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A Linguistic Description of Mbugwe with Focus on Tone and Verbal Morphology

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Dissertation presented at Uppsala University to be publicly examined in Ihresalen, Engelska parken Thunbergsv. 3H, Uppsala, Saturday, 2 June 2018 at 10:00 for the degree of Doctor of Philosophy. The examination will be conducted in English. Faculty examiner: Professor Maarten Mous (Leiden University).

Abstract

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Mbugwe is an endangered Bantu language spoken in north central Tanzania. This PhD dissertation is a description of the Mbugwe language with a focus on tone and verbal morphology, based on the author's fieldwork. This is the first detailed description of the language. Thus far, only a short grammatical sketch of Mbugwe has been available.

Mbugwe is a tonal language with a rich verbal system. Therefore, the focus of this dissertation is on tone and verbal morphology. The dissertation also contains a brief description of the phonology of Mbugwe as well as a description of the nominal system. Mbugwe has 7 vowels; length is distinctive. There are 21 consonant phonemes, not counting the NC sequences, which are analysed as clusters in this study. Mbugwe has 17 noun classes and the adnominals that agree with the noun are described and exemplified.

The tones of the language are presented in detail. Mbugwe has two tones, high and low, and the low tone is considered the default tone. The tone-bearing unit is the mora. High tones spread one mora to the right, and the last high tone before a low tone is upstepped. There is both lexical tone and grammatical tone in Mbugwe, and grammatical tones that occur on the verb stem in certain verb forms are described.

In the chapter on verb morphology, the structures of the simple and periphrastic verbs are presented, as well as a description of the infinitive and copula verbs. The various tenses, aspects and moods of Mbugwe are then presented. There are 25 affirmative forms and 15 negative forms. For the perfective verbs, there are three past tenses and a future tense. In the imperfective, there is only one past tense, as well as a present and one future tense. Other aspects are the progressive, the habitual and the persistive. Moods that are grammaticalized in Mbugwe are the subjunctive, the imperative and the counterfactual. Verb forms that are not readily categorized as tense, aspect or mood are the consecutive, the situative and the participial. They depend on other verbs for their time reference.

Keywords: Bantu, grammar, fieldwork, Tanzania, tone, TAM, morphology

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Abbreviations

The glosses follow the Leipzig glossing rules (Bickel, Comrie, and Haspelmath 2008) as far as possible. Others are added according to Africanist convention. In some chapters specialised notation is employed, and it will be explained for each chapter.

1	first person ¹	NONDOM	'not yet' marker
2	second person	NPST	non-past
3	third person	OM	object marker
ACP	agreement class prefix	PASS	passive
ADJ	adjective	PB	proto-bantu
APPL	applicative	PER	persistive
ASSOC	associative	PFV	perfective
CAUS	causative	PL	plural
CONN	connective	POSS	possessive
COP	copula	PRS	present
CFAC	counterfactual	PROG	progressive
CONS	consecutive	PROH	prohibitive
DEM	demonstrative	PROX	proximate
DIST	distant	PST	past
EXT	verbal extension	PTCP	participial
FPST	far past	RECP	reciprocal
FUT	future	REF	referential
FV	final vowel	REFL	reflexive
Н	high tone	SBJV	subjunctive
HAB	habitual	SG	singular
HEST	hesternal	SIT	situative
HOD	hodiernal	SM	subject marker
HTS	high tone spread	VENT	ventive
IMP	imperative		
INF	infinitive		
INTERJ	interjection		
IPFV	imperfective		
L	low tone		
LOC	locative		
MH	melodic H tone		
NEG	negative		
NEG1	pre-SM negative marker		
NEG2	post-SM negative marker		
NCP	noun class prefix		

 $^{^1}$ Note that in the glosses, the SMs are marked as follows: 1^{st} and 2^{nd} person singular and plural: 1SG.SM, 1PL.SM, 2SG.SM, 2PL.SM. The noun classes all represent 3^{rd} person, and are numbered according to the noun class. This means that 3^{rd} person singular is marked with 1SM if it is a human which belongs to class 1, and 2SM if it is a plural. Other subjects are also marked according to the noun class they belong to.

Other conventions:

- morpheme break (in gloss)

= clitic (in gloss)

↑ upstep

á surface high tone

a surface low tone (unmarked)

the gloss following the backslash is the grammatical function

marked by the MH tone²

Capital letters capital letters are used for names of TAM forms in Mbugwe

Sw./Eng. Swahili/English loan words

² Cf. Leipzig glossing rules 4D (Bickel, Comrie, and Haspelmath 2008).

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Vera Wilhelmsen, Ringsted, 08.04.2018

1 Introduction and background

This dissertation is a description of the Mbugwe language (ISO 639-3: mgz) with a focus on tonal and morphological features of the verb. Mbugwe is a Bantu language (classified as F34)³ mainly spoken in an area stretching from the south end of Lake Manyara to the town of Babati in the Manyara region in northern Tanzania. The language has approximately 37,000 speakers, according to *Atlasi ya lugha za Tanzania* (*Atlas of languages of Tanzania*) (LOT 2009).⁴ Mbugwe has no standard orthography, although there is an ongoing project run by SIL International, which is working towards that goal. The language is under-documented and is, like most minority languages in Tanzania, under heavy pressure from Swahili, the national language (Brenzinger 2007: 196). It is therefore a matter of urgency to describe and document the language.

In this introductory chapter, the purpose of the study is discussed (1.1), as well as the method and data used for the research (1.2). The theory used in the dissertation is then discussed (1.3). An overview of previous research of the Mbugwe language is also provided (1.4). Next follows an introduction to the classification and history of Bantu languages with a focus on the zone to which Mbugwe belongs (1.5). Then the Mbugwe people and language are presented, including a discussion on whether Mbugwe is an endangered language (1.6). Finally, the organisation of the dissertation is outlined (1.7).

1.1 Purpose of the study

The main goal of this dissertation is to describe the grammar of Mbugwe, with a focus on the tonal and morphological features of the verb. Mbugwe is a Bantu language, and Bantu languages can be characterized as being 'verby' (Nurse 2006: 683), as both subject and objects may be marked on the verb, and a single verb form can make up a full clause. Therefore, understanding the verbs in Mbugwe gives a good foundation for understanding the whole language. The reason for the strong focus on tone is that Mbugwe is a tonal

³ In this study all Bantu language names and their classification are based on Maho (2009), unless stated otherwise. Alternate names are given in brackets.

⁴ No author is listed for the Atlas, but Languages of Tanzania (LOT), a joint project between the University of Gothenburg and the University of Dar es Salaam, funded by SIDA/UDSM, published it.

language, and tone plays an important role in both the lexicon and in the grammar of verbs in Mbugwe. Tone distinguishes not only lexemes from each other, but also several TAM forms are marked by tone. Therefore, a study of the tones of the language is necessary in order to understand the verbs, and indeed the whole language.

The geographical location of Mbugwe is interesting, as the area where the language is spoken is surrounded by languages from other language families, such as the Cushitic languages Iraqw and Gorowa to the west and south respectively, and the Nilotic languages Maasai to the east and Datooga mostly to the south (Figure 1.1). Sandawe, which is suggested by Güldemann (2014: 35-36) to be a Khoe-Kwadi⁵ language, is also spoken in the area, as well as the language isolate Hadza. These languages, together with two other Cushitic languages, Alagwa and Burunge, spoken a bit further south, and the Bantu languages Nyaturu (F32), Rangi (F33), Nilamba (F31) and Kimbu (F24), are described as forming a *Sprachbund* or *language area* (Kiessling, Mous, and Nurse 2008) (see Figure 1.1 below). This makes Mbugwe interesting not only for Bantuists, but also for other linguists working on other African languages, typology and language contact.

In addition to the interesting location and the linguistic diversity in the area where Mbugwe is spoken, it was chosen as an object of study due to the lack of documentation of the language. There is one grammar sketch of the language available (Mous 2004). Mous emphasises the limits of this work, which was based on a very short period of fieldwork. However, it gives good insight into the complexity of the language. Other research on Mbugwe is scarce (see section 1.4).

⁵ Traditionally, Sandawe has been considered a Khoisan language, but the classification of Sandawe is still disputed. Khoisan is no longer considered a coherent language family (Güldemann 2014).

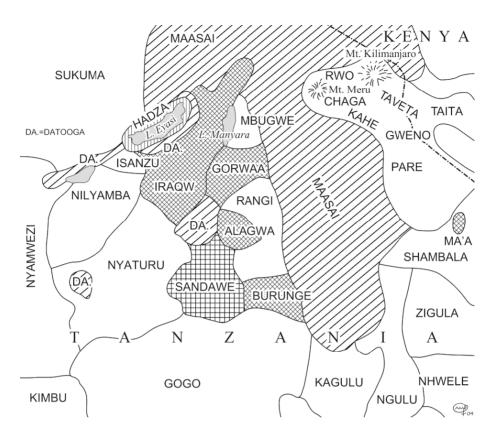


Figure 1.1 The languages of the Tanzanian Rift Valley, reprinted from Roland Kießling, Maarten Mous and Derek Nurse, The Tanzanian Rift Valley area, in Bernd Heine and Derek Nurse (eds), *A Linguistic Geography of Africa* (2007). Cambridge: Cambridge University Press. Copyright (2007): Cambridge University Press. Reprinted with permission.

1.2 Method and data

The fieldwork for this study took place in Magugu, in the southern end of the Mbugwe area in the period 2011-2012, with a total of about 5 months in the field (4 months in 2011 and one month in 2012). Magugu is a rapidly growing community of a few thousand people along the main road between Dodoma and Arusha. It is a multi-ethnic community with speakers of more than 20 languages living side by side. The language of every day communication is Swahili, except in home situations and in communication among community members, where the speakers use their first language. Quite a few children in Magugu have Swahili as their first language. The language of communication

during fieldwork was Swahili. During the first fieldtrip, I stayed with SIL linguists Viggo and Julia Larsen, in their house in Magugu. The Larsens were working on the Mbugwe language for SIL. In addition to staying on Magugu, I travelled to several Mbugwe villages, where I was able to meet more Mbugwe people and learn about their language and culture. During the last fieldtrip (summer 2012) I stayed with a Mbugwe family in Magugu. It was beneficial for me to stay with a local family and that way learn more about Mbugwe and Mbugwe culture. I became a part of the community to the extent that I was given a Mbugwe name.

A starting point for this study was a database (Fieldwork Language Explorer, FLEx) with a lexicon (around 1,300 entries, approximately 700 of which are marked for tone) and several texts, which were provided by the SIL linguists working on Mbugwe (Julia and Viggo Larsen). They also shared their linguistic analysis, including work on phonology, nominal paradigms and notes from their three orthography workshops. Oliver Stegen, a linguistics consultant from SIL, also contributed greatly to the analysis. When these materials are cited in this study (Larsen, Larsen, and Stegen 2011), the citations refer to the data Julia Larsen, Viggo Larsen and Oliver Stegen shared with me. Later, the new linguist in the project, Lizzie Poole, graciously shared some of her findings with me, especially her ongoing work on a Mbugwe language description (Poole 2017a) and the Mbugwe orthography statement (Poole 2017b).

The method for the study was largely analysing the recorded narratives, including personal life stories, and supplementing these with elicitation of specific data. Parts of the data provided by SIL were rechecked and I collected additional data during the two fieldtrips. During the first fieldtrip, the transcriptions and translations of three narratives and the lexical entries which occurred in them were checked with the language consultants. New data were also elicited, using questionnaires. One of the questionnaires was designed to collect information on Bantu languages, developed by the Languages of Tanzania project (LoT). From this questionnaire, sentences aimed to elicit various TAM forms were used. A few sentences from Dahl's TAM questionnaire (1985) were adapted to elicit specific constructions, such as conditional and contrafactive verb forms. A constructed narrative which was developed for eliciting TAM forms in Bantu languages in Mozambique and Botswana was also used. It was originally created by Tore Janson, and translated into Swahili (Petzell 2008: 195). For the elicitation of verbal tone a tone questionnaire was designed based on an earlier draft of Marlo (2013). During the first fieldtrip, 33 different TAM forms were elicited for two CVCVCVV verb stems, one H verb and one toneless verb. Various combinations of subject and object markers were tested for each verb and each TAM form, as well as the verb with a following adverb and the verb as a ves/no question. In total, 9 frames

were elicited for each TAM form.⁶ Many TAM forms of the language were not known at the time, so they were elicited simultaneously. Several new forms came up during elicitation, as tone was sometimes the only difference between certain TAM forms. 24 negative verb forms were also elicited during the first fieldtrip. About 1,000 verb forms in total were elicited on the first fieldtrip. Six traditional songs and 30 traditional riddles were also collected, and the numerals were checked for tone. The songs were first sung, and then the words were spoken, so that tone elicitation was possible.

During the second fieldtrip, the focus was solely on tone elicitation. All of the paradigms in chapter 4 on nominals were checked for tone. Verbal tone was the focus of this fieldtrip, and this time 30 verbs of various phonological shapes were recorded in the infinitive, and between 11 and 25 different verbs for a total of 19 TAM forms, which were thought to have grammatical tone or other interesting tonal features based on the data from the first field work. Examples of the variety in phonological shape are syllable count, long or short first vowel, consonant initial or vowel initial verb root, and whether the initial consonant was prenasalised or if a glide was present. As the work progressed, the number of different verbs was reduced, as the phonological shape was deemed not to make a difference for the tonal behaviour of the verb. A total of 12 frames were used for each verb, slightly adjusted from the last fieldtrip. In total, about 2,000 verb forms were elicited on the second fieldtrip.

During the analysis of the material after the fieldtrips, new lexical and tonal data were entered into the FLEx database. It now consists of 1,702 lexical entries including bound morphemes (1,466 stems), with a total of 905 entries marked for tone. The text material consists of 3 narratives which have been checked, 6 songs and 30 traditional riddles, as well as the various questionnaires mentioned above, and the constructed narrative. There are also two procedural texts in the database that have not been checked by the speakers, but they have been consulted during the analysis.

During the first fieldtrip I worked with two language consultants: Naomi Richards (born 1967) and Colman Chuchu (born 1949). They were both born to Mbugwe parents, and spoke Mbugwe growing up. They live in Magugu and use Swahili extensively in their everyday life, but they were both judged to be very competent Mbugwe speakers by the others in the Mbugwe community. They had both attended the SIL orthography workshops and had become more aware of their own language, which was an advantage for the efficiency of the fieldwork. They were recommended to me by the SIL linguists. It may or may not be an advantage to have language consultants who are linguistically aware, but in this case it made the sessions more efficient, as they understood the questions quickly and were able to work at a fast pace. Also used in the study was a life story originally told by Elisabeth Naamani Kesembe (born 1948),

⁶ A frame here refers to the combination of tones, prefixes, words following the verb and whether the verb is a statement or a question.

who is Naomi's mother, and a short text about having and raising children by Restuta Kebola, born in 1942. The language consultants signed release forms for their names and for all of the material to be used in research and published.

On the second fieldtrip I only worked with Naomi Richards, who was the main consultant on tones. All of the elicited tonal data for this study are based on her speech. For future research on Mbugwe tone, however, it is recommended to collect data from several speakers of different ages and backgrounds.

During the first fieldtrip (September-December 2011) three narratives were checked with Naomi Richards and Colman Chuchu. They were originally collected and transcribed by SIL and their language consultants. During the checking process, we went over the texts together and the speakers pronounced the words slowly in order to check the transcription, especially for tone. The narratives were then recorded again. The translation into Swahili was also checked and edited. There were two life stories, one by Elisabeth Kesembe (528 words after revisions) and one by Colman Chuchu (359 words after revisions) and one traditional story told by Colman Chuchu (758 words after revisions). Naomi Richards checked the story that was originally told by her mother. This is because Elisabeth Kesembe is in poor health and it was not possible for her to work with me for a longer period of time. Colman Chuchu checked his own two stories, and Naomi Richards was also consulted for parts of his narratives regarding tone and translation into Swahili.

The tension between the *ancient code* and modern versions of minority languages is discussed in Woodbury (2005). Here, he outlines several possible models for language documentation. The one followed in this study resembles what he calls "Documentation of the ancestral code" where the focus is on the grammar and lexicon of the language, with the goal of producing grammars and dictionaries of the language. As such, the focus is not on the actual modern usage, which might include more code switching and code mixing, but on the ancient code. This model is the traditional linguistic method for language fieldwork, and also might aid the community in revitalising the language or teaching it to new generations. See also Marten and Petzell (2016) on a discussion of editing in Kagulu, another Bantu language in Tanzania. In the article, three versions of a story are compared: the original recording, a transcribed version and an edited version. They argue that all three versions are "representations of authentic Kagulu" (Marten and Petzell 2016: 119).

During the process of transcribing and writing down the narrative by the SIL linguists and their language consultants, the language consultants had already edited the narratives slightly. This also took place during the rechecking with my language consultants. Due to the widespread use of Swahili in the community, code switching and code mixing are quite common for speakers of Mbugwe, and there are many Swahili loan words. Sometimes the language consultant would say that they had lapsed into Swahili in their narrative, but there is a Mbugwe word that could be used instead, and we would switch it

back to Mbugwe. However, quite a few Swahili loan words are preserved in cases where the language consultant did not comment or did not know an alternative Mbugwe word. Sometimes the structure of the clause was changed in order to make it more authentic. The result might be a slightly more conservative Mbugwe compared with how people usually speak, and it may be considered closer to the *ancient code*. The narratives are therefore to be viewed as edited texts, rather than spontaneous speech. The same would have to be said for the songs and riddles, which have been transferred orally from generation to generation. Tone was elicited for the songs by having the speaker say the words of the song without singing them. Copies of the narrative as they were originally told are preserved for possible future comparative research.

The data and the language consultants on which this dissertation is based have a strong connection to the SIL project, which some might see as a drawback. The collaboration with SIL was however beneficial to the project in many ways. The data they provided made it possible to not start from scratch in the analysis, and were valuable for the study. The SIL team provided a secure environment with access to clean water, food, electricity and an office, which made the fieldwork very efficient. Their connections in the Mbugwe community facilitated finding good language consultants quickly and enabled me to visit Mbugwe villages and attend Mbugwe church services, weddings and funerals. In my view, therefore, the benefits of the collaboration outweigh the drawbacks, to the extent that the project might not have been possible to complete without it, within the given time limits.

Recording sessions were conducted using a Zoom H2 Handy Recorder, a digital audio recorder, and a Røde M3 condenser external microphone. The microphone was mounted on a tripod in front of the speaker and the combination of the recorder and external microphone worked very well, as the resulting sound is clear, with little background noise (although some background noise was unavoidable in the setting). For instance, formants and pitch trace are clearly visible in PRAAT and Speech Analyser.

1.3 Theory

This dissertation aims to be a descriptive study. However, any description of a language requires some amount of theory, and no research is done in a vacuum (Dryer 2006: 208). The role of theory in language descriptions has been and is still widely debated among linguistic scholars (Haspelmath 2010, Dryer 2006, Rice 2006, Hyman 2001a, Gil 2001, Dixon 2010a, Bickel 2007, Nichols 2007). Dryer (2006) differentiates between descriptive theories on the one hand, which explain "what languages are like," and explanatory theories on the other, which explain "why languages are the way they are." In this study, descriptive theories are used where possible. For the general phonological and

morphological description of Mbugwe, what is called "basic linguistic theory" has been employed. By this, I do not mean to refer to the specific theory outlined by Dixon in his work entitled Basic Linguistic Theory (Dixon 2010a, b. 2012), but rather the accumulated linguistic knowledge of basic linguistic concepts such as phoneme, various parts of speech, grammatical categories and so on. Nichols (2007: 232) argues that she would remove the capital letters in Basic Linguistic Theory, and defines it as "the body of knowledge about grammar built up over the years by analysis and comparison of different languages." This body of knowledge is however construed as a theory in its own right, and Dryer (2006: 211) refers to it as "traditional grammar, minus its bad features (such as a tendency to describe all languages in terms of concepts motivated for European languages), plus necessary concepts absent from traditional grammars." The aim is to avoid forcing the data into a pre-made mold, but rather to allow the language to be described on its own terms, by employing linguistic knowledge (Gil 2001). Some elements of Autosegmental phonology (Goldsmith 1976) are assumed in chapter 3 on tone; however, the goal is to describe what the language looks like, rather than attempting to explain why it is the way it is.

1.4 Previous research on Mbugwe

Mbugwe is an underdescribed language, with Maarten Mous' (2004) Grammatical Sketch of Mbugwe as the only description available. It is of limited scope, but gives a good overview of the basic structure of the language, and it has been a useful reference for this study. Mous also wrote an article on the infinitive-auxiliary order in Mbugwe (Mous 2000), which is of interest typologically, as it shows that Mbugwe exhibits an order which is the opposite of what is expected for an SVO language (INF-AUX instead of AUX-INF). A newer dissertation focusing on the infinitive-auxiliary construction in Rangi (F33) also mentions Mbugwe briefly (Gibson 2012), and Mbugwe is one of six languages discussed in a forthcoming article by Gibson (Forthcoming-b). Earlier linguistic work on Mbugwe is not very extensive. Baumann (1894) has a list of numerals; Seidel (1898) has a few lexical items; Struck (1909) has a few notes on Mbugwe; and Dempwolff (1915-1916) wrote a short grammatical description of Mbugwe, with a focus on phonology. Newer works include some lexical items in Kesby (1986) and a word list in Masele (2001). Ethnographic and historical materials on Mbugwe containing a few lexical items are found in Gray's work (Gray 1955, 1963, 1954, Mbee and Gray 1965). Only Mous (2004) and Gibson (2012) have been consulted regarding linguistic analysis in this study.

1.5 Bantu languages: classification and history

In this section an overview of the classification and history of Bantu languages is provided, with special attention to zone F, to which Mbugwe belongs. Bantu is a large language family which belongs to the Niger-Congo language phylum. 540 Bantu languages are listed in the Ethnologue (Simons and Fennig 2018) but estimates vary from 300-600 depending on how scholars define a language versus a dialect (Nurse 2006: 679, Maho 2006: 198). The Bantu languages are spoken in most of sub-Saharan Africa, from western Cameroon in the west to the southern part of Somalia in the east. In this area, Bantu speakers outnumber speakers of other languages by large numbers, and only a few other language families are represented. Many Bantu languages are however endangered, due to small numbers and pressure from other languages. Therefore, documentation of these languages is an urgent need, as most of the Bantu languages do not have adequate descriptions (Nurse 2006: 679).

1.5.1 Classification of Bantu languages

The Bantu languages are sometimes referred to as Narrow Bantu, in order to distinguish them from the closely related Bantoid language group in Cameroon. In the literature, however, the simpler term Bantu is usually employed. The standard classification of Bantu languages is based on Guthrie (1967-1971, 1948), who divided the Bantu languages into 15 zones, named alphabetically from A to S (see map in Figure 1.2 below). The grouping is mostly taxonomical and geographical, based on 'shared features' and 'geographical contiguity' (Nurse 2006: 680). This means that Guthrie divided the groups based partly on shared linguistic features, which would suggest that the languages were closely related, and partly on geographical proximity. These 15 zones were then divided into smaller groups, divided in numbers of tens, for instance the A40 group. Each language within the group is given a number (for example A41 Barombi, A42 Abo etc.), but many groups have less than nine members. Dialects of the same language are given lower case letters, for instance A43a Basaa and A43b Bakoko. The smaller groups, called decades, are considered to be more reliable than the larger zones concerning genealogical affiliation (see Nurse and Philippson 2003: 169). A later, widely accepted addition to the classification is a zone J, which was added by a group from Tervuren (Bastin, Coupez, and Man 1999), based on lexicostatistics.

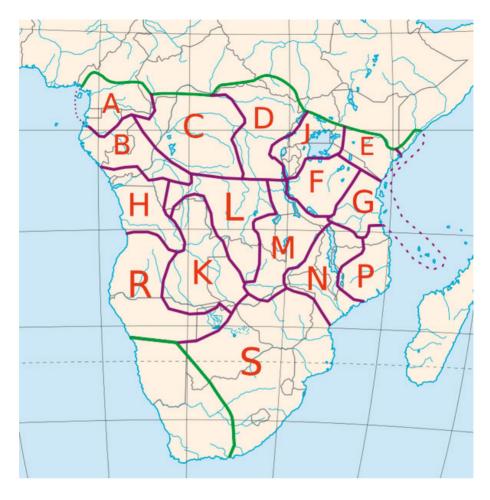


Figure 1.2. "Guthrie's Bantu zones (mostly geographically based; S is likely genealogical) (with Tervuren's zone J)", by I. Edricson. https://en.wikipedia.org/wiki/Bantu_languages (Accessed on 2018-04-12). Copyright: CC BY-SA 3.0.

A recent update to the classification is Maho (2009, 2003), which is now used as the standard. It is an expanded version of Guthrie's classification, with some 200 new languages and dialects added (see Maho 2003: 639-640 for an full explanation of the principles and codes for added languages). Maho (2003: 639) stresses that the classification is referential and not meant to be genetic. A common notion among Bantu scholars is that the referential classification of Guthrie is useful, but that the actual genealogical classification is still controversial. The latest version of Maho's update (Maho 2009) is used to refer to Bantu languages in this study. The first name listed by Maho is usually used, but sometimes alternative (commonly used) names are given in brackets. The next section outlines historical reasons for the difficulties of classification of Bantu languages.

1.5.2 History of Bantu languages

The Bantu expansion is quite well known in the literature, as it is one of the largest migrations in the history of mankind. Important works concerning the spread of Bantu are Vansina (1995, 1990) and Ehret (1998). According to Nurse (2006: 680), they agree on the big picture, even though they differ in many details. The migration is documented mostly by linguistic, but also archaeological and genetic evidence, although not all of it is conclusive, and the details are still being debated. The general consensus is that the homeland for the Bantu people was in an area on the border of what is today Nigeria and Cameroon, and that the migration started between 4,500 and 5,000 years ago. It was probably a series (or waves) of migrations stretching over several millennia, going eastwards and southwards (Vansina 1995). All of sub-Saharan Africa was populated over a period of a few millennia, and to this day the Bantu people dominate this area completely. De Filippo et al. (2012) conclude that linguistic and genetic data taken together confirm that there was indeed a migration of people, and that subsequent language contact between different groups has also played a large role in the development of the languages. The extensive language contact has further complicated the picture and made the classification of languages difficult.

Considering the history of Bantu languages, it is not an easy task to reconstruct a proto-language. It is however assumed that such a language has existed and Proto-Bantu (PB) has been reconstructed in quite some detail, especially by Meeussen (1967). It has been noted that despite the large number of Bantu languages and the geographical area they cover, there are striking structural similarities between Bantu languages, although there are also many local variations, and PB is more similar to Eastern Bantu, according to Schadeberg (2003a: 143). The difficulties for classification and reconstruction are also reflected in Bantu zone F, where Mbugwe is placed, which will be discussed in the next section.

1.5.3 Bantu zone F

Zone F consists of a group of 11 languages which are spoken in north-western Tanzania, according to Maho (2009) (unchanged since Guthrie (1967-1971). An overview of the classification is found below in Table 1.1.

Table 1.1. Languages of Zone F

Group	Languages
F10 group:	Tongwe (F11)
	Bende (F12)
F20 group:	Sukuma (F21)
	Nyamwezi (F22)
	Sumbwa (F23)
	Kimbu (F24)
	Bungu (F25)
F30 group:	Nilamba (Izanzu) (F31)
	Nyaturu (Rimi) (F32)
	Rangi (Langi) (F33)
	Mbugwe (F34)

Masele and Nurse (2003) consider the F zone to have five core languages: Sukuma (F21), Nyamwezi (F22), Kimbu (F24), Nilamba (F31) and Nyaturu (F32). According to Masele and Nurse (2003) and Nurse (1999: 10-11) the five languages are phonologically conservative and share some retentions such as lack of Bantu Spirantisation (Schadeberg 1994), no 7-to-5 vowel shift (Schadeberg 1994: 78), and no Dahl's law (Nurse 2006: 682). The five core languages also share some morphological and tonal innovations, such as an "innovation in the tense-aspect system" (Masele and Nurse 2003: 127), where originally aspectual suffixes are reinterpreted as different degrees of past. They also share a tone shifting or tone doubling rule, where a high (H) tone is either shifted one tone-bearing unit (TBU) to the right, or doubled, so that a H tone spreads one TBU to the right. They also share some lexical innovations, and in terms of shared vocabulary, they form a group, with a range around 70% compared with each other (Masele and Nurse 2003).

It is noteworthy that Masele and Nurse's (2003) definition of core F languages cuts the F30 group in half, with the first half (Nilamba [F31] and Nyaturu [F32]) being members of the core group, and the second half (Rangi [F33], Mbugwe [F34]) not being members. Geographically, it makes sense that Rangi and Mbugwe are different from the other members of this group, as they are geographically removed from them and surrounded by languages from other language families. The main difference between Rangi and Mbugwe and the rest of the group is lexicostatistical, although they do lie

⁷ Bantu Spirantisation is a process in which a plosive preceding a high vowel becomes a fricative or affricate. For instance, /p,b/ before a high vowel becomes /pf, bv, f, v/ or zero, and nonlabial consonants became /ts, dz, s, z/ before the front vowel (Nurse 2006: 681). A large majority of the languages that have undergone Bantu Spirantisation have also merged the two highest vowels, and now have only five vowels. In Schadeberg's investigation, no languages had reduced to five vowels without undergoing spirantisation (Schadeberg 1994: 78). Dahl's law is a process where a voiceless stop becomes voiced if the next obstruent is also voiceless, as in Kikuyu (E51) *geki*, from English 'cake' (Nurse 2006: 682). Actually, the name of the language itself is *Gikuyu* for the native speakers (Schadeberg 2003: 148).

within 60% in relation to most of the core languages (Masele and Nurse 2003: 121). A close connection between Rangi (F33) and Mbugwe (F34) is noted by many scholars, and they probably have a common origin (Maho 2003, Masele and Nurse 2003, Kiessling, Mous, and Nurse 2008, Nurse 1999). Rangi and Mbugwe have a 72% lexical similarity, according to Masele and Nurse (2003: 121). The languages are however not mutually intelligible, and are classified as different languages, and not dialects of the same language (Bergman et al. 2007: 17).

Stegen (2003) points to some features where Rangi is more similar to the rest of the F zone than Masele and Nurse (2003) acknowledge. Morphologically, Rangi displays a similar "innovation in the tense-aspect system" (Masele and Nurse 2003: 127) as the core F languages. It is a development where the original aspectual suffixes have been recycled to refer to different degrees of past time, whereas pre-stem TAM markers still mark tense, as well. As demonstrated in section 5.3.1, a similar development seems to have taken place in Mbugwe. The phenomenon of tone spread (see section 3.2.3.1) also places Mbugwe closer to the core F group than Masele and Nurse (2003) did based on the data available to them. It occurs in Rangi as well. Stegen (2003) also points to other morphological innovations which are shared by the F group, such as a merger of the reciprocal and reflexive marker (also in Sukuma [F21] and Nyamwezi [F22]) and the noun class markers 12/19 for diminutives. These are also shared by Mbugwe (see sections 5.1.2 and 4.2.1.7). Additionally, the imperative plural suffix, which is historically -1, and is also mentioned as being unique to the F zone by Nurse (2008: 39), also occurs in both Rangi and Mbugwe (see section 5.1.8).

The Glottolog (Hammarström et al. 2018) classifies the languages of zone F in a different way than Maho (2009) does. In their classification, Mbugwe-Rangi form a separate node under East Bantu, as do Nyaturu-Nilamba (F32 and F31). Other zone F languages are grouped under Northeast Savanna Bantu, a sub-group of East Bantu. This includes Sukuma-Nyamwezi (F20) and Bende-Tongwe (F10).8

This study suggests that Rangi and Mbugwe, as a node, are closer to the Northeast Savannah group, which includes the F10 and F20 languages, than previously assumed. They also appear to be closer to the other F30 languages Nilamba (F31) and Nyaturu (F32) than suggested by Masele and Nurse (2003). According to the research of Aunio et al. (Forthcoming), Mbugwe may also have more in common with languages from the JE40 group than previously assumed. Several of these languages share several features with the F zone, such as the 12/19 diminutive class pairing.

⁸ Bungu (F25) is argued to be related to M10 and M20 languages, and not the F zone languages (Roth 2011), and Bende-Tongwe (F10) to have more in common with the Great Lakes (JE) languages, as well as Sumbwa (F23) and Ha (JD66) (Roth 2013).

As regards the history of zone F, an historical account by Masele and Nurse (2003) suggests that the speakers of the core F languages arrived in the area in which they are now spoken a bit later than Rangi and Mbugwe. They refer to Ehret (1998), who holds that the predecessors of today's E50, E60, zone J and most of zone F languages had arrived in the area south and southwest of Lake Victoria around 500 B.C. Regarding Rangi and Mbugwe, Ehret places them in their approximate current location a bit earlier, around 300 A.D (Masele and Nurse 2003: 132). Kiessling (2008: 186-187) also suggests that Rangi-Mbugwe was an early Bantu arrival in Tanzania. Based on linguistic and oral historical data, Stegen (2003: 13) argues that Rangi originated from the same proto-language as the other Bantu F languages, but branched off early. Based on this study, this assumption is strengthened and is assumed to be the case for Mbugwe as well.

As mentioned above, the area where Rangi and Mbugwe are spoken, which is sometimes called the Tanzania Rift Valley (Kiessling, Mous, and Nurse 2008), is characterised by having very diverse groups of people living together for a long time, and the different languages and cultures have influenced each other and been shared among the different groups through both contact and intermarriage. Both Stegen (2003) and Masele & Nurse (2003) emphasise the complicated history of the area, and that the relationship between the languages of the area is not linear and would not fit into a tree-model, but that these languages have influenced each other over a long period of time.

The oral history of Mbugwe is also quite complex. Several different contradicting stories concerning the origins of Mbugwe are known, but most of them agree that the Mbugwe originated from the Rangi people. Mous (2044:1) relays the story that the Mbugwe are a result of Rangi people moving north in search of salt (referring to Baumann 1894: 139); another source says that the Rangi and Mbugwe split after a fight with the Gorowa (see Reche 1914). Dempwolff (1915-1916: 26) recounts a story of a girl appearing from an anthill, and then three groups of people were formed: the Rangi, the Mbugwe and the Nyaturu (F32). A curious story told by a Mbugwe elder (Larsen, Larsen, and Stegen 2011) says that Mbugwe is one of three groups (the present day Rangi, Mbugwe and Nilamba [F31]) who came from Iran, and escaped being taken as slaves in their original location. This story, which is well known and accepted by many Mbugwe people of today, is probably connected with the origin story of the Iragw, a Cushitic neighbouring group, where there is a tradition of tracing the story of their ancestors back to present day Iran in the middle east (Rekdal 1998). Rekdal (1998: 19) states that this is a newer narrative in the Iraqw culture, which has occurred within the last century, and is a remnant of the now refuted Hamitic hypothesis for the ancestry of African people groups. Another more recent story told by Thomas Kasi (Kasi 2003) and made available to Camilla Arlin (Arlin 2011: 63) details the clans of Mbugwe as stemming from several different ethnic groups, predominantly Rangi, but also from Maasai, Datooga, Iraqw, Isanzu (a variety of Nilamba,

F31) and Nyaturu (F32). Kasi (2003) mentions the fifteenth century as the starting point of the group which is now called Mbugwe, but the timeline is difficult to trace to the present. Gray (1955) states the eighteenth century as the century when the Mbugwe settled in the current location near Lake Manyara. The details of the history of the Mbugwe people remain largely unclear, as the description here shows.

1.6 The Mbugwe people and language

The Mbugwe people call the language *keemboowe*, and this is very similar to their name for a partridge, *mboowéy*. One traditional explanation for this name is the traditional markings the elderly Mbugwe have on their faces, which are similar to marks on the bird (Kasi 2003). They are mostly subsidence farmers, but many have a few domestic animals like cattle and goats, and they are known to supplement their diet by hunting (Årlin 2011: 71). A characteristic trait of the group is that they were known for their many and powerful witches, and the surrounding ethnic groups in the area were quite afraid of them (Gray 1963).

Most of the Mbugwe people live in villages situated in the area stretching from about the southern end of Lake Manyara to the town of Babati, not far from the main road from Arusha to Dodoma. They used to live a bit further north and west, around Lake Manyara, but were displaced from that area in 1966, partly due to the preparations to establish national parks in the area, but also in order to fight a cholera outbreak and the *tse tse* fly (Kasi 2003, Årlin 2011: 78-79). At the time of displacement, people from various villages would then settle together in new, larger villages. The displacement might be the reaon why no dialects have been observed for Mbugwe (Larsen, Larsen, and Stegen 2011).

As mentioned above, *Atlasi ya lugha za Tanzania* (Atlas of Languages of Tanzania) (LOT 2009) lists 37,000 people who identify themselves as Mbugwe. However, the number of Mbugwe speakers is not precisely known. One reason for the difficulty in assessing the number is that many Mbugwe people have moved away from the area, as people often move to the larger cities for education and work, and they usually do not return to the village. It is uncertain how many people have left the area and whether they still have a good command of the language, although some of them undoubtedly do. The Mbugwe area itself is quite mixed, with people from several other language groups living in most of the villages. Intermarriage is also common.

1.6.1 Is Mbugwe endangered?

A 2003 report from UNESCO identified 9 factors for "evaluating language vitality" (Brenzinger et al. 2003). They are: 1) intergenerational language

transmission; 2) absolute number of speakers; 3) proportion of speakers within the total population; 4) shifts in domains of language use; 5) response to new domains and media; 6) availability of materials for language education and literacy; 7) governmental and institutional language attitudes and policies, including official status and use; 8) community members' attitudes towards their own language and 9) type and quality of documentation (Brenzinger et al. 2003: 17). The report also offered scales in which to evaluate each factor and the degree of endangerment. It was stressed that one single factor is not enough to decide the fate of a language, but they work together and need to be viewed in relation to each other. In the scale the reports use, level 5 is the highest and 0 the lowest. In the following, I will evaluate the factors for Mbugwe, and place it on the scale, given the sociolinguistic situation, which will be described in more detail below. This study is based on my own impressions, based on my informal observations of the situation.

Intergenerational transmission (1) is still happening in Mbugwe, but to a lesser extent in larger towns than in the villages in the core area of Mbugwe. The Mbugwe people are all bilingual in Swahili, and most of them also speak or understand other languages from the area. In the Mbugwe villages, many children only speak Mbugwe until they start school, where Swahili is the language of instruction. Swahili is used in places like church and the market, in addition to school, even in the villages. In Magugu, however, many Mbugwe families have switched to Swahili and their children are not learning Mbugwe. On the scale, Mbugwe would be at the level of *Stable yet threatened (5-)*, as this description fits very well with the Mbugwe situation:

The language is spoken in most contexts by all generations with unbroken intergenerational transmission, yet multilingualism in the native language and one or more dominant language(s) has usurped certain important communication contexts. Note that multilingualism alone is not necessarily a threat to languages. (Brenzinger et al. 2003: 7).

Concerning factor (2), the absolute numbers of speakers, Mbugwe with its population of 37,000 (LOT 2009) is not very small on a global scale. But compared with large surrounding groups such as Irawq and Gorowa (about 500,000 speakers combined) and Rangi (F33) with more than 400,000 speakers (numbers from Lewis, Simons, and Fennig 2013), Mbugwe is relatively small.

Looking at factor (3), the proportion of speakers within the total population, which refers to "the number of speakers in relation to the total population of a group" (Brenzinger et al. 2003: 9), it is fair to assume that most people who identify as Mbugwe have a good command of the language. Exceptions might be children who do not live in the core area, and perhaps some of those who

⁹ Here "group" may refer to the ethnic, religious, regional, or national group with which the speaker community identifies (Brenzinger et al. 2003: 9).

moved away and never returned to the area. However, since not all members of the group speak the language, it can also be classified as *unsafe* (level 4) concerning this factor. If the "total population of a group" is to be understood as the total population of the whole region or even the whole country, Mbugwe would be at level 1: *very few people speak the language*.

The next factor is shifts in domains of language use (4), which pertains to "where, with whom, and the range of topics for which a language is used" (Brenzinger et al. 2003: 9). Here Mbugwe falls under the label *multilingual parity* (level 4), as the national language (Swahili) is used in most formal domains, such as school, church and politics, while Mbugwe is used in more informal settings and in the home. However, as observed in Magugu, some families are moving towards level 3, *dwindling domains*, where Swahili takes over more and more domains, and the children do not learn the mother tongue very well or at all.

Factor (5) is response to new domains and media. Mbugwe is not used in any media, like radio or newspaper. However, Mbugwe is used to a limited extent in text messaging and letter writing, as well as on social media like Facebook. There is at least one Facebook group where Mbugwe is used, written in an intuitive orthography based on Swahili. The use is however very limited. Mbugwe is on level 1 on this scale, *minimum*, as it is used in only a few new domains. However, when the orthography is established and printed materials become available in Mbugwe, this might change.

Another factor is availability of materials for language education and literacy (6). Presently Mbugwe is at level 2 on this scale, as an orthography is being tested and some written materials are available in the language. This will however not lift Mbugwe above level 2 on the scale, which is still quite low. Most likely Mbugwe will not be used in schools, as Swahili is the language of instruction there.

Factor number (7) is governmental and institutional language attitudes and policies, including official status and use. Here, Mbugwe is at level 2, *active assimilation*, as the language receives no official recognition or protection.

Regarding community members' attitudes towards their own language (8), it has not been measured, but a subjective assessment would put Mbugwe on level 3: *Many members support language maintenance; others are indifferent or may even support language loss*. This is to say that although many Mbugwe speakers value the language and their cultural background and identity, not all recognise the value of preserving the language, as they see Swahili as the language of education and the way forward in society. The Mbugwe people have a strong sense of identity and history is important to them, but in the face of everyday challenges, Swahili is more important than Mbugwe.

The last factor has to do with type and quality of documentation (9). Until the publication of this study, there is only one grammar sketch that exists on Mbugwe. The documentation is *fragmentary* at best (level 2), but even after

this publication, there is no full grammar or dictionary available on the language.

Below is a table of the factors, with the level for Mbugwe in the right-hand column. The average value of the 8 scales combined (excluding the absolute number in (2) is 2.75.

Table 1.2. UNESCO's evaluative factors for language vitality

Factor		Level for Mbugwe
1.	Intergenerational Language Transmission	5-
2.	Absolute Number of Speakers	37,000
3.	Proportion of Speakers within the Total Population	4
4.	Shifts in Domains of Language Use	3
5.	Response to New Domains and Media	1
6.	Availability of Materials for Language Education and Literacy	2
7.	Governmental and Institutional Language	
	Attitudes and Policies, Including Official	2
	Status and Use	
8.	Community Members' Attitudes towards Their Own Language	3
9.	Type and Quality of Documentation	2

Based on the values in the table above, Mbugwe is clearly threatened, although it is not in immediate danger of extinction. A language shift towards Swahili is probable, perhaps within a generation, although this academic description of the language along with a standardised alphabet and written material in the language may delay this process, and the language may be revitalised.

1.7 Organisation of dissertation

The organisation of this dissertation is as follows: After chapter 1, Introduction and background, follows a short sketch of the phonology of Mbugwe in chapter 2. The vowel and consonant phonemes, phonological processes and syllable structure are described, including the status of consonant-glide and nasal-consonant clusters, and the syllable shapes which are allowed in Mbugwe.

Chapter 3 provides an analysis and description of the tonal system of Mbugwe, with an introduction to tonal studies and tone in Bantu languages for the benefit of readers who are not familiar with linguistic tone. Both lexical and grammatical tone will be presented, as well as tonal processes such as spreading, downdrift and upstep. Upstep is rare in Bantu languages and is discussed in extra detail. Like many Bantu languages, certain TAM forms have tonal melodies which mark that particular form, and these melodic H tones are presented as well.

The morphology of the nominals and adnominals of Mbugwe are presented in chapter 4, with a focus on the noun classes and nominal concord. The nominal system is quite typical for Bantu languages, with just a few unsusual features, such as the class 12/19 pairing for the diminutive and no augmentative.

In chapter 5 an analysis of the Mbugwe verbal system is provided. This chapter includes morphological and semantic features of the various TAM forms. Mbugwe has a rich verbal system, with numerous TAM forms, both affirmative and negative. There are simple forms and periphrastic forms, and infinitives and copulas are also presented. Together with chapter 3 on tone, chapter 5 comprises the main part of the dissertation.

Chapter 6 is a summary, with suggestions for future research topics.

2 Phonology

In this chapter a brief description of the Mbugwe phonology is provided. The phonemic inventory is presented in sections 2.1 (consonants) and 2.2 (vowels). In the section on consonants, the issues of glides and consonant-glide sequences and nasal-consonant (NC) sequences are discussed in sections 2.1.1 and 2.1.2. In section 2.2.1, some phonological processes concerning vowels are discussed. They include vowel harmony (2.2.1.1), vowel assimilation and vowel deletion (2.2.1.2), and glide formation and compensatory lengthening (2.2.1.3). An overview of the syllable structure is provided in section 2.3. A summary of the chapter is provided in 2.4.

This chapter does not aim to give a full analysis of the phonology of Mbugwe, but to provide background information which is essential for the rest of the study. Tone is treated separately in chapter 3.

In this chapter, phonemes are given in IPA, and referred to in the text using square brackets []. In examples, and in the rest of the study, however, the graphic representations given in <> in the tables of phonemes are employed. The choice of graphic representation is based partly on Bantuist convention, and partly on the proposed orthography for the language (Poole 2017b). Underlying and surface forms in the adapted orthography are given for lexical items only in cases where the two differ, and the underlying form is marked with //, using the graphemes chosen for this study.

2.1 Consonants

In this work, the nasal-consonant sequences, which both Mous (2004) and Poole (2017b) treat as phonemes in Mbugwe, are analysed as nasal-consonant clusters, see section 2.1.2.¹⁰ In Table 2.1, which is adapted from Mous (2004), the 21 consonant phonemes of Mbugwe are listed.

¹⁰ In the Mbugwe orthography statement (Poole 2017b), the orthography suggests marking an [n] followed by the glide [j] differently from the palatal nasal [n]. The proposed orthography is to mark what she refers to as the palatalized alveolar nasal <n'y>, versus the palatal nasal <ny>. In this work, a distinction has not been made between the two, due to the fact that the former only occurs as a result of morphemes coming together, so that there is a morpheme break between the nasal and the glide.

Table 2.1. The consonant phonemes of Mbugwe

	Labial	Alveolar	Palatal	Velar	Glottal
Voiceless stop/ affricate	p	t	t∫ <ch></ch>	k	
Voiced stop/ affricate	b	d	d3 <j></j>	g	
Nasal Stop	m	n	n <ny></ny>	$\eta < ng' >$	
Voiceless fricative	f	S	∫ <sh></sh>		h
Voiced fricative	v		-		
Liquid trill		r			
Lateral liquid		1			
Glide	W		j <y></y>		

The distribution of [p] is limited in Mbugwe, and it is rarely found without a preceding nasal. It does not occur in any verb roots in the database. This could be due to *P-Lenition*, where PB *p > h, then $h > \emptyset$, a process which has occurred widely in northeastern Bantu, including Mbugwe, according to Masele and Nurse (2003: 124, 127). As a result, [h] is also rare in Mbugwe, and not found in any verb roots. In some cases, PB *p has become [f] in Mbugwe, see below.

The voiceless stops and affricate may be aspirated, but aspiration is not distinctive and is not marked in this study. According to Poole (2017a) aspiration of the voiceless stops is in free variation with non-aspiration, and the speakers are not consistent regarding this feature.

The affricates [tʃ] and [dʒ] in Mbugwe are realised as stops by some older speakers, i.e. [c] and [t] respectively, and Mous (2004) presents these phonemes as stops. Poole (2017a) demonstrates that the stop is affricated both word-initially and stem-medially for her language consultant. The tendency to pronounce these segments as affricates instead of stops may be driven by influence from Swahili, which has the same affricates.

In Table 2.2 below the consonant phonemes appearing in noun and verb stems initially are exemplified. 11 Noteworthy gaps in the data are verbs starting with [p] and [h], and nouns beginning with [ŋ].

¹¹ In this work, the term 'stem' is used to refer to a lexical root plus derivational suffixes. For verbs, the term 'stem' also includes the inflectional suffix, see chapter 5.

Table 2.2. Consonant phonemes stem-initially in verbs and nouns

Phoneme	Consonant phonem Stem-initially	Underlying (when differen	orm Tran	slation
p	-	`	-	
	Ø-pííwa		ʻilleg	gal alcohol' (cl. 5)
t	tíf-a		'fill,	plug'
	Ø-túri		'neig	hbourhood' (cl. 5)
t∫	cháál-a		'rema	ain'
	Ø-chéréréé		'daw	n' (cl. 9/10)
k	keenda	/kend-a/	'prot	
	Ø-káámbe	/kámbe/		g' (cl. 5)
b	baul-a		'pick	up, grab'
	Ø-bása			i' (cl. 5)
d	duul-a			pe out, wipe clean'
	Ø-diilá			' (cl. 9/10)
d3	jish-a			fix, build'
	i-jóva		'sun,	God' (cl. 5)
g	gúúnguta	/gúngut-a/	'pour	r'
	Ø-gaang'á	/gang'á/	'fore	head, skull' (cl. 5)
m	mút-a		'beat	,
	Ø-mawe		'motl	her'(cl. 1a)
n	nool-a		'get f	fat'
	Ø-nofokэ		'brui	sed area' (cl. 5)
n	nyaal-a		'lose	strength'
	Ø-nyiná		'his/l	ner mother' (cl. 1a)
ŋ	ng'əəl-a		'scra	tch, scrape'
	-		-	
f	faat-a		'step	on'
	Ø-faalá		'bear	n' (cl. 5)
S	sees-a		'mov	e over'
	Ø-seré		'hoe'	(cl. 5)
ſ	shʻʻót-a		'win'	,
	Ø-shéérə		'broo	om' (cl. 5)
h	-		-	
	Ø-hɔʻɔʻndi	/hɔ́ndi/	'ram'	'(cl. 5)
v	véék-a		'prot	ect, bury, put'
	Ø-vála		'colo	our' (cl. 5)
r	rer-a		'cry'	
	\emptyset -roombo	/rombo/	ʻsibli	ing' (cl. 5)
1	lóm-a		'bite'	
	Ø-loové		'spid	er, falcon' (cl. 5)
W	wéér-a		'tell'	
	Ø-walɔ			tive'(class 1a)
j	yáál-a			birth'
-	Ø-yoló			(cl. 5)

All of the consonant phonemes occur stem-medially or finally in noun and verb stems, except for [p], [h] and [j], which do not occur stem-medially in verbs, and [tf], which does not occur stem-medially in nouns (Table 2.3):

Table 2.3. Consonant phonemes stem medially in verbs and nouns

Pho- neme	Stem-medially/finally	Underlying form (when different)	Translation
p	-		-
•	Ø-poopá		'wall' (cl. 5)
t	faat-a		'step on'
	ny-óóta		'thirst' (cl. 9/10)
t∫	such-a		'shake'
	-		-
k	fák-a		'smear/spread'
	ke-maka		'thing' (cl. 7)
b	tubuj-a		'swim'
	Ø-siribí		'clay water pot' (cl. 5)
d	díd-a		'pinch'
	ke-dɛdu		'chin' (cl. 7)
d3	íjol-a		'be full'
-	m-bijao		'game' (cl. 9/10)
g	shéég-a		'mow'
	muyéégá	/mo-yéégá/	'lizard' (cl. 3)
m	duum-a	. 0	'increase'
	chemí	/ke-emí/	'rabbit' (cl. 7)
n	fón-a		'make mistake'
	Ø-ginó		'lower back of head' (cl. 5)
n	súny-a		'take off (clothes), offer'
	Ø-tónyə		'salt' (cl. 5)
ŋ	feeng'a		'run (away)'
3	Ø-gang'á		'forehead, skull'(cl. 5)
f	ref-a		'pay'
	m-péfɔ		'medicine' (cl. 9/10)
S	kás-a		'shave'
	Ø-bása		'twin' (cl. 5)
ſ	fiísh-a		'burn, roast'
J	moondeeshi	/mo-ndeeshi/	'gun' (cl. 3)
h	-		-
	Ø-hoho		'bell' (cl. 9/10)
v	lúv-a		'cook'
	ke-kúva		'chest' (cl. 7)
r	wéér-a		'tell'
	i-rerá		'road' (cl. 5)
1	fál-a		'carve, make'
	Ø-kála		'charcoal' (cl. 5)
w	tííw-a		'slip'
	Ø-mawe		'mother' (cl. 1)
j	-		- · · · · · · · · · · · · · · · · · · ·
3	Ø-kaya		'town' (cl. 9/10)

For comparison, the reconstructed PB consonants are found in Table 2.4. There are several versions of this table, and this version is based on Hyman (2003: 42), who cites Meeussen (1967).

Table 2.4. Consonants in Proto Bantu

	Bilabial	Alveolar	(Alveo)-pa	alatal Velar
Voiceless stop	*p	*t	*c	*k
Voiced stop	*b	*d	*j ¹²	*g
Nasal	*m	*n	*n	

Compared to PB, Mbugwe has added fricatives ([f], [v], [s], [f] and [h]), liquids ([r] and [l]), and the glides [w] and [j] to the phoneme inventory, in addition to the velar nasal [ŋ]. The glides are discussed in section 2.1.1. According to Nurse (2006: 681) it is common for modern Bantu languages to have a much greater consonant inventory than PB, as many phonemes have undergone palatalisation, gliding, voicing, and Bantu Spirantisation. Mbugwe has not undergone Bantu spirantisation, but Masele (2001: 106-126) shows that Mbugwe has developed fricatives from stops in all contexts, not just preceding a high vowel.

There are a few phonological processes that involve consonants: there is palatalisation of the prefix ke- (cl. 7) becomes ch- before a vowel-initial stem, as in $ch\acute{a}k\acute{b}ra$ from /ke- $\acute{a}kora$ / 'food (cl. 7)'. The sequence [vu] simplifies to [w], as in $najiw\acute{a}$ from / N-a-j-iv-u-a/ '1SG.SM-PST-10OM-steal-PASS-FV\FPST, they were stolen from me'. In connection with the perfective suffix $-iy\varepsilon$ and the extensions applicative er- and causative i- in verbs, they are several allomorphs, as shown by Mous (2004: 10-11). For instance, [l] sometimes drops out, as in $jil\acute{a}\acute{a}y\varepsilon$ from /ji- \mathcal{O} - $l\acute{a}\acute{a}la$ - $iy\varepsilon$ / '10SM-HOD-sleep-PFV\HOD, they had slept'. There are changes in the consonants also when they follow a nasal, this is discussed in section 2.1.2.

2.1.1 Glides and consonant-glide sequences

It is often not straight forward to determine whether a glide is an underlying phoneme or a glided vowel (Levi 2008). In Mbugwe, most surface glides are derived from vowels. When there is a morpheme boundary, the vocalic origin of the vowel is straightforward, as it occurs in other versions of the same morpheme (see section 2.2.1.3). However, within lexical stems, it is not always clear what the origin of the glide is. But some patterns emerge, and they are described below.

In this study, glides which occur alone in the onset or coda of a syllable and are not derived from affixes are assumed to be underlying phonemes (for more on this, see section 2.3). One example is roots with root-initial glides such as $y\acute{a}dl$ -a 'give birth', n- $y\acute{a}afu$ 'fishing nets' (cl. 9/10), m- $y\acute{e}e\acute{g}a$ 'lizard' (class 9/10), $w\acute{e}e\'{e}r$ -a 'tell', weery-a 'immerse', wa-a 'fall'and $wol\acute{o}o\'{r}iw\acute{a}$ '(kind of) flower'. For nouns in class 5, there are quite a few examples of nouns starting with [j]. Some of them probably have the noun class prefix i-, such as $yu\acute{u}$

¹² The *j was most likely a stop [1] or affricate, not an approximant.

/i-uú/ 'ash' (PB *bú), whereas others, such as Ø-yoló 'sky' (PB *gùdù) (cl. 5) have a short vowel after the initial and is therefore considered to start with [j] underlyingly. Quite a few noun roots have a glide intervocalically. Examples are píiwa 'illegally brewed alcohol', hayíiyi 'owl', nsíyé 'fish' (cl. 9/10). They are considered to have an underlying glide, not derived from a vowel. In some cases, it has been possible to trace the glide back to a PB consonant, such as in téya 'trap' from PB *tég 'set trap', tooya 'giraffe' (cl. 9/10) from PB *tùìgà and mo-oyé 'arrow' (cl. 3) from PB *gúí. Examples of roots with a final [j] which are analysed as having a final glide are ke-kəəkwéy 'insect' (cl. 7), mo-kwéy 'inlaw' (cl. 1), m-búléy 'rainy season' (cl. 9/10), and -ley 'tall'.

Glides which follow a consonant are often derived historically from close vowels in PB, especially in CVV sequences, as in the case of Mbugwe *monwe* 'finger' cl. 3, where the PB reconstruction is *nóé, and m-pyá 'fever' cl. 9/10, PB *pí 'be burnt; be hot; be cooked; be ripe; ferment (drink); be red' (Bastin et al. 2002). As shown in section 2.2.1.3, there is compensatory lengthening of the following vowel when a vowel is glided. All examples in the data with a CG sequence which are not word final are followed by a long vowel, which indicates that they are a result of gliding. Examples are given in Table 2.5. The words with a CG sequence will be written with a vowel in their underlying forms in the examples in this work.

¹³ All PB lexical reconstructions are taken from Bastin et al. 2002.

¹⁴ For each sequence, only a few stems are found. [gw] and [pw] are only found in Swahili loans, and not listed here. A possible PB origin is indicated when known, and a second example is given of a CG sequence which is non-final and is therefore followed by a long vowel. It is not always clear what the underlying form is, and the underlying forms given here are therefore stipulations.

Table 2.5. CG combinations

CG	Surface	PB	Underlying	Translation
ру	m-pyá	*pià 'fire' (DER) from *pi 'be burnt; be hot; be cooked; be ripe; ferment (drink); be red'	/m-piá/	'fever' (cl. 9)
	mo-mpyɔ́ɔ́mi		/mo-mpiómí/	'stranger, alien' (from <i>m-pyɔʻɔ́mi</i> , 'far-away land' (class 9/10). 15
ty	tyá	*tíàn 'forge'	/t í- a/	'win', 'escape', 'harvest/pick'
	tyéérə		/tiérɔ/	'place, location' (cl. 5)
tw	mo-twé twáál-a	*tớè	/túe/ /túal-a/	'head' (cl. 3) 'bring'
kw	kwáát-a	*kóàt 'seize, grab'	/kúat-a/	'hold', 'rape'
by	n-taambyə		/n-tambiɔ/	'step' (cl. 9)
bw	bwaak-a		/buak-a/	'make noise'
mw	тwεεк-а		/тиєєк-а/	'burst'
nw	moo-nwe	*nờè	/mo-nue/	'finger' (cl. 3)
fy	n-sáfyá		/n-sáfiá/	'piece of trash' (cl. 9)
fw	fwéér-er-a	*póòm 'breathe, rest'	/fúɛr-ɛr-a/	'breathe, rest'
sw	n-swaalá		/n-sualá/	'rug' (cl. 9)
chw	-áchwé		/áchué/	POSS:3SG
lw	lwáál-a	*dớàd 'be ill'	/lúal-a/	'be ill'
ry	vi-ryɔ́		/vi-riɔ́/	'millet' (cl. 8)
rw	mo-rerwá		/mo-rɛruá/	'house help' (cl. 1)
				(from the verb rer-a 'raise a child' in the passive (u-))

2.1.2 Nasal-consonant sequences

Mbugwe has NC sequences involving all the plosives, both voiced and voiceless, as well as [tʃ], [dʒ] and [s]. The only other consonant sequence in the language is the CG sequence discussed in section 2.1.1. The nasal in a NC sequence is always assimilated for place with the other consonant, and the result is for instance [mb], [nd], [ndʒ] and [ng]. Utterance initially the nasal is often assimilated to the voicing of the stop, as well, so that the nasal becomes

¹⁵ Perhaps from Mbugwe's name for the neighbouring Gorowa people, fy55mi.

voiceless in [mp], [nt], [nt], [nk] and [ns]. In some cases the voiceless nasal element that is formed before voiceless consonants in an utterance initial position drops out completely. This is demonstrated by Poole (2017a) with spectrograms of language consultants pronouncing words with an initial NC sequence. In cases where the NC sequence was unvoiced, both the younger and older speaker sometimes dropped the initial nasal, and sometimes pronounced it. They would both claim that the nasal was there, however, even when it was not detectable in the spectrogram.

Among the language consultants for the present study, it seems to vary whether or not the speaker was aware of the voiceless nasal. When we went over the transcriptions, the older speaker would point out where I had failed to note a voiceless nasal, but the younger speaker would not. For example, the first person SM *N*- forms an NC sequence with the following consonant, for instance in the negative *nsijéréma* /*n-si-jé-rem-a*/ 'I am not cultivating' (see section 5.1.3). The initial *n*- '1SG.SM' is however devoiced, and has disappeared in some speakers' variety of Mbugwe, resulting in *sijéréma* 'I am not cultivating'. This could also be a transfer from Swahili, where the first person singular negative is *si*- only. However, a voiceless nasal is barely audible, and a young person might not be aware that it is there. The devoicing of the nasal is not contrastive and will not be marked in this study, but for one speaker the nasal drops out completely, and it is reflected in surface forms.

According to Hyman (2003: 50), an NC sequence did not occur initially in verb or noun roots in PB, and this is quite typical for Bantu languages. There are only a few examples of the NC sequence occurring stem-initially in nouns in Mbugwe, and none in verbs. One example of a noun is *moonto /mo-nto/* 'person' (cl. 1), which is a well-known exception in Bantu, and is a reflex of PB *jintù 'entity, thing, person', with a loss of the initial syllable (Hyman 2003: 50). Other examples are *njaiko* 'bull' and *ngulata* 'billy-goat', both class 5. They may however have originally been in class 9/10, with a nasal prefix, as many names of animals are, but have been reinterpreted in class 5 in Mbugwe (see also Hyman 2003: 50). The cluster [ns] occurs stem-initially in two nouns found so far: *moonsé /mo-nsé/* 'noon' (cl. 3) and *keensweere /ke-nsuere/* 'kinky hair' (cl. 7). The few occurrances of NC stem-initially may therefore be said to be exeptions, often with an historical nasal prefix. All of

 $^{^{16}}$ Mous (2004: 3) gave the phoneme [n ʃ] as well for Mbugwe, but it has not been found in this study. According to Poole (2017a), the sequence [n ʃ] only occurs across a morpheme break.

¹⁷ This kind of assimilation is not uncommon in Bantu languages. In some Bantu languages in East Africa, the combination nasal + voiceless stop has resulted in a deletion of the stop, as in Hehe (G62), Pangwa (G64) and Kingwa (G65) (Hyman 2003), and in some cases the nasal is voiceless, but the stop is deleted, as in Kagulu (G12), Pokomo (E27), Bondei (G24), Kalanga (S16), Nyarwanda (JD61) and Nyamwezi (F22) (Maddieson 2003, Petzell 2008). The assimilation pattern seen in Mbugwe goes the other way, and the nasal becomes voiceless and tends to be dropped. The Mbugwe pattern is more similar to Swahili (G62), where the nasal is also dropped before a voiceless stop, such as [t], and the [t] is aspirated.

the NC sequences occur stem medially in Mbugwe, and word initially across a morpheme boundary (Table 2.6). ¹⁸

Table 2.6. Distribution of the NC clusters in verb and noun stems

	Stem initially	Stem medially	Word initially (across morpheme boundary)
mp	-	X	X
nt	X	X	X
nt∫	-	X	X
ŋk	-	X	X
mb	-	X	X
nd	-	X	X
րժշ	X	X	X
ŋg	X	X	X
ns	X	X	X

A NC sequence is often formed word initially across a morpheme boundary, for instance in nouns from class 9/10, and with the first singular subject marker, which in most cases have an unspecified nasal prefix (Hyman 2003: 49-50), a nasal and another consonant become adjacent across a morpheme boundary, the nasal assimilates to the place of articulation and the voicing of the consonant. However, some combinations are not allowed. That is, when a nasal precedes a [p] or [f] across a morpheme boundary, it is realised as [mp], and if a nasal precedes a [b] or [v] across a morpheme boundary, it is realised as [mb]. If a nasal precedes an [1] or [r] across a morpheme boundary, the result is [nd], as in the noun *ndoseka/n-loseka/* 'language' (cl. 9/10) from the verb losak-a 'speak'. Vowels are lengthened before NC sequences in Mbugwe. It happens both morpheme-internally, and across morpheme boundaries. Such 'conditioned lengthening' is quite common in Bantu languages (Hyman 2003: 48). Poole (2017a) demonstrates that the resulting long vowel is shorter than an underlying long vowel, and longer than a short vowel. They do however group together with long vowels and are assumed to have two moras, based on tone patterns and speaker intuition.

¹⁸ In addition to these nouns and verbs, [ns] occurs stem initially in the prepositions *nsey* 'inside', and *nseensey* /nsensey/ 'down, under', and *nsereri* 'east'. In addition, [ng] occurs in the adverb *ngare* 'like, as' and [ndʒ] is found initially in the preposition *njey* 'outside'. Even though they are not found stem initially in nouns and verbs, [nd] occurs in the interrogative *ndee* 'when', and [np] occurs in the adjective *mpéfɔ* 'cold', but this arguably comes from the noun *mpéfɔ* /*N-péfɔ*/ 'medicine' with a nasal cl. 9/10 prefix.

Table 2.7. Examples of conditioned lengthening

Surface form	Underlying form	Translation
kíinda	/kínd-a/	'rape'
kekśómbε	/ke-kɔ́mbε/	'mug' (cl. 7)
báraanda	/báranda/	'horn' (cl.5)
gúúnguta	/gúngut-a/	'pour'
keenda	/kend-a/	'protect'
káámbe	/kámbe/	'dreg' (cl. 5)
moonto	/mo-nto/	'person' (cl. 1)
moonsé	/mo-nsé/	'noon' (cl. 3)
muunjó	/N-unjó/	'jackal' (cl. 9)

Within roots, it is not always possible to determine whether a vowel is underlyingly long or not before an NC cluster. Therefore these vowels are assumed to be short underlyingly, and marked long in the surface realisation only.

There is an on-going debate, not just in Bantu research but in linguistics at large, about whether the nasal-consonant sequence is to be analysed as a single unit (NC) or a consonant cluster (N+C), see for instance Riehl (2008), Stanton (2017) for a general discussion and Morrison (2009), (Downing 2005) for a Bantu-specific discussion. Some researchers, for instance Schadeberg (2003a: 146), treat the NC sequence as prenasalised phonemes in PB, while others, like Hyman (2003: 42) do not.

Riehl (2008) sets up a few criteria in order to determine whether a NC sequence is a single unit or a consonant cluster. Her criteria are not phonetic, even though she does find phonetic differences in her data. The first criterium is whether the sequences are separable, that is, if the nasal and the other consonant occur in isolation, as well. If they are not separable, they are considered to be unary. If they are separable, however, you move on to the question of syllabification. If they do not belong to the same syllable, there is no reason to consider them one unit. Even if they do belong to the same syllable, however, extra evidence is needed in order to assert that they are really one unit, and not a cluster. The extra evidence may be that the sequence is treated as a unit in the phonology, as opposed to true consonant clusters. An illustration of her criteria are found in Figure 2.1

¹⁹ Incidentally, Riehl (2008) holds that only a voiced NC sequence may be prenasalized, which disqualifies more than half of the NC sequences in Mbugwe. She also assumes the the input and output status of the NC sequence is the same.

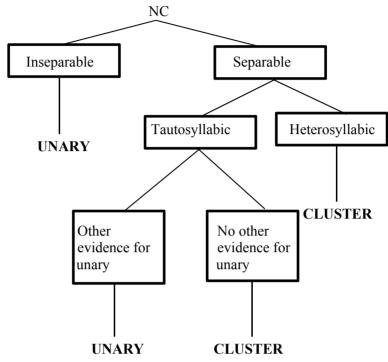


Figure 2.1 Determining the status of NC sequences. From Riehl, Anastasia Kay. 2008. *The phonology and phonetics of nasal obstruent sequences*. PhD Dissertation, Cornell University. Copyright (2008) by Anastasia Riehl. Reprinted with permission.

For the first criterium, the N and C are separable in Mbugwe. All nasals and the consonants they occur with also occur separately. In terms of separability there is no reason to consider them a unit.

The question of syllabification is not an easy one to solve. Seeing that there are no other consonant sequences in Mbugwe, except for the CG sequence, there is nothing to compare to regarding what sequences are allowed when it comes to sonority. The lengthening of the preceding vowel is not a good indicator, either, according to both Riehl (2008) and Downing (2005).

Riehl (2008) argues that even if the NC sequence comprises the onset of a syllable, it does not necessarily follow that it is a prenasalised segment. It could still be a cluster. She holds that the question of syllabification is separate from the question of whether it is a unit or a cluster. If there are no other sequences in the languages to compare with, as in Mbugwe, the distribution of the sequence is considered. In Mbugwe there is only one other consonant sequence on the surface, that is CG, and it is in the onset position. The distribution of the NC sequence itself is shown above. Stem initially, it is rare, but word initially, across morpheme boundaries, there are no restrictions to the

occurence of the NC sequence. Riehl (2008) does not consider morpheme boundaries in her analysis of NC sequences, as she does not consider that they make a difference to the analysis. She holds that the morpheme break can not say anything definite about the nature of the segments, because there could be prefixes that consist of nasality alone, and the resulting NC sequence may or may not be unary and may also occur on the same syllable or be syllabic, depending on the nature of the following segement. If morpheme breaks are disregared, it may be said that the NC sequence occurs freely both word initially and word medially in Mbugwe and there is no reason not to consider the NC sequence to occur in the onset of a syllable.

Having established that the NC sequence in Mbugwe is separable but still (possibly) occurs on the same syallable, it has still not been concluded whether the sequence is a unit or a cluster. Further evidence that the NC is a unit could come from the sonority principle. Since the NC in an onset counters the sonority principle, it is often assumed that it is an unit. However, sonority violations do occur in many languages, and can not be the only reason to assume that the sequence is unary. As there is no other evidence for the NC sequence being treated as a unit in Mbugwe, there is no reason to assume that the NC sequence in Mbugwe is unit. The fact that the voicless nasal in word initial position drops out for some speakers may be used as an argument for the cluster analysis. If it was indeed one unit, it would be less likely that a part of the unit dropped out.

Downing (2005) argues that there is evidence for that the nasal occurs in the coda of a syllable stem internally in some Bantu languages, and emphasises the fact that the NC sequence almost never occurs stem initially. She therefore concludes that the NC cluster may be analysed as being heterosyllabic, the structure being CVN.CV word medially. For the NC clusters which occur word initially, where there usually is a morpheme break, she suggests that the syllable structure is N.CV. While this is a possible alternative analysis for Mbugwe, it is not preferred here. Word initial syllabic nasals do occur in Mbugwe, but they are audibly distinct from an initial NC cluster. For instance, there is the word m.mberó/mu-mberó/'skin' (cl. 3), where the mu- prefix is shortened to [m]. Here, the first [m] is syllabic, but the second [m] is shorter and is perceived to occur on the onset of the second syllable. There is also the syllabic nasal in m.so/mu-so/'crowd' (cl. 3), where the mu- prefix is shortened to [m]. This is considered a different kind of sequence, as the nasal is syllabic and the following consonant is not homorganic with the nasal.

For the reasons stated above, the NC sequence is analysed as an NC cluster which forms the onset of a syllable in Mbugwe.

2.2 Vowels

Mbugwe has 14 vowel phonemes. See Table 2.8. The phonemes were established by Larsen, Larsen, and Stegen (2011) and confirmed in this study.

Table 2.8. The vowel phonemes of Mbugwe

	Fro	nt	Central		Back	
Close	i	i: <ii></ii>			u	u: <uu></uu>
Close-Mid	e	e: <ee></ee>			o	0: <00>
Open-Mid	ε	e: <ee></ee>			э	o: <oo></oo>
Open			a	a: <aa></aa>		

The distinctive length difference is illustrated by the following minimal or near minimal pairs which have been found in this study (Table 2.9). As can be seen in the table, there is also a tonal difference, which is why they are called near minimal pairs.

Table 2.9. Minimal and near minimal pairs for vowel length

Vowel pair	Short v	owel	Long vo	wel
0-0:	n-kó	'firewood' (cl. 9/10)	n-kóo	'wild fig'(cl. 9/10)
0-0:	nól-a	'shave'	nool-a	'get fat'
a-a:	sáká	'bush' (cl. 5)	saak-a	'need'
a-a:	sál-a	'cut up'	sáál-a	'pray'
ε-ε:	néne	'big'	neéne	'I, me'
ε -ε:	ker-a	'cut'	kéér-a	'be late'
o- o:	d om ε	'disobedience' (cl. 9/10)	dəəmé	'assault' (cl. 9/10)

The distinction between the close, close-mid and open-mid vowels is also illustrated by minimal and near minimal pairs, see Table 2.10.

Table 2.10. Minimal and near minimal pairs for vowel quality

Pho- nemes	Surface form	Under- lying form	Translation	Surface form	Underly- ing form	Translation
i/e	kíínda	/kínd-a/	'rape'	keenda	/kend-a/	'protect'
u/o	kúkú		'hump' (cl. 5)	n-kókó		'chicken' (cl. 9/10)
e/ε	serera		'sickness' (cl. 5)	serer-a		'help, stop '
e/ε	kera		'every'	ker-a		'cut'
0/3	tóól-a		'stop at, set on'	<i>tóól-</i> a		'get, find'
0/3	n-kókó		'chicken' (cl. 9/10)	kókó		'shell, rind' (cl. 5)

All the vowel phonemes occur as V1 (first vowel of the lexical stem) of both nouns and verbs (see Table 2.11).

Table 2.11. Vowel phonemes as V1

Phoneme	Surface form	Underlying form	Translation
i	ifer-a		'blow'
1	ri-ísə		'eye' (cl. 5)
•,	kiim-a		'ascend'
i:	siiri		'debt' (cl. 5)
	ém-a		'stand up'
e	chemí	/ke-emí/	'rabbit' (cl. 7)
. •	véék-a		'protect'
e:	muundeeshi	/mo-ndeeshi/	'gun' (cl. 3)
	έr-a		'shine'
ε	weéro	/o-έro/	'light, world' (cl. 14)
	téér-a		'hear'
ε:	shéérə		'broom' (cl. 5)
	alol-a		'hatch'
a	arisé		'sheep' (cl. 5)
	saak-a		'need'
a:	baavá		'wing' (cl. 5)
	ulul-a		'glean'
u	uri		'pubic hair' (cl. 5)
	suuf-a		'swell'
u:	duúdu		'jigger, larva' (cl. 5)
	och-a		'take'
0	ko-olo		'foot, leg' (cl. 15)
	lóós-a		'say'
0.	boová		'stalk (of grain)' (cl. 5)
	ələl-a		'straighten, align'
3	mɔɔ́tɔ	/mo-śtə/	'fire' (cl. 3)
	tớớl-a		'get'
3 .	dəəmü		'grasshopper' (cl. 5)

In V2 position, i.e. the second vowel of the lexical stem, the distribution of vowels is more restricted (see Table 2.12).

Table 2.12. Vowel phonemes as V2

Phoneme	Surface form	Underlying form	Translation
i	sinin-a		'sway, swing'
	chemí	/ke-emí/	'rabbit' (cl. 7)
i:	-		
	-		
e	anek-a		'put out to dry'
	chare	/ke-are/	'width' (cl. 7)
e:	-		
	-		
ε	erek-a		'avoid'
	kekśśmbe	/ke-k5mbε/	'mug' (cl. 7)
ε:	-		
	-		
a	tómam-a		'do'
	báraanda	/báranda/	'horn' (cl.5)
a:	kalaam-a		'thank'
	ma-sumaa		'urine' (cl. 6)
u	gúúnguta	/gúngut-a/	'pour'
	churu	/ke-uru/	'nest ' (cl. 7)
uː	-		
	-		41 . 1 2
0	alol-a	/1 1 /	'hatch'
	chalo	/ke-alo/	'field' (cl. 7)
0.	-		
	wolóóríwá		'(kind of) flower' (cl. 5)
э	ólɔv-a		'get wet'
	refɔ		'payment (cl. 5)
ɔ :	-		
	-		

Long vowels do not occur as V2 in verbs, except for [a:], which is found in one verb stem. Not all long vowels do occur as V2 in nouns, either, although it cannot be ruled out that this is due to a gap in the data. In addition, only [e:] and [a:] occurs in any affix (in verbal TAM prefixes, see section 5.1.4). The restrictions on the distributions of the long vowels are marked in Table 2.13.

Table 2.13. Restrictions in the distribution of long vowels

	i:	e:	ε:	a:	ə :	0:	u:	
V1	X	X	X	X	X	X	X	
V2 nouns			X	X	X			
V2 verbs				X				
Affixes		X		X				

The short vowels $[\varepsilon]$, $[\mathfrak{d}]$ and $[\mathfrak{u}]$ do not occur in any nominal or verbal affixes, except for as a result of vowel harmony in the verbal extensions, assimilation or as an allomorph or mo- (class 3) (see section 2.2.1.2 and 2.1.2). This kind

of restriction is quite common in Bantu languages (Hyman 2003: 45). An overview is given in Table 2.14.

Table 2.14. Restrictions in the distribution of short vowels

	i	e	ε	a	ð	0	u
V1	X	X	X	X	X	X	X
V2	X	X	X	X	X	X	X
Affixes	X	X		X		X	

In previous research on Mbugwe, there is great variation with regard to the description of the vowels. For instance, Dempwolff (1915-1916) proposed 9 vowels for Mbugwe, although his transcription was phonetic and not phonemic. Masele (2001) proposed that Mbugwe is a 5 vowel language, whereas Mous (2004) proposed a 7 vowel system. Mous' analysis was *i-t-e-a-o-v-u*, but he noted that "there is considerable variation between *i-t-e* and *u-v-o*". (Mous 2004: 4). Variation has also been observed in this study, and older speakers tend to have more closed vowels (Larsen, Larsen, and Stegen 2011). However, the data in this study have demonstrated that Mbugwe has the seven vowel qualities which are proposed here. Length has not been found to be distinctive in any of the previous studies, but is demonstrated here to be phonemic.

For comparison, Proto-Bantu (PB) is reconstructed as having 7 vowels. According to Hyman (2003: 42-43) PB had both long and short phonemic vowels; however, long vowels were rare. The vowels of PB are given below in a phonetic transcription from Schadeberg (2003a), but it is of course impossible to know the exact phonetic quality of the reconstructed vowels.

Table 2.15. Vowels in Proto Bantu

	Front	Central	Back
Close	*i		*u
Near close	*1		*U
Open-Mid	* ε		* 3
Open		*a	

Many eastern Bantu languages have retained the vowel system of PB, according to Hyman (2003: 43); of these, some have the 7 vowel qualities described in Table 2.15, while others, like Mbugwe, have i, e, ε , u, o, o, a. Quite a few languages have shifted to 5 vowels, and some to 9 (Hyman 2003). Modern Bantu languages with 5 vowels usually have the phonemes i, ε , a, o, u (Schadeberg 1994: 74). The 5 vowel system is quite widespread, except for the northern parts of the Bantu area (Schadeberg 1994: 76). Bantu languages vary as to whether the length contrast is preserved or not (Hyman 2003: 43).

2.2.1 Phonological processes concerning vowels

There are a few phonological processes which become apparent especially across morpheme boundaries in Mbugwe, but some of them, such as glide formation, also take place within morphemes (see also section 2.1.1). Vowel assimilation, deletion and glide formation have been observed to also take place across word boundaries, but this is not analysed in this study. The processes are vowel harmony (2.2.1.1), vowel concatenation (2.2.1.2), and glide formation and compensatory lengthening (2.2.1.3). Conditioned lengthening before NC clusters is illustrated in section 2.1.2.

2.2.1.1 Vowel harmony

There is limited vowel height harmony in Mbugwe, and it is only observed in verbal extensions, such as with the applicative -er, which has the allophone $-\epsilon r$ after [ϵ] only (see Table 2.16). It also occurs with the unproductive verbal extensions such as the stative $-ek/-\epsilon k$, the separative transitive -ol/-ol, and separate intransitive ok-/ok- (data on this from Poole 2017b) (see section 5.1.7). This vowel height harmony is common in Bantu languages, and often [τ] and [τ] lower to [τ] and [τ] lower to [τ] and [τ] respectively after an [τ] or [τ] in the root (Hyman 2003: 46-47).

Table 2.16.	Vowel	harmony
-------------	-------	---------

Surface form	Underlying form	Translation	
fwéérera íingera	/fúer-er-a/ /íng-er-a/	'rest, breathe' 'enter'	
uneka	/unek-a/	'be broken'	
reendeka	/rɛndek-a/	'be faint'	
sofola	/sofol-a/	'loosen'	
kənəla	/kənol-a/	'peel'	
inoka	/inok-a/	'to get up'	
nəfəka	/nɔfok-a/	'bruise'	

Poole (2017a) suggests that there is also vowel harmony in noun and verb roots, particularly that [o]/[o], and [e]/[e], respectively, do not co-occur in the same root. This has not been found in this study, and is a subject for further research.

2.2.1.2 Vowel concatenation

In Bantu languages, there are often restrictions for vowel sequences (Hyman 2003: 46). Mbugwe allows for two vowels to occur next to each other in lexemes. Examples of this are *buɔ* 'face' (cl. 5), *ául-a* 'crawl', and *saola* 'choose'. Some of these are probably a result of consonant loss, such as *n-jɔu* 'elephant'

(cl. 9/10), a reflex of PB *j og u. One of the adjacent vowels may be long, as in mbu o o 'riddle' and kaa - i 'homestead'. In these cases, the two vowels sound like they are pronounced in separate syllables, so it is bu o o 'face' and kaa o o o 'home'. There is no glottal stop between the vowels.

When vowels become adjacent across morpheme boundaries in Mbugwe, they often assimilate to each other with regard to height, or the first one is glided, as seen in section 2.2.1.3. If two back vowels or two front vowels occur next to each other, they assimilate to the height of the second vowel (usually the stem-initial vowel). Examples of vowel height assimilation are /mo-5tɔ/'fire' (cl. 3) which surfaces as mɔɔ́tɔ and uúvála from /o-úval-a/ 'to carry'. If the vowels are identical, a long vowel will result, as in va-ána 'children' (cl. 2). When three vowels are concatenated, it results in two syllables. An example is wéé.¹é.mbé.re.ra from /o-é-émber-er-a/ 'to teach/sing for each other', where the first vowel is glided. There is a glottal stop between the two first syllables in this case. If a long vowel occurs before a short vowel across a morpheme boundary, it is in some cases shortened and/or assimilated. An example is vákɔ́ɔ́na from /vá-kéé-ɔ́na/ 'if they look' (Situative).

The exact rules for vowel assimilation and deletion are a topic for further research. These are some preliminary observations based on my data. A more detailed description of the conditions determining these phonological processes is outside the scope of the present study.

2.2.1.3 Glide formation and compensatory lengthening

The front vowels [i] and [e] are glided to [j] before another vowel, and the back vowels [o] and [u] are glided to [w].²¹ In Table 2.17 below some examples of glide formation are given.

Table 2.1'	7	Evamnl	es of	olid	e forn	nation
Table 2.1	Ι.	глании	es oi	2 11 α	с юн	iauon

Vowel combination	Surface form	Underlying form	Translation
o + i	mwiirama	/mo-irama/	'darkness' (cl. 3)
o + e	weeva	/o-ev-a/	'to forget'
$o + \varepsilon$	weéro	/o-έro/	'light, world' (cl. 14)
$i + \varepsilon$	ryeené	/ri-ɛné/	'self' (of class 5)
i + a	yaángi	/i-ángi/	'(kind of) bird of prey' (cl. 5)
i + o	yoonda	/i-onda/	'field' (cl. 5)
e + a	myaaré	/me-aré/	'wide' (cl. 4)
$e + \varepsilon$	туєєпє́	/me-ɛné/	'self' cl. 4)
$e + \mathfrak{d}$	yɔɔ́nsε	/e-ɔʻɔnsɛ/	'all' (cl. 4)

²⁰ The pronunciation of this word may also be analysed to be njw, the only example of a possible final [w] in the data.

²¹ In the case of o + i and a + i there is free variation between pronunciation as /way/ or /wii/,at least in some words, and younger speakers tends to choose /wii/ according to Poole (2017).

If an [i] is added at the end of a lexeme, such as the locative suffix -i, this final [i] is usually glided. An exception to the pattern is *kedɛdwi /ke-dɛdu-i/* 'at the chin' (cl. 7), where the [u] glides to a [w]. Notice that [o] is not glided in this case: *kotóy* 'at the ear'. In nouns ending in [a] it changes to [ε], as in *yoondɛy* 'at the field', from *i-onda* 'field'.

Table 2.18. Glide formation lexeme finally

Vowel combinaton	Surface form	Underlying form	Translation
a + i	yoondey	/i-onda-i/	'at the field' (cl. 5)
o + i	kotóy	/ko-tó-i/	'at the ear' (cl. 15)
e + i	túúmbéy	/túmbé-i/	'at the chair' (cl. 5)
$\varepsilon + i$	motwéy	/mo-twé-i/	'at the head' (cl. 3)
$\mathfrak{d} + \mathfrak{i}$	mokźnźy	/mo-kɔ́nɔ-i/	'at the arm, hand' (cl . 3)
u + i	kedɛdwi	/ke-dɛdu-i/	'at the chin' (cl. 7)

When gliding occurs, it causes the vowel following the glide to lengthen, as seen above. This process is called "compensatory lengthening," as the vowel which is glided loses its moraic status (Hyman 2003: 48). The lengthened vowel then preserves the length of the original two vowels. According to Poole (2017b), the length of the lengthened vowel is a bit shorter than an underlying vowel, but it does have two moras and therefore counts as a long vowel (also see chapter 3 on tone). Compensatory lengthening is not observed word-finally in Mbugwe. This is seen in for instance /ke-dedu-i/ kededwi 'at the chin' (cl. 7), where the final [i] is not lengthened. This is also demonstrated in section 2.1.1, which concerns glide formation inside lexemes.

Glides which are derived from vowels and glides which are underlying phonemes behave similarly in Mbugwe. Neither of them can carry tone (see chapter 3). Both underlying and derived glides will be written <w> and <y> in surface forms in this study. In underlying forms, the original vowel will be given in cases of glide formation.

2.3 Syllable structure

A syllable may be defined as "the unit which organizes segmental melodies in terms of sonority (...)" (Blevins and Goldsmith 1994: 76). Each syllable has a peak in sonority, and usually a vowel is the nucleus of the syllable. The initial part of the syllable is called an onset. The nucleus and the segment after the nucleus (called coda) are often grouped together as a rhyme (Blevins and Goldsmith 1994: 81-82).

In Bantu languages, the canonical syllable shape is CV. For PB, the following have been reconstructed: CV, CVV, V and N (Hyman 2003: 43). In

Mbugwe as well, these are the most common syllable shapes, and CV is the most common by far.

In Mbugwe, the nucleus of the syllable is usually a vowel, long or short. Syllabic nasals are rare in Mbugwe. There are a few examples of 'double n' where the first nasal is syllabic, as in *n-no* 'toe' cl. 9/10 (Larsen et al. 2011). A syllabic nasal also occurs when the noun class prefix (NCP) of some class 1 and 3 nouns where the noun root begins with [s] or [mb] is shortened to only the nasal, according to Poole (2017b). Examples are *m.so* /mu-so/ 'crowd' (cl. 3) and *m.mberó* /mu-mberó/ 'skin' (cl. 3). However, the nasal does not seem to be a tone-bearing unit in Mbugwe. The onset may be empty or consist of a consonant or a glide and a consonant in Mbugwe. In a few lexemes, a NCG sequence occurs. Examples are *n-taambyɔ* 'step' (cl. 9) and *n-swaalá* 'rag' (cl. 9/10).

The syllabicity of the NC cluster is discussed in section 2.1.2. In this study, the NC cluster is analysed as forming the onset in a syllable, in a similar fashion to CG. Even though this is the preferred analysis in this study, the question of syllable division is considered a theoretical issue, and further research is warranted in this area for Mbugwe.

The approximant [i] also occurs in the coda in Mbugwe. This is unusual for Bantu languages, which usually do not allow for closed syllables. The final [j] occurs in roots, such as ke-kookwéy 'insect' (cl. 7), mamey 'uncle' (cl. 1a), mboowéy 'partridge' (cl. 9/10), mo-kwey 'in-law' (cl. 1), koley 'far away', kaley 'long time ago' weroy 'brown' and -ley 'tall'. It also occurs as a result of the locative suffix -i as seen in section 2.2.1.3, and the imperative plural suffix is -ey (probably historically derived from a suffix -1, see section 5.1.8). The most common combination, as seen in the roots, is [ej] but other combinations have also been found: [oi], [ɛi], [oi] and [ai]. This suggests that the final element is a consonant and not a vowel. However, the [j] does not co-occur with a long vowel and there are some restrictions as to which vowels it occurs after, perhaps due to the rules for vowel assimilation and glide formation. The [j] coda does not only appear in non-final position, for instance in the variation of the NCP mo- (class 1 and 3) and a root starting with [i], such as mwayréto /moiréto/ 'girl', and the TAM prefix/auxiliary éyse-/áyse- (progressive 2) and the 1PL possessive pronoun -εντό.

An alternative analysis is that there are diphthongs in Mbugwe. In that case, they would be [oi], [ei], [ɛi], [ɔi] and [ai]. Here, the interpretation that it is indeed a [j] coda is based on the rules for glide formation in the language. It is important to note that there is no evidence that the final element carries tone, as one would expect from a vowel. Further, diphthongs are rare in Bantu languages and would be marked typologically, as well.

Attested syllable shapes in Mbugwe are V, N, VV, CV, GV, CVV, GVV, NCV, CVG, GVG, CGVG, NCVV, NCGV and NCGVV (see Table 2.19).²²

Table 2.19. Syllable shapes

Syllable shape	Example	Translation
V	ya. ɔ	'tooth' (cl. 5)
N	n .no	'toe' (cl. 9)
VV	άά .nέ	1SG.POSS (cl. 6)
CV	ke .ti.nó	'giant' (cl. 7)
GV	yo.ló	'sky' (cl. 5)
VG	έy .tό	1PL.POSS (cl. 6).
CVV	baa. vá	'wing' (cl. 5)
GVV	wéé. ra	'tell'
CGV	vi. ry 5	'millet' (cl. 8)
NCV	fee. nde	'wave' (cl. 5)
CVG	mo. ley	'tall' (cl. 1)
GVG	m.bəə .wéy	'partridge' (cl. 9)
CGVG	mo. twéy	'at the head' (cl. 3)
NCVV	mbəś	'buffalo' (cl. 9)
NCGV	ntaa .mbyɔ	'step' (cl. 9)
NCGVV	nswaa.lá	'rag' (cl. 9/10)

2.4 Summary

The phonology of Mbugwe is fairly standard for a Bantu language, with 7 vowels, as well as distinctive vowel length. NC sequences are viewed as clusters in this study, so the consonant phonemic inventory amounts to 21. The phonological processes described here are also well known in Bantu languages: vowel harmony, glide formation, vowel deletion and assimilation, and compensatory lengthening. The syllable structure of Mbugwe deviates from the common Bantu structure in the sense that the glide [j] occurs in the coda. Tone is of course part of the phonology of Mbugwe, and will be treated in chapter 3.

²² When a vowel occurs utterance-initially it is initiated by a glottal stop, which is not indicated in the table, nor in the transcriptions in this study, as it is not contrastive.

3 Tone

This chapter contains a basic analysis of tone in Mbugwe. Section 3.1 provides a cross-linguistic definition and a description of tone, as well as an account of tone and its distribution and function in Bantu languages. Important concepts such as phonemic tone and tone-bearing unit (TBU) are defined, as well as lexical and grammatical tone. The main part of the chapter is section 3.2, which consists of an analysis of tone in Mbugwe, and how it is realised in various contexts. Section 3.2.1 presents the phonemic tone and TBU in Mbugwe, and section 3.2.2 presents lexical tone in nouns (3.2.2.1) and verbs (3.2.2.2). Section 3.2.3 provides an overview of tonal processes in Mbugwe. Important tonal processes are H tone spread (3.2.3.1), final lowering (3.2.3.2), downdrift (3.2.3.4) and upstep (3.2.3.4). Section 3.2.4 is an overview of grammatical tone of verbs in Mbugwe, which covers grammatical tone in subject markers (SM) (3.2.4.1) and Melodic H tones (3.2.4.2). Section 3.3 provides a summary of the chapter.

The aim of this chapter is not to give a comprehensive analysis of tone in Mbugwe, but rather to give an introduction to the most important features of tone in the language, which will in turn make further studies of the language possible. Downing (2011: 2731) notes that the main objective of Bantu tone analysis is "accounting for the distribution of surface High tones." This is also the aim of this analysis of Mbugwe tone. This is achieved by describing the underlying tones and the processes that they undergo in order to arrive at the surface realisation. The analysis is descriptive rather than theoretical, and efforts are made to make it as theory-neutral as possible, even though some theoretical assumptions are specified in section 3.2.3.

Surface tone realisation is different from the underlying tone structure in Mbugwe. Therefore, underlying high (H) tones will be marked with an underlined vowel in this chapter ($\underline{\acute{a}}$ -), whereas an acute accent without underlining marks a surface H tone ($\underline{\acute{a}}$ -). Vowels with a melodic H tone are marked with double underlining ($\underline{\acute{a}}$ -). Upstep is marked with an arrow ($^{\uparrow}$) before the upstepped syllable.

3.1 Tone and tonal languages

This section will present some common characteristics of tone in general and in Bantu languages, in order to give a background for the present study. Only features which are either typical for tonal languages, Bantu languages and/or present in Mbugwe will be presented here.

Hyman (2006: 229) suggests the following definition of a tonal language: "A language with tone is one in which an indication of pitch enters into the lexical realisation of at least some morphemes." This definition is quite wide, and includes restricted tone systems, often referred to as 'pitch-accent'. In a prototypical tone language, tone is linked to most or all morphemes and distinguishes lexemes (Hyman 2006: 229-230). Hyman (2011: 50) estimates that approximately 40-50% of the world's languages are tonal. Tonal languages are common in Africa, East and South-East Asia and parts of the Pacific and the Americas (Yip 2002: 17). In some of these areas, for instance sub-Saharan Africa and Meso-America, tonal languages are dominant, according to Yip (2002: 17).

Tonal languages have two to six contrasting levels of tones, although more than four levels is rare and some scholars question their existence (Yip 2002: 27). Most tonal languages have two or three contrasting levels. In addition to the level tones, many languages have contour tones, which go from one level to another, creating rises and falls. Contour tones are however often analysed as sequences of level tones (see Yip 2002: 47-52 for a discussion).

Almost all Bantu languages are tonal, and although there is great variation in the surface realisations, there is a lot of similarity in the underlying structure (Kisseberth and Odden 2003: 59). Most Bantu languages are analysed as having two underlying tones, high (H) and low (L), with the L tone for many languages described as the default tone, and sometimes referred to as toneless (Ø) (Hyman 2001b). Some languages are analysed as having both H, L and Ø tones (Paster and Kim 2011). The default L surface tone is "assigned at some point in the phonology to any vowel which is toneless" (Odden 1995b: 465). The reason for this is among other things that the H tone is usually active in the tonal processes that take place in many Bantu languages, the location of the H tone is restricted, and a H tone is often inserted in certain TAM forms (Hyman 2001b). When contour tones (rises and falls) occur in Bantu languages, they are usually interpreted as sequences of level tones, and they most often occur only in long vowels (Odden 1995b: 444-445). This is also the case in Mbugwe (section 3.2.1).

An important concept in tonal research is establishing the Tone-Bearing Unit (TBU) in each language, as it is not always straight-forward (Yip 2002: 73-74). The TBU is "the element in the segmental structure to which tone associates" (Gussenhoven 2004: 29). It may be a syllable or a mora (Yip 2002: 73-74, Gussenhoven 2004: 29-30). The syllable was defined in chapter 2 as "the unit which organizes segmental melodies in terms of sonority (...)"

(Blevins and Goldsmith 1994: 76). The syllable in Mbugwe has a long or short vowel as a nucleus, or rarely a nasal. A mora is defined by Ladefoged (1982: 226) as such: "A mora is a unit of timing. Each mora takes about the same length of time to say." A short vowel is considered to have one mora, and a long vowel two moras. A consonant in the coda may be moraic in some languages, but not in others (Hyman 1985). If a language has both long and short vowels, and a syllable with a short vowel has only one tone associated with it, but a syllable with a long vowel has two tones, then the TBU is the mora (Yip 2002: 73). Conversely, if both syllables with a long and a short vowel carry only one tone, the syllable is usually assumed to be the TBU. In Mbugwe, only vowels are moraic, and a long vowel may have a rising or falling tone, that is, the long vowel has two moras. Nasals and glides cannot carry tone in Mbugwe.

Establishing the TBU is an important issue within Bantu research, and in Mbugwe as well, as it sets the premise for further analysis and studies of tone. In languages without long vowels there is no way to distinguish between the syllable and the mora as a TBU, if all syllables are open in Bantu languages, as many authors assume (Downing 2011: 2731). In languages with vowel length distinctions, the evidence can be conflicting. Odden (1995b: 448-452) argues that the data for Bantu languages point towards the mora as the TBU, but the question is still under debate, and "an analytical problem for each Bantu language" (Downing 2011: 2731). In Mbugwe, the mora is the TBU (see section 3.2.1).

Like vowels and consonants, tone can be employed to create lexical minimal pairs (Gussenhoven 2004: 26). This is often called *lexical tone*, and lexical tone is linked to a lexeme or an overt morpheme. In Bantu studies, the lexical tones of nouns and verbs have been given the most attention. The canonical noun root is disyllabic (CVCV), and typically has one of the four possible tone melodies: HH, HØ, ØØ, and ØH (Kisseberth and Odden 2003: 60). Noun class markers are usually toneless. The four-way distinction for tone in CVCV noun roots and the toneless noun class markers are reconstructed to Proto-Bantu (Greenberg 1948). Tonal contrast on verb roots in Bantu languages, where present, is usually restricted to the first TBU of the verb root, irrespective of how many TBUs or syllables the stem has (Kisseberth and Odden 2003: 61). The first TBU of the verb root is either H or toneless, and the rest of the root is usually toneless. This two-way distinction is also reconstructed in PB, and is a typical pattern for Bantu infinitives (Greenberg 1948).

In addition to lexemes having lexical tone in Bantu languages, grammatical morphemes often also have underlying tone. The tone of the grammatical morphemes is specified underlyingly, in the same way that lexemes have tones linked with them. For example, in many cases there is an underlying contrast between H and toneless subject markers (SM) and it is quite common thatfirst and second person (both singular and plural) are toneless, whereas the third

person SMs are H. This is also reconstructed for PB. For personal object markers (OM), the singulars are often toneless, and the plurals are H, as reconstructed for PB (Greenberg 1948). Verbal extensions such as the passive, applicative and causative are usually underlyingly toneless (Odden and Bickmore 2014: 3). Verbal prefixes which mark tense, aspect and mood are usually underlyingly H or toneless.

A distinction is often made between *lexical tone* and *grammatical tone*. While lexical tone is linked to the lexeme or overt segment, grammatical tone is not underlyingly connected to a specific overt segment, but it is assigned to a TBU of the word stem in order to encode a grammatical category. This is also called a "tonal morpheme" (Hyman 2006: 230, Yip 2002: 106). They may be the only marker of a grammatical category, or function together with affixes or other grammatical morphemes.

In Bantu languages, even though grammatical morphemes can have an underlying tone, they may be combined with or replaced by grammatical tone when the verb is inflected. It involves a "tone melody" which is assigned to a TBU of the verb stem in order to mark a grammatical category on the verb, such as tense, aspect, mood, polarity and what kind of clause it is (Odden and Bickmore 2014: 3). The tone melody, often involving a H tone, may be associated with any TBU of the verb stem, depending on the TAM of the verb, but the final TBU and the second TBU of the stem are common positions (Kisseberth and Odden 2003: 62). Which TAM form takes which tonal assignment is quite arbitrary and must be specified. This is also the case for Mbugwe, see section 3.2.3.

As mentioned above, subject prefixes might also have grammatical tone. The underlying tonal differences between for example first and second person (Ø) and third person (class 1 and 2) (H) are however neutralised in some cases, for instance in the subjunctive mood, where all personal SMs tend to get a H tone (Odden and Bickmore 2014: 8).

Tones in Bantu languages are not always realised on the TBU they are associated with underlyingly. The high mobility of tone in African languages is noted for instance in Yip (2002: 132). Tones often move or are deleted, or change in pitch (see section 3.2.3). Some underlying principles from Autosegmental phonology (Goldsmith 1976) are therefore assumed in this chapter. Autosegmental phonology has proved to be a fruitful framework for analysing African tone languages in particular (Snider 1999: 3-6, Leben 2006). One important assumption is that tone is considered to be separate from the TBU it is realised on. The motivation for this is that a tone can for instance spread or move away from its original position, and if a TBU gets deleted, the tone may remain as a so-called floating tone, which is not linked to a TBU. A single tone can be linked with several TBUs, and several tones may be realised on one TBU. A TBU can also be toneless, with no tone linked with it.

3.2 Tone in Mbugwe

The aim of this section is to give an account of the underlying tonal structure of Mbugwe, and how it is realised on the surface. In section 3.2.1, the number of phonemic tones and what constitutes the TBU in Mbugwe will be established. In section 3.2.2 lexical tone of nouns and verbs in Mbugwe will be presented, and in section 3.2.3 grammatical tone of verbs in the language will be discussed. The surface distribution and realisation of H tones is affected by various tonal processes, which are also accounted for in section 3.2.3.

3.2.1 Phonemic tone and TBU

As this section will show, Mbugwe is analysed as having only one tone specified underlyingly, that is the H tone. The surface L tones are assumed to be a result of "Default L-insertion," which occurs fairly late in the phonology, possibly as a surface level rule (Pulleyblank 1986: 40, Odden 1995a: 465). In Mbugwe, as in many Bantu languages, the H tone is the active tone in the tonal processes in the language. The distribution of H tones is limited, and in addition, H tones are inserted on the verb stem in some TAM forms. Also, rising and falling tones only occur on long vowels in Mbugwe, which allows for a HØ representation. There is no need to refer to an underlying L tone anywhere in the phonology of Mbugwe, but it will be referred to in surface representations

The presence of a H underlying tone in Mbugwe is demonstrated by the lexical minimal pairs given in Table 3.1 and Table 3.2 below. There are not many minimal pairs for tone in Mbugwe, as there are often other differences as well (notably vowel quality and length). The structure of the nouns is noun class prefix (NCP)-stem, and for the verbs it is INF-root-FV. Each TBU is either H or L in noun roots, but the lexical tonal distinction is found only in the first syllable of the verb root.

Table 3.1. Tonal minimal pairs of nouns

Noun	Translation	Noun	Translation
mo-r <u>í</u>	'rope' (cl.3)	mo-ri	'tree' (cl. 3)
Ø-s <u>á</u> k <u>á</u>	'bush' (cl. 5)	Ø-sak <u>á</u>	'feces' (cl. 5)
Ø-t <u>úú</u> mb <u>é</u>	'chair' (cl. 5)	Ø-tuumb <u>é</u>	'dust' (cl. 5)
mo-s <u>óó</u> ng <u>ó</u>	'miser' (cl. 1)	mo-s <u>óó</u> ngo	'white person' (cl. 1)
Ø-t <u>íí</u> tí	'butterfly' (cl. 5)	ke-tiit <u>í</u>	'large group of people' (cl. 5)

Table 3.2. Tonal minimal pairs of verbs

Verb	Translation	Verb	Translation
o-v <u>á</u> l-a	'to start'	o-val-a	'to count'
o-s <u>áá</u> l-a	'to pray'	o-saal-a	'to spread'
o-l <u>áá</u> l-a	'to sleep'	o-laal-a	'to fall down'
o-r <u>έ</u> r-a	'to awake, leave'	o-rer-a	'to raise a child'

It is suggested here that the mora is the TBU in Mbugwe. This is based on the fact that there are contour tones (falling and rising tones) occurring on long vowels. This means that a sequence of HØ or ØH tones on the two moras of a long vowel will result in a falling or rising tone, respectively. Another indication that the mora is the TBU in Mbugwe is the HTS rule, discussed in section 3.2.3.1: "An underlying H tone spreads one mora to the right, if the target mora is followed by a toneless mora." If the following vowel is long, the HTS creates a falling tone, as in *o-vá-láan-a* 'to bid them farewell'. In addition, nouns with the syllable structure CVV (monosyllabic with a long vowel) and CVCV (bisyllabic) have the same tonal possibilities: HH, HØ, ØØ and ØH. Only vowels carry tone in Mbugwe.

3.2.2 Lexical tone

Lexical tone was defined in section 3.1 as a tone which may create minimal pairs and is linked to a lexeme or an overt morpheme. The two main parts of speech in Bantu languages are nouns and verbs, and they are the focus of this section. Lexical tone of pronouns and adnominals will be presented in chapter 4. We will start with lexical tone of nouns (3.2.2.1), and then we will move on to lexical tone of verbs (3.2.2.2).

3.2.2.1 Lexical tone of nouns

Most of the nouns listed in this section were elicited and recorded in isolation, and repeated twice, and then whistled once in order to hear the tones more clearly. In addition, I also made use of nouns which were elicited by the SIL linguists and are part of the FLeX database (Larsen et al. 2011). They also elicited the nouns in isolation.²³ Unless stated, the surface tones are assumed to correspond to the underlying tones.

In Mbugwe, a mora of a noun root is either H or \emptyset . Monomoraic noun roots have only two options: the root is either H or \emptyset . Out of a total of 35 monomoraic nouns, 28 are marked for tone. 21 CV nouns in the FLeX database have a H tone, whereas 7 are toneless. For examples, see Table 3.3.

Table 3.3. CV nouns

Noun	Translation	Tone
mo-ri	'root' (cl. 3)	Ø
mo-t <u>é</u>	'tree' (cl. 3)	Н

²³ Tone was not marked on all entries in the FLeX database I received from SIL, and during my field work, tone was marked and checked for the entries which showed up in the elicited data, but not for all entries in the database. Therefore, only the entries which have tone marked are included in this study. It is to be expected that the rest of the nouns display similar options for tone, however, as the typical Bantu pattern is found in Mbugwe.

These nouns have preserved the tone reconstructed for PB: *mo-ri* 'root' from *di 'root', *mo-té* 'tree' from *ti 'tree'. Examples of other monosyllabic nouns which also have the same tone as the reconstructed PB morphemes are *faa-nto* 'place' (cl. 16) from PB *ntò 'some (entity), any', *o-sh*ó 'face' (cl. 14) from PB *có 'face'. For many of the nouns, it is difficult to find a reliable reconstruction, and some of the monosyllabic nouns are shortened compared with PB.

Bimoraic noun roots have four possible tone patterns. Examples of CVCV nouns with tones are given in Table 3.4.

Table 3.4. CVCV nouns

Noun	Translation	Tone pattern	
n-k <u>ó</u> k <u>ó</u>	'chicken' (cl. 9/10)	НН	
ke-dεdu	'chin' (cl. 7)	ØØ	
Ø-b <u>á</u> sa	'twin'(cl. 5)	HØ	
n-dam <u>á</u>	'calf' (cl. 9/10)	ØН	

In my database there are 163 CVCV nouns which are marked for tone, out of a total of 214. 76 are HØ, 30 are HH, 32 are ØØ and 25 are ØH. It is uncertain why the distribution is uneven, with a high number of HØ nouns. The nouns in Table 3.4 have all preserved the reconstructed tone: $n-k\acute{o}k\acute{o}$ 'chicken' is reconstructed as * $k\acute{o}k\acute{o}$ 'chicken', ke-dedu 'chin' as * $d\grave{e}du$ 'chin', $Ø-b\underline{\acute{a}sa}$ 'twin' as * $p\acute{a}c\grave{a}$ 'twin', and $n-dam\acute{a}$ 'calf' as * $d\grave{a}m\acute{a}$ 'calf; heifer; young animal'. The PB tone is kept in each case. The four-way distinction which is reconstructed in Proto-Bantu (Greenberg 1948) seems to be preserved in Mbugwe.

CVV nouns, being bimoraic, have the same four possibilities for tone patterns as CVCV nouns in Mbugwe. There are only 25 CVV nouns which are marked for tone in my database (out of 28), and 3 are HH, 8 are $\emptyset\emptyset$, 5 are H \emptyset , and 8 are \emptyset H (see Table 3.5 for some examples).

Table 3.5. CVV nouns

Noun	Translation	Tone pattern	
Ø-d <u>úú</u>	'darkness' (cl. 9/10)	НН	
i-wee	'rock' (cl. 5)	ØØ	
n-k <u>ó</u> o	'fig' (cl. 9/10	HØ	
т-bэ <u>э́</u>	'buffalo' (cl. 9/10)	ØН	

Many of the CVV nouns have lost a consonant, and are CVCV in PB. For instance, n- $k\acute{o}o$ 'fig' as * $k\acute{o}y\acute{o}$, 'fig-tree: Moraceae: Ficus sp.' and m-b- $b\acute{o}$ 'buffalo' is reconstructed as * $b\grave{o}g\acute{o}$ 'buffalo'. A possible origin of $d\acute{u}\acute{u}$ 'darkness' is * $d\acute{u}d\acute{l}$, meaning 'shadow', and i- $w\varepsilon\varepsilon$ 'rock' is a possible reflex of * $b\grave{o}\grave{e}$ 'stone'. The tonal pattern from PB is preserved in these cases.

Trimoraic noun roots such as CVCVCV and CVVCV have more tonal variation. There are a total of 187 CVVCV nouns in the database, and 182 of

them are marked for tone. The most common tone patterns for these nouns are HØØ (52), HHH (34), ØØØ (37) and ØØH (52). In the database there are only five nouns with the tone pattern LHL, and one with the HLH pattern. The missing pattern LHH may be due to a gap in the data. Concerning the HØØ nouns, they surface as HHØ, because the H tone spreads one mora to the right (see section 3.2.3.1). If there were two H tones next to each other underlyingly in these nouns, there would have been an upstep, and the tone pattern would be $H^{\uparrow}H$ Ø (see section 3.2.3.4). This might also explain why there are no HHØ nouns found in the data. For examples, see Table 3.6.

Table 3.6. CVVCV nouns

Noun	Translation	Tone pattern
Ø-t <u>íí</u> tí	'butterfly' (cl. 5)	ННН
m-bεεva	'rat' (cl. 9/10)	ØØØ
ke-r <u>ó</u> óto	'dream' (cl. 7)	HØØ
Ø-baav <u>á</u>	'wing' (cl. 5)	ØØH
Ø-to <u>ó</u> ma	'cheek' (cl. 5)	ØНØ
Ø-s <u>á</u> ar <u>é</u>	'plate' (cl. 5)	НØН

For these words, the following have been possible to find in PB: *m-bɛɛva* 'rat' from *bèbà, Ø-tooma 'cheek' from *támà 'cheek', and ke-rontoma' is reconstructed as *dóòt 'dream'. This indicates that these nouns were originally CVCV or CVVC nouns, and that there is some correlation with the PB tones, although there is not enough information to make any conclusions.

The same tone patterns as above should be possible for CVCVCV nouns in Mbugwe, as they also have three moras. However, no CVCVCV noun with the HØH pattern is found in the database. This might be due to a gap in the data. The number of such nouns which are marked for tone in the database is very limited, with a total of 29 CVCVCV (out of 82 total). 3 of them are HHH, 4 are ØØØ, 3 are HØØ (HHØ on the surface), 2 are ØØH and 15 are ØHØ. However, several of the ØHØ nouns are loans from Swahili, and they tend to take a H tone on the penultimate syllable, since Swahili has penultimate stress. The tone patterns found for CVCVCV nouns in the database are listed in Table 3.7 below.

Table 3.7. CVCVCV nouns

Noun	Translation	Tone pattern
mo-tífálú	'blind person' (cl. 1)	ННН
mo-tavana	'boy' (cl. 1)	ØØØ
ke-k <u>ó</u> kóla	'elbow' (cl. 7)	HØØ
Ø-sirib <u>í</u>	'clay water pot' (cl. 5)	ØØH
mo-rir <u>í</u> mo	'shadow, darkness' (cl. 3)	ØHØ

The noun $ke-k\underline{\acute{o}}k\acute{o}la$ 'elbow' has the PB reconstruction * $k\acute{o}k\grave{o}d\grave{a}$ 'elbow'. Again, it is assumed that the underlying tone is also HØØ in Mbugwe. The

root for *mo-tifálú* 'blind person' is reconstructed to **pòkù* 'blind person', and *mo-ririmo* 'shadow' is **dúdi* 'shadow'. In these cases, the connection with PB is harder to establish.

The only noun with four syllables that is marked for tone in the database is the word *wolóóriwá* '(kind of) flower' (cl. 5), ØHHH. It looks like it may be derived from a verb stem. There are a few other nouns with four syllables, and some of them are reduplicated. They are not included in this study as there is not enough tonal information available at this time.

The tones of the nominal prefixes are given below. They may also be considered lexical tones, as they are inherent in the morpheme. All Noun Class Prefixes (NCP) are toneless, but the Agreement Class Prefixes (ACP) are H except for classes 1 and 9. Classes 4 and 14 are sometimes H and sometimes toneless (see chapter 4 for details). However, they are all toneless with numerals. For the Subject Markers (SMs), which also agree with the noun classes, classes 1 and 2 (third person singular and plural) are H, but the others are toneless. For the Object Markers (OMs), class 1 is toneless and the rest are H. These prefixes are also discussed in chapters 4 (NCP and ACP) and 5 (SM and OM).

Table 3.8 The nominal prefixes

Classes	NCP	ACP	SM			OM		
			3.	2.	1.	3.	2.	1.
1	то-	0-	á-/ó-	0-	N-	то-	ko-	N-
2	va-	vá-	vá-	mo-	ko-	vá-	mó-	kó-
3	mo-	ó-	0-			ó-		
4	me-	e-/é	ya-			é-		
5	Ø-/ri-/i-	ré-	re-			ré-		
6	ma-	é-	<i>a</i> -			á-		
7	ke-	ké-	ke-			ké-		
8	vi-	vé-	vi-			ví-		
9	Ø-/N-	ji/e-	e-			é-		
10	Ø-/N-	jí/í-	ji-			jí-		
11	lo-	ló-	lo-			ló-		
12	ka-	ká-	ka-			ká-		
14	0-	ó-/o-	0-			ó-		
15	ko-	kó-	ko-			kó-		
16	fa-	fá-	fa-			fá-		
17	ko-	kó-	ko-			kó-		
19	fi-/sha-	fi-/shá-	fi-			fĩ-		

3.2.2.2 Lexical tone of verbs

In this section, lexical tone of verb roots and verbal affixes will be presented. Mbugwe verb roots fall into two tone classes lexically: those with a H tone, which is associated with the initial syllable of the verb root, and those which are toneless throughout the root. The template for the Mbugwe verb will be described in more detail in chapter 5, but is also given here for convenience:

- 1. (NEG1) + SM + TAM + (VENT) + (OM) + root + (extension) + FV
- 2. SM + (NEG2) + TAM + (VENT) + (OM) + root + (extension) + FV

Figure 3.1 Mbugwe verbal template

The infinitive prefix *o*- is toneless and occurs in the TAM slot of the verb stem. Extensions are derivational suffixes such as the causative, applicative and passive. The structure of the verbs in Table 3.9 and Table 3.10 is INF-root-(extension(s))-FV, as the Infinitive is considered the base form of the verb. In the database, 319 verb roots out of 518 are marked for tone. 201 of them are H, and 118 are toneless.

Table 3.9. Toneless verbs in the infinitive

Surface	Underlying	Translation	
orefa	/o-ref-a/	'to pay'	
olaana	/o-laan-a/	'to bid farewell'	
osiinga	/o-sing-a/	'to touch'	
osisika	/o-sisik-a/	'to rub'	
osaola	/o-saol-a/	'to choose'	
otakanera	/o-takan-er-a/	'to persuade'	
weeva	/o-ev-a/	'to forget'	
waaja	/o-anj-a/	'to love'	
waamoka	/o- amok-a/	'to call'	
waamokola	/o-amokol-a/	'to call for'	

As regards PB reconstructions of the verbs listed above, these verb roots have been identified: *ref* 'pay' from **dìp* 'pay, compensate', *siing* 'touch' from **cìng* 'rub, smear', and *saol* 'choose' possibly from **cààgòd* 'choose; separate'. All of these are reconstructed with a L tone in PB, and are toneless in Mbugwe.

Table 3.10. H verbs in the infinitive

Surface	Underlying	Translation
of <u>á</u>	/o-f- <u>á/</u>	'to give'
om <u>ú</u> ta	/o-m <u>ú</u> t-a/	'to beat'
ot <u>úú</u> mba	/o-t <u>ú</u> mb-a/	'to follow'
os <u>óó</u> cha	/o-s <u>óó</u> ch-a/	'to hate'
ov <u>é</u> kéra	/o-v <u>é</u> k-er-a/	'to dress someone'
os <u>éé</u> réra	/o-s <u>éé</u> r-er-a/	'to help'
ofw <u>éé</u> rérya	/o-f <u>ú</u> εr-er-i-a/	'to dismiss'
ot <u>ó</u> mámera	/o-t <u>ó</u> mam-er-a/	'to serve'
э <u>э</u> ́па	/o- <u>ó</u> n-a/	'to see'
we <u>é</u> mbérera	/o- <u>é</u> mb-er-er-a/	'to teach, sing to'

H verbs which may be reconstructed are f- $\underline{\acute{a}}$ 'give' from PB * $p\acute{a}$ 'give', $\underline{\acute{o}}n$ 'see' from * $b\acute{o}n$ 'see; find; acquire; undergo' and $\underline{\acute{e}}mb$ - $\acute{e}r$ -er 'teach/sing for' from * $j\acute{i}mb$, 'sing; dance'. These are all reconstructed with a H tone, which suggests that Mbugwe is quite conservative when it comes to preserving the lexical tones of verbs.

The H tone on the initial vowel in the verb roots is linked to the whole syllable, and not just the first mora of a long vowel, which is to be expected, since the mora is the TBU. This is demonstrated by the fact that HTS occurs in longer verb stems, such as verbs with the applicative derivational suffix er/er. In verbs with a long vowel on the initial syllable, such as $o-s\underline{\acute{e}\acute{e}}r-\acute{e}r-a$ 'to help' in Table 3.10, the H tone is realised not only on both moras of the long vowel, but it also spreads to the following mora. This is why the underlying H tone of the verbs is analysed as being linked with the first syllable of the H verb root, and not just the first mora, even though the TBU is the mora.

In addition to the verb roots having lexical tone in Mbugwe, verbal grammatical prefixes also have lexical tone. TAM prefixes, for instance will be presented in detail in section 5.1. For the TAM prefixes, the underlying tone is either H, as in Future Perfective $j\underline{\acute{e}}$ -, or toneless, as in Past Imperfective kee-/keen-/keende-. Most of them have at least one H tone.

In some TAM forms of the Mbugwe verb, the tone pattern of the SM and/or the verb stem changes, and the underlying tones do not surface. This is due to grammatical tones, and tonal features which are specific to the TAM form in question. Before these instances for grammatical tone are discussed, however, the tonal processes which take place in Mbugwe will be presented. This is necessary in order to understand the complex tone patterns of the verb stems in Mbugwe.

3.2.3 Tonal processes

The surface realisation of tone is quite different from the underlying representations in Mbugwe, as in most Bantu languages. Therefore the tonal processes in the language will be introduced here. This information will be valuable for

anyone who wants to study Mbugwe, but also for linguists interested in these kinds of tonal processes. The most important tonal processes in Mbugwe are H tone spread (3.2.3.1), final lowering (3.2.3.2), downdrift (3.2.3.4) and upstep (3.2.3.4).

3.2.3.1 H Tone Spread

The H tone is quite mobile in Bantu languages (Kisseberth and Odden 2003: 62). Underlyingly, a H tone is associated with a given TBU, but in many Bantu languages the following TBU (or TBUs) is also realised with a H tone. This is called H tone spread (HTS) (Kisseberth and Odden 2003: 63). There are two kinds of tone spreading: bounded HTS, where the H tone spreads exactly one TBU (in some rare cases two TBUs), usually to the right and unbounded HTS, where the H tone spreads to all the following (or more rarely, preceding) TBUs of the word or utterance, until it is blocked (Kisseberth and Odden 2003: 63).

Mbugwe has bounded H tone spread. An underlying H tone spreads one mora to the right, if the target mora is followed by a toneless mora. This is illustrated by H verb stems²⁴ in the infinitive, where there is an underlying H tone on the initial syllable of the verb root. The H tone of the initial syllable of the root spreads one mora to the right in verb stems with 3 syllables or more, such as *o-vék-ér-a* 'to dress someone', and *o-tómám-er-a* 'to serve' (see Table 3.11). The structure of these verbs is INF-root-APPL-FV.

Table 3.11. HTS on long verb stems

H verbs	Translation	
o-v <u>é</u> k-ér-a	'to dress someone'	
o-t <u>ó</u> mám-er-a	'to serve'	

The H tone does not spread in the bisyllabic verb stem o- $m\underline{\acute{u}}t$ -a 'to beat'. This is due to the restriction that says that the HTS does not occur if the target mora is not followed by another toneless mora. As a consequence, the H tone does not spread to a toneless mora which is utterance-final, that is, before a pause. If the verb is not utterance-final, however, as in o- $m\underline{\acute{u}}t$ -a mon $\underline{\acute{u}}$ 'to beat a lot', the H tone spreads to the final -a (Figure 3.2).

²⁴ A verb stem here refers to the verb root and suffixes (see chapter 5). This is referred to as the *inflectional stem* in Bantu studies (Nurse 2008. 41-42).

²⁵ In tone elicitation, the verbs were elicited in isolation and in a frame with various SMs, OMs and with a following adverb. The elicitation unit is considerend an utterance here.

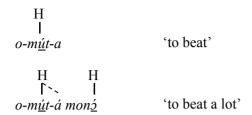


Figure 3.2. No HTS to an utterance-final mora

The restriction of HTS to reaching the utterance-final mora is explained by what Kisseberth and Odden (2003) calls the *nonfinality* principle. It refers to "the preference that the end of certain phonological structures not be realised on a H tone" (Kisseberth and Odden 2003: 64). The most common effect of this principle is that the H tone movement (spread or shift) does not target the final TBU, as seen in Mbugwe.

Another consequence of the restriction to the HTS rule is that it does not occur if the target for the spreading is followed by a H tone. An example is the noun phrase *mo-té mo-néne* 'big tree', where the spreading of the first H tone is blocked by a following H mora. Notice also that the second H tone does not spread to the utterance-final mora, as seen above. For comparison, HTS does however occur if the following mora is toneless, as in for instance *mo-té mó-ley* 'tall tree' (Figure 3.3).

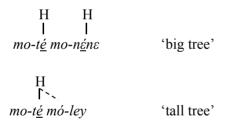


Figure 3.3. No HTS if the target mora is followed by a H tone.

This phenomenon is explained by the general phonological principle called the Obligatory Contour Principle (OCP). It was formulated by Goldsmith (1976: 36) as "at the melodic level of the grammar, any two tonemes must be distinct." It was subsequently acknowledged as a general phonological principle, stating that "adjacent identical elements are prohibited" (Yip 2002: 99). A common manifestation of the OCP in Bantu languages is blocking of H tone spread (Kisseberth and Odden 2003: 65).

3.2.3.2 Final lowering

Final lowering is a phenomenon where the frequency is lowered considerably at the end of an utterance. It is often attributed to a L boundary tone utterance finally in Bantu languages (Hyman 1990). In Mbugwe, final lowering is especially noticeable when the final mora is toneless. An example is the infinitive verb *o-takan-er-a* 'to persuade', where the pitch is falling towards the end, as seen in Figure 3.4. The final toneless mora has a falling tone, which is always true of a toneless mora utterance finally in Mbugwe.²⁶

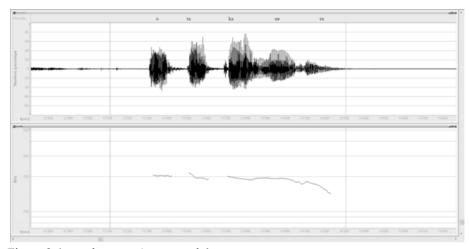


Figure 3.4. *o-takan-er-a* 'to persuade'.

However, when the utterance is all H, the final lowering is hardly noticeable, as seen in Figure 3.5. There is no final falling tone in this case.

²⁶ The last vowel is also lengthened and devoiced towards the end. This is a phonetic effect that always happens to an utterance-final toneless vowel, and it is not marked in the transcription.

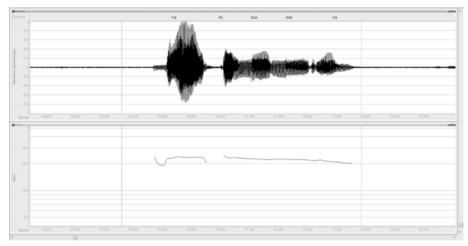


Figure 3.5. vá-tómám-ér-á 'they served'.

As seen in Figure 3.4 and Figure 3.5, declination, the gradual decline in frequency throughout an utterance, which is thought to be universal (Gussenhoven 2004: 98-99), is almost non-existent in Mbugwe. Except for the final lowering of the final toneless mora, there is very little lowering of frequency throughout the utterance. It cannot be ruled out that there is a L boundary tone utterance finally in Mbugwe, but since there is no final lowering with H tones, the lowering of the utterance-final toneless mora is attributed here to the principle of final lowering without the need for a L boundary tone.

When an utterance contains both H and toneless moras, the lowering of frequency becomes more noticeable. This is due to downdrift, which is the topic of the next section.

3.2.3.3 Downdrift

The term Downdrift is used here to describe "the lowering of H tones... after a L tone" (Yip 2002: 148). In Mbugwe, any H tone which follows a surface L tone is realised on a lower frequency than the previous H tone(s). Downdrift in Mbugwe is illustrated in Figure 3.6. The pitch trace shows that the final H tone, which follows a toneless mora, is lowered in *o-mút-á monó* 'to beat a lot'.

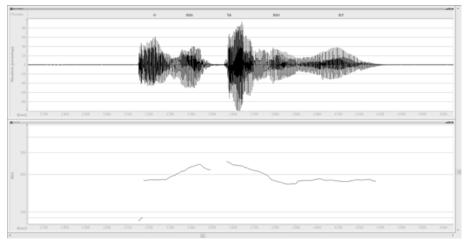


Figure 3.6. *o-m<u>ú</u>t-á mon<u>ó</u>* 'to beat a lot'.

As the pitch trace indicates, the final H tone is significantly lower than the first H tone in this utterance; in fact it is at the level of the preceding toneless mora. But in contrast with an utterance-final toneless mora, the final mora does not have a falling tone, but a level tone, which distinguishes the final H tone from a final surface L tone.

The downdrift is not always as clear as exemplified above. For instance, in the Hodiernal Perfective form $v\underline{\acute{a}}$ -ref- $\underline{\acute{i}}$ y ε 'they have paid (earlier today)', the penultimate mora is H due to a grammatical tone. The SM $v\underline{\acute{a}}$ - also has a H tone. In this verb form, the second H is not utterance-final, but it is lowered to some extent compared with the first H tone (see Figure 3.7).

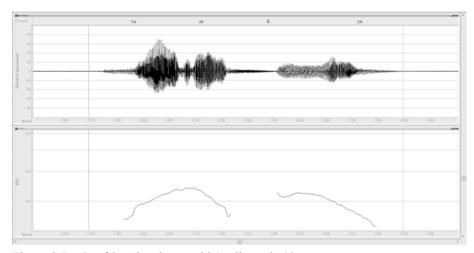


Figure 3.7. *ν<u>ά</u>-ref-<u>í</u>yε* 'they have paid (earlier today)'.

The presence of downdrift becomes particularly clear when a whole clause is taken into consideration (1).

This clause starts with a H tone, which spreads to the second mora of $f\underline{\acute{a}}f\dot{\acute{a}}$, 'now'. The H grammatical tone in the suffix of $ndem\underline{\acute{u}}y\dot{\acute{e}}$, 'I have cultivated', spreads to the final mora of the suffix, while yoonda 'field' is toneless. The possessive $r\underline{\acute{a}}an\underline{\acute{e}}$ 'my (5ACP-1SG.POSS)' is all H, but the pitch is on the same level as the toneless yoonda 'field'.²⁷ This is due to final lowering combined with downdrift (see Figure 3.8).²⁸

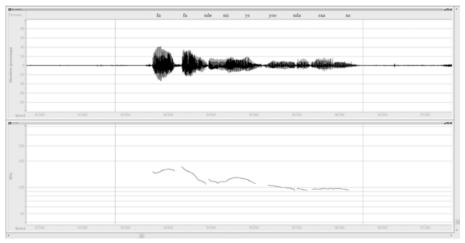


Figure 3.8. fáfá ndemíyé yoonda rááne 'I have just cultivated my field'.

In summary, Mbugwe has downdrift, which lowers each H mora that is preceded by a toneless mora. It works together with final lowering, so that the downdrift is more evident towards the end of an utterance. Final lowering and downdrift will not be marked in this study.

²⁷ In $r\acute{a}\acute{a}n\acute{e}$, the underlying tones are $r\acute{e}$ -an \acute{e} , but due to the process of vowel assimilation, the long resulting vowel is all H.

²⁸ In this case, the recording is of Colman Chuchu, rather than Naomi Richards, upon whose speech all of the other pitch traces are based.

3.2.3.4 Upstep

Upstep is less common than downdrift cross-linguistically. This is perhaps due to the near universal tendency for frequency to lower towards the end of an utterance. However, upstep does occur in Mbugwe. The underlying principle is the opposite of downdrift; it "raises the pitch of an H-tone immediately before an L-tone" (Gussenhoven 2004: 108). Among narrow Bantu languages, upstep has been described in Nyaturu (F32) (Hyman 1992), Chaga (E60) (McHugh 1990), Duma (B51) (Puech 1990) and Mbadja (a variety of R21) (Halme-Berneking 2014). Njem (A84) is analysed as having upstepped L tones in Akumbu (2012).

In Mbugwe, an underlyingly H mora that follows another H mora and precedes a toneless mora is upstepped, which means it is pronounced on a higher pitch than the previous H tone. This is illustrated by H infinitive verbs with a H OM marker $-v\underline{a}$ (3PL). For example, in $o-v\underline{a}^{-\uparrow}m\underline{u}t-a$ 'to beat them', the two H tones in the middle are followed by a toneless mora, and the second H mora is upstepped (Figure 3.9).

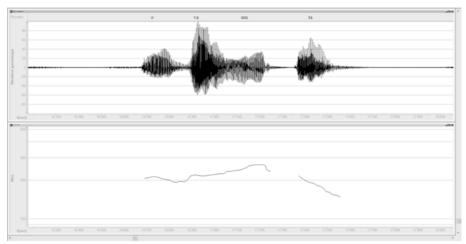


Figure 3.9. $o-v\acute{a}^{\uparrow}m\acute{u}t-a$ 'to beat them'.

The same is true for $o-v\underline{a}^{-1}t\underline{u}\underline{u}mb-a$ 'to follow them', where the long vowel of the verb root is level and upstepped (see Figure 3.10).

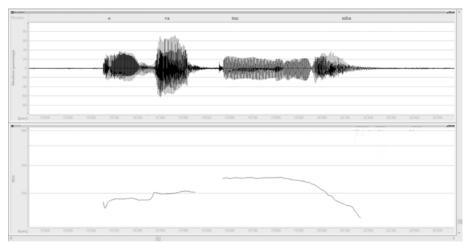


Figure 3.10. *o-vá-*¹*túúmb-a* 'to follow them'.

The verb $o-v\underline{a}^{-1}t\underline{u}\underline{u}mb-a$ 'to follow them' also illustrates another feature of upstep in Mbugwe: upstep never causes a rising tone. If the last underlying H tone is on a long vowel, whether it is on the first or second mora of that vowel, the whole syllable is upstepped.

HTS happens after the upstep, and the mora to which the H tone spreads (if applicable) is realised on the same level as the upstepped H mora. This is illustrated by $o-v\underline{\acute{a}}-^1fw\acute{e}\acute{e}r-\acute{e}r-y-a$ 'to dismiss'. (Figure 3.11).

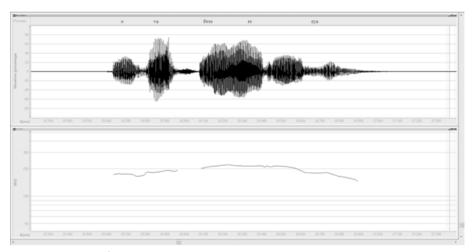


Figure 3.11. $o-v\underline{a}^{-1}fw\dot{\epsilon}\dot{\epsilon}r-\dot{\epsilon}r-y-a$ 'to dismiss'.

The pitch trace illustrates the three different levels: first, a toneless mora on the infinitive prefix o-, then a H mora on the OM $v\underline{\acute{a}}$ -, and thirdly an upstepped H tone on the verb root ($fw\underline{\acute{e}\acute{e}}$ -). The H tone of the first mora of the verb root then spreads to the following mora, so that they are on the same level.

Upstep happens in all H verbs in the infinitive with the H OM, except for the monosyllabic verbs, for example o-v $\underline{\acute{a}}$ -f $\underline{\acute{a}}$ 'to give them' (see Table 3.12). This is because there is no toneless mora after the H tone that would be upstepped.

Table 3.12. Upstep in H verbs in the infinitive with H OM

Infinitive	Translation
o-v <u>á</u> -f- <u>á</u>	'to give them'
o-v <u>á</u> - [↑] m <u>ú</u> t-a	'to beat them'
o-v <u>á</u> - [†] t <u>úú</u> mb-a	'to follow them'
o-v <u>á</u> - [†] t <u>ó</u> mám-er-a	'to serve them'
o-v <u>á</u> -†fw <u>éé</u> r-ér-y-a	'to dismiss'

In the examples above, there were only two underlying H tones, and the second one was upstepped. However, when there are more than two H moras adjacent to each other in the underlying structure, it is always the last H mora, or the syllable it is linked to in the case of long vowels, that is upstepped.

In the future tense, all SMs are realised H, regardless of underlying tone. The TAM prefix for the future is $j\underline{\acute{e}}$ -, which is underlyingly H. In each case, it is the last underlying H tone which is upstepped. For example, in $k\acute{o}$ - $j\underline{\acute{e}}$ - $v\underline{\acute{a}}$ - $^{\dagger}m\underline{\acute{u}}t$ -a 'we will beat them', the fourth H tone is upstepped (Figure 3.12).

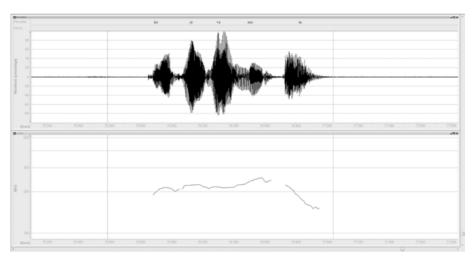


Figure 3.12 $k\acute{o}$ - $j\acute{e}$ - $v\acute{a}$ - $^{\uparrow}m\acute{u}t$ -a 'we will beat them'.

In $ko-v\underline{\acute{a}}-m\underline{\acute{u}}^{\dagger}t-\underline{\acute{t}}y\varepsilon$ 'we have beaten them', the grammatical H tone on the penultimate mora is the third H tone, and is followed by a toneless mora. Therefore, the penultimate mora is upstepped, as seen in Figure 3.13.

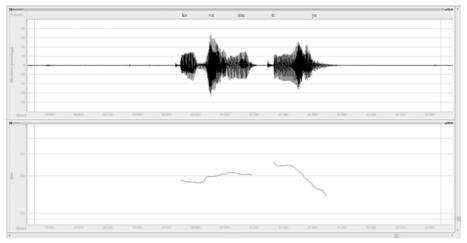


Figure 3.13. $ko-v\underline{\acute{a}}-m\underline{\acute{u}}^{\dagger}t-\underline{\acute{t}}v\varepsilon$ 'we have beaten them'.

So far we have looked at upstep in verbs, as H tones concatenate there and upstep is fairly common. However, upstep occurs wherever H tones concatenate and alternate with toneless moras, such as in noun phrases. One example is $ma-t\underline{u}\underline{u}\underline{m}^{\dagger}b\underline{\acute{e}}$ $m\acute{a}-ar\underline{\acute{e}}$ 'wide chairs'. The third H mora on the syllable $-b\underline{\acute{e}}$ is upstepped, and the final H mora $-r\underline{\acute{e}}$ is lowered. The upstepped H tone spreads one mora to the right, and creates a falling tone on the first syllable in $m\acute{a}-ar\underline{\acute{e}}$ 'wide' (Figure 3.14).

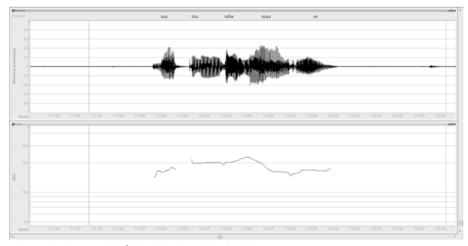


Figure 3.14. ma-túúm†bé má-aré 'wide chairs'.

For comparison, *ma-tuumbe* 'chairs' is given in isolation in Figure 3.15. Note that the noun root is all H, and the prefix is toneless.

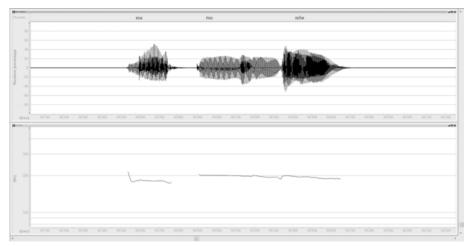


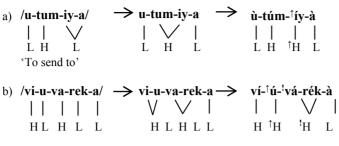
Figure 3.15. ma-túúmbé 'chairs'.

The conditions for upstep in Mbugwe can be summarised as follows: the last of two or more consecutive lexical or grammatical H tones before a toneless mora, or the syllable it is linked to in the case of a long vowel, is upstepped. The last underlying H tone may then spread to the following mora, if the conditions for HTS are fulfilled.

The conditions for upstep that are observed for Mbugwe are somewhat similar to Hyman's analysis of upstep in Nyaturu (F32), spoken in central Tanzania (Hyman 1992). In a dialect of Nyaturu, referred to by Hyman as Cahi, a H tone is upstepped before a L tone, even if the L tone is floating.²⁹ The examples in Figure 3.16 are taken from Hyman (1992: 99).³⁰

²⁹ Hyman (1992: 99) comments that L tones might be present underlyingly in this language, as a proposed default L tone would have to be inserted quite early in Nyaturu in order to account for downdrift in his analysis. Some morphemes are still considered to be underlyingly toneless by Hyman. The L tone is marked with a grave accent, following the source.

³⁰ In the source the verb stem *tum* is marked with a grave accent, signifying a L tone. This is probably a typo, as it is marked with an acute accent, signifying a H tone elsewhere in the chapter and it is underlyingly H. The ! in Figure 3.16 marks downstep, following Hyman's notation.



'They are leaving them.'

Figure 3.16. Upstep in Nyaturu. Reprinted from Hyman, Larry M. 1992. Register tones and tonal geometry. In *The phonology of tone: the representation of tonal register*, edited by Harry van der Hulst and Keith Snider, 99. Berlin: Mouton de Gruyter. Copyright (1992) by Mouton de Gruyter. Reprinted with permission.

These examples show the underlying structure of the verb to the left; the middle shows HTS one TBU to the right, and the right column shows the surface realisation. In a), the H tone of the verb root spreads to the suffix -iv, causing the mora to which the H tone spreads to be upstepped, since there is a L tone following it. In b), the H tone spreads both from the SM ví- to the present tense prefix u-, and from the OM vá- to the verb root rek, which is underlyingly L. This results in two delinked (floating) L tones. The first floating L tone causes the H tone of the prefix u- to upstep, since it is followed by a L tone (even if the L tone is not realised on the surface). The upstep is followed by an immediate downstep of the following H tone. For upstep to be followed by downstep is quite common in African languages with upstep, and this was also noted by Snider (1990: 458) for Krachi, a Kwa language from Ghana. Hyman explains the failure of the H tone of rék to upstep, even though it does precede a L tone, by a constraint that says that "one cannot obtain subsequent [†]H tones in a phonological clause unless each [†]H is separated from the preceding [†]H by a surface L tone" (Hyman 1992: 100, 86, emphasis in original). Hyman found the same constraint in Engenni, an Edoid language from Nigeria and Mankon, an Eastern Grassfields Bantu language (Hyman 1992).

Both similarities and differences can be noted when comparing Hyman's account of upstep in Nyaturu with upstep in Mbugwe as presented in this study. Crucially, both languages have upstep before a surface L tone. One difference from Mbugwe is that HTS occurs before upstep in Nyaturu, so that it is the target mora of the HTS which is upstepped, and not the underlyingly H mora. In Mbugwe, it is the underlyingly H mora which is upstepped, and HTS happens after the upstep has taken place. In addition, floating L tones may cause both upstep and downdrift in Nyaturu, whereas only surface L tones can trigger upstep (or downdrift) in Mbugwe.

One question still remains: why is the last H mora before a toneless mora upstepped? While this question is left for future research, a possible explanation is found in Gussenhoven (2004: 108), where he suggests that the raising of a H tone before a L tone is a way of emphasising the contrast, and makes it easier to identify the L tone. This is similar to what Rialland (2001) found: the pitch is preplanned to accommodate an upcoming downstep. Upstep can then be seen as anticipatory of the following L tone, facilitating the drop in pitch.

In this section, tonal processes in Mbugwe are described. Together, the processes HTS, final lowering, downdrift and upstep make the surface realisation of tones in Mbugwe quite different from their underlying representations. Both the location and the register of the tones can be shifted, and on the surface there are more than two levels of tones. However, the processes are all predictable if the conditions are fulfilled in Mbugwe. Crucially, the lowered and raised tones are not considered phonemic, that is, the only phonemic tone in Mbugwe is H, and moras that do not receive a H tone in the phonological process remain toneless and surface with a L tone.

3.2.4 Grammatical tone of verbs

In addition to lexical tones of verb roots and verbal affixes in Bantu languages, a grammatical tone or tonal melody is assigned to a TBU of the verb stem in order to mark a grammatical category on the verb (see Kisseberth and Odden 2003: 61, Odden and Bickmore 2014). This section presents a preliminary analysis of the grammatical tonal patterns that have been identified in simple verbs in Mbugwe, as well as grammatical tone of personal SMs in some TAM forms. The various TAM forms are not described here, as the TAM system is the topic of chapter 5. Grammatical tone has only been found in simple verb forms, not periphrastic verbs.

3.2.4.1 Grammatical tone of SMs

In Mbugwe, the SMs have an underlying tone, as shown in Table 3.8 above. Some are toneless and some are H, underlyingly. For the personal SMs, first and second person are toneless, whereas the third person (noun class 1 and 2) is H. This is also reconstructed for PB.

The personal SMs in most TAM forms surface with their lexical tone, but in a few TAM forms, the tone of the personal SMs is neutralised, so that they are all H or all L.³¹ In some cases, this leads to ambiguity between 2SG and 3SG, as both are realised as *o*- in certain TAM forms. In Table 3.13, the TAM forms in which the personal SMs are neutralised are listed.

³¹ For this study, only the personal SMs were included for the tonal paradigms.

Table 3.13. TAM forms with neutralised SM

TAM	Simple form
Future	SM(H)- <u>jé</u> -ROOT-a
Participial	SM(H)- <u>jé</u> -ROOT-a
Consecutive	SM(H)- <u>ká</u> -ROOT-a
Present Imperfective	SM(H)-k <u>éé</u> -/k <u>éé</u> n-/k <u>éé</u> ndé-ROOT-a
Perfective Subjunctive	SM(H)-ROOT- <u>É</u>
Negative Non-Past	te-SM(H)- <u>jé</u> -ROOT-a
Negative Present imperfective	te-SM(H)-k <u>éé</u> -ROOT-a
Nondum	te-SM(H)- <u>áá</u> nd <u>á</u> -ROOT-a
Situative	SM(L)-k <u>éé</u> -ROOT- <u>á</u>
Consecutive Ventive	SM(L)-ka-ja-ROOT-a
Past Imperfective	SM(L)-kee-/keen-/keende-ROOT-a
Negative Past Imperfective	te-SM(L)-kee-ROOT-a
Recent Past Counterfactual	SM(L)-k <u>áά</u> -ROOT-iyε
Far Past Counterfactual	SM(L)-k <u>áá</u> -ROOT- <u>á</u>
Future Counterfactual	SM(L)- <i>kaaj<u>á</u></i> -ROOT- <i>a</i>
Future Counterfactual	SM(L)-kaajiɛ-ROOT-a
Negative Recent Past Counterfactual	te-SM(L)-káά-ROOT-iyε
Negative Far Past Counterfactual	te-SM(L)-káá-ROOT- <u>a</u>
Negative Future Counterfactual	te-SM(L)-k <u>áájí</u> ε-ROOT-a
Negative Future Counterfactual	te-SM(L)-kaa-ROOT-iyε

Take for instance the personal SM in the Past Imperfective.³² Even though the 2SM $v\underline{a}$ - is H underlyingly, they surface with a L tone in this tense.

Table 3.14. Tones of SMs in Past Imperfective

Frame (underlying tone)	Verb	Translation
SM-H	v <u>a</u> -kee-sisik-a	'they were rubbing'
SM-Ø	ko-kee-sisik-a	'we were rubbing'
SM-H	v <u>a</u> -kee-m <u>ú</u> t-a	'they were beating'
SM-Ø	ko-kee-m <u>ú</u> t-a	'we were beating'

In Table 3.14 there is a toneless verb *sisik-a*, 'rub'. Both the 2SM and the 2PL.SM surface with a L tone, and there is no H tone present in these verb forms. In the H verb $m\underline{\acute{u}}t$ -a, 'beat', only the lexical H tone of the verb root surfaces as H.

The future tense is an example of a TAM form where all the SMs are H (Table 3.15). The TAM prefix is also H, so there is upstep between the SM

³² The SMs that are underlyingly H are underlined in Table 3.14, but the absence of an accent indicates that the prefix is realized with a L surface tone in each case.

and the $j\underline{\acute{e}}$ - TAM prefix in the toneless verb $k\acute{o}$ - $^{\uparrow}j\underline{\acute{e}}$ - $s\acute{s}sik$ -a 'we will rub', even if the SM is underlyingly toneless. The last of a series of H tones is upstepped, provided it is followed by a toneless mora (see section 3.2.3.4). The tone of the SM becomes clear when a H OM is added, as in $k\acute{o}$ - $j\underline{\acute{e}}$ - $^{\uparrow}v\underline{\acute{a}}$ - $s\acute{s}sik$ -a 'we will rub them'. If the SM was not high here, there would have been three levels of tones here, since there is upstep before the OM $v\underline{\acute{a}}$ - '3PL'. However, there are only two levels here, as the SM also surfaces with a H tone.

For Future Perfective verbs with a H lexical tone, the first syllable of the verb stem is upstepped, as in $v\underline{\acute{a}}$ - $j\underline{\acute{e}}$ - $^{\uparrow}m\underline{\acute{u}}t$ -a 'they will beat'. There is no difference in surface realisation between the underlyingly H SM $v\underline{\acute{a}}$ - '3PL' and the underlyingly toneless SM ko- '1PL', $k\acute{o}$ - $j\underline{\acute{e}}$ - $^{\uparrow}m\underline{\acute{u}}t$ -a 'we will beat'. This is also observed with a H OM in Table 3.15.

Frame	Verb	Translation
SM-H	v <u>á</u> - [†] j <u>é</u> -sísik-a	'they will rub'
SM-Ø	kó- [↑] j <u>é</u> -sísik-a	'we will rub'
SM-H OM-H	v <u>á-jé</u> - [↑] k <u>ó</u> -sísik-a	'they will rub us'
SM-Ø OM-H	kó-j <u>é</u> - [↑] v <u>á</u> -sísik-a	'we will rub them'
SM-H	v <u>á-jé</u> - [↑] m <u>ú</u> t-a	'they will beat'
SM-Ø	kó-j <u>é</u> - [↑] m <u>ú</u> t-a	'we will beat'
SM-H OM-H	v <u>á</u> - <u>jé</u> - <u>kó</u> - [↑] m <u>ú</u> t-a	'they will beat us'
SM-Ø OM-H	kó- <u>jé</u> -v <u>á</u> - [↑] m <u>ú</u> t-a	'we will beat them'

Table 3.15. Tone of SMs in Future Perfective

For the TAM forms in which the personal SMs are all H, a grammatical H tone is inserted on the underlyingly toneless SMs. For the cases where all the personal SMs are realised as L, the H lexical tone is deleted in this analysis.

In summary, all personal SMs surface with a H tone in the Future, Present Imperfective, Perfective Subjunctive, Imperfective Subjunctive, and the Consecutive Past Subjunctive. All personal SMs surface with a L tone in the Far Past Perfective, Past Imperfective, Persistive, Situative, Hodiernal Counterfactual, Recent Past Counterfactual, and Far Past Counterfactual. In other TAM forms, the personal SMs surface with their underlying tone.

3.2.4.2 Melodic H tones

According to Odden and Bickmore (2014: 3), the so-called melodic H (MH) tones are found in all tonal Bantu languages. The rules for assignment of the grammatical tone on the verb stem are often quite complicated, see for instance Africana Linguistica, Volume XX, 2014. It is evident that MH tones are not just a matter of a tone that is linked to the suffix of the verb in these Bantu languages, but that the tonal assignment is sensitive to such categories

as tense, aspect, mood, lexical tone on the verb root, the presence or absence of OMs, or their tone, clause type and phonological properties.

The origin of the MH tones is unknown, but it has been suggested that the tone was originally part of a grammatical suffix (Meeussen 2014, Odden and Bickmore 2014), but the present complications of various patterns in different languages are difficult to explain based on this hypothesis. In this section the inflectional verb stem is marked with [], as it is the domain of the MH tone.

Even though the TBU is the mora in Mbugwe, as illustrated in section 3.2.1, the syllable also plays a part in tone assignment for MH tones. This is not unexpected, and is also true for varieties of Luyia, for example (Ebarb, Green, and Marlo 2014). Tonal rules may refer to both moras and syllables in the same language, and seemingly, especially when it concerns MH tones.

An overview of the verb forms and the various patterns that are found with a MH tone in Mbugwe is presented in Table 3.16.

Table 3.16. Overview of Melodic H patterns

Pattern	TAM form
1a) MH on the ultimate syllable	Situative
	Far Past Counterfactual
	Negative Hodiernal Perfective
	Negative Far Past Counterfactual
1b) MH on the ultimate syllable with root neutralisation	Perfective Subjunctive
2) MH on σ 2-ultimate syllable	Far Past Perfective
	Imperative Plural
	Negative Far Past Perfective
3) MH on penultimate syllable	Imperative Singular
4) MH on σ 2-penultimate syllable	Hodiernal Perfective

1a) and b) are grouped together because they both have a MH on the ultimate syllable. 1b) has a more complex pattern than 1a), and among other things, the lexical tone is neutralised in some cases. In 1) and 3), the MH only docks to one syllable of the verb, that is the ultimate/penultimate syllable of the verb stem, whereas in 2) and 4), the MH causes the whole verb stem from the second to the ultimate/penultimate syllable to be H. An overview of full paradigms of the various forms are found in Appendix 1.

Pattern 1a: MH on the ultimate syllable

In the Situative mood the verbs with no lexical tone have a MH tone on the Final Vowel -a. The TAM prefix for the Situative is $\underline{k\acute{e\acute{e}}}$ -, and the form is SM- $\underline{k\acute{e\acute{e}}}$ -(OM)-ROOT-(extension)-a. As seen in Table 3.17, the final -a is H in each of the toneless verbs. It may be translated as 'if' or 'when'; here the 'if' interpretation is more appropriate.

Table 3.17. MH on the ultimate syllable: Situative Ø verbs

Toneless verbs	Underlying	Translation
ko-k <u>éé</u> -[ref- <u>á</u>]		'if we pay'
ko-k <u>éé</u> -[sísik- <u>á</u>]		'if we rub'
ko-k <u>éé</u> -[sáak-er- <u>á</u>]		'if we look for'
ko-k <u>éé</u> -[tákan-er- <u>á</u>]		if we persuade
ko-k <u>é</u> -[ev- <u>á</u>]	/ko-k <u>éé</u> -ev- <u>á</u> /	'if we forget'
ko-ká-[amok- <u>á]</u>	/ko-kéé-amok- <u>á</u> /	'if we call'

Note that in the vowel-initial verbs, the tone of the TAM prefix is HL instead of HH. This could be a result of a rule that preserves the lexical tone of the verb. The underlying $k\underline{\acute{e}\acute{e}}$ -e becomes $k\underline{\acute{e}e}$ - on the surface.

For Situative verbs with a H lexical tone on the root, the pattern has one difference from the toneless verbs: the verb stem is all H. This is observed for instance in *ko-kéé-[tómám-ér-á]* 'if we serve' in Table 3.18.

Table 3.18. MH on the ultimate syllable: Situative H verbs

H verbs	Underlying	Translation
ko-k <u>éé</u> -[f- <u>á</u>]		'if we get'
ko-k <u>éé</u> -[m <u>ú</u> t- <u>á</u>]		'if we beat'
ko-k <u>éé</u> -[s <u>óó</u> ch- <u>á</u>]		'if we hate'
ko-k <u>éé</u> -[t <u>ó</u> mám-ér- <u>á</u>]		'if we serve'
ko-k <u>ź</u> -[<u>ź</u> n- <u>á</u>]	/ko-k <u>éé</u> - <u>ó</u> n- <u>á</u> /	'if we see'
ko-k <u>é</u> -[<u>é</u> m-y- <u>á</u>]	/ko-k <u>éé</u> - <u>é</u> m-i- <u>á</u> /	'if we make stand'
ko-k <u>é</u> -[<u>é</u> mbér-ér- <u>á</u>]	/ko-k <u>éé</u> - <u>é</u> mbér-ér- <u>á</u> /	'if we teach/sing for'

Since the Situative verbs without a lexical H tone are H only on the ultimate mora of the verb stem, there is reason to assume that the grammatical H tone is also assigned to the final mora on the underlyingly H verbs. A possible explanation for the fact that the whole verb stem is H is the 'plateau effect'. This refers to a tendency in Bantu languages to avoid "a valley between two peaks" (Kisseberth and Odden 2003: 67). One or several toneless TBUs are avoided between H tones. It is noteworthy that the plateau effect is not present in other

places in Mbugwe. Even if the first syllable of the verb stem is H due to HTS from a H TAM prefix or OM, only the ultimate syllable is H, as seen in Table 3.19.

Table 3.19. MH on the ultimate syllable: Situative sisik-a 'rub'

Frame	Situative	Translation
SM-Ø	ko-k <u>éé</u> -[sísik- <u>á</u>]	'if we rub'
SM-Ø OM-H	ko-k <u>éé</u> - [†] v <u>á</u> -[sísik- <u>á</u>]	'if we rub them'

The effect is only triggered if the verb has a lexical tone on the initial syllable, that is, if there is a H tone underlyingly on the initial syllable of the verb stem (see also Odden 1995a). Similar processes are observed with special tone rules with certain MH tones, as described for instance for Bakweri (Marlo and Odden 2014) and Kikamba (Roberts-Kohno 2014).

Another possible explanation for this pattern could be that the grammatical H tone that links to the ultimate syllable spreads left. Left spreading is quite common for MH tones, but not for other H tones in Bantu languages (Odden and Bickmore 2014: 8). This is however unlikely, as the final mora of the verb stem is upstepped if it is followed by a toneless mora, as in the phrase medial $va-k\acute{e}\acute{e}-[t\acute{o}m\acute{a}m-\acute{e}^{\dagger}r-\acute{a}]$ mon \acute{o} 'if they serve a lot' (Table 3.20).

Table 3.20. MH on the ultimate syllable: Situative tómám-er-a 'serve'

Frame	Situative	Translation
Phrase medial SM-H	v <u>a</u> -k <u>éé</u> -[t <u>ó</u> mám-é [†] r- <u>á</u>] mon <u>ó</u>	'if they serve a lot'

If the preceding H tones were a result of a left spread, it would not be expected for the final H mora, which is underlyingly H, to be upstepped (see section 3.2.3.4).

Other TAM forms with a similar pattern with a MH on the ultimate syllable are the Far Past Counterfactual, the Negative Hodiernal Perfective and Negative Far Past Counterfactual (see Appendix 1 and chapter 5).

In summary, the Situative and Far Past Counterfactual, as well as the Negative Hodiernal Perfective and Negative Far Past Counterfactual, have the same MH pattern: the MH docks on the ultimate syllable of the verb stem. In verbs with no lexical tone, only the ultimate syllable is H, but if the verb has a lexical H tone, the whole verb stem is H. It is suggested that this is a plateau effect

The Perfective Subjunctive also has a MH tone on the ultimate syllable of the verb stem. But there are some complications in this form, which will be discussed here. According to Meeussen (2014), the subjunctive (along with the imperative) often has a pattern that differs from other verb forms in Bantu.³³ It can be summarised as such:

The bare subjunctive in Bantu may reconstruct to a pattern with final H but L on preceding stem vowels, plus neutralisation of the root contrast to L. With an object prefix, however, the pattern changes to final H which spreads leftward, with no neutralisation of root tone.

(Odden and Bickmore 2014: 11)

This reconstructed pattern for the Perfective Subjunctive is very similar to what is found in Mbugwe. All SMs are H in the subjunctive, and the Final Vowel is $-\varepsilon$, which receives the MH tone. The pattern is (SM)-(OM)-ROOT-extension- ε .³⁴ In Table 3.21, the forms of Perfective Subjunctive verbs with no lexical tone and a SM are given.

Table 3.21. MH on the ultimate with root neutralisation: Perfective Subjunctive Ø verbs

Toneless verbs	Underlying	Translation
ν <u>ά</u> -[ref- <u>έ</u>]		'they should pay'
ν <u>ά</u> -[láan- <u>έ</u>]		'they should praise'
ν <u>ά</u> -[sísik- <u>έ</u>]		'they should rub'
v <u>á</u> -[sáak-er- <u>é</u>]		'they should look for'
v <u>á</u> -[tákan-er- <u>é</u>]		'they should persuade'
v <u>é</u> -[ev- <u>é</u>]	/v <u>á</u> -ev-ε/	'they should forget'
ν <u>ά</u> -[ámok- <u>έ</u>]		'they should call'

As seen in Table 3.21, the suffix $-\varepsilon$ is H, and the rest of the verb stem has no tone, except for the first mora which is occasionally the target of HTS. In the verbs with a lexical H tone, the suffix $-\varepsilon$ is also H. However, the lexical H tone is lost in Perfective Subjunctive verbs with no H OM. The forms are found in Table 3.22.

³³ From the abstract: "This article is a translation (with minor editorial changes) of Professor A.E. Meeussen's article 'De tonen van subjunktief en imperatief in het Bantoe', which originally appeared in Dutch in *Africana Linguistica* 1: 57-74 (1962).". Edited and translated by Maud Devos.

³⁴ The subjunctive may occur with only an SM, an SM and an OM, and only an OM.

Table 3.22. MH on the ultimate with root neutralisation: Perfective Subjunctive H verbs

H verbs	Underlying	Translation
ν <u>ά</u> -[f- <u>έ</u>]		'they should give'
ν <u>ά</u> -[m <u>u</u> t- <u>έ</u>]		'they should beat'
ν <u>ά</u> -[s <u>óo</u> ch- <u>έ</u>]		'they should hate'
ν <u>ά</u> -[t <u>ó</u> mam-er- <u>έ</u>]		'they should serve'
ν <u>ό</u> -[<u>ɔ</u> n- <u>έ</u>]	/v <u>á</u> - <u>ό</u> n-ε/	'they should see'
v <u>é</u> -[<u>é</u> mber-er- <u>é</u>]	/v <u>á</u> - <u>é</u> mber-er-ε/	'they should teach/sing for'

The initial syllable of the verb root is still underlined in these forms, as they are lexically H, but they are not realised with a H tone, as seen in $v\underline{\acute{a}}$ - $[\underline{mut}$ - $\underline{\acute{e}}]$ 'they should beat'. In $v\underline{\acute{a}}$ - $[\underline{s\acute{o}och}$ - $\underline{\acute{e}}]$ 'they should hate' and $v\underline{\acute{a}}$ - $[\underline{t\acute{o}mam}$ - \underline{er} - $\underline{\acute{e}}]$ 'they should serve' the H tone of the SM spreads one mora to the right.

The same pattern surfaces when there is a toneless OM in these forms. An example is $v\underline{\acute{a}}$ - $m\acute{o}$ - $[t\underline{o}$ mam-er- $\underline{\acute{e}}]$ 'they should serve him/her', where the verb stem also surfaces without a H tone except for the final suffix - ε (Table 3.23).

Table 3.23. MH on the ultimate with root neutralisation: Perfective Subjunctive H verbs with a Ø OM

H verbs	Underlying	Translation
ν <u>ά</u> - mό-[f- <u>έ</u>]		'they should give him/her'
v <u>ά</u> - mό-[m <u>u</u> t- <u>έ</u>]		'they should beat him/her'
v <u>á</u> - mó-[s <u>oo</u> ch- <u>έ</u>]		'they should hate him/her'
v <u>ά</u> - mό-[t <u>o</u> mam-er- <u>έ</u>]		'they should serve him/her'
ν <u>ά</u> -mw-[éev- <u>έ]</u>	/v <u>á</u> -mo-ev-ε/	'they should forget him/her'
<u>-</u> νά-mw-[áamok- <u>έ</u>]	/vá-mo-amok-ε/	'they should call him/her'

When a H OM is present, the verb root surfaces with a H tone on the initial syllable of the verb root, as usual (Table 3.24). In addition, the whole verb stem is H, as seen in $v\underline{\acute{a}}-k\underline{\acute{o}}-[t\underline{\acute{o}}m\acute{a}m-\acute{e}r-\acute{e}]$ 'they should serve us'.

Table 3.24. MH on the ultimate with root neutralisation: Perfective Subjunctive H verbs with a H OM

H verbs	Underlying	Translation
v <u>á</u> -k <u>ó</u> -[f- <u>é</u>]		'they should give us'
v <u>á</u> -k <u>ó</u> -[m <u>ú</u> t- <u>é</u>]		'they should beat us'
v <u>á</u> -k <u>ó</u> -[s <u>óó</u> ch- <u>έ</u>]		'they should hate us'
v <u>á</u> -k <u>ó</u> -[t <u>ó</u> mám-ér- <u>é</u>]		'they should serve us'
v <u>á</u> -k <u>ó</u> -[<u>ó</u> n- <u>é</u>]	/v <u>á</u> -k <u>ó</u> - <u>ó</u> n- <u>é</u> /	'they should see us'
v <u>a</u> -kw <u>é</u> -[<u>é</u> mbérér- <u>é</u>]	/v <u>á</u> - k <u>ó</u> -[<u>é</u> mbérér- <u>é</u>]	'they should teach/sing for us'

Again the H verb stem may be a result of the plateau effect, which was also observed in 1a).

When only an OM is present in the Perfective Subjunctive, and no SM, the lexical tone is kept both with a toneless and a H OM. The whole verb stem is H in these cases, as seen in Table 3.25.

Table 3.25. MH on the ultimate with root neutralisation: Perfective Subjunctive H verbs with only OM

H verbs	Translation
k <u>ó</u> -[t <u>ó</u> mám-ér- <u>έ</u>]	'should serve us'
mo-[t <u>ó</u> mám-ér- <u>é</u>]	'should serve him/her'

The presence and tone of the OM does not make a difference to the tone pattern for Perfective Subjunctive verbs with no lexical tone, and the only H tone on the verb stem is on the ultimate syllable in these cases, as seen in Table 3.26.

Table 3.26. MH on the ultimate with root neutralisation: paradigm of *takan-er-a* 'persuade' in the Perfective Subjunctive with SM and OM

Frame	H verbs	Translation
SM-H ОМ-H	v <u>á</u> -k <u>ó</u> -[tákan-er- <u>é</u>]	'they should persuade us'
SM-H OM-Ø	v <u>á</u> -mó-[takan-er- <u>έ</u>]	'they should persuadehim/her'
SM-Ø OM-Ø	kó-mó-[takan-er- <u>έ</u>]	'we should persuade him/her'
SM-Ø OM-H	kó- [†] vá-[tákan-er- <u>é</u>]	'we should persuade them'

In summary, the Perfective Subjunctive verbs in Mbugwe have a MH on the ultimate mora of the verb stem. For verbs with no H OM, the lexical tone is neutralised and all verb stems are realised as L. For verb forms with a H OM present, the whole verb stem is H in verbs with a H lexical tone, and if there is only an OM present and no SM, the whole verb stem is H in H verbs, and low with toneless verbs. For verbs without lexical tone, the presence of an OM makes no difference and only the final suffix $-\varepsilon$ is H.

The variation that is seen in the Perfective Subjunctive is difficult to explain with regular tone rules. Analogous to the other forms with a melodic H tone on the ultimate mora, it can be suggested that the lexical H tone of the verb root spread to the right in the cases where the whole verb stem is H. The forms found in Mbugwe correspond well with Meeussen's 1962 reconstruction for the subjunctive in PB. The only difference is that with verbs with no lexical tone, the presence of an OM makes no difference to the tone pattern in Mbugwe.

Pattern 2: MH on σ 2-ultimate syllable

In the Far Past Perfective form the whole verb stem from the second syllable to the ultimate has a MH tone. There is a TAM prefix *a*-, and the Final Vowel

-a, so the form is SM-a-(OM)-ROOT-a.³⁵ Examples of toneless verbs in the Far Past Perfective are found in Table 3 27

Table 3.27. MH on σ2-ultimate syllable: Far Past Perfective Ø verbs

Ø verbs	Underlying	Translation
kw-aa-[sis <u>í</u> k- <u>á</u>]	/ko-a-sis <u>í</u> k- <u>á</u> /	'we rubbed'
kw-aa-[saak- <u>é</u> r- <u>á</u>]	/ka-a-saak- <u>é</u> r- <u>á</u>	'we looked for'
kw-aa-[tak <u>á</u> n- <u>é</u> r- <u>á</u>]	/ko-a-tak <u>á</u> n- <u>é</u> r- <u>á</u> /	'we persuaded'
kw-e-[ev- <u>á</u>]	/ko-a-ev- <u>á</u> /	'we forgot'
kw-a-[am <u>ó</u> k- <u>á</u>]	/ko-a-am <u>ó</u> k- <u>á</u> /	'we called'

C-initial verb roots with a H lexical tone in the Far Past Perfective display the same pattern as the verbs without lexical tone. There is a MH tone from the second syllable of the verb stem to the ultimate syllable. The first syllable of the verb stem has a lexical H tone (Table 3.28).³⁶

Table 3.28. MH on σ2-ultimate syllable: Far Past Perfective H C-initial verbs

H verbs	Underlying	Translation
kw-aa-[f- <u>á</u>]	/ko-a-f <u>'</u> -a/	'we gave'
kw-aa-[m <u>ú</u> t- <u>á</u>]	/ko-a-m <u>ú</u> t-a/	'we beat'
kw-aa-[s <u>óó</u> ch- <u>á</u>]	/ko-a-s <u>óó</u> ch-a/	'we hated'
kw-aa-[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]	/ko-a-t <u>ó</u> mam-er-a/	'we served'

The V-initial verbs with a lexical H tone in the Far Past Perfective behave slightly differently from the C-initial verbs. The H of the initial syllable of the verb root seems to be lost when preceded by a toneless SM (Table 3.29).

Table 3.29. MH on σ2-ultimate syllable: Far Past Perfective H V-initial verbs

Far past perfective	Underlying	Translation
k-ว-[<u>ว</u> ท <u>á</u>]	/ko-a- <u>ź</u> n-a/	'we saw'
kw-e-[<u>e</u> m-y- <u>á</u>]	/ko-a- <u>é</u> m-i-a/	'we caused to stand'
kw-e-[<u>e</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/ko-a- <u>é</u> mber-er-a/	'we taught/sang for'

In the vowel-initial verbs, the first mora of the verb stem coalesces with the vowels of the prefixes *ko*- '1PL.SM' and *a*- 'PAST'. The three underlying vowels coalesce to one long vowel, which surface as low, even though the verb-initial vowel is H. Why the H tone of the initial syllable is deleted is unclear at this point, and needs further research.

Other TAM forms with this MH pattern are the Imperative Plural and the Negative Far Past Perfective (see Appendix 1).

³⁵ The prefix appears to be toneless, but does not block HTS, as seen in the form $v\underline{\acute{a}}$ - $\overset{\uparrow}{a}$ - $\overset{\downarrow}{b}$ - $[tak\underline{\acute{a}}n$ - $\overset{\downarrow}{e}r$ - $\overset{\downarrow}{a}]$ 'they persuaded us' with a H SM.

 $^{^{36}}$ The monosyllabic verb $f\dot{a}$ has a H lexical tone, which is marked here by an underlined acute accent after the [f] underlyingly, as there is no vowel in the verb root.

In summary, in the Far Past Perfective, the Imperative Plural and the Negative Far Past Perfective, the whole verb stem from the second syllable has a MH tone. Since both verbs roots with a H initial tone and those without lexical tone display the same pattern, this is not considered to be a result of the plateau effect or spreading; rather, it is simply stated that each mora from the second syllable of the verb stem has a MH tone.

Pattern 3: MH on penultimate syllable

Below are the tonal patterns for the Imperative Singular forms with no lexical tone (Table 3.30).³⁷

Table 3.30. MH on penultimate syllable: Imperative Singular Ø verbs

Imperative	Translation
[ref- <u>á</u>]	'pay!'
[la <u>á</u> n-a]	'bid farewell!'
[saak- <u>é</u> r-a]	'look for!'
[takan- <u>é</u> r-a]	'persuade!'
[ev- <u>á</u>]	'forget!'
[am <u>ó</u> k-a]	'call!'

As seen in Table 3.30, the verbs without a lexical tone have a H tone in the final (in bimoraic verb stems) or penultimate mora (in other verbs). The H tone is a grammatical tone, which is associated with the penultimate mora of the verb stem, except if the verb stem only has two moras (as in ref- $\underline{\acute{a}}$ 'pay'), where it is linked to the final mora. There seems to be a prohibition against linking the H tone to the first mora of the verb stem.

The Imperative Singular verbs with a lexical H tone in Mbugwe are found in Table 3.31. They display a pattern in which the whole stem from the initial H syllable to the penultimate mora is H.

Table 3.31. MH on penultimate syllable: Imperative Singular H verbs

Imperative	Translation
[f- <u>á</u>]	'give!'
[m <u>ú</u> t-a]	'beat!'
[s <u>éé</u> r [↑] - <u>é</u> r-a]	'help!'
[fw <u>éé</u> r-ér-y- <u>á</u>]	'dismiss!'
[t <u>ó</u> má [†] m- <u>é</u> r-a]	'serve!'
[<u>ź</u> n-a]	'see!'
<u>[éé</u> mbér [↑] - <u>é</u> r-a]	'teach/sing for!'

 $^{^{37}}$ Unfortunately, no monosyllabic verbs without a lexical H tone were found, except j-a 'come' which has a suppletive imperative form.

As observed in Table 3.31, there are exceptions for the shorter verb stems, in this case for f- $\underline{\acute{a}}$ 'give', which already has a lexical H tone on the single mora of the verb stem. In the shorter verbs the tones are the same as the Infinitive (f- $\underline{\acute{a}}$ 'give!', $m\underline{\acute{u}}t$ -a 'beat!'). In the longer verb stems, such as $s\underline{\acute{e}}\underline{\acute{e}}$ 'r- $\underline{\acute{e}}r$ -a 'help!', the only tonal difference from the Infinitive is that the penultimate mora is upstepped. This indicates that the H tone is not spread from the first syllable of the verb, as in the infinitive, but there is a separate H tone on the penultimate mora.

In the longer verb stem $[t\underline{\acute{o}}m\underline{\acute{a}}^{\dagger}m\underline{\acute{e}}r-a]$ 'serve!', it becomes clear that it is not just the penultimate mora which is H, but the whole verb stem, except for the final mora. This is attributed to the plateau effect, which was observed to play a role in the forms in 1a) and b).

In the causative H verb, $[fw\underline{\acute{e}\acute{e}r}-\acute{e}r-y-\acute{a}]$ 'dismiss!', the underlying form is $/f\dot{u}er-er-i-a/$. The penultimate mora was originally the causative -i, which would have received the H grammatical tone. However, the vowel is glided and becomes -y before the FV -a. But the H tone is preserved and realised on the FV as $-\acute{a}$. This is a known tonal effect of the causative extension, according to Marlo (2013, 182-183), as the causative is underlyingly a vowel (i-) which is usually glided.

In summary, the imperative singular form in Mbugwe has a grammatical H tone which is linked with the penultimate mora of the verb stem. In toneless verbs this is the only mora that surfaces with a H tone, whereas in H verb stems, the whole stem becomes H, as a result of the plateau effect also seen in 1a) and b).

Note that the Imperative Plural has a different pattern than the Imperative Singular. It has a MH tone from the second syllable to the ultimate syllable both for toneless verb roots and for verb roots with an initial H tone. Historically, the suffix may have been -i, which became -ey by fusing with the FV -a, and as such it could have originally belonged to pattern 4 (see below), and not pattern 2, as it does synchronically.

Pattern 4: MH on σ 2-penultimate syllable

The Hodiernal Perfective TAM form ends in the suffix $-iy\varepsilon$. In Table 3.32, Hodiernal Perfective verbs with no lexical tone and a toneless SM are listed. Thre is a zero TAM prefix, which is not marked here.

Table 3.32. MH on σ 2-penultimate syllable: Hodiernal Perfective Ø verbs with Ø SM (1PL).

Ø verbs	Underlying	Translation
ko-[ref- <u>ί</u> yε]	/ko-ref-íyɛ/	'we have paid'
ko-[laan- <u>ί</u> yε]	/ko-laan-íyɛ/	'we have bid farewell'
ko-[saak- <u>éé</u> ɛ]	/ko-saak-er-iyɛ/	'we have looked for'
ko-[tak <u>á</u> [†] n- <u>í</u> ryε]	/ko-takan-er-iyɛ/	'we have persuaded'
kw-e[ev- <u>ί</u> yε]	/ko-ev- <u>ί</u> yε/	'we have forgotten'
kw-a[am <u>ó</u> k- [↑] <u>í</u> yɛ]	/ko-amok- <u>í</u> yɛ/	'we have called'

In the shorter verb stems, the grammatical tone only surfaces on the penultimate mora of the verb stem, as in ko-[ref- $\underline{i}y\varepsilon]$ 'we have paid' and ko- $[laan-\underline{i}y\varepsilon]$ 'we have bid farewell'. In ko- $[saak-\underline{\acute{e}}\varepsilon]$ 'we have looked for', the applicative morpheme -er is merged with the TAM suffix - $iy\varepsilon$, creating the ending - $\underline{\acute{e}}\varepsilon$. In the longer forms, only the first syllable of the verb stem is toneless, and the rest is H: ko- $[tak\underline{\acute{a}}^{\dagger}n$ - $\underline{\acute{i}}ry\varepsilon]$ 'we have persuaded'. The proposed analysis is therefore that there, the whole verb stem from the second syllable to the penultimate mora receives a MH tone, analogous to Pattern 2 above.

There are two different patterns for the toneless verbs in this form, and they will be investigated in turn. In forms with no H SM or OM, the second syllable of the verb stem is also H, as seen in Table 3.33.

Table 3.33. MH on σ2-penultimate syllable: Hodiernal Perfective *takan-er-a* 'persuade' with no H SM or OM

Frame	Hodiernal Perfective	Underlying	Translation
SM-Ø	ko-[tak <u>á</u> †n- <u>ί</u> ryε]	/ko-takan-er-iyɛ/	'we have persuaded'
SM-Ø OM-Ø	ko-mo-[tak $\underline{\acute{a}}^{\uparrow}$ n- $\underline{\acute{i}}$ ry ε]	/ko-mo-takan-er-iyɛ/	'we have persuaded him/her'

When there is a H tone present in either the SM or OM, the verb stem only has a MH on the penultimate, and not the preceding syllables of the verb stem, as seen in Table 3.34. Therefore, these verb forms belong to Pattern 3, and display the same pattern as Imperative Singular verbs: a MH tone on the penultimate syllable of the verb stem. The reason for this variation is not known at this point.

Table 3.34. MH on penultimate syllable: Hodiernal Perfective *takan-er-a* 'persuade' with a H SM or OM

Frame	Hodiernal Perfective	Underlying	Translation
SM-H	v <u>á</u> -[tákan- <u>í</u> ryε]	/v <u>á</u> -takan-er-iyε/	'they have persuaded'
SM-H OM-H	v <u>á</u> - [†] k <u>ó</u> -[tákan- <u>í</u> ryε]	/v <u>á</u> -k <u>ó</u> -takan-er-iyε/	'they have persuaded us'
SM-H OM-Ø	v <u>á</u> -mó-[takan- <u>í</u> ryɛ]	/v <u>á</u> -mo-takan-er-iyε/	'they have persuaded him/her'
SM-Ø OM-H	ko-v <u>á</u> -[tákan- <u>í</u> ryε]	/ko-v <u>á</u> -takan-er-iyɛ/	'we have persuaded them'

In the Hodiernal Perfective verbs with a H in the lexical root, the whole verb stem is H except for the final mora (Table 3.35). For these verbs, the vowel-initial verb forms behave differently and are listed separately.

Table 3.35. MH on σ 2-penultimate syllable: Hodiernal Perfective H verbs C-initial with SM 1PL

H verbs	Underlying form	Translation
ko-[f- <u>έέ</u> γε]	/ko-f <u>'</u> -iyε/	'we have given'
ko-[m <u>ú</u> [↑] t- <u>ί</u> yε]	/ko-m <u>ú</u> t-ίyε/	'we have beaten'
ko-[s <u>óó</u> [†] ch- <u>ί</u> ryε]	/ko-s <u>óó</u> ch-iyɛ/	'we have hated'
ko-[s <u>éé</u> ↑r- <u>é</u> yɛ]	/ko-s <u>éé</u> r-er-iye/	'we have helped'
ko-[t <u>ó</u> m <u>á</u> [†] m- <u>éé</u> ε]	/ko- <u>tó</u> mam-er-iyɛ/	'we have served'

In $ko-[f-\underline{\acute{e}\acute{e}}ve]$ 'we have given', there is a lexical H tone and a grammatical H tone, and the first syllable of the verb stem is H on the surface. In verb stems with three syllables, such as $ko-[m\underline{\acute{u}}^{\dagger}t-\underline{\acute{t}}ve]$ 'we have beaten' and $ko-[s\underline{\acute{o}}^{\dagger}ch-\underline{\acute{t}}rye]$ 'we have hated', the first and second syllable is H, and the last syllable is toneless. In $ko-[t\underline{\acute{o}}m\underline{\acute{a}}^{\dagger}m-\underline{\acute{e}}e]$ 'we have served (earlier today)', the second syllable of the verb stem is also H, and here it is clear that the whole verb stem except for the final mora is H. The H tone on the second syllable is not a result of HTS, as it is followed by another H tone. Rather, it is assumed that it is a grammatical H tone in this case.

For H verbs, it makes no difference whether there is a H SM or OM present, as shown in Table 3.36

Table 3.36. MH on σ2-penultimate syllable: Hodiernal Perfective H verb *tomam-er-a* 'serve'

Frame	Hodiernal Perfective	Underlying	Translation
SM-H	v <u>á</u> -[t <u>ó</u> m <u>á</u> [†] m- <u>éé</u> ε]	/v <u>á</u> -t <u>ó</u> mam-er-iyε/	'they have served'
SM-H OM-H	v <u>á</u> -kó-[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ε]	/v <u>á</u> -k <u>ó</u> -t <u>ó</u> mam-er-iyε/	'they have served us'
SM-Ø OM-Ø	ko-mo-[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ɛ]	/ko-mo-t <u>ó</u> mam-er-iyɛ/	'we have served him/her'

In vowel-initial verbs with a H lexical tone in the Hodiernal Perfective form, the lexical initial H tone of the verb root is lost, as in the Far Past Perfective forms. However, the verb stem is H from the σ 2-penultimate syllable.

Table 3.37. MH on σ2-penultimate syllable: Hodiernal Perfective H verbs V-initial

H verbs	Underlying	Translation
ku-[<u>u</u> ν <u>á</u> -yε]	/ko- <u>ú</u> val-iyɛ /	'we have carried'
ko-[<u>o</u> ré [†] k <u>éé</u> -y-ryε]	/ko- <u>ó</u> rek-er-i-iyɛ	'we have asked'
kw-e[<u>e</u> mb <u>é</u> †r- <u>éé</u> ɛ]	/ko- <u>é</u> mber-er-iyɛ	'we have taught/sung for'

The vowel-initial forms are not realised with a H tone initially. Again, this could be a case of Reverse Meeussen's rule, as seen in 2). It could also be due to vowel coalescence with the toneless SM *ko*- '1PL'. Alternatively, there is a restriction against creating a rising tone. More research is needed in order to identify the tone rules for the initial mora of vowel-initial forms.

In summary, the Hodiernal Perfective form has the following patterns for MH tone assignment: verbs with no lexical tone and no H tone in the SM or OM have a MH tone on the second to penultimate syllable of the verb stem. If there is a H tone in the SM or OM, only the penultimate syllable is H, and the pattern is the same as Pattern 3, the Imperative Singular pattern. For H verbs, the whole verb stem except for the final mora is H. H verbs with an initial vowel lose their lexical H tone, probably due to vowel coalescence and simplification of the rising tone.

3.2.4.3 Discussion and summary of grammatical tones

In this section it has been demonstrated that some TAM forms have a MH tone on the ultimate or penultimate syllable or mora of the verb stem. In some cases, the whole verb stem from the second syllable onwards is H. In verbs with a H lexical tone this is attributed to the 'plateau effect' but in some cases, the whole verb stem from the second syllable onwards is H even though there is no lexical H tone on the verb root. In the subjunctive and the Hodiernal verbs, the tone of the SM and/or OM, and even the presence of an OM, influence the pattern of the MH.

One interesting observation concerning the verb forms with grammatical tone in Mbugwe is that many of them express a modal category, such as imperative, situative, counterfactual, and subjunctive. The only verb forms with no modal category marked are the Hodiernal Perfective forms, and the Far Past Perfective verbs. They do however mark different remoteness degrees of past tense.

It is common for MH tones in Bantu languages to dock at certain positions on the verb stem. The penultimate and ultimate syllable of the verb stem are typical positions in languages with lexical tones of verbs, as well as the first and second syllable of the verb stem (Odden and Bickmore 2014: 6). As such, Mbugwe displays patterns that are typical for Bantu languages.

There seems to be a restriction against the grammatical tone creating contour tones (rising or falling tones), so that a long vowel will always receive or fail to receive a H tone as a unit. Therefore, the syllable as a unit is more relevant when discussing grammatical tone than lexical tone, although verbal lexical tone is also linked to the whole initial syllable. This is also observed in the upstep process in Mbugwe, where an upstepped mora always causes the whole syllable to be upstepped (see section 3.2.3).

The regular tonal processes in Mbugwe also occur with grammatical tones. However, there are some additional tonal rules in play, such as the plateau effect. The theoretical implications of this are beyond the scope of this work, but are worth noting for future research.

In the following chapters, a melodic H tone will be glossed on the verb, in order to highlight the fact that the tone is a grammatical morpheme. It will be done by using a backslash after the verb stem, and the name of the TAM form after the backslash. This is done both in cases where the TAM form is marked with a segmental morpheme, as well as when it is not. For instance, a Far Past Perfective may be glossed like this: $v\acute{a}$ -a- $f\acute{e}t$ -a '2SM-PST-go-FV\FPST'.

This study of grammatical tone has focused on the verbal system in Mbugwe. There are also other grammatical tones, for instance in nominal constructions.

3.3 Summary

This chapter has presented a basic analysis of tone in Mbugwe. After having defined and described tone in a cross-linguistic perspective, and after introducing the theoretical framework for the study, tone in Mbugwe was described and analysed. The phonemic status of tones in Mbugwe and what constitutes the TBU were established. An analysis was then given for lexical tone for nouns and verb. The important tonal processes such as H tone spread, final lowering, downdrift and upstep were then described, before grammatical tones of various TAM forms were analysed. The present tonal analysis is not comprehensive, but is a first description of the tonal system of Mbugwe, which enables an analysis of the Mbugwe nominal and verbal system. In the next chapter, nominal morphology will be presented, as the noun class system makes for a lot of agreement both within the NP and with the verb, in the form of subject and object markers.

4 Nominal morphology

The nominal morphology of Mbugwe is the topic of this chapter. The nominals include nouns and personal pronouns, as they usually function as the head of a noun phrase and do not agree with any other nominal element. Nominal modifiers are called adnominals here, following Maho (1999: 100). They modify the head noun of the noun phrase, and include parts of speech such as adjectives, the associative marker, possessive pronouns, quantifiers, demonstratives and numerals. They agree with the noun they are modifying.

The organisation of the chapter is as follows: section 4.1 is an introduction to the noun class system in Bantu languages in general, for the benefit of readers not familiar with it. In section 4.2, nouns in Mbugwe are introduced and exemplified, including the noun class system. The locative suffix is presented in section 4.2.1.11. Personal pronouns are presented in section 4.2.1, and in section 4.3, various adnominals such as adjectives, the associative marker, possessive pronouns, demonstratives and numerals are discussed.

4.1 Noun classes in Bantu languages

Nouns in Bantu usually consist of a prefix and a stem.³⁸ The prefix of a noun indicates which noun class it belongs to. Some Bantu languages also have what is called a pre-prefix or augment, which is not found in Mbugwe. A typical Bantu language has between 15-21 noun classes (Nurse 2006: 682). Noun stems in Bantu languages often have the structure CV(V)CV, whereas noun prefixes are CV, and less commonly only a vowel or only a nasal (Hyman 2003: 44). In Table 4.1 the reconstructed noun classes for Proto-Bantu, based on Meeussen (1967) and Maho (2006) are found. The vowels are given in Meeussen's notation, where <į> is the highest front vowel and <u> is the second degree back vowel.

³⁸ In this study nouns are referred to as noun stems, and not noun roots. This is due to the fact that many nouns are derived historically. This is common practice in Bantu studies.

Table 4.1. Noun classes in Proto-Bantu

Class	Prefix	Typical semantic grouping	
1	*mu-	humans	
1a	*Ø-	kinship terms, personified animals	
2	*ba-	plural of class 1	
3	*mu-	trees, plants, inanimates	
4	*mį-	plural of class 3	
5	*į-	miscellaneous, augmentatives	
6	*ma-	plural of classes 5, 11,14 and 15	
7	*kį-	things, artifacts, augmentatives	
8	*bį-	plural of class 7	
9	*n-	animals	
10	*n-	plural of class 9	
11	*du-	long thin things	
12	*ka-	small things, diminutives	
13	*tu-	plural of class 12	
14	*bu-	abstracts, mass nouns	
15	*ku-	infinitives, some body parts	
16	*pa-	locatives, near or explicit	
17	*ku-	locatives, remote or general	
18	*mu-	locatives, inside	
19	*pį-	diminutives	
23	*į-	locative, unspecified.	

Class 1a is a class of human nouns with no noun prefix in the singular, but class 2 prefix in the plural. Classes 20-22 were originally reconstructed for PB, but are now thought to be later additions, and are therefore not included in this table. The noun classes in PB can be divided into 6 pairs consisting of a singular and a plural class (1/2, 3/4, 5/6, 7/8, 9/10, and 12/13). The six pairs are assumed to share semantic characteristics, but for many classes it is difficult to delimit the semantic criteria (Schadeberg 2003a: 114ff). In PB, class 6 was the plural for class 11, 14 and 15, in addition to class 5. Class 15 was the infinitive, but it also had other members, mostly body parts (see also Maho 1999: 78-84). There were three locative classes (16-18), and they usually had only one member, the word for 'place' (Schadeberg 2003a: 116). The pair 12/13 and 19 were diminutive classes (indicating something small), and 5/6 or 7/8 were the augmentative (indicating large things) in PB.

4.2 Nominals in Mbugwe

In this section, the nominals in Mbugwe are discussed. First, the nouns and noun classes are presented (4.2.1), including the locative suffix (4.2.1.11). The personal pronouns are listed in 4.2.1.

4.2.1 Nouns and noun classes

This section presents nouns in Mbugwe. Each noun is lexically assigned to a specific noun class. Mbugwe has 17 noun classes, which are numbered in accordance with PB. Mbugwe can be said to have a "canonical noun class system" (Katamba 2003: 108), with 6 classes of singular and plural pairs (1/2, 3/4, 5/6, 7/8, 9/10, 12/19) and a few other classes with either no plural (15a, 16, 17) or a plural of a different pair, as is common in Bantu languages (11/10, 14/6, 15/6). Class 18 was not found in this study, but Lizzie Poole (SIL. p.c.) reports finding the prefix in demonstratives referring to something being inside something. The prefix is mu-. It is not included in this study, as it was not found in the present data.

The singular-plural pairs are listed in the far right column in the table below. The pair 12/19 for diminutives is uncommon in Bantu languages, as is 15a for infinitives. Each pair of classes is described and exemplified below. For class 9 and 10, the nasal noun prefix is a homorganic nasal, which assimilates to the following consonant. Allophones of the noun class prefix which are not a result of phonological processes such as glide formation, vowel assimilation and vowel lengthening are also given in Table 4.2.

Table 4.2. Noun classes in Mbugwe

Class	Prefix	Allomorphs	Mbugwe	Translation	SG/PL
1	mo-		mo-chááni	'blacksmith'	1/2
1a	Ø-		Ø-máwe	'mother'	1a/2
2	va-		va-chááni	'blacksmiths'	1/2
3	mo-	mu-, m-	mo-té	'tree'	3/4
4	me-		me-té	'trees'	3/4
5	Ø-, ri-, (i-)		Ø-túúmbé	'chair'	5/6
6	ma-		ma-túúmbé	'chairs'	5/6
7	ke-	ch-	ke-maka	'thing'	7/8
8	vi-	vj-	vi-maka	'things'	7/8
9	N-/ Ø-	ny-, nj-	m-pérá	'rhinoceros'	9/10
10	N-/ Ø-	ny-, nj-	m-pérá	'rhinoceroses'	9/10
11	lo-		lo-dí	'rope'	11/10
12	ka-		ka-damá	'small calf'	12/19
14	0-		o-shó	'face'	14/6
15	ko-		ko-tó	'ear'	15/6
15a	0-		o-múta	'to beat'	INF
16	fa-		faa-nto	'place' (near)	-
17	ko-		koo-nto	'place' (far)	-
19	fi-/sha-		fì-damá	'small calves'	12/19

As in the noun classes which are reconstructed for PB, it is possible to find some coherence in the semantics of the members of each noun class. But there are always cases where the semantic coherence of a class has been blurred, as new items have been added and the system evolves over time (Dingemanse 2006). For each noun class, the typical members will be exemplified, as well as some exceptions when relevant.

4.2.1.1 Noun class 1/2

The prefix for class 1 is *mo*- and for 2 it is *va*-. As in PB, there is a subclass 1a in Mbugwe, which takes a \mathcal{O} - prefix in the singular, and the class 2 prefix in the plural. Noun class 1/2 contains only human referents in Mbugwe, as in PB. Quite a few kinship terms belong to this group, for instance \mathcal{O} -babá 'father', \mathcal{O} -aiko 'father (respectful, said by male to for instance father in-law), \mathcal{O} -walə 'relative', \mathcal{O} -mamey 'maternal uncle', \mathcal{O} -fiane 'sister in-law (for females)', \mathcal{O} -mami 'grandfather', \mathcal{O} -mawe 'mother'. The suppletive forms such as \mathcal{O} -séévə 'their father', \mathcal{O} -nyiná 'his/her mother', and \mathcal{O} -nyináávə 'their mother' also belong to this class. For some of these forms, a possessive element is recognisable (-avó, 3PL POSS), but the morphemes are now part of the lexicalised suppletive forms. Some nouns denoting humans belong to other

classes, for instance \emptyset -rafi 'friend' (cl. 5), \emptyset -korogoto 'giant, big and strong person' (cl. 5), \emptyset -roombo 'sibling' (cl. 5). Such words are also found in other Bantu languages, for instance rafiki 'friend' is class 5 in Swahili.

4.2.1.2 Noun class 3/4

The noun prefix for class 3 is mo- and me- for class 4. Noun class 3/4 mostly consists of plants in Mbugwe, but also things made from plants such as mo-ri 'rope' and mo-riésa 'stick'. Certain body parts also belong to this class, such as mo-twé 'head', mo-nwe 'finger', and mo-nyóóku 'bellybutton'. Times of day also belong here, such as mo-tóóndo 'morning' and moo-nsé 'noon'. More surprisingly, some human referents also belong to class 3/4, such as mo-siyá 'fiancée', mo-suungati 'chief, king' and mo-sokolo 'fool'. According to Poole (2017a), nouns in class 3 starting with a NC cluster have the prefix mu- instead of mo-, and in some nouns starting with [s] the prefix is reduced to a syllabic nasal [m]. One exception is the noun mu-so 'crowd', which some speakers pronounce [mso] and others [muso]. The vowel change to mu- could be an influence from Swahili, where the class 3 prefix is mu-. This variation and the reason for it is a subject for further research.

4.2.1.3 Noun class 5/6

For noun class 5, there are two possible prefixes in Mbugwe: in addition to the most common zero prefix. ri- and i- also occur. Mous (2004: 15) notes that the prefix ri- occurs in front of certain vowel-initial nouns, but not all, and some nouns have an optional *i*- prefix. In the FLeX database, ten nouns have the optional i- prefix, and all of them start with a consonant. There are some vowel-initial roots that start with a <y>, and in some cases this is analysed as an underlying i- prefix. Examples of these are yoonda, which is underlyingly /i-onda/ 'field' with the plural moonda 'fields', and yaa, which is underlyingly /i-aɔ/ 'tooth' with the plural maɔ. 39 There are also some nouns where the $\langle y \rangle$ may be root-initial, such as \emptyset -yoló 'sky' from PB *gòdò 'sky, top'. Only a few nouns have the prefix ri-, and they are all reconstructed with an initial *ji-CV in PB.⁴⁰ They are *ri-iko* 'stove, cooking fire, kitchen' from PB **jikò* 'fireplace', ri-ina 'name' from PB *jinskà 'name', and ri-iso 'eye' from PB *jicò 'eye'. The plural of these are ma-iko, ma-ina and ma-iso. The nouns riyó 'voice' (PB *jói) and rinó 'mushroom', which seem to take the ri- prefix, become ma-rivó and ma-rinó in the plural, so the ri- prefix is to be considered a part of the noun stem in these cases.

Reconstructions for PB for class 5 vary, and both *i- and *li- are suggested (Katamba 2003: 104) and it is not uncommon to have both a zero prefix and a reflex of *li- in class 5. For example Ganda (JE15) has \mathcal{O} - and li- as class 5 prefixes (Katamba 2003: 112). In Kagulu (G12) there is variation between i-

³⁹ The plural form seems to have a short vowel instead of a long vowel.

⁴⁰ I am grateful to Lotta Aunio for pointing out this fact.

and *di*- (Petzell 2008). Guthrie (1967: 120) also observes the variation, but states that the V-prefix is used for vowel-initial stems, and the CV prefix with consonant-initial stems. However, this is not the case in Kagulu, or in Mbugwe, as observed above.

The semantic criteria for class 5/6 is listed as 'miscellaneous' in Table 4.1. It contains a collection of things, body parts, plants and small animals, among other categories. Perhaps since the prefix is often zero, mass nouns tend to be assigned to this class. Some mass nouns only exist in the plural class 6, such as *ma-áje* 'water', *ma-sii* 'milk', and even abstracts such as *ma-kévá* 'sadness' and *ma-kimereryo* 'agreement, promise, contract' belong to noun class 6.

4.2.1.4 Noun class 7/8

The noun class prefix for class 7 is *ke*- and for 8 it is *vi*-. Noun class 7/8 also contains a plethora of different kinds of nouns semantically. Body parts such as *ke-kókóla* 'elbow', *ke-ng'ósɔ* 'knuckles', and *ke-verɔ* 'thighs' belong to this class, as well as small animals and insects such as *ke-dákó* 'duck', *ch-ora* 'frog' and *ke-rómi* 'bed-bug'. The word for 'thing', *ke-maka*, also belongs here, as well as artifacts such as *ch-omo* 'sling', *ch-uru* 'nest', *ke-tóóré* 'mortar' and *ke-buundé* 'tobacco pipe'.

4.2.1.5 Noun class 9/10

For class 9/10 the most common prefix in Mbugwe is a nasal, given underlyingly as N-, "unspecified homorganic nasal" (Hyman 2003: 49). That is, the nasal is always assimilated to the initial consonant of the noun stem. Examples of this are n-sóvé 'leopard', and m-pítí 'hyena'. Many members of class 9/10 are animals, and they usually have the nasal prefix, such as the ones already mentioned. Class 9/10 also has some members that do not take the nasal prefix, but have a zero prefix, for instance \emptyset -biró 'heat'. Many of these words are loan words from Swahili, and also belong to class 9/10 or class 5 (with no prefix) in Swahili. Examples are \emptyset -kódi 'tax', \emptyset -dalili 'sign' and \emptyset -farási 'horse'.

4.2.1.6 Noun class 11

The noun class prefix for class 11 is *lo-*. Class 11 is described as containing 'long, thin things' in PB, but this is true only to a certain extent for Mbugwe. It does contain nouns like *lo-di* 'rope', *lo-nyɛɛnjɛ* 'thread' and *lo-jéére* '(a strand of) hair', *lo-réme* 'tongue, and *lo-shó* 'knife'. Nouns that do not fit in with the semantic category of 'long, thin things' are *lo-tangéy* 'toilet', *lo-tá* 'phlegm' and *lo-óje* 'water hole, pool of rain water', and abstract nouns such as *lo-ori* 'war', *lo-táámbɔ* 'trip', and *lo-óloó* 'dusk'. Nouns in class 11 all take the class 10 plural. For instance, the plural for *lo-di* 'rope' (cl. 11) is *n-di* 'ropes' (cl. 10).

⁴¹ These words are in turn borrowed from Persian, Hindi or Arabic into Swahili.

4.2.1.7 Noun class 12/19

Class 12/19 is different from the other noun classes, as any noun can be put in this class in order to make a diminutive. This class could very well have been described as nominal derivation instead of as separate noun classes, but is given here with the noun classes, numbered according to Bantu tradition.

The noun prefix for class 12 is *ka*-. There are no inherent members of this class in Mbugwe, but typically, animal offspring are put in this class. For instance, *ka-nyaaú* 'kitten' from *nyaaú* 'cat' (class 9/10). However, quite a few animal offspring, such as *n-kókó* 'chicken' (class 9/10), *n-deeru* 'goat kid' (class 9/10) and *n-damá* 'calf' (class 9/10) are lexemes of their own. In the diminutive, these lexemes get the meaning 'small chicken' (*ka-kókó*), 'small goat kid' (*ka-deeru*) and 'small calf' (*ka-damá*).

Class 19 has two allomorphs: fi- and sha-. According to Lizzie Poole, SIL (p.c.), there is a tendency for vowel-initial noun stems to take the sha- prefix, but it also occurs on many consonant-initial stems. Mous (2004: 4) suggests that there is allophonic variation, and refers to the sound changes from PB py > fy > sh which have happened in Mbugwe according to Dempwolff (1915-1916: 12). For instance, the word lo-shó 'knife' (cl. 11) is probably a reflex of PB * $pi\acute{o}$, 'knife', which is preserved in the plural form m- $py\acute{o}$ 'knives' (cl. 10) (Mous 2004: 4). The variation in the prefixes fy- and sha- may therefore represent different stages in the historical development. It is still unclear, however, where the vowel [a] in sha- comes from. For class 19, the prefix *pi- is reconstructed for PB (Meeussen 1967: 98). In Rangi (F33), the prefix is fi-(Stegen 2011: 15), and in Nilamba (F31) and Nyaturu (F32) the form of the prefix is fi-(Maho 1999: 303-304).

The pair 12/19 for single and plural diminutives is uncommon in Bantu, but characteristic for F30 languages, according to Maho (1999: 187). It also occurs in certain JE40 languages, such as Ikoma (JE45), Ngurimi (Ngoreme) (JE401), and Ikizu (JE402) (Aunio et al. Forthcoming). The class pair 12/13 is more common for diminutives, according to Meeussen (1967: 103), who comments that class 19 could be used to indicate 'very small', i.e. a stronger diminutive (as it is in for example Lega (D25), where the form *si-ntu* 'tiny person' (cl. 19) contrasts with *ka-ntu* 'small person' (cl. 12) (Botne 2003: 430), also referenced in Di Garbo (2014: 149-150). Class 19 is also used as a singular diminutive in some Northwest Bantu languages, with class 13 as the plural (Gibson, Rozenn and Marten 2017).

When the diminutive prefix is added, the original noun class prefix is retained for classes 3/4, 7/8, 11, 14 and 15. For example, a noun from class 3 such as *mo-tiikó* 'wooden spoon' is *ka-mo-tiikó* 'small wooden spoon'. For classes 1/2, 5/6, and 9/10, the original class prefix is deleted, and only the class 12/19 prefix is added to the noun stem, so that a class 1 noun such as *mo-dima* 'fool' becomes *ka-dima* 'small fool' in class 12. According to Gibson, Rozenn and Marten (2017), it is common in Bantu languages that the diminituive is

substitutive in some classes and additive in others, but which classes it concerns varies. An example with a retained NCP is found in example (2), where the diminutive denotes a small amount of a mass noun, w-aare 'ugali' (class 14). 42 Notice that the copula re 'to be' has a class 12 SM as well.

From Restuta Kebola's story about having and raising children 1.25⁴³

```
okámofá
                                mwaáná
                                           kawaare
na
      o-ká-mo-f'-a
                                mo-ána
na
                                           ka-o-are
CONN 2SG.SM-CONS-10M-give-FV
                                1NCP-child 12NCP-14NCP-ugali
```

kare degedege degedege ka-re 12SM-COP soft

'You gave the child a little soft ugali.'

No augmentative markers have been found in Mbugwe. This function is expressed in the lexicon or by the use of adjectives.

4.2.1.8 Noun class 14

Class 14 has the prefix o-, and it, too, contains various kinds of nouns in Mbugwe. The plural is always class 6, but some of the nouns in this class do not have a plural counterpart, as they are abstracts or mass nouns. Examples of abstract nouns are o-sóóngó 'pain, sadness, labor, poison', o-sávé 'witchcraft', o-didi 'smallness, o-ré 'wealth'. These nouns are derived from nouns or adjectives, such as sóóngó 'boil' (cl. 5), sóóngó 'bitter' (adj), mo-sávé 'witch' (cl. 1), -didi 'small' (adj.), mɔ-ɔré 'rich person' (cl. 1). Examples of underived nouns found in class 14 are o-tá 'bow', w-oongo 'brain', o-shó 'face, large group' and o-sino 'gums'. Examples of mass nouns are o-óke 'honey', w-aare 'ugali' and o-reembo 'glue'.

4.2.1.9 Noun class 15

In Mbugwe, the infinitive prefix o- is different from the prefix of the nouns in class 15, which is ko-. However, the adjectival concord prefix is ko-, as in the example (3), adapted from Mous (2004: 17).

3. Adapted from Mous (2004: 17)

oláálá ne koiá o-láál-a ne ko-iá INF-sleep-FV 15NCP-good COP

'To sleep is good.'

⁴² A porridge made from corn flour, usually. A staple in East Africa.

⁴³ The verb $f\dot{a}$ has a lexical tone, which is marked after the consonant of the verb root, as there is no vowel. It surfaces on the first vowel after the root in the verb stem.

Following Mous (2004: 15) the infinitive is therefore called 15a. In the data-base there are only two class 15 nouns: *ko-olo* 'foot, leg', *ko-tó* 'ear', *ko-lóme* 'righthand side' (derived from *mo-lóme* 'man, husband' [cl. 1]) and *ko-mɔɔnsó* 'lefthand side'. This is in line with PB, where a few body parts and also 'lefthand side' (PB *móncó, as a variant of *ócó) are reconstructed to belong to class 15 (Katamba 2003: 116).

4.2.1.10 Noun class 16 and 17

Class 16 and 17 are the locative classes in Mbugwe. In class 16, the only member is *faa-nto* 'place (near)'. The nouns in class 17, in addition to *koo-nto* 'place (far)', are *ko-ómo* 'dry spot' and *ko-rímó* 'afterworld' (derived from *mo-rímo* 'spirit' [cl. 1]). Class 18 was not found in this study, but Lizzie Poole (p.c.) has found the prefix *mu-* in certain demonstratives referring to something being inside of something.

4.2.1.11 Locative suffix

The only productive suffix which attaches to nouns in Mbugwe is the locative suffix -*i*, which can be attached to any noun, denoting the location of the noun, i.e. 'being at/on NOUN'. It is probably a reflex of PB locative suffix *-*ini*, which is found in eastern Bantu languages (Schadeberg 2003b: 82).

Regular morpho-phonological rules apply for this suffix. The vowel of the suffix is usually glided, except for after -u, where the -u is glided and results in ke-dɛdwi 'at the chin' (cl. 7). Following an -i, the suffix results in a lengthening of the vowel: mo-óki-i 'at the smoke' (cl. 3). See Table 4.3 for examples of the locative suffix.

Tak	1 ~ 1	2	т	ocative	auffir
Ian	16 4	4		ocative	CHITTIY

Noun	Noun + locative	Surface
yoonda 'field' (cl. 5)	/i-onda-i/	yoondεy 'at/on the field'
ko-tó 'ear' (cl. 15)	/ko-tó-i/	ko-tóy 'at/on the ear'
túúmbé 'chair' (cl. 5)	/túmbé-i/	túúmbéy 'at/on the chair'
mo - $tw\acute{\varepsilon}$ 'head' (cl. 3)	/mo-twé-i/	<i>mo-twέy</i> 'at/on the head'
mo-óki 'smoke' (cl. 3)	/mo-óki-i/	mo-ókii 'at/on the smoke'
ke-dɛdu 'chin' (cl. 7)	/ke-dɛdu-i/	ke-dεdwi 'at/on the knee'
mo-kóno 'arm, hand' (cl. 3)	/mo-kɔ́nɔ-i/	mo-kónoy 'at/on the arm, hand'

Some of the forms are lexicalised, such as *lo-tangé-y* 'toilet' from *lo-tangé* 'place far away'.

4.2.2 Personal pronouns

The pronouns in Mbugwe always express emphasis or contrast, as the subject and human object are marked on the verb as well, and Mbugwe is a pro-drop language In addition to the regular, short forms, there are partially reduplicated forms for first and second person, but they do not occur in the texts in the data, only in elicited paradigms. It is not established whether there is a semantic difference between the short forms and the long forms (Table 4.4).

Table 4.4. Personal pronouns

Person	Short form	Long form
1SG	née	neéne
2SG	wέε	wεέwε
3SG	weé	-
1PL	sίyε	siísiye
2PL	пуєє	nyeénye
3PL	νοό	-

The first person singular pronoun is used when introducing oneself, as in example (4), where Elisabeth Kesembe is starting the story of her life by stating the name she is known by, Mama Naomi (after her first born child, a common practice in East Africa). The pronoun is clause external, and this is a common way of starting a sentence or story about oneself in Bantu languages.

4. From Elisabeth Kesembe's life story 1.1a

	riína		né	mama naómi	
nέε	ri-ína	ré-anέ	ne	mama naómi	
1s _G	5NCP-name	5ACP-1SG.POSS	COP	Mama Naomi	
'As for me, my name is Mama Naomi.'					

Example (5) is from the early part of Colman Chuchu's life story. Here, the occurence of the pronoun has a contrastive interpretation: "*Even I* became an alcoholic".

5. From Colman Chuchu's life story 1.16

chafá because	ne ne COP	moreevi mo-reevi 1NCP-drunk	á-á-re 1SM-PST-COP	baa even	nεε nέε 1SG
<i>najííngé[†]r</i> N-a-j-ínge	er-a		<i>kóre</i> ko-re	ndεενa N-rεενa	
1SG.SM-PS FV/FPST	ST-9ON	M-enter-	17sm-cop	9NCP-drui	nkenness

^{&#}x27;Because she was an alcoholic, even I became an alcoholic.'44

-- 44

⁴⁴ Even though pronouns and subject markers are not inflected for gender in Mbugwe, the appropriate pronoun according to the context will be used in the free translation. In cases where the gender is not known by the context, s/he is used as a gender-neutral pronoun in the free translation. In this case, the speaker is referring to his wife.

4.3 Adnominals and concord

The noun may be modified by adjectives, the adnominal 'self, alone', the associative marker, possessive pronouns, demonstratives, numerals, quantifiers and inflected interrogatives. In this section, the nominal modifiers that are inflected in concordance with the main noun are presented. They are all called adnominals here, following Maho (1999: 100).

For most Bantu languages, there are two or three sets of prefixes for the nominals and adnominals. These are reconstructed for PB. Meeussen (1967: 96) listed three different sets of prefixes that occurred in noun phrases in PB. In many languages, however, there are now only two distinct sets of prefixes, and they may be referred to as Noun Class Prefix (NCP) and Agreement Class Prefix (ACP (see Table 4.5). For PB, the prefixes called ACP here are reconstructed to have a H tone in all classes except for class 1 and 9 (Meeussen 1967: 97). In Mbugwe, they are H in all classes except 1 and 9, and occasionally the ACP for classes 4 and 14 ACP are toneless, as well (see below). In addition, the ACP is toneless with numerals (section 4.3.6).

Table 4.5. Nominal concord in Mbugwe

Classes	NCP	ACP
1	mo-	0-
2	va-	vá-
3	mo-	ó-
4	me-	é-/e-
5	Ø-/ri-/i-	ré-
6	ma-	é-
7	ke-	ké-
8	vi-	vé-
9	Ø-/N-	ji/e-
10	Ø-/N-	jí/í-
11	lo-	ló-
12	ka-	ká-
14	0-	ó-/o-
15	ko-	kó-
16	fa-	fá-
17	ko-	kó-
19	fì-/sha-	fi-/shá-

In Mbugwe, the agreement markers for adjectives are the same as the NCP. For class 5, all three possible prefixes $(\mathcal{O}-/ri-/i-)$ have been observed in adjectives, even for the same noun. Further research is needed to determine if they are in free variation, or whether there are rules governing the variation.

The ACP in Mbugwe display some variation in class 9 and 10. The distant demonstratives, numerals, and the interrogative *-reengá* 'how many' take an ACP e-/i- instead of ji-. However, they are treated as one set of agreement class markers here, as the difference is not consistent. Class 1a and 15a have the same concord prefixes as class 1 and 15, and are therefore not listed separately in Table 4.5.

When the noun has the locative suffix, the adnominals optionally get locative agreement, as seen in (6). Otherwise, the agreement usually follows the noun class of the noun.

6. From Colman Chuchu's traditional story 4.15

otúryá	mee	váká [†] fétá	na
o-túry-a	mee	vá-ká-fét-a	na
INF-finish-FV	then	2SM-CONS-go-FV	CONN

yoondεy	kw ááchwé	^ kw á	veejá
i-onda-i	kó-achué	kó-a	veejá
5NCP-field-LOC	17ACP-3SG.POSS	17ACP-ASSOC	slowly
'They went to his	/her field slowly.'		

The various adnominals are presented below, starting with adjectives.

4.3.1 Adjectives

In Bantu languages, adjectives are distinguished from nouns in that they do not have an inherent noun class, but take the NCP of the noun they modify (Petzell 2008: 78). It is not uncommon for Bantu languages to have relatively few adjectives, and about 20 are reconstructed for PB. There are also few adjectives in Mbugwe: 34 adjectives are listed in the database. There may of course be more adjectives in Mbugwe, but the ones presented here are the ones identified so far.

Dixon (1982: 16) lists seven semantic types of adjectives, which most of the ones found in Mbugwe fit into. The seventh type, speed, is not represented in the database, but there is an adverb $veej\acute{a}$ 'slowly', as seen in example (6) above. Some of the adjectives have antonyms, and they are listed on the same row in Table 4.6.⁴⁵

⁴⁵ A hyphen before the root indicates that the root always has a prefix and does not occur independently in the language.

Table 4.6 Adjective semantic classes

Semantic class	Adjective	Translation	Adjective	Translation
1. DIMENSION	-íma	'whole, complete'		
	-didi	'small'	-néne	'big, important, many'
	-kúfé	'short'	-ley	'tall'
	-séséré	'narrow'	-aaré	'wide'
2. PHYSICAL	-túúfú	'dull'	-fóómbú	'sharp'
PROPERTY	-vése	'unripe'	-vérú	'ripe'
	-hálí	'dirty'	-já	'good, clean'
	-fafú	'hard, difficult, expensive'	-ólə	'easy, sharp'
	-ritɔ	'heavy'		
	-uundú	'rotting, smelling'		
	-óómo	'dry'		
	-fɔ̃lɔ	'cold'		
	-mpéfɔ	'cold'		
3. COLOUR ⁴⁶	-éro	'white, light colour'	-íro	'black, dark'
4. HUMAN	-lomé	'male'	-ká	'female'
PROPENSITY	-tarí	'careful, sly'		
	-seu	'silent'		
	-vira	'lazy'		
5. AGE	-feyá	'new'	-kálá	'old'
6. VALUE	-já	'good, clean'	-vé	'bad'
	-enú	'expensive'		
	-kέ, -rimo	'scarce'		

In Mbugwe, an adjective usually follows the noun it modifies when used attributively. An example is given in (7).

7. From Elisabeth Kesembe's life story 1.4

mwaáná modídí mo-ána mo-dídí 1NCP-child **1NCP-small** 'a small child'

Adjectives can also be used predicatively, in which case they occur with copula verbs. Sometimes the adjective is introduced by the copula verb ne (8), and occasionally ne is followed by another, inflected copula, for instance re (9). In constructions with two copulas, ne may have a focus reading (see section 5.6).

⁴⁶ The color 'red' is *guu*, which is not inflected, but it requires an inflected copula *re*. 'Green' is kwanyi and 'brown' is weroy, but tone and inflection are not clear at this point.

8. From Colman Chuchu's traditional story 1.27b

mee vɔɔ́ chákɔ́ra vááré[†]rá
mee vɔɔ́ ke-ákɔra vá-a-r´-er-a
then 3PL 7NCP-food 2SM-PST-eat-APPL-FV\FPST

né **kejá**ne **ke-já**COP **7NCP-good**'But the food they ate was good.'

9. From Colman Chuchu's traditional story 1.29a

njééré ne **ndey** járe n-jéére ne **n-ley** ji-á-re 10NCP-hair COP **10NCP-long** 10SM-PST-COP 'The hair was long.'

Meeussen (1967) lists -ingé 'many' among the adjectives. It is inflected with the NCP, and not the ACP, and is therefore considered an adjective and not a quantifier. It is only relevant for plural classes, due to the meaning of 'many' (Table 4.7). The reconstruction for PB is *jíngí.

Table 4.7. 'Many' paradigm

Class	Underlying form	Surface form
2	va-ingé	veyngé
4	me-ingé	miingé
6	ma-ingé	meyngé
8	vi-ingé	viingé
10	n-ingé	nyiingé
19	fi-ingé	fiingé

-ingé 'many' follows the noun it modifies, as in (10).

10. From Colman Chuchu's traditional story 1.8

nsíkó nyiingé N-síko N-ingé 10NCP-day 'many days'

4.3.2 The adnominal 'self, alone'

In addition to the adjectives, there is an adnominal which is often translated as 'self', which is inflected with the NCP. For first and second person, there are forms that appear to be made from an associative marker, -a (see below), with prefixes that are only observed with the quantifier 'all' in addition to 'self' (see section 4.3.7).⁴⁷

The root is -ɛné or -ɛ́né. It is reconstructed to PB as *jéné 'self'. The concept is translated differently into English, depending on the context. This is seen in the examples below, where it is translated 'on my own' and 'themselves'. It may be considered a reflexive pronoun, but it also includes the concept of being alone, by oneself. It is usually inflected for first, second or third person, and the surface forms are given in Table 4.8.

Table 4.8. Personal forms for 'self, alone'

Person/number	'self'
1SG	namwééné
2SG	wamwééné
3SG (cl. 1)	mwεεnέ (cl. 1)
1PL	shavééné
2PL	nyavééné
3PL (cl. 2)	vεεnέ (cl. 2)

The adnominal is often used alone when referring to people doing something alone or by themselves, as seen in (11).

11. From Elisabeth Kesembe's life story 1.23

neé [†]nkájaréra vaáná neé N-ká-ja-rér-a va-ána then 1SG.SM-CSC-VENT-raise-FV 2NCP-child

vaveeréá[†]vávadí[†]dínamwéénéva-veeréáváva-dídínamwééné2ACP-two2.PROX2NCP-small1SG.self

'Then I was taking care of these two small children on my own.'

Used with a noun, the adnominal follows the noun and is inflected according to the noun (12).

⁴⁷1PL sh- and 2PL ny- are observed for the adnominal -*ónsε* 'all', as well.

12. From Colman Chuchu's traditional story 1.12

áfa	áákú [†] yá	nyináávɔ	vá [↑] káva
áfa	á-a-kúy-a	Ø-nyináávo	vá-ká-va
16.PROX	1SM-PST-die-FV\FPST	1aNCP-their.mother	2SM-CONS-COP

 $v\acute{a}^{\uparrow}c\acute{h}\acute{a}\acute{a}\acute{y}\epsilon$ $v\acute{a}^{\uparrow}r\acute{a}$ $va\acute{a}n\acute{a}$ $v\epsilon\epsilon n\acute{\epsilon}$ $v\acute{a}$ -O-cháál-iy ϵ $v\acute{a}$ -rá $v\acute{a}$ -ána $v\acute{a}$ - $\epsilon n\acute{\epsilon}$ 2SM-HOD-remain-PFV\HOD 2ACP-DIST 2NCP-child 2NCP-self 'When their mother died, those children were left by themselves.'

Table 4.9 presents the full paradigm for 'self, alone' in all noun classes.

Table 4.9. Paradigm for 'self, alone'

Class	NCP	'self, alone'
1	то-	тweené
2	va-	veené
3	то-	mweené
4	me-	myeené
5	Ø-/ri-/i-	ryeené
6	ma-	теєпє́
7	ke-	cheené
8	vi-	vyeené
9	N-/nj-/ny-	nyeené
10	N-/nj-/ny-	nyeené
11	lo-	lweené
12	ka-	keené
14	0-	weené
15	ko-	kweené
16	fa-	feené
17	ko-	kweené
19	fi-	fyeené

4.3.3 Associative markers

The associative marker -a connects many different constituents in the noun phrase. It can be used to connect nouns with other nouns, or with adjectives, ordinal numerals, interrogatives or possessives. It also connects verbs or other parts of speech with adverbs (see for instance [6] above).

Since the associative marker is a vowel, the rules for glide formation apply. The vowel is not lengthened as it is word-final. The associative marker agrees with the main noun in the phrase, and the prefix is the ACP (Table 4.10). Classes 1 and 9 are toneless; the other classes have a H tone. Therefore, the tone is assumed to be provided by the ACP.

Table 4.10. Associative marker

Class	ACP	Associative marker surface
1	0-	wa
2	vá-	vá
3	ó-	wá
4	é	yá
5	ré-	rá
6	é-	á
7	ké-	chá
8	vé-	vyá
9	ji-/e-	ja/ya
10	jí/í-	já/yá
11	ló-	lá
12	ká-	ká
14	ó-	wá
15	kó-	kwá
16	fá-	fá
17	kó-	kwá
19	fĩ-	fyá

The associative marker occurs in various constructions, for example to mark a partitive construction (13) and a possessive construction (14).

13. From Colman Chuchu's traditional story 4.16

otina **wá** viryó o-tina **ó-a** vi-rió

14NCP-stem 14ACP-ASSOC 8NCP-millet

14. From Elisabeth Kesembe's life story 1.32

mpoongo yá ijóva N-pongo í-a i-jóva 10NCP-word 10ACP-ASSOC 5NCP-god 'word of God'

The associative marker is also used for names (15), and years (usually given with Swahili numerals) (16).

15. From Colman Chuchu's life story 1.1

nayáálwá [†]nsé **yá** N-a-yáál-u-a N-sé **e-a**

1SG.SM-PST-give.birth-PAS-FV\FPST 9NCP-place 9ACP-ASSOC

burungey burunge-i

burunge-LOC

16. From Elisabeth Kesembe's life story 1.2

nayáá[†]lwá mwaáka **wá** N-a-yáál-u-a mo-áka **ó-a**

1SG.SM-PST-give.birth-PAS-FV\FPST 3NCP-year 3ACP-ASSOC

arobáini na sába arobáini na sába forty and seven 'I was born in the year of 47'

The associative marker is also used to form the interrogative 'why' (17).

^{&#}x27;stems of the millet'

^{&#}x27;I was born in the place called Burunge.'

17. From Colman Chuchu's traditional story 7.20

ne **wá** kée ó[†]kéémosééréra ne **ó-a** kee o-kéé-mo-séérer-a

COP **14ACP-ASSOC** what 2SG.SM-PRS-1OM-help-FV

orira óo o-rir-a óo INF-protect-FV 1.PROX

'Why are you helping her to protect this one?'

In Rangi, Gibson (2012) describes another associative: the referencial associative. It is used "to refer back to a noun which has been mentioned or indicated in the preceding discourse" (Gibson 2012). The form in Rangi $-\acute{o}\acute{o}/-oo$, with the respective ACPs. This marker is also present in Mugwe, but the paradigm was not elicited during the fieldwork. There are a few examples of this marker in the textual material, and they are given in examples (18), (19) and (20). The marker is $-\acute{o}\acute{o}$. Further research is needed concerning the form and function of this marker.

18. From Colman Chuchu's traditional story 1.4

ne mwaána wááré **k55** ne mo-ána ó-á-re **kó-55**

COP 1NCP-child 1SM-PST-COP 17ACP-REF.ASSOC

waavó †kóko o-avó kóko 1ACP-3PL.POSS LOC 'And their child was there.'

19. From Colman Chuchu's traditional story 7.15

f50 $\acute{a}k\acute{a}r\acute{a}$ $\acute{k}\acute{e}r\acute{a}$ $^{\uparrow}ch\acute{a}k\acute{o}ra$ $f6-\acute{o}\acute{o}\acute{o}$ \acute{a} -ká-r´-aké-ráke-ákora16ACP-REF.ASSOC1SM-CONS-eat-FV7ACP-DIST7NCP-food

'And then she ate the food.'

20. From Colman Chuchu's traditional story 5.1

mwáánso áfa ááté ϵ^{\uparrow} rá mwánso áfa á-a-té ϵ^{\uparrow} ra

Mwanso 16.PROX 1SM-PST-hear-FV\FPST

wáalwe a^{\uparrow} jéémbaj35Ø-waalweá-jé-émb-ají-35

1ancp-his/her.relative 1sm-ptcp-sing-fv 10acp-ref.assoc

 $me\acute{e}$ $\acute{a}k\acute{a}^{\dagger}r\acute{e}ra$ na kore $me\acute{e}$ \acute{a} - $k\acute{a}$ -rέr-a na ko-re then 1SM-CONS-leave-FV CONN 17SM-COP

waalwe

Ø-waalwe

1aNCP-his/her.relative

'When Mwanso heard her relative singing like that she wanted to leave with her relative.'

4.3.4 Possessive pronouns

The possessive pronouns occur after the noun, and agree with the noun, using the ACP. The regular morphophonological rules apply for gliding and vowel coalescence. The ACP is toneless for 1, 4 and 9, and H for the rest of the classes. 3PL has two variants: $-av\dot{\sigma}$ and $-a\dot{\sigma}$. They are in free variation. The paradigm for $-av\dot{\sigma}$ is given in Table 4.11.

Table 4.11. Possessive pronouns

Class	ACP	1SG	2SG	3SG	1PL	2PL	3PL
1	0-	waané	waakź	waachwé	weytó	waanyú	waavɔ́
2	vá-	vááné	váákó	vááchwé	véytó	váányú	váává
3	ó-	wááné	wáákó	wááchwé	wéytó	wáányú	wáávó
4	e-	yaané	yaakɔ́	yaachwé	yɛytó	yaanyú	yaavɔ́
5	ré-	rááné	ráákó	rááchwé	réytó	ráányú	ráávó
6	é-	ááné	áákó	ááchwé	έytó	áányú	áávó
7	ké-	chááné	cháákó	chááchwé	chéytó	cháányú	cháávó
8	vé-	vyááné	vyáákó	vyááchwé	vyéytó	vaanyu	vyáávó
9	e-	yaané	yaakớ	yaachwé	yεytó	yaanyú	yaavɔ́
10	jí-	jááné	jáákó	jááchwé	jέytó	jáányú	jáávó
11	ló-	lááné	láákó	lááchwé	léytó	láányú	láávó
12	ká-	kááné	káákó	kááchwé	kéytó	káányú	káávó
14	ó-	wááné	wáákó	wááchwé	wéytó	wáányú	wáávó
15	kó-	kwááné	kwáákó	kwááchwé	kwéytó	kwáányú	kwáávó
16	fá-	fááné	fáákó	fááchwé	féytó	fáányú	fáávó
17	kó-	kwááné	kwáákó	kwááchwé	kwéytó	kwáányú	kwáávó
19	fi-/shá-	shááné/ fyááné	sháákó / fyáákó	shááchwé /fyááchwé	shéytó/ fyéytó/	sháányú / fyáányú	sháávó / fyáávó

An example of a possessive pronoun is given in example (21). It always follows the possessed noun.

21. From Colman Chuchu's life story 1.38b

okotúúmbá nje nsíko jááné
o-ko-túmb-a N-je N-síko jí-ané
INF-2SG.SP-follow-FV 1SG.SP-FUT 10NCP-day 10ACP-1SG.POSS

 $^{\uparrow}$ j $\acute{o}\acute{o}ns\varepsilon$

jí-ónsε

10ACP-ALL

'I will follow you all of my days.'

4.3.5 Demonstratives

Mbugwe has three different sets of demonstratives, labeled 'proximate', 'distant' and 'referential'. The proximate form can be described as the ACP with the vowel of the ACP copied as a prefix, which is similar to what is reconstructed for PB (Meeussen 1967: 107). An example from Mbugwe is $\acute{o}\acute{o}$ in class 1 and $\acute{a}v\acute{a}$ in class 2. It is deictic and refers to something or someone that is close to the speaker.

The distant demonstrative is formed by the ACP and $r\acute{a}$, which is reconstructed as *- $d\acute{a}$. Mbugwe examples are $o-r\acute{a}$ (cl. 1) and $v\acute{a}-r\acute{a}$ (class 2). It refers to something or someone that is far from the speaker. The ACP is toneless in classes 1 and 9 and H in the others.

The referential demonstrative is similar to the proximate form, with the addition of an -3 suffix. This is also analogous to PB. For instance, class 1 is $\delta w \delta$, and class 2 is $\delta v \delta$. The referential refers to someone or something that is previously mentioned in the context, but not visible at the time of speaking. The final -o (-o in Mbugwe) is reconstructed to PB as a referential marker, which also may occur in other elements, such as the words for 'all' and 'any', see section 4.3.7. In many languages it is also used to mark a relative on the verb, but not in Mbugwe (see also Petzell 2008: 184). It is said to "mark a referent that was previously mentioned in the discourse" (Güldemann 2002: 275). The proximate and the referential are not separated into morphemes in this work, as they are made up of a combination of the ACP and other elements.

The tone varies for the proximate and the referential demonstrative, depending on whether it occurs before or after the noun. Both forms are given in Table 4.12.

Table 4.12. Demonstratives

Class	ACP	Proximate DEM-N /N-DEM	Distant	Referential DEM-N /N-DEM
1	0-	óó/óo	o-rá	ów5/ów2
2	vá-	ává/áva	vá-rá	άνό/άνο
3	ó-	óó/óo	ó-rá	ów5/ów2
4	e-/é	éé/ée	é-rá	éyó/éyɔ
5	ré-	éré/ére	ré-rá	ér5/ér5
6	é-	áá/áa	á-rá	áw5/áw5
7	ké-	éché/éche	ké-rá	éch5/éch5
8	vé-	íví/ívi	ví-rá	ίνγό/ίνγο
9	e-/é-	éé/ée	e-rá	éyɔ́/éyɔ
10	jí/í-	íjí/íji	jí-rá	íjó/íjɔ
11	ló-	óló/ólo	ló-rá	ólź/ólɔ
12	ká-	áká/áka	ká-rá	ákó/ákɔ
14	ó-	óó/óo	ó-rá	ówź/ówɔ
15	kó-	ókó/óko	kó-rá	ókó/ókɔ
16	fá-	áfá/áfa	fá-rá	áf3/áf3
17	kó-	ókó/óko	kó-rá	ókó/ókɔ
19	fĭ-	ífi/ífi	fi-rá	ífyó/ífyɔ

A common position for the demonstrative is after the noun it refers to, as in (22), where the distant demonstrative *vírá* refers to *vimaka* 'things'.

22. From Colman Chuchu's traditional story 7.6

chá	$^{\uparrow}k$ óómbóka	vimaka	vírá
ké-a	Ø-kómbok-a	vi-maka	ví-rá
7ACP-ASSOC	INF-remember-FV	8NCP-thing	8ACP-DIST

¹áárémojisheryaØ-waalweá-á-re-mo-jish-er-i-alaNCP-waalue3SG.SM-PST-PROG1 -3SG.OM-do-APPL-CAUS-FVher.relative'And to remember those things she was doing to her relative.'

A proximate demonstrative is found (23). Here also, the demonstrative *óo* follows the noun it modifies (*movere* 'body').

23. From Elisabeth Kesembe's life story 1.10

movere	óó	ne	degedege	ŚŚ
mo-vere	óo	ne	degedege	၁၁
3NCP-body	3.PROX	COP	soft	only

```
wava faanto fɔ́onsε
a-va fa-nto fá-onsε
3SM-COP 16NCP-place 16ACP-all
'This body became limp all over.'
```

There are not many examples of the referential demonstrative in the textual data. The best example is found in (24):

24. From Colman Chuchu's life story 1.36

náángáé [†] ká	báa	chá	féenya
n-á-ángaek-a	baa	ké-a	Ø-feeny-a
1SG.SM-PST-be.restless-FV\FPST	even	7CP-ASSOC	INF-move-FV

na	é [†] ch5	ngálawá	nakémɔ
na	échố	N-galawá	nakémo
CONN	7. REF	9NCP-canoe	nothing

^{&#}x27;I looked around restlessly for anything to move that canoe with, but there was nothing.'

The referential demonstrative is also used in the expression 'last year', as in (25). Here, it occurs after the noun, *mwaáka* 'year'. The demonstrative, however, does not agree with the noun, but has a class 10 ACP, so it appears to be lexicalised to mean 'previous'.

25. From LOT questionnaire Colman Chuchu #160

naremá	yóonda	ráá [†] né
N-a-rem-a	i-onda	ré-anέ
1CC CM DCT cultivate EVEDCT	SNCD field	5ACD 1 SC DOSS

1SG.SM-PST-cultivate-FV\FPST 5NCP-field 5ACP-1.SG.POSS

mwaáka íjo mo-áka íjo 3NCP-year 10.REF

The referential demonstrative is fully lexicalised in the word for yesterday, $nayj\delta$, which probably comes from the connective na and the referential demonstrative $ij\delta$ (cl. 10), see example (26).

^{&#}x27;I cultivated my field last year.'

26. From LOT questionnaire, Colman Chuchu #156a

nárémiye	yoonda	ráá [†] né	nayjś
N-a-rem-iyε	i-onda	ré-anέ	naijś
1SG.SM-PST-cultivate-PFV	5NCP-field	5ACP-1SG.POSS	yesterday
'I cultivated my field yeste	erday.'		

Demonstratives also occur without the noun, as demonstrative pronouns, as in (27).

27. From Colman Chuchu's traditional story 7.20

ne	wá	kée	ó [†] kéémosééréra
ne	ó-a	kee	o-kéé-mo-séérer-a

COP 14ACP-ASSOC what 2SG.SM-PRS-1OM-help-FV

orira óo
o-rir-a óo
INF-protect-FV 1.PROX

In some cases, the demonstrative precedes the noun. Sometimes the noun is in focus position, and fronted, and the demonstrative functions as an article. This is a common function of the demonstrative in this position in Bantu languages according to Van de Velde (2005). For instance, it is used in a narrative to refer to the protagonist, often clause-initially, as in (28).

28. From Colman Chuchu's traditional story 1.28

orá	mwaána	cháfá	ne
o-rá	mo-ána	cháfa	ne
1ACP-DIST	1NCP-child	because	COP

onyáálólwa ááré ne o-nyáálol-u-a á-á-re ne INF-annoy-PASS-FV 1SM-PST-PROG1 COP

 $ová^{\uparrow}k\acute{o}\acute{o}mb\acute{o}ka$ $\acute{a}\acute{a}re$ $kw\acute{a}\acute{a}v\acute{o}$ $o-v\acute{a}-k\acute{o}mbok-a$ $\acute{a}-\acute{a}-re$ $k\acute{o}-\acute{a}v\acute{o}$

INF-3PL.OM-remember-FV 1SM-PST-PROG1 17ACP-3PL.POSS

The demonstrative is also found before the noun in (29), where again the demonstrative appears to function as a definite article.

^{&#}x27;Why are you helping her to protect this one?'

^{&#}x27;Because that child was very troubled, she was missing her parents.'

29. From Colman Chuchu's life story, 1.26b

najiwá jírá †nyááfu
N-a-j-iv-u-a jí-rá N-áfu
1SG.SM-PST-10OM-steal-PASS-FV\FPST 10ACP-DIST 10NCP-net
'The nets were stolen from me '

Demonstratives are also used without a noun for specific purposes, where they often function as adverbs. An example of this is $\acute{a}fa$, which may mean 'when', 'then' or 'where' (30).

30. From LOT questionnaire Colman Chuchu #183a

nsáysérema yoonda rááné N-sí-áyse-rem-a i-onda ré-ané

1SG.SM-1SG.NEG-PROG2-cultivate-FV 5NCP-field 5ACP-1.SG.POSS

†**áfa** ááfiká **áfa** á-a-fik-a

16.PROX 1SM-PST-arrive-FV\FPST

Another such example is $k\acute{o}$ - $r\acute{a}$, a distant demonstrative referring to 'that place, there' (31).

31. From Colman Chuchu's traditional story 4.1

baa vá[†]káfíka **kó[†]rá** baa vá-ká-fík-a **kó-rá** even 2SM-CONS-arrive-FV **17ACP-DIST**

keká[†]vá báa tevakeetééra ke-ká-vá baa te-vá-kee-téér-a

7NCP-CONS-COP even NEG-2SM-PST.IPFV-listen-FV

For the proximate and distant demonstrative, more emphatic variants have been reported by Larsen, Larsen, and Stegen (2011) by adding *-é/-ee* to the demonstrative as a suffix. The function of these forms has not been established yet, and they are not found in the text corpus, and are therefore not presented here.

^{&#}x27;I was not cultivating my field when s/he arrived.'

^{&#}x27;And so they arrived there, but even then they could not hear.'

4.3.6 Numerals

Many Mbugwe speakers use mostly Swahili numbers and do not know all the Mbugwe numbers. As seen in example (16) above (section 4.3.3), Swahili numbers are often used when giving years, for instance. But for smaller numbers, Mbugwe numbers are used, as in (32).

32. From Elisabeth Kesembe's life story 1.3

nέε	nkáykála	njire	modí¹dí	mpáka
nέε	N-ká-ikal-a	N-re	mo-dídí	mpaka
1sg	1SG.SM-CONS-stay-FV	1SG.SM-COP	1NCP-small	until (Sw.)

natúryá [†]myááka **ikómí na**N-a-túry-a mi-áka **i-kómi na**1SG.SM-PST-finish-FV\FPAST 4NCP-vear **10ACP-ten CONN**

iveeré i-veeré 10ACP-two

'I lived (there) from when I was small until I was twelve years old.'

The numerals were elicited from the older language consultant, Colman Chuchu (Table 4.13). Numerals from 100 and higher were hard to elicit and do not seem to be in use any longer in Mbugwe. There is also some variation between speakers concerning some numerals.

The numerals 1 ($-m\dot{o}$), 2, 3, 4, 5, 6 and 8 take the ACP, that is, they agree with the noun they are modifying. The other numerals are nouns, which belong to a noun class. It is common in Bantu languages that some numerals are nouns and others not. Meeussen (1967) reconstructed only the numerals 1-5 to be true numerals in PB, and the rest to be nouns or particles. There are two nouns that mean 'ten' in Mbugwe: there is \emptyset - $k\dot{o}mi$ 'ten', which belongs to class 10, and me-roongo 'ten', which belongs to noun class 4.

Table 4.13. Numerals

1	moontí, -mɔ́	11	kómi na i-m5
2	-veeré	12	kómi na i-veeré
3	-taató/-saató	13	kómi na i-sááto
4	-ínya	14	kómi na í-ínye
5	-táánə /-sáánə	15	kómi na i-sáánɔ
6	-áánsáto	16	kómi na i-sáánsáto
7	fúnkáte	17	kómi na i-ré mo-fúnkáte
8	-náná	18	kómi na i-nyáánye
9	keendá	19	kómi na i-ré keendá
10	kómi (cl. 10), me-rəəngə (cl.4)	20	me-rəəngə e-veeré
21	me-rəəngə e-veeré na i-mə́	30	me-rəəngə e-táto
22	me-rəəngə e-veeré na i-veeré	40	me-rəəngə e-nne
23	me-rəəngə e-veeré na i-sááto	50	me-rəəngə e-táánə
24	me-rəəngə e-veeré na í-ínye	60	me-rəəngə e-táántáto
25	me-rəəngə e-veeré na i-sáánə	70	me-rɔɔngɔ mo-fúnkáte
26	me-rəəngə e-veeré na i-sáánsáto	80	me-rɔɔngɔ e-nááne
27	me-rəəngə e-veeré na mo-fúnkáte	90	me-rəəngə keendá
28	me-rəəngə e-veeré i-nyáánye	100	gana re-mɔ́
29	me-rəəngə e-veeré na i-ré kɛɛndá	200	ma-gana a-veeré
		1000	ma-gana na ma-gana

The ACP is toneless for numerals, which is different from other adnominals. In addition, the ACP for noun class 10 is consistently *i*-, whereas with other adnominals, it is realised as *ji*-. This variation is traced back to PB, where class 10 had a separate prefix for numerals, **i*- (Meeussen 1967: 98). In Table 4.14, the paradigm for 'one' and 'five' is given. 'One' only occurs in singular classes, since it is singular, and 'five' only in plural classes, being plural in nature.

Table 4.14 Paradigm for numerals one and five

Class	ACP	1	5
1	0-	o-mź	-
2	va-	-	va-táánɔ
3	0-	o-mɔ́	-
4	e-	-	e-táánɔ
5	re-	re-mɔ́	-
6	<i>a</i> -	-	a-táánɔ
7	ke-	ke-mɔ́	-
8	vi-	-	vi-táánɔ
9	e-	e-mɔ́	-
10	i-	-	i-sáánɔ
11	lo-	lo-m5	-
12	ka-	ka-mɔ́	-
14	0-	o-mɔ́	-
15	ko-	ko-mɔ́	-
16	fa-	fa-m5	-
19	fì-	-	fi-táánɔ

The variation between initial [t] and [s] in 'five' (and 'three') in Mbugwe could be a morphophonological variation which appears to happen in class 10 (t > s after i-). This variation is reconstructed for PB in class 10 (Meeussen 1967: 105).

Ordinal numbers in Mbugwe are formed by the associative -a, followed by the number (Table 4.15).

They are the same as for cardinal numbers, except for *-a mbeere* 'first', which also means 'in front of'. For 'three' and 'five', the variant with initial [s] is used. No examples of ordinal numbers occurred in the textual data, so they were only found in elicitation.

Table 4.15. Ordinal numbers

Ordinal numbers	
first	-a mbeere
second	-a veeré
third	-a saató
fourth	-a ínya
fifth	-a sáánə
sixth	-a sáánsáto
seventh	-a fúnkáte
eighth	-a náná
ninth	-a keendá
tenth	-a kómi

4.3.7 Quantifiers

There is a small group of inflected words which are called quantifiers in Bantu languages (see also Payne 1997: 65). The quantifiers are inflected with the ACP (Table 4.16). 48

 48 The word for 'many' is not included here, as it is inflected with the NCP, and is therefore considered an adjective.

Table 4.16. Quantifiers

Class	ACP	all/whole	any	other
1	0-	эόnsε	weéɔɔʻnse	oongé
2	vá-	vớớnsε	vəəənse	váángé
3	ó-	<i>ό</i> źnsε	οόόnsε	óóngé
4	e-	yɔʻźnsε	yəyəʻənsε	yeengé
5	ré-	rźźnse	rərəənse	rééngé
6	é-	<i>ό</i> źnsε	<i>οόόnsε</i>	áángé
7	ké-	chźźnse	chəchəənse	chééngé
8	vé-	vyэ́ə́nsε	vyəvyəənse	vííngé
9	e-	yɔʻɔnsε	yəyəənse	yeengé
10	jí-	jόόnsε	jɔjɔʻɔʻnsε	jííngé
11	ló-	lόόnsε	ləlэənse	lóóngé
12	ká-	kźźnsε	kəkəənse	káángé
14	ó-	oʻśnsε	οόόnsε	óóngé
15	kó-	kźźnsε	kəkəənse	kóóngé
16	fá-	fጛʻźnsε	fəfəənse	fáángé
17	kó-	kόónsε	kɔkɔʻɔ́nsε	kóóngé
19	fí- /shá-	fyśśnse	fyɔfyɔʻɔ̀nsε	fiingé

The form -ɔ́nsɛ means 'whole' in the singular noun classes, and 'all' in the plural classes. It is reconstructed to PB as *ncè, 'all'. Its semantic extension to the meaning 'whole' for a single unit is common in modern Bantu languages, see for instance Swahili -ote 'all, whole'. Only the consonant of the ACP is included, except for the cases where the ACP is only a vowel. The irregular forms shɔ́ɔ́nsɛ 'us all' and nyɔ́ɔ́nsɛ 'you all' are used for first person plural and second person plural.

The root for 'any' may possibly be $-3-5ns\varepsilon$, with the consonant (or the only vowel) of the ACP inserted before each 3-. This form is also common in Bantu languages, for instance in Swahili, where the root is 0-ote. The initial 3- in Mbugwe in $-3-5ns\varepsilon$ and $5ns\varepsilon$ may be the referential 3- discussed in section 0. The word for 'other' is the root $-ng\acute{e}$ in Mbugwe, from PB * $ng\acute{i}$ 'other'. In the single classes the meaning becomes 'another', whereas in the plural classes it is 'other'.

For $-\delta ns\varepsilon$ 'all, whole' and $-ng\dot{e}$ 'other', the ACP is toneless in classes 1, 4, 9 and for 'all/whole' in class 14 as well. For $-\delta -\delta ns\varepsilon$ 'any', the tone pattern is different only for class 1, and the initial vowel is also different from the others ($\varepsilon\varepsilon$ vs. δ), the reason for which is unclear at this point. The forms $\delta \delta \delta ns\varepsilon$ in class 3, 6 and 14 are pronounced [$2\delta .2\delta \delta .ns\varepsilon$].

If the quantifier $-\delta ns\varepsilon$ refers to a plural noun, it means 'all', and in (33) it could be translated 'all of the days' or 'every day'. It follows the noun it modifies. The prefixes 1PL sh- and 2PL ny- are observed for $-\delta ns\varepsilon$.

33. From Colman Chuchu's traditional story 4.2

nววng'ว์	kekává	ne	nsíko	jśśnse
nong'ó	ke-ká-va	ne	n-síko	jí- óns ε
so	7SM-CONS-COP	COP	10NCP-day	10ACP-all

vááréja vá-á-re-j-a.

2SM-PST-PROG1-come-FV

In other situations, with a singular noun, it means 'whole', as in (34).

34. From Elisabeth Kesembe's life story 1.38b

wáándáalaanga	mikalə	yaané	yəźnse
á-ándaa-lang-a	me-ikalə	e-anέ	e-śnsɛ
1SM-HAB1-look-FV	4NCP-life	4ACP-1SG.POSS	4ACP-all
'Cha is the one who	watches eve	r my whole life;	

She is the one who watches over my whole life.

The word for 'any' only occurs once in the textual data, where it refers back to 'all those things', but the concord is in class 7, which may be considered a default concord, probably due to the distance from the noun in the clause (35).

35. From Elisabeth Kesembe's life story 1.7

baa áfa váá[†]jánjishé[†]ryá baa áfa vá-a-já-N-jish-er-i-a

even 16.PROX 2SM-PST-VENT-1SG.OM-did-APPL-CAUS-FV/FPST

mpóongó já jí¹rá, lakíni N-pongó jí-a jí-rá lakíni 10NCP-thing 10ACP-ASSOC 10ACP-DIST but (Sw.)

tejasaidi¹ά chəchə́ənsé tokó te-ji-a-saidi-a chəchə́nse tokó NEG-10SM-PST-help(Sw.)-FV\FPST 7.any at.all

'They even came and did all those things to me, but they didn't help anything at all.'

^{&#}x27;And so it was that they were coming every day.'

The adnominal $-ng\acute{e}$ 'other' also usually follows the noun it modifies, as in (36).

36. From Colman Chuchu's life story 1.23

naf5	nkééféwá	[↑] nyááfú	ne
nafá	N-kéé-f´-u-a	N-áfu	ne
that.is.when	1SG.SM-SIT-give-PASS-FV\SIT	10NCP-net	COP

vaantováángéva-ntová-ngé2NCP-people2ACP-other

'That is when I was given a net by some other people.'

4.3.8 Inflected interrogatives

In Table 4.17 the paradigm for the interrogative *-reengá* /-*rengá* 'how many' is given. The interrogative has the same prefix (ACP) as numerals, with the prefix *i*- in class 10. For semantic reasons, this interrogative is only used with plural classes, not singular classes. No examples of this interrogative were found in the textual data.

Table 4.17. Paradigm for 'how many'

Class	ACP	'how many'
2	vá-	vá-réengá
4	é-	é-réengá
6	á-	á-réengá
8	ví-	ví-réengá
10	i-	í-réengá
19	fì-	fi-réengá

The word meaning 'which one', $-rz \delta r \varepsilon$, is also found with a short vowel, but this is judged to be non-standard by the language consultants (used by children and young people mostly). The paradigm is provided in Table 4.18. The ACP is also H in this case, except for class 1, and there is tonal variation on the root in classes 1, 4, 9, where the first long vowel is LH instead of HH.

Table 4.18. Paradigm for 'which one'

Class	ACP	'which one'
1	0-	o-rɔɔʻrɛ
2	vá-	vá- [↑] róórε
3	ó-	<i>ó-</i> [↑] <i>r</i> 55rε
4	é	é-rɔɔʻrɛ
5	ré-	ré- [†] rэ́ə́rε
6	é-	á- [↑] róórε
7	ké-	ké- [↑] rэ́ə́rε
8	vé-	ví- [↑] róórε
9	é-	é-rɔɔ́rε
10	jí-	jí- [↑] rɔʻɔʻrε
11	ló-	ló- [↑] róórε
12	ká-	ká- [↑] róórε
14	ó-	ó- [↑] róórε
15	kó-	kó- [↑] rɔ́ɔ́rε
16	fá-	fá- [↑] róórε
17	kó-	kó- [↑] róórε
19	fi-/shá-	fĩ- [↑] rɔ́ɔ́rε

Only one example of the interrogative 'which' is found in the textual data (37).

37. From Colman Chuchu's traditional story 4.10a

<i>óó</i>	mo-ána	wáándáarira	na	óό
óó		ó-ándaa-rir-a	na	óό
1.prox		1SM-HAB1-protect-FV	CONN	1.PROX
[↑] óré	<i>kaai</i>	<i>walaakś</i>	ne	P
ó-re	Ø-kaa-i	Ø-walaakś	ne	
1SM-COP	9NCP-house-	-LOC 1aNCP-your.relat	tive CO	

orośre

o-roóre

1ACP-which

'That child who is keeping watch, and that one who is staying in the house, which one is your relative?'

4.4 Summary

Mbugwe has 17 noun classes, and is a quite typical Bantu language with regard to noun classes and nominal concord. One unusual feature of Mbugwe is the class pair 12/19 for the diminutive in Mbugwe. The combination 12/13 is more common among Bantu languages. It is also unusual for the infinitive prefix *o*- to be different from the other class 15 prefixes, *ko*-.

The adnominals in this chapter all agree with the head noun in the noun phrase, and they are also quite typical for Bantu languages. They all follow the nominal except for demonstratives, which may also precede the nominal. In this position, they function as definite articles.

The ACP is usually H, except in classes 1 and 9. This is also reconstructed for PB. Occasionally, classes 4 and 14 also have a toneless ACP in Mbugwe, perhaps because they are vowel-initial.

5 Verbal morphology

Bantu languages are renowned for the richness of their verbal system (see e.g. Dahl 1985, Bybee, Perkins, and Pagliuca 1994). Not only does the verb take several affixes, marking subject, object, tense, aspect, mood, negation, relativity, focus and condition as well as valency-changing derivational suffixes, but there is also a large inventory of distinct tense, aspect and mood (TAM) forms, including several degrees of past and future tense (Nurse 2008). Direction is also marked on the verb in many Bantu languages. The verb, therefore, carries the bulk of the information in a clause, and can also constitute a full clause alone. This is the reason for the heavy focus on verbs in this work.

Nurse (2003) notes that Bantu languages may employ inflection, tone and auxiliaries in order to mark TAM. This is also true for Mbugwe. The interpretation of each TAM form of the verb relies not only on the verbal prefixes and suffixes, but also on the tone of the SM, and the MH tone, which is added to some verb stems, as seen in chapter 3. In some verb forms, auxiliaries are also employed to mark TAM in Mbugwe (see section 5.2). Diachronically, each prefix, suffix and tone may have marked a specific TAM category, and according to reconstructions done for PB, prefixes tended to mark tense and suffixes tended to mark aspect (Nurse 2003). Synchonically, the picture is not so straight forward. Often, it is not possible to say what each individual affix and tone marks, as it is the entire construction which is assigned a specific grammatical function. This causes a challenge for glossing purposes. Still, glosses for each morpheme have been provided according to function, following Bantu conventions and the Leipzig glossing rules (Bickel, Comrie, and Haspelmath 2008). However, each construction has a meaning that is more than the sum of its parts.

The main objective of this chapter is to give an overview of the verbal morphology in Mbugwe. The semantics of the various TAM forms is also discussed, but the focus is on the morphology. Names of TAM forms in Mbugwe are capitalised. The organisation of the chapter is as follows: first, the structure of the simple verb in Mbugwe is presented (section 5.1), and then periphrastic constructions are discussed in 5.2. The main part of the chapter presents the various tenses, aspects and moods encoded on the verb (5.3). In section 5.3.12 the negative forms are presented. The form and function of the infinitive is discussed in section 5.5. The chapter ends with a summary (section 5.7).

5.1 The structure of the simple verb in Mbugwe

Nurse (2008: 40) identifies 11 slots on the verb stem for the Bantu verb. They are adapted here to fit Mbugwe verbs. In indicative verbs, the obligatory components are SM-TAM-root-FV. The extension slot and the TAM slot allows for multiple morphemes in Mbugwe; for TAM, two have been observed, and up to three for the extensions. Negative 1 and 2 are mutually exclusive, and therefore there are two different templates below. In the first version, the NEG1 occurs (in the initial position), and in the second version, the NEG2 occurs after the SM. In Mbugwe, as in Rangi (F33) (Gibson Forthcoming-a), the directional (ventive in Mbugwe) is given a separate slot, which differs from Nurse (2008). This is because the ventive always occurs after a TAM prefix, and does not replace it. Most typically, there are four slots filled: SM-TAM-root-FV.

- 1. (NEG1) + SM + TAM + (VENT) + (OM) + root + (extension) + FV
- 2. SM + (NEG2) + TAM + (VENT) + (OM) + root + (extension) + FV

Figure 5.1 Mbugwe verbal template

Exceptions to the template above are non-indicative verb forms such as the subjunctive and imperative. The shortest possible verb form in Mbugwe is root-FV. For instance, the imperative singular usually consists of the verb root and the final vowel -a (38). There is a MH tone on the verb stem, which distinguishes this from a bare infinitive, which is another minimal verb-form in Mbugwe (see section 5.5).

38. From LOT questionnaire, Colman Chuchu #178a

remá yóonda ráánέ rem-a i-onda ré-anέ

cultivate-FV\IMP.SG 5NCP-field 5ACP-1SG.POSS

'Cultivate my field!'

The longest attested verb form in this study has 8 morphemes, including an SM, a TAM prefix, a ventive, an OM, the verb root, an applicative, a causative and the final vowel (39). However, such examples are exceptional.

39. From Elisabeth Kesembe's life story 1.7

váá[†]jánjishéryá
 vá-a-já-N-jish-er-i-a
 2SM-PST-VENT-1SG.OM-do-APPL-CAUS-FV\FPST
 'They did (all those things) to me.'

Each slot of the verb will now be presented separately, with examples of the morphemes that occur in each slot.

5.1.1 Negative 1

The negative prefix *te*- is the only morpheme that occurs in the initial slot of the Mbugwe verb. It is assumed to be a reflex of PB negative pre-stem marker *ti/ci, which occurs in this slot in 5-7% of the languages in Nurse's sample of Bantu languages, including several others from zone F (Nurse 2008: 181). This negative prefix is the default negative marker in Mbugwe and occurs in all indicative negatives except for the first person singular. An example is found in (40).

40. From LOT questionnaire, Colman Chuchu #169b

tekojéréma yoonda réy[†]tó te-ko-jé-rem-a i-onda ré-εytó

NEG-1PL.SM-NPST-cultivate-FV 5NCP-field 5ACP-1PL.POSS

loví lo-ví

11NCP-tomorrow

'We shall not cultivate our field tomorrow.'

5.1.2 Subject Marker

The SM slot is the slot for the Subject Marker. It occurs obligatorily in all indicative verb forms. Subjects are usually animate, but inanimate subjects are also possible. The SMs for first and second person and the noun classes (third person) are presented in Table 5.1. In Mbugwe, only class 1 and 2 (third person singular and plural) are H; the rest of the SM are toneless underlyingly. The SM in Mbugwe corresponds largely to the ACP (see section 4.3), whereas for PB, the subject markers corresponded to the NCP in most classes, according to Meeussen (1967: 97).⁴⁹

⁴⁹ 3SG is \acute{a} - in most TAM forms in Mbugwe, but it sometimes occurs as \acute{o} - in the Hodiernal Perfective, Hesternal Perfective, Far Past Perfective, and Consecutive Subjunctive. They seem to be in free variation in these forms. In PB, * \acute{a} - is reconstructed for the subjunctive and * \acute{u} - for remaining verb forms (Meeussen 1967).

Table 5.1. SM for noun class 1-19

NC	PB SM		SM in Mbugwe			
	3. person	2. person	1. person	3. person	2. person	1. person
1	*á-/*ú-	*u-	*N-	á-/ó	0-	N-
2	*bá-	*mu-	*tu-	vá-	то-	ko-
3	*mú-			0-		
4	*mį́-			ya-		
5	*į́-			re-		
6	*má-			<i>a</i> -		
7	*kí-			ke-		
8	*bí-			vi-		
9	*n-			e-		
10	*n-			ji-		
11	*dú-			lo-		
12	*ká-			ka-		
14	*bú-			0-		
15	*kú-			ko-		
16	*pá-			fa-		
17	*kú-			ko-		
19	*pí-			fi-		

Class 1 and 2 are for human referents. However, sometimes animals with anthromorphic qualities in stories can take the human class prefix. In (41), the two birds first have a class 6 SM, then a class 2 SM.

41. From Colman Chuchu's traditional story 2.3

ne	mawani	a ajá	á veeré	mee
ne	ma-wani	a -a-j-a	a-veeré	mee
COP	6NCP-kind.of.bird	6SM- PST-come-FV\FPST	6ACP-two	then

vá[†]kámoréétéra chákóra kejá
 vá-ká-mo-réét-εr-a ke-ákora ke-já
 2SM-CONS-1OM-bring-APPL-FV 7NCP-food 7NCP-good

^{&#}x27;Then two birds came and they brought her good food.'

5.1.3 Negative 2

In the first person singular the negative prefix is *si*- and occurs after the SM, in the NEG2 slot, as seen in (42) below. It is plausible that it is a reflex of PB **ti/ci*, a negative marker.

42. From Colman Chuchu's traditional story 7.10
nsiréétiyé kérá
N-si-Ø-réét-iyε ké-rá
1SG.SM-1SG.NEG-HOD-bring-PFV\HOD 7ACP-DIST
'I have not brought you that (cl.7).'

Another negative marker that occurs in NEG2 slot is the negative subjunctive marker $k\dot{a}ys\dot{e}$ -, which occurs with all persons. This is a negative marker that can be analysed as stemming from two different morphemes: k- (possibly from counterfactual $k\dot{a}\dot{a}$ - and $-\dot{a}ys\dot{e}$, which is also used in the progressive 2 [43]). It is very common in Bantu languages to have a separate negation strategy for subjunctive forms, often in this position, and it is also reconstructed for PB (Nurse 2008: 234).

43. From LOT questionnaire, Colman Chuchu #179

okáy[†]séréma yoonda rááné o-káysé-rem-a i-onda ré-ané

2SG.SM-NEG.SBJV-cultivate-FV 5NCP-field 5ACP-1SG.POSS

'Do not cultivate my field.'

5.1.4 Tense, Aspect and Mood marker

TAM is the slot for tense, aspect and mood markers, and this slot is filled in indicative verbs except for in the Hodiernal Perfective in Mbugwe.⁵⁰ The infinitive marker *o*- also occurs in this slot. Some moods, such as the Imperfective Subjunctive and the counterfactual, are also marked in this slot in Mbugwe, and not in the final vowel, where they are usually marked in Bantu languages (Nurse 2008). An overview of TAM prefixes is given in Table 5.2.

⁵⁰ The Hodiernal form may be considered to have a Ø TAM morpheme, but it will not be marked in this work, as it is difficult to pin down what function the Ø morpheme indicates. The absence of a TAM marker, together with the tone on the verb stem, differentiates it from the Hesternal.

Table 5.2. TAM prefixes, forms and glosses

Prefix	Gloss	Full form	TAM form
0-	INF	o-ROOT-a	Infinitive
Ø-	HOD	Ø-ROOT-iy€	Hodiernal Perfective
á-	PST	SM-ά-ROOT-iyε	Hesternal Perfective
<i>a</i> -	PST	SM-a-ROOT-á	Far Past Perfective
jé-	FUT	SM(H)-jé-ROOT-a	Future Perfective
kéé-/kéén- /kééndé-	PRS	SM(H)-kéé-/kéén-/kééndé-ROOT-a	Present Imperfective
kee-/keen- /keende-	IPFV	SM(L)-kee-/keen-/keende-ROOT-a	Past Imperfective
kée/ kééndeé-	FUT.IPFV	SM(H)-kée/ kééndeé-ROOT-a	Future Imperfective
ándaa-	HAB1	SM-ándaa-ROOT-a	Habitual 1
jéé-	HAB2	SM-jéé-ROOT-a	Habitual 2
re	PROG1	SM-á-re-ROOT-a	Past Progressive 1
áyse-	PROG2	SM-áyse-ROOT-a	Past Progressive 2
kéré-	PER	SM-kéré-ROOT-a	Persistive
ká-	CONS	SM-ká-ROOT-a	Consecutive
kéé-	SIT	SM(L)-kéé-ROOT-á	Situative
jé-	PTCP	SM(H)-jé-ROOT-a	Participial
éé-/éénd-	CDIV	CM/ID // // I DOOT	Imperfective
ee-/eena-	SBJV	SM(H)-éé-/éénd-ROOT-a	Subjunctive
káá-	CFAC	CM(L) 1-44 DOOT 4	Far Past
каа-	CFAC	SM(L)-káá-ROOT-á	Counterfactual
kaajá-/ kaajiɛ-	CFAC.FUT	SM(L)-kaajá-ROOT-a/ SM(L)-kaajiɛ-ROOT-a	Future Counterfactual
á-	CONS.SBJV	SM(H)-á-ROOT-a	Consecutive Subjunctive

The origins of the various TAM markers are mostly straight forward, as they come from lexical verbs, copulas and some PB prefixes. This will be presented in the sections in 5.3.

For some of the TAM prefixes in the list, the underlying tone is distinctive, as in *kéé-/kéén-/kééndé-* 'Present Imperfective' vs. *kee-/keen-/keende-* 'Past Imperfective'. There are also homonyms among the prefixes in isolation: *jé*-may refer to the Future Perfective or the Participial, but in main indicative clauses, the Future Perfective is a periphrastic construction with an auxiliary (see section 5.2), and the Participial does not occur as a main verb in a clause.

The tone of the TAM prefix *a*- has already been commented on in chapter 3. It appears to be underlyingly toneless in the Far Past Perfective, and underlyingly H in the Hesternal Perfective.

The Past Progressive 1 form, $\acute{a}re$, is formed by the coupla re- and the past prefix \acute{a} -. This shows that there may be at least two TAM prefixes in this slot.

Some of the TAM prefixes seem to be made up historically of two TAM markers. This is very clear in the Persistive, which is made up of the prefixes $k\acute{e}$ - and $r\acute{e}$ -. The prefix $k\acute{e}$ - is probably a reflex of persistive PB * $k\acute{i}$ -, and re (with no H tone) is the copula. Synchronically, however, this is analysed as one morpheme.

5.1.5 Ventive

A directional called *ventive* occurs after the TAM slot. As defined by Nurse (Nurse 2008: 318), it indicates "movement of an agent toward the here-and-now," often derived from 'come'. In Mbugwe, too, it is transparently grammaticalised from the verb *j-a*, 'come'. There are only five examples of the ventive in the textual data. The movement is not clear in these examples, but has been explained by the language consultants as "coming and doing something" or "coming to do something," see also Mous (2004: 7). It often, but not always occurs with the consecutive marker *ká*-. Examples of the ventive forms found in the textual data are found in (44) and (45).

44. From Elisabeth Kesembe's life story 1.22

waykal	a	baadáy	ne	áká [†] já réka
o-ikal-a		baadáy	ne	á-ká- já- rek-a
INF-sta		later (Sw.)	COP	1SM-CONS- VENT -quit-FV
<i>róró</i>	baa	morémo	wá	<i>neé</i>
róro	baa	mo-rémo	ó-a	neé
now	even	3NCP-work	3ACP-	ASSOC then

kokáykála neé áká**já**[†]fóónjá otómáma ko-ká-ikal-a neé á-ká-**já**-fónj-a o-tómam-a 2PL.SM-CONS-stay-FV then 1SM-CONS-VENT-start-FV INF-work-FV

mpoongó jíingé m-pongó jí-ngé 10NCP-thing 10ACP-other

'After living for a while, he even left work. Then we were living and he started working with other things.'

45. From Elisabeth Kesembe's life story 1.7

baa áfa váá[†]**já**njishé[†]ryá baa áfa vá-a-**já**-N-jish-er-i-a

even 16.PROX 2SM-PST-VENT-1SG.OM-did-APPL-CAUS-FV/FPST

mpό>ngό jά jί $^{\uparrow}$ rά, lakíni N-pong ό jί-a jί-rá lakíni lonCP-thing lonCP-ASSOC lonCP-DIST lonCSw.)

tejasaídí[†]á chochóónsέ tokó te-ji-a-saidi-a chochónsε tokó NEG-10SM-PST-help(Sw.)-FV\FPST 7.any at.all

'They even came and did all those things to me, but they didn't help anything at all.'

5.1.6 Object Marker

The object marker (OM) is not obligatory in Mbugwe, but it is often present if the object is animate. The OM largely corresponds to the ACP, except for class 1, where it is *mo*- instead of the ACP *o*-. The OMs that are reconstructed for PB are also given in the table below (Meeussen 1967: 97).

Table 5.3. OM in class 1-19.

NC	PB OM			OM in Mbugwe		
	3. person	2. person	1. person	3. person	2. person	1. person
1	*mu	*ku-	*N-	то-	ko-	N-
2	*bá-	*mú-	*tú-	vá-	mó-	kó-
3	*mú-			ó-		
4	*mį́-			é-		
5	*į́-			ré-		
6	*má-			á-		
7	*kí-			ké-		
8	*bí-			ví-		
9	*n-			é-		
10	*n-			jí-		
11	*dú-			ló-		
12	*ká-			ká-		
14	*bú-			ó-		
15	*kú-			kó-		
16	*pá-			fá-		
17	*kú-			kó-		
19	*pí-			fi-		

The reflexive/reciprocal é- also occurs in this slot, as it also marks the object of a clause. The prototypical reflexive is defined by Payne (1997: 198) as "a construction in which subject and object are the same entity." It specifies that there is only one participant in the situation, and this single participant fills two semantic roles in the clause (for instance both agent and patient). A reciprocal construction, similarly, is a clause where "two participants equally act upon each other" (Payne 1997: 200-201), and they both fill two semantic roles in the clause.

According to Payne (1997: 200), the two functions are expressed in the same way in many languages, as the concepts are very similar. For the two functions to merge is common in African languages (Heine 2000), including several Bantu languages from zone F (Stegen 2002: 139) and G (Petzell and Hammarström 2013). In Mbugwe as well, the reflexive and reciprocal have merged, and in Mbugwe they are both expressed in the OM slot as *é*-. However, the reflexive is reconstructed in PB as **j*-, which occurred in the OM position, whereas the reciprocal is reconstructed as the suffix *-an, in the extension slot.

Below is an example of the reflexive function of the marker (46) and a reciprocal function (47) in Mbugwe.

46. From LOT questionnaire, Colman Chuchu, #243

masanja w**éé**kεríyε na lwéémbé masanja ό**-Ø-é-**kεr-íyε na lo-émbε Masanja 1SM-HOD-**REFL-**cut-PFV\HOD CONN 14NCP-razor

monwe

mo-nue

3NCP-finger

'Masanja has cut his finger with a razor.'

47. From Colman Chuchu's traditional story 7.7

áfa	váatú [†] ryá	órera	na
áfa	vá-a-túry-á	o-rer-a	na
16.PROX	2SM-PST-finish-FV\FPST	INF-cry-FV	CONN

w**éé**[†]kúúmbátera meé á[†]kámofá o-**é**-kúmbater-a meé á-ká-mo-f´-a

INF-RECP-embrace-FV then 1SM-CONS-3SG.OM-give-FV

modí[†]dí waachwé [†]chákýra mo-dídí o-achué ke-ákora 1NCP-little 1ACP-3SG.POSS 7NCP-food

'So when they had finished to cry and embrace each other, she gave her little relative food.'

Bantu languages differ as to whether there may be two objects marked on the verb, and in some languages for instance both direct object and indirect object may be marked. Some languages allow only one object to be marked, and others allow two or more objects (Marten, Kula, and Thwala 2007). In Mbugwe, only one object may be marked on the verb. If there are both a direct and an indirect object in the clause, the indirect object is usually marked, as it is typically more animate than the direct object. For instance, as seen in *á-ká-mo-f-á* (1SM-CONS-3SG.OM-give-FV) in (47) above, the indirect object is marked, as it is animate.

5.1.7 Extensions

After the root, there is a slot called 'extension'. This refers to verbal derivative suffixes, of which the three productive ones in Mbugwe are -er (applicative), -i (causative) and -u (passive). The applicative generally increases the valency with one, adding a receiver or beneficiary of the verb, whereas the passive decreases the valency and promotes the object to the subject position. The causative changes the meaning of the verb into 'cause someone to VERB', and adds an object to an intransitive verb.

The applicative is reconstructed as *-id in PB; the causative is reconstructed to *i-, and the passive to *-i (Meeussen 1967: 92). An example of the applicative is found in (48), where a woman is cooking food for her children.

48. From LOT questionnaire, Colman Chuchu #237

moontomoká	ókéé [†] válúv er a	vaána
mo-ntomoká	ó-kéé-vá-luv- er -a	va-ána
1NCP-woman	1SM-PRS-3PL OM-cook-APPL-FV	2NCP-child

vááchwέ †chákóra vá-achuέ ke-ákora 2ACP-3SG.POSS 7NCP-food

An example of the causative is the verb katal- 'become tired'. With the causative -i it means 'to make someone tired' and with the reflexive marker in addition it means 'to argue' (49). With the causative extension, the [1] of the root is realised as [r], a variation which is seen in several places in Mbugwe (se also section 2.1).

49. From Colman Chuchu's traditional story 7.14

vákéé[†]kátárya kwá lótaanga vá-ká-é-kátal-i-a kó-a lo-tanga 2SM-CONS-REFL-become.tired-CAUS-FV 17ACP-ASSOC 11NCP-time

loley

lo-lev

11NCP-long

The passive is quite prototypical in Mbugwe, promoting the object to subject position, as in (50).

^{&#}x27;The woman is cooking food for her children.'

^{&#}x27;And they argued with each other for a long time.'

50. From Colman Chuchu's traditional story 1.25

yoonda oremwa rek $\acute{\epsilon}\acute{\epsilon}n^{\uparrow}d\acute{\epsilon}$ i-onda o-rem-**u**-a re-k $\acute{\epsilon}$ nd $\acute{\epsilon}$ 5NCP-field INF-cultivate-**PASS**-FV 5SM-PRS

né moontomoká ne mo-ntomoká COP 1NCP-woman

The extensions may also be combined and doubled. In (51) there is an example of a double applicative and a causative. The meaning of the double applicative is not clear at this stage. The verb *laang-a* means 'to look' or 'to watch', and *laang-er-a* 'to look for'. The doubling of the applicative marker possibly has an intensifier function.

51. From Elisabeth Kesembe's life story 1.43

na	nké [†] rémólaang erery a	jóva
na	n-kéré-mo-lang- er-er-i- a	Ø-jóva
CONN	SG.SM-PER-10M-look-APPL-APPL-CAUS-FV	5NCP-god

ánkwaatέ bóó [↑]mpáká faanto á-n-kúat-ε bóó mpáka fa-nto 1SM-1SG.OM-hold-SBJV\SBJV plenty until (Sw.) 16NCP-place

á[†]*jéficha* á-jé-fich-a

1SM-FUT-arrive-FV

'So I am still looking to God that he should keep me until the time when he will arrive.'

An example of the applicative and passive combined is found in (52).

52. From Colman Chuchu's traditional story 1.25

na	chákóra	ááretwár érw a	ne
na	ke-ákora	á-á-re-túal- er-u -a	ne
CONN	7NCP-food	1SM-PST-PROG1-bring-APPL-PASS-FV	COP

chák
óra chá $^{\uparrow}$ mpúúmba ke-ákora ké-a N-púmba.

7NCP-food 7ACP-ASSOC 10NCP-chaffs.of.grain (Sw).

^{&#}x27;The field is being cultivated by the woman.'

^{&#}x27;And the food she was being brought was chaffs of grain.'

Frozen traces of older derivational extensions are found in some verbs in Mbugwe: stative -ek/-ik, intransitive separative -ok, transitive separative -ol, extensive -al, repetitive -ang, and reciprocal -an (see Mous 2004, Poole 2017b). In the present study they will be analysed as part of the verb root.

5.1.8 Final Vowel

The Final Vowel is commonly used to refer to the last morpheme of the Bantu verb. Often, it is -a, which is considered the 'default' final vowel in Bantu languages. It is notoriously difficult to pin down the meaning of it. It generally marks a verb in the indicative mood, in contrast to -e, which marks the subjunctive mood in many Bantu languages (Nurse 2008: 37-38). However, not all indicative forms take the -a suffix. For instance, another common suffix in Bantu which occurs in the FV slot is reconstructed as 'past' or 'perfective' (Meeussen 1967: 110). It is very widespread in Bantu, a reflex of PB *-ide. It is found in 66% of the languages in Nurse (2008).

In Mbugwe also, -a is the default FV and $-\varepsilon$ marks the Perfective Subjunctive. -a is therefore glossed FV, and $-\varepsilon$ is glossed SBJV. The suffix which is a reflex of PB *-ide is realised as $-iy\varepsilon$ in Mbugwe, and occurs in the Hodiernal Perfective and in the Hesternal Perfective. It is glossed as perfective (PFV), as both of these forms are in the perfective aspect. Notice that the perfective is not always maked by this suffix, however, as seen in the far past and the future, which are also perfective. An example of the Perfective Subjunctive is found in (53). An example of the Hodiernal Perfective is found in (54) (repeated from 46). For examples of the FV -a, see for instance (51) and (52) above.

53. From Colman Chuchu's traditional story 3.2

babά nkόtuumbέ Ø-babá N-ko-túmb-ε

1ancp-father 1sg.sm-2sg.om-follow-sbjv\sbjv

'Father, may I follow you?'

54. From LOT questionnaire, Colman Chuchu, #243

masanja wéékεr**iy**ε masanja ó-Ø-é-kεr-**iy**ε

masanja 1SM-HOD-REFL-cut-PFV\HOD

na lwέέmbέ monwe
na lo-έmbε mo-nue
CONN 14NCP-razor 3NCP-finger
'Masanja has cut his finger with a razor.'

Historically, there seems to have been a post-FV slot in Mbugwe. Probably, in the Imperative Plural, the suffix -i was added to the final vowel. The FV is coalesced with the -i, resulting in the combined suffix -ey (55). Nurse (2008: 39) notes that the F zone is the only Bantu zone which has -i (in Nurse's transcription) instead of the more common -ni suffix for the plural imperative. A reason for treating this as one suffix in Mbugwe is that it does not follow the general rules for gliding, where -ey is usually the result of a + i which becomes adjacent across morpheme boundaries, see section 2.2.1.3.

55. From Song of the wedding day, Naomi Richards 1.1a ntwááléy n-túal-ey 1SG.OM-bring-IMP.PL\IM.PL 'Bring me'

In summary, the Final Vowel is a suffix that has -a default suffix (FV), $-\varepsilon$ is subjunctive (SBJV), $-iy\varepsilon$ is considered to mark the perfective (PFV) and -ey, which is imperative plural (IMP.PL).

5.2 Periphrastic constructions

Before the various TAM forms of Mbugwe are presented, the structure of the periphrastic forms needs to be introduced in more details, as a few of the TAM forms in Mbugwe occur in a periphrastic form in affirmative indicative main clauses. In the periphrastic form, the lexical verb occurs first, in the infinitive, and then an auxiliary verb follows. The subject is marked on the auxiliary, and an object may be marked on the lexical verb, after the infinitive prefix.

Periphrastic constructions are widespread in Bantu languages, and are a common place for grammaticalisation of new TAM forms (Schadeberg 2003a: 152). However, the order of constituents for Bantu languages is usually auxiliary-lexical verb, and not the other way around, which is the case in Mbugwe. The periphrastic construction in Mbugwe is of special interest typologically,

as the order of constituents is unusual for SVO languages. The auxiliary-infinitive construction is also rare in Bantu, but does occur in a few Bantu languages, as noted in Gibson (Forthcoming-b).

The periphrastic construction has the following structure in Mbugwe:

INF-(OM)-root-FV SM-AUX

Figure 5.2 The structure of the periphrastic construction

The term *auxiliary* is defined by Payne as "a verb-phrase element that displays at least some of the inflectional information common to verbs but is distinct from the verb that expresses the main lexical content of the clause" (Payne 1997: 84). This definition fits the second verb in these constructions, as it does not carry the lexical content of the clause, but is inflected for person (subject). Payne (1997: 84) notes that auxiliaries often stem from lexical verbs such as *be, stand, sit, go* and *come*.

There are six auxiliaries that occur in the periphrastic construction in Mbugwe (Table 5.4). For an explanation of each TAM term and the corresponding TAM form, see section 5.3.

TAM	Periphrastic construction	Simple verb
Present Imperfective	o-ROOT-a SM-kééndé	SM(H)- <i>kéé(n)</i> -ROOT- <i>a</i> SM(H)- <i>kééndé</i> -ROOT- <i>a</i>
Past Progressive 1	o-ROOT-a SM-á-re	SM- <i>á-re</i> -ROOT- <i>a</i>
Past Progressive 2	o-ROOT-a SM-áyse	SM-áyse-ROOT-a
Habitual 1	o-ROOT-a SM-ándaa	SM-ándaa-ROOT-a
Habitual 2	o-ROOT-a SM-jééndé	SM-jée-ROOT-a
Future	o-ROOT-a SM-je	SM(H)-jé-ROOT-a

The verb *j-a* 'come' is still a lexical verb in Mbugwe, and *re* (found in *á-re*, Past Progressive 1, where there is also a Past TAM prefix *á-*) is a copula verb in Mbugwe. The copula may be a reflex of PB **dì*, 'be', and *á-* often refers to past tense. The PB **gènd* 'walk, travel, go, go away' is a possible source for the forms **kééndé/kééndé* and **jeɛndɛ*. It is unclear where the initial **k-* and **j-*come from in these morphemes, but possible sources are PB **ki-*, which is reconstructed to mark Persistive, Situative or Imperfective (Nurse 2008: 246-249), and **j-a* 'come'. Concerning **ándaa*, a possible source is PB **bànd*, meaning 'start'. It appears as a lexical verb in both Rangi (F33) (*and-a*), and Swahili (*anz-a*), meaning 'to start' in both languages. The auxiliary **áyse* is of unknown origin, but Rangi has an auxiliary **iise* (immediate future) (Gibson 2012). However, the semantic link with the progressive is not clear.

In Mbugwe the simple form of these TAM forms is found in subordinate clauses, relative clauses, interrogatives, negatives and cleft constructions. These are the same conditions that Gibson (2012: 113-122) found for Rangi (F33), which has the order infinitive-auxiliary in the same clause types. In indicative, affirmative clauses, the auxiliary-infinitive order is used in both languages, which is surprising, considering how marked the construction is.

Below are examples of each of the periphrastic constructions in Mbugwe. The first is the Present Imperfective (56). It is the most common form used to refer to the present.

56. From Elisabeth Kesembe's life story 1.1b

ne	osááka	nkéén [†] dé	olóósa
ne	o-sáák-a	N-kéndé	o-lóós-a
COP	INF-want-FV	1SG.SM-PRS	INF-tell-FV

mikalo yaanέ kwεεnda me-ikalo e-anέ kuɛnda 4NCP-life 4ACP-1SG.POSS since

nayáálwá

N-a-yáál-u-á

1SG.SM-PST-give.birth-PASS-FV\FPST

The Past Progressive 1 and 2 (57) and (58) are used in reference to an ongoing action in the past. The difference between the two forms is not clear. The two examples are referring to the same event in the story.

57. From Colman Chuchu's life story, 1.25

otéya náre nsí[†]yé nkéetwáála o-téy-a N-á-re N-síyé N-kee-túal-a

INF-fish-FV 1SG.SM-PST-PROG1 10NCP-fish 1SG.SM-IPFV-bring-FV

'I was fishing, I was bringing the fish.'

^{&#}x27;I want to tell about my life since I was born.'

58. From Colman Chuchu's life story, 1.32

na	okóla	náyse	nyááfu	nέε
na	o-kól-a	N-áyse	N-áfu	nέε
CONN	INF-take.up-FV	1SG.SM-PROG2	10NCP-net	1sg

 $nt\hat{u}^{\dagger}riry\varepsilon$ $ok\acute{o}la$ $ny\acute{a}\acute{a}f\acute{u}$ $iveer\acute{e}$ $N-\acute{O}-t\acute{u}ri-iy\varepsilon$ $o-k\acute{o}l-a$ $N-\acute{a}fu$ $i-veer\acute{e}$

1SG.SM-HOD-finish-PFV\HOD INF-take.up-FV 10NCP-net 10ACP-two

The difference between Habitual 1 and 2 (59 and 60) is not clear from the limited data available, as there are few examples of these forms.

59. From Colman Chuchu's life story 1.40

na	omotúúmba	náándáa	ijóvá
na	o-mo-túmb-a	N-ándaa	i-jóva
CONN	INF-10M-follow-FV	1SG.SM-HAB1	5NCP-god

baa éé[↑]nsíko baa éénsíko even today

60. From Elisabeth Kesembe's life story 1.26

hamu	ne	otśślá	ojééndé	nkúúndá
hamu	ne	o-tớớl-a	o-jέndέ	n-kúnda
INTERJ ⁵¹	COP	INF-get-FV	2SG.SM-HAB2	10NCP-problem

mon5ótiingokanamoloókomon5o-tingok-anama-oloókoa.lotINF-walk-FVCONN6NCP-foot17.PROX

The Future Perfective is the most common form used to refer to future events, and it is exemplified in (61).

61. From Colman Chuchu's traditional story 1.2b

osírákojenavaánao-sír-ako-jenava-ánaINF-finish-FV1PL.SM-FUTCONN2NCP-child

^{&#}x27;I was taking up nets, and I had already taken up two nets.'

^{&#}x27;I am following God even until today.'

^{&#}x27;Look, you are having big problems walking here on foot.'

^{&#}x27;We are going to die, and the children too.'

⁵¹ An interjection expressing surprised dismay.

All of the above examples are affirmative indicative main clauses, and the periphrastic construction is used in each case. In some clause types, such as the interrogatives, relative clauses, subordinate clauses, clefts and in negative constructions, a simple verb form occurs instead. Examples of each of these are given below in order to illustrate the various conditions in which the simple form occurs.

An example of the simple form of the Future Perfective verb used in the interrogative is seen in (62).

62. From Song about a young man who goes to see a girl, Naomi Richards. 1.10

nányu **njé** $^{\uparrow}$ **mwééra** áykalé nányu **N-jé-mo-wéér-a** á-ikal- ϵ

who **1SG.SM-FUT-1OM-tell-FV** 1SM-stay-SBJV\SBJV

neshopárki. neshopáki. national park (Eng.)

'Who will I tell to stay in the national park?'

The simple form is also found in relative clauses, as seen in (63). There is no overt relative morpheme, but there is a phrasal tone on the relative verb, suggesting that the verb is part of a subordinate clause and not a main clause. The phrasal tone is not marked in this study, as it needs more research.

63. From Colman Chuchu's traditional story 1.27

tere chákóra cháandáaréwá ne vaanto te-re ke-ákora ke-ándaa-r´-u-a ne va-nto NEG1-COP 7NCP-food 7SM-HAB1-eat-PASS-FV COP 2NCP-person 'It was not food which was usually eaten by people.'

Another clause type where the simple form is used, is in subordinate clauses which are not relative clauses. In (64), the clause with the simple form functions as temporal adverbial in the main clause.

64. From Colman Chuchu's traditional story 7.23a

áfa **ááysetótéka** nkó áfa **á-áyse-tótek-a** N-kó

16.PROX **1SM-PROG2-bring-FV** 10NCP-firewood

meé †kóno vá†kámonóla njéére meé kóno vá-ká-mo-nól-a N-jéére then LOC 2SM-CONS-10M-cut.hair-FV 10NCP-hair 'While she was collecting firewood, they cut her hair.'

An example of a cleft construction with a simple form is found in (65).

65. From Colman Chuchu's traditional story 4.2

nວວng'ວ໌	kekává	ne	nsíko	jэ́э́nsε
nəng'á	ke-ká-va	ne	n-síko	jí-όnsε
SO	7SM-CONS-COP	COP	10NCP-day	10ACP-all

vááréja

vá-á-re-j-a.

2SM-PST-PROG1-come-FV

Finally, the simple form is always used in negative constructions. An example of this is the Negative Past Progressive 2 (66).

66. From LOT questionnaire Colman Chuchu #183a

nsáysérema yoonda ráánέ N-sí-áyse-rem-a i-onda ré-anέ 1SG.SM-1SG.NEG-PROG2-cultivate-FV 5NCP-field 5ACP-1SG.POSS

†áfa ááfiká áfa á-a-fik-a

16.PROX 1SM-PST-arrive-FV\FPST

In summary, the simple form is found in interrogative clauses, in relative clauses and other subordinate clauses, in cleft constructions and in negative clauses.

There are still unanswered questions concerning the origin of the periphrastic constructions in Mbugwe. Mous (2000) suggests that it is a recent innovation in Mbugwe, as the periphrastic constructions are not mentioned in Dempwolff (1915-1916). He suggests that the innovation is due to language

^{&#}x27;And so it was that they were coming every day.'

^{&#}x27;I was not cultivating my field when s/he arrived.'

contact, specifically with Cushitic languages. However, Gibson (Forthcoming-b), which is a study of similar periphrastic constructions in six Bantu languages, argues convincingly that they are language internal innovations, originating from more canonical auxiliary-infinitive constructions. In her analysis, the lexical verb is fronted for focus in some specific contexts, such as the present progressive and other related tenses, thereby arriving at the unexpected infinitive-auxiliary construction.

For Mbugwe, another possible origin of this construction may be a copula verb.⁵² It is noteworthy that the copula *re* occurs clause-finally in certain contexts. One example is given in (67), where the copula links the subject with the predicate, an attributive adjective. In (68), there is no overt subject, but the copula functions in a similar way, with a noun as an attribute to the subject, which is marked on the copula.

67. From Colman Chuchu's traditional story 1.29a

njééré	ne	ndey	járe
n-jéére	ne	n-ley	ji-á-re
10NCP-hair	COP	10NCP-long	10SM-PST-COP
'The hair was long	<u>,</u> ,	_	

68. From Colman Chuchu's life story 1.16

chafá		né	moreevi	ááre
chafá		ne	mo-reevi	á-á-re
because		COP	1NCP-drunk	1SM-PST-COP
(D	1		1 1 1 ,	

^{&#}x27;Because she was an alcoholic...'

The similarity with a periphrastic structure such as in (69), repeated from (28), is striking, even though the forms here are both progressive.

⁵² Thanks to Östen Dahl and Harald Hammarström for pointing this out possible origin.

69. From Colman Chuchu's traditional story 1.28

orá	mwaána	cháfá	ne
o-rá	mo-ána	cháfa	ne
1ACP-DIST	1NCP-child	because	COP

onyáálólwaááréneo-nyáálol-u-aá-á-reneINF-annoy-PASS-FV1SM-PST-PROG1COP

ová[↑]kóómbókaáárekwáávóo-vá-kómbok-aá-á-rekó-ávó

INF-3PL.OM-remember-FV 1SM-PST-PROG1 17ACP-3PL.POSS 'Because that child was very troubled, she was missing her parents.'

Gibson (Forthcoming-b) also notes that in many of the Bantu languages with the infinitive-auxiliary construction, there is a mandatory *ne*, often analysed as a focus marker, in the beginning of the clause. The implications of these facts for Mbugwe and the grammaticalisation path this construction has taken in Mbugwe is an interesting topic for future research.

5.3 Tense, aspect and mood

In this section the form and function of various TAM categories in Mbugwe will be presented. When possible, their etymological origin will also be suggested. Well-established terms for tenses, aspects and moods will be employed wherever possible. When the usage in Mbugwe is different from the pattern observed in Bantu languages, this will be pointed out.

Traditionally, tense, aspect and mood have been described as discrete categories, separate from each other (Comrie 1985, 1976, Palmer 1986). Some literature on TAM emphasise that it is not always possible to tease them apart, such as Dahl (1985) and (Bybee, Perkins, and Pagliuca 1994). Dahl and Velupillai (2013) state:

An alternative to seeing tense, aspect and mood as grammatical categories in the traditional sense is to regard tense-aspect-mood systems as wholes where the building-blocks are the individual tenses, aspects, and moods, such as the Past and the Progressive in English. (Dahl and Velupillai 2013)

This approach is especially fitting for Bantu languages. Bantu languages often combine tense, aspect and mood in numerous TAM forms, which often need to be described as a combination of a tense and aspect, such as past perfective or present progressive. Nurse (2008) holds that TA in Bantu languages forms an interlocking system, and that every finite verb has an aspect, even if it is sometimes unmarked. Each finite verb has only one tense, but also one or more aspects, according to Nurse (2008).

Dahl (1985) and Bybee, Perkins, and Pagliuca (1994) also remind us that verbal categories are in constant change, like everything else in a language. It is not a stative set of categories and markers, but a dynamic system in constant change. This is also true for Bantu languages, where the grammaticalisation of TAM forms seems to be ongoing in many cases (Nurse 2008: 13).

With the particularities of Bantu languages in mind, we will now define the various terms which are used to describe the Mbugwe TAM forms. First we will define tense, then aspect, and finally mood. Then we will look at how they combine in Mbugwe TAM forms.

Tense is defined in Comrie (1985: 9) as a "grammaticalized expression of location in time" and the most common tenses are the present, "simultaneous with the moment of speaking," the past, "located prior to the moment of speaking" and the future, "located subsequent to the moment of speaking" (Comrie 1976: 2). Bantu languages, as well as some other languages found in New Guinea, South America, and a few instances in North America and Australia (Dahl and Velupillai 2011) have additional remoteness degrees of the past and, more rarely, the future tense. In these languages time is divided on a scale going from recent to remote in reference to the time of speaking. This is called "temporal distance" in Dahl (1985: 120). According to Nurse (2008: 89), 80% of Bantu languages in his sample had at least two degrees of past tense. Only 41% had a division of the future (Nurse 2008: 22). Most Bantu languages have two or three degrees of the past tense (Nurse 2008: 22).

The most common dividing point for languages with several degrees of past is between today and before today, called hodiernal and hesternal respectively (see Dahl 1985: 125). For Bantu languages, Nurse notes that the most common distinction is hodiernal, hesternal and earlier than hesternal (Nurse 2008: 91). However, the system is flexible, and rather than referring to exact times, the tenses can refer to three time periods: the closest to the time of speaking, the one before the closest, and one which is further away from the present (Nurse 2008: 22).

In Mbugwe, there are three degrees of past tense in the perfective aspect. There is the Hodiernal Perfective, which refers to event which have taken place earlier on the day of speaking; Hesternal Perfective, which refers to events which took place the day before the time of utterance; and Far Past Perfective, which took place before yesterday. In other aspects, there is no such division of past time. There is only one degree of the future tense in Mbugwe.

Aspects are grammaticalised expressions of the "different ways of viewing the internal temporal constituency of a situation" (Comrie 1976: 3). Common aspects in Bantu are perfective, imperfective, anterior, and less commonly habitual, progressive, and persistive (Nurse 2003: 96). All of these are also found in Mbugwe.

The Hodiernal Perfective form, primarily used to describe an event that has taken place on the day of speaking, is also used for describing the anterior aspect, expressing something that has occurred before something else, or in the typical sense: "a situation that started in the past but continues into the present" or a situation with "continuing present relevance of a previous situation" (Comrie 1976: 52). 53 The "perfect of recent past" (Comrie 1976: 60) is used to describe an event which is so recent that this fact in itself is enough to fulfill the requirement of present relevance. This is also discussed in Nurse (Nurse 2008) where he points out problems of distinguishing the near past from the anterior aspect in Bantu languages.

A main division concerning aspect is the perfective versus the imperfective forms. Perfective is defined by Comrie as "a view of a situation as a single whole, without distinction of the various phrases that make up that situation" (1976: 16). In Mbugwe, there are the following perfective forms: Hodiernal Perfective, Hesternal Perfective, Far Past Perfective and also the Future Perfective. These forms do not focus on the duration or the beginning or end of a situation, but on the whole situation as a complete event. The perfective forms do however contrast with the imperfective forms. Perfective forms will be discussed in section 5.3.1.

The imperfective aspect is defined by Comrie as "paying essential attention to the internal structure of the situation" (1976: 16). The imperfective aspect views the event from the inside, focusing on the duration of it, and not the beginning or end. Cross-linguistically, the present is usually in the imperfective aspect. However, Bybee et al. (1994: 126) noted: "An imperfective restricted to the present is simply a present, since a present cannot be perfective." It is the neutral way of expressing a present event, and other possibilities for expressing the present involve other aspects such as the habitual, progressive or persistive. In Mbugwe as well, the most common present tense is in the imperfective form.

Comrie divides imperfectivity into two parts: habitual and continuous. Continuous is then divided into non-progressive and progressive (Comrie 1976). Another way of looking at it is by studying representations of the various categories in a variety of languages. Doing this, both Bybee et al. (1994)

⁵³ The anterior is also called perfect, but anterior is used here in order to prevent confusion with perfective aspect (following Bybee et. al. [1994] and Nurse [2008]). Comrie (1976) subsumes the perfect/anterior under aspect, but notes that it is possible to view this category as a combination of tense, as it relates to time, and aspect, as it relates to the structure of the event.

and Dahl (1985) find that the category of imperfective functions as a counterpart to the perfective, and habitual and progressive forms as separate, more restricted verb forms. In many Bantu languages, as well, there are separate forms for the imperfective (which have perfective counterparts), the habitual, the progressive and the persistive, according to Nurse (2003: 97). Nurse (2008: 138ff) does however subsume imperfective, habitual, progressive and the persistive aspect under the label 'imperfective', as their semantic range is partially overlapping. This can also be said for Mbugwe. The imperfective forms are treated in section 5.3.2, the Habitual in 5.3.3, the Progressive in 5.3.4 and the Persistive in 5.3.5.

The habitual aspect is described by Comrie (1976) as an imperfective form expressing not just iterativity (which is a separate category), but that the habitual form can "describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is a characteristic not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period" (1976: 27-28). There may be an element of repetition, but it may also be a static situation that lasts for the duration of the period.

The progressive aspect is defined by Dahl as "on-going activity": "...a relation between a dynamic situation and a point in time. Accordingly, PROG is normally not used for stative constructions" (Dahl 1985: 93). The difference between the imperfective and the progressive is not always evident, but the progressive form is not used for stative verbs, and refers to an ongoing action, rather than focusing on duration, which is often the case with the imperfective.

The persistive is unusual cross-linguistically, but common in Bantu languages. It refers to "a situation that held at one time (usually in the past) and holds at a later time (usually time of speaking)" (Nurse 2008: 24). It differs from the anterior in that it focuses on the present ongoing situation, and is not just a result of a past situation (Nurse 2008: 146). Nurse (2008) subsumes the persistive under imperfective aspect, although he also mentions it among the possible relative tenses such as the consecutive, the situative and the anterior (Nurse 2008: 123). Here it is considered an aspect due to its close connection to the progressive both in form and function.

Nurse discusses how some categories in Bantu languages are not unambiguously tense or aspect (Nurse 2008). He mentions among others the consecutive, and concludes that the consecutive may be viewed as a relative tense. Each event that is marked with the consecutive marker occurs after the previous event. The temporal frame is usually given in the first verb of a narrative, unless it is clear from the context. The Consecutive is the topic of section 5.3.6

Similarly, the situative and participial may be defined as relative tenses, as they do not have an inherent tense, but the time reference depends on other verbs in the text. The situative is a term that has been used in Bantu linguistics at least since Doke (1935), although he prefers to call it the participial mood.

In Mbugwe, there are two forms with a similar function. One is labelled the Situative, and the other the Participial. The Situative is widespread in eastern and southern Bantu, and is also reported for instance in Makhuwa (P31), where van der Wal (2014: 51) identifies four different situative forms. The situative forms only occur in dependent clauses, and are characterised as lacking inherent time reference. Their time reference depends on the tense of the main verb.

The situative forms typically occur either in hypothetical situations, as background information, and/or in dependent clauses, such as in if-clauses or when-clauses (Nurse 2008: 148). In some languages, the situative also covers situations when the verb functions as a participial, but in Mbugwe, there is a separate form with this function. The verbs with this marker are always subordinate and function as participles. Although the participial and situative are difficult to define as purely tense or aspect, Nurse (2008) treats them as aspects, based on the fact that they combine with tenses and other aspects in a fashion similar to other aspects (Nurse 2008: 124). Nurse treats the consecutive as a "narrative tense," however (Nurse 2008: 120ff). In Mbugwe, neither the Consecutive nor the Participial and Situative combine with other tenses or aspects. In this work they are therefore not defined specifically as tense or aspect, as they have characteristics of both. The Situative is presented in section 5.3.7 and the Participial in 5.3.8.

Payne (1997: 244) defines mood as something that "describes the speaker's attitude toward a situation, including the speaker's belief in its reality, or likelihood." Palmer (2001: 1) states that modality, which is the semantic category expressed by grammatical moods, "is concerned with the status of the proposition which describes the event" rather than the time of the event (tense) or how the event is viewed (aspect).

The most common inflectional mood category across Bantu is the subjunctive (Nurse 2003: 91). The subjunctive in this work is defined based on Palmer (2001). Palmer (2001: 107-108) mentions that in Bantu languages there is a fundamental difference between indicative forms, which end in -a, and subjunctive forms, which end in -e. The subjunctive may occur in main clauses, where it functions as an imperative or hortative, giving polite commands or requests (Palmer 2001: 136-138). If there is an object present, the subjunctive is often used instead of the imperative, as a more polite command, in Bantu languages (Nurse 2008: 28-29). Examples of propositional modality such as speculative, reported, negative, interrogative, presupposed, future, and the situative and event modality such as directives, purposive, wishes and fears and the resultative are found in Mbugwe subjunctives (Palmer 2001).

The subjunctive forms found in Mbugwe are described in section 5.3.9. They include the Perfective Subjunctive, the Imperfective Subjunctive and the Consecutive Subjunctive. It is not common for Bantu languages to have three different subjunctive forms, but similar forms are also found in other Bantu languages.

Other TAM forms which may be subsumed under the label mood are the imperative and the counterfactual, which are also found in Mbugwe. The imperative mood expresses a command, and the addressee is usually the 2nd person singular or plural. In Mbugwe, the speaker may be included, so that the addressee is first person plural. In these cases, the form is actually a hortative, rather than an imperative (command), and reads more like a wish or suggestion. Mbugwe then has an imperative-hortative system, which is quite common cross-linguistically (Auwera, Dobrushina, and Goussev 2013). In the terms of Auwera, Dobrushina, and Goussev (2013), Mbugwe displays maximal homonymy, as the second person singular is marked with the same strategy as first person, even if the suffix is different for plural and singular addressees. Due to the homonymity, the hortative function is subsumed in the imperative here. The imperative forms are found in section 5.3.10.

The counterfactual mood refers to a hypothetical situation which is known to not be true or possible. In Mbugwe, both the protasis and apodosis may have the counterfactual marker, or the first clause may be marked with a subjunction. In Mbugwe, the counterfactual has a recent past, a far past and a future form.

Below is a table of all the TAM forms that are found in Mbugwe, including the simple forms and the periphrastic constructions where applicable (Table 5.5).⁵⁴

 $^{^{54}}$ Legend: Melodic H tone is marked by MH after the verb form, and with an indication of where it is placed: U = ultimate, PU = penultimate, σ 2 for the second syllable, X for root neutralisation. H and L after the SM refer to a grammatical tone on the SM.

Table 5.5. All TAM forms in Mbugwe

TAM	Default form	Subordinate clauses	Gloss simple form
Hodiernal	CM & DOOT : MIIo2-PII		HOD-
Perfective	SM-Ø-ROOT- <i>iyε</i> MH ^{σ2-PU}		-PFV\HOD
Hesternal	CM 4 DOOT in-		DOT DEV
Perfective	SM-ά-ROOT-iyε		PSTPFV
Far Past	CM DOOT MIGHT		DOT EMEDOT
Perfective	SM- a -ROOT- a MH $^{\sigma 2\text{-U}}$		PSTFV\FPST
Future	INF-ROOT-a SM-je	SM(H)-jé-ROOT-a	FUTFV
Perfective	INT-KOOT-u SWI-je	5W1(11)-je-KOO1-a	1 O 1 1 V
Present	INF-ROOT-a SM-kééndé	SM(H)-kéé-/kéén-	PRSFV
Imperfective	In the out a sin weenac	/kééndé-ROOT-a	TRS TV
Past	SM(L)-kee-/keen-/keendee-		IPFVFV
Imperfective Future	ROOT-a	SM(II) kán/kándaá	
Imperfective	INF-ROOT-a SM-έέndε	SM(H)-kée/ kééndeé- ROOT-a	FUT.IPFVFV
Habitual 1	INF-ROOT-a SM-ándaa	SM-ándaa-ROOT-a	HAB1FV
Habitual 2	INF-ROOT-a SM-jééndé	SM-jée-ROOT-a	HAB2FV
Past	·	·	PST-PROG1-
Progressive 1	INF-ROOT-a SM-á-re	SM- <i>á-re</i> -ROOT- <i>a</i>	-FV
Past	DIE DOOT GM /	CN / POOT	
Progressive 2	INF-ROOT-a SM-áyse	SM-áyse-ROOT-a	PROG2FV
Present		SM-re-ROOT-a	PROGFV
Progressive		51176 110 0 1 W	
Persistive	SM(H)-kére-ROOT-a		PERFV
Consecutive	SM(H)-ká-ROOT-a		CONSFV
Situative	SM(L)-kéé-ROOT-a MH ^U		SIT- FV\SIT
Participial	SM(H)-jé-ROOT-a		PTCPFV
Perfective Subjunctive	SM(H)-ROOT- ε MH ^{UX}		-SBJV\SBJV
Imperfective	SM-éé/éénd-ROOT-a		IMPF.SBJVFV
Subjunctive			~~~~
Consecutive	SM-á-ROOT-a		CONS.SBJV-
Subjunctive			-FV
Imperative Singular	ROOT-a MH ^{PU}		-FV\IMP.SG
Imperative			
Plural	ROOT-ey MH ^{σ2-U}		-IMP.PL\IMP.PL
Recent Past			
Counterfactual	SM(L)-káá-ROOT-iyε		CFACPFV
Far Past			CFAC-
Counterfactual	SM(L)-káá-ROOT-a MH ^U		-FV\FPST
Future	SM(L)-kaajá-ROOT-a		
Counterfactual	SM(L)-kaajiɛ-ROOT-a		CFAC.FUTFV
Counterfactual	2(2) may to 1001 u		

5.3.1 Perfective aspect

In Mbugwe, there are three past tenses and one future tense in the perfective aspect. They refer to past and future events as a whole, with no focus on the duration of the event.

The suffix -iyɛ occurs in Hodiernal Perfective and Hesternal Perfective, and is analysed as marking perfectivity. As mentioned in section 5.1.8, it often marks past tense or perfectivity in Bantu. Nurse (2008: 264) suggests that it also often marks the anterior aspect in Bantu. A TAM prefix a- for past tense occurs in 78% of the languages in Nurse (2008: 82), and 58% have the combination a- -a in a past tense, while 43% had a past with a- -ile, which corresponds to the Hesternal Perfective in Mbugwe. It is the most common way to refer to past time in Bantu languages. In Mbugwe this prefix is analysed as being toneless for Far Past Perfective and H in the Hesternal Perfective.

The future marker je/je is probably grammaticalised from the lexical verb j-a 'come', with a possible subjunctive ending. In Nurse's 2008 survey, it is noted that 11% have a future with a subjunctive ending, but he did not note many occurrences derived from 'come' (Nurse 2008: 86). However, this is quite common cross-linguistically (Bybee, Perkins, and Pagliuca 1994: 252). The Future Perfective has a periphrastic construction in main indicative clauses (Table 5.6).

Table 5.6. Perfective forms

TAM	Simple form	Periphrastic construction
Hodiernal Perfective	SM- <i>Ø</i> -ROOT- <i>iyε</i> /MH ^{σ2-PU}	-
Hesternal Perfective	SM-ά-ROOT-iyε	-
Far Past Perfective	SM-a-ROOT-ά/ MH ^{σ2-U}	-
Future Perfective	SM(H)-jé-ROOT-a	INF-ROOT SM-je

5.3.1.1 Hodiernal Perfective

When an event has occurred earlier in the day of speaking, the Hodiernal Perfective is used. The form has a zero TAM prefix, and the suffix is the perfective $-iy\varepsilon$. The 1SM (third person singular, class 1) is \acute{a} - or \acute{o} -. There is a MH tone with the main pattern of a MH tone from the second syllable to the penultimate syllable of the verb stem (see section 3.2.4.2), which also marks TAM. An example of the usage is found in (70).

 $^{^{55}}$ The subjunctive is $-\varepsilon$ in Mbugwe. It is not known why the vowel quality is different in the prefix.

70. From LOT questionnaire #154, Colman Chuchu

ndemíyέ yoonda ráánέ N-Ø-rem-iyε i-onda ré-anέ

1sg.sm-hod-cultivate-pfv\hod 5NCP-field 5ACP-1sg.poss

éé[†]nsíkó na motóóndo éénsíko na mo-tóndo today CONN 3NCP-morning 'I cultivated my field this morning.'

The Hodiernal Perfective may also be employed to express anterior aspect, where something has already happened, but not necessarily on the day of speaking. In (71), the language consultant recounts what he was doing when he heard that his friend had been caught stealing nets. This is a typical example of an event in the past which is located before another event in the past.

71. From Colman Chuchu's life story, 1.31

kwá	órá	[↑] wásiwási	áfá
kó-á	ó-rá	Ø-wasiwási	áfa
17ACP-ASSOC	14ACP-DIST	14NCP-worry (Sw.)	16.PROX

natέ
έrá
 Ν-a-té
έr-a
 όκwá
ά †tíw
έ
 ό-Ø-kú
at-u-iyε

1SG.SM-PST-hear-FV/FPST 1SM-HOD-catch-PASS-PFV\HOD

na	okóla	náyse	nyááfu	nέε
na	o-kól-a	n-áyse	N-áfu	nέε
CONN	INF-take up-FV	1SG SM-PROG2	10NCP-net	1sg

ntú¹ríryεokólanyááfűN-Ø-túri-iyεo-kól-aN-áfu1SG.SM-HOD-finish-PFV\HODINF-take.up-FV10NCP-net

iveeré i-veeré

10ACP-two

The Hodiernal Perfective is also used in clauses referring to the result of a previous event. These are examples of the "perfect of result", where "a present state is referred to as being the result of some past situation" (Comrie 1976).

^{&#}x27;In my worry, I heard that he had been caught. And I was taking up nets, and I had already taken up two nets.'

In this case both situations are in the past, but the second situation is a result of the first one (72).

72. From Colman Chuchu's traditional story 1.12

áfa	áákú [†] yá	nyináávɔ	vá [†] káva
áfa	á-a-kúy-a	Ø-nyináávo	vá-ká-va
16.PROX	1SM-PST-die-FV\FPST	1aNCP-their.mother	2SM-CONS-COP

vá [†] chááyε	vá [†] rá	vaáná	veené	
vá-Ø-cháál-iyɛ	vá-rá	va-ána	va-εnέ	
2SM-HOD-remain-PFV\HOD	2ACP-DIST	2NCP-child	2NCP-self	
'When their mother died, those children were left by themselves.'				

Other examples of the anterior use of this form are in stative verbs. Nurse states that "anteriors used with stative verbs represent the state resulting from the action, and the translation into English is present" (2008: 97-98). This statement is a bit problematic, as a stative verb does not entail an action. ⁵⁶ Furthermore, this function of the anterior is not universal, and not all stative verbs necessarily behave like this, even in Mbugwe. An example from Mbugwe with a seemingly stative (posture) verb is found in (73). These kinds of verbs may be derived from dynamic verbs in Bantu, and even synchronically there may be both dynamic and stative uses of such verbs. This is a topic for future research.

73. From LOT questionnaire #233, Naomi Richards

wéémíyé	kore	itúúmbe
ó-Ø-ém-iyε	ko-re	i-túmbe
1SM-HOD-stand-PFV\HOD	17SM-COP	5NCP-chair
'S/he is standing on the cha	ir.'	

Wilhelmsen (2011) discusses the probable grammaticalisation path for the Hodiernal in Mbugwe, and suggests that the anterior was the original function of this form, and that the three different tense distinctions in Mbugwe developed at a later stage. Botne (2014) suggests that the form with the *-ile* suffix was a resultative in early Bantu, which in Mbugwe developed into Hodiernal Perfective and also took over the function of the anterior (Botne 2014:24). In any case, it is assumed that the three different past tenses are a later innovation in Bantu (Masele and Nurse 2003).

⁵⁶ This and the following observation were brought to my attention by Östen Dahl, p.c. See also Fleisch (2000) for a relevant dicussion of this issue in a Bantu language.

5.3.1.2 Hesternal Perfective

The Hesternal Perfective is used primarily for events that occurred the day before the time of utterance, and is the default form if you want to refer to something that occurred yesterday (74). The form has a TAM prefix a- and the suffix $-iy\varepsilon$. The 1SM (third person singular, class 1) is \acute{a} - or \acute{o} -.

74. From LOT questionnaire, Colman Chuchu #156a

nárémiyɛ	yoonda	ráá [†] né	nayjʻʻ
N-á-rem-iyε	i-onda	ré-anέ	naijó
1SG.SM-PST-cultivate-PFV	5NCP-field	5ACP-1SG.POSS	yesterday
'I cultivated my field yesterd	lay.'		

The Hesternal is not very frequent in the data, as it specifically refers to the day before the time of utterance, which is not talked about frequently in narratives. Sometimes, however, the form is used in a different way, referring to something that happened in the time frame before this one (75).

75. From LOT questionnaire Colman Chuchu #158a

nárémiyε N-á-rem-iyε 1sG.sM-PsT-culti	vate-PFV	yoonda i-onda 5NCP-field	ráánέ ré-anέ 5ACP-	lsg.pos	S
[†] wíki	ée	yáál <i>ó</i> əkiye		na	ijź
Ø-wíki	ée	i-á-lɔɔk-iyε		na	ijź
9NCP-week (Sw.)	9.PROX	9SM-PST-pass	s-PFV	CONN	10.ref
'I cultivated my fi	eld last w	eek.'			

The language consultant also used the Hesternal Perfective for farming last month, but for last year he used the Far Past Perfective form. He commented that when it comes to farming, there are seasons and cycles, and he agreed that it is possible to use the Hesternal to refer to the time cycle before the present time cycle. Botne (2014: 28) refers to the flexible status ('time scaling') of the past tenses in Mbugwe, as well as other languages, and places the Mbugwe data into his multidimensional dissociative model in order to explain such relativity in the various TAM forms (Botne 2014: 24). One can talk about three time frames: the present, the previous one, and the one before that. This usually refers to today, yesterday and before that in Mbugwe, but it can be extended to this week, last week and before that, or this season, the previous season and the one before. Nurse (2008: 22, 93) also comments on the flexible

⁵⁷ In the Hesternal Perfective verbs, the *a*- prefix appears to be H, but does not cause a rising tone before another H tone, as in *kwaamúttye* 'we beat (yesterday)'; however it is rising in *kwaásísikiye* 'we rubbed (yesterday)', with a toneless verb root.

use of time reference in Bantu languages, and that some of the languages have a quite rigid system of temporal reference, whereas in others it is more flexible

5.3.1.3 Far Past Perfective

The Far Past Perfective is used for anything that happened before yesterday, in general. It refers to a complete event which happened some time ago. The form of the far past tense is a TAM prefix a-, marking past time, and the final vowel -a. The 1SM (third person singular, class 1) is \acute{a} - or \acute{o} -. There is a MH tone on the verb from the second syllable to the ultimate.

The Far Past Perfective can refer to a few days ago, as in (76), or a long time ago, as in (77).

76. From LOT questionnaire Naomi Richards #158a

naremá	yóonda	rááné
N-a-rem-a	i-onda	ré-ánέ

1SG.SM-PST-cultivate-FV\FPST 5NCP-field 5ACP-1SG.POSS

†wíki **yaalóóká** Ø-wíki **e-a-lóók-a**

9NCP-week (Sw.) 9SM-PST-pass-FV\FPST

77. From LOT questionnaire Colman Chuchu #160

naremá	yóonda	ráá [†] né
N-a-rem-a	i-onda	ré-anέ

1SG.SM-PST-cultivate-FV\FPST 5NCP-field 5ACP-1.SG.POSS

mwaáka íjo mo-áka íjo 3NCP-year 10.REF 'I cultivated my field last year.'

5.3.1.4 Future Perfective

The Future Perfective refers to a future event as a single event. It has a periphrastic construction in indicative main clauses (78). The form is INF-root-FV SM-je.

^{&#}x27;I cultivated my field last week.'

 $^{^{58}}$ As seen in chapter 3, the Far Past Perfective a- prefix appears to be toneless, but does not block HTS.

78. From Colman Chuchu's life story 1.38

okotúúmbánjensíkoo-ko-túmb-aN-jeN-síkoINF-2SG.SM-follow-FV1SG.SM-FUT10NCP-day

jááné [↑] *jóónse* jí-áné jí-ónse

10ACP-all 10ACP-1SG.POSS 'I will follow you all of my days.'

The Future Perfective occurs in the simple form in the interrogative, relative clauses, and subordinate clauses. (79) is an example of the use of the Future Perfective in a relative clause. The simple form has a future prefix $j\acute{e}$ - and the suffix -a.

79. From Elisabeth Kesembe's life story 1.43

na **nké**[†]**rémólaangererya** jóva na **n-kéré-mo-lang-er-er-i-a** Ø-jóva CONN **SG.SM-PER-10M-look-APPL-APPL-CAUS-FV** 5NCP-god

ánkwaatέ bóó [†]mpáká faanto á-n-kúat-ε bóó mpáka fa-nto

1SM-1SG.OM-hold-SBJV\SBJV a.lot until 16NCP-place

á[†]jéficha á-ié-fich-a

1SM-FUT-arrive-FV

'So I am still looking to God that he should keep me until the time when he will arrive'

In summary, there are three past tenses in the perfective aspect, and one future form. In these forms, the event is viewed as a single, complete event, with no focus on the beginning or end. This is in contrast with imperfective aspect, which focuses on the duration of the event.

5.3.2 Imperfective aspect

In Bantu languages, the imperfective is often marked by a verbal suffix -aga/-anga (Nurse 2008: 138), but in Mbugwe, it is marked by a prefix, as seen in Table 5.7. It may possibly be grammaticalised from a PB *gènd 'walk, travel, go, go away'. The difference between the Past Imperfective and the Present

Imperfective markers is the tone of the prefix and SM, which is H in the Present and L on the Past Imperfective. The Present Imperfective is periphrastic in affirmative indicative clauses. The longer forms are used with vowel-initial stems, and with consonant-initial stems *kee-/kéé* is used. There is a correspondence between all H SM and a H tone on the TAM prefix in the imperfective, but judging from other forms and the tonal behaviour of the verb stems, it appears to be a coincidence.

The Future Imperfective form is not found in the textual data, but it is found in tone elicitation. The simple form is similar segmentally to both Past Imperfective and Present Imperfective, but the tone is different and there is a long [e:] at the end of the long form. The periphrastic form has the auxiliary -έέndε.

Table 5.7. Imperfective forms

TAM	Simple form	Periphrastic construction
Past	SM(L)-kee-/keen-/keende-ROOT-a	
Imperfective Present	SM(H)-kéé-/kéén-/kééndé-ROOT-a	INF-ROOT-a SM-kééndé
Imperfective		
Future imperfective	SM(H)-kée/ kééndeé-ROOT-a	INF-ROOT-a SM-éénde

5.3.2.1 Past Imperfective

The Past Imperfective form refers to an ongoing event in the past, with no focus on the beginning or end. The prefix for the Past Imperfective is *kee-/keen-/keende-*, and all SMs surface as L. The longer forms are used with vowel-initial stems. Example (80) contains four verbs in the Past Imperfective, and here *keen-* is used before the verb root *émb-a* 'sing'.

80. From Colman Chuchu's traditional story 4.7.

vaampééndə	vá	chálóy	meé
va-mpéndo	vá-a	ke-álo-i	meé
2NCP-neighbour	2ACP-ASSOC	7NCP-field-LOC	then

vákeemotééréramwaánájeembéróvá-kee-mo-téér-εr-amo-ánajembéro2SM-IPFV-1OM-listen-APPL-FV1NCP-childREL

akeerera	na	jeembéró	akeenéémbá
á-kee-rer-a	na	jembéro	á-keen-émb-a
1SM-IPFV-cry-FV	CONN	REL	1SM-IPFV-sing-FV

na	mpśśngś	akeelóósa
na	m-póngo	á-kee-lóós-a
CONN	10NCP-word	1SM-IPFV-tell-FV

^{&#}x27;So the neighbours from the field were listening to the child who was crying and singing, and the words she was saying.'

In (81), the long form *keende*- is used with the vowel-initial verb *ikal-a* 'stay'. It refers to a state which lasted a long time, with no focus on the beginning or end.

81. From Colman Chuchu's traditional story 1.21

meé	orá	morerwá	wεέ
meé	o-rá	mo-reruá	wεέ
then	1ACP-DEM.DIST	1NCP-house.help	3sg

meé	ákeendeykala	óό	káai
meé	á-keende-ikal-a	óό	kaa-i
then	3SG.SM-IPFV-stay-FV	only	house-LOC

^{&#}x27;And that house help, she just stayed in the house.'

The imperfective is employed to slow down the events, with a focus on the internal duration of the event, and it signals that a significant event is about to happen. In Colman Chuchu's life story, there is a crucial event in the narrative, when he got caught with some fishing nets he had stolen. It is the turning point of the story. Here, the Past Imperfective form is used (82).

82. From Colman Chuchu's life story, 1.26

nkeetéyá	nkeetwála	nsí¹yé	né
N-kee-téy-a	N-kee-twál-a	N-síyé	ne
1SG.SM-IPFV-fish-FV	1SG.SM-IPFV-bring-FV	10NCP-fish	COP

najiwá jírá †nyááfu
N-a-j-iv-u-a jí-rá N-áfu
1sG.SM-PST-10OM-steal-PASS-FV\FPST 10ACP-DIST 10NCP-net
'I was fishing and I was bringing the fish, and afterwards the nets were stolen from me '

The Past Imperfective occurs less frequently than the perfective past forms in the textual data, perhaps due to the nature of the data. Notice also that there are no remoteness distinctions in the Past Imperfective, whereas there are three degrees of past in the perfective aspect.

5.3.2.2 Present Imperfective

The Present Imperfective is the default way to refer to present events in Mbugwe. A present event is by definition ongoing, and therefore imperfective. The Present Imperfective is periphrastic in indicative main clauses, with the auxiliary $k\acute{\epsilon}\acute{e}nd\acute{\epsilon}$, as seen in (83). This form will be glossed PRS in this study.

83. From LOT questionnaire Colman Chuchu #150

orema	nkéén†dé	yóonda	rááné	†fáfa
o-rem-a	N-kéndé	i-onda	ré-anέ	fáfa
INF-cultivate-FV	1SG.SM-PRS	5NCP-field	5ACP-1SG.POSS	now
'I am cultivating	my field now			

The Present Imperfective occurs in the simple form in subordinate clauses, relative clauses, clefts and interrogatives (84). The simple form has the prefix $k\acute{e}\acute{e}/k\acute{e}\acute{e}n/k\acute{e}\acute{e}nd\acute{e}$, the long form occur before vowel-initial verb roots.

84. From Colman Chuchu's traditional story 4.5

áfa	ókéé [†] sííta	chákóra
áfa	ó-kéé-síít-a	ke-ákəra
16.PROX	2SG.SM-PRS-refuse-FV	7NCP-food
'Why do w	ou refuse food?	

Why do you refuse food?'

The Present Imperfective form in Mbugwe differs from progressives in that it may be used for stative as well as dynamic verbs. An example of the stative

verb sááka 'want' with the Present Imperfective in Mbugwe found in (85), repeated from (56).

85. From Elisabeth Kesembe's life story 1.1b

ne	osááka	nkéén [†] dé	olóósá	mikalə
ne	o-sáák-a	N-kéndé	o-lóós-a	me-ikalə
COP	INF-want-FV	1SG.SM-PRS	INF-tell-FV	4NCP-life

yaané kwéenda nayáálwá e-ané kuenda N-a-yáál-u-á

4ACP-1SG.POSS since 1SG.SM-PST-give.birth-PASS-FV\FPST

'I want to tell about my life since I was born.'

5.3.2.3 Future Imperfective

The Future Imperfective is only found once in the textual data, and it is from the LOT questionnaire. In the tone elicitation, a future form with the prefix $k\acute{e}e$ -/ $k\acute{e}\acute{e}nde$ - was given, but it was not found in the data. The form given in (86), with the auxiliary - $\acute{e}\acute{e}nde$, may have the notion of 'going to do something', in the literal sense, or have an immediate future reference. Notice that the periphrastic form here occurs in a main clause, in contrast with the forms presented in section 5.2.

More data are needed to determine the nature of this form, but it is given here as an example. It is not included in the section on periphrastic forms, as more data are needed to determine its meaning and whether there is a corresponding simple form.

86. From LOT questionnaire Naomi Richards #164

na	orema	nyééndé	yoonda
na	o-rem-a	N-énde	i-onda
CONN	INF-cultivate-FV	1SG.SM-FUT.IPFV	5NCP-field

ráánέ [†]fáfa ré-anέ fáfa 5ACP-1SG.POSS now

'I am going to cultivate my field right now.'

5.3.3 Habitual aspect

Nurse (2008: 143) found a habitual form in 43% of the languages in his survey. There are two morphemes that are identified here as expressing a habitual meaning in Mbugwe: ándaa/ándaa- and jɛɛndɛ/jéé-. The suffix is -a in the simple forms. They are unusual for Bantu languages, as the habitual is most

commonly marked by a suffix in the shape of *-aga* (Nurse 2008: 144). The possible origin of the Mbugwe forms is mentioned in section 5.2.

The periphrastic construction is used with indicative main clauses, and the simple form is used with interrogatives, relative clauses, sub clauses and negatives. There are ten examples of the form ándaa/ándaa-, and there are only two examples of jééndé/jéé-. Due to the limited number of examples, it is difficult to establish the difference between the two forms, and they are called Habitual 1 and Habitual 2 here, respectively. The language consultants held that the difference has to do with tense (recent vs. far past), but this is not confirmed by the limited data. As the examples demonstrate, the habitual forms usually still hold for the present, even if it started some time in the past. It is possible that Habitual 2 is about to disappear from the language, as it was only used by the older language consultants, and there are only two instances of it in the textual data.

Table 5.8 Habitual forms

TAM	Simple form	Periphrastic construction
Habitual 1	SM-ándaa-ROOT-a	INF-ROOT-a SM-ándaa
Habitual 2	SM-jée-ROOT-a	INF-ROOT-a SM-jééndé

5.3.3.1 Habitual 1

The forms with the morphemes ándaa/ándaa- are called Habitual 1 here. They generally refer to something that is characteristic for a time period that started some time ago, and is still going at the time of speaking. There are five examples of the Habitual 1 in the periphrastic construction in the data, and one of them is found in (87).

87. From LOT questionnaire Colman Chuchu #148

néé	ne	orema	náándáa
nέε	ne	o-rema	N-ándaa
1sg	COP	INF-cultivate	1SG.SM-HAB1
yoonda	ı	nsíko	jóónse
i-onda		N-síko	jí-ónse
5NCP-field		10NCP-day 10ACP-all	
'I culti	vate the	e field every day	<i>y</i> .'

The simple form is found in five instances in the textual data. They are all relative clauses. (88), repeated from (63), has a typical habitual reading, set in a past time frame.

88. From Colman Chuchu's traditional story 1.27a

tere	chákóra	cháándáaréwá	ne	vaanto	
te-re	ke-ákora	ke-ándaa-r´-u-a	ne	va-nto	
NEG1-COP	7NCP-food	7SM-HAB1-eat-PASS-FV	COP	2NCP-person	
'It was not food which was usually eaten by people.'					

5.3.3.2 Habitual 2

The morpheme that is called Habituial 2 here is *jééndé/jée*. There are only two examples of this form in the textual data, and the difference from the Habitual 1 form is not clear from the examples. In (89), repeated from (60), it fits the definition of the habitual as being "a characteristic feature of a whole period" (Comrie 1976: 27-28).

89. From Elisabeth Kesembe's life story 1.26

hamu hamu INTERJ ⁵⁹	ne ne COP	<i>otóólá</i> o-tóól-a INF-get-		ojééndé o-jéndé 2SG.SM-HAB2	[†] <i>nkúúndá</i> n-kúnda 10NCP-problem
monź	ótiin	goka	na	molo	óko
monó	o-tin	gok-a	na	ma-olo	óko
a.lot	INF-V	valk-FV	CONN	6NCP-foot	17.PROX
'Look, you are having big problems walking here on foot.'					

In (90), which is an interrogative and therefore in the simple form, the habitual reading is quite obvious, as the neighbours are asking the girl in the story what kind of food she is used to eating, since she refuses to eat the food they are bringing.

90. From Colman Chuchu's traditional story 4.4

```
vakeemoórékerya ne kee ojéerá
vá-kee-mo-órekery-a ne kee o-jée-r´-a
2SM-IPFV-1OM-ask-FV COP what 2SG.SM-HAB2-eat-FV
'They asked her: "What do you usually eat?""
```

The two habitual forms found in the data both refer to past events that are considered habitual: either they are done repeatedly, or they have been ongoing for a long while, so that they characterise the whole period.

⁵⁹ An interjection expressing surprised dismay.

5.3.4 Progressive aspect

The progressive is a common aspect in Bantu and found in 66% of the languages in Nurse (2008). Many of the progressive markers are derived by locatives. In Mbugwe there are two progressive forms found in the textual data, and they are \dot{a} -re/ \dot{a} -re- and \dot{a} yse/ \dot{a} yse-. The form \dot{a} -re/ \dot{a} -re- is comprised of the past tense prefix \dot{a} - and the copula re. As mentioned in section 5.2, the origin of \dot{a} yse is unknown, but there is a similar form in Rangi (F33), the auxiliary - \dot{u} ise (immediate future). According to the language consultants there is a difference in the time frame so that \dot{a} -re/ \dot{a} -re- refer to recent past and \dot{a} yse/ \dot{a} yse- to far past, but this is not confirmed by the limited data available. The two forms that are found in the data do refer to past time, and are called Past Progressive 1 and Past Progressive 2. A Present Progressive is found in tone elicitation, but not in the textual data. The form is SM-re-ROOT-a. This form is rare, probably because the default present tense is an imperfective form, and, by nature of being present tense, refers to an ongoing action.

Table 5.9 Progressive forms

TAM	Simple form	Periphrastic construction
Past Progressive 1	SM-á-re-ROOT-a	INF-ROOT-a SM-á-re
Past Progressive 2	SM-áyse-ROOT-a	INF-ROOT-a SM-áyse
Present Progressive	SM-re-ROOT-a	

5.3.4.1 Past Progressive 1

Past Progressive 1 is the form \acute{a} -re/ \acute{a} -re-. This form occurs in the periphrastic construction in indicative main clauses, as in (91). Here, it refers to an ongoing event. The initial \acute{a} - is a past tense TAM prefix, as in the Hesternal Perfective (5.3.1.2).

91. From Colman Chuchu's traditional story 1.28

110111 001111411 01144		1 5001 / 1.=	
orá	mwaána	cháfá	ne
o-rá	mo-ána	cháfa	ne
1ACP-DIST	1NCP-child	because	COP
onyáálólwa	ááré		ne
o-nyáálol-u-a	á-á-re		ne
INF-annoy-PASS-FV	1SM-PS	T-PROG1	COP
ová [†] kóómbóka	ááre	2	kwáávó
o-vá-kómbok-a	á-á-re		kó-ává

o-vá-kómbok-a á-á-re kó-ávó INF-3PL.OM-remember-FV 1SM-PST-PROG1 17ACP-3PL.POSS

'Because that child was very troubled, she was missing her parents.'

Past Progressive 1 occurs in the simple form in interrogatives, relative clauses (92), cleft constructions and other subordinate clauses. Again, there is an ongoing event which is being referred to.

92. From Colman Chuchu's traditional story 1.25

na	chákóra	ááretwárérwa	ne
na	ke-ákora	á-á-re-twál-er-u-a	ne
CONN	7NCP-food	1SM-PST-PROG1-bring-APPL-PASS-FV	COP

chákóra chá [↑]mpúúmba ke-ákora ké-a N-púmba.

7NCP-food 7ACP-ASSOC 10NCP-chaffs.of.grain (Sw.) 'And the food she was being brought was chaffs of grain.'

5.3.4.2 Past Progressive 2

The Past Progressive 2 is *áyse/áyse*- or *éyse/éyse*-, which are in free variation. This form is rarer than the Past Progressive 1. All of the 9 occurrences of the Past Progressive 2 are given by the older language consultant, Colman Chuchu. The sentence in (93) was given by a younger language consultant in the Past Progressive 1 form, but the older consultant gave the Past Progressive 2 form. As this was from a questionnaire, no explicit time frame was given, except that the clause was in the past tense.

93. From LOT questionnaire Colman Chuchu #182

ne	orema	náysé	yoonda
ne	o-rem-a	N-áyse	i-onda
COP	INF-cultivate-FV	1SG.SM-PROG2	5NCP-field
rááné	[†] áfa	ááfiká	

ré-áné áfa á-a-fik-a

5ACP-1SG.POSS 16.PROX 1SM-PST-arrive-FV/FPST

(94) is an example of the Past Progressive 2 in the simple form in a relative clause.

^{&#}x27;I was cultivating my field when he arrived.'

94. From Colman Chuchu's traditional story 1.15

```
ne shóónsε kwáyséja na kwéytó
ne shóónsε ko-áyse-j-a na kó-εytó
COP 1PL.all 1PL.SM-PROG2-come-FV CONN 17ACP-1PL.POSS
'It was all of us who were coming from our home.'
```

The difference between the two progressive forms might be temporal, but no definite time frame has been possible to set for the cut-off time between the recent and the far past, if that is the relevant division. It is also possible that the Progressive 2 is archaic and not much in use anymore. This is supported by the fact that all the occurrences of -áyse are given by the elder language consultant, who speaks the most conservative Mbugwe of the language consultants. This is similar to the habituals, where Habitual 2 may be archaic. It seems plausible that there used to be distinction between recent and far past in these forms, but the distinction has been lost and now the two forms are used interchangeably, and one form is preferred over the other by younger speakers.

5.3.5 Persistive aspect

The persistive "refers to a situation that held at one time (usually past) and holds at a later time (usually time of speaking)" (Nurse 2008: 24). The persistive is usually marked by a reflex of the PB marker *ki- in Bantu languages (Nurse 2008: 146). In Mbugwe, the Persistive marker is kére-, which may be derived from the combination of two morphemes: ké-, which is probably a reflex of the persistive PB *ki-, and re-, which is idendifiable as a copula. According to Nurse (2003: 147), the persistive is often combined with a progressive form, which is seen in Mbugwe, where re- is also a part of the progressive morpheme. The meaning is closely connected with the progressive, as it refers to an ongoing action. A similar form is found in Rangi, where the form is an auxiliary káa-rı (Nurse 2003: 148). The two examples given below (95 and 96) are the only ones found in the textual data. Notice that they are both given by Elisabeth Kesembe, who is an elderly speaker.

95. From Elisabeth Kesembe's life story 1.43

na	nké [†] rémólaangererya	jóva
na	n-kéré-mo-lang-er-er-i-a	Ø-jóva
CONN	SG.SM-PER-1OM-look-APPL-APPL-CAUS-FV	5NCP-god

ánkwaaté	bóó	[↑] mpáká	faanto
á-n-kúat-ε	bóó	mpáka	fa-nto
1SM-1SG OM-hold-SBIV\SBIV	a lot	until (Sw.)	16NCP-place

á[†]jéficha

á-jé-fich-a

1SM-FUT-arrive-FV

'So I am still looking to God that he should keep me until the time when he will arrive'

96. From Elisabeth Kesembe's life story 1.31

baa	éé [†] nsíkó	na	nkéretómáma	moremo
baa	éénsíko	na	n-kére-tómam-a	mo-remo
even	today	CONN	1SG.SM-PER-work-FV	3NCP-work

wáijóvakeempérokereó-ai-jóvakempéroke-re3CP-ASSOC5NCP-godREL7SM-COP

5.3.6 Consecutive

The consecutive is considered to be a relative tense, with no inherent temporal frame. The time reference of the consecutive verb depends on the previous verb in the narrative. The consecutive marker is reconstructed as *ka- in PB, and in Mbugwe it is also $k\acute{a}$ -, with a H tone, and the suffix is -a.

As an example of the Consecutive, the first few lines of a traditional story are given below (97). In this opening section of the story, the first verb is set in the Far Past Perfective tense: e-a-inger-a' it (the famine) entered (a long time ago)'. The following verbs are all in the Consecutive, except for direct speech. The verbs marked by ka- are set in the same tense as the first verb, which is in the Far Past Perfective tense. They are also sequential: first the famine arrived, then they told each other that they had to leave, and then they left. Then they told each other to go to a certain place. In Mbugwe, unlike many other Bantu languages, the Consecutive may be employed even if the subject of the various clauses changes. In the first three clauses of (97), there

^{&#}x27;Even today, I am still doing the work of God as it is.'

are three different subjects, but the Consecutive is used for the second and third clause

97a. From Colman Chuchu's traditional story 1.1-5

fá[†]rá kálev njala viíngérá fá-rá kaley N-jala e-a-ínger-a

16ACP-DIST long.time.ago 9NCP-hunger 9SM-PST-enter-FV/FPST

'A long time ago there came a big famine.'

97b. moonto omá áká[†]lóósá osírá á-ká-lóós-a o-sír-a mo-nto o-má INF-finish-FV

1SM-CONS-say-FV 1NCP-person 1ACP-one

koje na vaána ko-je va-ána na 1PL.SM-FUT 2NCP-child CONN

'One person said: "We are going to die, and the children too."

97c. meé váká[†]rérá nsé kólev na ja meé vá-ká-rér-a N-sé koley na ji-a then **2SM-CONS-leave-FV** CONN 9NCP-land 9ACP-ASSOC far.away 'And they left for a land far away.'

97d. ne mwaána wááré káá ó-á-re ko-áá mo-ána ne

> 1NCP-child 1SM-PST-COP 17ACP-REF.ASSOC COP

[↑]kóko waavź o-avá káka 1ACP-3PL.POSS LOC

'And their child was there.'

97e. meé vákéé[†]wééra ebév ná meé vá-ká-é-wéér-a ebey na then 2SM-CONS-RECP-tell-FV come.IMP.PL\IMP.PL **CONN**

kore mwaáná wεvtó mo-ána ko-re o-εvtó.

17SM-COP 1NCP-child 1ACP-2PL.POSS

'And they told each other: Come, let us go to our child.'

5.3.7 Situative

The Situative in Mbugwe mainly functions as a conditional, in an if-clause. It also occurs in what is translated as a when-clause. Usually the prefix ki- is the marker for the situative in Bantu languages (Nurse 2008: 148). A similar category occurs in 11% of Bantu languages in Nurse's 2008 survey, and he calls this the situative or participial. In Mbugwe, the Situative verb has the prefix $k\acute{e}\acute{e}$ -, and all SM are L. The suffix is -a. There is also a grammatical H tone on the final syllable (see section 3.2.4.2). A prototypical conditional reading is found in (98).

98. From Colman Chuchu's life story 1.38

kalááma chá **okéénsú**[†]**nyá** kalááma ké-a **o-kéé-N-sún-i-a**

please 7ACP-ASSOC 2SG.SM-SIT-1SG.OM-take.out-CAUS-FV\SIT

áfita koré †láva éé okotúúmbá afita ko-ré Ø-láva ée o-ko-túmb-a

here 17SM-COP 9NCP-lake 9.PROX INF-2SG.SM-follow-FV

nje nsiko jάάnέ $^{\uparrow}jόnsε$ N-je N-siko ji-anέ ji-onsε 1SG.SM-FUT 10NCP-day 10ACP-1SG.POSS 10ACP-all

'Please, if you take me out of this lake, I will follow you all of my days.'

The *kéé*- prefix in Mbugwe may also have the reading 'when something happens' instead of the conditional reading. An example is given in (99), repeated from (36).

99. From Colman Chuchu's life story 1.23

nafó **nkééféwá** †nyááfú ne nafó **N-kéé-f ´-u-a** N-áfu ne that.is.when **1SG.SM-SIT-give-PASS-FV\SIT** 10NCP-net COP

vaantováángéva-ntová-ngé2NCP-people2ACP-other

In (100) the two clauses 'If you come, you will meet me' and 'When you come, you will meet me' are rendered identically in Mbugwe. This is known to occur cross-linguistically (Shopen 1985: 193), and Doke (1935: 75) mentions this as a typical feature of Bantu languages.

^{&#}x27;That is when I was given a net by some other people.'

100. From LOT questionnaire Naomi Richards #247a/250

okéé [†] já	onkúúndyá	oje
o-kéé-j-a	o-N-kúndy-a	o-je

2sg.sm-sit-come-fv\sit INF-1sg.om-meet-fv 2sg.sm-fut

In some languages, the situative also covers situations when the verb functions as a participial, but in Mbugwe, there is a separate form with this function. It is described in the next section.

5.3.8 Participial

The prefix for the Participial is $j\acute{e}$ -, and the suffix is -a. All SM are H in this form. In (101), the main verb is inflected for tense. The second verb follows immediately. It is inflected for person, with the same subject as the main verb. In this case, the second verb may be said to function as a participle modifying the main verb.

101. From Colman Chuchu's traditional story 1.14

vááfétá	vá [†] jóórékerya	nyoombá
vá-a-fét-a	vá-jé-órekery-a	N-yombá
2SM-PST-go-FV\FPST	2SM-PTCP-ask-FV	9NCP-house

ya kwá waláávó e-a kó-a Ø-waláávó

9ACP-ASSOC 17ACP-ASSOC 1aNCP-their.relative

In (102), the Participial is clause-external, but functions as a participle, describing the girl.

^{&#}x27;If /when you come, you will meet me.'

^{&#}x27;They walked around asking about the house of their relative.'

102. From Colman Chuchu's traditional story 1.30

nວວng'ວ່	kwá	osóóngó	ó [↑] rá	orá
nəng'á	kó-a	o-sóngó	ó-rá	o-rá
SO	17ACP-ASSOC	14NCP-problem	14ACP-DIST	1ACP-DIST

```
mwaána wááfóó<sup>↑</sup>njá órera kóno
mo-ána ó-a-fónj-a o-rer-a kóno
1NCP-child 1SM-PST-start-FV\FPST INF-cry-FV LOC
```

á[†]jéémba á-jé-émb-a 1SM-PTCP-sing-FV

5.3.9 Subjunctive mood

There are three different subjunctive forms in Mbugwe: the Perfective Subjunctive, the Imperfective Subjunctive and the Consecutive Subjunctive. The Perfective Subjunctive expresses the subjunctive verb as a whole, completed event. It is marked by the suffix $-\varepsilon$. The final *- ε is also reconstructed for PB (Meeussen 1967). The Imperfective Subjunctive is marked with the TAM prefix $\acute{e}e$ -, or $\acute{e}\acute{e}nd$ - in the TAM slot. The FV is -a. It refers to an action which is continuous, without reference to the beginning or end of the action. There is also a form called Consecutive Subjunctive. It has a TAM prefix $\acute{a}e$ -, with a H tone, and the FV is -a (with no MH tone). It occurs after an imperative or counterfactual verb form and as such resembles the regular consecutive in that it has no inherent tense or aspect.

All SMs are H in both the Perfective and the Imperfective Subjunctive, and in the Perfective Subjunctive there is a MH on the verb stem. Having several subjunctive forms is not uncommon in Bantu languages. For instance Kikuyu (E51) has an imperfect subjunctive (Clements and Goldsmith 1984: 312). However, it is marked with a suffix and not a prefix in Kikuyu. In Swahili, the subjunctive may be marked on an auxiliary, and the lexical verb has a tense or aspect marker, forming for instance perfect subjunctive or imperfective subjunctive (Ashton 1947: 267). There is also a form called consecutive subjunctive in Swahili, with the regular TAM prefix *ka*- and the subjunctive FV -*e*.

^{&#}x27;So because of all of her troubles, the child started to cry there, singing.'

Table 5.10 Subjunctive forms

TAM form	Simple form	
Perfective	SM(H)-ROOT- ε MH ^{UX}	
Subjunctive Imperfective		
Subjunctive	SM-éé/éénd-ROOT-a	
Consecutive	SM-á-ROOT-a	
Subjunctive	5141-4-10001-4	

5.3.9.1 Perfective Subjunctive

The Perfective Subjunctive has the FV $-\varepsilon$, and there is a MH tone on the verb stem. There is no TAM prefix. It may occur with SM, SM and OM, or just OM. It functions as imperative or hortative when it occurs as a polite command in a main clause (Palmer 2001: 81). The hortative function is found in (103).

103. Song about a prayer to God, Naomi Richards 2.2

kósiité mbírii ko-síít-ε N-birii 1PL.SM-refuse-SBJV\SBJV 9NCP-sin

'Let us refuse sin.'

In (104), it is the groom speaking to his in-laws, making a polite request. Only the object is marked on the verb.

104. From Wedding song about in-laws, Naomi Richards 2.3

 ne
 m33nέ
 mokáykóló

 ne
 m0-5n-ε
 m0-káikóló

 COP
 10M-see-SBJV\SBJV
 1NCP-old.woman

'Let me see the old woman.'

According to Palmer (2001: 108), other common functions for the subjunctive in main clauses are volitive, obligative, speculative, presupposed, and permissive. (105) is an example of permissive.

105. From Colman Chuchu's traditional story 3.2

babá nkótuumbέ Ø-babá N-ko-tumb-ε

1ancp-father 1sg.sm-2sg.om-follow-sbJv\sbJv

'Father, may I follow you?'

There are also examples of volitive: a wish or a blessing. This function is quite common in songs and prayers, as seen in (106), which is a blessing at the end of the story.

106. From Elisabeth Kesembe's life story 1.44

```
        jóva
        ne
        ré¹móvékeré
        mokónɔ

        Ø-jóva
        ne
        re-mó-veker-ε
        mo-kónɔ

        5NCP-god
        COP
        5SM-2PL.OM-put-SBJV\SBJV
        4NCP-hand
```

wááchwé

ó-áchuέ

3ACP-3SG.POSS

The Perfective Subjunctive also occurs in subordinate clauses in Mbugwe. Below is an example that falls under propositional modality. The clause in (107) is both future and interrogative, which makes the proposition non-assertive

107. From Song about a young man who goes to see a girl,

Naomi Richards, 1.10

nányu **njé** $^{\uparrow}$ **mwééra** áykalé nányu **N-jé-mo-wéér-a** á-ikal- ϵ

who **1SG.SM-FUT-1OM-tell-FV** 1SM-stay-SBJV\SBJV

neshopárki.

neshopáki.

national park (Eng.)

'Who will I tell to stay in the national park?'

There are several examples of the Perfective Subjunctive used in expression of wishes in the data. (108) is illustrative.

108. From Elisabeth Kesembe's life story 1.25

```
osaaka nkééndé <sup>†</sup> ósáamé na kóno o-saak-a N-kééndé ó-saam-ε na kóno INF-want-FV 1SG.SM-PRS 2SG.SM-move-SBJV\SBJV CONN LOC 'I want you to move here.'
```

The examples of the Perfective Subjunctive are not exhaustive, but they are given here to illustrate that the Mbugwe subjunctive functions as a typical subjunctive verb form, both in main clauses and in subordinate clauses.

^{&#}x27;May God put you in his hand.'

5.3.9.2 Imperfective Subjunctive

The form of the Imperfective Subjunctive is the TAM prefix éé-, but it also occurs as éénd- before a vowel. A possible source for this marker, if it is not the same as the suffix, is PB *gènd 'walk'.

The Imperfective Subjunctive refers to an action which is ongoing or continues, without referring to the beginning or end of it. It is also found in both main and subordinate clauses, and seems to have the same functions as the Perfective Subjunctive, but with different aspectual focus. However, there are not many examples of this form, so not all functions are represented in the examples. In main clauses, the Imperfective Subjunctive functions as imperative and hortative. In (109), there are two verbs with the Imperfective Subjunctive form. The first is a polite command, where the addressee is the second person singular, and the second is a hortative, where the speaker includes himself in the hortative.

109. From Colman Chuchu's life story 1.24

```
asé nyááfu jáánέ
asé N-áfu jí-ánέ
take.IMP<sup>60</sup> 10NCP-net 10ACP-1SG.POSS
```

wéé[†]ntéyérya o-éé-n-téy-er-i-a 2SG.SM-SBJV-1SG.OM-fish-APPL-CAUS-FV

kwéén¹déváaneryansíyéko-énd-é-vaan-er-i-aN-síyé1PL.SM-SBJV-RECP-divide-APPL-CAUS-FV10NCP-fish'Take my nets and fish for me, and then let us share the fish.'

In another example of the Imperfective Subjunctive, the imperative function with the second person singular as the addressee is found (110).

110. From Colman Chuchu's traditional story 1.23

wéé [†] fétá	na	chaalóy	ná	rira		
ó-éé-fét-a	na	chaaló-i	na	Ø-rir-a		
2SG.SM-SBJV-go-FV	CONN	field-LOC	CONN	INF-protect-FV		
'Go to the field in order to protect.'						

In subordinate clauses, the Imperfective Subjunctive has among others, a purposive interpretation. In (111) there are two Imperfective Subjunctive verbs.

⁶⁰ A polite form of the imperative 'take', used when giving something to someone.

The first is the main verb, and it functions as a wish directed towards God. The verb of the subordinate clause has a purposive interpretation.

111. From Song about a prayer to God, Naomi Richards 1.6

éékórira kwéé[†]síítá éé-ko-rir-a kó-éé-síít-a

SBJV-1PL.OM-protect-FV 1PL.SM-SBJV-refuse-FV

ojisha mpoongó o-jish-a N-pongó INF-do-FV 10NCP-thing

The Imperfective Subjunctive in (112) occurs in a subordinate clause as well. Elisabeth Kesembe reports what some people said she should do in order to get better from her illness, so it has an obligative interpretation (Palmer 2001: 110).

112. From Elisabeth Kesembe's life story 1.8

nວວng'ວ໌	kéento	rźrź	neykalá	neé
nəng'á	kento	róro	N-a-ikal-a	neé
so	after	now	1SG.SM-PAST-stay-FV\FPST	then

váká [†] lóósa	nééfinantwa	na
vá-ká-lóós-a	N-éé-finant-u-a	na
2SM-CONS-say-FV	1SG.SM-SBJV-rub-PASS-FV	CONN

onyá maáje á móloongó o-ny´-a ma-áje á-a mo-longó

INF-drink-FV 6NCP-water 6ACP-CONN 4NCP-knobwood.tree

5.3.9.3 Consecutive Subjunctive

The form of the Consecutive Subjunctive is SM- \acute{a} -ROOT-a. It is distinguished from the Far Past Perfective by tone only, as far past has the tones SM-a-ROOT- \acute{a} , with a MH tone on the second to the ultimate syllable. The 1SM (third person singular, class 1) is \acute{a} - or \acute{o} -. The form is unexpected and atypical for Bantu languages, and may be considered a default verb form with a in both the prefix and the suffix. However, in addition to the typical function of the TAM prefix a- to mark past time, other functions are also noted in Nurse

^{&#}x27;Protect us so that we refuse to do things.'

^{&#}x27;So after that I stayed for a while, and then they said that I should be rubbed with and drink the juice of the knobwood tree.'

(2008: 237). These include non-past, present, future, imperfective, and disjunctive focus. The latter is proposed to be a function of a second *a*- TAM prefix in PB (Nurse 2008: 240). In the case of the Consecutive Subjunctive suggested here, it is clear that the meaning is not past, so the meaning is glossed CONS.SBJV according to function. It is rare in the textual data and only occurs three times.

In Swahili and other Bantu languages, the Consecutive Subjunctive has the meaning 'go and do something' (Almasi, Fallon, and Wared 2014: 328). In Mbugwe, too, it occurs together with verbs of movement: 'go' and 'bring'. The Consecutive Subjunctive occurs twice in the data together with an imperative. In (113) the groom is addressing his future in-laws. The first verb is in the Imperative Plural form, and the second is in the Consecutive Subjunctive form

113. From Song of the wedding day, Naomi Richards 1.1

ntwááley ná[†]víná N-túal-ey **N-á-vín-a**

1SG.OM-bring-IMP.PL\IMP.PL **1SG.SM-CONS.SBJV-dance-FV**

arúsiyε arúsiyε wedding (Sw.)

'Bring me, and let me dance at the wedding.'

In (114), the language consultant is talking to his friend, and the function of this clause is also subjunctive, or rather hortative. Again, the first verb is in the imperative, and the second is in the Consecutive Subjunctive.

114. From Colman Chuchu's life story, 1.29

ebú †**kwáíva** nyááfu ebú **kó-á-iv-a** N-áfu go.IMP\IMP.SG **1PL.SM- CONS.SBJV-steal-FV** 10NCP-net 'Let us go and steal nets.'

The Consecutive Subjunctive also occurs with the Far Past Counterfactual, as in (115). Here, the reading is similar to a Far Past Counterfactual, and expresses what would have happened if he had done something. As above, it occurs with the verb 'to go', indicating movement.

115. From A song of warning, Naomi Richards, 1.5

na ákááfétá [†]**wááúna** na á-káá-fét-a **ó-á-un-a**

CONN 1SM-CFAC-go-FV\FPST 1SM-CONS.SBJV-hurt-FV

kwa nuumbe ko-a numbe 7CP-ASSOC Numbe

5.3.10 Imperative mood

The Imperative Singular has the suffix -a, and the Imperative Plural has -ey, and both forms have a MH tone (see section 3.2.4.2). Several imperative forms are suppletive. As mentioned in section 5.3, the subjunctive is sometimes used instead of the imperative, as it is a more polite command. This is also usually the case if there is an OM present, although examples with a first singular OM are found in the imperative, as well. This is common in Bantu languages (see discussion in Devos and Van Olmen 2013).

Table 5.11 Imperative forms

TAM form	Simple form
Imperative Singular	ROOT- a MH ^{PU}
Imperative Plural	ROOT-ey MH ^{σ2-U}

5.3.10.1 Imperative Singular

The Imperative Singular has a MH tone (see section 3.2.4.2). The FV is -a. In (116) the addressee is second person singular, and it is a prototypical imperative clause.

116. From LOT questionnaire Colman Chuchu #178a

remá yóonda ráánέ rem-a i-onda ré-anέ

cultivate-FV\IMP.SG 5NCP-field 5ACP-1SG.POSS

'Cultivate my field!'

In (117), the imperative function is also very clear, but the first person OM is also present on the imperative verb. This is the only OM which occurs on an imperative in the data.

^{&#}x27;If he would have gone he would have hurt Numbe.'

117. From Colman Chuchu's life story, 1.27

ndefά nyááfu jáánέ N-ref-a N-áfu jí-anέ

1SG.OM-pay-FV\IMP.SG 10NCP-net 10ACP-1SG.POSS

'Pay me for my nets!'

Suppletive and irregular forms are common in the imperative in Mbugwe. For instance, the verb *render-a* 'wait' has the imperative form *nendera* (118), and *fét-a* 'go' has the imperative form *ebu* (119). In (118), there are two imperative forms. In (119) the addressee is first person plural, even though the singular form is used. The verb functions as a hortative.

118. From Colman Chuchu's traditional story 5.2

nendéra tééreréra táánga nendera téér-εr-εr-a tánga wait.IMP.SG listen-APPL-APPL-FV\IMP.SG first 'Wait, listen first!'

119. From Colman Chuchu's life story, 1.29

 ebú

 ↑kwáíva
 nyááfu

 ebu
 kó-á-iv-a
 N-áfu

 go.IMP\IMP.SG
 1PL.SM- CONS.SBJV-steal-FV
 10NCP-net

'Let us go and steal nets!'

As mentioned above, there are not many examples of the Imperative Singular in the textual data, as it only occurs in direct speech, and often the more polite subjunctive form is used instead.

5.3.10.2 Imperative Plural

In Mbugwe, the Imperative Plural suffix is -ey. There is a MH tone as well (see section 3.2.4.2). Usually, the addressee for the Imperative Plural is second person plural. However, it can also be first person plural. In (119) the groom is addressing his future inlaws, requesting them to give him a wife. As the addressee is second person plural, it functions as an imperative.

120. From Song of the wedding day, Naomi Richards 3.1

ntεεmpéy moká N-tεεmp-ey mo-ká 1SG.OM-give-IMP.PL\IMP.PL 1NCP-wife

'Give me a wife!'

In (121), the addressee is first person plural, and the imperative functions as a hortative. Imperative Plural is also often suppletive, in this case with the suffix *-ey* added to a suppletive singular form.

121. From Colman Chuchu's traditional story 1.5

ebéy	na	kore	mwaána
ebu-ey	na	ko-re	mo-ána
go.IMP-IMP.PL\IMP.PL	CONN	17SM-COP	1NCP-child

wεεytό o-εytó 1ACP-1PL.POSS 'Let us go to our children!'

In summary, the imperative in Mbugwe is a typical imperative-hortative system, but with separate markers for singular and plural addressees.

5.3.11 Counterfactual mood

The prefix for the counterfactual mood is $k\acute{a}\acute{a}$ -.⁶¹ In Mbugwe, it can combine with the perfective suffix -*iye* for Recent Past Counterfactual and the suffix -*a* in order to form Far Past Counterfactual. The cut-off point between the two past tenses is yet to be established.

The counterfactual can also be used with future time reference, but this has only been found in tone elicitation. There is a form *va-kaajiɛ-tomam-er-a*, 'they may serve (some time in the future)', where all moras surface as L. Another form is *va-ka-já-tomam-er-a*, which appears to have the same meaning. Here, the SM surfaces as L and the prefix *kaa-* is L, whereas *já-* is H. More research is needed in order to determine the usage of these forms.

Table 5.12 Counterfactual forms

TAM form	Simple form
Recent Past Counterfactual	$SM(L)$ -káá-ROOT-iy ε
Far Past Counterfactual	SM(L)-káá-ROOT-a MH ^U
Future Counterfactual	SM(L)-kaajá-ROOT-a SM(L)-kaajiε-ROOT-a

⁶¹ The origin is uncertain, but a prefix *nga-, which may have marked the irrealis mood, but also conditional or potential, is reconstructed from PB (Nurse 2008: 251-252).

5.3.11.1 Recent Past Counterfactual

The Recent Past Counterfactual refers to a situation which is hypothesised to have happened not too long ago. It can refer to earlier today, as in (122), yesterday, as in (123), or to an unidentified time that includes the time of speaking, as in (124) and 125).

122. From LOT questionnaire, Naomi Richards #247b

okáájíyεokáán¹kúúndíryεo-káá-j-iyεo-káá-N-kúndi-iyε

2SG.SM-CFAC-come-PFV 2SG.SM-CFAC-1SG.OM-meet-PFV

'If you would have come, you would have found me (earlier today).'

123. Adapted from Dahl's questionnaire (106), Naomi Richards 62

 $ak\acute{a}\acute{a}^{\dagger}t\acute{5}\acute{5}y\varepsilon$ $mp\acute{i}y\acute{a}$ $nayj\acute{5}$ \acute{a} - $\acute{k}\acute{a}$ - $\acute{t}\acute{5}$ - $\acute{i}y\varepsilon$ N-píyanaij\acute{5}1SM-CFAC-receive-PFV10NCP-moneyyesterday

ά¹káámóorereyesawádimwayrétuá-káá-mo-ol-er-iyεØ-sawadimo-irétu1SM-CFAC-10M-buy-APPL-PFV9NCP-gift (Sw.)1NCP-girl'If he had gotten the money yesterday, he would have bought a present for the girl'

Notice that in (122) and (123), both verbs have the counterfactual morpheme, whereas in (124) and 125), there is only a counterfactual morpheme in the second verb, and the first verb is a copula verb, which is not inflected for mood, only for tense. The initial clause has the subjunction *ngáre* 'if' in these cases.

124. From Modality Questionnaire, Naomi Richards, 57

ngáre náré na mpíya ngáre n-á-re na N-píya

if 1SG.SM-PST-COP CONN 10NCP-money

nkόόryε igéri N-káá-ol-iyε i-géri.

1sg.sm-cfac-buy-pfv 5NCP-car (Sw.)

'If I had money, I would buy a car.'

⁶² Context: [the speaker knows the boy was expecting money and that he did not get it] "If the boy GET the money (yesterday), he BUY a present for the girl."

125. From Modality questionnaire, Naomi Richards, 58

ngáre náré nyiná ngáre n-á-re Ø-nyiná

if 1SG.SM-PST-COP 1aNCP-his/her.mother

nkáámomútíye

N-káá-mo-mút-iye

1SG.SM-CFAC-1OM-beat-PFV

'If I were his/her mother, I would spank him/her.'

5.3.11.2 Far Past Counterfactual

The counterfactual may also refer to a distant past time, and in the Far Past Counterfactual the final vowel is -a, with a melodic H tone on the ultimate syllable (3.2.4.2) This form refers solely to a past time, and does not include the time of speaking (126), repeated from (115).

126. From A song of warning, Naomi Richards, 1.5

na **ákáá[†]féta** wááúna na **á-káá-fét-a** ó-á-un-a

CONN **1SM-CFAC-go-FV** 1SM-CONS.SBJV-hurt-FV

kwa nuumbe ko-a numbe 7CP-ASSOC Numbe

'If he would have gone, he would have hurt Numbe'

5.3.12 TAM as an interlocking system

Nurse (2008) states that "tense and aspect form an interlocking system" (Nurse 2008: 12). This assumption holds for Mbugwe, as well: each form fills a specific place in the system, and even though there is some overlap, there is not complete overlap between two forms. An exception may be the two forms found for Habitual and Past Progressive, where an older form seems to be in the process of being replaced with a new form. This reflects another feature of the Bantu TAM system, according to Nurse (2008: 13): it is always developing and changing.

For Mbugwe, a clear pattern emerges looking at tense and aspect together. Only the perfective forms distinguish all three past tenses. For the imperfectives, there is only one past tense, but there is also a present form (the default present) and a future form. The progressive usually occurs in the past tense, but there is also a present form of the progressive. The habitual may refer to the past, but may also include the present, in a similar fashion to the persistive.

In Table 5.13, the various tense and aspect forms of Mbugwe are placed in a matrix similar to the ones Nurse made in his survey (Nurse 2008). It illustrates the interlocking system and also displays the gaps very clearly.

Mood does not readily fit into the system, but it is noteworthy that there is both a perfective and an imperfective form of the subjunctive, and there are two past tenses for the counterfactual mood, as well as two future forms in Mbugwe.

Table 5.13 A matrix of Mbugwe tense, aspect and mood forms

	Far Past	Hesternal	Hodiernal	Present	Future
Perfective	SM-a-ROOT-a	SM-á-ROOT-	SM-Ø-		INF-ROOT-a
	$MH^{\sigma 2-U}$	iyε	ROOT-iyε		SM-je
		-	$MH^{\sigma 2-PU}$		SM(H)-jé-
					ROOT-a
Imperfec-	SM(L)-kee-/keen-	/keende-ROOT-a		INF-ROOT-a	INF-ROOT-a
tive	. ,			SM-kééndé	SM-έέndε
				SM(H)-kéé-/kéén-	SM(H)-kée/
				/kééndé-ROOT-a	kééndeé-
					ROOT-a
Progressive	INF-ROOT-a SM	-áyse		SM-re-ROOT-a	
_	SM-áyse-ROOT-	a			
	INF-ROOT-a SM	-á-re			
	SM-á-re-ROOT-a	Į.			
Habitual	INF-ROOT-a SM	-jééndé			
	SM-jée-ROOT-a				
	INF-ROOT-a SM	-ándaa			
	SM-ándaa-ROOT	-a			
Persistive			SM(H)-kére-ROOT-a	

5.4 Negative forms

The negative verb forms will be presented here. There is not always a one-to-one relationship between the affirmative and negative forms, which will be clear from this overview. As mentioned in 5.1, the negative prefix *te*- is the default negative marker in Mbugwe, and it occurs before the SM. It is used in indicative negative forms except for the 1SG, where the negative prefix is *si*-and occurs after the SM. The negative subjunctive is *káysé*- and it occurs after the SM as well. The prohibitive has a different negation strategy, with the prohibitive *aré* before the verb. An overview of the negative forms is found in Table 5.14.

Table 5.14. Negative forms

Negative	Form	Corresponding affirmative simple form
Negative Hodiernal Perfective	te-SM-Ø-ROOT-iyε MH ^U	SM- \mathscr{O} -ROOT- $iy\varepsilon$ MH $^{\sigma 2\text{-PU}}$
Negative Hesternal Perfective	te-SM-ά-ROOT-iyε	SM-ά-ROOT-iyε
Negative Far Past Perfective	$te ext{-SM-}a ext{-ROOT-}a\ \mathrm{MH}^{\sigma 2 ext{-U}}$	SM-a-ROOT-a MH ^{G2-U}
Negative Non-Past	te-SM-jé-ROOT-a	SM(H)-jé-ROOT-a (Future)
Negative Past Imperfective	te-SM(L)-kee-ROOT-a	SM(L)-kee-/keen-/keendee- ROOT-a
Negative Present Imperfective	te-SM(H)-kéé-ROOT-a	SM(H)-kéé-/kéén-/kééndé- ROOT-a
Nondum	te-SM(H)-ándá-ROOT-a	-
Negative Past Progressive 1	te-SM-áre-ROOT-a	SM-á-re-ROOT-a
Negative Past Progressive 2	te-SM-áyse-ROOT-a	SM-áyse-ROOT-a
Negative Recent Past Counterfactual	te-SM(L)-káá-ROOT-iye	SM(L)-kάά-ROOT-iyε
Negative Far Past	4- CMG) 144 DOOT - MIJU	CM(I) 1-44 DOOT MII
Counterfactual	te-SM(L)-káá-ROOT-a MH ^U	SM(L)-káá-ROOT-a MH ^U
Negative Future	te-SM(L)-káájíε-ROOT-a	SM(L)-kaajá-ROOT-a
Counterfactual	te-SM(L)-kaa-ROOT-iyε (again)	SM(L)-kaajie-ROOT-a
Negative	CM Live POOT	CM(II) DOOT - MIIIIX
Subjunctive	SM-káysé-ROOT-a	$SM(H)$ -ROOT- ε MH^{UX}
Prohibitive	aré SM-ROOT-a	ROOT-a MH ^{PU}

5.4.1 Negative Hodiernal Perfective

The Negative form of the Hodiernal Perfective has the same suffix in the affirmative form $(-iy\varepsilon)$. There is a MH tone on the verb stem, but it is not the same as the affirmative Hodiernal Perfective (see section 3.2.4.2). It is used for events with an anterior reading, or for negating events that took place earlier on the same day. In (127), repeated from (42), the Negative Hodiernal Perfective is found with the first person singular negative marker. No example is found in the textual data with the *te*- prefix, but there is an example from the tone elicitation, which is given in (128).

127. From Colman Chuchu's traditional story 7.10

nsíréétíyé kérá

N-sí-Ø-réét-iye ké-rá

1SG.SM-1SG.NEG-HOD-bring-PFV\HOD 7ACP-DIST

'I have not brought you that (cl. 7).'

128. From tone questionnaire, Naomi Richards

tevátómáméyé te-vá-Ø-tómam-er-iye

NEG-2SM-HOD-work-APPL-PFV\HOD

'They have not served.'

5.4.2 Negative Hesternal Perfective

The Negative Hesternal Perfective has the same TAM markers as the affirmative Hesternal Perfective, with the TAM prefix \acute{a} - and the suffix $-iy\varepsilon$, plus the negative prefix. It is used to negate events that are proposed to have taken place yesterday. In (129) the first singular negative si- occurs in the Negative Hesternal Perfective, and (130) is an example of the te- prefix.

129. From LOT questionnaire Colman Chuchu #157a

nsάάrémiyε yoonda N-sí-á-rem-iyε i-onda 1sg.sm-1sg.neg-pst-cultivate-pfv 5NCP-field

ráá[†]nέ nayjó ré-anέ naijó 5ACP-1SG.POSS yesterday

'I did not cultivate my field yesterday.'

130. From LOT questionnaire Colman Chuchu #157b

tewάάrémiyε yoonda te-o-á-rem-iyε i-onda NEG-2SG.SM-PST-cultivate-PFV 5NCP-field

ráá[†]kó nayjó ré-akó naijó 5ACP-2SG.POSS yesterday

'You did not cultivate your field yesterday.'

5.4.3 Negative Far Past Perfective

The Negative Far Past Perfective has the same form as the affirmative Far Past Perfective: a prefix *a*- and a suffix -*a*, in addition to the negative prefix. There is a MH tone on the verb stem, see section 3.2.4.2. An example of the form

with a *te*- prefix is found in (131), and in (132) it occurs with the first singular negative prefix.

131. From Mozambique story, Naomi Richards 1.8

teyaankómá te-ya-n-kóm-a NEG-9SM-1SG.SM-bite-FV\FPST 'It (cl.9) did not bite me.'

132. From Elisabeth Kesembe's life story 1.40

baa na cheembóy sááfétá
baa na chembó-i N-sí-a-fét-a
even CONN school-LOC
'I didn't even go to school.'

5.4.4 Negative Non-Past

The same TAM morpheme that is used for the Future Perfective $(j\acute{e}-)$ is used in a negative form which is primarily used for future events, but it also describes present events. It is therefore called Non-Past. As usual, the $s\acute{t}-$ prefix is used for the first singular and the $t\acute{e}-$ prefix is used for all other persons. Examples of future time reference are found in (133) and (134).

133. From LOT questionnaire Naomi Richards #248a

okéé[†]já **tóojéénkúndya**o-kéé-j-a **te-o-jé-N-kundi-a**2SG.SM-SIT-come-FV\SIT **NEG-2SG.SM-NPST-1SG.OM-meet-FV**'If you come, you won't meet me.'

134. From LOT questionnaire Colman Chuchu #165

nsf¹jérémayoondaráánέN-sí-jé-rem-ai-ondaré-anέ1sG.sM-1.sG.NEG-NPST-cultivate-FV5NCP-field5ACP-1sG POSS

[↑]nsíko jóónsε N-síko jí-ónsε 10NCP-day 10ACP-all

'I will never cultivate my field.'

It may also be used to refer to the present time, such as in (135), where it has a progressive reading.

135. From LOT questionnaire Colman Chuchu #151

nsí jéréma yoonda ráánέ N-sí-jé-rem-a i-onda ré-anέ

1SG.SM-1.SG.NEG-NPST-cultivate-FV 5NCP-field 5ACP-1SG.POSS

†fáfa

fáfa

now

'I am not cultivating my field now.'

5.4.5 Negative Past Imperfective

There is a negative form that corresponds to the Past Imperfective. There is only one example in the textual data, and it has the TAM prefix *kee*- (136) (repeated from 31). All SM surface as L in this form as well.

136. From Colman Chuchu's traditional story 4.1

baa vá[†]káfíka kó[†]rá baa vá-ká-fík-a kó-rá even 2SM-CONS-arrive-FV 17ACP-DIST

kekává baa **tevakeetééra** ke-ká-va baa **te-vá-kee-téér-a**

7NCP-CONS-COP even **NEG-2SM-PST.IPFV-listen-FV** 'And so they arrived there, but even then they could not hear.'

5.4.6 Negative Present Imperfective

A Negative Present Imperfective form was found in tone elicitation, but not in the textual data. The form is *te*-SM(H)-*kéé*-ROOT-*a*, which corresponds to the simple Present Imperfective form (137).

137. From tone questionaire, Naomi Richards

tevákéé[†]tómámera te-vá-kéé-tómam-er-a NEG-1SM-PRS-work-APPL-FV 'They do not serve.'

5.4.7 Nondum

There is a so-called *Nondum* morpheme in Mbugwe, a negative form with the meaning 'not yet' (van der Auwera 1998). In Mbugwe, the morpheme is similar to Habitual 1 in form, but not in function. In the negative forms with the prefix $\acute{a}\acute{a}nd\acute{a}$ - (underlying $\acute{a}nd\acute{a}$ -), there is an expectation that even though the event has not happened yet, it is likely to happen in the future. In (138) there is an example with $\acute{s}\acute{i}$ -. All SMs are H in this form

138. From LOT questionnaire Naomi Richards #254

baa	áfá	ne	mojá	wá
baa	áfa	ne	mo-já	o-a
even	16.PROX	COP	1NCP-good	1ACP-ASSOC

buə **táándá** l**óólwa** Ø-buə **t-á-ándá-lóól-u-a**

5NCP-face NEG-1SM-NONDUM-marry-PASS-FV 'Although she is beautiful, she is not yet married.'

139. From LOT questionnaire Colman Chuchu #153

nsáá[†]ndáréma yoonda rááné N-sí-ándá-rem-a i-onda ré-ané

1SG.SM-1SG.NEG-NONDUM-cultivate-FV 5NCP-field 5ACP-1SG.POSS

'I have not yet cultivated my field.'

5.4.8 Negative Past Progressive 1

The Negative Past Progressive 1, with the TAM prefix *á-re*- is found with the *te*- prefix in (140).

140. From Colman Chuchu's traditional story 4.6

otúryá baa **teárétaalola** o-túri-a baa **te-á-re-taalol-a**

INF-finish-FV even NEG-PST-PROG1-answer-FV

'But she was not answering.'

5.4.9 Negative Past Progressive 2

The Negative Progressive 2 occurs only once in the textual data (141). It shows that this TAM prefix may also occur in the negative.

141. From LOT questionnaire Colman Chuchu #183a

nsáyséremayoondaráánέN-sí-áyse-rem-ai-ondaré-anέ

1SG.SM-1SG.NEG-PROG2-cultivate-FV 5NCP-field 5ACP-1SG.POSS

[†]áfa ááfiká áfa á-a-fik-a

16.PROX 1SM-PST-arrive-FV\FPST

'I was not cultivating my field when s/he arrived.'

5.4.10 Negative Recent Past Counterfactual

The Negative Recent Past Counterfactual expresses a negative hypothesis, which, like the affirmative counterfactual, is known to not be true. In (142), there is an example of Negative Recent Past Counterfactual. It refers to something that is hypothesised to (not) have happened earlier on the same day. All SM are L in this form (see section 3.2.4.1).

142. From LOT questionnaire Naomi Richards #248b

ngáre ojíyε ngáre o-Ø-j-iyε

if 2SG.SM-HOD-come-PFV\HOD

tookáá[†]nkúúndíyε te-o-káá-N-kúndi-iyε

NEG-2SG.SM-CFAC-1SG.OM-meet-PFV

'If you would have come, you wouldn't have met me (earlier today).'

5.4.11 Negative Far Past Counterfactual

Negative Far Past Counterfactual is found in (143). Here, the time frame is not given, but it refers to the past. There is a MH tone on the ultimate syllable, and all SM are L.

143. Song of warning, Naomi Richards, 1.6

taakááfɛ́εng'ánalóósápolísite-á-káá-fɛɛng'-anaØ-lóósapolísiNEG-1SM-CFAC-run-FV\FPSTCONNINF-tellpolice (Eng/Sw.)'If he would not have run to tell the police.'

5.4.12 Negative Future Counterfactual

Two Negative Future Counterfactual forms were found in tone elicitation. The first tone is *te-va-káájiε*-ROOT-*a* 'They may not VERB (in the future)' (144). The focus here is on the uncertainty, according to the language consultant. There was also a similar form found during tone elicitation, which was translated as 'They will not VERB again': *te-va-kaa*-ROOT-*iyε*, with a L tone on SM and on the TAM prefix (145).

144. From tone questionnaire, Naomi Richards

tevakáájíetómámera te-vá-káájíe-tómam-er-a NEG-2SM-FUT.CFAC-work-APPL-FV 'They may not serve in the future.'

145. From tone questionnaire, Naomi Richards

tevakaatómámeee te-á-kaa- tómam-er-iye NEG-2SM-FUT.CFAC-work-APPL-FV 'They will not serve again.'

5.4.13 Negative Subjunctive

The Negative Subjunctive is often different from the standard negation in Bantu languages (Nurse 2008). In Mbugwe, it has the TAM prefix $k\acute{a}ys\acute{e}$ - or $k\acute{e}s\acute{e}$ - in free variation (see also (Mous 2004). It appears in the slot after the SM. It occurs with first, second and third person SMs, and the first singular is not different from the other persons in this form. In (146), the verb has a first person singular SM, whereas there is a second person singular SM in (147) and (148), where the Negative Subjunctive functions as a polite command.

146. From LOT questionnaire Naomi Richards #177

nké[†]séréma rááné voonda N-késé-rem-a i-onda ré-ané

1SG.SM-NEG.SBJV-cultivate-FV 5NCP-field 5ACP-1SG.POSS

'Let me not cultivate my field.'

147. From LOT questionnaire Colman Chuchu #179

okáy[†]séréma voonda rááné o-kávsé-rem-a i-onda ré-ané

2SG.SM-NEG.SBJV-cultivate-FV 5NCP-field 5ACP-1SG.POSS

'Do not cultivate my field.'

148. From Song of warning, Naomi Richards 2.2

okáv[†]sóókerera o-kávsé-okerer-a 2SG.SM-NEG.SBJV-return-FV 'Do not return'

5.4.14 Prohibitive

na

There is an interesting form with a Prohibitive reading found in the textual data. The form is aré SM-OM-root-FV. Notice that there is no overt negative morpheme, but the construction itself conveys a Prohibitive meaning (149 and 150).

149. From Song of the wedding day, Naomi Richards 2.1

Ø-ng'oombe

síré máli síré na sí-re Ø-máli sí-re na 10NCP-wealth (Sw.) 1SG.NEG-COP 1SG.NEG-COP **CONN**

móonsóócha ng'əəmbe aré na

aré CONN 10NCP-cow **PRHB** 2PL.SM-1SG.OM-hate-FV

mo-N-sóóch-a

'I do not have riches, I do not have cows, don't hate me.'

150. From Song of the wedding day, Naomi Richards 3.1

síré	na	ng' əəm $b\varepsilon$	aré
sí-re	na	Ø-ng'ɔɔmbε	aré
1SG.NEG-COP	CONN	10NCP-cow	PRHB

móonsiniingala mo-N-siningal-a 2PL.SM-1SG.OM-stalk-FV

The Prohibitive is interesting typologically, as there is no negative morpheme present, and only the order of elements conveys the negative meaning. Devos and Van Olmen (2013) note that the prohibitive is sometimes expressed with auxiliaries or particles, but usually there is a negative morpheme present, or a negative lexical meaning of the auxiliary or particle. In this case, it looks like the past tense a- and the copula re, even though the tone is unusual with a H tone on $r\acute{e}$. A possible alternative analysis is that $ar\acute{e}$ is a prefix, which occurs in the NEG1 slot of the verb. This is not persued here, as the morpheme looks more like a complex auxiliary.

5.4.15 Negative particle

There is a negative particle *tokó* in Mbugwe, which occurs in several negative contexts. It is used as the negative interjection 'no', as well as in non-verbal negation. It also functions as a negative intensifier. In (151) it functions as a negative interjection.

151. From Song of warning Naomi Richards, 1.4

tokó	ne	mwaijwa	wááfónyá
tokó	ne	mwaijwa	ó-a-fóny-a
NEG	COP	Mwaijwa	1SM-PST-make.mistake-FV\FPST
'No, i	t is Mw	aijwa who ha	s made a mistake.'

In (152), *tokó* functions as a negation in a subordinate clause, where there is no verb, although the conditional subjunction *ngáre* may historically be derived from the copula *re* (Gibson and Wilhelmsen 2015).

^{&#}x27;I do not have cows, don't stalk me.'

152. From Elisabeth Kesembe's life story 1.32

baa	ngáré	tokó	mpśśngs	yá
baa	ngáre	tokó	N-póngo	í-a
even	if	NEG	10NP-word	10-ASSOC

jóvá sí[†]*kááré k55* Ø-jóva n-sí-káá-re kó-55

5NP-god 1SG.SM-1SG.NEG-CFAC-COP 17ACP-REF.ASSOC

Tokó also functions as an intensifier in a negative clause, as seen in (153), repeated from (35) and (45)). In Rangi, this particle is obligatory in most negative clauses, as shown in Gibson and Wilhelmsen (2015). It is probably borrowed from Cushitic, and a similar morpheme means 'all' in Alagwa and is an ideophone which expresses totality in Burunge (Gibson and Wilhelmsen 2015).

153. From Elisabeth Kesembe's life story 1.7

baa áfa váá[†]jánjishé[†]ryá baa áfa vá-a-já-N-jish-er-i-a

even 16.PROX 2SM-PST-VENT-1SG.OM-did-APPL-CAUS-FV/FPST

mp52ng5 jά jί $^{\uparrow}r$ ά, lakíni N-pong5 jί-a jί-rά lakíni 10NCP-thing 10ACP-ASSOC 10ACP-DIST but (Sw.)

tejasaidi[†]ά chochóónsé tokó te-ji-a-saidi-a chochónsε tokó NEG-10SM-PST-help(Sw.)-FV\FPST 7.any NEG

5.4.16 Summary of negative forms

There are two main negative strategies in Mbugwe: the pre-SM *te-* for standard negation, and post-SM *káysé-/késé-* for the subjunctive. For the first person singular, post-SM *sí-* is used for standard negation. The prohibitive has no overt negative morpheme, but a construction with *aré* is employed. The prohibitive strategy is rare both for Bantu languages and cross-linguistically. There is also a negative particle *tokó* which functions as a negative interjection, a non-verbal negator and as an intensifier for negation.

^{&#}x27;If it were not for the word of God, I would not be here.'

^{&#}x27;They even came and did all those things to me, but they didn't help anything at all.'

5.5 The infinitive

The infinitive is presented in chapter 4, as it takes the class 15a NCP *o-* in Mbugwe. As in most languages, the infinitive has both nominal and verbal properties, and it is therefore treated in both chapters. Many examples of the infinitive in the periphrastic TAM forms are found in this chapter, especially in section 5.2. They will not be repeated here.

Meeussen observes that the Bantu infinitive "is rather a noun by virtue of its prefix and through part of its syntactic uses, but also a verb by its stem, its full possibility of having infixes, and by some of its syntactic valences" (Meeussen 1967: 111). In Mbugwe, however, the vast majority of instances of the infinitive have a verbal function, and the prefix is glossed INF for convenience and transparency. The infinitive prefix *o*- goes in the TAM slot of the verb. Naturally, there is no SM on the infinitive, but there may be extensions, and an OM may also occur on the infinitive.

The infinitive in Mbugwe often occurs as a verbal complement. See examples (154) and (155), repeated from (17) and (27).

154. From Colman Chuchu's traditional story 7.5

nວວng'ວ໌	váká [†] fóónjá	orera	vэ́э́nsε
nəng'á	vá-ká-fónj-a	o-rer-a	vá-όnsε
so	2SM-CONS-start-FV	INF-cry-FV	2ACP-ALL
'And they	all started to cry.'		

155. From Colman Chuchu's traditional story 7.20

ne	wá	kée	ó [†] kéémosééréra
ne	ó-a	kee	o-kéé-mo-séérer-a
COP	14ACP-ASSOC	what	2SG.SM-PRS-1OM-help-FV

 orira
 óo

 o-rir-a
 óo

 INF-protect-FV
 1.PROX

The infinitive is also used as a tail-head link in a narrative. In a narrative a clause is sometimes introduced by the last verb of the previous clause in the infinitive, as seen in (156). This tail-head construction is used in narratives throughout eastern Bantu, with various TAM forms in use (Nicolle 2015: 40). For example, the infinitive is used as a tail-head linkage in Kwaya (JE251) (Odom 2015: 15). In Rangi (F33), an infinitive verb form, together with a referential marker *noo*, occasionally occurs in the resolution of a narrative (Stegen 2011: 127). In this language, however, the verb is not repeated, which is the case in Mbugwe.

^{&#}x27;Why are you helping her to protect this one?'

156a. From Colman Chuchu's life story 1.8-10

otúryá osómá myaáká etátu o-túry-a o-sóma me-áka e-tátu

INF-finish-FV INF-read-FV 4NCP-year 4ACP-three (Sw.)

shúle ya biblíá shúle e-a biblía school (Sw.) 9ACP-ASSOC bible (Sw.)

nataalóká ná kaai n-a-taalok-a na Ø-kaa-i

1SG.SM-PST-return-FV\FPST CONN 9NCP-house-LOC

'After studying for three years at the Bible school, I went back home.'

156b. *otaaloka* na kaai o-taalok-a na Ø-kaa-i

INF-return-FV CONN 9NCP-house-LOC

namorεkά ijóva **n-a-mo-rεk-a** i-jóva **1SG.SM-PST-1OM-quit-FV\FPST** 5NCP-god

'Having returned home, I left God.'

156c. *omoreka ijóvá nalɔ́ɔ́\lá* o-mo-rek-a i-jóva N-a-lɔ́ɔ́l-a

INF-3SG.OM-leave-FV 5NCP-god 1SG.SM-PST-mary-FV\FPST

móontomoká mo-ntomoká 1NCP-woman

'Having left God, I married a woman.'

Sometimes, the infinitive occurs without the prefix *o*- in Mbugwe. Some examples of this are found below. According to Gibson (2012: 87) bare infinitives also occur in Rangi (F33). In Rangi, the prefix may be dropped when the infinitive is a complement to a verb, but not when it functions as a subject or object of a clause (Gibson 2012: 87-88). In Mbugwe, as well, the infinitives without prefixes have only been found in verb complements. No semantic difference has been observed in infinitive forms with and without the prefix in either language. Examples are given in (157), (158), repeated from (22), and (159).

157. From Colman Chuchu's traditional story 7.19

chalóy	[↑] náré	na	mosééréra
ke-aló-i	n-á-re	na	Ø-mo-séérer-a
7NCP-field-LOC	1SG.SM-PST-COP	CONN	INF-10M-help-FV

 $mp\acute{e}^{\uparrow}tiy\acute{e}$ orira óo n-Ø-fét-iyɛ o-rir-a óo

1SG.SM-HOD-go-PFV\HOD INF-protect-FV 1.PROX

158. From Colman Chuchu's life story 1.36

náángáé [†] ká	baa	chá	féenya
N-á-áangaek-a	baa	ké-a	Ø-feeny-a
1SG.SM-PST-be.restless-FV\FPST	even	7CP-ASSOC	INF-move-FV

na é[†]chó ngálawá nakémo na échó N-galawá nakémo CONN 7.REF 9NCP-canoe nothing

159. From Colman Chuchu's traditional story 1.24

nວວng'ວ໌	orá	mwaáná	meé	akeefétá
nong'ó	o-rá	mo-ána	meé	á-kee-fét-a
SO	1ACP-DIST	1NCP-child	then	1SM-IPFV-go-FV

na	rira	míre	nsíko	jśśnse
na	Ø-rir-a	Ø-míre	N-síko	jí-ónsε
CONN	INF-protect-FV	10NCP-bird	10NCP-day	10ACP-all

^{&#}x27;So the child was going to protect from the birds every day.'

5.6 Copula verbs

There are three copula verbs in Mbugwe: the invariable *ne*, and *re* and *va*, which are inflected for person and TAM. The copula *ne* is used for predication, often linking a noun with an adjective. As seen in section 4.3.1, *ne* occurs alone or together with another copula, in which case *ne* has a focus function, as in Rangi (Gibson 2012: 92-95). In (160), repeated from (8), there is an example of simple predication with *ne*.

^{&#}x27;I went to the field in order to help her to protect this one.'

^{&#}x27;I looked around restlessly for anything to move that canoe with, but there was nothing.'

160. From Colman Chuchu's traditional story 1.27b

```
mee v>>> chák>ra vááré^{\uparrow}rá
mee v>>> ke-ák>ra vá-a-r'-er-a
then 3PL 7NCP-food 2SM-PST-eat-APPL-FV\FPST
```

né kejáne ke-jáCOP 7NCP-good

The copula *ne* also occurs in constructions where it functions as a focus marker. It frequently occurs together with a periphrastic form of the verb, as in (161), repeated from (93). This occurrence of *ne* with a periphrastic verb is also noted by Gibson (Forthcoming-b) concerning other Bantu languages with this construction, and is a topic for further research.

161. From LOT questionnaire Colman Chuchu #182

ne	orema	náysé	yoonda
ne	o-rem-a	N-áyse	i-onda
COP	INF-cultivate-FV	1sg.sm-prog2	5NCP-field

ráánέ [†]áfa ááfiká ré-anέ áfa á-a-fik-a

5ACP-1SG.POSS 16.PROX 1SM-PST-arrive-FV/FPST

The copula *re* may also function predicatively, not just with adjectives, but with locatives and possessive phrases (see also Gibson (2012) on Rangi, where it has similar functions). In (162), there are two instances of *re*. The first is predicative; the other is a locative, referring to 'entering into drunkenness', metaphorically.

^{&#}x27;But the food they ate was good.'

^{&#}x27;I was cultivating my field when s/he arrived.'

162. From Colman Chuchu's life story 1.16

chafá	né	moreevi	ááré	baa	nέέ
chafá	ne	mo-reevi	á-á-re	baa	nέε
because	COP	1NCP-drunk	1SM-PST-COP	even	1sg

najiingė[†]rá **kóre** ndεενα N-a-j-inger-a **ko-re** N-rεενα

1SG.SM-PST-9OM-enter-FV/FPST 17SM-COP 9NCP-drunkenness

Another example of *re* in a locative construction is found in (163), repeated from (152), where it is inflected with an SM, a negative marker and a counterfactual prefix.

163. From Elisabeth Kesembe's life story 1.32

baa	ngáré	tokó	mpśżngə	уá
baa	ngáre	tokó	N-póngo	í-a
even	if	NEG	10 _{NP} -word	10-ASSOC

jóvá s**í**¹kááré k55 Ø-jóva **n-sí-káá-re** kó-55

5NP-god **1SG.SM-1SG.NEG-CFAC-COP** 17ACP-REF.ASSOC

The copula *va* is considered a copula of process, as in Rangi (Gibson 2012: 92-95). It entails the meaning of 'becoming'. An example of this is seen in (164), repeated from (21).

164. From Elisabeth Kesembe's life story 1.10

movere	óó	ne	degedege	ό ό
mo-vere	óo	ne	degedege	၁၁
3NCP-body	3.PROX	COP	soft	only

wavafaantofɔ́ɔ́nsεa-vafa-ntofá-ɔ́nsε3sm-cop16NCP-place16ACP-all'This body became limp all over.'

Another example of the copula va is found in (165), repeated from (12) and (72). Here, the copula could also be understood as a copula of process: the children became left alone when their mother died.

^{&#}x27;Because she was an alcoholic, even I became an alcoholic.'

^{&#}x27;If it were not for the word of God, I would not be here.'

165. From Colman Chuchu's traditional story 1.12

áfa	áákú [†] yá	nyináávə	vá [↑] káva
áfa	á-a-kúy-a	Ø-nyináávo	vá-ká-va
16.PROX	1SM-PST-die-FV\FPST	1aNCP-their mother	2SM-CONS-COP

vá [†] chááyɛ	vá [†] rá	vaáná	veené
vá-Ø-cháál-iyɛ	vá-rá	va-ána	va-εnέ
2SM-HOD-remain-PFV\HOD	2ACP-DIST	2NCP-child	2NCP-self
'When their mother died those children were left by themselves'			

More research is needed in order to understand when one copula is chosen over the other; *ne* and *re* especially seem to be overlapping in function. The role of the copula *ne* as a focus marker is also a topic for future research.

5.7 Summary

This chapter has provided an overview of verbal morphology in Mbugwe. First, the structure of the simple verb and the periphrastic constructions were presented. The bulk of the chapter was an overview of the various TAM forms that are observed in the language. Negative forms were treated separately, and finally, the infinitive and copula verbs were described.

There are three past tenses in the perfective: the Hodiernal Perfective, the Hesternal Perfective and the Far Past Perfective. There is also a Future Perfective form, whereas the present tense occurs in the Present Imperfective, Present Progressive, Habitual and Persistive aspects. There is also one single Past Imperfective form. For the two Habitual and Past Progressive forms, there may have originally been a temporal difference between them, which is disappearing from the language.

The Consecutive form is considered to be a relative tense. The Situative and Participial forms are even harder to place within the tense-aspect paradigm, as they are relative tenses, but also often occur in dependent clauses.

Regarding mood, there is a basic distinction between the indicative and the subjunctive. There are three subjunctive forms: Perfective Subjunctive, Imperfective Subjunctive and Consecutive Subjunctive. Other moods include the imperative, with the forms Imperative Singular and Imperative Plural, and counterfactual forms: Recent Past Counterfactual, Far Past Counterfactual and Future Counterfactual.

There are two standard negative markers, and the subjunctive has a separate negative prefix. The prohibitive is formed with the auxiliary *aré* before the verb. Not all affirmative forms have a negative counterpart, and there is not always a one-to-one relationship between negative and affirmative forms.

Finally, the various forms and functions of the infinitive are presented, as well as the copula verbs.

Below is a table in which all TAM forms that are observed in this study are provided, with simple, periphrastic and negative forms all listed together (Table 5.15).

Table 5.15 All TAM forms, affirmative and negative in Mbugwe

TAM	Default form	Subordinate clauses	Negative form
Hodiernal	SM-Ø-ROOT-iyε MH ^{σ2-PU}		te-Ø-SM-ROOT-iyε MH ^U
Perfective			
Hesternal	SM-ά-ROOT-iyε		te-SM-ά-ROOT-iyε
Perfective			
Far Past	SM-a-ROOT-a MH ^{G2-U}		te-SM-a-ROOT-a MH ^{σ2-U}
Perfective			
Future	INF-ROOT-a SM-je	SM(H)-jé-ROOT-a	te-SM-jé-ROOT-a
Perfective	·		(non-past)
Present	INF-ROOT-a SM-kééndé	SM(H)-kéé-/kéén-	te-SM(H)-kéé-ROOT-a
Imperfective		/kééndé-ROOT-a	
Past	SM(L)-kee-/keen-	SM(H)-kée/ kééndeé-	$te ext{-SM(L)}$ - $kee ext{-ROOT-}a$
Imperfective	/keendee-ROOT-a	ROOT-a	
Future imperfective	INF-ROOT-a SM-éénde		
Habitual 1	INF-ROOT-a SM-ándaa	SM-ándaa-ROOT-a	
Habitual 2	INF-ROOT-a SM-jééndé	SM-jée-ROOT-a	
Past	INF-ROOT-a SM-á-re	SM- <i>á-re</i> -ROOT- <i>a</i>	te-SM-áre-ROOT-a
Progressive 1			
Past	INF-ROOT-a SM-áyse	SM-áyse-ROOT-a	te-SM-áyse-ROOT-a
Progressive 2	·	•	•
Present		SM-re-ROOT-a	
Progressive			
Persistive	SM(H)-kére-ROOT-a		
Consecutive	SM(H)-ká-ROOT-a		
Situative	SM(L)-kéé-ROOT-a MH ^U		
Participial	SM(H)-jé-ROOT-a		01/1/ / 000
Perfective Subjunctive	$SM(H)$ -ROOT- ε MH^{UX}		SM-káysé-ROOT-a
Imperfective	SM-éé/éénd-ROOT-a		
Subjunctive	Sin corcena noon a		
Consecutive	SM-á-ROOT-a		
Subjunctive	Sivi a ROOT a		
Imperative	ROOT-a MH ^{PU}		aré SM-ROOT-a
Singular	KOO1-u WIII		ure SW-ROOT-u
Imperative	ROOT-ey MH ^{σ2-U}		
Plural	•		
Recent Past	SM(L)-káá-ROOT-iyε		te-SM(L)-káá-ROOT-iyε
Counterfactual			
Far Past	SM(L)-káá-ROOT-a MH ^U		te-SM(L)-káá-ROOT-a MH ^U
Counterfactual			
Future	SM(L)-kaajá-ROOT-a		te-SM(L)-káájíε-ROOT-a
Counterfactual	SM(L)-kaajiɛ-ROOT-a		$te ext{-SM(L)-}kaa ext{-ROOT-}iy\varepsilon$
Nondum			te-SM(H)-ándá-ROOT-a
Nondum			te-SM(H)-ándá-ROOT-a

6 Summary and future research

In chapter 1 of this dissertation the Mbugwe language and people are introduced. The purpose of the study and its method, data and theory are also presented. The history of Bantu languages in general and the group to which Mbugwe belongs are also discussed in chapter 1. The research presented in this study contributes to classifying Mbugwe closer to both other F zone languages and to languages spoken around Lake Victoria, although more research is needed. Previous research on the language and the history of the Mbugwe people is also provided in the chapter, as well as a discussion on whether Mbugwe is endangered. The conclusion is that Mbugwe is threathened, even though inter-generational transmission is still ongoing.

The topic of chapter 2 is the phonology of Mbugwe, which is quite typical, conservative Bantu. Even though there is some variation between speakers concerning how the vowels are pronounced, it is established that there are 7 vowels and that length is distinctive. There is also vowel lengthening, and the vowels which are lengthened are not as long as underlyingly long vowels, but longer than short vowels. The consonants are also quite typical for modern Bantu languages, with a richer inventory than PB. NC and CG clusters in onsets are common in Bantu languages, although some analyse them as units instead of clusters. Here, the NC is analysed as a consonant cluster which appears in the onset of a syllable. The glides in a CG cluster are analysed here as underlying vowels, as the following vowel is lengthened in all lexemes where the vowel is not word-final. However, glides that occur alone in the onset or coda of a syllable are analysed as underlying glides, since they do not trigger lengthening of the following vowel and cannot be traced to vowels historically. The presence of a coda is uncommon for Bantu languages, but Mbugwe has the coda [i].

In chapter 3, the tone of Mbugwe is described. There are two tones, H and L, with the L tone being analysed as unspecified underlyingly. The lexical tones are typical for tonally conservative Bantu languages, and are quite similar to PB. Tone spread and downtrends are also very common, but upstep is more unexpected and rare in Bantu languages. Grammatical (MH) tones are also well known in Bantu studies. In Mbugwe, they occur in several TAM forms in four different main patterns. They are similar to MH tones in other Bantu languages, and dock on the second, penultimate or ultimate syllable of the verb stem. Topics left for future research concerning tone in Mbugwe are phrasal tones which are observed in relative clauses and in interrogative

clauses, and some details regarding tone rules, especially concerning MH tones.

The morphologies of the nominals and adnominals of Mbugwe are presented in chapter 4. The noun classes and nominal concord are quite standard for Bantu languages, with a few exceptions. Class 12/19 for diminutives is not a common combination, and class 15a, with a separate form of the prefix for the infinitive, is also rare. There is an interesting tonal variation in the ACP, where classes 1 and 9 and occationally 4 and 14 have a different tone from the other noun classes. This is however reconstructed to PB for classes 1 and 9.

In chapter 5, the TAM forms of Mbugwe were described. Mbugwe has a rich inventory of TAM forms, even for a Bantu language. The TAM forms found in Mbugwe are four perfective forms: the Hodiernal Perfective, Hesternal Perfective, Far Past Perfective and the Future Perfective. The Hodiernal Perfective is also used to express the anterior aspect. The present tense is usually expressed with an imperfective form (Present Imperfective), and there is also an imperfective form which refers to past time (Past Imperfective). A Future Imperfective form was also found in the textual data. In addition, there are some forms which only mark aspect. There are two habitual forms, which usually refer to the present (Habitual 1 and 2); there are progressive forms (Present Progressive and Past Progressive 1 and 2), and there is a Persistive form. The Consecutive. Situative and Participial are neither defined as tense nor aspect, but their time reference depends on the preceding verbs in the case of the Consecutive, or the main verb in the case of the Situative and Participial. The moods that are found in Mbugwe are the subjunctive, the imperative and the counterfactual. The subjunctive occurs in a Perfective Subjunctive, an Imperfective Subjunctive and a Consecutive Subjunctive. The Consecutive Subjunctive shares some features with the Consecutive, as it only occurs after another subjunctive, imperative or counterfactual verb. The counterfactual occurs in a Recent Past and a Far Past form, and there is also a Future Counterfactual which was found in tone elicitation. Although the focus of the present work has been on the individual TAM forms, a more in-depth study of the semantics and usage of the TAM would be beneficial in the future.

The strategies for negation in Mbugwe are quite typical for Bantu, with a pre-SM negative marker for standard negation except for the subjunctive and the first person singular, which is post-SM. The form of the prohibitive (preverbal $ar\dot{e}$) is unusual, however, and warrants further research in order to be understood fully.

Syntax is an important topic for further research. The periphrastic verb forms still posit some questions, as well as relative clauses and focus markers. Other topics for future research in syntax include information structure, clause structure and argument structure.

As the first in-depth study of Mbugwe, this dissertation outlines the basics of the phonology and morphology of the language, focusing on tone, nominal

morphology and verbal morphology. This is hoped to benefit the Mbugwe community, as the language is in the process of establishing a standard orthography. For the wider linguistic audience and typological research, this dissertation offers an introduction to the language with many examples to illustrate the analysis. By describing the basics of the phonology, morphology and the verbal system, in particular, this study aims to provide a better understanding of the structure of the language, and to facilitate further studies of Mbugwe.

Appendix 1: Paradigms for TAM forms with MH tones

MH on the ultimate syllable: Paradigm for \emptyset verb sisik-a 'rub' in the Situative mood

Frame	Situative	Translation
SM-H	v <u>a</u> -k <u>éé</u> -[sísik- <u>á</u>]	'if they rub'
SM-Ø	ko-k <u>éé</u> -[sísik- <u>á</u>]	'if we rub'
SM-H OM-H	v <u>a</u> -k <u>éé</u> - [†] k <u>ó</u> -[sísik- <u>á</u>]	'if they rub us'
SM-H OM-Ø	v <u>a</u> -k <u>éé</u> -mó-[sisik- <u>á</u>]	'if they rub him/her'
SM-Ø OM-Ø	ko-k <u>éé</u> -mó-[sisik- <u>á</u>]	'if we rub him/her'
SM-Ø OM-H	ko-k <u>éé</u> - [↑] v <u>á</u> -[sísik- <u>á</u>]	'if we rub them'
Phrase medial SM-H	v <u>a</u> -k <u>éé</u> -[sísik- <u>á</u>] mon <u>ó</u>	'if they rub a lot'

MH on the ultimate syllable: Paradigm for H verb $t\underline{\acute{o}}$ $m\acute{a}m$ -er-a 'serve' in the Situative mood

Frame	Situative	Translation
SM-H	v <u>a</u> -k <u>éé</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if they serve'
SM-Ø	ko-k <u>éé</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if we serve'
SM-H OM-H	v <u>a</u> -k <u>éé</u> -k <u>ó</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if they serve us'
SM-H OM-Ø	v <u>a</u> -k <u>éé</u> -ko-[t <u>ó</u> mám-ér- <u>á</u>]	'if they serve you (sg)'
SM-Ø OM-Ø	ko-k <u>éé</u> -mo-[t <u>ó</u> mám-ér- <u>á</u>]	'if we serve him/her'
SM-Ø OM-H	ko-k <u>éé</u> -v <u>á</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if we serve them'
Phrase medial SM-H	v <u>a</u> -k <u>éé</u> -[t <u>ó</u> mám-é [†] r- <u>á</u>] mon <u>ó</u>	'if they serve a lot'

MH on the ultimate syllable: Paradigm for \emptyset verb takan-er-a 'persuade' in the Far Past Counterfactual

Frame	Situative	Translation
SM-H	v <u>a</u> -k <u>áá</u> -[tákan-er- <u>á</u>]	'if they would have persuaded'
SM-Ø	ko-k <u>áá</u> -[tákan-er- <u>á</u>]	'if we would have persuaded'
SM-H ОМ-H	v <u>a</u> -k <u>áá</u> - [†] k <u>ó</u> -[tákan-er- <u>á</u>]	'if they would have persuaded us'
SM-H OM-Ø	v <u>a</u> -k <u>áá</u> -kó-[takan-er- <u>á</u>]	'if they would have persuaded you (sg.)'
SM-Ø OM-Ø	ko-k <u>áá</u> -mó-[takan-er- <u>á</u>]	'if we would have persuaded him/her'
SM-Ø OM-H	ko-k <u>áá</u> - [†] v <u>á</u> -[tákan-er- <u>á</u>]	'if we would have persuaded them'
Phrase medial SM-H	v <u>a</u> -k <u>áá</u> -[tákan-er- <u>á</u>] mon <u>ó</u>	'if they would have persuaded a lot'

MH on the ultimate syllable: Paradigm for H verb $t\underline{\acute{o}}m\underline{\acute{a}}m$ - $\underline{\acute{e}}r$ - $\underline{\acute{a}}$ 'serve' in the Far Past Counterfactual

Frame	Counterfactual	Translation
SM-H	v <u>a</u> -k <u>áá</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if they would have served'
SM-Ø	ko-k <u>áá</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if we would have served'
SM-H OM-H	v <u>a</u> -k <u>áá</u> -k <u>ó</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if they would have served us'
SM-H OM-Ø	v <u>a</u> -k <u>áá</u> -ko-[t <u>ó</u> mám-ér- <u>á</u>]	'if they would have served you (sg)'
SM-Ø OM-Ø	ko-k <u>áá</u> -mo-[t <u>ó</u> mám-ér- <u>á</u>]	'if we would have served him/her'
SM-Ø OM-H	ko-k <u>áá</u> -v <u>á</u> -[t <u>ó</u> mám-ér- <u>á</u>]	'if we would have served them'
Phrase medial SM-H	v <u>a</u> -k <u>áá</u> -[t <u>ó</u> mám-é [†] r- <u>á</u>] mon <u>ó</u>	'if they would have served a lot'

MH on the ultimate syllable: Negative Hodiernal verbs

Negative Hodiernal Ø verbs	Underlying	Translation
te- <u>vá</u> -[tákaniry <u>é</u>]	/te-vá-takaner-iyɛ/	'they have not persuaded'
te- <u>vá-[tó</u> máméé <u>é]</u>	/te-vá-tómam-er-iyε/	'they have not served'

MH on the ultimate syllable: Negative Far Past Counterfactual verbs

Negative Far Past Counterfactual Ø verbs	Translation
te-va- <u>káá</u> -[tákaner- <u>á</u>]	'if they would not have persuaded'
te-va- <u>káá-[tó</u> mám-ér- <u>á</u>]	'if they would not have served'

MH on the ultimate with root neutralisation: Paradigm for Ø verb *ref-a 'pay'* in the Perfective Subjunctive

Frame	Perfective Subjunctive	Translation
SM-H	v <u>á</u> -[ref- <u>é</u>]	'they should pay'
SM-Ø	kó-[ref- <u>é</u>]	'we should pay'
SM-H OM-H	v <u>á</u> - [↑] k <u>ó</u> -[ref- <u>έ</u>]	'they should pay us'
SM-H OM-Ø	ν <u>ά</u> -mó-[ref- <u>έ</u>]	'they should pay him/her'
SM-Ø OM-Ø	kó-mó-[ref- <u>é</u>]	'we should pay him/her'
SM-Ø OM-H	kó- [↑] v <u>á</u> -[ref- <u>έ</u>]	'we should pay them'
OM-H	k <u>ó</u> -[ref- <u>é</u>]	' should pay us'
OM-Ø	mo-[ref- <u>έ</u>]	<pre>' should pay him/her'</pre>
Phrase medial SM-H	v <u>á</u> -[ref- <u>é</u>] mon <u>ó</u>	'they should pay a lot'

MH on the ultimate with root neutralisation: Paradigm for H verb $m\underline{\acute{u}}t$ -a 'beat' in the Perfective Subjunctive

Frame	Perfective Subjunctive	Translation
SM-H	ν <u>ά</u> -[m <u>u</u> t- <u>έ</u>]	'they should beat'
SM-Ø	kό-[m <u>u</u> t- <u>έ</u>]	'we should beat'
SM-H OM-H	ν <u>ά</u> -k <u>ó</u> -[m <u>ú</u> t- <u>έ</u>]	'they should beat us'
SM-H OM-Ø	v <u>á</u> -mo-[m <u>u</u> t- <u>é</u>]	'they should beat him/her'
SM-Ø OM-Ø	kó-mo-[m <u>u</u> t- <u>é</u>]	'we should beat him/her'
SM-Ø OM-H	kό-vá-[m <u>ú</u> t- <u>έ</u>]	'we should beat them'
OM-H	k <u>ó</u> -[m <u>ú</u> t- <u>έ</u>]	" should beat us"
OM-Ø	mo-[m <u>ú</u> t-έ]	"should beat him/her"
Phrase medial SM-H	vá-[m <u>u</u> t- <u>έ</u>] mon <u>ź</u>	'they should beat a lot'

MH on the ultimate with root neutralisation: Paradigm of H verb $t\underline{\acute{o}}$ mam-er-a 'serve' in the Perfective Subjunctive with SM and OM

Frame	Perfective Subjunctive H verbs	Translation
SM-H OM-H	v <u>á</u> -k <u>ó</u> -[t <u>ó</u> mám-ér- <u>é</u>]	'they should serve us'
SM-H OM-Ø	v <u>á</u> -ko-[t <u>ó</u> mám-ér- <u>é</u>]	'they should serve you (sg.)'
SM-Ø OM-Ø	kó-mo-[t <u>ó</u> mám-ér- <u>é</u>]	'we should serve him/her'
SM-Ø OM-H	kó-vá-[t <u>ó</u> mám-ér- <u>é</u>]	'we should serve them'

MH on the ultimate with root neutralisation: Paradigm of \emptyset verb takan-er-a 'persuade' in the Perfective Subjunctive with SM and OM

Frame	Perfective Subjunctive H verbs	Translation
SM-H OM-H	v <u>á</u> -k <u>ó</u> -[tákan-er- <u>é</u>]	'they should persuade us'
SM-H OM-Ø	v <u>á</u> -kó-[takan-er- <u>é</u>]	'they should persuade you (sg.)'
SM-Ø OM-Ø	kó-mó-[takan-er- <u>£</u>]	'we should persuade him/her'
SM-Ø OM-H	kó- [†] vá-[tákan-er- <u>é</u>]	'we should persuade them'

MH on σ 2-ultimate syllable: Paradigm for H verb $t\underline{\acute{o}}$ mam-er-a 'serve' in the Far Past Perfective

Frame	Far Past Perfective	Underlying	Translation
SM-H	v <u>á</u> -á-[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]		'they served'
SM-Ø	kwa-a-[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]	/ko-a-t <u>ó</u> mam-er-a/	'we served'
SM-H ОМ-H	v <u>á</u> -á-k <u>ó</u> -[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]		'they served us'
SM-H OM-Ø	v <u>á</u> -á-ko-[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]		'they served you (sg.)'
SM-Ø OM-Ø	kwa-a-mo-[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]	/ko-a-mo-t <u>ó</u> mam- er-a/	'we served him/her'
SM-Ø OM-H	kwa-a-v <u>á</u> -[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>á</u>]	/ko-a-v <u>á</u> -t <u>ó</u> mam- er-a/	'we served them'
Phrase medial	v <u>á</u> -á-[t <u>ó</u> m <u>á</u> m- <u>é</u> [†] r- <u>á</u>]		'they served a
SM-H	mon <u>ʻs</u>		lot'

MH on σ 2-ultimate syllable: Paradigm for H verb $\underline{\acute{e}mber\text{-}er\text{-}a}$ 'teach/sing for' in the Far Past Perfective

Frame	Far Past Perfective	Underlying	Translation
SM-H	v-é-[<u>é</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/v <u>á</u> -a- <u>é</u> mber-er-a/	'they taught/sang for'
SM-Ø	kw-e- [embér-ér-á]	/ko-a- <u>é</u> mber-er-a/	'we taught/sang for'
SM-H ОМ-H	v <u>á</u> -á-kw-[<u>éé</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/v <u>á</u> -a-k <u>ó</u> - <u>é</u> mber- er-a/	'they taught/sang for us'
SM-H OM-Ø	v <u>á</u> -á-mw-[<u>ee</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/vá-a-mo- <u>é</u> mber- er-a/	'they taught/sang for him/her'
SM-Ø OM-Ø	kw-a-mw-[<u>ee</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/ko-a-mo- <u>é</u> mber- er-a/	'we taught/sang for him/her'
SM-Ø OM-H	kw-a-v-[<u>éé</u> mb <u>é</u> r- <u>é</u> r- <u>á</u>]	/ko-a-v <u>á</u> - <u>é</u> mber- er-a/	'we taught/sang for them'
Phrase medial SM-H	v-é-[<u>é</u> mb <u>é</u> r- <u>é</u> [†] r- <u>á</u>] mon5	/v <u>á</u> -a- <u>é</u> mber-er-a monó/	'they taught/sang for a lot'

MH on $\sigma 2$ -ultimate syllable: Paradigm for Ø verb takan-er-a 'persuade' in the Far Past Perfective

Frame	Far Past Perfective	Underlying	Translation
SM-H	v <u>á</u> -á-[tak <u>á</u> n- <u>é</u> r- <u>á</u>]		'they persuaded'
SM-Ø	kwa-a-[tak <u>á</u> n- <u>é</u> r- <u>á</u>]	/ko-a-takan-er-a/	'we persuaded'
SM-H OM-H	v <u>á</u> -á- [†] k <u>ó</u> -[tak <u>á</u> n- <u>é</u> r- <u>á</u>]		'they persuaded us'
SM-H OM-Ø	v <u>á</u> -á-ko-[tak <u>á</u> n- <u>é</u> r- <u>á</u>]		'they persuaded you (sg.)'
SM-Ø OM-Ø	kwa-a-mo-[tak <u>á</u> n- <u>é</u> r- <u>á</u>]	/ko-a-mo-takan-er- a/	'we persuaded him/her'
SM-Ø OM-H	kwa-a-v <u>á</u> -[tak <u>á</u> n- <u>é</u> r- <u>á</u>]	/ko-a-v <u>a</u> -takan-er- a/	'we persuaded them'
Phrase medial SM-H	v <u>á</u> -á-[tak <u>á</u> n- <u>é</u> [^] r- <u>á</u>] mon <u>5</u>		'they persuaded a lot'

MH on σ 2-ultimate syllable: Imperative Plural Ø verbs

Imperative Plural Ø verbs	Translation
[ref- <u>é</u> y]	'you all pay!'
[laan- <u>é</u> y]	'you all bid farewell!'
[siing- <u>é</u> y]	'you all touch!'
[sis <u>í</u> k- <u>é</u> y]	'you all rub!'
[saak- <u>é</u> r- <u>é</u> y]	'you all search for!'
[tak <u>á</u> n- <u>é</u> r- <u>é</u> y]	'you all persuade!'

MH on σ 2-ultimate syllable: Imperative Plural H verbs

Imperative Plural H verbs	Translation
[f- <u>é</u> y]	'you all give!'
[m <u>ú</u> t- <u>é</u> y]	'you all beat!'
[t <u>úú</u> mb- <u>é</u> y]	'you all follow!'
[s <u>óó</u> ch- <u>é</u> y]	'you all hate!'
[v <u>é</u> k- <u>é</u> r- <u>é</u> y]	'you all dress!'
[s <u>éé</u> r- <u>é</u> r- <u>é</u> y]	'you all help!'
[fw <u>éé</u> r- <u>é</u> r-y- <u>é</u> y]	'you all dismiss!'
[t <u>ó</u> m <u>á</u> m- <u>é</u> r- <u>é</u> y]	'you all serve!'

MH on σ2-ultimate syllable: Negative Far Past Perfective

Negative Far Past Perfective	Translation
te- <u>va</u> -a[t <u>ó</u> m <u>á</u> m <u>é</u> r- <u>á</u>]	'they did not serve'
te- <u>va</u> -a[tak <u>á</u> n <u>é</u> r- <u>á</u>]	'they did not persuade'

MH on σ 2-penultimate syllable: Paradigm for H verb $t\underline{\acute{o}}$ mam-er-a 'serve' in the Hodiernal Perfective

Frame	Hodiernal	Underlying	Translation
SM-H	v <u>ά</u> -[t <u>ó</u> m <u>ά</u> [↑] m- <u>éé</u> ε]	/v <u>á</u> -t <u>ó</u> mam-er-iyε/	'they have served'
SM-Ø	ko-[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ɛ]	/ko-t <u>ó</u> mam-er-iyɛ/	'we have served'
SM-H OM-H	v <u>á</u> -kó-[t <u>ó</u> m <u>á</u> [↑] m - <u>éé</u> ε]	/v <u>á</u> -k <u>ó</u> -t <u>ó</u> mam-er- iyε/	'they have served us'
SM-H OM-Ø	v <u>ά</u> -mo-[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ε]	/v <u>á</u> -mo-t <u>ó</u> mam-er- iyɛ/	'they have served him/her'
SM-Ø OM-Ø	ko-mo-[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ε]	/ko-mo-t <u>ó</u> mam-er- iyε/	'we have served him/her'
SM-Ø OM-H	ko-v <u>ά</u> -[t <u>ó</u> m <u>ά</u> [†] m - <u>éé</u> ε]	/ko-v <u>á</u> -t <u>ó</u> mam-er- iyɛ/	'we have served them'
Phrase medial SM-H	v <u>á</u> -[t <u>ó</u> m <u>á</u> [†] m - <u>éé</u> ε] mon <u>5</u>	/v <u>á</u> -t <u>ó</u> mam-er-iyε mon <u>ó</u> /	'they have served a lot'

MH on (σ 2)-penultimate syllable: Paradigm for Ø verb *takan-er-a* 'persuade' in the Hodiernal Perfective

Frame	Hodiernal Perfective	Underlying	Translation
SM-H	v <u>á</u> -[tákan- <u>í</u> ryɛ]	/v <u>á</u> -takan-er-iyε/	'they have per- suaded'
SM-Ø	ko-[tak <u>á</u> †n- <u>í</u> ryε]	/ko-takan-er-iyɛ/	'we have per- suaded'
SM-H OM-H	v <u>á</u> - [↑] k <u>ó</u> -[tákan- <u>í</u> ryɛ]	/v <u>á</u> -k <u>ó</u> -takan-er-iyɛ/	'they have per- suaded us'
SM-H OM-Ø	v <u>á</u> -mó-[takan- <u>í</u> ryɛ]	/v <u>á</u> -mo-takan-er-iyε/	'they have per- suaded him/her'
SM-Ø OM-Ø	ko-mo-[tak <u>á</u> [†] n- <u>í</u> ryε]	/ko-mo-takan-er-iyɛ/	'we have per- suaded him/her'
SM-Ø OM-H	ko-v <u>á</u> -[tákan- <u>í</u> ryε]	/ko-v <u>á</u> -takan-er-iyɛ/	'we have per- suaded them'
Phrase medial SM-H	v <u>á</u> -[tákan- <u>í</u> ryé] mon <u>ó</u>	/v <u>á</u> -takan-er-iyε mon <u>5/</u>	'they have per- suaded a lot'

Appendix 2: Colman Chuchu's traditional story

1.1 $f a^{\uparrow} r a$ k a ley njala yi lng e r a $f a^{\uparrow} r a$ k a ley N-jala e-a-lng e r-a 16 A CP-DIST long.time.ago 9 N CP-hung e r 9 SM-PST-enter-FV/FPST A long time ago there came a big famine.

1.2 moonto omó áká[†]lóósá osírá mo-nto o-mó á-ká-lóós-a o-sír-a 1NCP-person 1ACP-one 1SM-CONS-say-FV INF-finish-FV

koje na vaána ko-je na va-ána 1PL.SM-FUT CONN 2NCP-child

'One person said: "We are going to die, and the children too."

1.3 $me\acute{e}$ $v\acute{a}k\acute{a}^{\dagger}r\acute{e}r\acute{a}$ na $ns\acute{e}$ ja $me\acute{e}$ $v\acute{a}$ - $k\acute{a}$ - $r\acute{e}r$ -a na N- $s\acute{e}$ ji-a then 2SM-CONS-leave-FV CONN 9NCP-land 9ACP-ASSOC

koley koley far.away 'And they left for a land far away.'

1.4 *ne mwaána wááré k55* ne mo-ána ó-á-re kó-55 COP 1NCP-child 1SM-PST-COP 17ACP-REF.ASSOC

> waavó [†]kóko o-avó kóko 1ACP-3PL.POSS LOC 'And their child was there.'

1.5 meé vákéé[†]wééra ebéy ná meé vá-ká-é-wéér-a ebey na then 2SM-CON-RECP-tell-FV come.IMP.PL\IMP.PL CONN

> kore mwaáná wεytó ko-re mo-ána o-εytó.

17SM-COP 1NCP-child 1ACP-2PL.POSS

'And they told each other: "Come, let us go to our child."

vááré¹rá 16 nəəng'ə káka na na noong'ó na vá-a-rér-a káka na 2SM-PST-leave-FV\FPST COP COP LOC 'So they left in order to go there.'

1.7 meé vá[†]kóócha chákɔra chá mee vá-ká-óch-a ke-ákɔra ké-a then 2SM-CONS-bring-FV 7NCP-food 7ACP-ASSOC

> [†]rά njérεy Ø-r´-a n-jera-i

INF-eat-FV 9NCP-road-LOC

'And they brought food to be eaten on the way.'

1.8 áfa vááfiká kóley cháfá áfa vá-a-fik-a koley cháfá 16.PROX 2SM-PST-arrive-FV\FPST far.away because

> [↑]váátiingóká kwá [↑]nsíkó vá-a-tiingok-a kó-a N-síko 2SM-PST-walk-FV\FPST 17ACP-ASSOC NCP10-day

nyiingé chákóra chavásíré[†]rá N-ingé ke-ákora ke-a-vá-sír-er-a

NCP10- 7SM-PST-2OM-end-APPL-

many FV\FPST

njérey

n-jera-i

9NCP-road-LOC

'When they had come far, because they had walked for many days, the food they had brought for the road was gone.'

1.9 meé váká¹fóónjá osírá njerey
meé vá-ká-fónj-a o-sír-a n-jera-i
then 2SM-CONS-start-FV INF-end-FV 9NCP-road-LOC
'So they started to die on the road.'

1.10 $s\acute{e}\acute{e}v\acute{o}$ na $we\acute{e}$ $w\acute{a}\acute{a}v\acute{a}^{\dagger}l\acute{a}$ \emptyset - $s\acute{e}\acute{e}vo$ na $we\acute{e}$ \acute{o} -a- $v\acute{a}l$ -a

1a-their.father CONN 3SG 1SM-PST-start-FV\FPST

okúya o-kúy-a ^{INF-die-FV}

'Their father was the first one to die.'

nyináává 1.11 kaayé mbeere ofétá ná o-fét-a kaayέ mbeere Ø-nvináávo na INF-go-FV again CONN front 1aNCP-their.mother

 $me\acute{e}$ $\acute{a}k\acute{a}^{\dagger}k\acute{u}y\acute{a}$ $kaay\acute{e}$ $me\acute{e}$ \acute{a} - $k\acute{a}$ - $k\acute{u}y$ -a $kaay\acute{e}$ then 1SM-CONS-die-FV again

'When they had gone forward a bit, their mother died also.'

1.12 *áfa áákú*[†]*yá nyinááv*² áfa á-a-kúy-a Ø-nyinááv²

16.PROX 1SM-PST-die-FV\FPST 1aNCP-his/her.mother

 $v\acute{a}^{\uparrow}k\acute{a}va$ $v\acute{a}^{\uparrow}c\acute{h}\acute{a}\acute{a}y\varepsilon$ $v\acute{a}^{\uparrow}r\acute{a}$ $v\acute{a}$ - $v\acute{a}$

vaáná vεεnέva-ána va-εnέ2NCP-child 2NCP-self

^{&#}x27;When their mother died, those children were left by themselves.'

1.13 vá[†]rá vaáná na vaveeré omá vá-rá va-ána o-má na va-veeré 2ACP-DIST 2NCP-child 2ACP-two 1ACP-one CONN wááré né morerwá meé wεέ na

meé wεέ ó-á-re ne mo-reruá na COP

1NCP-house.help then CONN 3SG 1SM-PST-COP

monéne

mo-néne

1NCP-big

'Among those two children, one was a house help, and she was the eldest?

vá[†]jóórékerya 1.14 vááfétá nyoombá ya vá-jé-órekery-a vá-a-fét-a N-vombá e-a 2SM-PST-go-FV\FPST 2SM-PTCP-ask-FV 9NCP-house 9ACP-ASSOC

vá[†]káfika kwá waláává meé kó-a Ø-waláává meé vá-ká-fik-a

1aNCP-their relative then 17ACP-ASSOC 2SM-CONS-arrive-FV

kwá waláává nyoombá ya n-yombá kó-a Ø-waláává e-a

9NCP-house 9ACP-ASSOC 17ACP-ASSOC 1ancp-their.relative 'They walked around asking about the house of their relative, until they reached their relative's house.'

1.15a *orá* mwaáná monénε áfa o-rá mo-ána mo-nénε áfa 1ACP-DIST 1NCP-child 1NCP-big 16.PROX

> vááfiká meé áká[†]fóónjá vá-a-fik-a meé á-ká-fónj-a

2SM-PST-arrive-FV\FPST then 1SM-CONS-start-FV

olóósá ne shóónsε kwáyséja o-lóós-a ne shóónsε ko-áyse-j-a

INF-say-FV COP 1PL.all 1PL.SM-PROG2-come-FV

na kwέytó na kó-εytó

CONN 17ACP-2PL.POSS

'When they arrived, the older child started to explain: 'It was all of us who were coming from our home.''

1.15b *áfá* kwaafiká katékaté áfa ko-a-fik-a katékaté 16.PROX 1PL.SM-PST-arrive-FV\FPST middle

> yá lotáámbo bába meé e-a lo-támbo Ø-bába meé 9ACP-ASSOC 11NCP-trip 1NCP-father then

áká[↑]*kúya* á-ká-kúy-a

1SM-CONS-die-FV

'When we were in the middle of our journey, our father died.'

1.16 [↑]máwe meé ója ee kaayέ meé meé o-j-a kaayέ meé Ø-máwe ee then INF-come-FV only again then 1NCP-mother

áká[†]kúya

á-ká-kúy-a

1sm-cons-die-FV

'When we continued on, mother died also.'

1.17 meé koká[†]cháála shavéé[†]né nachó meé ko-ká-cháál-a shavééné nachó then 1PL.SM-CONS-left.behind-FV 1PL.self therefore

 \acute{o} ké \acute{e} $^{\uparrow}$ kό \acute{o} n \acute{a} kojíy \acute{e} \acute{o} -ké \acute{e} -ko- \acute{o} n-a ko- $\emph{Θ}$ -j-iyε

2SG.SM-PRS-1PL.OM-see-FV 1PL.SM-HOD-come-PFV\HOD

shavééné shavééné 1PL.self

'We were left alone and that is why you see us coming alone.'

1.18a neé mwaáná monéné meé orá mo-ána mo-nέnε neé o-rá meé 1NCP-child then 1ACP-DIST 1NCP-big then

> áká[†]lóósa á-ká-lóós-a

1SM-CONS-say-FV

'Then the older child said:'

1.18b *όό mwaáná njijíyé na ó*ó mo-ána N-Ø-j-iyε na 1.PROX 1NCP-child 1SG.SM-HOD-come-PFV\HOD CONN

wεέ tέre wa kwέytό wεέ te-re o-a kό-εytό

3SG NEG-COP 1ACP-ASSOC 17ACP-2PL.POSS

'This child that I came with is not from our place.'

 $1.19 \quad kw\acute{\epsilon}\acute{\epsilon}y^{\uparrow}t\acute{o} \qquad n\acute{\epsilon} \quad omoola$

kó-εytó ne o-mo-ol-a

17acp- COP INF-1OM-buy-FV

1PL.POSS

váamoolá kotóolέ vá-a-mo-ol-a ko-tóól-ε

2PL.SM-PST-1OM-buy-FV\FPST 1PL.SM-take-SBJV\SBJV

morerwá

mo-reruá

1NCP-house.help

'Our parents bought her in order to take her as a house help.'

1.20 nɔɔng'ɔ́ orá waaláávɔ́ áfa nɔng'ɔ́ o-rá Ø-waaláávɔ́ áfa so 1ACP-DIST laNCP-their relative 16.PROX

> *άάτἑετά* [†]*óó ne morετwá* á-á-τἑετ-a óo ne mo-rετυά

2SM-PST-hear-FV\FPST 1.PROX COP 1NCP-househelp

meé áká[↑]fóónja omotómámya meé á-ká-fonj-a o-mo-tómam-i-a

then 1SM-CONS-start-FV INF-2SM-work-CAUS-FV

'So the relative heard that this one is a house help, and she started to put her to work.'

1.21 *meé orá mórerwá wεέ* meé o-rá mo-rεruá wεέ then 1ACP-DEM.DIST 1NCP-house.help 3SG

> meé ákeendeykala 55 káai meé á-keende-ikal-a 55 kaa-i then 3SG.SM-IPFV-stay-FV only house-LOC

^{&#}x27;And that house help, she just stayed in the house.'

1.22 *váákúúndíwá vá[†]jéríra viryó*vá-a-kúndi-w-á vá-jé-rir-a vi-rió
2SM-PST-meet-PASS-FV\FPST 2SM-PTCP-protect-FV 8NCP-millet

 $me\acute{e}$ $^{\uparrow}m\acute{i}r\acute{e}$ ne $ken\acute{e}nε$ $me\acute{e}$ Ø-míre ne $ke-n\acute{e}nε$ then 10NCP-bird COP 7NCP-big

'They were found protecting the millet, and there were many birds.'

1.23a *orá wáalwε meé* o-rá Ø-waalwε meé
1ACP-DEM.DIST 1aNCP-his/her.relative then

ákeemwééra á-kee-mo-wéér-a 1SM-IPFV-1OM-tell-FV 'And so the relative was telling her:'

- 1.23b wéé[†]fétá chaalóy ná rira na ó-éé-fét-a na chaaló-i na Ø-rir-a field-LOC 2SG.SM-SBJV-go-FV **CONN** CONN INF-protect-FV 'Go to the field in order to protect.'
- 1.24 nɔɔng'ɔ orá mwaáná meé ákeefétá
 nɔng'ɔ o-rá mo-ána meé á-kee-fét-a
 so 1ACP-DIST 1NP-child then 1SM-IPFV-go-FV

na rira mírε nsíko jóónsε na Ø-rir-a Ø-mírε N-síko jí-ónsε CONN INF-protect-FV 10NCP-bird 10NCP-day 10ACP-all 'So the child was going to protect from the birds every day.'

'So the child was going to protect from the birds every day.'

1.25 na chákóra ááretwárérwa ne na ke-ákora á-á-re-túal-er-u-a ne CONN 7NCP-food 1SM-PST-PROG1-bring-APPL-PASS-FV COP

 $ch\acute{a}k\acute{o}ra$ $ch\acute{a}$ $^{\uparrow}mp\acute{u}\acute{u}mba$ ke-ákora ké-a N-púmba

7NCP-food 7ACP-ASSOC 10NCP-chaffs.of.grain (Sw.) 'And the food she was being brought was chaffs of grain.'

1.26 tere chákóra kejá te-re ke-ákora ke-já NEG-COP 7NCP-food 7NCP-good 'It was not good food.'

1.27a *tere chákóra cháándáaréwá ne* te-re ke-ákora ke-ándaa-r´-u-a ne

NEG1-COP 7NCP-food 7SM-HAB1-eat-PASS-FV COP

vaanto va-nto 2NCP-person

'It was not food which was usually eaten by people.'

1.27b *mee vɔɔ́ chákɔ́ra vááré*[†]*rá* meé vɔɔ́ ke-ákɔra vá-a-r´-er-a

then 3PL 7NCP-food 2SM-PST-eat-APPL-FV\FPST

ne kejá ne ke-já COP 7NCP-good

'But the food the others ate was good'.

1.28 *orá mwaána cháfá ne*o-rá mo-ána cháfa ne
1ACP-DIST 1NCP-child because COP

onyáálólwa ááré ne o-nyáálol-u-a á-á-re ne INF-annoy-PASS-FV 1SM-PST-PROG1 COP

 $ov\acute{a}^{\uparrow}k\acute{o}\acute{o}mb\acute{o}ka$ $\acute{a}\acute{a}re$ $kw\acute{a}\acute{a}v\acute{o}$ $o-v\acute{a}-k\acute{o}mbok-a$ $\acute{a}-\acute{a}-re$ $k\acute{o}-av\acute{o}$

INF-3PL.OM-remember-FV 1SM-PST-PROG1 17ACP-3PL.POSS

^{&#}x27;Because that child was very troubled, she was missing her parents.'

1.29 teáré teáár[†]óóva na ngə N-go te-á-áre-óv-a te-á-re na NEG-PST-COP NEG-1SM-PROG1-bathe-FV **CONN** 10NCP-clothes káá baa njééré teáré moonto baa N-jéére te-á-re kó-áá mo-nto even 10NCP-hair NEG-PST-COP 17ACP-REF.ASSOC 1NCP-person wáámónó[†]lá m[↑]póótí meé bóó ne ó-a-mó-nól-a meé N-póóti bóó ne 1SM-PST-1OM-cut-FV\FPST then 10NCP-louse COP plenty ¹járé n[†]jééré ndev motwév ne

[†]járé motwέy n[†]jééré ne ndey j-á-re mo-túε-i N-jéére ne n-ley 10SM-PST-COP 3NCP-head-LOC 10NCP-hair COP 10NCP-long

járé meé báa tejár[†]*óóywá* j-á-re meé baa te-j-áre-óy-w-a 10SM-PST-COP then even NEG-10SM-PROG1-wash-PASS-FV

na chákóra akeerá ne na ke-ákora á-kee-r´-a ne CONN 7NCP-food 1SM-IPFV-eat-FV COP

mpúúmba

N-púmba

10NCP-chaffs.of.grain

(Sw.)

^{&#}x27;She had no clothes, and took no baths, and no one cut her hair, and there were a lot of lice on her head, and the hair became long and unwashed, and the food she ate was only chaffs of grain.'

mwaánawááfoonjáórerakónomo-ánaó-a-fonj-ao-rer-akóno1NCP-child1SM-PST-start-FV\FPSTINF-cry-FVLOC

 $\acute{a}^{\uparrow} j \acute{e} \acute{e} m b a$

á-jé-émb-a

1SM-PTCP-sing-FV

'So because of all of her troubles, the child started to cry there, singing:'

1.30b *ne* weéwé mwáánso okáréra ne weéwe mwánso o-ká-rer-a COP 2SG Mwanso 2SG.SM-CONS-raise-FV

COI 250 IVIWanso 250.5W-CON5-Taise-IV

mompyśśmi okáréka wa mo-mpismi o-ká-rek-a o-a

1NCP-stranger 2SG.SM-CONS-leave-FV 1ACP-ASSOC

kwáányú †nkúyakó síimbe kó-anyú N-kúya=kó Ø-siimbe 17ACP-2PL.POSS 9NCP-death-2SG.POSS⁶³ 5NCP- curse 'It is you, Mwanso, you raised a stranger, then you left her at home for a bad death.'

⁶³ The language consultant explained that the special form of the noun with the 2.SG.POSS form attatched to it is only used in songs.

2.1 nóóng'o áfá ááreémba kwá nóng'o áfa á-áre-émb-a kó-a

so 16.PROX 1SM-PROG1-sing-FV 17NP-ASSOC

osóóngokónoá † jévenakónóo-sóngokónoá-jé-ven-akóno14NCP-problemLOC1SM-PTCP-get.angry-FVLOC

orera

o-rer-a

INF-cry-FV

'So while she was singing about her problems and crying, she became angry.'

2.2 nsíko emó kwáávó vá†kájá N-síko e-mó kó-avó vá-ká-j-a

9NCP-day 9ACP-one 17ACP-3PL.POSS 2SM-CONS-come-FV

mpeende ya na moonsékáte N-pende e-a na mo-nsékate 9NCP-time 9ACP-ASSOC CONN 3NCP-daytime

mirejetóreréryeauØ-míreje-Ø-tórer-er-iyeau

10NCP-bird 10SM-HOD-calm.down-APPL-PFV\HOD or (Sw.)

mírέ jilááyε

Ø-mírε ji-Ø-láála-iyε

10NCP-bird 10SM-HOD-sleep-PFV\HOD

'One day her parents came during the day when the birds had rested or slept.'

2.3 ne mawani áájá aveeré ne ma-wani á-a-i-a a-veeré

6NCP-kind.of.bird COP 1SM-PST-come-FV\FPST 6ACP-two

vá[†]kámoréétéra meé chákóra kejá meé vá-ká-mo-réét-er-a ke-ákora ke-já

then 2SM-CONS-10M-bring-APPL-FV 7NCP-food 7NCP-good

'And two birds came and they brought her good food.'

2.4 mwáana meé $\dot{a}^{\uparrow}k\dot{a}\dot{a}$ moré[†]ré meé á-ká-ón-a moréré mo-ána meé meé 1NCP-child then then 1SM-CONS-see-FV good

ákárá ákáv[†]kóta á-ká-íkot-a á-ká-r'-a

1SM-CONS-be.full-FV 1SM-CONS-eat-FV 'The child felt very good and ate until she was full.'

2.5 áfa áátú[†]ryá meé orá áfa á-a-túrv-á o-r'-a meé 16.PROX 1SM-PST-finish-FV\FPST INF-eat-FV then

> váká[†]fóónjá omotóóndóla mpóótí vá-ká-fónj-a o-mo-tóndol-a N-póóti INF-10M-find-FV 10NCP-louse 2SM-CONS-start-FV

kóná vákeeneémba motwév meé mo-twέ-y kónə meé vá-keen-émb-a 3NCP-head-LOC 2SM-IPFV-sing-FV LOC then

'When she finished eating, they started to pick lice from her head, and they were singing:'

2.6 kógáa k5[↑]nkúyak5 síimbe kó=N-kúya=kó Ø-siimbe kógaa 5ACP-curse Kogaa 2SG.POSS-10NCP-death-2SG.POSS

'Kogaa, your death is cursed.'

3.1 kógáa ne orá móonto kógaa ne o-rá mo-nto

Kogaa COP 1ACP-DIST 1NCP-person

wáámolóólá †mwáánso ó-a-mo-lóól-a mwánso 1SM-PST-1OM-marry-FV\FPST Mwanso 'Kogaa is the man who married Mwanso.'

3.2a mpeende ya na iyóló N-pende e-a na i-yóló

9NCP-time 9ACP-ASSOC CONN 5NCP-evening

ekáfíka váká[†]féréenka orá e-ká-fik-a vá-ká-érenk-a o-rá

9SM-CONS-arrive-FV 2SM-CONS-leave-FV 1ACP-DIST

mwaánane $áká^{\dagger}fóónja$ orerakónomo-ánaneá-ká-fónj-ao-rer-akóno1NCP-childCOP1SM-CONS-begin-FVINF-cry-FVLOC

á[†]jéémba

á-jé-émb-a

1SM-PTCP-sing-FV

'When the evening arrived, they took off, and the child began to cry

3.2b *babá* nkótuumbέ Ø-babá N-ko-túmb-ε

1ancp-father 1sg.sm-2sg.om-follow-sbjv\sbjv

'Father, may I follow you?'

3.3 mwaáná waané korí[†]mó mo-ána o-aané ko-rímó

1NCP-child 1ACP-1SG.POSS 17NCP-afterworld

tekoriwέ na ngɔ te-ko-Ø-ol-u-iyε na N-gɔ

NEG-17SM-HOD-buy-PASS-PFV\HOD CONN 10NCP-clothes 'No, my child, in the afterworld clothes have not been bought.'

3.4 mawe nkotuumbέ Ø-mawe N-ko-túmb-ε

1aNCP-mother 1sg.sm-2sg.om-follow-sbJv\sbJv

'Mother, may I follow you?'

3.5 mwaáná waané korí[†]mó mo-ána o-aané ko-rímó

1NCP-child 1ACP-1SG.POSS 17NCP-afterworld

tekoríwέ na ngɔ te-ko-Ø-ol-w-iyε na N-gɔ

NEG-17SM-HOD-buy-PASS-PFV \setminus HOD CONN 10NCP-clothes 'No, my child, in the afterworld clothes have not been bought.'

4.1 baa vá[†]káfika korá baa vá-ká-fik-a ko-rá even 2SM-CONS-arrive-FV 17ACP-DIST

> kekává baa tevakeetééra ke-ká-va baa te-vá-kee-téér-a

7SM-CONS-COP even NEG-2SM-IPFV-listen-FV

'And so they arrived there, but even then they could not hear.'

4.2 nɔɔng'ɔ́ kekává ne nsiko jɔ́ɔ́nsε nong'ɔ́ ke-ká-va ne N-siko jí-ɔ́nsε so 7SM-CONS-COP COP 10NCP-day 10ACP-all

vááreja vá-áre-j-a

2SM-PROG1-come-FV

'And so it was that they were coming every day.'

4.3 baa áfá vakeemoréétéra chákóra baa á-fa vá-kee-mo-réét-er-a ke-ákora even 16.PROX 2SM-IPFV-2OM-bring-APPL-FV 7NCP-food

kérá cháávó $^{\uparrow}$ chá ké-rá ké-avó ke-á

7ACP-DIST 7ACP-3PL.POSS 7ACP-ASSOC

mpúumba meé ákeevá[†]siítéra N-pumba meé á-kee-vá-siít-a

10NCP-chaffs.of.grain then 1SM-IPFV-2OM-refuse-FV 'They even brought her their own food, chaffs of grain, but she turned them down '

4.4 *vakeemoórékerya ne kee ojééra*vá-kee-mo-órekery-a ne kee o-jéé-r-a
2SM-IPFV-1OM-ask-FV COP what 2SG.SM-HAB2-eat-FV
'They asked her: "What do you usually eat?""

4.5 áfa ókéé[†]sííta chákóra áfa ó-kéé-síít-a ke-ákora 16.PROX 2SG.SM-PRS-refuse-FV 7NCP-food 'Why do you refuse food?'

4.6 otúryá baa teárétaalola o-túry-a baa te-áre-taalol-a INF-finish-FV even NEG-PROG1-answer-FV 'But she was not answering.' 4.7 *vaampééndo vá chálóy meé* va-mpéndo vá-a ke-álo-i meé 2NCP-neighbour 2ACP-ASSOC 7NCP-field-LOC then

vakeemotééréramwaánájeembéróvá-kee-mo-téér-er-amo-ánajembéro2SM-IPFV-1OM-listen-APPL-FV1NCP-childREL

akeereranajeembéróakeenéémbáá-kee-rer-anajembéroá-keen-émb-a1SM-IPFV-cry-FVCONNREL1SM-IPFV-sing-FV

na mpśśngś akeelóósa na N-pśngɔ á-kee-lóós-a CONN 10NCP-word 1SM-IPFV-tell-FV

'The neighbours from the field were listening to the child who was crying and singing, and the words she was saying.'

- 4.8 noong'ó nsénsey na ááyserera ee fáfɔ fáfa nong'ó á-áyse-rer-a nsénsey na ee 1SM-PROG2-cry-FV only LOC under SO CONN 'And she was just crying there below.'
- 4.9 nɔɔng'ɔ váampééndɔ áfa nɔng'ɔ va-mpéndɔ áfa so 2NCP-neighbour 16.PROX

váárémoterééréra meé váká[†]féta vá-áre-mo-téér-er-a meé vá-ká-fét-a

2SM-PROG1-1OM-listen-APPL-FV then 2SM-CONS-go-FV

vá¹kámoórékeryamwáánsová-ká-mo-órekery-amwánso2SM-CONS-1OM-ask-FVMwanso

'So as the neighbours were listening to her, they went and asked Mwanso:'

4.10a	óó	mwaána	wáándáarira	na
	óó	mo-ána	ó-ándaa-rir-a	na
	1.PROX	1NCP-child	1SM-HAB1-protect-FV	CONN

όό [↑]óré kaai walaak5
 óó ó-re Ø-kaa-i Ø-walaak5

1.PROX 1SM-COP 9NCP-house-LOC 1aNCP-your.relative

 né
 or>όrε

 ne
 o-r>όrε

 COP
 1ACP-which

'That child who is keeping watch, and that one who is staying in the house, which one is your relative?'

4.10b $\acute{a}k\acute{a}^{\dagger}l\acute{o}\acute{o}sa$ $wal\acute{a}\acute{a}n\acute{e}$ ne $\acute{o}\acute{o}$ ore \acute{a} - $k\acute{a}$ - $l\acute{o}\acute{o}s$ -a $wal\acute{a}\acute{a}n\epsilon$ ne $\acute{o}o$ o-re 1SM-CONS-answer-FV my.relative COP 1.PROX 1SM-COP

kaai

Ø-kaa-i

9NCP-house-LOC

'She said: "My relative is the one in the house."

4.11 óo ókéé $^{\uparrow}$ fétá na orira ne óo ó-kéé-fét-a na o-rir-a ne 1.PROX 1SM-PRS-go-FV CONN INF-protect-FV COP

> morerwá [†]wáárerwá kaai mo-reruá ó-a-rer-u-a Ø-kaa-i

1NPC-house.help 1SM-PST-raise-PASS-FV\FPST 9NCP-house-LOC

kwéytó

kó-εytó

17ACP-1PL.POSS

'The one who is out keeping watch is the house help who has been brought up in our house.'

4.12a nəəng'ə moompééndə waachwé nəng'ə mo-mpéndə o-achué

so 1NCP-neighbour 1ACP-3.SG.POSS

áká¹mwééra á-ká-mo-wéér-a 1SM-CONS-3OM-ask-FV 'So her neigbour asked her:'

4.12b $n\acute{a}\acute{a}ma$ $lov\acute{i}$ $\acute{o}^{\dagger}k\acute{a}l\acute{u}va$ $n\acute{a}\acute{a}ma$ $lo-v\acute{i}$ o-ka-luv-a

INTERJ⁶⁴ 11NCP-tomorrow 2SG.SM-CONS-cook-FV

chákόra kéré terεrε meé ke-ákora ké-re terεrε mee 7NCP-food 7ACP-COP good then

*ókaja*okaja

na

moonsékáte

na

mo-nsékate

2SG.SM-CONS-come-FV

CONN

3NCP-daytime

'Listen, why don't you make good food tomorrow, and come during the day.'

4.13 nɔɔng'ɔ́ lovi yaachwɛ́ meé nɔng'ɔ́ lo-vi e-achuɛ́ mee so 11NCP-tomorrow 9ACP-3.SG.POSS then

ά[†]kájísha jeembéró moompééndo
 á-ká-jish-a jembéro mo-mpéndo
 1SM-CONS-do-FV REL 1NCP-neighbour

ámwér[†]*éyε* á-Ø-mo-wer-iyε

1SM-HOD-1OM-ask-PFV\HOD

'And the day after she had done what they neighbour had asked her to.'

⁶⁴ Interjection to draw attention.

4.14 *meé* áká[†]fétá na yoondey meé á-ká-fét-a na i-onda-i

then 3SM-CONS-go-FV CONN 5NCP-field-LOC

kwá moompééndó wachwé kó-a mo-mpéndo o-achué

17ACP-ASSOC 1NCP-neighbour 1ACP-3.SG.POSS

'And she went to the field with her neighbour.'

4.15a otúryá meé váká[†]fétá na o-túry-a meé vá-ká-fét-a na INF-finish-FV then 2SM-CONS-go-FV CONN

> yoondεy kwáachέ †kwá veejá i-onda-i kó-achuέ kó-a veejá 5NCP-field-LOC 17ACP-3SG.POSS 17ACP-ASSOC slowly 'They went to his/her field slowly.'

4.15b $\acute{a}fa$ $\acute{a}\acute{a}\acute{f}e^{\dagger}t\acute{a}$ $\acute{n}\acute{a}$ $\acute{y}oond\varepsilon y$ $\acute{a}fa$ $\acute{v}\acute{a}$ -rét-a $\acute{n}a$ \acute{i} -onda-i $\acute{1}6$.PROX $\acute{2}$ SM-PST-go-FV/FPST CONN 5NCP-field-LOC

kwáá[†]chwέ meé vákée[†]vísa kó-achuέ meé vá-ká-é-vís-a

17ACP-3SG.POSS then 2M-CONS-RFLX-hide-FV 'When they arrived at his/her field, they hid themselves.'

4.16 *vá[†]káykála kore otina* vá-ká-ikal-a ko-re *o-tina* 2SM-CONS-stay-FV 17SM-COP 14NCP-stem

> wá viryó ó-a vi-rió

14ACP-ASSOC 8NCP-millet

'They stayed there among the stems of the millet.'

4.17a nəəng'ə ora mwaana ne nəng'ə o-ra mo-ana ne so 1ACP-DIST 1NCP-child COP

άkā¹fóónjá weémba na uúlala
 á-ká-fónj-a o-émb-a na o-úlal-a
 1SM-CONS-begin-FV INF-sing-FV CONN INF-hurt-FV

тээу

mo-o-i

3NCP-heart-LOC

'And then that child started to sing and to hurt inside:'

4.17b *ne weéwe mwáánso okáréra* ne weéwe mwánso o-ká-rer-a

COP 2SG Mwanso 2SG.SM-CONS-raise-FV

moompyśśmi okáréka wa mo-mpismi o-ká-rek-a o-a

1NCP-stranger 2SG.SM-CONS-leave-FV 1ACP-ASSOC

kwáányú †nkúyakó síimbe kó-anyú N-kúya=kó Ø-siimbe 17ACP-2PL.POSS 9NCP-death-2SG.POSS 5NCP- curse 'It is you, Mwanso, you raised a stranger, then you left her at home for a bad death.' 5.1 mwáánso áfa áátέξ[†]rá mwánso áfa á-a-tέξr-a

Mwanso 16.PRO 1SM-PST-hear-FV\FPST

wáalwe a^{\dagger} jéémbajóómeéØ-waalweá-jé-émb-ají-óómeé1aNCP-his/her.relative1SM-PTCP-sing-FV10ACP-REF.ASSOCthen

ἀkά[†]*réra* na kore waalwε á-ká-rér-a na ko-re Ø-waalwε

1SM-CONS-leave-FV CONN 17SM-COP lanCP-his/her.relative 'When Mwanso heard her relative singing like that she wanted to leave with her relative.'

5.2a otúryá orá moompééndo o-túri-a o-rá mo-mpéndo INF-finish-FV 1ACP-DIST 1NCP-neighbour

á[†]kámokwááta áká[†]mwééra
 á-ká-mo-kúat-a á-ká-mo-wéér-a

1SM-CONS-10M-hold-FV 1SM-CONS-10M-tell-FV 'But the neighbour took a hold of her and told her:'

5.2b nendéra tééreréra táánga nendera téér-er-er-a tánga wait.IMP.SG listen-APPL-APPL-FV\IMP.SG first 'Wait, listen first!'

5.3 meé á[†]rá máwani meé meé á-rá ma-wani meé then 6ACP-DIST 6NCP-kind.of.bird then

 $\dot{a}^{\uparrow}k\acute{a}fika$ $\dot{a}^{\uparrow}k\acute{a}mor\acute{e}\acute{e}t\acute{e}ra$ $mwa\acute{a}n\acute{a}$ \acute{a} -k\acute{a}-fik-a \acute{a} -k\acute{a}-mo-r\acute{e}\acute{e}t-er-a \acute{m} -ana 1SM-CONS-arrive-FV 1SM-CONS.1OM-bring-APPL-FV 1NCP-child

waavó [↑]chákóra o-avó ke-ákora 1ACP-3PL.POSS 7NCP-food

'Those birds arrived, bringing food for the child.'

5.4 áátú[†]rvá áfa orá meé á-a-túri-a o-r'-a áfa meé 16 PROX 1SM-PST-finish-FV\FPST 1sm-eat-FV then

váká[†]fóónja omotóándála mpóótí vá-ká-fónj-a o-mo-tóndol-a N-póóti 2SM-CONS-begin-FV 10NCP-louse INF-10M-pick-FV

motwey

mo-tue-i

3NCP-head-LOC

'When she had finished eating, they started to pick lice from her head.'

5.5a meé vákeendeémba meé vá-keende-émba

> 2SM-PST.IMPV-sing-FV then

'And they were singing:'

5.5b kógáa k5[↑]nkúyak5 síimhe kógaa kó=N-kúva=kó Ø-siimbe 2SG.POSS-10NCP-death-2SG.POSS Kogaa 5NCP-curse

'Kogaa, your death is cursed.'

6.1 nວວng'ວ່ yaafiká áfá na nong'ó áfa e-a-fik-a na 16.PROX 4SM-PST-arrive-FV\FPST **CONN** so

> áká[†]rέra vóló máwani meé Ø-yóló ma-wani meé á-ká-rér-a

1SM-CONS-leave-FV 5NCP-evening 6NCP-kind.of.bird then

'So the evening arrived, and the birds left.'

6.2 orá mwaáná áká[†]fóónjá na mo-ána á-ká-fónj-a o-rá na

1ACP-DIST 1NCP-child 1SM-CONS-begin-FV **CONN**

kɔ́nɔ á[†]jéémba orera o-rer-a kóno á-jé-émb-a

LOC 1SM-PTCP-sing-FV INF-crv-FV

'And the child started to cry and sing:'

6.2b *babá nkótuumbé* Ø-babá N-ko-túmb-e

1aNCP-father 1sg sm-2sg om-follow-sbjv\sbjv

'Father, may I follow you?'

6.3 mwaáná waané korí[†]mó mo-ána o-aané ko-rímó

1NCP-child 1ACP-1SG.POSS 17NCP-afterworld

tekoriwέ na ngɔ te-ko-Ø-ol-w-iyε na N-gɔ

NEG-17SM-HOD-buy-PASS-PFV\HOD CONN 10NCP-clothes 'No, my child, in the afterworld clothes have not been bought.'

6.4 *mawe* $nkotuumb\acute{\epsilon}$ \emptyset -mawe $N-ko-t\acute{u}mb-\epsilon$

1ancp-mother 1sg.sm-2sg.om-follow-sbjv\sbjv

'Mother, may I follow you?'

6.5 mwaáná waané korí[†]mó mo-ána o-aané ko-rímó

1NCP-child 1ACP-1SG.POSS 17NCP-afterworld

tekoríwέ na ngɔ te-ko-Ø-ol-w-iyε na N-gɔ

NEG-17SM-HOD-buy-PASS-PFV\HOD CONN 10NCP-clothes 'No, my child, in the afterworld clothes have not been bought.'

7.1 á[†]jéémbá ee vákáfika koley á-jé-émb-a ee vá-ká-fik-a koley 1SM-PTCP-sing-FV only 2SM-CONS-arrive-FV far.away 'And she continued to sing like this until they had gone far away.' 7.2 baa áfa akéélóó[†]sá babá baa áfa á-kéé-lóós-á Ø-babá even 16.PROX 1SM-SIT-say-FV\SIT 1NCP-father

> nkόtuumbέ báa omotééra n-ko-túmb-έ baa o-mo-téεr-a

1SG.SM-2SG.OM-follow-SBJV\SBJV even INF-1.OM-listen-FV

nakémo nakémo nothing

'Even if she asked 'Father, may I follow you?', they still did not listen to her'

7.3 nɔɔng'ɔ́ na ááyserera ee fáfɔ nɔng'ɔ́ na á-áyse-rer-a ee fáfɔ so CONN 1SM-PROG2-cry-FV only LOC

nsénsey nsénsey under

'And she was just crying there below.'

7.4 nafó wáalwe akeerérá nafó Ø-waalwe á-kee-rér-a

that.is.when lancp-his/her.relative lsm-pst.ipfv-leave-fv

otinεy wá viry5
o-tina-i ό-a vi-ri5
14NCP-stem-LOC 14ACP-ASSOC 8NCP-millet

á¹kámokúúmbátera modí¹dí wáachwé
 a-ka-mo-kúmbater-a mo-dídí o-achué
 1SM-CONS-1OM-embrace-FV 1NCP-small 1ACP-3SG.POSS
 'So then the relative left from among the stalks of millet, and

hugged her little relative.

7.5 nɔɔng'ɔ váká¹foʻonja orera vɔʻɔʻnsε nong'ɔ vá-ká-fonj-a o-rer-a vá-oʻnsε so 2SM-CONS-start-FV INF-cry-FV 2ACP-ALL

'And they all started to cry.'

7.6 chá hácómbóka vimaka vírá ké-a Ø-kómbok-a vi-maka ví-rá 7ACP-ASSOC INF-remember-FV 8NCP-thing 8ACP-DIST

[†]áárémojisherya á-á-re-mo-jish-er-i-a 3SG.SM-PST-PROG1 -3SG.OM-do-APPL-CAUS-FV

waalwe

Ø-waalwe

1aNCP-his/her.relative

'And to remember those things she had done to her relative.'

7.7 áfa váatú[†]ryá órera na áfa vá-a-túri-á o-rer-a na 16.PROX 2SM-PST-finish-FV\FPST INF-cry-FV CONN

wéé[†]kúúmbátera meé á[†]kámofá o-é-kúmbater-a meé á-ká-mo-f´-a

INF-RECP-embrace-FV then 1SM-CONS-3SG.OM-give-FV

modí[†]dí wáachwέ [†]chákóra mo-dídí o-achuέ ke-ákora 1NCP-little 1ACP-3SG.POSS 7NCP-food

'So when they had finished to cry and embrace each other, she gave her little relative food.'

7.8 *chákóra tere já kérá*ke-ákora te-re jí-a ké-rá

7NCP-food NEG-COP 10ACP-ASSOC 7ACP-DIST

†áándáaréétérwansíkojóźnsεá-ándaa-réét-er-u-aN-síkojí-ɔnsε1SM-HAB1-bring-APPL-PASS-FV10NCP-day10ACP-all

'The food was not the kind she used to be brought every day.'

7.9 áká[†]mwéérá waalwe hamu á-ká-mo-wéér-a Ø-waalwe hamu 1SM-CONS-1OM-tell-FV 1aNCP-his/her relative INTER 1⁶⁵

chákóra tere kérá ke-ákora te-re ké-rá 7NCP-food NEG-COP 7ACP-DIST

mwándáandéétera mo-andaa-n-réét-er-a 2SG.SM-HAB1-1SG.SM-bring-APPL-FV

'She said to her relative: "Look, this food is not what you usually bring me."

7.10 $\acute{a}k\acute{a}^{\dagger}mw\acute{e}\acute{e}ra$ $\acute{r}\acute{a}$ $\acute{v}\acute{e}\epsilon$ \acute{a} - $\acute{k}\acute{a}$ -mo-wéér-a \acute{r} -a $\acute{w}\acute{\epsilon}\epsilon$ 1SM-CONS-1OM-tell-FV eat-FV\IMP.SG 2SG

nsíréétíyé kérá
N-sí-Ø-réét-iyε ké-rá
1SG.SM-1SG.NEG-HOD-bring-PFV\HOD 7ACP-DIST
'She told her: "Just eat, I have not brought you that.""

7.11 áká[†]sííta kérá [†]chákóra orá á-ká-síít-a ké-rá ke-ákora o-r´-a 1SM-CONS-refuse-FV 7ACP-DIST 7NCP-food INF-eat-FV 'And she refused to eat that food.'

⁶⁵ An interjection expressing surprised dismay.

7.12 άκά[†]mwééra chákóra éche nέε
 á-ká-mo-wéér-a ke-ákora éche nέε
 1SM-CONS-1OM-tell-FV 7NCP-food 7.PROX 1SG

nsí¹jékekwéérya chákóra n-sí-jé-ke-kwééry-a ke-ákora 1SG.SM-1SG.NEG-NPST-7OM-be.able-FV 7NCP-food

 \acute{e} ché $nach\acute{e}$ \acute{e} vá $k\acute{a}$ ley \acute{e} che n-a-ké-év-á kaley

7.PROX 1SG.SM-PST-7OM-forget-FV\FPST long.time.ago 'She told her: "I can't eat this food because I forgot about it a long time ago."

7.13 nέε nayjóvérá kérá [↑]chák5ra
 nέε n-a-íjover-á ké-rá ke-ákɔra
 1SG 1SG.SM-PST-be.used.to-FV\FPST 7ACP-DIST 7NCP-food

chááné ké-ané

7ACP-1.SG.POSS

'I am used to my own food.'

7.14 *vákéé[†]kátárya kwá* vá-ká-é-kátal-i-a kó-a

2SM-CONS-REFL-become.tired-CAUS-FV 17ACP-ASSOC

lótaanga loley lo-tanga lo-ley

11NCP-time 11NCP-long

'And they argued with each other for a long time.'

7.15 f50 ákárá kérá †chákóra f55 á-ká-r´-a ké-rá ke-ákora 16ACP-REF.ASSOC 1SM-CONS-eat-FV 7ACP-DIST 7NCP-food 'And then she ate the food.' 7.16 nɔɔng'ɔ́ meé vákā[†]rérá na kaai nɔng'ɔ́ meé vá-ká-rér-a na Ø-kaa-i

so then 2SM-CONS-leave-FV CONN 9NCP-house-LOC

na waalwε na Ø-waalwε

CONN 1anCP-his/her.relative

'And they left to go home to her relative.'

7.17 *áfa* vááfiká kaai neé áfa vá-a-fik-a Ø-kaa-i neé 16.PROX 2SM-PST-arrive-FV\FPST 9NCP-house-LOC then

 $a^{\uparrow}k\acute{o}\acute{o}r\acute{e}keriwa$ ne orá wá á-ká-órekeri-u-a ne o-rá o-a

1SM-CONS-ask-PASS-FV COP 1ACP-DIST 1ACP-ASSOC

kaai

Ø-kaa-i

9NCP-house-LOC

'When they arrived at the house, she was asked by the one who stayed in the house.'

7.18 *ά*¹*kámoórékerya waalwε ne* á-ká-mo-órkeri-a Ø-waalwε ne 1SM-CONS-1OM-ask-FV 1aNCP-his/her.relative COP

 k55
 wááre

 k6-55
 ó-á-re

17ACP-REF.ASSOC 2SG.SM-PST-COP 'She asked here: "Where were you?"'

7.19 áká[†] mwééra chalóy [†] náré á-ká-mo-wéér-a ke-aló-i n-á-re

1SM-CONS-1OM-tell-FV 7NCP-field-LOC 1SG.SM-PST-COP

 $egin{array}{lll} \it{na} & \it{mos\'e\'er\'era} & \it{mp\'e\'^\dagger tiye} \ \it{na} & \it{\varnothing-mo-s\'e\'erer-a} & \it{N-\varnothing-f\'et-iye} \ \end{array}$

CONN INF-10M-help-FV 1SG.SM-HOD-go-PFV\HOD

orira óo o-rir-a óo

INF-protect-FV 1.PROX

'She told her: "I went to the field in order to help her to protect

7.20 áká[†]mwééra ne wá kée á-ká-mo-wéér-a ne ó-a kee 1SM-CONS-1OM-tell-FV COP 14ACP-ASSOC what

> δ^{\uparrow} kéémosééréra orira óo o-kéé-mo-séérer-a o-rir-a óo 2SG.SM-PRS-1OM-help-FV INF-protect-FV 1.PROX

'Why are you helping her to protect this one?'

7.21 nəəng'ə lovi yaachwê nəng'ə lo-vi e-achuê

so 11NCP-tomorrow 9ACP-3.SG.POSS

 $\acute{a}k\acute{a}^{\dagger}w\acute{e}\acute{e}rwa$ $w\acute{e}\varepsilon$ $\acute{e}\acute{e}^{\dagger}nsik\acute{o}$ mo-remo \acute{a} -k \acute{a} -wéér-u-a $\acute{w}\dot{\varepsilon}\varepsilon$ éénsiko \acute{m} 0-remo \acute{a} -SM-CONS-tell-PASS-FV \acute{a} -RONS \acute{e}

wáák5 ne wá [†]tótéka ó-ak5 ne ó-a Ø-tótek-a 3ACP-2SG.POSS COP 3ACP-ASSOC INF-bring-FV

nkó n-kó

10NCP-firewood

'So the day after she was told: "Today your job is to collect firewood."

áká[†]tótéka 7.22 nəəng'5 orá mwavrétú meé á-ká-tótek-a nong'ó o-rá mo-irétu meé 1ACP-DIST 1SM-CONS-bring-FV SO 3NCP-girl then nkó chá jíre para N-kó ké-a ji-re para 10NCP-firewood 7ACP-ASSOC 10SM-COP many 'And the girl collected a lot of firewood.'

7.23 áfa ááysetótéka nkó meé áfa á-áyse-tótek-a N-kó meé 16.PROX 1SM-PROG2-bring-FV 10NCP-firewood then

†kónová†kámonólanjéérekónová-ká-mo-nól-aN-jééreLOC2SM-CONS-1OM-cut.hair-FV10NCP-hair

νά†kámɔɔ́yaνά†kámofɔ́tɔʻlamakútaνά-ká-mo-ɔ́y-aνά-ká-mo-fɔ́tɔl-ama-kúta2SM-CONS-1OM-bath-FV2SM-CONS-1OM-apply-FV6NCP-oil

vá¹kámovékérangɔmpeyává-ká-mo-véker-aN-gɔN-feyá2SM-CONS-1OM-put.on.clothes-FV10NCP-clothing10NCP-new'While she was collecting firewood, they cut her hair, bathed herand applied lotion, and dressed her in new clothes.'

7.24 *otúrya jírá nkó* o-túri-a jí-rá N-kó

INF-finish-FV 10ACP-DIST 10NCP-firewood

 $\acute{a}t\acute{o}t\acute{e}^{\dagger}k\acute{i}ye$ or \acute{a} mwayrét \acute{u} $\acute{a}-\emph{Ø}-t\acute{o}tek-\acute{i}ye$ o-r \acute{a} mo-ir $\acute{e}tu$ 1SM-HOD-bring-PFV\HOD 1ACP-DIST 3NCP-girl

váká[†]*kóórya moóto chá* vá-ká-kóóry-a mo-óto ké-a

2SM-CONS-make fire-FV 3NCP-fire 7ACP-ASSOC

monenenééne

mo-nεnε~nέέnε

3NCP-big~big

'When that girl had brought the firewood, they made a huge fire.'

7.25 mɔɔ́tɔ áfa wáá\taká monɔ́ mo-ɔ́tɔ áfa ó-a-ák-a monɔ́ 3NCP-fire 16.PROX 3SM-PST-build-FV\FPST a.lot

> chá monεnεnέέnε meé ké-a mo-nεnε~nέέnε meé 7ACP-ASSOC 3NCP-big~big then

vá[†]kámófagutera kore *mɔɔ́tɔ* va-ka-mo-fagut-er-a ko-re mo-ɔ́tɔ 2SM-CONS-1OM-throw-APPL-FV 17SM-COP 3NCP-fire

órá

ó-rá

3ACP-DIST

'The fire was really big, and they threw her in the fire.'

7.26 na chaano cháá[†]né keká[†]síréra fáfo na ke-ano ké-ané ke-ká-sírer-a fáfo CONN 7NCP-story 7ACP-1.SG.POSS 7SM-CONS-end-FV LOC 'And my story ends here.'

Free translation:

A long time ago there came a big famine. One person said: 'We are going to die, and the children too.' And they left for a land far away. And their child was there. And they told each other: 'Come, let us go to our child.' So they left in order to go there. And they brought food to be eaten on the way. When they had come far, the food they had brought for the road was gone, because they had walked for many days. So they started to die on the road. Their father was the first one to die. When they had gone forward a bit, their mother died also. When their mother died, those children were left by themselves. Among those two children, one was a house help, and she was the eldest. They walked around asking about the house of their relative, until they reached their relative's house. When they arrived, the older child started to explain: 'It was all of us who were coming from our home. When we were in the middle of our journey, our father died. When we continued on, mother died also. We were left alone and that is why you see us coming alone.' Then the older child said: 'This child that I came with is not from our place. Our parents bought her in order to take her as a house help.' So the relative heard that this one is a house help, and she started to put her to work. And that house help, she just stayed in the house.

They were found protecting the millet, and there were many birds. And so the sister told her: 'Go to the field in order to protect'. So the child was going to protect from the birds every day. And the food she was being brought was chaffs of grain. It was not good food. It was not food which was usually eaten by people. But the food the others ate was good. Because that child was very troubled, she was missing her parents. She had no clothes, and took no baths, and no one cut her hair, and there were a lot of lice on her head, and the hair became long and unwashed, and the food she ate was only chaffs of grain. So because of all of her troubles, the child started to cry there, singing:

SONG: 'It is you, Mwanso, you raised a stranger, then you left her at home for a bad death.'

So while she was singing about her problems and crying, she became angry. One day her parents came during the day when the birds had rested or slept. And two birds came and they brought her good food. The child felt very good and ate until she was full. When she finished eating, they started to pick lice from her head, and they were singing:

SONG: 'Kogaa, your death is cursed.'

Kogaa is the man who married Mwanso. When the evening arrived, they took off, and the child began to cry and to sing:

SONG: 'Father, may I follow you?'

'No, my child, in the afterworld clothes have not been bought.'

'Mother, may I follow you?'

'No, my child, in the afterworld clothes have not been bought.'

And so they arrived there, but even then they could not hear. And so it was that they were coming every day. They even brought her their own food, chaffs of grain, but she turned them down. They asked her: 'What do you usually eat? Why do you refuse food?' But she was not answering.

The neighbours from the field were listening to the child who was crying and singing, and the words she was saying. And she was just crying there below. So as the neighbors were listening to her, they went and asked Mwanso: 'That child who is keeping watch, and that one who is staying in the house, which one is your relative?' She said: 'My relative is the one in the house. The one who is out keeping watch is the house help who has been brought up in our house.' So her neigbour asked her: 'Listen, why don't you make good food tomorrow, and come during the day.' And the day after she had done what they neighbour had asked her to. And she went to the field with her neighbour. They went to his/her field slowly. When they arrived at his/her field, they hid themselves. They stayed there among the stems of the millet. And then that child started to sing and to hurt inside:

SONG: 'It is you, Mwanso, you raised a stranger, then you left her at home for a bad death.'

When Mwanso heard her relative singing like that she wanted to leave with her relative. But the neighbour took a hold of her and told her: 'Wait, listen first.' Those birds arrived, bringing food for the child. When she had finished eating, they started to pick lice from her head. And they sang:

SONG: 'Kogaa, your death is cursed.'

So the evening arrived, and the birds left. And the child started to cry and sing:

SONG: 'Father, may I follow you?'

'No, my child, in the afterworld clothes have not been bought.'

'Mother, may I follow you?'

'No, my child, in the afterworld clothes have not been bought.'

And she continued to sing like this until they had gone far away. Even if she asked 'Father, may I follow you?', they still did not listen to her. And she continued to cry there below. So then the relative left from among the stalks of sorghum, and hugged her little relative. And they all started to cry, and to

remember all the things she had done to her relative. So when they had finished to cry and embrace each other, she gave her little relative food. The food was not the kind she used to be brought every day. She said to her relative: 'Look, this food is not what you usually bring me'. She told her: 'Just eat, I haven't brought you that'. And she refused to eat that food. She told her: 'I cannot eat this food because I forgot about it a long time ago. I am used to my own food.' And they argued with each other for a long time. And then she ate the food. And they left to go home to her relative.

When they arrived at the house, she was asked by the one who stayed in the house. She asked: 'Where were you?' She told her: 'I went to the field in order to help her to protect this one'. And she said: 'Why are you helping to protect this one'? So the day after she told her: 'So today your job is to collect firewood.' And the girl collected a lot of firewood. While the girl collected firewood, they cut her hair, bathed her and and applied lotion, and dressed her in new clothes. When that girl had brought the firewood, they made huge fire. The fire was really big, and they threw her in the fire. And my story ends here.

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