6.2 on the dummy subject and §14.2.3 on main clauses with subject focus). The dummy subject causes a subsequent superhigh tone to be realized as a low-high rising tone. In any other context, it has no perceivable effect. Unlike main clauses with subject focus, relative clauses with subject focus, i.e. with the subject in IAV position, do not contain a dummy subject. Therefore, the P1 marker **fə̋** in (519) and the verb **tấŋ** 'buy' in (520) are realized with a superhigh rather than a low-high rising tone, like in the equivalent main clauses in (522) and (523). Defocalization, i.e. movement of canonically post-verbal constituents to immediate before verb (IBV) position[10] (see §14.2.2.2 for details), is not attested in relative clauses.

(522) fə̌ gyà wù dʒǔ y-ɔ̄
DS.P1 steal(a) CL1 CL9.goat CL9-DET

◇'He stole the goat.'

(523) tǎŋ ɲùŋfù (kǐ)
DS.buy(b) N. CL7

◇'Nyungfu bought it.'

Verum focus (cf. §14.4.2) can also be expressed in relative clauses, as in (524). However, this is is not very common. Just like in a main clause, truth focus is marked by the particle **tə́**, which occurs at the beginning of the verbal complex.

(524) f-án dǐ mɔ̀ [nn̩̄ wù tə́ kə̀ tʃū w-ɔ̄]
PROX-here be(b) CL1.man SUBORD CL1 VER.FOC P3 come(b) CL1-REL

◇'Here is the man who did come.'

Interrogative relative clauses are attested as well. Apart from the presence of a relativizer which follows the relative verb, the same construction is used to express content questions in main clauses, as in (525), and relative clauses, as in (526) (cf. §15.1.2 for more on interrogatives).

[10]For an explanation of this term, see first footnote in Chapter 14.

(525) a. mɔ̀ nǫ̣ [wù yíŋ w-ɔ̄ gbɔ̌ ndɛ́] kpɨ́
CL1.man SUBORD CL1 build(c) CL1-REL CL3.house who die(b)

◇‘The man who built whose house died?’

b. wù yíŋ gbɔ̌ ndɛ́
CL1 build(c) CL3.house who

◇‘Whose house did he build?’

(526) a. y-ɛ́n dɨ́ sɨ̀ŋ nǫ̣ [bə̄ fə̋ tán y-ɔ̄ mān
CL9-this be(b) CL9.knife SUBORD IMPERS P1 cut(b) CL9-REL what
ā yì]
COM CL9

◇‘This is the knife that they cut what with?’

b. bə̄ fə̋ tán mān ā yì
IMPERS P1 cut(b) what COM CL9

◇‘What was cut with it?’

While main and relative clauses are nearly identical regarding tense, aspect and focus marking, the two differ with regard to negation. The regular negation strategy (see §8.5.3), which employs the circumfixal negative marker **ā … wɔ̄**, as employed in (527), is not attested in relative clauses. However, there is one exception to this generalization, namely when the head of a relative clause belongs to Class 1. See below for details.

(527) bī ā wʉ́ wɔ̄ ɲɔ̄ nɨ́
CL8 NEG hear(b).IPFV NEG CL8.talk CL1.mother.3SG.POSS

‘They are not listening to their mother’s advice.’[11]

Rather than a negated main verb, negated relative clauses contain a positive copula verb followed by the post-verbal relativizer. Negation is instead expressed within an adverbial phrase containing a non-finite negative verb which is introduced by the adverbializer **ā́** and followed by the post-verbal negative marker **wɔ̄**, as in (528a). Example (528b) shows the ungrammaticality of the regular negation strategy in a comparable but ungrammatical construction.

(528) a. ɲwám nǫ̣ bə̋ dɨ́ b-ɔ́ ā́ gàn wɔ̄
CL2.children SUBORD CL2 be(b) CL2-REL ADVLZ go(a) NEG
skûl, bə̋ lǽ mān
CL1/2.school CL2 do(a).IPFV what

◇‘The children who do not go to school, what are they doing?’

[11]The Class 8 pronoun can be used in a pejorative manner to refer to human beings, equating them with inanimate things.

b. *ɲwám nǭ́ bɔ́ ā gàn (b-ɔ́) wɔ̄ skûl,
CL2.children SUBORD CL2 NEG go(a) (CL2-REL) NEG CL1/2.school
bɔ́ lǽ mān
CL2 do(a).IPFV what

intended: ◇'The children who do not go to school, what are they doing?'

However, there is one exception to the absence of the unmarked negation construction in relative clauses, i.e. there is one case in which the unmarked negation construction with the circumfixal marker **ā … wɔ̄** is attested in a relative clause. This is when the head nominal of the relative clause belongs to Class 1, as in (529). In this case, it is possible to use the regular negation strategy. As usual, the relative clause is optionally introduced by the subordinator **nǭ́**. The main verb of the relative clause is preceded by the preverbal negative marker **ā**, and followed by **wɔ̄**, a word which could be interpreted either as a post-verbal Class 1 relative marker or as a post-verbal negation marker. The two are identical in shape, and in this special context, a single form seems to fulfil both functions.

(529) wān nǭ́ mán mű́ ā dǐ́ wɔ̄
CL1.child SUBORD CL18.name CL18;3SG.POSS NEG be(b) CL1-REL;NEG
ɲùŋfù dǐ gbə́
N. be(b) house.LOC

◇'The child whose name is not Nyungfu is at home.'

Another example of a negative relative clause with a Class 1 head noun which contains a regular negation construction is (530).

(530) kpé nǭ́ wù fá nàm wɔ̄ dá yí wɔ̄
CL1.woman SUBORD CL1 P1.NEG work(a) NEG F1;NEG eat(b) NEG
ɲām
CL8a.fufu

◇'The woman who did not work will not eat fufu.'

Negative relative clauses with a Class 1 head nominal can alternatively be formed by employing the unmarked relative clause negation strategy; cf. (531) and (532).

(531) wān nǭ́ mán mű́ dǐ́ w-ɔ̄ ā́
CL1.child SUBORD CL18.name CL18;3SG.POSS be(b) CL1-REL ADVLZ
nɨ̀m wɔ̄ ɲùŋfù dǐ gbə́
be_situated(a) NEG N. be(b) house.LOC

◇'The child whose name is not Nyungfu is at home.'

(532) kpé nǭ wù fə̀ dɨ́ w-ɔ̄ ā́ nàm wɔ̄ dā́
CL1.woman SUBORD CL1 P1 be(b) CL1-REL ADVLZ work(a) NEG F1;NEG
yí wɔ̄ ɲām
eat(b) NEG CL8b.fufu

◇'The woman who did not work will not eat fufu.'

A construction similar to the one employed in negated relative clauses is used in main clauses to imply that an action or event has not yet taken place, as in (533) (cf. §8.5.3.4). In this case, the content verb is introduced by **dā́**. This most likely represents a merger of the copula verb **dɨ́** and the adverbializer **ā́**, rendering a construction comparable to the one attested in negative relative clauses.

(533) n=dā́ ɲɔ́m wɔ̄ ɲàm
1SG=be(b).ADVLZ stir(b) NEG CL8b.fufu

◇'I have not stirred fufu yet.'

The most probable reason for the near lack of true negative relative clauses is the fact that the post-verbal negation marker and the post-verbal relative marker compete for the same slot. The fact that the only exception to this rule, i.e. the only case of a true negative relative clause (using the regular negation strategy), are relative clauses headed by Class 1 head nominals, seems to confirm this. When the head nominal belongs to Class 1, the agreeing relative marker **wɔ̄** is identical in shape with the post-verbal negative marker **wɔ̄**. While it is still not possible for the two to co-occur, the construction employs a single post-verbal form **wɔ̄** which simply fulfils both (completely unrelated) functions. This is an interesting phenomenon and I am not aware of any other case in which a single word fulfils the function of two formally identical but semantically unrelated items simultaneously.

CHAPTER 13

Copulas and nonverbal predicates

This chapter deals with nonverbal predicate constructions, i.e. clauses whose predicate is not a verb but e.g., a noun, an adjective or a locative phrase. Although the predicate in these clauses is not a verb, they do frequently contain a copular verb. As copula verbs are an integral part of these constructions, the chapter starts of with a description of copula verbs (§13.1). As the use of these copula verbs is not restricted to nonverbal predicates, their functions in other constructions are presented at the end of the chapter, in §13.3. The attested types of nonverbal predicate constructions are described in turn in §13.2. and Lovegren (2013: Ch.14).

13.1 Copula verbs

Mundabli has a general copula **dɨ́** 'be' which is used in all kinds of nonverbal predicate constructions. This copula is a fully-fledged verb, behaving like a regular verb regarding tense, mood and aspect marking (see §8.1). It belongs to verb tone class B (see §3.2.2.1). The copula may be omitted in presentational equative constructions (see §13.2.1), i.e. in clauses which can be translated as 'This/that is a/the...', and in adjectival predicates (see §13.2.2). In all other contexts, the use of the copula is obligatory. The etymology of the copula verb is unclear. It is not obviously related to a stative verb like e.g., **nɨ̀m** 'sit' or **dő** 'stay'. The use of the copula **dɨ́** is not restricted to nonverbal predicate constructions. It is also attested in a number of other constructions (see §13.3). Apart from the copula verb **dɨ́**, there is at least one semi-copula, namely the verb **tʃű** 'come, become' (see §13.2.6).

There is another copula **gɛ̂** which surfaces in locative predicates in the broader sense, i.e. including existential predicates and possessive predication. In this context, it is used in exactly the same constructions as **dɨ́** but, in addition to its function as a copula, it seems to be associated with simultaneity. Apart from its use as a copula, **gɛ̂** is also attested as a clause linker. The use of **gɛ̂** including its use in locative nonverbal constructions and as a conjunction for clause linking is dealt with in §13.2.5.4.

13.2 Nonverbal predicate constructions

This section describes the different types of nonverbal predicates attested in Mundabli. All non-verbal predicates in Mundabli are at least optionally, and often obligatorily, introduced by the copula verb **dɨ́** 'be' (Class B). Locative attributes can alternatively be introduced by the particle **gɛ̂** (Class A). This copula is not formally a verb because, although it co-occurs with tense markers like a verb, it does not fit into any of the three verb tone classes and, its tone being constant across tenses, it does not exhibit any of the characteristic tone changes. Its use is restricted to situations in which two simultaneous events are described (see §13.2.5.4). When a clause containing a verbless predicate does not contain a copula, and is thus a true verbless clause, the predicate directly follows the subject NP. When a copular clause lacks an overt subject, a purely tonal low tone dummy subject (cf. §6.2) precedes the copula.

I describe the various constructions in turn, starting off with equative constructions (or nominal predicates) (§13.2.1), followed by adjectival predicates (§13.2.2), then similative predicates (§13.2.3) and numeral predicates (§13.2.4). Following these, locative predicates, existentials and predicative possession are dealt with in (§13.2.5). Finally, I conclude this section with a description of the semi-copula **tʃʉ́** 'become' and the constructions it occurs in (§13.2.6). Wherever relevant, copulas are underlined and the relevant clause is enclosed in square brackets.

13.2.1 Equative constructions

Equative constructions express the identity of the referents of two noun phrases. Equative constructions are formed with the copula verb **dɨ́**. The predicate is represented by a noun phrase ((534) and (536)).

(534) mɨ̄ tɛ́m ɲùŋfù n=dɨ́ f-án, [n=<u>dɨ́</u> ŋkŏŋ ɲdʒân]
1SG T. N. 1SG=be(b) PROX-here 1SG=be(b) CL1.chief Mundabli

'I, Tem Nyungfu, I am here. I am the chief of Mundabli.'

(535) *neighbour* wū kə̀ tʃyé [ɲwɔ́m b-ɛ́n
CL1.neighbour CL1;3SG.POSS P3 know(c) CL2.children CL2-DEM.PROX
dɨ̋ ɲwɔ́m nɨ́]
be(b) CL2.children CL1.mother.3POSS

'Her neighbour knew that these children were her siblings.'

(536) ndʒā̀n dɨ̋ ná áná, [ndʒā̀n dɨ̋ ndʒā̀n]
Mundabli be(b) as like_that, Mundabli be(b) Mundabli

'Mundabli is like that. Mundabli is Mundabli.'[1]

Equational predicates may lack a full NP subject. However, in this case, a purely tonal low tone dummy subject (cf. §6.2) precedes the verb complex, which causes the Class B copula verb **dɨ̋** 'be' in P0 tense to be realized with a low-high rising tone, as in (537) and (538).

(537) bɔ̋ dzé tí yɛ̄ [dɨ̌ bɛ̄n]
CL2 say(b).IPFV surprisingly COMP DS.be(b) 2PL

'They are [instead] saying that [it] is *y*ou!'

(538) [dɨ̌ tá bɛ̄n ndʒā̀n à]
DS.be(b) only 2PL Mundabli Q

'Is it only you Mundabli [people]?'

Mundabli does not make a formal distinction between "true equational clauses". In other words, clauses with a referential nominal predicate, as in (534)-(536), and "clauses with true nominal predicates" (Dryer 2007a: 233), i.e. clauses with non-referential nominal predicates, as in (539)-(540), are expressed in exactly the same way.

(539) nsūŋ wū dzé wú lā yɛ̄ wà, [à dɨ̌
CL1.friend CL1;3SG.POSS say(b) CL1PP DAT COMP 2SG, 2SG be(b)
kpé bɔ̌]
CL1.woman CL1/9.bad

'Her friend said to her: You, you are a bad woman!.'

(540) ŋ=wò má yɛ̄ wù dzé lɔ̄~lɔ̄ *bìkɔ́* ŋ̋=kə̀ ā
1SG=think CS.QUOT COMP CL1 say(b) lie~RED because 1SG=P3 NEG
tʃyé wɔ̄ yɛ̄ ŋwàtɨ̀ dɨ̋ ná, [dɨ̌ nɨ́ŋ kə̄-dzɔ́ŋ]
know(c) NEG COMP CL7/8.book be(b) as be(b) CL7.thing CL7-good

'So I was thinking that he was telling a lie because back then, I did not know that literacy is a good thing.'

[1]This is supposed to mean that Mundabli and its people are the way they are. This cannot be changed and it will always be like that.

Although this is not often the case, the copular verb **dǐ́** can be omitted in positive declarative present tense equative clauses. In all other tense-mood-aspect combinations, the use of **dǐ́** is obligatory because the copula verb serves as the host for TAM morphology. All attested examples of equative constructions which lack a copula verb are presentational constructions, i.e. the subject is represented by a demonstrative pronoun and the translation starts with 'This/that is a...', as in (541)-(544).

(541) [w-ēn ŋkŏŋ fān]
CL1-DEM.PROX CL1.chief here?

◇'This here is a/the chief.'

(542) à mɨ̄ tʃyé yɛ̄ [w-ɔ́ gbɔ̄ wān w-ā]
2SG CONSEC know(c) COMP CL3-DET CL3.house CL1.child CL1-2SG.POSS
yà
INTERJ

'And then you know that that [is] your child's house, you hear?'

(543) [k-ɔ́ nɨ́ŋ nǭ wù tʃű́ k-ɔ́]
CL7-DET CL7.thing SUBORD CL1 come(b) CL7-REL

'...that is the thing [because of] which he came.'

(544) ā dǐ́ wɔ̄ yɛ̄ bì-lʊ̀ŋ dǐ ʃí yɪ́
NEG be(b) NEG COMP CL8-CL7/8.suffering F1 go_down(a) eat(b).IPFV
wù t-án áná, [w-én lyɛ́]
CL1 DIST-here like_that CL3-DEM.PROX CL3/7a.boldness

'It is not that suffering would come down and eat him there like that, this would be a bold thing to claim.'

13.2.2 Adjectival predicates

Adjectival predicates may be introduced by the copula verb **dǐ́** (545) or they may directly follow the subject NP without a copula, as in (546)-(547). The adjective is marked by an agreement prefix, which is tonal for Class 1 and 9 and segmental for all other agreement classes (cf. §5.3.1).

(545) [mɔ̀ w-ēn dǐ́ bŏ]
CL1.person CL1-DEM.PROX be(b) CL1/9.bad

◇'This person is bad.'

(546) [yū y-ɔ̄ bò ɲwɛ́n á́ kī-lī]
CL9/10.buttock CL9-DET CL1/9.bad now ADVLZ NMLZ-be_strong(a)

'Sex is very dangerous these days.'

(547) bɔ̄ dzé gàn bɔ̌ lā yɛ̄ [bán bò
IMPERS speak(b) go(a) CL2DAT DAT COMP CL1/2.outside CL1/9.bad
á kī-lī]
ADVLZ NMLZ-be_strong(a)

'They are telling them that [the world] outside is very bad.'

However, cases of adjectival predicates are rare. This is partly due to the small number of adjectives (cf. §5.3.1). However, even with few adjectives, predicative use is marginal. It is more common to use a nominal predicate in which the noun is modified by the relevant adjective, as in (539).

13.2.3 Similative predicates

Similative predicates obligatorily include the copula verb **dǐ́**. Similative predicates also require an adverbial constituent consisting of two particles **ná** and **áná** which are glossed 'as' and 'like that', respectively, as in (548)-(550).

(548) wān w-ɔ̄ mɨ́ dzě nǐ́ lā yɛ̄
CL1.child CL1-DET CONSEC say(b) CL1.mother.3POSS DAT COMP
[dɔ̄ w-én dǐ́ ná áná] n=tə́ ʃɛ̄ yɛ̄
CL3.beans CL3-DEM.PROX be(b) as like_that 1SG=FOC want(a) COMP
m=fǭ ʃū wá lā, yɛ̄ k-ɔ́ nɨ́ŋ nǭ
1SG=tell(a) come(b) 2SG DAT COMP CL7-DET CL7.thing SUBORD
wān w-ɔ̄ fə̄ lə̀ k-ɔ́ f-án ǐ́ nsɔ̄lā
CL1.child CL1-DET P1 do(a) CL7-REL PROX-here LOC CL1/2.afternoon

'The child told the mother: as these beans are like this, I want to tell you what your child has done here in the afternoon.'

(549) kə́ [gbɔ̄ w-én dǐ́ ná áná] bɛ̄n ɲwɔ́m
COND CL3.house CL3-DEM.PROX be(b) as like_that 2PL CL2.children
b-ɔ́, bɛ̄n yɨ́ŋ yá t-ə̋ tʃì t-ɔ́
CL2-DET 2PL build(c) go_up(c) DIST-there up DIST-DET

'As this house is like this, you, the children will be building it up (adding on top of the house).'

(550) ɲwō̍m w-ɔ̄ kpán ʃú, ā́ká [dʒwɛ̄n kú
CL1.husband CL1-DET be_correct(b) come(b) like Missong home.LOC
dǐ́ ná áná]
be(b) as like_that

'The husband came as near as Missong, like that.'

This construction is similar to Lovegren's "Gesture-framing construction" in Mungbam (Lovegren 2013: 445). However, I am not aware that any of the

clauses in the examples above has a hand gesture as its predicate. Instead, the predicate is the adverbial proform **áná** 'like that', and it is always specified by a subsequent sentence describing what the adverbial proform **áná** 'like that' refers to, i.e. what the subject of the copula clause is like.

13.2.4 Numeral predicates

Numeral predicates are introduced by the copula verb **dǐ́**. I am not aware of any instances of numeral predication in which the copula is omitted. The numeral in a numeral predicate construction takes a concordant noun class prefix,[2] as in (551)-(553).

(551) [bɔ́ kə̀ dɪ̄ bɔ́-fyɛ̂], wān mɔ̀nɔ̄ wù-mwò āmɨ̀ wān
CL2 P1 be(b) CL2-two CL1.child CL1.man CL1-one and CL1.child
kpé wù-mwò
CL1.woman CL1-one

'They were two, one boy and one girl.'

(552) [bì ā dǐ́ dzɔ́ŋ wɔ̄ bǐ́-fyɛ̀]
CL8 NEG be(b) again NEG CL8-two

'They [the frogs] are no more two of them.'

(553) bě gān yɪ̄ŋ ʃī k-ɔ́, [kī dǐ́
count(a) go(a) CL3/7a.egg CL9.chicken CL7a-DET, CL7a be(b)
kí-mɪ̀ŋ], [kī dǐ́ dzōfɪ̄]
CL7a-how_many, CL7a be(b) ten

'Count those eggs! How many are they? There are ten.'

The presence of a full NP subject is not obligatory in numeral predication (554). However, the use of a tonal dummy subject (cf. §6.2) is required if no subject NP is present.

(554) wù dzě yɛ̄ [dǐ́ bɔ́-mɪ̀ŋ]
CL1 say(b) COMP DS.be(b) CL2-how_many

'He said that [there] were how many?'

13.2.5 Locative predicates and existential clauses

Locative predicates and existential clauses have the same form. Both contain locative constituents, but existential clauses co-occur with locative proforms

[2]The irregular numeral **dzōfɪ̄** 'ten' does not take a noun class prefix (see (553)). For more on numeral agreement prefixes, see §5.4.

more frequently, while predicative possession constructions contain comitative phrases. Locative predicates and existential clauses, including predicative possession constructions, are the only nonverbal predicates which allow the use of the simultaneous-locative copula **gɛ̄̂** as an alternative to the copula verb **dɨ́**. The use of the copula **gɛ̄̂** is described in §13.2.5.4.

13.2.5.1 Locative predicates

A locative predicate is introduced by the copula verb **dɨ́**, as in (555)-(557). Locative predicates require the presence of a locative constituent (cf. §11.3.4) and a copula verb.

(555) wɛ́, [wù ā dɨ́ wɔ̄ gbɔ̄ kóŋ ò]
INTERJ CL1 NEG be(b) NEG CL3.house house_back.LOC INTERJ

'Alas! She is not behind the house!'

(556) [wù dɨ̌ (ɨ́) ʃɨ́ mɨ̄]
CL1 be(b) LOC CL9/10.market in

◇'She is at the market.'

(557) [gbàn w-ā wú-kpé w-ɔ̄ dɨ́ gbə̄ ò]
CL1.in-law CL1-2SG.POSS CL1-female CL1-DET be(b) house.LOC INTERJ
yɛ̄ wù nɨ́ŋ yɛ̄ wū də̄ wá lā ò
COMP CL1 want(c) COMP CL1 see(a) 2SG.PP DAT INTERJ

'Your mother-in-law is in the house [saying] that she wants to see you!'

The locative constituent can be represented by a locative proform, such as **fán** 'here' in (558) or the interrogative pronoun **nā** 'where' in (559).

(558) [n = dɨ́ f-án], n = dɨ́ Tela Mwɔm
1SG = be(b) PROX-here 1SG = be(b) T. M.

'I am here. I am Tela Mwom.'

(559) nɨ́ bú ʃɨ̀ tí wú lā,
CL1.mother.3POSS ask(b) go_down(a).IPFV surprisingly CL1PP DAT
yɛ̄ mɨ̄ wān, [ɲwɔ́m w-ā dɨ́ tí
COMP 1SG CL1.child CL1.husband CL1-2SG.POSS be(b) surprisingly
nā (ò)]
where INTERJ

'Her mother will ask her: My child, where is your husband?'

13.2.5.2 Existential

Existential clauses are not formally different from locative clauses. However, they usually have a presentative function by introducing discourse participants. This is reflected in the frequent use of the modifier **dzū** 'a certain' in (560)-(562), to modify the subject, as characteristic for thetic clauses (cf. §14.5). Existential clauses express the existence of the subject referent, either in general, as in (561), or in a specific place, as in (562). They employ the copula verb **dǐ́** and usually require a locative constituent, as in (560)-(563). However, the presence of a locative constituent is not obligatory. The locative phrase in existential clauses is commonly represented by the spatial proform **fǐ́n** 'there', as in (see (560)-(562)), and less frequently by a more elaborate locative phrase, as in (563).

(560) [kpé dzū kə̀ dī̱ fǐ́n]
CL1.woman CL1/9.INDEF P3 be(b) there

'There once was a woman.'

(561) [mɔ̀ dzū dǐ́ fǐ́n] wù kǎn tsʊ̌ à
CL1.person CL1/9.INDEF be(b) there CL1 lack(b) CL7/8.witchcraft Q

'Is there any person who does not possess witchcraft?'

(562) kyɛ́ yá gān f-ʊ̌ ywṵ́, [fì-yǎn
look(c) go_up(c) go(a) PROX-there CL1/2.hanging_dryer CL19-leaf
dzú dǐ́ fǐ́n], ā mū ʃī
CL19.INDEF be(b) there 2SG take(a) go_down(a)

'Look up at the hanging dryer! There is a certain leaf. You should take it down.'

(563) Pɛ́ dzé yɛ̄ [mbǐ́ dǐ́ wú gbə̄]
P. say(b) COMP CL6.wine be(b) CL1.PP house.LOC

'Pe said that there was wine in his house.'

When an existential predicate is negated, the locative constituent is absent (see (564) and (565)).

(564) Pɛ́ kə̌ də́m ʃṵ́ yɛ̄ wū tʃū kwó
P. P3.HAB shake(?).IPFV come(b).IPFV COMP CL1IRR come(b) enter(c)
kɛ́ gbə́, [dʒī kǎ dǐ́ wɔ̄]
return(c) house.LOC CL3.way P3;NEG be(b) NEG

'Pe was ravaging [places] in order to come back into the house but there was no way.'

(565) tō nn̰ lòŋ kɔ́ b-ɔ́ wù,
cl7/8.day subord cl7/8.suffering catch(b) cl8-rel cl1
[kām b-ɔ́ bī-kpɔ̄n ā dɪ́ wɔ̄]
cl7/8.thousand cl8-det cl8-five neg be(b) neg

'The day that suffering attacks her, the 5000 francs are not there.'

13.2.5.3 Predicative possession

Predicative possession is expressed by a copula in combination with a comitative phrase. The copula in predicative possession constructions is **dɪ́**, as in (567).

(566) [wù kə̀ dɪ̄ ā ɲwɔ́m bɔ́]
cl1 p3 be(b) com cl2.children cl2;3sg.poss

'She had children of her own.'

(567) nɪ́ wū bú wú lā yɛ̄ mə̀, [à
cl1.mother cl1;3sg.poss ask(b) cl1pp dat comp ncs.quot.q 2sg
kə̌ dɪ́ ā mɔ̀nō yɛ̄]
p3.hab be(b) com cl1.male quot.q

'Her mother asked her: Do you have a husband?'

Predicative possession can also be expressed by the verb **kán** 'have, hold', as in (568).

(568) bī ká kán ŋgī, *school, any* nɨ́ŋ bī nɨ́ŋ k-ɔ́
1pl f2 have(c) cl6.water school any cl7.thing 1pl want(c) cl7-rel
kɪ́ bī ká kán kɪ́
cl7 1pl f2 have(c) cl7

'We will have water, a school, anything we want, we'll have it.'

There is no semantic difference between the two possessive constructions described above, as shown in (569) where both are used in sequence by the same speaker, describing the same state of affairs. Here, the speaker is telling other villagers that people in Europe do not have land to clear and grow crops.

(569) a. ə̌yī, [bɔ́ ā dɪ́ wɔ̄ ā dɛ̀ fwɛ́n]
no cl2 neg be(b) neg com cl9.place clear(b)

'No! They don't have a place to clear.'

b. bɔ́ ā kán wɔ̄
cl2 neg have(c) neg

'They don't have [any]!'

The difference between the two constructions in (569a) and (569b) seems to be a pragmatic one. Note that is possible to omit the object when the verb **kán** is used, as in (569a). This is not possible when possession is expressed by the copula verb **dǐ́** in combination with a comitative phrase, as in (569a).

13.2.5.4 The locative copula gɛ̀

There is a second copula **gɛ̀** which can be used as an alternative to **dǐ́** in locative non-verbal predicates in the wider sense, i.e. including locative predicates, existential predicates and predicative possession. This copula is not formally a verb because, although it co-occurs with tense markers like a verb, it does not fit into any of the three verb tone classes and, its tone being constant across tenses, it does not exhibit any of the tone changes characteristic of verbs. It has a mid tone in non-final position and a mid-low tone in final position,[3] irrespective of the tense it occurs in.

At first glance, the copula **gɛ̀** seems to be simply a locative copula which is used as an alternative to the copula verb **dǐ́** in locative, existential and predicative possession constructions. However, while **dǐ́** is always grammatical, the copula **gɛ̀** cannot be used in the first clause of a sequence. It seems to be associated with simultaneity somehow. It is only used in contexts in which the second of two simultaneous events is described by a verbless predicate construction. However, it is unclear what exactly the semantic relation between the two events is. Furthermore, all attested examples are in the distant past or P3 tense. While more research is needed in order to determine the exact function of **gɛ̀**, the examples provided in this section should provide a first impression. Examples of location encoded by the locative copula **gɛ̀** are in (570) and (571). Each example contains at least the clause containing the verbless predicate construction (in square brackets) and the clause preceding it.

(570) n=tsē, n=sɛ́n də̄ kwō ʃī tʃə̋m,
1SG=search(a) 1SG=then see(a) enter(c) go_down(a) CL3/7a.axe
[tʃə̋m kə̀ gɛ̄ mɛ̌ mú mī áná],
CL3/7a.axe P3 be_there(a) only CL3/10.corner in like_that
tʃə̋m bə̄ syā w-ɔ́ kpān ŋgɔ́
CL3/7a.axe IMPERS split(a).IPFV CL3-REL CL3.wood upon

'I then searched and saw an axe down in [the corner]. The axe was just there in a corner of the house like that, the axe that they split wood with.'

[3] The copula **gɛ̀** can occur in clause-final position when it is used with the full predicate meaning 'be there', as in (572).

(571) tō dǫ́m lā wù gān də̀ sèsǎŋ, [sèsǎŋ
CL7/8.day other DAT CL1 go(a) see(a) CL9/10.spider CL9/10.spider
kə̀ gɛ̄ dʒwó]
P3 be_there(a) CL1/2.water_place

'One day she went and saw a spider. The spider was at the water place.'

Just like the copula verb **dɨ́**, **gɛ̀** is also attested as a full predicate, as in (572).

(572) nɨ́ wū kə̀ fǎ ā ɲ-ɲwɔ̄m
CL1.mother.3SG.POSS 3SG.POSS P3 be_occupied(b) COM INF-stir(b)
ɲām, [wān nɨ̌ gɛ̀], wù yɨ̣́
CL8.fufu CL1.child CL1.mother be_there(a) CL1 rearrange_fire(c).IPFV
gù
CL3/7a.fire

'Her mother was stirring fufu. Her sister was there. She was rearranging the fire.'

Examples of possessive predication with the simultaneous-locative copula **gɛ̀** are found in (573)-(574).

(573) ókě, byé-ā-ntí twó yə̄, [wù kə̀ gɛ̄ ā
okay B.-COM-N. carry(b) go_up(c) CL1 P3 be_there(a) COM
mù-gɛ̄ mű dzú ɨ́ *sāks-ā-mɔ́tò* mɪ̄]
CL18-maize CL18;3SG.POSS CL18.INDEF LOC S.-COM-M. in

'O.K., Bie-a-Ntie carried up [the corn]. She had her small corn with her in a Sacks & Motor bag.'[4]

(574) ɛ̀, wù mū yə́ byān wű́ áná, wù
yes CL1 take(a) go_up(c) CL3.breast CL3;3SG.POSS like_that CL1
fə̌ gàn wān wū w-ɔ̄ lā, [wù gɛ̄
give(b) go(a) CL1.child CL1;3SG.POSS CL1-DET DAT CL1 be_there(a)
ā wān wū]
COM CL1.child CL1;3SG.POSS

'Yes. She [the mother gorilla] takes up the breast like this and gives [it] to the child. She had a child.'

The particle **gɛ̄**, which is identical in segmental shape with the simultaneous locative copula, functions as a linking element in clause combinations which combine two clauses describing simultaneous events, as in (575).

[4]"Sacks & Motor bag" refers to a sturdy plastic bag with the company name "Sack & Motor" imprinted on it. These bags are commonly used in this area for carrying things over great distances.

(575) wù dzé gɛ̄ wù yį́
CL1 say(b).IPFV while CL1 eat(b).IPFV

◇'He is talking while he is eating.'

13.2.6 Constructions with the semi-copula tʃű 'come, become'

The verb **tʃű** 'come', which is frequently used as a main verb and as a minor coverb in SVCs (cf. §9.1.1.1) is also used as a semi-copula with the meaning 'become', as in ((576) and (577)). In order to function as a predicate, it is complemented by a noun phrase. The verb **tʃű** is a fully-fledged Class B verb.

(576) bő nɨ̄m *sűtéée*, [bő tʃú ŋwén nswēn]
CL2 sit(a) extensively CL2 come(b) now CL2.friends

'They stayed [together] for a long time and became friends.'

(577) [wù tʃǔ ŋkǒŋ]
CL1 come(b) CL1.chief

◇'He has become a chief.'

13.3 Other grammatical functions of copula verbs

The copula verb **dű́** occurs in several constructions in addition to nonverbal predicate clauses. The general copula verb **dű́** can be a hodiernal tense marker (§13.3.1), and is found in compound tense and counterfactual conditional constructions (§13.3.2) as well as in a construction expressing ability (§13.3.3). Cleft constructions are also formed with the general copula **dű́**, cf. §14.6.

13.3.1 F1 future marking

The F1 future marker **dű́** is identical in shape with the copula verb **dű́**. Like all tense markers, it occurs at the beginning of the verb complex, preceding the verbal core, as in (578)-(580). For more on tense marking, cf. Chapter 8.

(578) n=dű́ tsɔ́ ʃí dʒī dɛ̀ nǭ
1SG=F1 show(a) go_down(a) CL3.road CL9/10.place SUBORD
wān wā dű́ f-ɔ́
CL1.child CL1-POSS be(b) PROX-REL

'I will show you the way to where your child is.'

(579) à dǐ yə́ ǐ́ dʒɔ̄ b-ɛ́n mɪ̄
2SG F1 go_up(c) LOC CL8a.bridge CL8a-DEM.PROX in

'You will go up on this bridge.'

(580) kwɛ̄ b-ɛ́n ŋà t-án sɛ́
CL7/8.rat CL8-DEM.PROX boast(a) DIST-here CL3/7a.attic
t-ání, n=dǐ́ lá kpɪ́ mɛ́ kwɛ̄
DIST-this_way 1SG=F1 make(a) die(b) finish(a) CL7/8.rat
b-ɛ́n t-án sɛ́ ō
CL8-DEM.PROX there CL3/7a.attic EMPH

'These rats which are showing off in this attic - I will kill all of them!'

13.3.2 Compound tense and counterfactual conditional constructions

The copula verb **dǐ́** is used as auxiliary in compound tense constructions, as in (see (581)-(583)). These compound tense constructions consist of a copula clause which is complemented by a whole clause without overt subordinate marking. The copula clause in compound past perfect constructions starts with the locative proform **tɔ́** 'there'. The subordinate clause follows the copula **dǐ́**, which in turn is preceded by the relevant tense marker, as in (581)-(582). In the future perfect construction, the locative proform is absent so that the tense marker or the copula verb occurs at the beginning of the sentence, as in (583). The tonal pattern of the F2 future tense marker makes it impossible to tell whether a tonal dummy subject (cf. §6.2) is present or not.

(581) t-ɔ́ kə̀ dɪ̄ tǐ wū kə̀ kwɛ̄ fúbɔ̌,
DIST-DET P3 be(b) CL1.father CL1.POSS P3 return_from_bush(c) also
tǐ wū tʃú tsú bɔ̌ wān w-ɔ̄
CL1.father CL1POSS come(b) beat(b) also CL1.child CL1-DET

'When her father had also returned from the bush, her father came and also beat the child.'

(582) t-ɔ́ kə̀ dɪ̄ sèsǎŋ kə̀ dzé wú lā yɛ̄
DIST-DET P3 be(b) CL9.spider P3 say(b) CL1PP DAT COMP

'The spider had told her: ... '

(583) kā dɪ́ n=kɔ́ ŋwā mɛ̄ ŋwàtɨ̀ k-ɔ́
F2 be(b) 1SG=P3? write(a) finish(a) CL7/8.book CL7-DET

◇'I will (then) have finished writing the letter.'

A very similar construction is used to express counterfactual conditionals, as in (584). The counterfactual conditional construction differs from the compound tense constructions by having a subordinate clause introduced by the complementizer **yɛ̄**.

(584) t-ɔ́ kə̀ dɪ̄ yɛ̄ bə̄ kə̀ bú sɔ̄ wù ā́ká sípr̀ɛ̀n
DIST-DET P3 be(b) COMP IMPERS P1 deliver(c) first CL1 like C.

'If he had been delivered before Cypren...'

13.3.3 The ability construction

The copula verb **dɪ́** is also found in a construction which expresses ability (see also §8.4.2). In this construction, **dɪ́** functions as a copula followed by a non-finite verb which is marked by the proclitic **kə̄**=and which may in turn be followed by an object (585) or by an oblique argument (586). As example (585) shows, the ability construction can also have a deontic interpretation.

(585) n=dɪ́ kə̄=fǫ̣́ dʒī wá lā yɛ̄ ā gān
1SG=be(b) NOMLZ=report(a) CL9.road 2SG.PP DAT COMP 2SG go(a)
də̄ wān w-ā yɛ̄
see(a) CL1.child CL1-2SG.POSS QUOT.Q

'Can I show you the way to your child?'

(586) ā ŋ=tʃyɛ́ wɔ̄ yɛ̄ bɔ́ dɪ́ kə̄-gān ā byɛ̂
NEG 1SG=know(c) NEG COMP CL2 be(b) NMLZ=go(a) COM CL7a.feet

'I wasn't aware that they are able to walk on foot.'

The ability construction can be negated either with the unmarked negation strategy, as in (587), involving a preverbal and a postverbal negative marker bracketing the copula verb, or with a post-verbal frustrative marker, as in (588).

(587) mə́ ā n=dɪ́ wɔ̄ kə̄-gān mū ā́ mɨ́
CS.QUOT NEG 1SG=be(b) NEG NMLZ=go(a) take(a) ADVLZ 1SG.PP
ndʒɛ̄n
alone

'I said that I cannot go and take [the corn] on my own.'

(588) wù dɪ̌ kə̄=dɔ́ bɔ̀
CL1 be(b) NMLZ=stay(b) FRUST

'She cannot sit still.'

CHAPTER 14

Information structure

14.1 Introduction

In the last couple decades, a lot of progress has been made in research on information structure in African languages, cf. e.g., Aboh et al. (2007), Fiedler and Schwarz (2010) and more recently Kalinowski (2015). Among the African languages, Cameroonian languages have attracted considerable attention due to their elaborate focus marking systems. Early works dealing with Cameroonian languages are e.g., Watters (1979) and Hyman and Watters (1984). More recent works include Good (2010), Kießling (2010a) and Lovegren (2013: Chapter 11). Bond and Anderson (2014) deal with cognate head-dependent constructions which can mark focus in African languages, including several Cameroonian languages. See Foley (2007) for a brief typologically oriented overview and Lambrecht (1996) for a more detailed general treatment of information structure. I understand focus as referring to "information judged by the speaker not to be shared by the listener" (Hyman and Watters 1984: 239). I also adopt Hyman and Watters' (1984: 239) notion of assertive vs. contrastive focus. They define assertive focus as "asserted information against a neutral background". In contrastive focus on the other hand, "a non-neutral background is assumed by [speaker$_2$]. That is, [speaker$_2$] judges that [speaker$_1$] has filled the focus slot with a conflicting value." The distinction between these two types of focus is important because in some cases, the two are encoded differently. Hyman and Watters (1984: 240) claim that "in many languages [...] contrastive focus is realized by an addition to, or an operation on, the assertive focus structure." Following Lovegren (2013: 339-340) and Hyman and

Watters (1984), I distinguish between constituent focus on the one hand and auxiliary focus on the other. Just like in Mungbam, auxiliary focus in Mundabli is restricted to truth/verum focus. There are no distinct focused tenses. Like Lovegren, I divide constituent focus into argument focus and verb focus, i.e. focus on the action described by the verb or on the lexical content of the verb.

Informational status in Mundabli is marked by various means including constituent order, dedicated syntactic constructions, and particles. Mundabli has various focus marking strategies.

Mundabli can also defocalize canonically postverbal constituents by moving these to the position immediately before the verbal complex (following the subject if the latter is not moved to immediate after verb (IAV) position).[1] I refer to this construction as defocalization rather than topicalization because the term topicalization is widely used for left-dislocation, i.e. movement to the beginning of the clause rather than to IBV position.

This chapter is intended to provide a first inventory of strategies employed to express the informational status of phrases and clauses. It is based on both spontaneous and elicited data. Its structure is strongly influenced by Lovegren (2013: Ch.11), and is divided into six sections. Following this introduction, there are three sections on the different types of focus: argument focus (§14.2), which also contains sections on canonical (§14.2.1 and non-canonical constituent order (§14.2.2), verb focus (§14.3), and truth focus (§14.4). The two remaining sections deal with thetic sentences (§14.5) and cleft constructions (§14.6).

14.2 Argument focus

The primary means employed to express argument focus are word order alternations. Non-object arguments can be moved to the IAV focus position in order to be put in focus, while non-subject arguments, which follow the verb in the unmarked case, can be moved to IBV position, in order to be defocalized. Another strategy used to defocalize an object is to simply omit it, cf. §14.2.8. Argument focus can also be expressed by using a cleft-construction. As they are not restricted to argument focus, cleft-constructions are dealt with in a separate section §14.6. The remainder of this section starts of with a description of canonical (§14.2.1) and non-canonical (§14.2.2) constituent order. Following this, there is a section on focalization and defocalization for the relevant con-

[1] "Immediate after verb position" (short IAV) and "immediate before verb position" (short IBV) are terms coined by Watters (1979). In Watters' use, they refer to the positions immediately following and preceding the verb. I use these terms with a slightly modified meaning. In this thesis they refer to the positions immediately following and preceding the verbal complex. The verbal complex includes preverbal tense and negation markers, as well as verbal adverbs and the post-verbal negation marker. For details, see §8.3.

stituents (§14.2.3-§14.2.7). The section ends in a subsection on the omission of topical objects (§14.2.8).

14.2.1 Canonical constituent order

The unmarked word order of an intransitive sentence is Subject-Verb(-other) and that of a transitive sentence is Subject-Verb(-other); see (589) for examples of both. The preverbal field in Mundabli is inherently topical and the IAV position is inherently focused. Thus, in clauses with canonical constituent order, the preverbal subject represents the topic while the postverbal object is focused.

(589) n=sɛ́n bí yə̄ ɲwɛ́n, n=kɔ́ Pɛ̋ ɲwɛ́n
1SG=then exit(b) go_up(c) now 1SG=catch(b) P. now

'I then got up now, I caught Pe now, [...]'

Canonical intransitive sentences express assertive verb focus (590). Contrastive verb focus requires a cognate deverbal noun construction (cf. §14.3.1). Example (590) is uttered after the children in the narrative finally found a pot which was big enough to fit all the beans which they had contributed.

(590) dɔ̄ w-ɔ́ kpán
CL3.beans CL3-DET fit(b)

'The beans fit.'

Transitive sentences with SVO(X) constituent order may express focus on the object, as in (591), on the verb, as in the main clause in (592), or on the whole predicate (verb plus object), as in (593). The focused items in these examples are enclosed in square brackets.

(591) bə̄ kə̀ lə̌ kpɪ̄ [nɪ́ wū] nɔ̌
IMPERS P3 make(b) die(b) mother.3SG.POSS CL1;3SG.POSS QTAG

'They killed the mother, didn't they?'

(592) kə́ bɔ̋ kə̀ mū kpān, wù [tsú] bɔ̋
COND CL2 P3 drink(b) be_full(b) CL1 hit(b) CL2

'When they had drank enough, he beat them.'

(593) bɔ̋ [tsú dɔ̄]
CL2 contribute(c) CL3.beans

'They contributed beans.'

Example (591) is uttered in reaction to an inquiry whether a certain gorilla baby had been killed. The speaker clarifies that it was the gorilla mother who was killed, while the gorilla baby had been brought to the village alive. The focus in this example is on the object. In this case, it is contrastive focus, but assertive focus can be expressed in the same way. Example (593) is taken from a narrative and mentions for the first time that each of the story's children brings beans to cook. Focus is thus on the whole predicate (verb plus object).

14.2.2 Non-canonical constituent order

In addition to canonical SVO word order, other word orders are attested, as well. A non-object constituent may occur in IAV position (§14.2.2.1), in order to be focused. A non-subject constituent can precede the verb complex, which has the effect of defocalization (§14.2.2.2).

14.2.2.1 Immediate after verb (IAV) focus position

The immediate after verb (IAV) position is a focus position in Mundabli. In canonical word order, this position is occupied by the object; see §14.2.1. However, other constituents can occur in IAV position when they are in focus. The non-object constituent which most commonly occupies the IAV position is the subject, as in (594). However, obliques occasionally occur in IAV position, as well; cf. §14.2.6.

(594) bə̄ lə̄ tí āgān, kə̀ lə̌ āká tí gbàm
IMPERS do(a) surprisingly how P3 do(a) like surprisingly CL7.God

'What should we do? It was created by God.'

The passive translation given by a consultant reflects the focus structure of the original example (Mundabli uses an impersonal pronoun where other languages might use a passive construction (cf. §6.3)).

14.2.2.2 Defocalization of canonically postverbal constituents

Object and oblique constituents follow the verb in canonical sentences. They may also occur immediately before the verb complex, which has the effect of topicalization. As the canonical position of the subject is before the verb anyway, this operation is not applicable to subjects. Either a single or multiple non-subject constituents may precede the verb, as in (595) and (596), respectively.

(595) a. ɲām b-ɔ́ yí́ ndɛ̀
CL8a.fufu CL8a-DET eat(b) who

◇‘Who ate the fufu?’

b. ɲām b-ɔ́ yí́ mɪ̄
CL8a.fufu CL8a-DET eat(b) 1SG

◇‘I ate the fufu.’

(596) [kpő̄ w-ɔ́] [í́ ntí lā] fə̄ fə̋ [ndɛ̀]
CL3/7a.money CL3-DET LOC N. DAT P1 give(b) who

◇‘Who gave money to Ntie?’

When multiple non-subject constituents are topicalized, they must occur in the same order as they would if they followed the verb complex.

14.2.3 Subject focus

In clauses with canonical constituent order, the subject is equivalent to the topic of the clause and occurs in IPBV position. When it is in focus, the subject occurs in the IAV focus position, as can be seen in the question-answer pair in (597).

(597) a. tsŭ ndɛ̀ ɲùŋfù
DS.hit(b) who N.

◇‘WHO [did just] hit Nyungfu?’

b. tsŭ ŋkɔ̋ ɲùŋfù
DS.hit(b) N. N.

◇‘NGKO hit Nyungfu.’

When the subject occurs in IAV focus position, followed by the object in the case of a transitive verb, the verb complex is preceded by a purely tonal low tone dummy subject. The low tone causes subsequent superhigh-toned verbs of inflection class B and superhigh-toned tense markers to be realized with a low-high rising tone. When the object is defocalized and occurs in IBV position (cf. §14.2.4), the low tone dummy subject is absent or does not have any perceivable effect. However, when an oblique constituent occurs in IBV position (cf. §14.2.5), the dummy subject is present and has the same effect as before the verbal complex. Spontaneous text examples with VS constituent order and focus on the subject are found in (598)-(599). The focused subject in the examples is underlined.

(598) ʃī k-ɔ́ kǫ́ ʃú mɪ̄ ā
CL3/7a.storm CL7a-DET catch(b).IPFV come(b).IPFV 1SG COM
kē ā́kə́ kǫ́ mbɛ̄
CL10.hand like catch(b).IPFV CL2.person

'The storm was catching me with its hands as if it were PEOPLE catching [me].'

(599) dzɔ̄ y-én, kwɛ́ w-én à, ā́
CL10.houses CL10-DEM.PROX CL3/7a.home CL3-DEM.PROX Q ADVLZ
wú-lō à, wɛ́ à, tá lə mī ɛ̄
CL3-whole Q CL1.sibling Q VER.FOC do(a) 1SG QUOT.Q

'These houses, this whole compound, sister, did *I* do it?'

Interrogative subject pronouns are obligatorily moved to IAV position; see (600)-(602).

(600) fə fə́ ndɛ̀ kpɔ́ ɪ́ ntí lā
DS.P1 give(b) who CL3/7a.money LOC N. DAT

◇'Who gave money to Ntie?'

(601) yɪ́ŋ ndɛ̀ gbɔ̄ w-én
DS.build(c) who CL3.house CL3-DEM.PROX

◇'Who has built this house?'

(602) fə fə́ ndɛ̀ wà ā kpɔ́
DS.P1 give(b) who 2SG COM CL3/7a.money

◇'Who gave you money [earlier today]?'

Another strategy used to focus the interrogative subject pronoun is clefting; see §14.6. However, subject clefts are rare. Clefting is more commonly used to focus on objects or obliques.

14.2.4 Defocalization of objects

The object can be defocalized by moving it to IBV position. When the object precedes the verbal complex, no dummy subject is present. Consequently, there is no formal difference between an OVS clause (with a defocalized object) and a canonical SVO clause. However, in most cases the context suffices to disambiguate between the two possible interpretations. Defocalization of the object often coincides with subject focus, as e.g. in (603), repeated here from (595b). The object in these examples is enclosed in square brackets.

(603) [ɲām b-ɔ́] yí́ mɨ̄
CL8a.fufu CL8a-DET eat(b) 1SG

◇'I ate the fufu.'

However, defocalization of the object is also possible in combination with an in situ subject, as in (604).

(604) mɔ̀ w-ɔ̄ [tʃyē w-ɔ́] kɔ̋ ā kɛ̀
CL1.person CL1-DET CL3.stone CL3-DET catch(b) COM CL10.hand(s)

◇'The man [indeed] caught the stone WITH HIS HANDS.'

In (604) defocalization of the object leaves the oblique constituent in the IAV focus position. According to my consultant, (604) would be an appropriate answer to the question 'Did he really catch the stone WITH HIS HANDS?'.

14.2.5 Defocalization of obliques

Obliques occur at the end of the clause in the canonical constituent order, but may be dislocated to IBV position for defocalization, as in (605). The oblique constituent in this and the following examples is enclosed in square brackets. While the comitative phrase in this example occurs at the beginning of the clause, examples with an in-situ subject, such as (604), show that it is the position immediately before the verb rather than clause-initial position which defocalized constituents are moved to. When an oblique constituent stands in IBV position, a tonal dummy subject[2] precedes the verb, which causes a subsequent superhigh tone on verbs of the tonal inflection class B in P0 and P1 perfective verbs to change to a rising tone.

(605) [ā nɨ́ŋ k-ɔ́] fə̄ ndɛ̀ wà
COM CL7.thing CL7-DET DS.give(b) who 2SG

◇'Who gave you that thing?'

A sentence as in (605) could be used e.g. when the speaker has seen the listener with some object and wants to know where she got it, suspecting that someone must have given it to her.

14.2.6 Oblique focus

Focused oblique constituents commonly remain in situ at the end of the clause. If an object is present, they usually follow it, as in (606)[3] and (607).

[2]A dummy subject is also present when the subject occurs in IAV focus position, cf. §14.2.3.

[3]Example (606) is ambiguous. It can be interpreted as an inquiry about the gadget used or about the meat or sauce which were served with the fufu.

(606) wù fə́ yí ɲām b-ɔ́ [mán ŋgɔ̀]
CL1 P1 eat(b) CL8.fufu CL8-DET what upon

◇'WHAT did he eat the fufu with?'

(607) wù fə́ yí ɲām b-ɔ́ [tswān ŋgɔ̀]
CL1. P1 eat(b) CL8.fufu CL8-DET CL3.bitter_leaf upon

◇'He ate the fufu with BITTER LEAF.'

However, in order to be explicitly marked for focus, obliques can be clefted (cf. §14.6) or they may occur in IAV position. An oblique constituent may occur in IAV position when no object follows the verb, i.e. in a transitive clause, when the object is moved to IBV position for defocalization, as in (608),[4] when the object is omitted, as in (609) or when the order of object and oblique is inverted, as in (610).

(608) mɔ̀ w-ɔ̄ tʃyē w-ɔ́ kɔ̋ [ā kɛ̀]
CL1.person CL1-DET CL3.stone CL3-DET catch(b) COM CL10.hand(s)

◇'The man [really] caught the stone WITH HIS HANDS.'

(609) yɛ̄ gǎn tsē mɨ̄ ā ntsɔ̋m mū-ŋ-gɛ̄-ŋ-gɛ̄ à
COMP go(a) search(a) 1SG COM CL6-soil 6a-N-be_red-N-be_red 2SG
mɨ̄ tʃű fə̋ [ndá lā]
CONSEC come(b) give(b) 1SG.PP DAT

'[She said]: go and search for some red soil for me, and then you come and give [it] to me!'

(610) wù tsɔ̀ [mɨ́ lā] dʒɔ̆n
CL1 show(a) 1SG.PP DAT J.

◇'She introduced John to me.' (lit.: She showed John to me.)

14.2.7 Modifier focus

It is also possible to focus on only a part of the subject NP, i.e. on a noun modifier, as done in (611). Here, the numeral modifier **wű́mwó** is focalized by being moved out of the preverbal subject NP to IAV focus position (see also §7.3.1.3). The focused modifier is enclosed in square-brackets.

(611) dɔ̄ gbū bí ʃī [wű́-mwó]
CL3.beans fall(a) exit(b) go_down(a) CL3-one

'One of the beans fell down.'

[4]The first example (608) is repeated from (604). An explanation of the context is given in §14.2.4.

In the more unmarked case, the noun modifier directly follows the noun, as in (612). However, this sentence has no explicit partitive semantics.

(612) dɔ̄ wű-mwó gbū bí ʃī
CL3.beans CL3-one fall(a) exit(b) go_down(a)

◇'One bean fell down.'

14.2.8 Omission of topical objects

The informational status of noun phrases also influences the choice of a noun or a pronoun vs. zero reference to represent the object. In Mundabli topical objects are commonly omitted, as in (613b) and (614b).

(613) a. yǐ ɲùŋfù ɲām
eat(b) N. CL8.fufu

◇'NYUNGFU ate fufu.'

b. yǐ ɲùŋfù
eat(b) N.

◇'NYUNGFU ate [it].'

(614) a. tsǔ mɨ̄ wù
hit(b) 1SG CL1

◇'I hit him.'

b. tsǔ mɨ̄
hit(b) 1SG

◇'I hit [him].'

Examples (613) and (614) each contain two alternative answers to the questions **yǐ ndɛ̀ ɲām** 'Who ate fufu?' and **tsǔ ndɛ̀ ɲùŋfù** 'Who hit Nyungfu?', respectively. The preferred option is indeed to omit the object, as in (613b) and (614b).

14.3 Verb focus

Verb focus can be expressed by canonical clauses, i.e clauses with SV(O)(X) word order, cf. §14.2.1. However, explicit focus on the lexical meaning of the verb can only be expressed by a cognate deverbal noun construction.

14.3.1 Cognate deverbal noun constructions

The cognate deverbal noun construction[5] involves the presence of an infinitive deverbal noun (cf. §8.1.4.1) which is cognate with the finite verb of the clause and which follows the verb complex, as in (615), or the object, as in (616), if one is present. It marks contrastive verb focus (cf. §14.1).

(615) dzɔ̄ yī-dzú y-ɔ́ kə̀ bǫ́ m-bǫ̂,
CL10.houses CL10-other CL10-DET P3 burn(b) INF-burn(b)
y-ɛ́n t-án kwā tí ŋ-kwà
CL10-DEM.PROX DIST-here break(a) instead INF-break(a)

'The other houses BURNT DOWN, these ones BROKE DOWN.'

(616) a. à gyà kǐ
2SG steal(a) CL7

◇'You stole it.'

b. ŋgàŋ, n=tấŋ kǐ n-tàŋ
no 1SG=buy(b) CL7 INF-buy(b)

◇'No, I BOUGHT it.'

The fact that the cognate deverbal noun may co-occur with an object, as e.g. in (616b), shows that the cognate deverbal noun is not a direct object of the verb. Mundabli does not allow multiple unflagged objects[6]. Instead, the deverbal noun forms an unflagged oblique constituent, comparable with an unflagged adverbial or locative phrase.

Cognate deverbal noun constructions are also attested in relative clauses, as in (617).

(617) ń=də̀ mɔ̀ nǭ wù fə̀ tấŋ w-ɔ̄ dʒŭ
1SG=see(a) CL1.man SUBORD CL1 P1 buy(b) CL1-DET CL9.goat
ntàŋ, ā dǐ wɔ̄ mɔ̀ nǭ wù fə̀ fān w-ɔ̄
INF-buy(b) NEG be(b) NEG CL1.man SUBORD CL1 P1 sell(a) CL1-DET
yī m-fàn
CL9 INF-sell(a)

◇'I saw the man who BOUGHT the goat, not the man who SOLD it.'

While the use of the cognate deverbal noun construction seems to be preferred in the given context, its use is not obligatory. Contrastive verb focus can also be expressed by an unmarked SVO clause. The presence of the adverbial **mɛ̌** 'only' in a cognate deverbal noun construction, implies exclusive

[5]See Bond and Anderson (2014) for a typology of comparable constructions and their functions in African languages. Bond and Anderson refer to these constructions as "Cognate Head-Dependent Constructions".

[6]see §11.3 for a comment on the term "flag"

focus semantics (Bond and Anderson 2014: 239) rather than verb focus. The examples in (618) and (619) express exclusive situation, indicating that "the situation (i.e., event or state) described by the predicate is in focus, to the explicit exclusion of other (higher-ranked) situations." (Bond and Anderson 2014: 241).

(618) wù kū nɨ̄m mɛ̌ ŋ-kù
CL1 cry(a) sit(a) only INF-cry(a)

'She was still only crying.'

(619) ā́nā wù kə̀ fǫ̋ bī gān áná, kpé w-ɔ̄
like_that CL1 P3 tell(a) go_out(b) go(a) like_that CL1.woman CL1-DET
kpɨ̄ mɛ̌ ŋ-kpɨ̄-n
die(b) only INF-die(b)-INF

'Immediately as she was reporting [that], the woman died on the spot.'

As there is no attested example with a transitive verb in my data, it is unclear whether this construction allows the presence of an object.

Note that a cognate deverbal noun can also be used to describe the manner in which something is done, as in (620).

(620) *or* à sé mű̀ n-sē kwɛ́ mɨ̄
or 2SG heat(c) CL6 CL1.INF-heat(c) CL3/7a.home in

'[...] or you prepare it in the local traditional way.'

This construction is different from the cognate deverbal noun construction. The deverbal noun co-occurs with a modifier and forms part of a locative phrase headed by the postposition **mɨ̄** 'in'.

14.4 Truth focus

Truth focus is focus on the truth value of a clause. In Mundabli, this can be achieved by using a serial verb construction involving the right-modifying coverb **bā́n** 'clearly' (cf. §14.4.1) or the particle **tə́** (cf. §14.4.2).

14.4.1 Serial verb constructions with bā́n 'clearly'

Truth focus can be expressed by use of a serial verb construction involving the right-modifying coverb **bā́n** 'clearly', as in (621)-(623); cf. also §9.1.4.2.

(621) yɛ̄ ń=nɨ́ŋ bā́n yɛ̄ [n=də wú lā]
COMP 1SG=want(c) clearly(b) COMP 1SG=see(a) CL1.PP DAT

'[She said]: I really want to see him.'

(622) wù fə̄ yí bấn ɲām w-ɔ́
CL1PRO P1 eat(b) clearly(b) CL3.fufu CL3-DET

◇'He DID eat fufu.'

The coverb **bấn** which expresses truth focus may be combined with subject focus, see e.g. (623).

(623) (dǐ) yíŋ yə́ bấn mɨ̄ gbɔ̄ ŋgɨ́
(F1) build(c) go_up(c) clearly(b) 1SG CL3.house CL3;1SG.POSS

'I will be the person to build my house.' (or rather: It will really be me who will build my house.)

14.4.2 The particle tə́

The particle **tə́**, alternatively pronounced **té** or **tá**, expresses something like truth focus.[7] The particle occurs at the beginning of the verb complex, following the subject and preceding tense and negation markers, as (624)-(626). The particle in the examples is underlined.

(624) tɛ́là mwɔ́m dzé hǎyì, dzē gbàn ŋgɨ̄ lā yɛ̄
T. M. say(b) INTERJ say(b) CL1.in-law CL1.1SG.POSS DAT COMP
n = <u>tə́</u> tʃʉ́
1SG = VER.FOC come(b).IPFV

'Tela Mwɔm said: No! Tell my in-law that I am coming!'

(625) byé-ā-nɬ́i bɔ̄ŋ ʃú yɛ̄ bàbǎ dwò yɛ̄ wù <u>tə́</u> fə̄
B.-COM-N. call(a) come(b) COMP Papa D. COMP CL1 VER.FOC P1
ʃɛ̄ yɛ̄ wù ʃī ɲī fɨ̄, wù <u>tə́</u> wʉ́
want(a) COMP CL1. go_down(a) leave(a) pass(b) CL1 VER.FOC hear(b)
tʃʉ́ yɔ̀ ŋgɨ̄, k-ɔ́ nɬ́ŋ nɔ̰̄ wù
come(b) CL9/10.voice CL9;1SG.POSS CL7-DET CL7.thing SUBORD CL1.
tʃʉ́ k-ɔ́
come(b) CL7-REL

'Bie-a-Ntie called out: Papa Duo! [She said] that she was about to go down when she heard my voice. That is why she came.'

[7] Truth focus is also known as "polarity focus", see e.g., Bond and Anderson (2014: 215).

(626) yɛ̄, kə́ wù tǫ́ mɛ̄ tʃú wù tá ā lá
COMP COND CL1 grow_up(b) finish(a) come(b) CL1 VER.FOC NEG do(a)
kɔ̀ wɔ̄ sǎm, wù dǐ mɔ́sí yíŋ gbɔ̀ áná
catch(b) NEG CL1/2.game CL1 F1 *must* build(c) CL3.house like_that
nǐ́ tʃū nīm
CL1/2.mother.3POSS come(b) sit(a)

'[He said] that once he has grown up fully, he will not play, he will have to build a house and his mother shall come live [there].'

The sentence in (624) quotes Tela Mwom's words to his wife uttered after a lively discussion finally agreeing to meet his mother-in-law. The particle emphasizes that he *will* ultimately come to meet her, even if he does not think that this is a good idea. In (625), the speaker stresses that Bie-a-Ntie had not been planning to come, but that she was (really) on the way to somewhere else and that she only came to meet the speaker because she had (really) heard the speaker's voice. Here the focus in the first clause is on the truth of the claim that she was on the way down, and the focus in the second clause is on the truth of the claim that she had heard the speakers voice. Finally, in (626), the particle serves to emphasize the truth of Dya's claim that he will not play - even if this is contrary to what people expect from a young boy.

14.5 Thetic sentences

Thetic sentences have unmarked SV(O)(X) constituent order. Syntactically, they are not different from canonical sentences. However, when the topic of a narrative is introduced or when the topic of a conversation is (abruptly) changed, the noun phrase referring to the newly introduced topic commonly contains the modifier **dzū** 'a certain', as in (627) and (628).

(627) kpé dzū kə̀ dɪ̄ fǐ́n
CL1.woman CL1.certain P3 be(b) there

'There [once] was a woman.'

(628) kyɛ́ yá gān fā́ ywṵ́, fì-yā́n
look(c) go_up(c) go(a) there CL1/2.hanging_dryer CL19-CL3/7a.leaf
dzú dǐ́ fǐ́n, ā mū ʃī
CL19.certain be(b) there 2SG take(a) go_down(a)

'Look up at the hanging dryer! There is a leaf. You should take [it] down!'

14.6 Cleft constructions

Another strategy for expressing constituent focus is to use a cleft construction. This way, not only can the subject be explicitly focused on, as in (629), but also other constituents like the object, as in (630), or an oblique constituent, as in (631). Cleft constructions require the use of an impersonal dummy subject consisting only of a low tone which causes a subsequent superhigh-toned Class B verb, like the copula verb **dǐ́**, or a superhigh-toned tense marker, like the P1 marker **fə̋**, to be realized with a LH rising tone.

(629) dǐ́ ɲùŋfù wù yí́ w-ɔ̄ ɲām
DS.be(b) N. CL1 eat(b) CL1-REL CL8.fufu

◇'It is Nyungfu who ate the fufu.'

(630) dǐ́ ɲām wù fə̋ yí́
DS.be(b) CL8.fufu CL1 P1 eat(b)

◇'It is fufu he ate.'

(631) dǐ́ ā kɛ̀ wù fə̋ yí́ ɲām
DS.be(b) COM CL9/10.finger CL1 P1 eat(b) CL8.fufu

◇'It is with his hands that he ate fufu.'

In content questions, the focus on the question word may also be expressed by use of a cleft construction, as in (632) and (633).

(632) dǐ́ kì-mān nɔ̰̄ à yē kɛ̄ dzɔ̄ŋ k-ɔ́ kí́
DS.be(b) CL7-what SUBORD 2SG start(a) return(c) again CL7-REL CL7
ǐ́ tán mɪ̄
LOC there in

'What is it that you are starting again in here?'

(633) dǐ́ ŋgwɔ̀ mɔ̀nɔ̄ mān à mū w-ɔ̄ wù yɛ̄
DS.be(b) CL1/2.sort CL1.man what 2SG take(a) CL1-REL CL1 COMP
mɔ̀ kə̌ dyà wɔ̄ wú lā yɛ̄
CL1.person HAB see(a).IPFV NEG CL1.PP DAT QUOT.Q

'What sort of husband is it that you have married, so that nobody sees him?'

A cleft construction can also be used to express truth focus. In this case a whole complement clause is clefted. This is mostly done to express negative truth focus, as in (634).

(634) ā dɨ́ wɔ̄ yɛ̄ bì-lʊ̀ŋ dɨ̌ ʃí
NEG be(b) NEG COMP CL8-CL7/8.suffering F1 go_down(a).IPFV
yɨ́ wù t-án áná, w-én
eat(b).IPFV CL1SG DIST-here like_that CL3-DEM.PROX
lyɛ́
CL3/7a.impertinence

'Not that he will be suffering there like that. [Saying] this [would be] impertinent.'

CHAPTER 15

Non-declarative clauses

The current chapter deals with various kinds of non-declarative clauses. Section 15.1 deals with questions and question words. Polar questions (§15.1.1) and content questions (§15.1.2) are dealt with separately, followed by a section on questions in reported speech (§15.1.3). The imperative is described in §15.2, which is followed by sections on the prohibitive (§15.3) and on the jussive (§15.4). Imperatives and jussives with plural addressee are devoted a special section (§15.5) at the end of the chapter.

15.1 Questions and question words

The basic word order of questions is the same as that of declarative clauses: SVO. Polar questions are marked by a clause-final question particle and content questions contain a question word. The two types are described in §15.1.1 and §15.1.2, respectively.

15.1.1 Polar questions

Polar questions are distinguished from declaratives by the clause-final question marker **à**. Their word order is the same as that of pragmatically unmarked declarative sentences: Subject – Verb – Object, and there are no special intonational effects. However, the low-toned question marker **à** causes a characteristic pitch-drop at the end of a polar question. Three examples are provided in (635)-(637).

(635) wù fə́ gān à
CL1 P1 go(a) Q

'Did she go?'

(636) mɔ̀ dzū dɨ́ fín wù kán tsɔ́ à
CL1.person certain be(b) there CL1 lack(b) CL7/8.witchcraft Q

'Is there any person who does not posses witchcraft?'

(637) bə̄ kə̀ tʃyé yɛ̄ wù dɨ̀ ʃí ʃú à
IMPERS P3 know(c) COMP CL1 F1 go_down(a) come(b) Q

'Was it known that she will come down?'

Certain polar questions are conventionally used as greetings or as part of formulaic exchanges. Examples are found in (638), (639) and (640).

(638) à ʃí à
2SG spend_day(b) Q

◇'Have you spent the day [at home]?'

(639) à ʃí lī à
2SG spend_day(b) be_strong(a) Q

◇'Have you spent the day [at home] well?'

(640) à kwé à
2SG return_from_bush(c) Q

◇'Have you returned from the bush?'

15.1.1.1 Tag questions

Payne defines a tag question as "a yes-no question consisting of a declarative clause plus a "tag" that requests confirmation or disconfirmation of the declarative clause" (Payne 1997: 297). Like polar questions, positive tag questions consist of a declarative clause, followed by the question tag **nɔ̌**, as in (641). The question tag is most likely borrowed from English 'no' via Cameroon Pidgin English, where it serves the same function.[1]

(641) mɔ̀ dzū kə̀ dɨ̄ fín nɔ̌
CL1.person CL1.INDEF P3 be(b) there QTAG

'There [once] was a person, right?'

[1]The same particle is also attested with the same function in Mungbam (Lovegren 2013: 458).

It is possible, although less common, to insert the tag in a complex tag question at the end of a non-final subordinate clause, as done in (642). The initial clause in (642), introduced by the particle **nā** 'as', is subordinate to the main interrogative clause.

(642) nā *accident* w-ɔ̄ dǐ́ ná f-án nǔ̌, bī nà ā kán
as accident CL1-DET be(b) as PROX-here QTAG 1SG P2 NEG have(c)
wɔ̄ bwḗ, bī byā Pḗ yà
NEG CL1/2.quarrel 1PL 1PL;COM P. EXCL

'As the accident is here - right? - we did not have any quarrel, me and Pe.'

15.1.2 Content questions

Content questions require the use of a question word. They do not contain a question marker like polar questions. A comprehensive list of attested question words can be found in Table 15.1.

question word	gloss
ndɛ̀	'who'
mān	'what'
nā	'where'
bɛ̀n	'when'
mān, ***why***	'why'
āgān	'how'
(-)mwān	'which one'
(-)mɨ̀ŋ	'how much', 'how many'

Table 15.1: Comprehensive list of question words

The word order of content questions is basically the same as that of declarative clauses; see e.g. (643).

(643) à yɔ̀ tʃyē w-ɔ́ ndɛ̀ ŋgɔ̄
2SG throw(a) CL3.stone CL3-DET who upon

◇'At whom did you throw the stone?'

However, the question word is often focused. Focusing is obligatory in subject interrogatives. Two different strategies are available to express constituent focus. The first is dislocation to immediate after verb (IAV) position, as in (644), which only applies to subject interrogatives and which results in VS order. The second is cleft-constructions, as in (645), which can be used to focus on any constituent. See Chapter 14 for more on information structure and word order.

(644) yǐ ndɛ̀ ɲām b-ɔ́
eat(b) who CL8.fufu CL8-DET

◇'Who ate the fufu?'

(645) dǐ ndɛ̀ (nə̄) wù lyā w-ɔ̄ ɲú̄
be(b) who SUBORD CL1 go_to_bush(a).IPFV CL1-REL CL3/7a.farm

◇'Who is it that is going to the farm?'

15.1.2.1 The interrogative pronoun mān 'what'

The interrogative pronoun **mān** 'what' mainly functions as an interrogative pronoun, as in (646). It may also function as an interrogative modifier (see below). Because it represents inanimate participants, the interrogative pronoun **mān** 'what' more commonly functions as an object than as a subject. As pointed out in the introduction of §15.1.2, When it does not function as subject, the interrogative pronoun **mān** may remain in situ, as in the object interrogatives in (646) and (647), or it is are put in focus by using a cleft construction, as in (648).

(646) kpé w-ɛ̄n, à ká lɛ̀ mān
CL1.woman CL1-DEM.PROX 2SG HAB do(a).IPFV what

'Woman, what are you doing?'

(647) à dzě mān
2SG say(b) what

'What did you say?'

(648) kpé w-ɛ̄n, dǐ bā́ mān à mwē k-ɔ́
CL1.woman CL1-DEM.PROX be(b) really what 2SG be_sad(a) CL7-REL
tō ā́ bí-lō yɛ̄
CL7/8.day ADVLZ CL8-all QUOT.Q

'Woman, why are you sad every day?' (lit.: This woman, what is [it] really that you grieve for every day?)

Examples like (648) and (649) are best translated by an English 'why'-question. An alternative way to ask for the reason of something is to use the word **why**, loaned from English (see §15.1.2.6).

(649) à kʊ̀ mān
2SG cry(a).IPFV what

'What are you crying [for]?'

Of the interrogative pronouns, **mān** 'what' is the only one which, parallel to other personal pronouns (see §6.1.4), has a special tonal form **mán** with a high tone instead of a mid tone. It is used when the pronoun is object of a postposition, as in (650).

(650) gbə̀ ndɛ̀ mān mán ŋgɔ̄
cut(a) who what what.PP upon

◇'Who cut what with what?'

Finally, **mān** 'what' can also function as a nominal modifier which best translated as 'what type of'. It is used in combination with the noun **ŋgwò** 'type' and it is unclear whether it is used to modify any other nouns. NPs containing the modifier **mān** may remain in situ, be dislocated to immediate after verb position or be clefted, as in (651).

(651) dǐ [ŋgwò mɔ̀nɔ̄ mān] à mū w-ɔ̄ wù yɛ̄
be(b) CL1.type CL1.person what 2SG take(a) CL1-REL CL1 COMP
mɔ̀ kə̌ dyà wɔ̄ wú lā yɛ̄
CL1.person HAB see(a).IPFV NEG CL1.PP DAT QUOT.Q

'What sort of husband is it that you have married, so that nobody sees him?'

The interrogative pronoun **mān** 'what' can take the class 7 prefix **ki-**. The prefix is used, e.g. if the speaker already has a referent for the question pronoun in mind. The use of the Class 8 (plural) prefix, i.e. the form *__biman__ is not attested at all. Examples (652) and (653) show contexts in which the prefix-less form and the form with the prefix are used, respectively.

(652) ɲùŋfù fə̌ [mān] ntí lā
N. give(b) what N. DAT

◇'What did Nyungfu give to Ntie?'

(653) dǐ [kì-mān] ɲùŋfù fə̌ fə̋ k-ɔ́ ǐ ntí lā
be(b) CL7-what N. P1 give(b) CL7-REL LOC N. DAT

◇'What is it that Nyungfu gave to Ntie?'

In (652), the thing asked for is not yet established and the question comes out of the blue. In (653), the speaker and listener are both aware that Nyungfu gave something to Ntie and the question is only *what* he gave her.

Example (654) is similar to (653). It is a sort of "repetition question". It is clear that something fell down, but it is unclear what exactly it was.

(654) à dzě yɛ̄ gbù̀ [kì-mān]
2SG say(b) COMP fall(a) CL7-what

◇'What did you say fell?'

Examples (655) and (656) are a bit different, but ultimately of the same kind. It is clear in (655) that the addressee is starting something (here: trouble), and in (656) it is obvious that something has happened, but it is unclear what exactly it is that he is starting or what exactly has happened, respectively.

(655) dǐ [kì-mān] nǭ à yīe kɛ̄ dzɔ̄ŋ k-ɔ́ kǐ ǐ́
be(b) CL7-what SUBORD 2SG start(a) return(c) again CL7-REL CL7 LOC
tán mɪ̄
there in

'What is it that you are starting again in here?'

(656) wān w-ɔ̄ tə́ kə̀ nǐm wù kyɛ́ yɛ̄ mɛ̀
CL1.child CL1-DET VER.FOC P3 sit(a) CL1 look(c) COMP NCS.QUOT.Q
dǐ [kì-mān] kī bǐ́ k-ɔ́ yán yɛ̄
be(b) CL7-what CL7 exit(b) CL7-REL like_that QUOT.Q

'The child was there watching [and asking herself]: What has happened like that?'

Furthermore, **kìmān** is also used as a noun modifier in non-interrogative contexts, where it means as much as 'whatever'; see §6.4.

15.1.2.2 The interrogative pronoun ndɛ̀ 'who'

The interrogative pronoun **ndɛ̀** 'who' is most commonly attested in subject function, as it represents an animate participant, which is likely to coincide with the agent. In this case, it is always put in focus, most commonly by dislocation to immediate after verb position. It precedes the object, as in (657), unless the object is defocalized and moved to preverbal position, as in (658) and (659). For clarity, the interrogative pronoun **ndɛ̀** 'who' in (657)-(659) is underlined, and other constituents are enclosed in square brackets.

(657) tǔ ndɛ̀ [ŋgī mɪ́ŋ] yɛ̄
scoop(b) who CL6.water CL6;1SG.POSS QUOT.Q

'Who has carried my water?'

(658) [tɛ̄] [gbɔ̄ ŋgɪ́ sè] à
CL7/8.walking_stick CL3.house CL3;1SG.POSS house_front.LOC P2
gɪ̌ ndɛ̀ yɛ̄
put(b) who QUOT.Q

'The stick in front of my house, who put it [there]?'

(659) [mɪ́ŋ gbə̀] ʃyà gɪ̌ ndɛ̀ yɛ̄
1SG CL3.house.LOC sweep(a) put(a) who QUOT.Q

'Who has swept in my house?'

The interrogative pronoun **ndɛ̀** 'who' does not bear a noun class prefix unless it has a plural referent, as in (660).[2]

(660) wǫ́ bɔ̀-ndɛ̀
wash(b).IPFV CL2-who

'Who are those who are washing?' (lit.: Who are washing?)

As mentioned in §15.1.2, the interrogative pronoun **ndɛ̀** 'who' has a special dative form **ndyɛ̄n**; see §6.1.5 and §11.4.1.

15.1.2.3 The interrogative word nā 'where'

The interrogative word **nā** 'where' usually occurs toward the end of the clause, just like the locative phrase it represents; see e.g., (661) and (662).

(661) wù bɔ̄ŋ mɛ̂, nɨ́ nàn fɨ́ nā
CL1 call(a) CS.QUOT;Q CL1.mother N. pass(b) where

'She called out: Where has the mother of Nan gone?'

(662) ḿ=bǒ gàn wú lā, yɛ̄ bwɛ̄ à gàn
1SG=ask(b) go(a) CL1.PP DAT COMP CL1/2.friend 2SG go(a).IPFV
fɨ̰́ tí nā
pass(b).IPFV surprisingly where

'I ask her: Friend, where are you going?'

In some cases, the question word 'where' is modified by the locative modifier **fɔ́** (see §10.4; NP in square brackets). What exactly determines the presence of this modifier is unclear and requires further investigations.

(663) n=dɨ́ fɨ́ [nā f-ɔ́] yɛ̄
1SG=be(b) pass(b) where PROX-DET QUOT.Q

'Where will I go?'

15.1.2.4 The interrogative word bɛ̀n 'when'

The interrogative word **bɛ̀n** 'when' occurs in-situ, towards the end of a clause, just like the adverbial phrase it represents, as in (664). It does not take a prefix.

(664) à ɲæ̀ bɛ̀n
2SG leave(a).IPFV when

◇'When are you leaving?'

[2]This sentence or an equivalent cleft construction is called out by people before they approach a stream where people are known to wash, in order to warn them and not to embarrass anyone.

15.1.2.5 The interrogative word āgān 'how'

The interrogative word **āgān** 'how' occurs in focus position, directly following the verb complex, as in (665) and (666). In the case of a transitive verb, as in the latter example, they precede the object NP. Unlike the interrogative word, adverbs generally occur at the end of the clause (see §10.1).

(665) yɛ̄ mɛ̀ dzɪ́ dɪ́ [āgān] yɛ̄
COMP NCS.QUOT.Q CL3/7a.journey be(b) how QUOT.Q

'How was your journey?'

(666) à sɨ̀ŋ [āgān] mbɪ́
2SG tap(a) how CL6.palm_wine

◇'How do you tap palm wine?'

15.1.2.6 The borrowed interrogative word why

The function of the English interrogative word 'why' is mainly covered by the interrogative pronoun **mān** 'what', as mentioned in §15.1.2.1. However, a relatively common alternative to this is the use of the clause-initial loanword 'why' (borrowed from English, most likely via Cameroon Pidgin English), followed by a normal declarative clause, as in (667) and (668).

(667) *why* à fə̄ tsɔ̄ mɪ́ lā yɛ̄ bɛ̄n fə̄ dʒyè dɔ̄ ɪ́
why 2SG P1 show(a) 1SG.PP DAT COMP 2PL P1 cook(a) CL3a.beans LOC
nsɔ̄lā
CL1.afternoon

'Why did you show me that you [children] cooked beans in the afternoon?'

The interrogative word 'why' occurs in clause-initial position, just like in English. This is untypical for Mundabli which tends to position focused elements behind the verb complex.

(668) *why* wù lə̄ bwān mɪ̄ yɛ̄
why CL1 make(a) be_wounded(a) 1SG QUOT.Q

'Why has he injured me?'

15.1.2.7 The interrogative nominal modifier -mwān 'which'

The interrogative word **-mwān** 'which' functions as a nominal modifier and is used to identify a specific referent within a group of the same kind. Its function is different from that of the noun modifier **mān** 'what' (§15.1.2.1), which is better translated as 'what type of' when it modifies a noun; see §15.1.2.1.

Like other interrogative modifiers, **-mwān** 'which' takes a noun class prefix. However, in the case of **-mwān**, prefixes for most noun classes can be replaced by a low-toned syllabic nasal prefix. The choice seems to be optional. For an overview of agreement prefixes, see §5.3. In (669), the modified NP occurs in situ. In (670), it is put in focus using of a cleft-construction.

(669) à kɔ̀ŋ [wān kpé m̀-mwān/wù-mwān]
2SG love(a) CL1.child CL1.female CL1-which

◇'Which girl do you love?'

(670) dɨ̌ [sɨ̀ŋ yì-mwān/m̀-mwān y-ɔ̄] à lɛ̄ y-ɔ̄
be(b) CL9.knife CL9-which CL9-DET 2SG do(a).IPFV CL9-DET
ŋgɔ́
upon

◇'Which knife do you use?' (lit.: It is which knife that you do [it] with?)

In both of the above examples, the noun class prefix and the nasal prefix are interchangeable. The order of the alternative forms in the examples reflects their naturalness. The first forms are the ones that were used spontaneously by the speakers.

15.1.2.8 The interrogative noun modifier mɨ̀ŋ 'how much, how many'

The question word **mɨ̀ŋ** 'how much, how many' functions as noun modifier. It always takes a noun class prefix. It can co-occur with a head noun or stand on its own, as in (671). See §5.3 for an overview of prefix forms.

(671) ɑ́ʔɑ́ mbɛ̄ dʒwɛ̀ b-ɔ̌ kpɑ́ f-án, wù bɔ̄ŋ
INTERJ CL2.people many CL2-DET abound(b) PROX-here CL1 call(a)
yɛ̄ dɪ̄ bɔ́-mɨ̀ŋ
COMP be(b) CL2-how_many

'People, too many of them - she is saying that [it] is how many?'

15.1.2.9 Multiple interrogative words

It is also possible to combine multiple interrogative words in a single interrogative clause. However, this is not done frequently. An elicited example is found in (672).

(672) gbə̀ ndɛ̀ mān mán ŋgɔ̄
cut(a) who what what.PP upon

◇'Who cut what with what?'

A question like (672) could be uttered by someone who joins into a conversation, missing most of the information and hearing merely that someone cut something. The subject interrogative is dislocated to immediate after verb position, while the other interrogative phrases remain in situ.

15.1.2.10 Plural forms of interrogative words

The interrogative pronouns **mān** 'what' and **ndɛ̀** 'who' sometimes take noun class prefixes. However, the interrogative pronoun **mān** 'what' is only attested with the Class 7 prefix **ki-**, and **ndɛ̀** 'who' is only attested with the Class 2 prefix **bɔ-**. Agreement in cognate question words has also been reported for Noni (Hyman 1981: 104-105) and Mankon (Leroy 2007: 128).

15.1.3 Questions in reported speech

Questions in reported speech (or 'quoted interrogatives') receive special question markers, which are different from question markers in direct speech. A formal distinction is made between current speaker vs. non-current speaker quoted interrogatives, just like in quoted declaratives.[3]

Current speaker quotations (i.e., the speaker is quoting themselves) are introduced by the general-purpose complementizer **yɛ̄**. Non-current speaker quotations (i.e., the speaker is quoting someone else) are instead introduced by the non-current speaker quotative marker **mə́**, which serves no other function. Reported speech declaratives receive no other marking.

Questions in non-current speaker quotations are introduced by the complementizer **yɛ̄** plus the non-current speaker quoted question marker **mɛ̀**[4] and followed by the quoted question marker **yɛ̄** (which sometimes takes the shape **ā** or, more rarely, **ɛ̄**). Whereas in direct speech, only polar questions take a final question marker (**à**), in reported speech, content questions (673) and polar questions (674) are marked in the same way.

(673) wù bú yɛ̄ mɛ̀, b-én nʤɔ́m míŋ
CL1 ask(b) COMP NCS.QUOT.Q CL8-DEM.PROX CL8.things 1SG.PP
gbə̄ à là ndɛ̀ yɛ̄
house.LOC P2 do(a) who QUOT.Q

'Then she asked [herself]: All these things in my house, who has done them?'

[3] Apart from the current section, quotatives are not discussed in this thesis. For some findings on quotatives, see Voll (2017).

[4] The markers **yɛ̄** and **mɛ̀** can phonologically merge under certain circumstances.

(674) nǐ́ wū bú wú lā yɛ̄ mɛ̀, à
CL1.mother CL1;3SG.POSS ask(b) CL1PP DAT COMP NCS.QUOT.Q 2SG
kə̌ dǐ́ ā mɔ̀ nō yɛ̄
P3.HAB be(b) COM CL1.person CL1.male QUOT.Q

'Her mother asked her: Do you have a husband?'

Questions in current speaker quotations are introduced by the current speaker quotative marker **mə́**, which may or may not be followed by a particle of the shape **à**. I gloss this particle Q because it has the same shape as the direct speech interrogative particle **à**. Questions in non-current speaker quotations are followed by the quoted question marker **yɛ̄** or a variant thereof, just like current speaker quoted questions (see above). An example of a current speaker quoted question is found in (675).

(675) n=dzé mə́ [...] mə́ à bɔ̀ kǐ́ k-ɔ́
1SG=say(b) CS.QUOT [...] CS.QUOT Q CL7.bag CL7.3SG.POSS CL7-DET
mī dǐ́ mān wù twő k-ɔ́ yɛ̄
in be(b) what CL1 carry(b) CL7-REL QUOT.Q

'I said that [if she was going to come up that I was going to come up as well]. I asked [her]: in that bag of hers, what was it that she carried [in it]?'

15.2 The Imperative

The imperative form of a verb consists of the segmentally unmarked stem and a specific imperative tone pattern. Table 15.2 contains examples of imperatives of all three verb tone classes.

verb tone class	imperative example	gloss	citation form
A	**gə̌n**	'Go!'	**gə̀n**
	ɲə̌	'Leave!'	**ɲə̀**
B	**tʃū**	'Come!'	**tʃű**
	yī	'Eat!'	**yǐ́**
C	**yə́m**	'Sing!'	**yə́m**
	yó	'Run!'	**yó**

Table 15.2: Imperative verb forms in single verb cores

The tonal patterns in Table 15.2 are representative of simple core imperatives, i.e. of imperative clauses whose verbal core contains no more than one verb, and of initial verbs in complex core imperatives, i.e. of imperatives

whose verbal core contains two or more verbs. Examples for Class A and B imperative verbs in simple verbal cores taken from spontaneous texts are given in (676) and (677).

(676) nǐ́ wū dzé yɛ̄, ɲă̱
CL1.mother.3SG/PL.POSS CL1;3SG.POSS say(b) COMP leave(a)

'The mother said: Leave!'

(677) tɛ́là mwɔ́m dzé hǎyì, dzɛ̄ gbàn ŋgɨ̄ lā yɛ̄
T. M. say(b) INTERJ say(b) CL1.in-law CL1;1SG.POSS DAT COMP
n=tə́ tʃʊ̱́
1SG=VER.FOC come(b).IPFV

'Tela Mwom said: No! Tell my in-law that I am coming!'

Imperative verbs in serial verb constructions show a different tonal behavior than imperative verbs in single-verb cores. Examples (678) and (679) illustrate imperative clauses with complex verbal cores. This special tonal behavior of non-initial verbs in verb sequences is not attested in declaratives (at least not in the present tense). For more on this, see §3.2.2.4.

(678) [gǎn tsē] mù-dántʃɛ́n
go(a) find(a) CL18-berry

'Go and find [some] Dantshen berries!'

(679) yɛ̄ [gǎn bɔ̄ŋ ʃū] wān nɛ̌
COMP go(a) call(a) come(b) CL1.child CL1.mother.2SG/PL.POSS
w-ɔ̄
CL1-DET

'[...] Go and call your sister!'

My data do not contain any examples of imperatives with a verbal core starting in a Class B verb. Therefore, I cannot say for sure whether initial verbs in imperative clauses always have the same tone pattern as imperative verbs in single-verb cores, although this seems likely since it is the case for Class A and Class C verbs. The data show that the tonal pattern of non-initial imperative verbs in complex verbal cores differs from that of imperative verbs in single-verb cores. Non-initial verbs of Class A and B bear a mid tone (see (678) and (679)). In short, the tone pattern of imperative Class A verbs in non-core-initial position differs from their tone pattern in core-initial position. They bear a rising tone in initial position and a mid tone in non-initial position, so that, in non-initial position, the tonal distinction between Class A and Class B verbs is neutralized. It is unknown what exactly causes the irregular tone patterns of Class A verbs in SVCs.

15.3 The Prohibitive

The prohibitive uses segmentally unmarked verb forms, just like the imperative, but requires a subject pronoun. The tonal pattern of prohibitive verbs is the same as that of non-initial verbs in imperative SVCs: Class A and B verbs bear a mid tone and Class C verbs a high tone. Instead of the circumfixal negative marker **ā…wɔ̄** as used in declarative clauses, the prohibitive employs the preverbal prohibitive marker **ʃá**, which is sometimes realized as **tá**. Table 15.3 contains examples of the prohibitive for all three verb tone classes. Table 15.3 only contains examples of prohibitions aimed at the second person, but note that the same form is also used to issue negative commands to third and first person referents.

verb tone class	example	gloss	citation form
A	**à ʃá ʃī**	'Don't go down!'	**ʃì**
B	**à ʃá tʃū**	'Don't come!'	**tʃú**
C	**à ʃá yó**	'Don't run!'	**yó**

Table 15.3: Examples of second person prohibitives with single verb cores

Spontaneous text examples of the prohibitive are given in (680)-(682). The examples illustrate that not only the second person singular (680), i.e. the addressee of the utterance, may be the object of the negative command, but also the third person plural (681) or the first person plural (682), i.e. people other than the addressee, including the speaker.

(680) [à ʃá dzē] dzɔ̄ŋ
2SG PROHIB say(b) again

'Don't say [that] again!'

(681) [bɔ̋ ʃá tsɪ̄] f-án ɲwɛ́n ɪ́ kwɛ́
CL2 PROHIB spend_night(b) PROX-here today LOC CL3/7a.village
w-ɛ́n mɪ̄
CL3-DEM.PROX in

'They must not spend the night in this village tonight.'

(682) ɲwám b-ɔ́ dzé yɛ̄ ǎy, bə̀-tǐ bɔ́ ā
cl2.children cl2-det say(b) comp no cl2-father cl2poss com
nǐ́ fə̋ dzɛ́ ká mɔ̀ tʃǔ fán
cl1.mother p1 say(b) cond cl1.person come(b) here
nsɔ̄lā wù ɲwǎn nǐ́ŋ dǭ bí lā yɛ̄ [bī
cl1/2.afternoon cl1 beg(b) cl7.thing certain 1pl.pp dat comp 1pl
ʃá̋ fə̄]
prohib give(b)

'The children said: No, our fathers and mothers said if anybody comes here in the afternoon, we must not give [anything].'

Prohibitions can also be formulated in an indirect way, as in (683). Here a negated future verb form is employed to imply that something shouldn't happen.

(683) n=lyə́ná f-án, n=dá wú wɔ̄ yɛ̄
1sg=go_to_bush(a).ipfv as prox-here 1sg=f1;neg hear(b) neg comp
bɛ̄n fə̋ mù ʃǔ kpɛ̄ tsyě w-ɛ̄n
2pl p1 take(a) come(b) cl3.pot cl1.father.2pl.poss cl1-2pl.poss
w-ɔ́ wú-kwɛ́̋ w-ɔ́ yɛ̄ bɛ̄n lə́ nǐ́ŋ dǫ́ tʃín
cl3-det cl3-home cl3-det comp 2pl do(a) cl7.thing certain there
mɪ̄
in

'As I am going to the bush, I don't want to hear [when I come back] that you have taken your father's traditional pot in order to do something inside.'

15.4 The Jussive

The jussive is mainly used to issue commands concerning first or third person referents. However, it is also used when an order is issued by wish of someone else. It requires a subject pronoun combined with the segmentally unmarked verb form and the same verb tone pattern as attested in non-initial imperative verbs (§15.2) and prohibitives (§15.3): Class a and b verbs bear a mid tone and Class c verbs a high tone.

The first person plural jussive makes use of the impersonal pronoun **bə̄** (see §6.3) rather than the first person plural pronoun **bī**. Example (684) contains two jussive clauses, one with a third person singular subject and one with a first person plural subject, each enclosed by square brackets.

(684) yɛ̄ gǎn bɔ̄ŋ ʃū wān nɛ̌ bwébwé
COMP go(a) call(a) come(b) CL1.child CL1.mother.2POSS toddler
w-ɔ̄ yɛ̄ ɲ=ɲwɔ̋m mɛ̀ ɲām b-ɔ́ yɛ̄ [wù
CL1-DET COMP 1SG=stir(b) finish(a) CL8.fufu CL8-DET COMP CL1.PVB
tʃū] [bə̄ yī]
come(b) IMPERS eat(b)

'[...] Go and call your little sister [and tell her] that I've finished stirring the fufu, that she should come, let's eat.'

When used with the impersonal pronoun **bə̄** as its subject, the jussive is best translated as 'Let us ...'.

As pointed out above, the jussive is used for second person subjects when an order is issued by wish of someone else. In this case, the order is introduced by the complementizer **yɛ̄**, as in (685).

(685) ŋkŭŋ dzɛ́ yɛ̄ ā mū níŋ k-ɔ́
CL1.chief say(b) COMP 2SG take(a) CL7.thing CL7-DET

◇'The chief said that you should take that thing!'

The presence of a main clause such as the initial clause in (685) is not obligatory. However, the use of the complementizer is obligatory in this case, even if the main clause is omitted.

15.5 Imperatives and jussives with PL addressee

A plural addressee in imperatives, as in (686) and jussives, as in (687) is marked by the post-verbal particle **nɨ́**. Here, the clause containing the plural addressee is enclosed in square brackets and the particle **nɨ́** is underlined. These examples contain the only two attested instances of this particle.

(686) bī mɨ̄ dzě gàn bɔ̌ lā, yɛ̄ [nɨ̌m nɨ́ ā
1PL CONSEC speak(b) go(a) CL2.PP DAT COMP sit(a) IMP.PL COM
mɔ̀ kwɛ́]
CL1.man CL3/7a.home

'And we keep telling them: Stay with a native man!'

(687) kə́ bɔ́ kə̀ mū kpān, wù tsú bɔ́ yɛ̄ [bɛ̄n ɲā
COND CL2 P3 drink(b) be_full(b) CL1 hit(b) CL2 COMP 2PL leave(a)
nɨ́]
IMP.PL

'When they had drunk enough, he beat them saying: Leave!.'

CHAPTER 16

Glossed texts

16.1 Song by Yung Henrik, “It is eating me up”

16.1.1 Introduction

This song was written by Yung Henrik who died from a disease shortly after this song was recorded. Besides being a farmer, Yung Henrik was a gifted musician who composed his own songs and accompanied them on the guitar. The song is a so-called ‘bottle-dance’, which is a popular music style of North-West Cameroon. During the performance, the audience taps the rhythm on bottles. The song treats some of the problems society is facing due to more and more young girls leaving the village in search of a better life.

16.1.2 Text

(1) ḿ̀=bő gàn wú lā, yɛ̄ bwɛ̄ à gàn
1SG=ask(b) go(a) CL1PP DAT COMP CL1/2.friend 2SG go(a).IPFV
fɨ́ tí nà̀
pass(b).IPFV surprisingly where

‘I ask her: friend, where are you going?’

(2) wù fǫ̀ tʃʉ́ mɨ́ lā, yɛ̄ lùŋ b-ɔ́
CL1 tell(a).IPFV come(b).IPFV 1SG.PP DAT COMP CL8.suffering CL8-DET
yɪ́ nɨ̀m tí mɨ̄
eat(b).IPFV sit(a).IPFV surprisingly 1SG

'She told me: I am suffering.'

(3) nɨ́ ŋgɨ̄ nɨ̀m tsā́ kŭ́, yɛ̄
CL1/2.mother CL1;1SG.POSS live(a).IPFV Tsa home_village.LOC COMP
nɨ́ ŋgɨ̄ nɨ̀m tsā́ kŭ́,
CL1/2.mother CL1;1SG.POSS live(a).IPFV Tsa home_village.LOC
bwɛ̄
CL1/2.friend

'My mother lives in Tsaku. My mother lives in Tsaku, my friend.'

(4) m̋ = bŭ́ gàn wú lā, yɛ̄ nɨ́, à gàn
1SG = ask(b) go(a) CL1PP DAT COMP CL1/2.mother 2SG go(a).IPFV
fɪ̏ tí nā ō
pass(b).IPFV surprisingly where INTERJ

'I asked her: mother where are you going?'

(5) nɨ́ mɨ́ fǫ̀ tʃʉ́ mɨ́ lā, yɛ̄ mɨ̄
CL1/2.mother CONSEC tell(a).IPFV come(b).IPFV 1SG.PP DAT COMP 1SG
wān, ń = lyà fɪ̏ ɲɛ̀
CL1.child 1SG = go_to_bush(a).IPFV pass(b).IPFV leave(a).IPFV
bɔ̄ ŋgɨ́
CL3/7a.stroll CL3;1SG.POSS

'My mother told me: my child, I am wandering.'

(6) lùŋ b-ɔ́ yɪ́ nɨ̀m tí mɨ̄,
CL8.suffering CL8-DET eat(b).IPFV sit(a).IPFV surprisingly 1SG
lùŋ b-ɔ́ yɪ́ nɨ̀m tí mɨ̄
CL8.suffering CL8-DET eat(b).IPFV sit(a).IPFV surprisingly 1SG

'Suffering is eating me up. Suffering is eating me up.'

(7) *better* nɨ̀m gàn mɨ́ lā, yɛ̄ ń = dzɛ́
better sit(a) go(a) 1SG.PP DAT COMP 1SG = miss_track(c).IPFV
lɛ̀ ɲɛ̀ tǫ̋m b-ɔ́ yɨ̀ŋ
get_lost(a).IPFV leave(a).IPFV CL7/8.palm_village CL8-DET bush.LOC

'It would be better for me to leave and get lost in the bush of any village.'

(8) bī kù dzí gàn kyɛ̄n mī, yɛ̄ bī kù
CL8 cry(a) walk_around(b) go(a) CL7/8.soul in COMP CL8 cry(a)
dzí gàn kyɛ̄n mī
walk_around(b) go(a) CL7/8.soul in

'She is crying in her soul. She is crying in her soul.'

(9) bī mí nɨ̀m f-ấní́ (ē), bī dzé nɨ̀m tí
1PL CONSEC sit(a) PROX-there INTERJ 1PL speak(b) sit(a) surprisingly
mɛ̌ yɛ̄, lùŋ bó dǐ́ tá mɛ̌ yɛ́n lā, bī
only COMP CL8.suffering CL8-DET be(b) specifically only Y. DAT CL8
kwó fúbɔ̌ bí ŋgɔ̀
enter(c) also 1PL.PP upon

'And we are sitting here, saying that only Yain is suffering, but the suffering has also attacked some of us.'

(10) lùŋ b-ɔ́ yi̱ fúbɔ̌ bī (e), bī dzé nɨ̀m
CL8.suffering CL8-DET eat(b).IPFV also 1PL INTERJ 1PL speak(b) sit(a)
mɛ̌ ā mɔ̀ wù-mwò
only COM CL1.person CL1-one

'The suffering is also eating us up and we are only talking about one person.'

(11) à kyɛ́ wān nɛ̌ yū (e),
2SG look(c) CL1.child CL1/2.mother.2SG.POSS buttock.LOC INTERJ
mɔ̀ dzū kyɛ́ fúbɔ̌ á yū
CL1.person CL1.other look(c) also 2SG.PP buttock.LOC

'If you talk against your brother or your sister, somebody will also talk against you.'

(12) bī kù dzi̱ gàn kyɛ̄n mī, yɛ̄
1PL cry(a).IPFV walk_around(b).IPFV go(a).IPFV CL7/8.soul in COMP
bī kù dzi̱ gàn kyɛ̄n mī, yo
1PL cry(a).IPFV walk_around(b).IPFV go(a).IPFV CL7/8.soul in INTERJ

'We are crying in our soul, we are crying in our soul.'

(13) bə̄ dzé gàn bɔ̌ lā yɛ̄ bán bò á
IMPERS say(b) go(a) CL2PP DAT COMP CL1/2.outside be_bad(a) ADVLZ
kī-lī
NMLZ-be_strong(a)

'They are telling them that [the world] outside is very bad.'

(14) bɔ̋ fo̱ tʃṵ bí lā yɛ̄ bɔ̋ tsè
CL2 tell(a).IPFV come(b).IPFV 1PL.PP DAT COMP CL2 search(a)
dzi̱ gàn kpɔ̋
walk_around(b) go(a) CL3/7a.money

'They are telling us that they are searching for money.'

(15) tō nǭ dzwàn kɔ̋ b-ɔ́ bɔ̋ (e), bɔ̋
CL7/8.day SUBORD CL9.illness catch(b) CL8-REL CL2 INTERJ CL2
mɪ̄ nɪ̀m gàn tí f-ɔ̋ gbə́ (e)
CONSEC sit(a) go(a) surprisingly PROX-there house.LOC INTERJ

'The day that an illness has attacked them they will be there, staying in the house.'

(16) bə̀-tɪ̌ bɔ̌ yi̱ nɪ̄m tí lòŋ
CL2-father 3PL.POSS eat(b).IPFV sit(a) surprisingly CL8.suffering
(e), nɪ́n bɔ̌ yi̱ nɪ̄m tí
INTERJ CL1/2.mother 3PL.POSS eat(b).IPFV sit(a) surprisingly
lòŋ (è)
CL8.suffering INTERJ

'Their father will be suffering and their mother will be suffering.'

(17) tō mɪ́ wě ʃi̱ tí (é), wù
CL7/8.day CONSEC dawn(b) go_down(a) surprisingly INTERJ CL1
gwān nīm f-ɔ̋ gbə́ (o)
be_sick(a) sit(a) PROX-there house.LOC INTERJ

'When the day has dawned, she is there with an illness in the house.'

(18) bī bú gàn wú lā, yɛ̄ nɪ̋, à
1PL ask(b) go(a) CL1PP DAT COMP CL1/2.mother.1SG/PL.POSS 2SG
gwàn tí mān yɛ̄
be_sick(a) surprisingly what QUOT.Q

'We ask her: mother, why are you ill?'

(19) bī dzé gàn bɔ̌ lā yɛ̃, tō fɪ̄ ā
1PL speak(b) go(a) CL2PP DAT COMP be_smart(b) pass(b) COM
yū y-ā (ò)
CL9/10.buttock CL9-2SG.POSS INTERJ

'We always tell them that they should be very careful with their sex life'

(20) yū y-ɔ̄ bò ɲwɛ́n á̋ kī-lī
CL9/10.buttock CL9-DET be_bad(a) now ADVLZ NMLZ-be_strong(a)
(e)
INTERJ

'Sex is very dangerous these days.'

(21) lʊ̀ŋ b-ɔ́ yɪ̤́ nɪ̀m tí bɪ́̋ (e),
CL8.suffering CL8-DET eat(b).IPFV sit(a).IPFV surprisingly 1PL INTERJ
bī yɪ̤́ fúbʊ̌ bī (o)
CL8 eat(b).IPFV also 1PL INTERJ

'Suffering is eating them up and it is also eating some of us up.'[1]

(22) à bɔ̀ŋ gàn kpé (é), wù dzé tʃʊ̤́
2SG call(a) go(a) CL1.woman INTERJ CL1 say(b).IPFV come(b).IPFV
wá lā yɛ̄ (o)
2SG.PP DAT COMP INTERJ

'If you call a woman, she will tell you that'

(23) kpʊ́ wʊ̤́ dɪ́̋ mɛ̌ kām bī-kpɔ̄n,
CL3/7a.money CL3;3SG.POSS be(b) only CL7/8.thousand CL8-five
bwɛ̄
CL1/2.friend

'her price is always 5000 francs, my friend.' (lit.: her money)

(24) tō nɔ̤̄ lʊ̀ŋ kɔ̋ b-ɔ́ wù
CL7/8.day SUBORD CL8.suffering catch(b) CL8-REL CL1
kām b-ɔ́ bī-kpɔ̄n ā dɪ́̋ wɔ̄
CL7/8.thousand CL8-DET CL8-five NEG be(b) NEG

'The day that suffering attacks her, the 5000 francs are not there.'

(25) nɪ́̋ mɪ̄ yɪ̤́ nɪ̀m tí
CL1/2.mother;3SG.POSS CONSEC eat(b).IPFV sit(a).IPFV surprisingly
lʊ̀ŋ (è), tɪ̌ mɪ̄ yɪ̤́
CL8.suffering INTERJ CL1/2.father.3SG.POSS CONSEC eat(b).IPFV
nɪ̀m tí lʊ̀ŋ (e)
sit(a).IPFV surprisingly CL8.suffering INTERJ

'Her mother is suffering and her father is suffering.'

[1]The Class 8 pronoun is used to refer to a group of people in an abusive way.

(26) tō mɨ́ wé ʃi̱ tí (e),
CL7/8.day CONSEC dawn(b).IPFV go_down(a).IPFV surprisingly INTERJ
wù kū nɨ̄m f-ɔ́ gbɔ́, (o)
CL1 cry(a) sit(a) PROX-there house.LOC INTERJ

'When day has broken, she is still there in the house crying.'

(27) nɨ́ bú ʃi̱ tí wú lā, yɛ̄
CL1/2.mother.3POSS ask(b) go_down(a) surprisingly CL1PP DAT COMP
mɨ́ wān, ɲwɔ́m w-ā dɨ́ tí nā
1SG CL1.child CL1.husband CL1-2SG.POSS be(b) surprisingly where
(o)
INTERJ

'And the mother will ask her: My child, where is your husband?'

(28) wù dzé gàn nɨ́ lā yɛ̄,
CL1 speak(b) go(a) CL1/2.mother;3POSS DAT COMP
nɨ́, ā n=dɨ́ wɔ̄ ā mɔ̀nɔ̄
CL1/2.mother;1POSS NEG 1SG=be(b) NEG COM CL1.male

'and the daughter will say: Please mother, I don't have a man.'

(29) bī mɨ́ dzě gàn bɔ̌ lā, yɛ̄ nɨ̌m nɨ́ ā
1PL CONSEC speak(b) go(a) CL2PP DAT COMP sit(a) IMP.PL COM
mɔ̀ kwɛ́ (e)
CL1.man CL3/7a.home_village INTERJ

'We are telling them: Stay and get married to a native man!'

(30) bɔ́ dzé ʃú̱ bí lā yɛ̄, ɲwɔ́m
CL2 speak(b).IPFV come(b).IPFV 1PL.PP DAT COMP CL2.husbands
kwɛ́ ā fyá tí wɔ̄ bī
CL3/7a.home_village NEG give(b).IPFV surprisingly NEG 1PL

'and they are telling us that native men are not giving us.'

(31) *better* dɨ̌ yɛ̄ bī bí ɲɛ̄ gān
better be(b) COMP 1PL go_out(b).IPFV leave(a).IPFV go(a)
tǫ́m b-ɔ́ yɨ̄ŋ (...)
CL7/8.palm_village CL8-DET bush.LOC

'It is better for us to go out to other home villages.'

(32) tō mɨ̄ wě ʃi̤ tí (e), bɔ̋
CL7/8.day CONSEC dawn(b) go_down(a).IPFV surprisingly INTERJ CL2
tʃṳ́ tí bɛ́~bɛ̄ (e)
come(b).IPFV surprisingly CL7/8.half~RED INTERJ

'And then day has broken and they will be coming back half way.'' (i.e. attacked by illness, lost weight)

(33) tō mɨ̄ wě ʃi̤ tí (e),
CL7/8.day CONSEC dawn(b) go_down(a).IPFV surprisingly INTERJ
lòŋ b-ɔ́ yí̤ nɨ̄m tí ā́ bɔ̋
CL8.suffering CL8-DET eat(b).IPFV sit(a) surprisingly ADVLZ CL2
(e)
INTERJ

'And then day has broken and the suffering is only attacking them.'

(34) bī kù dzí̤ gàn kyɛ̄n mɨ̄ (ē), bī
1PL cry(a) walk_around(b).IPFV go(a) CL7/8.soul in INTERJ 1PL
kù dzí̤ gàn kyɛ̄n mɨ̄ (e)
cry(a) walk_around(b).IPFV go(a) CL7/8.soul in

'They are crying in their soul, they are crying in their soul.'

(35) bì bú gàn bǔ lā, yɛ̄ bɛ̄n lǎ dzí̤
1PL ask(b) go(a) CL2PP DAT COMP 2PL do(a).IPFV walk_around(b).IPFV
tí mān
surprisingly what

'We are asking them: What are you doing [aimlessly]?'

(36) lòŋ b-ɔ́ yí̤ nɨ̀m bǔ (e), lòŋ
CL8.suffering CL8-DET eat(b).IPFV sit(a) CL2 INTERJ CL8.suffering
b-ɔ́ yí̤ fúbǔ bī (e)
CL8-DET eat(b).IPFV also 1PL INTERJ

'The suffering is still eating them up and it is also eating us up.'

(37) bī dzé gàn bǔ lā, yɛ̄ nḯ,
1PL speak(b) go(a) CL2PP DAT COMP CL1/2.mother.1SG/PL.POSS
lòŋ b-ɔ́ yí̤ bī (e)
CL7/8.suffering CL8-DET eat(b).IPFV 1PL INTERJ

'We are telling them: Please, the suffering is eating us up.'

(38) wù dzé tʃṵ́ mɨ́ lā, yɛ̄ lùŋ b-ɔ́
CL1 say(b).IPFV come(b).IPFV 1SG.PP DAT COMP CL8.suffering CL8-DET
yḭ́ fúbɔ̆ mɨ̄ (e)
eat(b).IPFV also 1SG INTERJ

'And she will also tell us that the suffering is also eating her up.'

(39) bī kù dzḭ́ gàn (e)
CL8 cry(a).IPFV walk_around(b).IPFV go(a) INTERJ

'They are crying'

(40) bī dzé gàn tí (e)
CL8 say(b) go(a) surprisingly INTERJ

'and they keep on talking.'

(41) bī mɨ̄ dzě tʃű́ wá lā yɛ̄, bā́n
1PL CONSEC say(b) come(b) 2SG.PP DAT COMP CL1/2.outside
bò ā́ kī-lī
be_bad(a) ADVLZ NMLZ-be_strong(a)

'We are talking to you, saying that [the world] outside is very bad.'

(42) bɛ̄n mù kɔ̄ bɛ́n fɔ̄ yɛ̄
2PL take(a) CL8a.intelligence 2PL.PP head.LOC QUOT

'You should be careful and put some sense in your heads.'

(43) tō mɨ̄ wě ʃḭ́ tí (e)
CL7/8.day CONSEC dawn(b) go_down(a).IPFV surprisingly INTERJ

'When day has broken'

(44) nɛ́̌ mɨ̄ dzě gàn wá lā (e)
CL1.mother.2SG.POSS CONSEC speak(b) go(a) 2SG.PP DAT INTERJ

'your mother will tell you.'

(45) bī ā wṵ́ wɔ̄ ɲɔ̄ nḯ
CL8 NEG hear(b).IPFV NEG CL8a.talk CL1/2.mother

'They will not be hearing their mother's advice.'

(46) bɔ̋ mɨ̄ kù nɨ̀m tí (e), nḯ
CL2 CONSEC cry(a) sit(a) surprisingly INTERJ CL1/2.mother.1POSS
mɨ̄ kù nɨ̀m tí (e)
CONSEC cry(a) sit(a) surprisingly INTERJ

'They will still be crying, and our mother will still be crying.'

(47) à mɨ̄ syɛ́ nɨ̀m á dzǽ, à mɨ̄
2SG CONSEC expose_teeth(b) sit(a) 2SG.PP mouth.LOC 2SG CONSEC
syɛ́ nɨ̀m á dzǽ
expose_teeth(b) sit(a) 2SG.PP mouth.LOC

'and you will still be exposing your teeth, and you will still be exposing your teeth.'

(48) nɛ́ mɨ̄ kɔ̀ nɨ̀m tí (e), yɛ̄
CL1.mother.2SG.POSS CONSEC cry(a) sit(a) surprisingly INTERJ COMP
mɨ̄ wān gàn fɨ́ tí nə̄
1SG CL1.child go(a) pass(b) surprisingly where

'Your mother will still be crying: Where is my child going?'

(49) mɨ̄ wān gàn fɨ́ tí nə̄, mɨ̄ wān gàn
1SG CL1.child go(a) pass(b) surprisingly where 1SG CL1.child go(a)
fɨ́ tí nə̄
pass(b) surprisingly where

'Where is my child going? Where is my child going?'

(50) bī yi̱ nɨ̀m mɨ̄ (o), bī yi̱ nɨ̀m mɨ̄ (o)
CL8 eat(b).IPFV sit(a) 1SG INTERJ CL8 eat(b).IPFV sit(a) 1SG INTERJ

'It is eating me up, it is eating me up.'

(51) bī yi̱ nɨ̀m mɨ̄ (o), bī yi̱ nɨ̀m mɨ̄ (o)
CL8 eat(b).IPFV sit(a) 1SG INTERJ CL8 eat(b).IPFV sit(a) 1SG INTERJ

'It is eating me up, it is eating me up.'

16.2 Recipe for corn beer

16.2.1 Introduction

The following text is a spontaneous presentation of a recipe for corn beer. As such, it is not necessarily a correct or complete recipe, but serves to present Mundabli in use.

16.2.2 Text

(1) bə̄ ʃə̄ bə̄ fyē nə̄ bə̄ kə̋
IMPERS want(a).IPFV IMPERS learn(a) SUBORD IMPERS HAB
læ̃ ná ŋkà
make(a).IPFV as CL6.corn_beer

'We want to learn how to make corn beer.'

(2) ká à mū ʃú gɛ̄ w-ɔ́ à mɨ̄
COND 2SG take(a) come(b) CL3/7a.maize CL3-DET 2SG CONSEC
kpè wŭ ŋgī mɨ̄ sɨ́ yí-ʃyɛ̂
soak(a) CL3 CL6.water in CL9/10.day CL10-two

'When you take the corn and soak it in water for two days,'

(3) à mɨ̄ wú bɨ́ yá mű
2SG CONSEC drain(c) go_out(b) go_up(c) CL6

'you then remove it [the corn],'

(4) à mɨ̄ tɛ́n wű kyà mɨ̄
2SG CONSEC pour(c) CL3 CL9/10.basket in

'and put it into a basket.'[2]

(5) *after*, à mɨ̄ tăn tʃű yán ŋgɔ̄m
after 2SG CONSEC cut(b) come(b) CL3/7a.leave CL1/2.plantain

'After that, you collect plantain leaves.'

(6) à mɨ̄ bă̋ŋ kɨ́ tʃɨ́n wɔ̄
2SG CONSEC lock(b) CL7 there on

'and you cover the corn with them.'

[2] In order to drain out the water.

(7) kə́ mū bí sɨ́ yí-ǹdē *or* yī-kpɔ̄n à
COND CL6 germinate(b) CL9/10.day CL10-four or CL10-five 2SG
mɨ̄ mū kɛ́ bɨ́ yá mű̀ ā mɨ̄ gwɔ̀
CONSEC take(a) return(c) go_out(b) go_up(c) CL6 2SG CONSEC grind(a)

'After it has germinated for four or five days, you then remove it [the corn] and grind [it].'

(8) ká à gwō tʃú mű̀, *either* mɛ̀ʃîn mɨ̄ *or*
COND 2SG grind(a) come(b) CL6 either CL1/2.machine in or
ɲē wɔ̄ à mɨ̄ tʃǔ wɔ̀ŋ mǔ
CL3/7a.lower_grinding_stone on 2SG CONSEC come(b) squish(a) CL6

'When you have ground it, either in the machine or on the grinding stone, you then mash it.'

(9) dʒī dā̋ yɨ́-ʃyɛ̄ à kə̄ lā ŋkā̀
CL9.path be_still(b) CL10-two 2SG COND make(a) CL6.corn_beer

'There are two ways of making corn beer:'

(10) *either* à wɔ̀ŋ mǔ, kə́ mū gé à tǔ fɨ̀
either 2SG squish(a) CL6 COND CL6 settle(b) 2SG scoop(b) pass(b)
bì yá fɔ̄ w-ɔ́ à dʒyɛ̀ tsālɨ̀
go_out(b) go_up(c) CL3.head CL3-DET 2SG cook(a) CL7/8.chaff
b-ɔ́ ā mū-ntʃīm m-ɔ́
CL8-DET COM CL6-thick CL6-DET

'either you wash and leave it to settle, then you remove the head and cook the chaffs with the thick one (liquid)'

(11) *or* à sé mű̀ n-sē kwɛ́ mɨ̄
or 2SG heat(c) CL6 INF-heat(c) CL3/7a.home in

'or you cook it in the local traditional way.'

(12) *then after*, ká à dʒyē mɛ̄ mű̀, *the first day*
then after COND 2SG cook(a) finish(a) CL6 the first day

'Then after you've finished cooking, the first day'

(13) tō ā m-bāŋ b-ɔ́, ká à dʒyē mɛ̄
CL7/8.day COM INF-follow(b) CL8-DET COND 2SG cook(a) finish(a)

'the first day when you've finished cooking'

(14) *then*, ká tō wé kɛ̄ ʃī, à mɨ́
then COND CL7/8.day dawn(b) return(c) go_down(a) 2SG CONSEC
dʒyē kpɛ̂ mǔ
cook(a) complete(a) CL6

'then the next day you finish cooking.'

(15) ká à dʒyē kpɛ̄ mű́, à mɨ́ mū ʃú
COND 2SG cook(a) complete(a) CL6 2SG CONSEC take(a) come(b)
ŋkā mū-nkɔ̄n m-ɔ́, à mɨ́ nūŋ
CL6.corn_beer CL6-strong_corn_beer CL6-DET 2SG CONSEC add(a)
kwó ʃī tʃín ŋgɔ́
enter(c) go_down(a) there upon

'When you are done with cooking, you take the strong corn beer and add [it].'

(16) *then* kɔ́̄ tō wé kɛ̄ ʃī mū mɨ́
then COND CL7/8.day dawn(b) return(c) go_down(a) CL6 CONSEC
nīm ĭ́ bə̄ kə̄ mű́
sit(a) LOC IMPERS so_that drink(b)

'then the next day it will be ready for drinking'

(17) *so* bə̄ mɨ́ yē m-mù̱
so IMPERS CONSEC start(a) INF-drink(b).IPFV

'So, people will then start drinking.'

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Samenvatting in het Nederlands

Dit proefschrift omvat een descriptieve grammatica van Mundabli, een Zuid-Bantoïde taal die door ongeveer 350 à 450 mensen gesproken wordt in het gelijknamige dorp in de Noordwestelijke provincie van Kameroen. Deze grammatica behandelt een groot aantal onderwerpen, zoals de fonologie, morfofonologie, naamwoordclassificatie, concordantie, het pronominaal systeem, nominale modificeerders en de structuur van nominale constituenten, werkwoordsmorfologie en het verbale complex, seriële werkwoordsconstructies, kleinere woordklassen zoals bijwoorden, ideofonen, basiszinstructuur, bijzinnen, koppelwerkwoorden en niet-verbale predicaten. Daarnaast bevat dit proefschrift hoofdstukken over informatiestructuur en niet-declaratieve zinnen.

De introductie 1 schetst de achtergrond van de taal, haar sprekers, en haar classificatie. Hoewel Mundabli (ook wel bekend onder het endonym **ndʒə̀n**) voorheen werd gerekend tot de Westelijk Beboïde taalfamilie heeft een recentere herclassificatie ertoe geleid dat de taal nu geschaard wordt onder een geografische eenheid Yemne-Kimbi genaamd die Zuid-Bantoïde talen zonder duidelijke affiliatie verenigt. Het tweede deel van dit hoofdstuk (Section 1.2) behandelt het eerdere onderzoek naar Mundabli. Daarnaast geeft dit deel weer hoe het veldwerk is verricht, hoe de data gepresenteerd worden, en wat het gehanteerde transcriptiesysteem is. De data die de basis vormen voor dit proefschrift zijn verzameld tijdens veldwerk in het dorp Mundabli en de nabijgelegen stad Wum. Het corpus dat zo gevormd is bevat zowel spontane als uitgelokte uitingen die als geluidsbestanden opgenomen zijn. De gebruikte orthografie is gebaseerd op het International Phonetic Alphabet (IPA), met enkele aanpassingen, zodat het beter aansluit op het 'General Alphabet of Cameroon Languages.'

De fonologie van Mundabli staat centraal in hoofdstuk 2. Hierin worden verscheidene aspecten van de fonologie beschreven, waaronder toon, klinkers en medeklinkers, en fonotaxis. Mundabli heeft vier level tonen en een aantal contour-tonen, maar geen downstep of fonetische downdrift; het is een zogenoemde discrete level taal, hetgeen betekent dat tonen altijd op min of meer

dezelfde hoogte gerealiseerd worden. In Mundabli is toon contrastief op elke lettergreep. Daar waar naamwoorden over het algemeen hun lexicale toon behouden, verandert het toonpatroon van werkwoorden onder invloed van zaken zoals de positie in de uiting, en tense/mood/aspect.

De consonantinventaris van Mundabli bevat 21 segmenten. Stemhebbendheid is contrastief in de plofklanken, hoewel de labiale stop **b** geen stemloze variant heeft; dit levert een gat in het fonologische systeem op. Er zijn een aantal algemene allofone alternanties aan te wijzen, zoals de spirantizatie van stops voor de hoge klinkers **i** en **u**, het verlies van stemhebbendheid van sonoranten in coda-positie, en de glottalisering van finale nasalen. Ook het aantal klinkers is aanzienlijk, met 13 gewone en vier faryngale klinkers (Mundabli is de enige taal in de Yemne-Kimbi-groep met faryngale klinkers). De faryngale klinkers komen alleen voor in open lettergrepen, en zijn vermoedelijke ontstaan door het wegvallen van velare coda's, die in cognaten in het verwante Mufu wel worden aangetroffen. Het klinkersysteem van Mundabli is verder nog complexer door de hoge mate van variatie tussen sprekers in de uitspraak van de hoge- en midklinkers.

Mundabli staat niet veel clusters toe: alleen sequenties van consonanten gevolgd door glijklanken en van nasalen gevolgd door stops worden aangetroffen, en dan alleen in lettergreep-initiële positie. Lettergrepen zijn open, of hebben een nasaal of **l** in de coda.

Hoofdstuk 3 behandelt de restricties op morfeemstructuur, de interactie tussen morfologie en fonologie, en fonologische processen die over woordgrenzen heen plaatsvinden. Lexicale stammen, affixen en functiewoorden zijn onderhevig aan verschillende structurele beperkingen. Zo zien we in stam-initiele positie regelmatig consonant-glijklank sequenties, terwijl deze in affixen en functiewoorden volledig afwezig zijn. Gesloten lettergrepen en faryngale klinkers vinden we alleen in lexicale stammen, waartegenover staat dat lettergrepen zonder onset alleen in functiewoorden zijn toegestaan.

Prefixen zijn de enige soort affixen, met als uitzondering het infinitiefmorfeem, dat onder bepaalde omstandigheden als circumfix wordt gerealiseerd. Nomina in gender 9/10 hebben een tonale alternantie tussen enkelvoud en meervoud (waarbij de toon in klasse 9 meestal lager is dan die in klasse 10), in plaats van een segmenteel prefix.

Monosyllabische naamwoordstammen kunnen acht verschillende toonpatronen hebben, die in vrijwel alle omstandigheden behouden blijven. Werkwoorden zijn bijna altijd monosyllabisch, en zijn onder te verdelen in drie tonale klasses: A, B en C. Alle werkwoorden binnen een klasse zijn identiek qua toonpatroon, en vertonen dezelfde tonale alternanties onder invloed van onder andere tijd en aspect.

Er zijn ook een aantal morfologische alternanties. Zo is er een groep gender 3/10 nomina die stam-initiële consonantmutatie vertoont, waarbij de initiële consonant alterneert tussen een labiovelaire plosief in het enkelvoud (klasse 3) en een palataal (of vergelijkbare klank) in het meervoud (klasse 10). Werkwoordstammen bestaan in een perfectieve en een imperfectieve vorm. Die

tegenstelling wordt in vormen met een open lettergreep onder andere weergegeven door middel van ablaut, zoals bijvoorbeeld de alternantie tussen een gewone en faryngale klinker. Fonologische processen op het niveau van de frase zijn beperkt tot incidentele klinker-elipsis en het spreiden van een lage toon naar een volgende superhoge lettergreep.

Mundabli heeft een Bantoe-achtig naamwoordklassesysteem, met paren van enkelvouds- en meervoudsklassen, zoals beschreven wordt in hoofdstuk 4. Concordantie vindt alleen plaats bij nominale modificeerders. De nominale klassen zijn meestal niet openlijk gemarkeerd, hoewel de paren in klasse 9 en 10 een tonale markering hebben (zie hierboven). Leenwoorden worden ingedeeld in de klassenparen 1 en 2, of 7 en 8.

Concordantie wordt verder behandeld in hoofdstuk 5. Werkwoorden congrueren met geen enkele van hun argumenten, maar nominale modificeerders congrueren met de nominale klasse van het hoofdnaamwoord. Concordantie wordt gerealiseerd door prefixen, die kunnen bestaan uit een hele lettergreep, een consonant gepaard met een toon, of alleen een toon. Alleen bij de persoonlijke voornaamwoorden vinden we het hele palet van concordantie, terwijl bij nominale modificeerders sommige naamwoordklassen samenvallen.

Pronomina, die zelfstandig of in appositie met een naamwoord kunnen voorkomen, worden behandeld in hoofdstuk 6. In persoonlijk voornaamwoorden bestaat een soort van naamvalsysteem, met vier verschillende tonen voor de volgende zinsposities: preverbaal, niet-preverbaal, volgend op de comitatieve prepositie **ā** en voor een locatieve of dative postpositie. De pronomina voor 1SG en 2SG zijn segmenteel gereduceerd.

Het 1SG voornaamwoord en het interrogatieve voornaamwoord hebben bijzondere datieve vormen. Zinnen met een omgekeerde woordvolgorde hebben een (volledig tonaal) preverbaal 'dummy' subject. Mundabli kent een onpersoonlijk subject, welke analoog is aan de passief in andere talen. De vragende voornaamwoorden **mān** 'wat' en **ndɛ̀** 'wie' hebben, in bepaalde context, voorvoegsels van meervouds-naamwoordklassen.

De structuur van de nominale frase en de nominale modificeerders (waaronder demonstratieven, adjectieven, numeralia en adverbia) staan centraal in hoofdstuk 7. Demonstratieven onderscheiden dichtbij en veraf. Mundabli heeft een kleine gesloten klasse van adjectieven. Deze nemen een syllabisch prefix, met uitzondering van klasse 9 (SG) en klasse 10 (PL), waarbij het prefix tonaal is. Sommige telwoorden hebben een vorm van stamallomorfie, afhankelijk van de klasse van het nominale prefix. Zo vinden we vormen als **mbɛ́ bə̋-fyə̋** 'twee mensen' (CL2) and **dʒə́ yə́-ʃyə̋** 'twee honden' (CL10).

Hoewel nominale frases meestal door een eenvoudige conjunctie **āmī** samen gevoegd worden, vinden we ook een inclusieve conjunctieconstructie om combinaties te vormen van pronomina, nomina, of combinaties van beiden. Nominale frasen zijn meestal hoofd-initieel, hoewel in een beperkt aantal constructies (zoals de possessief) de volgorde omgekeerd is.

In hoofdstuk 8 wordt de verbale morfologie behandeld, alsmede het verbale complex. Vrijwel alle werkwoordstammen zijn monosyllabisch, en er

bestaan drie inflectionele klassen: A, B en C. Alle werkwoorden binnen een inflectionele klasse hebben eenzelfde toonpatroon voor een gegeven constructie. De imperfectief wordt gevormd door ablaut, hetgeen resulteert in faryngale klinkers.

Er zijn in Mundabli twee toekomstige en vier niet-toekomstige grammaticale tijden, die gemarkeerd worden door middel van preverbale partikels en tonale inflectie. Negatie wordt meestal uitgedrukt door de discontinue markeerder **ā … wɔ̄**, die zich om de verbale kern heen vormt.

Een groot aantal constructies wordt beschreven in dit hoofdstuk, waaronder verscheidene constructies van tijd, en constructies met preverbale markeerders die andere zaken aangeven dan tijd, zoals habitualis, opeenvolging, focus en voorwaardelijkheid. Daarnaast passeren meer gemarkeerde negatieconstructies de revue.

Na de verbale morfologie gaat hoofdstuk 9 verder in op werkwoordconstructies en adverbia. Seriële werkwoordconstructies in Mundabli bestaan uit een ononderbroken blok werkwoorden. Het vaakst komen symmetrische seriële werkwoordconstructies voor, waarbij alle verba een gelijke status hebben. Asymmetrische constructies komen echter ook voor, waarin een of meer werkwoorden de interpretatie van het hoofdwerkwoord beïnvloeden. In de symmetrische constructies is de woordvolgorde vaak iconisch, maar in de asymmetrische constructies is dat niet het geval: De bepalende werkwoorden, die zaken als beweging, aspectualiteit, valentie en wijze uit kunnen drukken, staan meestal rechts van het hoofdwerkwoord. Symmetrische seriële werkwoordconstructies zijn vaste uitdrukkingen, of drukken opeenvolgende gebeurtenissen uit. Sommige grammaticale categorieën worden slechts eenmaal per werkwoordconstructie gemarkeerd, terwijl andere op elk individueel werkwoord voorkomen. Daarnaast zijn er categorieën die van beide mogelijkheden gebruik maken. Verbale adverbia staan meestal in de laatste positie van de core.

In hoofdstuk 10 komen de andere woordsoorten aan bod: adverbia, adposities, temporele en ruimtelijke deixis, ideofonen, en interjecties. Naast de verbale adverbia die in het vorige hoofdstuk besproken zijn heeft Mundabli finale manner adverbia, die bestaan uit een gereduplicerde stam, voorafgegaan door de adverbializer **ā́**. Mundabli heeft postposities, maar ook twee prepositie: comitatief (**ā**) en algemeen locatief (**ī́**). Postposities zijn vaak afgeleid van naamwoorden. De postpositie **lā** heeft een datieve/benefactieve betekenis, terwijl de meeste andere postposities statische spatiale betekenissen uitdrukken. Ideofonen komen veelvuldig voor. Vaak is hier sprake van reduplicatie, en de ideofonen zijn niet onderhevig aan de algemene fonotaxis van Mundabli.

In hoofdstuk 11 wordt de structuur van de basale (dat wil zeggen, pragmatisch ongemarkeerde en declaratieve) zin beschreven. Het onderscheid dat ik maak in valentie is gebaseerd op het maximale aantal argumenten, en niet op het minimale aantal. Het enige verplichte argument in Mundabli is het subject. Intransitieve werkwoorden hebben geen object, terwijl een object optioneel is voor transitieve werkwoorden. Er zijn ook afgeleide intransitieve en transitieve werkwoorden, die daarnaast ook een obliek argument

hebben. De standaardwoordvolgorde is S-V-O-(OBL)-(X), en in zinnen met gemarkeerde informatiestructuur komen ook andere woordvolgordes voor. Er is geen syntactisch onderscheid tussen non-core (oblieke) constituenten en adverbiale frases. Alleen non-core argumenten hebben postposities. Op de pronomina is een naamvalsysteem van toepassing: verschillende vormen worden gebruikt in preverbale posities, niet-preverbale posities, wanneer een pronomen geregeerd wordt door een comitatieve prepositie, of door een datieve of benefactieve postpositie. Mundabli is een atypische marked nominative taal, met nominatief/accusatief alignment. Evidentie voor grammaticale verhoudingen is relatief zwak, maar sterker voor het subject dan voor het object. Het 1SG pronomen en het interrogatieve pronomen voor 'wie' hebben speciale datieve vormen.

Betrekkelijke bijzinnen worden behandeld in hoofdstuk 12. Deze volgen op het hoofdnaamwoord, en alle nominale modificeerders. Typologisch gezien zijn betrekkelijke bijzinnen in Mundabli bijzonder aangezien ze gemarkeerd worden door zowel een (optionele) initiële subordinator en een verplichte interne postverbale markeerder die concordeert met de klasse van het hoofdnaamwoord, onafhankelijk van de grammaticale rol van het hoofdnaamwoord in de bijzin. Vrijwel alle betrekkelijke bijzinnen kunnen een vervanger van het hoofdnaamwoord bevatten, maar dit is alleen verplicht wanneer het hoofdnaamwoord het subject is in de bijzin, of de bezitter in een genitieve frase. Deze voorwaarden zijn vrijwel gelijk in de hoofdzin. Er is geen beperking op de grammaticale relatie van het hoofdnaamwoord in de betrekkelijke bijzin. Het is niet mogelijk om een bijzin te vormen waarbij het hoofdnaamwoord niet een duidelijke grammaticale rol heeft in de bijzin. De mogelijkheden voor inflectie, focus markering en bevraging zijn vrijwel gelijk in betrekkelijke bijzin en hoofdzin. Alleen de reguliere negatiestrategie wordt niet aangetroffen in betrekkelijke bijzinnen, met een enkele uitzondering, namelijk wanneer het hoofdnaamwoord deel uitmaakt van naamwoordklasseklasse 1 en de relatieve markeerder dezelfde vorm heeft als de post-verbale bijzinmarkeerder.

Het belangrijkste koppelwerkwoord is **dǐ** 'zijn', zo lezen we in hoofdstuk 13. Het werkwoord **tʃǘ** 'komen' kan ook als koppelwerkwoord worden gebruikt, en betekent dan 'worden'. Verder bevat dit hoofdstuk een beschrijving van verschillende non-verbale predicaatconstructies, waaronder counterfactual voorwaardelijke constructies en ability-constructies.

Informatiestructuur komt aan bod in hoofdstuk 14. In Mundabli kan informatiestructuur uitgedrukt worden door (onder andere) de volgorde van de constituenten, speciale syntactische constructies, en partikels. Er zijn drie soorten focus: argumentfocus, werkwoordfocus en waarheidsfocus. De eerste wordt weergegeven door een niet-canonieke constituentvolgorde. Cleft constructies kunnen ook argumentfocus uitdrukken. Een subject met focus komt direct na het werkwoordcomplex. Canonieke postverbale constituenten zoals het object kunnen uit focus gehaald worden door ze te verplaatsen naar de positie direct vóór het verbale complex. Oblieke constituenten kunnen in situ focus krijgen. Nominale modificeerders worden verplaatst uit de nominale

frase naar de positie direct na het werkwoordcomplex om focus te krijgen. Topicale objecten worden regelmatig weggelaten. Werkwoordfocus wordt uitgedrukt door canonieke zinnen of door cognate deverbale nominale constructies. Waarheidsfocus wordt uitgedrukt door het adverbium **bán** of door het focuspartikel **tə́**.

In hoofdstuk 15 tenslotte, worden de verschillende niet-declaratieve zinstypes behandeld: vraagzinnen (en vraagwoorden), het imperatief, het prohibitief en de aanvoegende wijs. In vraagzinnen is de woordvolgorde meestal gelijk aan die van declaratieve zinnen. Polaire vragen zijn te herkennen aan de zinsfinale markeerder **à**. Inhoudelijke vragen hebben een vraagwoord, dat in de focuspositie direct na het werkwoord staat wanneer het subject bevraagd wordt, en anders zowel in situ als in de focuspositie kan voorkomen. In reported speech krijgen vraagzinnen speciale vraag-markeerders, waarbij onderscheid bestaat tussen vragen die geciteerd worden van de huidige spreker, of een andere. Imperatieven worden gevormd door de (segmenteel ongemarkeerde) werkwoordstam, in combinatie met een toonpatroon dat imperatief uitdrukt — hoewel imperatieve werkwoorden die niet in de eerste positie staan andere toonpatronen hebben. De prohibitief wordt gekenmerkt door een preverbale markeerder, **ʃā̀**, in combinatie met de imperatieve vorm van het werkwoord. Een subject pronomen is daarbij verplicht. De aanvoegende wijs wordt voornamelijk gebruikt om opdrachten te uiten aan referenten in de eerste of derde persoon, of om een opdracht, die in eerste instantie door iemand anders werd gegeven, door te geven. Het wordt uitgedrukt door middel van een subject pronomen, in combinatie met het toonpatroon van niet-initiële imperatieve werkwoorden in seriële constructies. Imperatieven en aanvoegende wijs vormen met een meervoudige referent worden gemarkeerd door de postverbale markeerder **nɨ́**.

De grammatica wordt gecompleteerd door twee geannoteerde teksten in hoofdstuk 16.

Curriculum Vitae

Rebecca Voll was born on 20 September 1977 in Bonn, Germany. She completed her secondary school education at Helmholtz-Gymnasium, Bonn, and at Ludwig-Thoma Gymnasium, Prien am Chiemsee, from which she graduated in 1997. After a half-year internship in Namibia, she signed up for a diploma program in Biology at the University of Regensburg in 1998, which she atended for two years. She then moved to Leipzig where she began her studies in Linguistics in 2000. Parallel to her studies, she worked as a student assistant at the Max Planck Institute for Evolutionary Anthropology, at Leipzig University and at the Zentrum Allgemeine Sprachwissenschaft (ZAS) in Berlin. She graduated from Leipzig University in 2007 with an M.A. degree in Linguistics, African Studies and Logic. She wrote her M.A. thesis on “The phonological word in Richtersveld Nama”. In the same year, she started a PhD program at the Leiden University Centre for Linguistics (LUCL), Department of African Languages, where she was employed as a PhD researcher until 2012. This dissertation is the result of her doctoral research.