

A GRAMMAR OF MAKONDE
(Chinnima, Tanzania)

PROEFSCHRIFT

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Pieter Jacob Kraal
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Promotor: Prof. dr. Th.C. Schadeberg
Referent: Dr. L.J. Downing (ZAS, Berlin)
Overige leden: Prof. dr. F.H.H. Kortlandt
Prof. dr. G. Philippson (INALCO, Paris)
Dr. C. Kutsch Lojenga

To **Conny van den Oever**

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Front cover: **nsufi** (kapok tree) in Mtwara near the crossing to Msangamkuu (photo: Peter Kraal)

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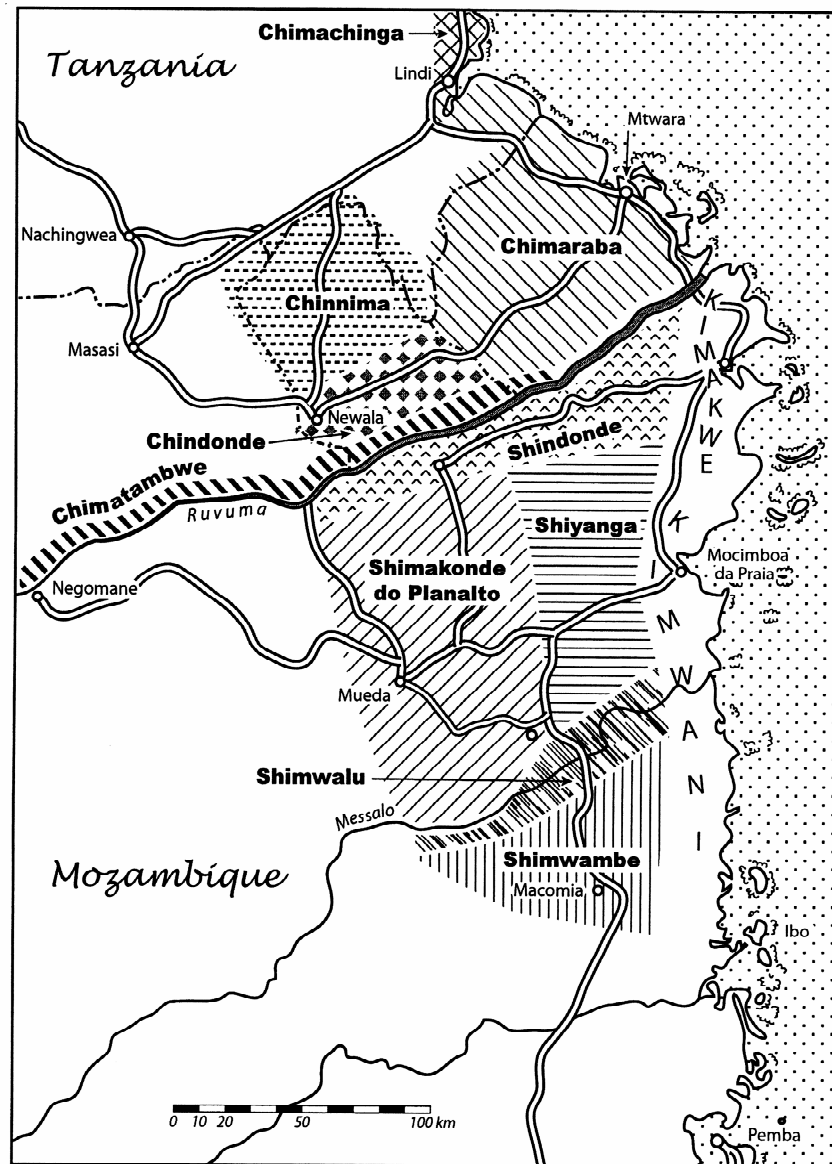
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ABBREVIATIONS

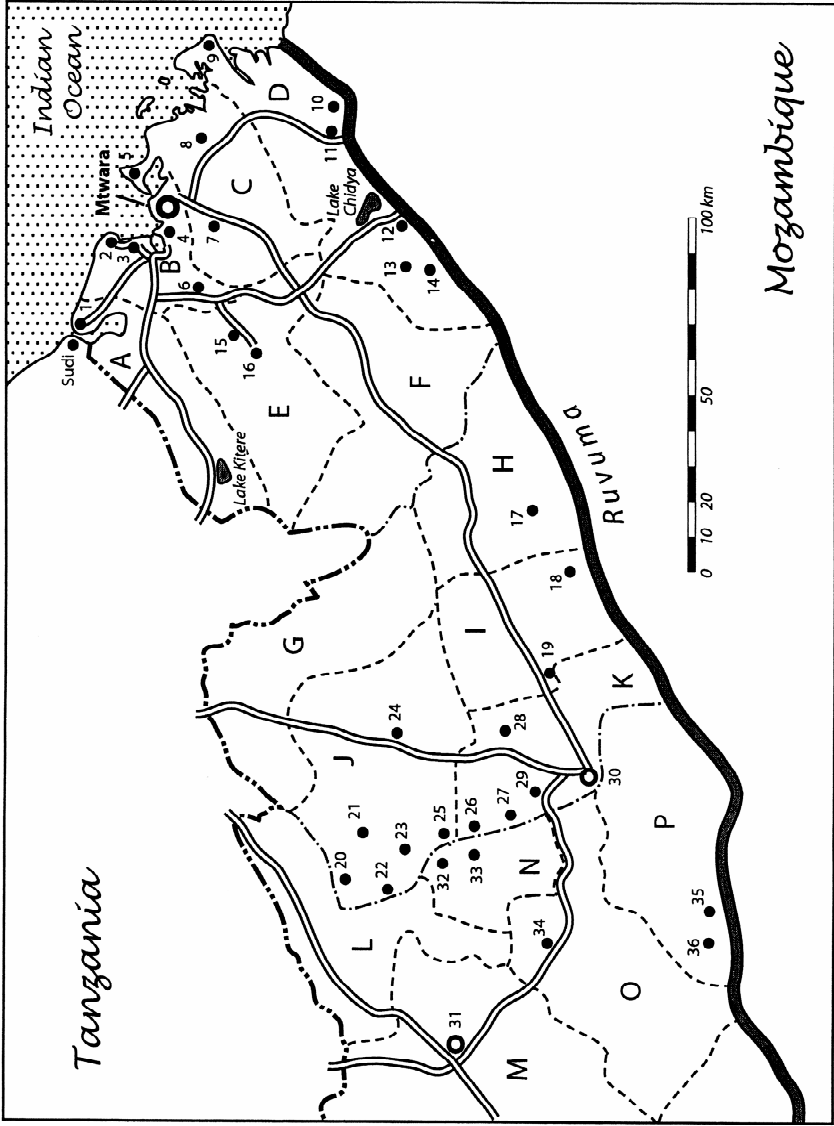
-	morpheme boundary;	NSTR	noun-specifier tone rule
◦	clitic boundary	OC	object concord
	underlying	P	pronominal form
	representation	PHTS, PS	prefix-H tone shift
<	derived from	p-phrase	phonological phrase
>	derives to	PUL	penultimate lengthening
1, 2, 3, ...	noun class numbers	PUS	penultimate shortening
1SG	1st person singular	Px-H	H tone on prefix
1PL	1st person plural	PPx	pronominal prefix
2SG	2nd person singular	R	rising tone;
2PL	2nd person plural		retraction of final H tone
A	adjective	RHTD	regressive H tone
C	consonant; coalescence		dissimilation
cf.	compare	S	stem
cjt	conjoint	S1	first mora of the stem
cl.	noun class	S2	second mora of the stem
DI	default L tone insertion	SF	final mora of the stem
djt	disjoint	SC	subject concord
e.g.	for example	s.o.	someone
F	falling tone; Final;	sp.	species
	final H tone deletion	SS, S	structure simplification
H	H tone	sth.	something
H:	level H tones	TA	tone assimilation
HTA	H tone assignment	TBU	tone bearing unit
HTB, TB	H tone bridge	TG	tone group
HTD, TD	H tone doubling	TM	tense/aspect/mood
I	invariable word		marker
i-phrase	intonational phrase	TP	tone pattern
itr.	intransitive	tr.	transitive
L	L tone	U	utterance
L:	level L tones	UFRL	utterance-final register
MR	Meeussen's rule		lowering
MS	macro-stem	V	verb; vowel
m'	bilab. nasal with H tone	VB	verbal base
'm	bilab. nasal with L tone	VC/GF	vowel coalescence/ glide formation
'n	alveol. nasal with L tone		
N	noun	VI	vowel incorporation
NP	noun phrase	VP	verb phrase
NPx	nominal prefix		

Map 1: Makonde dialects in Tanzania and in Mozambique



Situation in Mozambique based on Mpalume and Mandumbwe (1991:25).

Map 2: The Makonde-speaking area in Mtwara Region, Tanzania, including a selected list of towns and villages



Masasi District:**L** Chikundi Division**M** Lisekese Division

31 Masasi

N Lulindi Division

32 Majembe

33 Malatu

O Chiungutwa Division

34 Mpeta

P Mchauru Division

35 Lichehe

36 Mgwagule

Newala District:**G** Liteho Division**H** Namikupa Division

17 Kwanyama

I Mahuta Division

18 Namahonga

19 Mahuta

J Kitangari Division

20 Nkudumba

21 Chilangala

22 Luchemo

23 Mnyambe

24 Kitangari

25 Mkalenda

K Newala Division

26 Nakahako

27 Mkoma

28 Minjale

29 Nambunga

30 Newala

Mtwara District:**A** Mpapura Division

1 Mgao

B Mayanga Division

2 Mkungu

3 Naumbu

4 Mikindani

5 Msangamkuu

6 Likonde

C Mtawanya Division

7 Naliendele

8 Kiyano

D Kitaya Division

9 Msimbati

10 Kitanguli

11 Maharunga

12 Kitaya

13 Mkomo

14 Mchanje

E Dihimba Division

15 Dihimba

16 Miuta

F Nanyamba Division

1. INTRODUCTION

- 1.1 The Makonde people: demography and geography
- 1.2 The Makonde language: classification and dialectal variation
- 1.3 Field work
- 1.4 About this grammar: background, previous studies and theory

1.1 The Makonde people: demography and geography

The Makonde live on both sides of the river Ruvuma, which forms the border between Tanzania and Mozambique. The *Ethnologue* (Grimes 2000) gives the number of Makonde speakers as 900,000 for Tanzania and 360,000 for Mozambique; these figures relate to 1993. The plateaus, on which most Makonde live, rise either side of the Ruvuma from sea level to an altitude of ca. 900m. The Makonde of Mozambique live in the north-east of the Province of Cabo Delgado, the majority of the Makonde of Tanzania live in two of the three districts of the Mtwara Region: Mtwara and Newala. In the third district, Masasi, Makonde live next to Makua and Yao. The northern neighbours of the Makonde in the Lindi Region are the Mwera.

The Makonde plateau in Tanzania extends about 180 km from east to west, and about 80 km from south to north. It is a dry area, covered with dense bush and scattered high trees. There are a number of forest reserves and two lakes, and the highest mountains are situated in the north-west. *Makonde* means 'dry areas', and there is a singular form *Likonde*, which is also the name of several villages on the plateau.

The Makonde of Tanzania are divided into three main groups: the Nnima people who live in the north-west of the plateau, the Ndonde people who live on the south-west of the plateau, and the Maraba people who live near the Ruvuma and along the coast as well as on the eastern part of the plateau. The Maraba are part of the Swahili coastal culture, which next to their Makonde origin determines their cultural and historical identity, reflected in their religion (Islam), their fishing practices, the way they dress and their language, which is strongly influenced by Swahili. There is another group that claim to be part of the Makonde people: the Matambwe. They live near the Ruvuma next to the Ndonde with whom they intermarry.

Each Makonde group consists of several clans, which in turn consist of several extended families. The most important man of the family used to be the *njomba*, the elder brother of the mother. Clans are headed by a chief who is appointed by his predecessor who normally chooses his sister's son called *mwipwawe*. Amwenye Mandanda, the father of our first informant, was chief of the Lukanga clan until he died in 1989; he was a *jumbe*, a local leader appointed by the British colonial government in the 1950s.

Most Makonde are farmers who live in small villages. They grow mainly rice, maize and cassava. Those who live along the coast (the Maraba) and near the Ruvuma (the Maraba and the Matambwe) also practice fishery. Most of them are either Muslim or Christian (Catholic, Lutheran, Evangelical), many practice their traditional religion as well. In the past, Matambwe women used to wear decorative little round spots on both cheeks and the forehead as well as paintings on the chest; Makonde women used to wear a lip plug in their upper lip (like the Makonde of Mozambique, the Mwera and the Makua), Yao women used to wear a small pin in their right nostril, while the Makonde of Mozambique used to tattoo their faces as well as sharpened teeth. These practices are still found today, but much less frequently. The following so-called teasing relationships (Swahili *utani*, Makonde *uvilo*) exist in the area: Yao–Mwera, Makua–Matumbi and Makonde–Ngoni.

The wood carvings for which the Makonde are known throughout the world are mainly produced by the Makonde of Mozambique. The black wood from which the carvings are made comes from a tree called *mpingo* in Swahili as well as in Makonde.

1.2 The Makonde language: classification and dialectal variation

Makonde is a Bantu language, P.23 in Guthrie's referential classification (Guthrie 1948). In this classification, the name Makonde refers only to the Makonde of Tanzania. The other languages of Guthrie's "Yao Group" P.20 are Yao (P.21), Mwera (P.22), Ndonde (P.24) and Mabiha or Mavia (P.25).

As is clear from the descriptions, Mavia (P.25) is in fact the Makonde language of Mozambique (Shimakonde); it is an abusive term meaning 'savage people' and heavily disliked by the Makonde of Mozambique, but found widely in the literature. Our research revealed that Ndonde (P.24) does not exist as a separate language. The name Ndonde means 'lower parts (of the plateau)' or 'western direction', and it is the name of one of the dialects of the Makonde of Tanzania as well as the name of one of the dialects of the Makonde of Mozambique; both dialects are spoken in the lower plateau areas in Tanzania and Mozambique. Ndonde is also the name of an area around Masasi to the west of the plateau in Tanzania. This is probably the reason why language maps of Tanzania give the name "Ndonde" to different locations: either south of the plateau (on the "Tervuren Map" as used in *Africana Linguistica* since 1965) or to the west of it (Polomé and Hill 1980, p.30). Informants also reported that there are people called Ndonde living near Liwale (Lindi Region) as well as along the coast; neither speech variant forms part of the Makonde language but are rather part of the language of the Ngindo people.

Lorenz (1914), in his outline of the grammar of the Makonde language of Tanzania (called Kimakonde), distinguishes three dialects: Kimaraba, Kimatambwe and

Kimachinga. Harries (1940), talking about the linguistic situation in Tanzania, states that Matambwe, Ndonde and Makonde are three separate though related languages. Nurse (1979) mentions five Makonde dialects in his description of sample Bantu languages of Tanzania: Chinnima, Chimahuta, Kimaraba, Kimatambwe and Kimaviha. Odden (1990), in two articles describing two Makonde dialects in Tanzania, follows Nurse (p.c.) and mentions the same five dialects: Chimaraba, Chimatambwe, Chinnima, Chimahuta and Chimaviha. Our research of the Makonde language of Tanzania (called Chimakonde) revealed four dialects: Chimaraba, Chimatambwe, Chinnima, and Chindonde.

Our own research indicates that both Matambwe and Ndonde are dialects of Chimakonde. We differ from Lorenz in that he did not recognize Chinnima as a Makonde dialect, that he considers Chindonde to be a separate language (which is very common in the older literature), and that he considers Machinga to be a Makonde dialect. We differ from Nurse and Odden in that they applied the name Chimahuta to what we call Chindonde (according to all our informants, Chimahuta does not exist as a separate dialect), and that they mentioned Kimaviha or Chimaviha, which is in fact the Makonde language of Mozambique.

Liebenow (1971) reports that Makonde people, talking about their origin and past, mention Ndonde as the place west of the plateau around Masasi where a section of the Makonde people gathered in the first half of the nineteenth century, and where they stayed for about 20 years before moving onto the plateau in order to escape attacks from the Ngoni (who were also called Mafiti, Maviti or Mafita). Before this time, they lived together with the other Makonde groups around Negomano in northern Mozambique, where they arrived after having left what they consider to be their place of origin: (again) Ndonde, south-west of Negomano in Mozambique. Lichelo hill (with a summit called Mkundi) is sometimes given as their exact place of birth, while others mention Mkula. Dias (1964) reports that the original Makonde home south-west of Negomano lies in an area south of lake Malawi (Nyassa) according to the tradition.

The tradition also says that the Makonde of Tanzania, the Makonde of Mozambique and the Matambwe people are related to each other, although the differences between them suggest that each group went through a long period of individualisation and independent social evolution. They probably came from the same Ndonde area and have lived next to each other ever since. Liebenow suggests that the Makonde of Mozambique were subordinate to the Makonde of Tanzania, and this may be the reason why their language, once distinct, became more similar to the language of their superiors. Although it does not seem that the Matambwe were subordinate to one of the other groups, they lived closely together with the Makonde of Tanzania. Just like some of the Makonde, they moved from Negomano in Mozambique to the Ndonde area around Masasi in Tanzania, as Halimoja (1977) reports. He says that when the Makua arrived at Masasi in about 1800, they found the Matambwe, the Makonde and the Mwera south, east and north, respectively, of Masasi. The Yao

came about 50 years later to the area according to Halimoja, who also mentions the Ndonde north of Masasi, probably the Ndonde who now live near Liwale (see above).

Our Matambwe informant, Leonardi Petro Milanzi, reported that almost all Matambwe live in Tanzania, only some live in Mozambique; they all live near the Ruvuma, and they are fishermen. The word Matambwe refers to 'mist' or 'haze', which often hangs over the Ruvuma banks. The Matambwe have some characteristics which set them apart as an ethnic group: they are recognized as a distinct group of people with a special profession (fishing, they do not cultivate), they have their own habits, practices and ways of decorating their bodies, they live in a special area, and they have their own language. Milanzi said that their language is very close to Chimakonde, with a high level of mutual intelligibility, though their way of speech and some vocabulary items are different.

According to Milanzi, there are three distinct groups within the Matambwe people. One group lives south of Tunduru (Ruvuma Region) in the Yao area, and their language is a bit like the Yao language. A second group lives to the east of the first group in Masasi District and Newala District (Mtwara Region), and their language is very like Chimakonde. The third group lives in between. Milanzi said that this third group is also called Ndonde, their language is Matambwe but also called Ndonde, and it differs a bit from the language of the second group. Andrew Clayton, an anthropologist who worked on the Makonde plateau of Tanzania in the early nineties, suggests (p.c.) that the second and third group mentioned by Milanzi are one and the same group. He further says that the Makonde living on the southern part of the plateau are known as Ndonde people, and that most people regard the Ndonde people as the same as the Matambwe people. Others insist that these two groups are different, among them our Ndonde informant, Mariamu Mshamu. We think that they are different groups, although they live closely together and frequently intermarry. The Matambwe language has become so close to Makonde that it may be considered as one of its dialects.

Next to Chimatambwe and Chindonde, the other dialects of Chimakonde we found in our research are Chimaraba and Chinnima. Liebenow (1971) reports that after the Makonde had settled for a while in Negomano in northern Mozambique, they began to migrate north at the end of the eighteenth century. There were three main migration routes. The first migration brought groups of Makonde via the Ruvuma to the coast. Some of these settled as far north as Lindi, the Mbemkuru river and even Kilwa Kivinje. These people were called Maraba because most of them stayed around the Maraba hill near Lindi, according to Liebenow's report. During our research, we have asked many people about the existence of a Maraba hill, but there was nobody who had ever heard of it. According to Lorenz (1914), Maraba means 'dried out swamps', others relate the name to "Arabu" since the Maraba are part of the Swahili-Arabic culture of East Africa. Recent fieldwork done in northern Mozambique by Maud Devos (2004) strongly suggests that the Maraba people not only went north along the coast, but also south to Palma and beyond in Mozambique. There is a group of people

there called Makwe whose language is closer to Chimaraba of Tanzania than to Shimakonde of Mozambique.

In Tanzania, in Mtwara District, the locations which are mentioned as Maraba centers are Msimbati, Msangamkuu, Naumbu, Mkungu and Mgao. Mgao is known in the literature because of Kingao, the old Swahili dialect, spoken from Kilwa southwards, from the fourteenth century until it disappeared in the nineteenth century when it was replaced by the Kiunguja variant of Swahili. When the Maraba came to Tanzania (including Mgao) at the end of the eighteenth century, their language probably came under the influence of Kingao. We had hoped to find traces of Kingao, but during our short visits to the village of Mgao, we concluded that Kingao has completely been replaced by Kiunguja, as has occurred elsewhere. The only trace may be in the name: people speak of Kingao when talking about the Maraba as spoken in Mgao, while they do not refer to the Maraba of other places in the same way, e.g., the Maraba of Naumbu is not generally called Kinaumbu, but rather Kimaraba, Kimwamba or Kimwambao, three names used for the speech of the whole area. The women of Mgao, who habitually speak Maraba while the men habitually speak Swahili, call their village Kumwalu and their language Chimwalu. The form *mwalu* is the Maraba equivalent of Swahili *mgao*.

The second migration route brought Makonde to the plateau in Tanzania near Nambunga. One of the places there is Mahuta, about which there is a legend which explains why the Makonde (formerly the Matanda people) live on a plateau where there is no water; the legend tells about a man from Mahuta who carves a piece of wood which becomes a woman. We conclude that this second migration brought the Ndonge people to the southern part of the plateau; they speak the Chindonge variant of Makonde. We also think that the Matambwe people took part in this migration since they were found south of Masasi at the beginning of the nineteenth century according to Halimoja (see above).

According to Liebenow's report, inhabitants of Mahuta and Namahonga say that their ancestors arrived earlier than those of the third migration route, who approached the plateau from the north near Mnima via Luchemo near Majembe. These are the Makonde who first went to the Ndonge area around Masasi where they stayed for about 20 years before moving onto the plateau. We conclude that this third migration brought the Nnima people to the north-eastern part of the plateau. As this part of the plateau lies at high altitude and has several hills, the people are called Nnima, which means 'height'. My first major informant, the late Mariamu Mandanda, described the Nnima area as a circle of villages, mainly located in Kitangari Division, Newala District: Kitangari, Nnyambe, Malatu, Majembe, Nanbunga, Chilangala, Minjale, Mkoma, Nkudumba, Nakahako, Luchemo and Mkalenda. Liebenow finally mentions a fourth migration route which is still going on: Makonde from the plateau move to the coast.

We now turn to Chimachinga, which, just as Chimatambwe, was first recognized in the linguistic literature as a Makonde dialect by Lorenz (1914). But on the tribal map

by P. H. Gulliver (Berry 1971:113), Machinga and Matambwe (called Matumbi, different from P.13 Matumbi which is also mentioned there) are called southern Tanzania Bantu languages. The same names appear in Sutton's list (1968:80). Neither Machinga nor Matambwe are mentioned in the earlier *Linguistic Bibliography* by Whiteley and Gutkind (1958), nor in Bryan's *Handbook* of the Bantu languages (1959).

Machinga means 'mountains'. The Machinga people live between Lindi (Lindi Region) and Kilwa Kivinje in a mountainous area inland from the coast. A place often mentioned in connection with Machinga is Mchinga, north of Lindi. Although the British colonial government considered the Machinga as a separate ethnic group, the Maraba who live there along the coast consider them to be Maraba who have become mixed with Mwera people, though their language is much like Maraba. Some Mwera people told us that the Machinga are Mwera and their language is closer to Mwera than to Maraba. Harries (1950), in his Mwera grammar, mentions three dialects, one of which is Chimachinga (or Chindandawala) spoken south of the Mbemkuru river. Polomé and Hill (1980) also note that some of their informants considered Machinga as part of Mwera. However, we do not have data to decide whether Chimachinga is a dialect of Makonde or Mwera, and we conclude that more research is needed. (There is also a dialect of the Yao language which is called Chimachinga, spoken in the western part of Masasi District. We got information about this dialect from Immanueli Gambe, born 1922 in the Masasi District, via Mathias Mwaya, born 1958 in the Mtwara District.)

We now turn to Shimakonde, the Makonde language of Mozambique. We have said earlier in this section that Mavia, as mentioned by Guthrie as P.25 and found in the literature, and Shimakonde are one and the same language. There is not much agreement about the dialectal situation in Mozambique. The first to mention Shimakonde dialects is Harries (1940), presented in his outline of the grammar of Shimakonde (which he called Mavia): Mhwaba, Macinga, Mtamba, Hyanga and Miyula. Then follow Mpalume and Mandumbwe (1991), in their grammar of Shimakonde, with their judgement of the dialectal situation which we have taken over in map 1 (p.XIII), and which is confirmed by Benjamin Leach (p.c., 2004): Shimakonde do Planalto, Shindonde, Shiyanga, Shimwalu and Shimwambe. Finally, Liphola (2001) recognizes two dialects: Shímákonde as the dialect of the plateaus of Mueda and Macomia and Shimakoônde (or cíndoonde) as the variant spoken in the West low land area along the Ruvuma. Two other variants should be mentioned here: Simakonde, a Shimakonde variant which is spoken on Zanzibar and in Tanga, Tanzania, by residents from Mozambique (Manus 2003), and Kimwani. Kimwani is spoken along the coast of Northern Mozambique between Moçimboa da Praia and Pemba as well as on the islands of the Querimba archipelago, one of which is Ibo (Schadeberg 1994). Kimwani has many Swahili influences, in a similar way as the (Tanzanian) Chimakonde dialects Chimaraba and Kimakwe have: in all parts of the language (phonology, morphology, syntax and semantics), Swahili influences are found. The question is whether these influences are big enough to speak of an own

language, or that Kimwani (as well as Chimaraba and Kimakwe) are dialects of Swahili or (Swahilized) dialects of Makonde. Our investigation is very clear in its conclusion with respect to Chimaraba and Kimakwe: the final option is the right one. Chimaraba and Kimakwe are Makonde dialects because most parts of their grammar are basically Makonde. We can not go into detail, but to mention some examples: the locative classes, most tenses, the conjoint/disjoint distinction, their prosodic structure and their tonal system are clearly Makonde. Exactly these arguments are decisive in solving the question whether Chimakonde (Tanzania) and Shimakonde (Mozambique) are both variants of the same language or can best be considered to be separate languages: as both make use of the same basic instruments as mentioned above in building their language, they can be considered to be variants of Makonde. Since we have not seen enough data of Kimwani to draw definite conclusions, we are less sure of its dialectal status. (According to Benjamin Leach of SIL (p.c.), the Mwani people themselves would disagree strongly that they form part of the Makonde people, or that their language is a dialect of Shimakonde.)

We now come with an overview of the variants that belong to the Makonde (P.23) group. As we have said earlier in this section, Ndonde (P.24) does not exist as a separate language, but it is the name of dialects of Chimakonde and Shimakonde; Mavia (P.25) is the same as Shimakonde.

Makonde	
Chimakonde	Shimakonde
Chinnima	Shimakonde do Planalto
Chindonde	Shindonde
Chimaraba	Shiyanga
Kimakwe	Shimwalu
Chimatambwe	Shimwambe
Chimachinga?	Simakonde
	Kimwani?

1.3 Field work

The informants who were partners in this research are introduced below. Where more than one informant is involved, their names are given in alphabetical order. Most informants come from Tanzania, Mtwara Region, one informant for Chimaraba comes from Tanzania, Lindi Region, and most informants on Shimakonde, the

Makonde of Mozambique, come from Mozambique, Mueda District. We start with the informants of Chinnima, the dialect of the Makonde of Tanzania to which the main body of this thesis is devoted.

Chinnima, main informants:

- Ms Mariamu Mandanda, born 1942 in Majembe (Lulindi Division, Masasi District), died April 1992.
- Ms Mariamu Rashidi Nankandila Nachinguru, born 1962 in Mnyambe (Kitangari, Division Newala District).
- Ms Zakia Selemani Namalenga Ntanda, born march 1957 in Mnyambe (Kitangari Division, Newala District).
- Mr. Vincent Amandus Nnali Ntanda, born 1957 in Mnyambe (Kitangari, Division Newala District).
- and:
- Mr. Verentino Mohamed Nnisindwa, born 1966 in Nkudumba (Kitangari Division, Newala District).
- Chindonde: Ms Mariamu Mshamu, born 1963 in Kwanyama (Namikupa Division, Newala District).
- Chimaraba: Mr. Ali, born 1972 in Mgao (Mpapura Division, Mtwara District).
- Mr. Abdallah Ntongo, Msanga Mkuu (Mayanga Division, Mtwara District).
- Ms Mwanankulu Selemani, born 1941 in Mnolela (Lindi Region).
- Chimatambwe: Mr. Leonardi Petro Milanzi, born 1944 in Mgwagule (Mchauru Division, Masasi District), died August 2003, parents were born in Lichehe which is about six kilometres from Mgwagule.
- Shimakonde: Mr. Laurent Lijama, born 1949 in Mihula (Mueda District, Mozambique).
- Mr. Moses, born 1971 in Mtwara, Tanzania (both parents born in Mozambique).
- via Mr. Benjamin Leach (SIL), Mueda, Mozambique:
- Mr. Cosme Victor Wakudimba, born 1965(?) in Nanenda (Mueda District, Mozambique).
- Mr. Ernesto Ali Vitandeka, born 1965 (?) in Nanenda (Mueda District, Mozambique).

The greater part of the fieldwork on Chinnima and Chimaraba took place in Mtwara where most informants lived part of the year when there is not much work to do on their farms on the Makonde Plateau. Fieldwork on Chinnima and Chimaraba also occurred during travels in the area, i.e., in Newala, Masasi, Msanga Mkuu, Mgao, Maharunga, Kitaya, Dihimba, and also in Lindi. The fieldwork on Chindonde took place in Purmerend, the Netherlands, where the informant lived with her Dutch husband. The fieldwork on Chimatambwe was conducted in Newala and Nachingwea (Lindi District) where the informant lived for his work as pastor of a church. The information about Chimachinga was gathered in Lindi. Finally, fieldwork on

Shimakonde took place in Mtwara with two informants; two other informants gave their information in writing via Benjamin Leach.

The fieldwork was conducted in Tanzania from July 1991 until April 1992, in the Netherlands (Chindonde) in 11 sessions from September until December 1992, and again in Tanzania from September 1993 until March 1994.

1.4 About this grammar: background, previous studies and theory

My personal interest in Bantu languages of East Africa first led me to the Comoro archipelago in the Indian Ocean. The language of the island Ngazidja (or Grande Comore), called Shingazidja, was the topic of the thesis with which I completed my studies in African Linguistics, Leiden University, the Netherlands. Then I got the opportunity to write a dissertation, joining the Research School of Asian, African, and Amerindian Studies (CNWS; its predecessor was the Institute for Descriptive and Comparative Linguistics, IBVTW) of Leiden University, attached to the department of African Linguistics. There were three reasons why Makonde was chosen as the topic of my dissertation. First, I myself wanted to do research in northern Mozambique, but since the civil war was still going on at the time, southern Tanzania was chosen. Second, my promotor, prof. Thilo C. Schadeberg, felt that knowledge of Makonde was needed in order to understand more of the Swahili languages which are spoken along the coast in Tanzania and Mozambique, the main topic of his research. Third, the university of Dar es Salaam had initiated the project “The Linguistic Atlas of Tanzania”, a project in which the department of African Linguistics of Leiden University participated. The goal of the project was to make a descriptions of all languages spoken in Tanzania, and my contribution to this project was to be a description of the Makonde language.

Previous studies on Makonde of Tanzania contained word lists, notes, introductions and outlines of the language, as well as some articles mainly about tonal aspects. We here list the previous studies (as far as we know) in chronological order (for the full references, see the Bibliography): Steere (1876) *Collections for a handbook of the Makonde language*; Lorenz (1914) *Entwurf einer Kimakonde-Grammatik*; Large (s.d.) *English-Kimakonde*; Johnson (1923) *Notes on Kimakonde*; Whiteley (1951) *Introduction to the study of Makonde* (this work is said to be in the Newala District Office, but I did not get the opportunity to see it when I was in Newala); Nurse (1979) *Makonde*; Yukawa (1989) *A tonological study of Makonde verbs*; Odden (1990) *Tone in the dialects of Makonde: Chimaraba, Chimahuta; C-command or edges in Makonde*.

The title of my dissertation originally was to be “A description of the Makonde language”. The idea was to write a grammar on the most southern variant of Makonde

in Tanzania, and to gather information about the dialectal situation in the area. Both goals were adapted during research. The first informants with whom I worked for the first few months were not very consistent, and when I found an excellent informant on the north-western dialect Chinnima, I decided to write a grammar of that variant. About the dialect chart, I wanted to give short descriptions of all dialects, but that turned out to be too ambitious a goal. I collected some information on three other dialects in Tanzania as well as on one dialect of Shimakonde in Mozambique which is given in Appendix C.3. There possibly is a fifth dialect, Chimachinga, spoken north of Lindi in Lindi Region; apart from a couple of days asking around (also in Lindi), I did not have enough time for elicitation. As this Chinnima grammar also contains information about other dialects of Makonde, the title of this work now is “A Grammar of Makonde” followed by “(Chinnima, Tanzania)” to indicate the focus of our research.

The fieldwork was conducted in a way many Bantuists work: begin with the nominal classes, which is the starting point for studying phonology and morphology, and gradually advance to the verbal system. Very early during fieldwork, texts were collected and analysed with informants, and words were gathered for the vocabulary. The main focus of this grammar is on phonology (especially tone) and morphology, less on syntax and semantics. This is the reason why we did not subcategorize verbs, for example, nor give a description of the exact differences in meaning and use of the locative prefixes and demonstratives. We have not thoroughly studied the temporal, aspectual and modal meanings of the inflectional categories of the verb, which we call “tenses”; our labels are but rough indications of some (hopefully salient) part of their meaning.

This work is not written within a particular theoretical framework, but we have greatly benefited from concepts and notions of various theories, especially generative phonology, autosegmental theory, lexical phonology and prosodic domain theory. The adopted concepts and notions are used for our main goal which is a descriptive one, and we wish to distinguish and describe the various rules and processes. We also indicate that these rules and processes are ordered. This final point, a derivational type of description, comes from a generative tradition. It differs from the constraint-based, non-derivational approach taken in Optimality theory (and its extension, Alignment Theory), but it remains our purpose to describe the language in a way that is useful to linguists from all traditions.

In our view, there is a distinction between lexical processes and post-lexical processes. In both domains, there are specific conditions and rules. We follow Cook (1985) in assuming that there is a first and a second lexicon, and that there is a rule-ordering to derive surface forms from underlying forms. The first lexicon is a list of grammatical morphemes, verbal roots, (pro)nominal stems and lexicalized verbal bases and stems, including tonal instructions about H tones. The stems of all major categories have information about which of the four tonal profiles with H tones is to be placed on the stem:

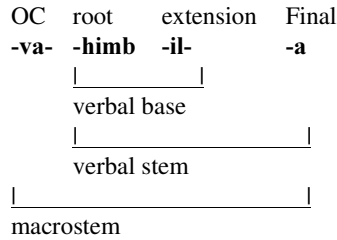
- a H tone on the first tone bearing unit of the stem (*S1-H*)
- a H tone on the second tone bearing unit of the stem (*S2-H*)
- a H tone on the final tone bearing unit of the stem (*SF-H*)
- a H tone on both the first and the final tone bearing unit of the stem (*S1/SF-H*)

There are also stems without H tones, and we call this the *no H* tonal profile. This *no H* tonal profile can either be combined with a prefix with a H tone or with a prefix without a H tone, just like the *SF-H* tonal profile; the other profiles can only be combined with a prefix without a H tone. The combination of the tone of the prefix and the tonal profile of the stem is called a tone group. All words of the major categories fall into one of seven tone groups that can be distinguished, exemplified below by trisyllabic CVCVCV-stems preceded by a CV-prefix.

tone group	Prefix <i>H</i>	tonal stem profile	
A		<i>S1/SF-H</i>	<div style="text-align: center;">H H CV-CVCVCV</div>
B		<i>S1-H</i>	<div style="text-align: center;">H CV-CVCVCV</div>
C1		<i>SF-H</i>	<div style="text-align: center;">H CV-CVCVCV</div>
C2	<i>H</i>	<i>SF-H</i>	<div style="text-align: center;">H H CV-CVCVCV</div>
D1		<i>no H</i>	CV-CVCVCV
D2	<i>H</i>	<i>no H</i>	<div style="text-align: center;">H CV-CVCVCV</div>
E		<i>S2-H</i>	<div style="text-align: center;">H CV-CVCVCV</div>

In the second lexicon, verbal bases, stems and words are formed. There are some minimal construction conditions and building prescriptions as well as an order of attachment of nominal prefixes and verbal suffixes. Verbal bases are formed by adding expansions and extensions to verbal roots. Stem formation joins verbal bases and Finals. In the example below, we use the verbal root **–himb** ‘dig’, the applicative

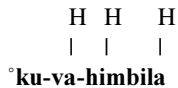
extension **-il-** ‘do something for someone’ and the Final **-a** ‘Present, Past, Perfective or Non-Past tense’ to form the stem °**-himbila** ‘dig for’, and when also an object prefix (or: object concord, OC) like **-va-** ‘them’ is added, the macrostem °**-vahimbila** ‘dig for them’ is formed.



Other verbal prefixes, including tense markers, are added to form verbal forms. Below, the Infinitive marker **ku-** is added to form the Infinitive.

°**ku-va-himbila** to dig for them

In case of nouns and pronominal forms, (pro)nominal prefixes are added to (pro)nominal stems. Next to morphological processes such as imbrication of the Perfective Final, all sorts of phonological processes apply in the lexicon including prenasalization, palatalization and vowel harmony, as well as prosodic processes. These deal with phonological phenomena concerned with tone, intonation and vowel length, such as H Tone Assignment (see 3.4). The Infinitive belongs to tone group A, i.e., the marker does not get a H tone and the tonal profile of the stem is S1/SF, and the form is °**ku-vá-himbilá** (the Infinitive is the only tense where the object prefix also gets a H tone by assignment).



Post-lexically, words are concatenated at the very first stage to build sentences. Sentences are also built in two ways: syntactically, i.e., with syntactic phrases, and prosodically, i.e., with phonological phrases. Prosodic phonology cooperates with syntax to produce the surface forms of phrases and sentences. This cooperation does not mean that syntactic phrases and phonological phrases always have a one-to-one relationship. The examples below show that some VP’s and NP’s fall together with one phonological phrase (conjoint) while others consist of more phonological phrases (disjoint); a phonological phrase is recognized by penultimate lengthening of its final word which is underlined in the examples, the end of a phonological phrase is marked by the sign ‘|’ accordingly.

tu-tóngóla <u>chímákóonde</u>	we spoke Makonde
tu-tongwele <u>chímákóonde</u>	we have spoken Makonde
tú-ná-tongoóla <u>chímákóonde</u>	we spoke Makonde
tu-ni-tongoóla <u>chímákóonde</u>	we have spoken Makonde

valúmé vááno 	these men
valúmé veétu 	our men
valúúme váanji 	other men
valúúme vakúlúungwa 	big men

Penultimate lengthening is the first post-lexical process. It is easy to observe since there is no contrastive vowel length in the language. The other processes include retraction of the final H tone, H tone shift, H tone bridge, H tone doubling and tone assimilation. These processes are ordered, and they apply to all words individually in the p-phrase as well as to the whole p-phrase (ch.3). There are also processes which specifically occur in whole p-phrases and not to words individually, such as special Noun-Specifier rules, a variant of H Tone Bridge and Regressive H Tone Dissimilation. These phrasal rules apply together at a certain stage of the derivation (ch.8).

Phonology, morphology and syntax are to a great extent interconnected in Makonde, as is usual in Bantu languages. There is a phonology-morphology interface since many phonological processes must be described as occurring in morphological environments, like vowel coalescence and glide formation which apply where syllables meet. There is also a morphology-syntax interface, like the addition of verbal extensions as the applicative, passive or causative which may change the syntactic valence of the verb. And there is a phonology-morphology and a phonology-syntax interface as prosodic phonology cooperates with morphology and syntax in words and phonological phrases. In fact, the phonological phrase is the meeting point for phonology, morphology, syntax and pragmatics. The choice between a conjoint form (which is in the same phonological phrase as the following object) and a disjoint form (which is in a different phonological phrase as the following object), for instance, is determined by pragmatics in terms of focus and informational units.

This grammar is organized as follows. In chapter 2, we concentrate on phonology: consonants, vowels, syllable structure, phonological and morphophonological processes. In chapter 3, we describe prosody, especially tone. Prosodic structure is organized differently from syntactic structure. We introduce the phonological phrase (p-phrase) as the basic prosodic domain, other prosodic domains are the word, the intonational phrase and the utterance. A p-phrase may have up to four words, and the penultimate syllable of its final word is automatically lengthened. One-word p-phrases are words in isolation (or: in citation form). The tonal processes for one-word p-phrases are described in chapter 3, those for longer p-phrases (like noun plus specifier and verb plus complement) are described in chapter 8. Particularly interesting is the status of monosyllabic stems; they are built in analogy with disyllabic vowel-initial stems. Their final syllable is complex, i.e., it consists of two vowels underlyingly, just like the final syllable of causatives and passives. The final syllable of lexicalized passives and some imperatives are built in analogy with them. Final syllables in general are not extraprosodic, i.e., they may have a (underlying) H tone, but only the final syllable of a p-phrase-final word may not have a H tone on

the surface. Also interesting is an automatic rule which applies whenever the proper environment is met (lexically and post-lexically): Meeussen's Rule. It is an adjacency constraint, part of the OCP (Obligatory Contour Principle) group of constraints, which prohibits two primary H tones from appearing next to each other. This constraint is sensitive to morae, and since other tone rules work on morae as well, they are the best candidates for being the tone bearing units in Chinnima. Tonal rules apply within different domains, called here tonal domains: the syllable (e.g. Tone Assimilation), the stem (e.g. H Tone Bridge), the macrostem (e.g. H Tone Shift), the word (e.g. H Tone Doubling) and the phonological phrase (e.g. Regressive H Tone Dissimilation, to be dealt with in ch.8). When the domain of application is the (macro)stem, tone rules (like H Tone Assignment) have to take into account the syllable division as well. Other prosodic processes like Penultimate lengthening, Penultimate shortening and Structure simplification work on the (penultimate) syllable.

In chapter 4 to 6, nouns, pronominal forms, invariables and verbs are described. Their structure is shown, and their tonal properties are outlined. In the chapter about nouns (ch.4), the famous noun class system is explained. Nouns, like pronominal forms, consist of a prefix and a stem. The noun class prefix shows the class to which the noun belongs; there are 16 classes in Chinnima. Most nouns belong to a pair of classes, called a gender, one of which indicates the singular form, while the other indicates the plural form. The noun plays an important role in the agreement system, i.e., words, like pronominal forms and verbs, that depend on the noun for agreement take a prefix that belongs to the same class as the noun.

va-lúmé váá-no va-ni-tóngóola chimákóonde
 cl.2-man cl.2-this cl.2-TM-speak Makonde language
 these men have spoken Makonde

Also secondary, or outer, nominal prefixes like the locative ones are described, and their tonal behaviour shows their phonological status and the order of attachment in the lexicon. In chapter 5, pronominal forms like demonstratives, possessives and other forms that take the same kind of prefix are dealt with, together with invariables which remain unchanged. In chapter 6, the structure of verb forms is described in detail, with special attention to verbal extensions, suffixes behaving like them, and their relative order.

In chapter 7, we show the different tenses, their tonal characteristics, and their distinction into conjoint, disjoint and conjoint-disjoint tenses. This distinction is connected with the prosodic structure of the language in which p-phrases play a key role: with conjoint tenses, the verb and the following word(s) appear in one and the same p-phrase, with disjoint tenses, the verb and the following word(s) are not in the same p-phrase, and with conjoint-disjoint tenses, pragmatics or the syntactic environment determines whether they appear in the same p-phrase with the following word(s) or not. The information structure (focus, new information, etc.) plays the key

role in the conjoint/disjoint distinction. At the end of this chapter, we also pay attention to complex and compound tenses.

In chapter 8, phrasal tonology is dealt with. The tonal processes of longer p-phrases, noun plus specifier and verb plus complement, are described. Specifiers can be divided in a similar way as tenses into conjoint, disjoint and conjoint-disjoint. As syntax and prosody are not structured in the same way, the results of this description show some interesting facts about the phonology-syntax interface.

The appendices contain the paradigms of the verbal tenses (app. A), texts (app. B) and a vocabulary Chinnima-English and English-Chinnima (app. C.1 and C.2) including a comparative word list of five dialects (app. C.3). The final part of this work consists of an extensive list of bibliographical references.

2. CONSONANTS, VOWELS AND SYLLABLE STRUCTURE

- 2.1 List of consonants
- 2.2 The syllabic nasal, prenasalized consonants and the voiceless nasal
- 2.3 Palatalization, depalatalization and labio-velarization
- 2.4 List of vowels
- 2.5 Vowel harmony, imbrication and vowel anticipation
- 2.6 Vowel dissimilation and final vowel raising
- 2.7 Vowel coalescence, glide insertion and liaison
- 2.8 Surface syllable structure
- 2.9 Penultimate lengthening and penultimate shortening

2.1 List of consonants

The consonants as they are spelled in this book are listed below. Their corresponding phonetic symbols are given in square brackets.

labial	labio-dental	alveolar	palatal	velar
p [p]	v [v]	t [t]	ch [tʃ]	k [k]
b [b]		s [s]		h [h]
		d [d]		g [g]
m [m]		l [l]	y [j]	w [w]
mb [mb]		n [n]	ny [ɲ]	ng' [ŋ]
		nd [nd]	nj [ɲj]	ng [ŋg]

Lorenz (1914:47f.) notes that the **s** (just like the **f**, **r** and **sh**) is not an original Makonde consonant, but that the sound appears in more and more words as a replacement for the **h**. Nowadays, there are still examples where both sounds are possible, e.g., **kuvíiha/kuvíisa** 'to be angry' and the Causative extensions **-ih-/ -is-**. In Swahili loans, **z** and **sh** become **s**, e.g., **nsungu** 'European' (SW **mzungu**) and **kufúndíisa** 'to teach' (SW **kufundisha**). As the last examples shows, the **f** does appear in loans, but since there are only one or two other examples, the sound is not included in the chart above.

The consonants **b** and **g** are only found in a few words, e.g., **kubádúúla** 'to bite off' and **kugóng'óola** 'to push once'; **g** sounds implosive, more so than **b** and **d** (which sound slightly implosive).

The **v** [v] is a voiced labiodental frictionless continuant (or approximant). — The **l** often sounds a bit **d**-like, and especially before the vowel **i** it becomes a tap [ɾ].

glides may appear as default consonants in onsetless syllables (glide insertion, see 2.7). In other syllables of the shape **yV** and **wV**, the two glides phonologically have a different status. The glide **y** has to be regarded as a consonant, while the glide **w** underlyingly is a rounded vowel. One argument is found in prenasalization. Prenasalization affects only consonants, not vowels. The **y** may be prenasalized, and results in **nj** (**lu-yééye/di-njééye** 11/10 lip). (In the Makonde variants of Mozambique, we found several examples of **j** which are **y** in the variants of Tanzania, e.g., **luchííya** – **lusííja** 11 root, **kuyáánda** – **kujáánda** 15 be thin, **kuyúúma** – **kujúúma** 15 be dry.) Vowels may not be prenasalized, not in the verbal system (the SC and OC for 1SG; no prenasalization before vowel-initial stems) nor in the nominal system (class 10 nouns which are the plural of class 11 nouns with vowel-initial stems; these class 10 nouns are regarded as starting with **y**, e.g., **lw-ááu/di-njááu** 11/10 net). Prenasalization of **w** results in **mbw** (**lu-wááni/di-mbwááni** 11/10 fence), a clear indication that the **w** itself is not prenasalized, but is regarded as preceded by a labial consonant. (In the Makonde variants of Mozambique, however, we found several examples of **gw** which are **w** in the variants of Tanzania, e.g., **liwáángwa** – **ligwáángwa** 5 bone, **luwááni** – **lugwááni** 11 fence, **uwoówa** – **ugwóógwa** 14 mushroom and **kuwáála** – **kugwáála** 15 to dress.) Another argument is found in syllable structure. Syllables of the shape CGV occur where the (consonant) **y** may be followed by the glide **w** (**-teywa** ‘be trapped’), but there are no such syllables where the **w** may be followed by the glide **y**.

The symbol **ny** is not only used for the palatal nasal, but also for the phonetically identical palatalized alveolar nasal **ny** (° **n** + **i**), e.g., in the causative stem **-vinya** ‘make dance’ (cf. **-vina** ‘dance’). The distinction between the palatal nasal and the palatalized alveolar nasal can only be made when the sound appears as onset of the final syllable of verbal stems. When the palatalized alveolar nasal occurs in that position, the tonal process Retraction of the final H tone to the penultimate syllable (R) has been blocked (see 3.5.2), e.g., **kuvíinya** ‘to make dance’ (F tone: blocking of R); this process is not blocked when the palatal nasal occurs in that position, e.g., **kupáánya** ‘to beat’ (level H tone: no blocking of R). As the symbol **ny** represents two different underlying sources which can only be distinguished when appearing as onset of the final syllable of verbal stems, there are three other consonants for which the same story is valid: **ch**, **h** and **w**. They are dealt with here below in short (for more details, see 6.3.2).

To begin with the **w**, the passive extensions are **-w-** and **-iw-/-ew-** where **w** has a vocalic origin (°**u**). A passive extension in the final syllable of verbal stems blocks the tonal process R, e.g., **kuliíwa** ‘to be eaten’; a non-passive **w** is not a block in that position, e.g., **kumóówa** ‘to shave’. There are examples of **ch** and **h** with incorporated vowel, probably the causative °**i** (the causative extensions are **-y-**, and **-ih-/-eh-** with the **h** with incorporated vowel). When these consonants occur as onset of the final syllable of verbal stems, the tonal process R has been blocked, e.g., **kuyóocha** ‘to roast’ and **kutóoha** ‘to touch’; consonants without incorporated vowel are not a block in that position, e.g., **kukóócha** ‘to poke’ and **kuyááha** ‘to throw’.

away'. All instances of **s** in the final syllable of verbal stems are with incorporated vowel, probably the causative °i (a variant of the causative extension **-ih-/-eh-** is **-is-/-es-** with the **s** with incorporated vowel).

Finally, in the dialect Chimaraba, the second part (**b**) of the prenasalized consonant **mb** (not the **b** on its own) contains a roll: [mbr].

2.2 The syllabic nasal, prenasalized consonants and the voiceless nasal

The syllabic nasal is homorganic. The syllabic nasal does not occur before vowel-initial stems and monosyllabic stems. As will be shown in the sections mentioned below, certain stem-initial consonants change when preceded by a syllabic nasal:

v	→	m
l	→	n
h,y	→	ny
hw,w	→	mw

The following prefixes and concords occur as syllabic nasals in the proper environments (followed by the section numbers where they are described, and by examples):

NPx:	cl.1/3, 18	(4.1, 4.2)	n-nyáavi/va-háavi	sorcerer (cl.1/2)
PPx:	cl.18	(5.1)	n-níida/ku-líida	which (cl.18/17)
SC:	cl.18, 2PL	(6.2.1)	m-miine/va-viine	you/they should dance
OC:	cl.1, 2PL	(6.2.1)	m-mwiile/tu-hwiile	die for her/us!

Prenasalization of consonants occurs with the following prefixes (+ section where they are described):

NPx:	cl.9/10	(4.1)
SC/OC:	1SG	(6.2.2)

Prenasalization occurs at the beginning of a word only in case of a SC of 1SG. As will be shown in the sections 4.1 and 6.2.2, the prenasalized consonants of the chart in 2.1 are only a part of the result of these prenasalizations. The result of these prenasalization also includes the nasals, **hw**, **s** and **h** as well as **mbw**; below, we give these results, followed by an example.

m	<	°p	lu-paápa/di-maápa	wing
n	<	°t	i-néembo	elephant
ny	<	°ch	lu-chííya/di-nyííya	root
ng'	<	°k	i-ng'áánga	guinea fowl
hw	<	°hw	va-ngu-hwíkiile/va-hwíkiile	they should come to me
s	<	°s	ngu-suúme/suúme	I should buy

h	< ° h	lu-híímo/di-híímo	song
mbw	< ° w	lu-wááni/di-mbwááni	fence

Lorenz (1914:48) notes the existence of “ein nasales **h**” - [a nasal **h**] - which particularly appears with nasals. He in fact mentions the voiceless nasal which, as he remarks, began to disappear in more and more words at that time. He notes the nasal **h** in the examples where it was still audible, e.g., **nhnyongo** ‘snake’ (pl.: **mihongo**) and **nhnyao** ‘Yao person’ (pl.: **vahao**). We have found only one type of environment where a voiceless nasal optionally appears in Chinnima nowadays: 2PL of tenses with zero tense marker with **-hwika** ‘arrive’, e.g. the Optative, where next to **m-mwiike** ‘you (pl) should arrive’ also **m-hmwiike** is possible. The voiceless nasal starts with a short airstream through the nose while articulating the nasal; the nasal is voiceless, though there may be a very short final voiced phase. In one other dialect, Chindonde, voiceless nasals are retained in many words. The voiceless nasals in Chindonde are **hm**, **hn**, **hny** and **hng**’.

ku-púhmúúla	to breath
m-hmuunga	wind
m-hmúúnda/ji-hmúúnda	bundle of firewood
n-hnéémba/va-hnéémba	boy (before initiation)
i-hnyúúmba	house
ku-núúhng’a	to stink
ku-yáhng’aanya	to pour
ku-gáhng’óóla	to push (once)
i-hng’oóle/ji-hng’oóle	dance
i-hng’ávaanga/ji-hng’ávaanga	dog
n-hng’wáápa/ji-hng’wáápa	armpit

Although there are examples of voiceless nasals within (verb) stems, in most words, voiceless nasals occur stem-initially. There are two specific environments where voiceless nasals appear. These environments are after a syllabic nasal, and with prenasalisation; the processes which occur in these environments are similar to those in Chinnima (see above). The first environment is with syllabic nasals followed by the voiceless consonants (non-stops) **h** and **hw**, which become (voiceless) nasals.

n-hnyáavi/va-háavi	sorcerer
n-hnyoóngo/va-hoóngo	snake
ń-hnyaangi	sand
m-hmwikiile/tu-hwikiile	come to her/us

The second environment where voiceless nasals appear is with prenasalisation of the voiceless stops, **p**, **t**, **ch** and **k**, not with other consonants.

lu-paápa/ji-hmaápa	wing
i-hnéémbo	elephant
lu-chííya/ji-hnyííya	root

i-hng'áánga	guinea fowl
lu-híímu/ji-híímu	song

Nowadays, there are words without voiceless nasals in this environment even in Chindonde. Some examples:

lu-pámbaahi/ji-mámbaahi	bamboo
lu-táámbo/ji-náámbo	trap
lu-kaloóngo/ji-ng'aloóngo	throat

In some words, the singular form has a voiceless nasal while the plural does not.

i-hmuúla/ji-muúla	nose
i-hnyúúmba/ji-nyúúmba	house

A final note about Chindonde, there are examples of singular forms with a **h** where in the plural forms a **h** with stronger friction (noted **h'**) appears.

li-pááhu/ma-pááh'u	lung
chi-híng'íino/vi-h'íng'íino	elbow

2.3 Palatalization, depalatalization and labio-velarization

Palatalization of consonants (called frication by Hyman (2003)), as occurs with the addition of the causative extension **y** (°i), occurs with most consonants. Some examples are the following.

-ipyá	make cut grass	(cf. -ipa cut grass)
-lekya	make leave	(cf. -leka leave)
-yahya	make throw away	(cf. -yaha throw away)
-ivya	make steal	(cf. -iva steal)

The **hy** is a palatalized **h** where the **h** has light friction (as occurs with labialized **h**, see below). With three consonants, palatalization changes their place and/or manner of articulation.

l	+ °i → dy
n	+ °i → ny
ng'	+ °i → ny

-wadya	dress	(cf. -wala put on clothes)
-ng'anya	make play	(cf. -ng'ana steal)
-penya	make blow one's nose	(cf. -peng'a blow one's nose)

It should be noted that the other causative extensions, **-ih/-eh-** and **-is/-es-**, may also appear instead of **y** (°i).

Not all consonants may be palatalized; with the addition of a causative extension, they do not get the short extension **y** (°i) but **-ih/-eh-** or **-is/-es-**. These consonants are **ch**, the consonants with incorporated vowel (**ch**, **h**, **s**), and the consonants **w**, **ny**, **nj**, **ng**; also causative **y** and passive **w** do not get the extension **y** (°i), but the longer ones. Examples are the following.

-kocheha	make poke	(cf. -kocha poke)
-yochaha	make roast	(cf. -yocha roast)
-toheha	make touch	(cf. -toha touch)
-visiha	be made angry	(cf. -visa be angry)
-moweha	make cut hair	(cf. -mowa cut hair)
-panyiha	make beat	(cf. -panya beat)
-kunjiha	make fold	(cf. -kunja fold)
-lingiha	make try	(cf. -linga try)
-tonyeha	make rain	(cf. -tonya rain)
-tamwiha	make love	(cf. -tamwa love, like)

Monosyllabic stems also get the longer extensions, e.g. **-liha** ‘make eat’ (cf. **-lya** ‘eat’), as well as some stems with three or more syllables having **k** as their final consonant. Some examples are the following.

-pwetkeha	make hurt	(cf. -pweteka hurt)
-velekeha	make give birth	(cf. -veleka give birth)
-pepekeha	be made narrow	(cf. -pepeka be narrow)
-motokeha	make fall	(cf. -motoka fall)
-hipukiha	make sprout	(cf. -hipuka sprout)

Just as disyllabic stems, stems as **-peneka** ‘put sideways’ and **-teleka** ‘cook’ may appear with the short as well as with the long extensions: **-penekya/-penekeha** and **-telekya/-telekeha**. Stems with the final consonant (non-causative) **y** appear with the following extension(s):

-haiha	make grind	(cf. -haya grind)
-tadya/taiha	make put into	(cf. -taya put into)
-tedya/-teyeha	make trap	(cf. -teya trap)
-meyeha	make break off a piece	(cf. -meya break off a piece)
-wiha	make return	(cf. -uya return)

The stem **-mala** ‘know’ may appear with the following extensions: **-madya/-maiha**. See 6.3.2 for more details about the causative extension.

The consonant **l** also changes to **ɖ** after the addition of the Perfective Final **-ile** (but not before **-ite**; see 7.1.4), e.g., **-tidile/-tilite** (cf. **-tila** ‘run away’) and before the final **-i** with manner nouns (see 4.5.2), e.g., **chi-cheédi** ‘way of cutting’ (cf. **-chela** ‘cut’). The **l** does not change to **ɖ** after addition of other extensions like the applicative (**-il-**) and neuter (**-ik-**), and also not in the case of the monosyllabic stem **-lya** ‘eat’.

With depalatalization, as occurs with the addition of the Perfective Final **-ile**, the original consonants are restored and the [◌]i appears after the consonant **l** of the Perfective Final (which become **-idyē**). Some examples are the following.

-ipidyē	(cf. -ipyā make cut grass, -ipa cut grass)
-lekidyē	(cf. -lekya make leave, -leka leave)
-ividyē	(cf. -ivya make steal, -iva steal)
-ng'anidyē	(cf. -ng'anya make play, -ng'ana play)

There is one exception: the original **l** is not restored with depalatalization, e.g., **-chedidyē** (cf. **-chedya** 'make cut', **-chela** 'cut'); even the whole **dy** remains in place, as can be seen with the addition of the applicative extension **-il/-el-** (which becomes **-idy/-edy-**), e.g., **-chedyedyā**.

Labio-velarization, as occurs with the addition of the passive **w** ([◌]u), occurs with most consonants. Some examples are the following.

-ipwa	be cut (grass)	(cf. -ipa cut (grass))
-pitwa	be passed	(cf. -pita pass)
-vikwa	be put	(cf. -vika put)
-yahwa	be thrown away	(cf. -yaha throw away)
-lombwa	marry (of woman)	(cf. -lomba marry (of man))

The **hw** is a labialized **h** where the **h** is pronounced with simultaneous lip rounding; the **h** has light friction. It should be noted that the other (long) passive extension **-iw/-ew-** may also appear instead of **w** ([◌]u).

Labio-velarization is not possible with the consonant **v**, nor with **w** and passive **w**; the longer extension **-iw/-ew-** is chosen instead. Some examples are the following.

-iviwa	be stolen	(cf. -iva steal)
-mowewa	be cut hair	(cf. -mowa cut hair)
-tamwiwa	be loved	(cf. -tamwa love, like)

Monosyllabic stems also get the longer extension, e.g. **-liwa** 'be eaten' (cf. **-lya** 'eat'). From the stems with the final consonant (non-causative) **y**, we found the following forms:

-haiwa	be ground	(cf. -haya grind)
-teywa/-teyewa	be trapped	(cf. -teya trap)

The passive forms of **-mala** 'know' are **-malwa/-maiwa** 'be known'. From the lexicalized causatives, we found the following forms:

-udywa/-udiwa	be asked	(cf. -udya ask)
-kundanywa/-kundaniwa	be mixed	(cf. -kundanya mix)

See 6.3.7 for more details about the passive extension.

2.4 List of vowels

The five vowels as they are spelled in this book are listed below. Their corresponding phonetic symbols are given in square brackets.

i [i] **e** [e] **a** [a] **o** [o] **u** [u]

The **i** is front/high, the **e** is front/mid, the **a** is front/low, the **o** is back/mid and the **u** is back/high.

2.5 Vowel harmony, imbrication and vowel anticipation

There are two instances of vowel harmony. One instance is restricted to verbal extensions with one of the high vowels **i** or **u**, of which the vowel harmonizes with the vowel of the preceding syllable. The applicative **-il-**, the causative **-ih-** and **-is-**, the neuter/impositive **-ik-** and the passive **-iw-** occur as **-el-**, **-eh-** and **-es-**, **-ek-**, and **-ew-** respectively, when they follow a syllable with one of the mid vowels **e** or **o**.

-minya squeeze:	-hepa gather (fruit):
-minyila	-hepela
-minyiha	-hepeha
-minyisa	-hepesa
-minyika	-hepeka

-twala seize:
-twalila
-twaliha
-twalisa
-twalika
-twaliwa

-nowa be sweet:	-tang'una chew:
-nowela	-tang'unila
-noweha	-tang'uniha
-nowesa	-tang'unisa
-noweka	-tang'unika
-nowewa	

The separative extensions **-ul-** and **-uk-** only occur as **-ol-** and **-ok-** when they follow a syllable with the vowel **o**.

-chima shut, fasten:	-tepa stoop, bend down:
-chimula	-tepula
-chimuka	-tepuka

-mata plaster a wall:

-matula

-matuka

-homa pierce:

-homola

-homoka

-uta pull:

-utula

-utuka

Verbal extensions with the low vowel **a** (as well as the Pre-Final **-ang-** and the Perfective Final **-ile/-ite**) do not change in any environment.

The other instance of vowel harmony occurs with Imbrication of the Perfective Final, where an harmonic vowel appears after the vowel of the penultimate syllable. The imbricated vowel occurs as **e** when the vowel of the penultimate syllable is **e** or **o**; it occurs as **i** when the vowel of the penultimate syllable is **i**, **a** or **u**. Vowel coalescence occurs with the penultimate vowels **i**, **e** and **a**, resulting in **i**, **e** and **e** respectively (see 7.1.4 for further details).

-pikite	<	-pikita	break away
-chekete	<	-cheketa	cut
-papete	<	-papata	follow
-olwete	<	-olota	point
-tukwite	<	-tukuta	run

When all vowels of the verbal stem are **a**, like in **-papata** ‘follow’, Imbrication may further affect all these vowels, e.g. **-pepete** (next to **-papete**).

A similar process is found with some verbal stems where the vowel of the penultimate syllable seems to be imbricated in the first syllable. The imbricated stems are the more modern variants of the older forms without Imbrication.

-pweteka	<	-poteka	wound, get hurt, be ill
-pwechela	<	-pochela	receive

An imbrication-like process is found with certain verbal stems as well as with nouns. With this process, a vowel seems to replace the vowel of the preceding syllable; for the time being, we call this process Vowel Anticipation (but further analysis might prove that in fact Imbrication occurs). Forms with the replaced vowel are the more modern forms.

-hinika	<	-hunika	cover
-hunukula	<	-hunikula	uncover
-kimbila	<	-kumbila	drink
-katapala	<	-katopala	be good, be beautiful
nkáyángaata	<	nkúyángaata	helper
chiúdúuhu	<	chiwídúuhu	sweat

2.6 Vowel dissimilation and final vowel raising

There are two processes that occurred in the Makonde dialects of Mozambique which have spread north to the southern Makonde dialect of Tanzania, Chindonde. The processes are currently spreading over the Northern Makonde dialect of Tanzania, Chinnima, which we describe in this dissertation. Remarkably, the most southern dialects which are spoken along the Ruvuma, Chimatambwe and Chimaraba (Chimaraba is also spoken along the coast) are not (yet) affected by these processes (we have no data from the other coastal dialect Chimachinga). One process might be called Vowel Dissimilation, the other Final Vowel Raising.

Vowel Dissimilation occurs with tri- and more syllabic verb stems with identical mid vowels **e** or **o**. With trisyllabic verb stems, the first vowel changes to **a**; with four-syllable verb stems, the first two vowels change to **a**. The verb stems contain an expansion or a lexicalized extension.

-taleka	< -teleka	cook
-pwachela	< -pwechela	receive
-chaketa	< -cheketa	cut, chop
-nang'ena	< -neng'ena	cut (with hands)
-matoka	< -motoka	fall
-tangola	< -tongola	speak
-alota	< -olota	point
-nanopa	< -nonopa	be hard
-kahamola	< -kohomola	cough
-papatola	< -popotola	wring out

Note that all vowels of the stem (except the Final) should be identical; for instance, when the penultimate vowel of four syllabic stems is different, Vowel Dissimilation does not occur: **-nyonyomala** 'squat', **-lombolela** 'applaud', **-ngongomana** 'be curved'.

With nouns derived from these verb stems, Vowel Dissimilation is taken over.

chipwáchélélo/chipwéchélélo	utensil	(cf. -pwechela receive)
chitangoódi/chitongoódi	language	(cf. -tongola speak)

The other process is Final Vowel Raising. The final mid vowels **e** and **o** of certain non-verbal forms are raised to **i** and **u** respectively.

muúti	< muútwe	head
chituundi	< chituundwe	anger
lutaánu	< lutaáno	story
ing'oówu	< ing'oówo	banana
-mu	< -mo	a(n), one
-nu	< -no	this

With some forms, the raising is found in non-final position.

-umi	< -omi	healthy, strong
-ahi-ohe	< -ohe-ohe	every

Since Vowel Dissimilation and Final Vowel Raising are currently spreading over the Chinnima-area, forms with and without Vowel Dissimilation and Final Vowel Raising all are acceptable. But there are exceptions: the word for ‘head’, e.g., is **muútwé** in Chinnima; **muúti** generally is regarded as Chindonde. The speakers of at least the South-Western part of the area more and more use the forms with Vowel Dissimilation and Final Vowel Raising.

2.7 Vowel coalescence, glide insertion and liaison

Vowel Coalescence of two adjacent vowels within a word gives the following results (there are no examples of **e** and **o** in the position of V1, but see under Liaison below):

V1 V2	Examples (no tones indicated in underlying forms)		
i + i → i	miíhi	< ° mi-ihí	pestles
i + e → ye	myéédi	< ° mi-edi	months
i + a → ya	vyáála	< ° vi-ala	fingers
i + o → yo	myóóngo	< ° mi-ongo	backs
i + u → yu	lyúúlo	< ° li-ulo	evening
a + i → i	kiíhi	< ° ka-ihí	little pestle
a + e → e	kéélu	< ° ka-elú	little field
a + a → a	káála	< ° ka-ala	little finger
a + o → o	koóngo	< ° ka-ongo	little back
a + u → u	kúúmba	< ° ka-umba	little arrow
u + i → wi	lwíídi	< ° lu-idi	door
u + e → we	wéélu	< ° u-elú	field
u + a → wa	lwááu	< ° lu-au	net
u + o → wo	lwóógo	< ° lu-ogo	cassava
u + u → u	múúmba	< ° mu-umba	arrow

Two adjacent vowels merge into one vowel which has the quality of the second vowel, and when the V1 is **i** or **u** and the V2 is not identical with V1, the glides **y** and **w** appear as well. From now on, we will call this merging process Vowel Coalescence/Glide Formation (VC/GF). There is no compensatory lengthening. The extra vowel after the V2 in the examples does not appear as the result of VC/GF, as can be seen with examples with a trisyllabic stem such as **mwikúumba** < °**mu-ikumba** ‘turkey sp.’, but the extra vowel is due to the process Penultimate Lengthening (see 2.9). VC/GF applies post-lexically at a certain stage of the derivation (see 3.5.5).

There are some nouns where VC/GF of **a** and **i** resulted in **e**, and vowel coalescence of **u** and **o** resulted in **o**. The full list:

méého	<	°ma-iho	eyes
mééno	<	°ma-ino	teeth
? méédi	<	°ma-idi	water
móómi	<	°mu-omi	healthy person (mwóómi also possible)
moóngo	<	°mu-ongo	back of body
moóoto	<	°mu-oto	fire

VC/GF generally does not apply successively to sequences of three vowels. It does not apply to tenses with a tense marker, the vowel of the tense marker being one of three vowels in a row. With tenses without a tense marker, it does not apply because there is no VC/GF between a subject concord and a object concord when the subject concord is **a-** (see below); when the subject concord is **u-** or **i-**, the non-existent initial sequences **wy** or **yw** would occur. The only exception we found is with the Indirect Relative tense starting with a Pre-Initial with the vowel **a**, e.g., the “fixed” **pa-** ‘when’.

pwííva	<	°pa-ú-íva	when you steal
cf. unúííve / unáwííve	<	°u-na-ú-íve	you should not steal it (cl.3, 14)

Sequences of four vowels are attested with Indirect Relatives with an object concord. But then, there is no VC/GF between the subject concord and the object concord. In the example below, there is VC/GF between the vowel of the subject concord and the vowel of the preceding **pa-**, and between the vowel of the object concord and the initial vowel of the stem.

púyííva	<	°pa-ú-í-íva	when you steal it (cl.9)
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There are more restrictions on positions where VC/GF takes place. Within stems, there is no VC/GF:

- when the first of two adjacent vowels is **e** or **a**
- between two identical vowels

In the examples below, two adjacent vowels belonging to different syllables are separated by a dot.

u-té.úúla	to serve food
ku-yándá.úúka	to be wide
u-pyá.ííla	to sweep
ku-ú.úúla	to fall ill
cf. li-kwaánda	abces
cf. ku-dyúuha	to revive
cf. ku-pwétééka	to hurt

There is optional glide insertion in all these cases: **kutéwúúla**, **kuyándáwúúka**, **kupyáyííla** and **kuwúwúúla**; without glide insertion, the syllables of these forms do not fuse, but they remain separate syllables.

Within stems of nouns, there is also no VC/GF when the V2 is the vowel of the final syllable. In cases mentioned above (V1 is **e** or **a**, identical vowels), glide insertion is optional (not indicated in the examples below) with other stems. Glide insertion often occurs in other cases. (The rules are roughly as follows: the glide **y** is inserted when V2 is **i**, and also when V1 is **i** while V2 is **e** or **a**; the glide **w** is inserted when V2 is **o** or **u**, and also when V1 is **o** or **u** while V2 is **e** or **a**. However, we did not always find glide insertion in these cases; especially when **u** is V1 and **i** is V2, glide insertion rarely occurs.) It should be noted that we have not found an example of a verb stem with the V2 as the vowel of the final syllable (without a preceding glide).

chi-leé.u	beard
lu-vaá.u	rib
chi-pyaá.i	broom
chi-koó.o	banana
i-ngúú.wo	cloth
ma-uú.wa	flowers
lu-woó.i	rope
ku-móó.wa	to shave

For the rest, VC/GF within stems is obligatory.

Outside stems, between a prefix and a vowel-initial nominal stem, there is no VC/GF:

- when the stem is monosyllabic
- when the word is a name or loan word

(Glide insertion is indicated where it normally occurs.)

lí-i	egg
lí-ye	egg
lí-wu	ashes
lu-úuma	Ruvuma (river)
ma-uúmba	smells
? lu-úúnji	cleared thicket (pl.: dimúúnji)
lí-uúwa	flower
di-yeémbe	mangos

In other cases, VC/GF is obligatory.

mwíhi/míhi	< ° mu-íhi/mi-íhi	pestle/pestles
chaanga/vyaanga	< ° chi-aanga/vi-aanga	galago/galagos

We found one example where the inserted glide is **y** instead of the expected **w**. (This example is probably a loan and treated differently; it will be shown in 4.1 that class

10 nouns which are the plural of class 11 nouns with vowel-initial stems are regarded as starting with **y**, e.g., **lw-ááú/di-njááú** 'net'): **ku-yándííka/kwándííka** 'to write'.

Outside stems, within verbal forms, there is no VC/GF:

- between a subject concord and an object concord or a vowel-initial stem when the subject concord is **a-**
- between a tense marker and an object concord with monosyllabic stems

a-í-loliíte	(s)he who has seen it/them (cl.9/4)
cf. tw-í-loliíte	they who have seen it/them
tu-ka-í-lyá	if we eat it/them
tu-na-uu-lyá	we (will) eat it (cl.3 or cl.14)
tu-chí-úu-lyá	we were eating it

But there is always VC/GF in verbal forms between a subject concord and the following Far Past tense marker **-a-**.

tw-á-ní-liíma	< ° tu-á-ní-liíma	we had cultivated (long ago)
tw-á-ná-liíma	< ° tu-á-ná-liíma	we cultivated (long ago)

VC/GF is optional in other positions within verbal forms, except in case of a vowel-initial stem preceded by the object concord °**-mu-** of class 1, which becomes **-mw-**.

ku-úudya/kúúdyá	to ask
ku-íkáála/kwikáála	to live
tu-iíve/tw-iíve	we should steal
tu-ni-iímba/tu-niímba	we sang
u-na-iíve/u-nííve	you should not steal
tu-ka-i-lóóla/tu-ki-lóóla	if we look at it (cl.9)
tu-na-chi-iíva/tu-na-chiíva	we (will) steal it
va-ká-tú-uudya/va-ká-túudya	they do not ask us
tu-mw-iíve	we should steal it (e.g. a cow)

A consequence of VC/GF is tonal coalescence; this process is dealt with in 3.5.5. Although not dealt with there, a consequence of Liaison is also tonal coalescence, and the results are the same as those of VC/GF.

Liaison of two adjacent vowels across a word boundary gives almost the same results as vowel coalescence within a word. In addition, there are examples for **e** and **o** in the position of V1. The only example we found of **e** as V1 and **a** as V2 was preferably used without liaison; fast speech resulted in **ya**.

V1 V2	V1 V2
e + i → i	o + i → wi
e + e → e	o + e → we
e + a → (ya)	o + a → wa
e + o → o	o + o → o
e + u → u	o + u → o

Liaison mainly occurs between a verb and a following (object) noun or (head-less) specifier.

ndolit'íng'áande	< ndolite íng'áande	I looked at the house
vannolit'éeeme	< vannolite éeeme	they looked at Eme
vannolity'ááli	< vannolite ááli	they looked at Ali
vannolit'óóki	< vannolite óóki	they looked at Oki
vavalolit'úvóovó	< vavalolite úvóovó	they looked at them
vannw'ííma	< vanno(la) ííma	they look at Ima
vannw'éeeme	< vanno(la) éeeme	they look at Eme
vannw'ááli	< vanno(la) ááli	they look at Ali
vann'óóki	< vanno(la) óóki	they look at Oki
vavaló'vóovó	< vavalo(la) úvóovó	they look at them

Liaison also occurs within complex verbal forms as well as between the index forms (**na-** and the associative PPx-**a-**) and a following noun. It is generally refused between a noun and specifier as well as between two specifiers.

2.8 Surface syllable structure

On the surface, the following types of syllables occur (NC represents a prenasalized consonant, N represents a syllabic nasal, G represents a glide):

V	VV	GV	GVV	N
CV	CVV	CGV	CGVV	
NCV	NCVV	NCGV	NCGVV	

The nucleus (or peak) of a syllable consists of a vowel or a syllabic nasal, each of which counts as one mora. The mora is the Tone Bearing Unit (TBU, see 3.3). The syllabic nasal has a restricted distribution: it is a prefix, generally not occurring in final and prefinal position in words (see below). The syllables with two vowels occur post-lexically, and they also have a restricted distribution: they occur in penultimate position in phrase-final words, where the vowel is automatically lengthened by the post-lexical process Penultimate Lengthening. (In the examples below, syllables are separated by a dot).

ku-pyá.íí.la	to sweep
i-nóó.ndwa	star
tu-ká-ya.ngéé.te	we have not helped
lu-wáá.ni	fence
tu-na-lyaa.nga	we (will) eat a lot
li-ngwéé.le	baboon
n-núú.me	man, husband
ń-ndóo.nde	Ndonde person

Rarely also occur syllables with three TBU's.

VVV	GVVV
CVVV	CGVVV
NCVVV	NCGVVV

These types of syllables also occur post-lexically; they only occur as penultimate syllables of phrase-final words consisting of disyllabic stems in the tenses Relative Present and Relative Perfective, as well as penultimate syllables of phrase-final words containing certain nominal and pronominal stems where syllable fusion has taken place. All these cases are the result of blocking of the process Structure Simplification (3.5.6 and 3.5.8).

a-ííí.va	(s)he who steals
ndíííma	I who cultivate
tu-wééé.te	we who have put on clothes
mbwááá.la	I who put on clothes
chi-loóó.ngo	pot
mwééé.nu	you (pl.)

The syllabic nasals are homorganic; they are representations of the syllable **mu** of certain class prefixes and concords (cl.1, 3 and 18; 2PL) before other than monosyllabic stems.

n-neémba 1	boy (before initiation)
m-píini 3	handle
n-chiloóongo 18	in the pot
tu-n-táamwe	we should like you (2PL)
muú-nu 1	person
tu-múú-lye	we should eat it (e.g. n-kóoko cl.1 animal)

In some cases, an allomorph of the syllable **ngu** of the concords for 1SG is represented by N, i.e., prenazalisation of the following consonant occurs, followed by cluster reduction in most cases (see 6.2.2).

va-ngu-táamwe/va-náamwe they should like me

There is syllable fusion between a syllable and a following syllabic nasal (which is a TBU). The nucleus of the fused syllable consists of two TBU's. This process also occurs between words. In the examples below, the high-toned syllabic nasal raises the preceding TBU of the syllable with which it has been fused (see 3.5.8).

tu-náń-táamwa	we (will) like him (object concord cl.1)
va-mwonáń-núúme	they see the man

There is even a case where syllable fusion of three syllables results in a syllable with three TBU's: the second syllable in the complex tense **va-veéń-kúlííma**; this form is derived from **va-velé-ń-kúlííma** 'they are cultivating', where the **l** of **-vele-** is omitted and three syllables are fused to one syllable (see 3.5.8 and 7.4).

2.9 Penultimate lengthening and penultimate shortening

There is no phonologically distinctive vowel length. But the penultimate syllable of phrase-final words is automatically lengthened by the post-lexical process PenUltimate Lengthening (PUL). Words in citation form, as the examples given in the preceding sections, are considered to have the same form as phrase-final words. A description of PUL is given in 3.2 and 3.5.1. In the examples below, PUL marks the end of a phrase, indicated by the sign ‘]’.

tuvaona valúúme] úlyámbá chiihi]
 we see the men only in the morning
tuvaona vakanuúnu] úlyámbá chiihi]
 we see the young children only in the morning

The underlying forms of the forms with PUL in the first phrase are °**valúmé** and °**vakanunú**. These forms appear when they occur as non-final words in phrases.

valúmé vááno these men
vakanunú veétu our young children

Phrase-finally, PUL occurs followed by Retraction of the final H tone (R, see 3.5.2).

R		PUL
valúúme	<	° valúúmé
vakanuúnu	<	° vakanuunú

However, the lengthened penultimate syllable of non-final phrases may be reduced with fast speech. This process, PenUltimate Shortening (PUS), is described in 3.5.9.

tuvaona valúme] úlyámbá chiihi]
 we see the men only in the morning
tuvaona vakanúnú] úlyámbá chiihi]
 we see the young children only in the morning

The forms **valúme** and **vakanúnú** are derived from the forms with PUL (plus a tone rule in the second form), not directly from their underlying forms.

3. PROSODY

- 3.1 Introduction to Makonde tone
- 3.2 Prosodic domains
- 3.3 Surface tones
- 3.4 Underlying tones and the lexicon
 - 3.4.1 Tonal profiles for stems
 - 3.4.2 Prefix-H tone
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- 3.6 Post-lexical processes with i-phrases and utterances
 - 3.6.1 The intonational H tone and utterance-final register lowering
 - 3.6.2 Two other instances of utterance-final register lowering
- 3.7 Contour tones

3.1 Introduction to Makonde tone

The first to put tone marks on Makonde words (but only on verbs) is Nurse in his brief description of sample Bantu languages of Tanzania (1979), although he himself was not sure whether to call the “prominent syllables” tone or stress. The first article where tone is recognized as a characteristic for all Makonde words is Yukawa's tonological study of Makonde verbs (1989). He describes Tanzanian Makonde, but it is not clear which dialect is involved. The work is descriptive rather than analytical, it gives a broad overview of nouns classes and tenses with tonal description, but the author admits that the work contains insecurities and gaps. One year later, Odden follows with two articles about verbal and nominal tone in the Tanzanian Makonde dialects Chimaraba and Chimahuta. According to Odden, Makonde shares the following properties of verbal tone with the genetically close zone P-languages Yao (P.21) and Matuumbi (P.13) as well as with some other Bantu languages (like Makua (P.31), Olusamia (E.34), Kikuria (E.43), Kihehe (G.62), Kinga (G.65) and Safwa (M.25)):

- there are no lexical tone contrasts in verb stems;
- the tones realized on the verb depend on the morphological (tense-aspect) category of the verb.

Odden, as formulated in an earlier article (1988), handles such languages as follows.

- underlyingly, only H tones occur and are assigned (toneless TBU's receive a default L tone at a late stage in the derivation);
- one or two H tones are allowed per stem (and multiple surface H tones), and the H tones are assigned on the basis of a count of vowels, such as to the second vowel of the stem;
- specific tone rules (like High Tone Doubling and High Tone Spreading) apply to derive the surface patterns.

The (tense-aspect) category of the verb determines which positions are assigned H tones by a count of vowels. Once the count of vowels is known, as well as the phonological shape of the stem, the location of each H tone is predictable. Odden therefore calls such languages “predictable” tone languages. Makonde fits in such a typology, and he describes the dialects Chimaraba and Chimahuta as formulated above. The Chimaraba infinitive form **ku-télékééla** ‘to cook for’, for example, has two underlying H tones which are assigned stem-initially and to the second mora of the lengthened penultimate syllable by default, and there is rightward spreading from the first to the second H.

H	H	
kutelekela		<i>underlying</i>
H	H	
kutelekeela		<i>Stress Length</i>
H	H	
kutelekeela		<i>Stem Initial Docking, Default Docking</i>
H	H	
Λ\		
kutelekeela		<i>Rightward Spreading</i>

Two basic features of these dialects get much attention. The first is that the final syllable never has a H tone. To explain this characteristic, Odden treats the final syllable as extraprosodic, that is, invisible for the purposes of tone and other prosodic phenomena. Given this extraprosodicity, stress is assigned to the penultimate syllable. Then, the stressed syllable is lengthened with a second mora, and all words have penultimate lengthening. But only the stress of the last word in an utterance is

phonetically realized by lengthening, medial stress is either severely reduced or eliminated altogether by a late postlexical rule. The second characteristic is an adjacency constraint in phonology called Meeussen's Rule: whenever two adjacent syllables bear H tones, the second loses its H tone. The Chimahuta infinitive form **ku-lá-liima** 'to cultivate them', for example, also has two underlying H tones which are assigned stem-initially (to the object concord as first part of the macrostem) and to the second mora of the lengthened penultimate syllable by default, and the second H is deleted by Meeussen's Rule.

	H H	
ku-la-liima		<i>underlying</i>
	H H	
ku-la-liima		<i>Stress Length</i>
	H H	
ku-la-liima		<i>Stem Initial Docking, Default Docking</i>
	H	
ku-la-liima		<i>Meeussen's Rule</i>

Liphola's description (2001) of Shimakonde of Mozambique is based on Odden's work as far as tone is concerned: one or two underlying H tones are assigned per stem, the penultimate syllable is the basis syllable for assignment, and specific tone rules (like High Tone Doubling and High Tone Spreading) apply to derive the surface patterns. Manus' description (2003) of a variant called Simakonde spoken by Mozambiquians who live on Zanzibar and in Tanga (Tanzania) varies from Odden's approach in that tone assignment includes underlying L tones, and that this assignment is restricted to the penultimate syllable of stems. Like Odden, Liphola and Manus assume that penultimate lengthening takes place as the result of stress, and Liphola agrees with Odden that penultimate lengthening occurs in all words; only utterance-final lengthening is realized, and utterance-medially, the lengthening is wiped out. Manus recognizes prosodic groups in the language where the penultimate lengthening occurs in the final word, not in the first words of such groups.

Just like Devos' excellent description (2004) of Makwe, a variant of Tanzanian Makonde (Chimaraba) spoken in Mozambique, our work is based on Odden's work as far as tone assignment is concerned. Underlyingly, every stem has zero, one or two H tones. H tones are assigned to the stem on the basis of the count of tone bearing units (TBU), and tone rules apply to derive the surface forms. But there are some big differences between our analysis and Odden's analysis. One difference concerns the

question which processes are lexical and which are post-lexical, resulting in a different rule ordering. In our analysis, H tone assignment takes place in the lexicon with word formation. Penultimate lengthening, however, occurs post-lexically, followed by the other tonal processes like Doubling and Spreading (which we call H Tone Bridge). Another difference concerns the extraprosodicity of the final syllable (which results in penultimate stress and ultimately in penultimate lengthening) in all words, and the resulting prosodic organization of the language. According to Odden, there is no final H tone, and all words have penultimate lengthening, although the lengthening is only phonetically realized in the last word of an utterance. In our analysis, the final syllable is only partially extraprosodic, viz., only in surface forms of words at the end of a specific prosodic unit called *phonological phrase* (p-phrase). Medial words in p-phrases do not undergo penultimate lengthening, only p-phrase-final words do. Underlyingly, the final syllable of p-phrase-final words may have a H tone assigned to it, and after penultimate lengthening, this final H tone retracts to the second mora of the penultimate syllable. We use the same examples as the Chimaraba and Chimahuta forms above to compare the analyses. The Chinnima infinitive form **ku-télékééla** ‘to cook for’ has two underlying H tones which are assigned stem-initially and stem-finally. After penultimate lengthening, there is retraction of the final H tone to the second mora of the penultimate syllable, and there is a H Tone Bridge between the stem-initial H tone and the retracted final H tone.

H H	
kutelekela	<i>underlying</i>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">H H</div> <div style="text-align: center;"> </div> </div>	
kutelekela	<i>Tone Assignment</i>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">H H</div> <div style="text-align: center;"> </div> </div>	
kutelekeela	<i>Penultimate Lengthening</i>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">H H</div> <div style="text-align: center;"> /</div> </div>	
kutelekeela	<i>Retraction of the final H tone</i>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">H H</div> <div style="text-align: center;">^ \ </div> </div>	
kutelekeela	<i>H Tone Bridge</i>

The Chinnima infinitive form **ku-lá-liíma** ‘to cultivate them’ has two underlying H tones which are assigned stem-initially and stem-finally; the object concord has an

own H tone, the second mora of the lengthened penultimate syllable by default, and the second H is deleted by Meeussen's Rule.

H H H

ku-la-li-ma *underlying*

H HH
| | |

ku-la-li-ma *Tone Assignment*

H H
| |

ku-la-li-ma *Meeussen's Rule*

H H
| |

ku-la-li-ma *Penultimate Lengthening*

H H
| |

ku-la-li-ma *Retraction of the final H tone*

Medial words in p-phrases do not undergo penultimate lengthening and the final syllable of such words is not extraprosodic. It may have a H tone also on the surface, as the following example shows.

vachoná chiyewé chaángu
they see my chin

In our opinion, and in Devos' analysis (2004) which resembles the present work, penultimate lengthening is not a stress-induced rule, its main purpose is to signal the end of a phonological phrase. Furthermore, it is not the word but the phonological phrase which is the basic unit in the prosodic organization of the language, and this concept is worked out in the next section.

3.2 Prosodic domains

An important part of phonology consists of prosody. Prosody deals with phenomena as tone, intonation and vowel length. In the lexicon, there is one domain where prosodic phonology is active: the word; with word formation, H tone assignment occurs.

Post-lexically, prosodic phonology cooperates with syntax to produce the surface forms of phrases and sentences. For this purpose, prosodic phonology uses its own domains which partially fall together with syntactic phrases and sentences. There may be several reasons why prosodic phonology has its own domains. First, it does not seem unreasonable that phenomena like intonation do not necessarily have to be bound to syntactic criteria. Furthermore, as prosodic phonology and syntax are partners in the same process and each has its specific task, one can imagine that one such task for prosodic phonology is to mark special aspects of the information structure.

The prosodic domains we use are the word, the phonological phrase, the intonational phrase and the utterance. The terminology of the post-lexical domains (the phonological phrase, the intonational phrase and the utterance) derives from work done by Selkirk (1986) who cites earlier work (1978) as well as the work Nespor and Vogel (1982, 1986) and Hayes (1984). In their research, they argue that there is a level in sentence phonology at which the representation is organized hierarchically into prosodic constituents (larger than one word) and that there are phonological rules which have their characteristic domains defined in terms of this prosodic structure. According to them, this prosodic hierarchy is determined by syntactic structure, although it is not isomorphic to it. Below, we argue that the basic domain in Chinnima prosodic structure is the phonological phrase. The term itself is proposed by Hayes building on Kissebirth and Abasheikh (1974).

In Chinnima, the prosodic process Penultimate Lengthening (PUL) not only occurs at the end of a syntactic phrase, it also occurs within syntactic phrases, and this has something to do with Focus (in VP's) and something like Determination (in NP's). Concerning VP's, there are a number of pairs of tenses where both members of a pair have the same meaning, but where one tense of each pair has post-verbal focus (pvf), while the other tense of each pair has verbal focus (vf). The examples used below are of the Past and the Present Perfective; the focussed words are underlined.

tu-tóngólá chímákóonde	we spoke <u>Makonde</u>	pvf
tú-ná-tongoóla chímákóonde	we <u>spoke</u> Makonde	vf
tu-tongwele chímákóonde	we have spoken <u>Makonde</u>	pvf
tu-ni-tóngoóla chímákóonde	we have <u>spoken</u> Makonde	vf

The vf-tenses (or disjoint tenses) have PUL, although they are followed by the object. The pvf-tenses (or conjoint tenses) do not have PUL, but they form a unit with the focussed object (for more details, see 7.3 and 8.3.1).

Concerning NP's, there are specifiers which form a unit with the preceding noun while other specifiers don't. This probably has something to do with the extent of determination of the specifiers. Here, too, PUL marks the difference (for more details, see 8.2.1). Some examples are:

valúmé vááno	these men
valúmé veétu	our men

valúúme váanji other men
valúúme vakúlúungwa big men

We call the smallest domain which ends in PUL the phonological phrase (p-phrase). A syntactic phrase exists of one or two, or even more p-phrases, as the following example shows (the closing square bracket “]” indicates the end of a p-phrase).

nguvaing’ile válúúme] ung’úuku] kukááya]
 I have given the men the chicken at home

A p-phrase consists of one to four words; in the following example, the noun of the first p-phrase is followed by a specifier within the same p-phrase.

nguvaing’ile válúmé vááno] ung’úuku] kukááya]
 I have given these men the chicken at home

P-phrases are the domain where specific tone rules apply subsequently to PUL. Among them are Final H Tone Retraction, H Tone Bridge and H Tone Doubling. These tone rules are dealt with in the following sections. The larger prosodic domain is the intonational phrase (i-phrase). The i-phrase consists of one or more p-phrases, and it can thus be smaller, equal or larger than a syntactic phrase. The end of an i-phrase is often marked by an intonational H tone on the final TBU of the final word (see 3.6.1). The largest prosodic domain is the utterance (U). The U consists of one or more i-phrases, often coinciding with a sentence. The end of an U is marked by register lowering of the final two TBU’s of the final word. There are two other instances of U-final register lowering which are optional (see 3.6.2).

3.3 Surface tones

The basic surface tones are High (H) and Low (L). Each Tone Bearing Unit (TBU) bears one tone, a H tone or a L tone. The TBU in Chinnima is the mora, the unit on which tone rules work. In the remainder of this work, the terms ‘TBU’ and ‘mora’ are used indifferently. Generally, syllables have one mora, but penultimate syllables of phrase-final words have two morae by the automatic process Penultimate Lengthening. On such lengthened penultimate syllables, level tones as well as contour tones may occur. There are two level tones: a sequence of two H tones (HH) and a sequence of two L tones (LL). (H tones are indicated by an acute accent ‘; L tones are generally left unmarked but in the rest of this chapter, they are indicated by a grave accent `.)

línà	name	lìmè	dew
chihúúvâ	chest	mitùùpâ	holes
kùtóngóólâ	to speak	lùwáláháànji	firewood
pànyéénjè	beside, aside	chùhì	only
tùkáályâ	if we eat	ng’ànà	play!

There are two contour tones: Rising (R) and Falling (F). The contour tones are best analysed as a sequence of a L tone followed by a H tone (R) and a H tone followed by a L tone (F) on these TBU's of lengthened penultimate syllables.

mùúnù	person	mwáànà	child
ìndìlā	path	litààwà	clan
ùnjénjéemà	mosquito	chímákóòndè	Makonde language
kàdìkì	a bit	ùpéèhì	quickly
tùng'áánè	we should play	tùkáàlyà	we do not eat

As noted in 2.8, a small number of phrase-final words have a penultimate syllable with three TBU's; two tonal sequences are possible: HLH and LHL.

mwééénù	you (pl.)	mòóòtò	fire
lúúúndù	tomorrow	mùúúndù	chopper
tùpááányà	we who beat	chilòóòngò	pot

When not taking into account the Intonational H tone (see 3.6.1), a H tone on the mora of the final syllable of a phrase-final word is rare (but see certain Substitutives and Demonstratives, 5.2 and 5.3, and the Optative without object concord, 3.5.6).

The levels on which H and L are pronounced are phonetically fairly close. Especially words with only L tones such as **lìimè** 'dew' are hard to distinguish from words like **línà** 'name' (and also from words like **mwáànà** 'child', see 3.6.1).

There are four phonetic levels of tone, mainly due to the instances of utterance-final register lowering (see 3.6); as a consequence, there are different phonetic contour tones (see 3.7).

3.4 Underlying tones and the lexicon

We assume that there is a first lexicon which is a list of grammatical morphemes, verbal roots, (pro)nominal stems and lexicalized verbal bases and stems. Grammatical morphemes are inflectional morphemes like tense markers, (pro)nominal prefixes and verbal prefixes; and derivational morphemes like extensions.

The information about some of these items in the first lexicon includes tonal instructions about H tones; L tones are default tones which are assigned post-lexically. Pronominal and nominal stems have information about which of the tonal profiles with H tones is to be placed on the stem, and about the prefix to be attached to the stem in case it gets a H tone. Tense markers carry tonal information when they themselves and/or the concords get a H tone; they also carry information about which of the tonal profiles is to be placed on the verbal stem. The other items in the first lexicon, such as verbal roots, prefixes and extensions, do not carry tonal information.

The actual H-tone assignment takes place in the second lexicon, with word formation, when the different parts of words are joined together.

In the second lexicon, verbal bases, stems and words are formed. Verbal bases are formed by adding expansions and extensions to verbal roots. Stem formation joins verbal bases and Finals. All sorts of phonological processes occur in the formation of verbal bases and stems, like prenasalization, (de)palatalization and vowel harmony. As soon as a verbal stem is formed, syllabification applies, which holds when a subsequent stem formation process like reduplication applies to it.

There are some building prescriptions for stems. One demand is that every syllable within a verbal stem, where one of the processes of verbal base and stem formation has occurred, must have an onset; if not, syllabificate in such a way that onsetless syllables disappear. We demonstrate this with monosyllabic stems. With verbal stem formation, vowel-final monomoraic roots (like **-li-** 'eat') and the Final **-a** or **-e** are joined together ([°]**-lia**, [°]**-lie**). Syllabification determines that these whole stems form one syllable because every syllable must have an onset after such a process. Monosyllabic nominal stems also exist (e.g., **-yo** in **muyo** 'front'). But there is another building prescription on stems which says that a stem should at least have two syllables; if not, create a structural position left to a monosyllabic stem, which serves as the first syllable of the stem, also being the first tone bearing position of the stem (indicated by a period, [°]**-lia**, [°]**-lie**). When the Final is the Perfective **-ile**, the structure condition is met ([°]**-liile** 'have eaten'), and no structural position is created to the left of the stem. Word formation provides phonetic content for this position from the vowel of the preceding morpheme (subject concord, object concord or tense marker). See the next section for more details.

The addition of Finals to verbal bases occurs in the first stage of stem formation. The second stage in the formation of verbal stems is reserved for 'vertical' (morphological) processes as the addition of the reciprocal **-an-**, the Pre-Final **-ang-** and the imbricated Perfective Final, which are infixed inside the penultimate syllable. After the formation of stems, words are formed. Verbal prefixes, (pro)nominal prefixes and tense markers are added to stems. Syllabification continues, but vowel coalescence/glide formation/vowel incorporation, glide insertion and syllable fusion are not carried out immediately but occur post-lexically (see 3.5.5). The next step is H-tone assignment (HTA): the tonal instructions are carried out, the prefixes and the tense markers get their H tone, and the stems get their tonal profile. When two primary H tones appear next to each other, the second H is deleted by Meeussen's Rule. There are four tonal profiles with H tones for stems, each profile having one or two H tones, and there is one profile without any H tone. Stems of all major categories have one of these five tonal profiles. There are some processes which occur after HTA, as the addition of certain outer NPX's to nominal stems and the formation of agent nouns and reduplicated nouns, and rules like the tone rule 'delete all H's' apply. Below, we try to give an overview of the main morphological and phonological (including prosodic) processes which occur in the second lexicon. All processes are described in this book.

main processes in the second lexicon			
word	addition	process	HTA
noun	-inner NPx to stem -outer NPx to stem -na- -locative NPx -pluralizing NPx -chi-/mu-/va-	prenasalization, homorganicity tone rule 'delete all H's'	before before after after after
instrument/ manner noun	NPx, Final to verbal base	vowel anticipation, vowel dissimilation, final vowel raising, l → d	before
augmentative/ diminutive	cl. 5/6, 12/13 NPx's to stem	prenasalization, homorganicity,	before
reduplicated noun	stem to stem	tone rule 'delete all H's'	after
agent noun	mu-/va- to Infinitive	vowel anticipation, vowel dissimilation, tone rule 'delete all H's'	after
verbal base	expansions, extensions to root	(de)palatalization, labio-velarization, vowel harmony	before
minisyllabic vs	Final to root	-create S1-position, copy preceding vowel -onset-syllabification l → d	before
verb stem (vs)	-Final to verbal base -reciprocal, Pre-Final to stem	vowel harmony, imbrication, vowel dissimilation, create complex final syllable	before (stage1) before (stage2)
reduplicated vs	stem to stem		before
verbal form	SC, OC, TM to stem	prenasalization, homorganicity, Meeussen's rule	before
pronominal form	PPx to stem	prenasalization, homorganicity	before

3.4.1 Tonal profiles for stems

There are five tonal profiles for stems; their order is explained in 7.2.1.

- A S1/SF : a H tone on the first and final TBU of the stem
- B S1 : a H tone on the first TBU of the stem
- C SF : a H tone on the final TBU of the stem
- D no H : no H tones on the stem
- E S2 : a H tone on the second TBU of the stem

As the TBU is the mora in Chinnima, the S1, S2 and SF are moraic positions in the stem.

Let us first show these five tonal profiles with words with four-syllable nominal and verbal stems (the prefixes preceding the stems are: NPx = Nominal Prefix, SC = Subject Concord, TM = Tense Marker, OC = Object Concord).

		NPx	-nominal stem		SC	-TM	-OC-verbal stem
A	S1/SF	°li	-pélependé		°ku		-pílikaná
B	S1	°va	-lúmilanga		°va		-li -pílikane
C	SF	°ma	-kolobekó		°tu	-na	-pílikaná
D	no H	°vi	-kokolowa		°		li -pílikane
E	S2	°vi	-tukútuku		°va		-li -pílikana

Several tonal and other processes occur before these underlying forms reach surface level; these processes are dealt with one by one in this chapter, the most striking processes in the examples below are H Tone Bridge (from the S1-H tone to the SF-H tone) with the examples of A and H Tone Doubling (from the S1-H tone to the next TBU) with the examples of B.

A	li-pélependé lyàákè	its cockroach
B	và-lúmilàngà váànji	other widows
C	mà-kòlobèkó lyàákè	its savannah
D	vi-kòkòlòwà vûnji	other empty maize cobs
E	vi-tùkútùkù vûnji	other things, substances, ingredients
A	kù-pílikáná límò	to hear one (e.g. li-lóóvè 'word')
B	và-li-pílikànè límò	they should hear the one
C	tù-nà-pílikáná límò	we (will) hear one
D	li-pílikànè límò	hear the one!
E	và-li-pílikànè límò	they who hear the one

We continue with the five tonal profiles as they occur with nouns and verbs having trisyllabic stems.

		NPx	-nominal stem	SC	-TM	-OC-verbal stem
A	S1/SF	°u	-tútulí	°ku		-tóngolá
B	S1	°li	-híndili	°va		-li -tóngole
C	SF	°li	-kumbatú	°tu	-na	-tongolá
D	no H	°n	-tandasa	°		li -tongole
E	S2	°li	-putíla	°va		-li -tongóla

Surface forms:

A	ù-tútulí wàángù	my brain
B	lì-híndili lūnjì	other cooking stone
C	lì-kumbatú lyàángù	my foot
D	`n-tàndàsà úùnjì	other cassava porridge
E	lì-pùtíla lūnjì	other trap
A	kù-tóngolá líimò	to speak one
B	và-li-tóngolè líimò	they should speak the one
C	tù-nà-tòngolá líimò	we (will) speak one
D	lì-tóngolè líimò	speak the one!
E	và-li-tóngolá líimò	they who speak the one

We now show the five tonal profiles of words having disyllabic nominal and verbal stems.

		NPx	-nominal stem	SC	-TM	-OC-verbal stem
A	S1/SF	°ma	-kálá	°ku		-lólá
B	S1	°a	-hímba	°va		-li -lóle
C	SF	°ma	-halá	°tu	-na	-lolá
D	no H	°vi	-yewe	°		li -lole
E	S2	°ma	-vaála	°va		-li -loóla

One process which has to be described here is the tonal lengthening caused by the S2-H tone on disyllabic stems. The penultimate syllable is lengthened, and the S2-H tone is assigned to the second part of the lengthened vowel. In this way, the S2-H tone has a distinctive location on disyllabic stems, and it can be distinguished from the SF-H tone. This lengthening provides for a tonal environment where other (tone) rules occur, the most striking one in the examples with E below is tonal coalescence resulting in penultimate H (see 3.5.5, 3.5.6 and 3.5.9).

A	mà-kálá làángù	my charcoal
B	à-himbà váànjì	other lions
C	mà-hàlá làángù	my fields
D	vì-yèwè vūnjì	other chins
E	mà-válà láànjì	other shoulders
A	kù-lólá líimò	to look at one

B	và-li-lólè límò	they should look at the one
C	tù-nà-lòlá límò	we (will) look at one
D	li-lólè límò	look at the one!
E	và-li-lólà límò	they who look at the one

In the examples above, the tones of the forms of B and E are the same, but they are distinct in other environments.

B	à-himbá vákè	his lions
E	mà-vàlá làákè	his shoulders

B	và-li-lólè	they should look at it
E	và-li-lólà	they who look at it

It is evident that with H Tone Assignment (HTA), the syllable structure of the words must be clear, and that HTA takes it into account: the SF-H tone is always assigned to the mora of the final syllable, the S1-H tone and the S2-H tone are never assigned there. This has been shown by the tonal lengthening caused by the S2-H tone on disyllabic stems above. When the final syllable has two morae (e.g. °-**udia** ‘ask’), lengthening of the penultimate syllable occurs when the S2-H tone is assigned, and the S2-H tone is not assigned to the first mora of the second (= final) syllable.

E	S2	° va	- li	- uúdia
		và-li-údyà límò they who ask the one		

We now come to monosyllabic stems. In the previous section we stated that due to a structure condition on stem formation (which says that a stem should at least have two syllables) monosyllabic stems get a structural position left to the stem which serves as the first syllable, and thus as S1-position. With word formation, this position is filled with a copy of the vowel of the preceding morpheme (NPx, subject concord, object concord or tense marker). So, these stems act as vowel-initial disyllabic stems, and they should therefore not be called monosyllabic. To distinguish them from “regular” disyllabic stems, we shall call them “minisyllabic” stems.

With tone assignment, the S1-H tone is thus assigned to the copy of the vowel of the preceding morpheme; this vowel and the remainder of the stem are separated by a dot below.

		NPx	-nominal stem		SC	-TM	-OC	-verbal stem
A	S1/SF	?	° u	- ú.chí	° ku			- ú.liá
B	S1	?			° va		- li	- í.lie
C	SF		° vi	- i.nú	° tu	- na		- a.liá
D	no H		° mu	- u.yo	°		li	- i.lie
E	S2	?			° va		- li	- íí.lia

With nouns consisting of a minisyllabic stem, the all-H tone pattern may result from either profile A or B or E (see 4.4.2), hence the question marks.

Minisyllabic stems are actually treated as (vowel-initial) disyllabic stems; they start with a vowel to which is assigned the S1-H tone, and the assignment of the S2-H tone causes lengthening. To show this, compare the minisyllabic stems with vowel-initial disyllabic stems like the verbal stem **-udya** (°**-udia**) ‘ask’ and the nominal stems below.

		NPx	-nominal stem	SC	-TM	-OC-verbal stem
A	S1/SF	?	° u - únú	° ku		- údiá
B	S1	?		° va		- li - údie
C	SF		° mi - ihí	° tu	- na	- udiá
D	no H		° chi - anga	°		li - udie
E	S2	?		° va		- li - uúdia

For the penultimate length of most disyllabic words in the examples below, see 8.2.2 and 8.3.1. The disappearance of the final H tone in verbal forms with profile C is explained in 3.5.6.

Minisyllabic stems:

A	?	úúchí úúnò	this honey
B	?		
C		chüünú chàángù	my thing
D		mùùyò múùnjì	other front
E	?		
A		kúúlyá líímò	to eat one (e.g. lí-tíínjì ‘pumpkin’)
B		và-lílyè líímò	they should eat the one
C		tù-nàlyà líímò	we (will) eat one
D		lílyè líímò	eat the one!
E		và-lílyà líímò	they who eat the one

Disyllabic vowel-initial stems:

A	?	úúnú úúnò	this plaster
B	?		
C		mùihí yàángù	my pestles
D		chàngà chünjì	another galago
E	?		
A		kúúdyá líímò	to ask one
B		và-lyúdyè líímò	they should ask the one
C		tù-núdyà líímò	we (will) ask one
D		lyùúdyè líímò	ask the one!
E		và-lyúdyà líímò	they who ask the one

With the verbal forms above, vowel coalescence between the SC (or Infinitive marker) or the OC or the tense marker and a vowel-initial disyllabic stem is optional (see 2.7). Hence, next to the verbal forms given above, the following forms exist.

- A kù-údyá límò
 B vâ-li-údyè límò
 C tù-nâ-údyà límò
 D lì-údyè límò
 E vâ-li-údyà límò

Although the structure of minisyllabic stems is identical with the structure of vowel-initial disyllabic stems, there is a clear difference: vowel coalescence between the SC or OC or the tense marker and a vowel-initial disyllabic stem is optional, while vowel coalescence between the SC or OC or the tense marker and a minisyllabic stem is obligatory. We think that the difference is explained by syllabification in the second lexicon with word formation: syllabification with minisyllabic stems occurs in a different way than syllabification with other stems. With minisyllabic stems, the created S1-position and the preceding morpheme form one syllable, whereas with other stems, the S1-position and the preceding morpheme form two different syllables. Below, we give the examples of TG B above. The slash “/” indicates the edge of a syllable, the hyphen “-” indicates the edge of a morpheme (the morpheme structure within the final syllable is not indicated).

- B S1 °va-/li-í/lie °va-/li-/ú/die

That the S1-position and the preceding morpheme with minisyllabic stems form one syllable is due to the fact that the S1-position is totally dependent on the vowel of the preceding morpheme to get phonetic content, and the two can therefore not be separated (although the morpheme structure remains intact: the OC and the S1-position are recognized as different grammatical positions). The syllable contains two morae, and vowel coalescence is obligatory, applying post-lexically.

There are good reasons to assume that the S1-position of minisyllabic verbs is filled with a copy of the vowel of the preceding morpheme and not with the vowel of the preceding morpheme itself. The assignment of the S1-H tone should be on a separate vowel in order to derive the correct tone patterns which are exactly the same as those of forms with disyllabic vowel-initial stems which have an original S1-position. That the first vowel of minisyllabic stems has the quality of the preceding vowel is demonstrated by verbal reduplication. With verbal reduplication, the whole stem is reduplicated, as the examples with trisyllabic stems illustrate.

- | | | |
|---|----------------------------|--------------------------------------|
| A | kù-tóngólátóngó lá límò | to keep on speaking one |
| B | vâ-li-tóngólètòngòlè límò | they should keep on speaking the one |
| C | tù-nâ-tóngòlàtòngò lá límò | we (will) keep on speaking one |
| D | lì-tòngòlètòngòlè límò | keep on speaking the one! |
| E | vâ-li-tóngólátòngò là límò | they who keep on speaking the one |

Verbal reduplication occurs before tone assignment, the reduplicated stem as a whole is assigned a tonal profile; the second H tone with the examples of the profiles B and E is due to the process H Tone Doubling (3.5.6).

With minisyllabic stems, the reduplicated part includes the copy of the preceding vowel. First, we give the underlying forms, followed by the surface forms.

	SC	-TM	-OC	-stem-reduplicated stem
A	S1/SF	°ku		-ú.lia-uliá
B	S1	°va	-li	-i.lie-ilie
C	SF	°tu -na		-a.lia-aliá
D	no H	°	li	-i.lie-ilie
E	S2	°va	-li	-i.liá-ilia

A	kúlyáúlyá límò	to keep on eating one
B	và-lílyéilyè límò	they should keep on eating the one
C	tù-nàlyàlyà límò	we (will) keep on eating one
D	lilyèilyè límò	keep on eating the one!
E	và-lilyáilyà límò	they who keep on eating the one

The form with profile E clearly shows that reduplication occurs before tone assignment. The stem is long enough, there is no S2-H tone lengthening, and the S2-H tone appears on the second TBU. The second H tone with the example of profile B is due to the process H Tone Doubling.

Compare these forms with forms with reduplicated disyllabic vowel-initial stems.

	SC	-TM	-OC	-stem-reduplicated stem
A	S1/SF	°ku		-údia-udiá
B	S1	°va	-li	-údie-udie
C	SF	°tu -na		-udia-udiá
D	no H	°	li	-udie-udie
E	S2	°va	-li	-udiá-udia

A	kúdyáúdyá límò	to keep on asking one
B	và-lyúdyéùdyè límò	they should keep on asking the one
C	tù-nùdyàùdyà límò	we (will) keep on asking one
D	lyùdyèùdyè límò	keep on asking the one!
E	và-lyùdyáùdyà límò	they who keep on asking the one

Without vowel coalescence, the verbal forms are as follows:

A	kù-údyáúdyá límò	to keep on asking one
B	và-li-údyéùdyè límò	they should keep on asking the one
C	tù-nà-ùdyàùdyà límò	we (will) keep on asking one
D	li-ùdyèùdyè límò	keep on asking the one!
E	và-li-ùdyáùdyà límò	they who keep on asking the one

3.4.2 Prefix-H tone

In the examples of the previous section, the profiles of stems are combined with (default) L-toned nominal prefixes and verbal prefixes (or subject concords). Two of these profiles, however, may also be combined with a H-toned (pro)nominal prefix or verbal prefix (called Px-H tone), depending on the particular tense. These profiles are C (SF-H tone) and D (no H tones).

		NPx -nominal stem		SC -TM -verbal stem
C	SF	?		°tú -ni -pilikaná
		°ú -njenjemá		°tú -ni -tongolá
		°lí -tínjí		°tú -ni -lolá
		?		°tú -ni -udíá
		?		°tú -ni -i.liá
D	no H	?		°tú -na -pilikane
		?		°tú -na -tongole
		?		°tú -na -lole
		?		°tú -na -udie
		?		°tú -na -a.lie

Since nouns do not appear in paradigms like verbal forms, it is not always possible to decide which underlying tones nouns have; for example, we can not decide whether nouns have profile B or D (with a H-toned NPx) since the resulting tone pattern would be the same (see 4.4.1 and 4.4.2). This is because the Px-H tone is not a stable one, but it shifts to the S1-position of the stem, or, when there is an object concord (with verbal forms), it shifts to the object concord; this is shown in 3.5.4.

After this shift, H Tone Bridge applies to the nouns in the examples below (triggered by the qualifier, see 8.2.2), but H Tone Bridge does not apply to verbal forms after this shift; the tones with verbal forms with minisyllabic stems below are explained with the process Coalescence (3.5.5).

C	ù-njénjemá wàákè	its mosquito
	lí-tínjí lyáàngù	my pumpkin
C	tù-nì-pílikàná líímò	we have heard one
	tù-nì-tóngolá líímò	we have spoken one
	tù-nì-lólá líímò	we have looked at one
	tù-núdyà líímò	we have asked one
	tù-nílyà líímò	we have eaten one
D	tù-nà-pílikànè líímò	we should not hear one
	tù-nà-tóngòlè líímò	we should not speak one
	tù-nà-lólè líímò	we should not look at one
	tù-núdyè líímò	we should not ask one
	tù-náalyè líímò	we should not eat one

As vowel coalescence between a tense marker and a vowel-initial stem is optional (see 2.7), the forms with disyllabic vowel-initial stems may also be as follows: C **tù-nì-údyà liímò**, D **tù-nà-údyè liímò**.

3.4.3 Meeussen's Rule

There is an automatic rule which applies whenever the proper environment for its application appears: Meeussen's Rule (Goldsmith, 1984).

Meeussen's Rule (MR) says that when two primary H tones appear next to each other, the second H tone is deleted. MR is part of a family of constraints called the OCP (Obligatory Contour Principle), a concept developed in autosegmental literature which essentially rules out representations where two similar specifications are adjacent. Word formation provides proper environments for MR, but the rule also applies with post-lexical processes (see below) as well as across word boundaries (see 8.2.2 and 8.3.2). Primary H tones are the H tones which are assigned with word formation. H tones which are the result of a bridge or doubling (processes which are dealt with in this chapter) are not primary H tones.

With word formation, it happens that two primary H tones appear next to each other. In the first and third example, the H tone of the tense marker/Negative marker and the S1-H tone of the stem appear next to each other; in the second example, the Infinitive, the H tone of the object concord and the S1-H tone of the stem appear next to each other. MR deletes the second primary H tone, i.e. the S1-H tone in all examples.

A	S1/SF	[°] tu-chí-tóngolá	>	[°] tu-chí-tongolá
		[°] ku-vá-lólá	>	[°] ku-vá-lolá
B	S1	[°] tu-ká-lóla	>	[°] tu-ká-lola
A		tù-chí-tòngolá kàdiiki		we were speaking a bit
		kù-vá-lólá kàdiiki		to look at them (cl.2) a bit
B		tù-ká-lòlâ kàdiiki		we do not look a bit

When there is an object concord with the first and third example, there is no environment for MR to apply because the H tone of the tense marker/Negative marker and the S1-H tone are separated by an object concord without a H tone. On the other hand, when there is no object concord with the second example, there is also no environment for MR to apply because the Infinitive marker has no H tone.

A	S1/SF	[°] tu-chí-li-tóngolá
		[°] ku-lólá
B	S1	[°] tu-ká-li-lóla

- A **tù-chí-li-tóngólá límò** we were speaking the one
 kù-lólá límò to look at one
 B **tù-ká-li-lólà límò** we do not look at the one

The second examples with profile A, where the S1-H tone and the SF-H tone appear next to each other on a disyllabic stem, suggest that the combined S1-H tone and the SF-H tone are in fact manifestations of one H tone (with other manifestations of H tones in between in case of a H Tone Bridge).

One example of MR applying post-lexically concerns the Negative Present Perfective 1 (of TG A) where the H tone on the Negative marker (shifted from the SC) deletes the S1-H tone of the stem after the H Tone Bridge (a post-lexical rule) has taken place (see 7.1.1, 7.1.5 and 7.2.5).

- A S1/SF °tú-ka-tóngwélé > °tú-ka-tóngwélé > °tu-ká-tóngwélé >
 °tú-ka-pílikéné > °tú-ka-pílikéné > °tu-ká-pílikéné >
 °tú-ka-pílikéné

- A **tù-ká-tóngwélé kàdiiki** we have spoken a bit
 tù-ká-pílikéné kàdiiki we have heard a bit

Here, too, MR does not apply when an OC is present. Note that the Negative marker has a block to prevent the H tone of the SC to shift to the OC.

- A S1/SF °tú-ka-li-tóngwélé > °tu-ká-li-tóngwélé
 °tú-ka-li-pílikéné > °tu-ká-li-pílikéné

- A **tù-ká-li-tóngwélé límò** we have spoken the one
 tù-ká-li-pílikéné límò we have heard the one

Note that the process H Tone Bridge on stems (which makes a bridge between a S1-H tone and a SF-H tone) occurs with the examples with profile A when there is no environment for MR; when MR applies, deleting the S1-H tone, the process H Tone Bridge is no longer applicable.

MR prohibits two primary H tones to appear on adjacent morae. The critical unit for applying is not the syllable, as the first example, the Infinitive form **ku-vá-loóla** ‘to look at them’ shows, where a H tone may appear on the second mora of the penultimate syllable which is preceded by a H-toned syllable (underlined in the example). The second example, a form of the Negative Present Perfective 1 **tu-ká-leedyé** ‘we have not laid down’ shows that when a H tone appears on the first mora of the penultimate syllable which is preceded by a H-toned syllable, it is deleted since it appears on a mora adjacent to a mora with a H tone (underlined in the example).

- ku-vá-loóla** < °ku-vá-loolá < °ku-vá-lolá < °ku-vá-lólá
tu-ká-leedyé < °tu-ká-léedyé < °tú-ka-léedíé < °tú-ka-lédié

3.5 Post-lexical processes with one-word p-phrases

The basic unit of prosodic phonology in syntax is the p-phrase. The end of a p-phrase is marked by lengthening of the penultimate syllable of its final word. P-phrases may consist of one, two, three or four words. Several post-lexical processes occur within each type of p-phrase. In this chapter, we restrict ourselves to processes which occur in one-word p-phrases, i.e., words in isolation (or: in citation form). Processes which occur in longer p-phrases (noun plus specifier(s), and verb plus complement or adjunct) are dealt with in 8.2 and 8.3. The processes that occur in one-word p-phrases are the following:

Penultimate lengthening

Complex final syllable and retraction of final H tone

H tone bridge

Prefix-H tone shift

Coalescence, resyllabification and OC-H tone retraction

H tone doubling, final H deletion and Structure Simplification

Default L tone insertion

Tone assimilation

Penultimate shortening

The processes are given in the right ordering. In the sections to come, we describe the different processes and we select several sets of examples to show how the processes operate. But to give a quick impression, we give an overview with the examples **tù-ká-pílikéénè** ‘we have not heard’ and **tù-kám’-pélékèdiidyè** ‘we have not sent him’. The lexical forms after H tone assignment are resp. **°tú-ka-pílikéné** and **°tú-ka-m-pélekediidié**. These forms of the Negative Present Perfective have a H-toned subject concord combined with stem profile A, a H tone on the first and last TBU of the stem. The form **°tú-ka-m-pélekediidié** has a complex final syllable, i.e., it has two morae in the final syllable; the H tone of the final TBU retracts to the preceding TBU in the final syllable instead of to the second mora of the penultimate syllable in case there is no complex final syllable. The shift of the H tone of the subject concord strands on the Negative marker because of a block (see 7.1.1). Meeussen’s rule is an automatic rule, it applies whenever the proper environment is met. The underlining in the examples indicates where the processes apply.

°tú-ka-pílikééné	°tú-ka-m-pélekediidié	<i>Penultimate lengthening</i>
°tú-ka-pílikééne	°tú-ka-m-pélekediidié	<i>Retraction of the final H tone</i>
°tú-ka-pílikééne		<i>H tone bridge</i>
°tu-ká-pílikééne	°tu-ká-m-pélekediidié	<i>Prefix-H tone shift</i>
	°tu-kám-pélekediidyé	<i>Coalescence, Resyllabification</i>
	°tu-kám-pélékediidyé	<i>H tone doubling, final H deletion</i>
°tu-ká-pílikééne		<i>Meeussen's rule</i>
tù-ká-pílikéénè	°tù-ká-m-pélékèdiidyè	<i>Default L insertion</i>
	tù- kám'-pélékèdiidyè	<i>Tone assimilation</i>
tù-ká-pílikéénè	tù- kám'-pélékèdiidyè	<i>Penultimate shortening</i>

There are different domains of application for the tonal rules, the tonal domains: the syllable (e.g. Tone Assimilation), the stem (e.g. H Tone Bridge), the macrostem (e.g. H Tone Shift), the word (e.g. H Tone Doubling) and the phonological phrase (e.g. Regressive H Tone Dissimilation, to be dealt with in ch.8). When the domain of application is the (macro)stem, tone rules (like H Tone Assignment) have to take into account the syllable division as well. Other prosodic processes like Penultimate lengthening, Penultimate shortening and Structure simplification work on the (penultimate) syllable.

In the following sections, the different processes are informally described and presented with the help of examples which can be tracked down from the first process until the last to reach surface form.

3.5.1 Penultimate lengthening

The penultimate syllable of the final word of a phonological phrase is lengthened by PenUltimate Lengthening (PUL). PUL is not a stress-induced rule, its main purpose is to signal the end of a phonological phrase. In the sections to follow, the same examples are used as in 3.4.1, but other examples are added as well. Below, the forms with PUL are followed by the surface forms. The tone rules which apply to derive these surface forms are indicated in the last but one column (R = Retraction, TB = H Tone Bridge, DI = Default L tone Insertion, C = Coalescence and syllabification, TD = H Tone Doubling, PS = Prefix-H tone Shift, S = structure Simplification, TA = Tone Assimilation and F = Final H deletion). All tone rules are dealt with in the coming sections.

Nouns:

		lexical form	PUL	next rules	surface forms
A	S1/SF	^o li-pélependé	> ^o li-pélepeendé	R,TB,DI	li-pélépééndè
		^o u-tútulí	> ^o u-tútuulí	R,TB,DI	ù-tútúúli
		^o ma-kálá	> ^o ma-káalá	R,DI	mà-káálà
		? ^o u-únú	> ^o u-úunú	R,C,DI	úúnù
		? ^o u-úchí	> ^o u-úuchí	R,C,DI	úúchì
B	S1	^o va-lúmilanga	> ^o va-lúmilaanga	TD,DI	và-lúmílààngà
		^o li-híndili	> ^o li-híndiili	TD,DI	lì-híndîli
		^o a-hímiba	> ^o a-híimba	DI	à-híimba
C	SF	^o ma-kolobekó	> ^o ma-kolobeekó	R,DI	mà-kòlòbèékò
		^o li-kumbatú	> ^o li-kumbaatú	R,DI	lì-kùmbàátù
		^o ma-halá	> ^o ma-haalá	R,DI	mà-hàálà
		^o mi-ihí	> ^o mi-iihí	R,C,DI	mîihì
		^o vi-inú	> ^o vi-iinú	R,C,DI	vîinù
		^o ú-njenjemá	> ^o ú-njenjeemá	R,PS,DI	ù-njénjèémà
		^o lí-tinjí	> ^o lí-tiinjí	R,DI	lî-tîinjì
D	no H	^o vi-kokolowa	> ^o vi-kokoloowa	DI	vì-kòkòlòòwà
		^o n-tandasa	> ^o n-tandaasa	DI	`n-tàndààsà
		^o vi-yewe	> ^o vi-yeewe	DI	vì-yèèwè
		^o chi-anga	> ^o chi-aanga	C,DI	chààngà
		^o mu-uyo	> ^o mu-uuyo	C,DI	mùùyò
E	S2	^o vi-tukútuku	> ^o vi-tukútuuku	TD,DI	vì-tùkútúùkù
		^o li-putíla	> ^o li-putiila	DI	lì-pùtîlâ
		^o chi-loóngo	> ^o chi-loóongo	DI,TA	chì-lòóòngò
		^o ma-vaála	> ^o ma-vaáala	S,DI	mà-váálà

Verbal forms:

		lexical form	PUL	next rules	surface forms
A		^o ku-pílikaná	> ^o ku-pílikaaná	R,TB,DI	kù-pílikáánà
		^o ku-tóngolá	> ^o ku-tóngoolá	R,TB,DI	kù-tóngóólà
		^o ku-lólá	> ^o ku-lóolá	R,DI	kù-lóólà
		^o ku-údiá	> ^o ku-úudiá	R,C,F,DI	kúúdyà
		^o ku-úliá	> ^o ku-úuliá	R,C,F,DI	kúúlyà
B		^o va-li-pílikane	> ^o va-li-pílikaane	TD,DI	và-li-pílikàànè
		^o va-li-tóngole	> ^o va-li-tóngoole	TD,DI	và-li-tóngóòlè
		^o va-li-lóle	> ^o va-li-lóole	DI	và-li-lóòlè

	°va-li-údie	>	°va-li-údie	C,DI	và-lyúúdyè
	°va-li-ílie	>	°va-li-ílie	C,DI	và-lílyè
C	°tu-na-pilikaná	>	°tu-na-pilikaaná	R,DI	tù-nà-pilikàànà
	°tu-na-tongolá	>	°tu-na-tongoolá	R,DI	tù-nà-tòngòólà
	°tu-na-lolá	>	°tu-na-loolá	R,DI	tù-nà-lòólà
	°tu-na-udiá	>	°tu-na-uudiá	R,C,F,DI	tù-nùúdyà
	°tu-na-aliá	>	°tu-na-aaliá	R,C,F,DI	tù-nààlyà
	°tú-ni-pilikaná	>	°tú-ni-pilikaaná	R,PS,DI	tù-nì-pìlikàànà
	°tú-ni-tongolá	>	°tú-ni-tongoolá	R,PS,DI	tù-nì-tòngòólà
	°tú-ni-lolá	>	°tú-ni-loolá	R,PS,DI	tù-nì-lòólà
	°tú-ni-udiá	>	°tú-ni-uudiá	R,PS,C,F,DI	tù-nyúúdyà
	°tú-ni-iliá	>	°tú-ni-iiliá	R,PS,C,F,DI	tù-níilyà
D	°li-pilikane	>	°li-pilikaane	DI	lì-pìlikàànè
	°li-tongole	>	°li-tongoole	DI	lì-tòngòòlè
	°li-lole	>	°li-loole	DI	lì-lòòlè
	°li-udie	>	°li-uudie	C,DI	lyúdyè
	°li-ilie	>	°li-iilie	C,DI	lìilyè
	°tú-na-pilikane	>	°tú-na-pilikaane	PS,TD,DI	tù-nà-pìlikàànè
	°tú-na-tongole	>	°tú-na-tongoole	PS,TD,DI	tù-nà-tòngòòlè
	°tú-na-lole	>	°tú-na-loole	PS,DI	tù-nà-lòòlè
	°tú-na-udie	>	°tú-na-uudie	PS,C,DI	tù-núúdyè
	°tú-na-alie	>	°tú-na-aalie	PS,C,DI	tù-náályè
E	°va-li-pilikana	>	°va-li-pilikaana	TD,DI	và-lì-pìlikàànà
	°va-li-tongóla	>	°va-li-tongóola	DI	và-lì-tòngòólà
	°va-li-loóla	>	°va-li-loóola	S,DI	và-lì-lóólà
	°va-li-uúdia	>	°va-li-uúudia	C,S,DI	và-lyúúdyà
	°va-li-iília	>	°va-li-iília	C,S,DI	và-líilyà

Note that the lengthened part of a vowel with a H tone does not have a H tone itself.

As noted earlier, vowel coalescence (C) between a tense marker and a vowel-initial stem is optional; also, vowel coalescence between the Infinitive marker and the vowel-initial stem is optional (see 2.7). The forms above with vowel coalescence exist of disyllabic vowel-initial stems with profiles A, C and D.

3.5.2 Complex final syllable and retraction of final H tone

Minisyllabic stems have a final syllable with two TBU's, e.g., °-**lia**, °-**lie** 'eat'. Causative stems and passive stems also have a final syllable with two TBU's: with the formation of causative stems and passive stems, vowel-final verbal bases (for

example °-lim-i- ‘make cultivate’ with causative °i, and °-lim-u- ‘be cultivated’ with passive °u combine with the Finals -a or -e (°-limia, °-limie and °-limua, °-limue). Also -udya ‘ask’, the disyllabic vowel-initial stem used in the examples, exists of a (lexicalized) causative extension, and should therefore be represented here as °-udia. We call such final syllables with two TBU’s complex final syllables. Nouns (and probably the other major categories as well) do not have complex final syllables; we assume that glides in the final syllable of nouns are lexicalised.

The existence of complex final syllables is best shown with the process Retraction of the final H tone (R). Stems with final H tone have profiles A or C. The final H tone is retracted to the preceding penultimate syllable, appearing on the lengthened part of the penultimate vowel, resulting in a penultimate rising tone. When the stem has a complex final syllable, the retracted tone appears on the first TBU of the final syllable (which shows that Retraction is a mora-based rule, not a syllable based rule), and disappears with Final H Deletion. We use the verbal stems with complex final syllable °-pelekeddia (-pelekedya ‘send’), °-kundania (-kundanya ‘mix’) and °-limia (-limya ‘make cultivate’); the following examples are used:

surface forms				
A	S1/SF	°ku-pelekedíá	kù-pélékèèdyà	to send
		°ku-kúndaniá	kù-kúndàànyà	to mix
		°ku-límiá	kù-lîmyà	to make cultivate
C	SF	°tu-na-pelekedíá	tù-nà-pélékèèdyà	we (will) send
		°tu-na-kundaniá	tù-nà-kúndàànyà	we (will) mix
		°tu-na-límiá	tù-nà-lîmyà	we (will) make cultivate
		°tú-ni-pelekedíá	tù-nì-pélékèèdyà	we have sent
		°tú-ni-kundaniá	tù-nì-kúndàànyà	we have mixed
		°tú-ni-límiá	tù-nì-lîmyà	we have made cultivated

Minisyllabic stems also have complex final syllables. Note that nominal stems never have a complex final syllable (we have not found examples of stems with three or four syllables with a glide in the final syllable); examples with disyllabic stems are:

surface forms			
A	°di-nóndwá	dì-nóóndwà	stars
C	°mi-utwé	myùútwè	heads

We now demonstrate the retraction process:

Nouns:

	previous rule		next rules
	PUL	R	
A	°li-pélepeendé	> °li-pélepeénde	TB,DI
	°u-tútuulí	> °u-tútuúli	TB,DI
	°ma-káalá	> °ma-káála	DI
	°di-nóondwá	> °di-nóóndwa	DI
	? °u-úunú	> °u-úúnu	C,DI
	? °u-úuchí	> °u-úúchi	C,DI
C	°ma-kolobeekó	> °ma-kolobeéko	DI
	°li-kumbaátú	> °li-kumbaátu	DI
	°ma-haalá	> °ma-haála	DI
	°mi-uutwé	> °mi-uútwé	C,DI
	°mi-iihí	> °mi-iihi	C,DI
	°vi-iinú	> °vi-iínu	C,DI
	°ú-njenjeemá	> °ú-njenjeéma	PS,DI
	°lí-tiinjí	> °lí-tiínji	DI

Verbal forms:

	previous rule		next rules
	PUL	R	
A	°ku-pílikaaná	> °ku-pílikaána	TB,DI
	°ku-pélekeediá	> °ku-pélekeedía	C,TD,F,DI
	°ku-tóngoolá	> °ku-tóngoóla	TB,DI
	°ku-kúndaaniá	> °ku-kúndaanía	C,TD,F,DI
	°ku-lóolá	> °ku-lóóla	DI
	°ku-liimiá	> °ku-liimía	C,F,DI
	°ku-úudiá	> °ku-úudía	C,F,DI
	°ku-úuliá	> °ku-úulía	C,F,DI
C	°tu-na-pilikaaná	> °tu-na-pilikaána	DI
	°tu-na-pelekeediá	> °tu-na-pelekeedía	C,F,DI
	°tu-na-tongoolá	> °tu-na-tongoóla	DI
	°tu-na-kundaaniá	> °tu-na-kundaanía	C,F,DI
	°tu-na-loolá	> °tu-na-loóla	DI
	°tu-na-liimiá	> °tu-na-liimía	C,F,DI
	°tu-na-uudiá	> °tu-na-uudía	C,F,DI
	°tu-na-aaliá	> °tu-na-aalía	C,F,DI
	°tú-ni-pilikaaná	> °tú-ni-pilikaána	PS,DI
	°tú-ni-pelekeediá	> °tú-ni-pelekeedía	PS,C,TD,F,DI
	°tú-ni-tongoolá	> °tú-ni-tongoóla	PS,DI

°tú-ni-kundaaniá	>	°tú-ni-kundaanía	PS,C,TD,F,DI
°tú-ni-loolá	>	°tú-ni-loóla	PS,DI
°tú-ni-liimiá	>	°tú-ni-liimía	PS,C,F,DI
°tú-ni-uudiá	>	°tú-ni-uudía	PS,C,F,DI
°tú-ni-iiliá	>	°tú-ni-iilía	PS,C,F,DI

With some examples, Coalescence is optional; both tracks (with and without C) can be followed in the sections to come.

As remarked above, retraction in verbal forms with and without complex final syllables leads to a different result. There is no H Tone Bridge when the H tone is in a complex final syllable (see next section). With nouns, there are no differences in surface forms since nouns do not have complex final syllables. There are also no differences in surface forms with the other profiles (B, D and E) with verbal forms. Their complex final syllables do not influence the tonal structure since verbal forms with profiles B, D and E lack a final H tone, hence there is no retraction.

3.5.3 H tone bridge

The process H Tone Bridge (TB) occurs in one-word p-phrases as well as in longer p-phrases. In this section, we concentrate on TB in one-word p-phrases (TB in the other types of p-phrases are dealt with in 8.2.2 and 8.3.2).

TB is a stem-based tonal rule which occurs between a S1-H tone and the retracted SF-H tone in the penultimate syllable. This process occurs in stems with profile A, but only those without a complex final syllable. Stems with a complex final syllable do not have a retracted H tone in the penultimate syllable, hence there is no TB. This shows that TB needs to take the syllable division into account when applying.

Nouns:

	previous rule		next rule
	R	TB	
A S1/SF	°li-pélepeénde	> °li-pélépéénde	DI
	°u-tútuúli	> °u-tútúúli	DI

Verbal forms:

	R	TB	
A	°ku-pílikaána	> °ku-pílíkáána	DI
	°ku-tóngoóla	> °ku-tóngóóla	DI
cf.	°ku-pélekeedía		
cf.	°ku-kúndaanía		

Forms with disyllabic stems do not need TB to reach their surface forms since R (plus Default L-Insertion) already gives that result (see 3.5.2).

As noted in 3.4.3, when the S1-H tone is deleted by Meeussen's Rule, there is no TB. An example: when the verbal forms above have an object concord, which has a H tone in the Infinitive, the S1-H tone is deleted by Meeussen's Rule (MR). The result is that there is no TB.

		surface form	
A	^o ku-lí-tóngolá		kù-lí-tòngòólà
	MR		PUL, R
A	^o ku-lí-tongolá	>	^o ku-lí-tongoóla

3.5.4 Prefix-H tone shift

The H tone of a (pro)nominal prefix or a verbal prefix (subject concord) shifts to the S1-position of the stem, or, when an object concord is involved, to the first position of the macrostem. This process is called Prefix-H tone Shift (PS). With nouns, similar tone patterns as verbal forms have led to the assumption that this shift happens to nouns in a similar way as to verbal forms. With verbal forms, the shift occurs via the tense marker. The shift does not occur, or it stops on the tense marker, when the disyllabic stem contains a R tone; this constraint, an instance of the OCP, prevents the H tone to shift next to the H tone on the second TBU of the penultimate syllable.

Nouns:

		previous rule		next rule
		R	PS	
C	SF	^o ú-njenjeéma	>	^o u-njénjeéma DI
D	no H	?		

Verbal forms:

		previous rule		next rules
		R	PS	
C	^o tú-ni-pílikaána	>	^o tu-ni-pílikaána	DI
	^o tú-ni-pelekeedía	>	^o tu-ni-pélekeedía	C,TD,F,DI
	^o tú-ni-tongoóla	>	^o tu-ni-tóngoóla	DI
	^o tú-ni-kundaanía	>	^o tu-ni-kúndaanía	C,TD,F,DI
	^o tú-ni-loóla	>	^o tu-ní-loóla	DI
	^o tú-ni-liimía	>	^o tu-ni-líimía	C,F,DI

	°tú-ni-uudíá	>	°tu-ni-úudíá	C,F,DI
	°tú-ni-iílíá	>	°tu-ni-íílíá	C,F,DI
	PUL		PS	
D	°tú-na-pilikaane	>	°tu-na-pílikaane	TD,DI
	°tú-na-tongoole	>	°tu-na-tóngoole	TD,DI
	°tú-na-loole	>	°tu-na-lóole	DI
	°tú-na-uudie	>	°tu-na-úudie	C,DI
	°tú-na-aalie	>	°tu-na-áalie	C,DI

With some examples, Coalescence is optional; both tracks (with and without C) can be followed in the sections to come.

The shift of the Px-H tone is not to the S1-position when there is an object concord (with verbal forms); then, the shift is to the object concord. This shows that the rule has the macrostem as domain of application. The examples we use are the verbal forms above, but now with object concord. First, we give the lexical forms, followed by the post-lexical forms until the stage where PS applies.

		surface forms	
C	°tú-ni-li-pilikaná	tù-nì-lí-pílikàánà	we have heard it
	°tú-ni-li-pelekedíá	tù-nì-lí-pélèkèèdyà	we have sent it
	°tú-ni-li-tongolá	tù-nì-lí-tòngòólà	we have spoken it
	°tú-ni-li-kundaniá	tù-nì-lí-kúndàànyà	we have mixed it
	°tú-ni-li-lolá	tù-nì-lí-lòólà	we have looked at it
	°tú-ni-li-limiá	tù-nì-lí-lîmyà	we have made it cultivate
	°tú-ni-li-udíá	tù-nì-lí-úúdyà/ tù-ní-lyúúdyà	we have asked (cl.5)
	°tú-ni-li-iliá	tù-ní-lîlyà	we have eaten it
D	°tú-na-li-pilikane	tù-nà-lí-pílikàànè	we shouldn't hear it
	°tú-na-m-pilikane	tù-nám'-pílikàànè	we shouldn't hear it
	°tú-na-li-tongole	tù-nà-lí-tóngòòlè	we shouldn't speak it
	°tú-na-li-lole	tù-nà-lí-lóòlè	we shouldn't look at it
	°tú-na-li-udie	tù-nà-lí-úúdyè/ tù-ná-lyúúdyè	we shouldn't ask (cl.5)
	°tú-na-li-ilie	tù-ná-lîlyè	we shouldn't eat it

	previous rules		next rules
	PUL, R		PS
C	°tú-ni-li-pilikaána	>	°tu-ni-lí-pilikaána
	°tú-ni-li-pelekeedíá	>	°tu-ni-lí-pelekeedíá
	°tú-ni-li-tongoóla	>	°tu-ni-lí-tongoóla
	°tú-ni-li-kundaanía	>	°tu-ni-lí-kundaanía
	°tú-ni-li-loóla	>	°tu-ni-lí-loóla
			TD,DI
			C,TD,F,DI
			DI
			C,TD,F,DI
			DI

	^o tú-ni-li-liimíá	>	^o tu-ni-lí-liimíá	C,TD,F,DI
	^o tú-ni-li-uudíá	>	^o tu-ni-lí-uudíá	C,TD,F,DI
	^o tú-ni-li-iilíá	>	^o tu-ni-lí-iilíá	C,TD,F,DI
	PUL		PS	
D	^o tú-na-li-pilikaane	>	^o tu-na-lí-pilikaane	TD,DI
	^o tú-na-m-pilikane	>	^o tu-na-m'-pilikaane	C,TD,DI,TA
	^o tú-na-li-tongoole	>	^o tu-na-lí-tongoole	TD,DI
	^o tú-na-li-loole	>	^o tu-na-lí-loole	TD,DI
	^o tú-na-li-uudie	>	^o tu-na-lí-uudie	C,TD,DI
	^o tú-na-li-iilie	>	^o tu-na-lí-iilie	C,TD,DI

All subject concords, participants and classes, have the same tones in the tenses above since there are no different surface forms in the paradigms. The assumption that the tone of the subject concords is H in the tenses above is explained as follows. The tones and their positions in the tenses above are similar to those in other tenses where we are sure that subject concords have a H tone; in these tenses, there is a distinction between H-toned subject concords (the classes) and non-H-toned subject concords (the participants). Such a tense is the Non-Past which we have used as an example of a tense with stem profile C (SF-H tone) from 3.4.1 onwards.

Participants (non-H-toned, see from 3.4.1):

		surface forms	
C	^o tu-na-pilikaná	tù-nà-pìlikáánà	we (will) hear
	^o tu-na-pelekedíá	tù-nà-pèlékèèdyà	we (will) send
	^o tu-na-tongolá	tù-nà-tòngòólà	we (will) speak
	^o tu-na-kundaniá	tù-nà-kùndàànyà	we (will) mix
	^o tu-na-lolá	tù-nà-lòólà	we (will) look
	^o tu-na-limiá	tù-nà-liìmyà	we (will) make cultivate
	^o tu-na-uudiá	tù-nà-ùúdyà/tù-nùúdyà	we (will) ask
	^o tu-na-aaliá	tù-nààlyà	we (will) eat

Classes (H-toned):

		surface forms	
C	^o vá-na-pilikaná	và-nà-pìlikáánà	they (will) hear
	^o vá-na-pelekedíá	và-nà-pèlékèèdyà	they (will) send
	^o vá-na-tongolá	và-nà-tòngòólà	they (will) speak
	^o vá-na-kundaniá	và-nà-kùndàànyà	they (will) mix
	^o vá-na-lolá	và-nà-lòólà	they (will) look
	^o vá-na-limiá	và-nà-liìmyà	they (will) make cultivate
	^o vá-na-udiá	và-nà-ùúdyà/và-núúdyà	they (will) ask
	^o vá-na-aliá	và-nàályà	they (will) eat

previous rules

	PUL, R	PS
C	°vá-na-pilikaána	> °va-na-pílikaána
	°vá-na-pelekeedía	> °va-na-pélekeedía
	°vá-na-tongoóla	> °va-na-tóngoóla
	°vá-na-kundaaanía	> °va-na-kúndaanía
	°vá-na-loóla	> °va-na-loóla
	°vá-na-liimía	> °va-na-líimía
	°vá-na-uudía	> °va-na-úudía
	°vá-na-iilía	> °va-na-íilía

With object concord:

surface forms

C	°vá-na-li-pilikaná	và-nà-lí-pílikàánà	they (will) hear it
	°vá-na-li-pelekedía	và-nà-lí-pélèkèèdyà	they (will) send
	°vá-na-li-tongolá	và-nà-lí-tòngòólà	they (will) speak it
	°vá-na-li-kundaniá	và-nà-lí-kúndàànya	they (will) mix it
	°vá-na-li-lolá	và-nà-lí-lòólà	they (will) look at it
	°vá-na-li-limiá	và-nà-lí-lîmyà	they (will) make it cultivate
	°vá-na-li-udíá	và-nà-lí-úúdyà/	
		và-ná-lyúúdyà	they (will) ask (cl.5)
	°vá-na-li-iliá	và-ná-lîlyà	they (will) eat it

previous rules

	PUL, R	PS
C	°vá-na-li-pilikaána	> °va-na-lí-pilikaána
	°vá-na-li-pelekeedía	> °va-na-lí-pelekeedía
	°vá-na-li-tongoóla	> °va-na-lí-tongoóla
	°vá-na-li-kundaaanía	> °va-na-lí-kundaaanía
	°vá-na-li-loóla	> °va-na-lí-loóla
	°vá-na-li-liimía	> °va-na-lí-liimía
	°vá-na-li-uudía	> °va-na-lí-uudía
	°vá-na-li-iilía	> °va-na-lí-iilía

All these forms of the Non-Past with H-toned subject concords, from the underlying stages until the surface forms, are tonally identical with the Present Perfective *djt* and the Negative Optative which we use as examples in the processes we describe. We therefore do not present further forms of the Non-Past with H-toned subject concords in the following sections.

There are also pronominal forms with H-toned pronominal prefixes; among them are °^H-**njí** ‘other’, and the Possessives. These forms are dealt with in 5.5 and 5.6.

There is also Px-H tone shift with p-phrases containing two words, but in these cases, the H tone shifts to the final TBU of the verbal form (see 8.3.2).

3.5.5 Coalescence, resyllabification and OC-H tone retraction

Vowel Coalescence/Glide Formation (VC/GF, including vowel incorporation) is optional in some environments and obligatory in others, and there are even environments where VC/GF may never occur. These environments are described in 2.7. VC/GF is obligatory in complex final syllables, where a glide appears, because there is a condition on syllabification that every syllable within a verbal stem, where one of the processes of verbal base and stem formation has occurred, must have an onset. As a result of tonal coalescence (see below), the final H tone (in case of TG A and C) appears on the Final, where the later process Final H Deletion deletes them. Resyllabification takes place. In the case of minisyllabic stems, their first vowel (S1) and the preceding morpheme form one syllable (see 3.4.1).

		previous rule	C	next rules
		R		
A	S1/SF	? °u-úúnu	> °úúnu	DI
		? °u-úúchi	> °úúchi	DI
		°ku-pélekeedíá	> °ku-pélekeedyá	TD,F,DI
		°ku-kúndaaníá	> °ku-kúndaanyá	TD,F,DI
		°ku-liímíá	> °ku-liímyá	F,DI
		°ku-úudíá	> °ku-úudyá/ °kúúdyá	F,DI
		°ku-úulíá	> °kúúlyá	F,DI
		PUL		
B	S1	°va-li-úudíe	> °va-lyúúdye	DI
		°va-li-íílie	> °va-liílye	DI
		R		
C	SF	°mi-uútwe	> °myuútwe	DI
		°mi-ííhi	> °mííhi	DI
		°vi-íínu	> °víínu	DI
		°tu-na-pelekedíá	> °tu-na-pelekeedyá	F,DI
		°tu-na-kundaníá	> °tu-na-kundaanyá	F,DI
		°tu-na-limíá	> °tu-na-liímyá	F,DI
		°tu-na-uudíá	> °tu-na-uudyá/ °tu-nuudyá	F,DI
		°tu-na-aalíá	> °tu-naalyá	F,DI

		PS	
		°tu-ni-lí-pelekeedía	> °tu-ni-lí-pelekeedyá TD,F,DI
		°tu-ni-pélekeedía	> °tu-ni-pélekeedyá TD,F,DI
		°tu-ni-lí-kundaanía	> °tu-ni-lí-kundaanyá TD,F,DI
		°tu-ni-kúndaanía	> °tu-ni-kúndaanyá TD,F,DI
		°tu-ni-lí-liimía	> °tu-ni-lí-liimyá TD,F,DI
		°tu-ni-liimía	> °tu-ni-liimyá F,DI
		°tu-ni-úudía	> °tu-ni-úudyá/ F,DI
			°tu-nyúúdyá F,DI
		°tu-ni-lí-uudía	> °tu-ni-lí-uudyá/ TD,F,DI
			°tu-ní-lyuudyá TD,F,DI
		°tu-ni-íilía	> °tu-ní-ílyá F,DI
		°tu-ni-lí-iilía	> °tu-ní-liilyá TD,F,DI
		PUL	
D	no H	°chi-aanga	> °chaanga DI
		°mu-uuyo	> °muuyo DI
		°li-uudie	> °lyudye DI
		°li-iilie	> °liilye DI
		PS	
		°tu-na-m'-pilikaane	> °tu-nam'-pilikaane DI,TA
		°tu-na-úudie	> °tu-na-úudyé/ DI
			°tu-núúdyé DI
		°tu-na-lí-uudie	> °tu-na-lí-uudyé/ TD,DI
			°tu-ná-lyuudyé TD,DI
		°tu-na-áalie	> °tu-náálye DI
		°tu-na-lí-iilie	> °tu-ná-liilye TD,DI
		PUL	
E		°va-li-uúdia	> °va-lyuúudia S,DI
		°va-li-íilia	> °va-liíilia S,DI

There are nine examples where VC/GF is optional since it concerns the merging of the infinitive marker or a tense marker or an object concord with a vowel-initial stem (see 2.7).

°ku-úudía	> °ku-úudyá, °kúúdyá
°va-li-úudie	> °va-li-úudye, °va-lyuúdye
°tu-na-uudía	> °tu-na-uudyá, °tu-nuudyá
°tu-ni-úudía	> °tu-ni-úudyá, °tu-nyúúdyá
°tu-ni-lí-uudía	> °tu-ni-lí-uudyá, °tu-ní-lyuudyá
°li-uudie	> °li-uudye, °lyuudyé
°tu-na-úudie	> °tu-na-úudye, °tu-núúdye
°tu-na-lí-uudie	> °tu-na-lí-uudyé, °tu-ná-lyuudyé
°va-li-uúdia	> °va-li-uúdyá, °va-lyuúdyá

The examples with VC/GF show that VC/GF may have consequences for the H tones, e.g., a zero-H-zero sequence becomes HH (first, third and fifth example). What happens to the H tone of a fused object concord is dealt with at the end of this section. More examples of VC/GF (which are obligatory or optional) show more consequences. Below, VC/GF is optional in all examples, except for the examples under 3. where VC/GF is obligatory. The examples are not included in the description of the rules which follow in the next sections. We call VC/GF with respect to tones tonal coalescence.

The results of tonal coalescence are the following:

1. Coalescence of two H tones results in a H tone:

HH → H

[°]pa-vá-ú-lóola → pà-vú-lóòlà when they look at it (cl.3)

2. Coalescence of a H tone and a zero tone results in a H tone:

H zero → H

[°]tu-chí-oloóta → tù-chólòótà we were pointing

We assume that this tonal coalescence also happens in complex final syllables with a final H tone. When the result of tonal coalescence is that two primary H tones appear next to each other, then the second H tone is deleted by Meeussen's Rule.

[°]tu-ká-i-lólíite → tù-kí-lòlíitè we have not looked at it

3. Coalescence of a H tone, a zero tone and a H tone results in a H-zero sequence (a F tone after Default L tone insertion).

H zero H → H zero

This is in fact the same case as the final one of 2. above: the result of tonal coalescence is that two primary H tones appear next to each other, and the second H tone is deleted by Meeussen's Rule.

[°]lí-aángu > lyáàngù mine (cl.5)

[°]mú-aána > mwáànà child

4. Coalescence of a zero tone and a H tone results in two successive H tones, on two syllables as well as on one syllable (level H tones):

zero H → H.H

zero H → HH

[°]la-na-éneleedya → là-nénélèèdyà it extends

[°]tu-na-íive → tù-níívè we should not steal

When the result of tonal coalescence is that two primary H tones appear next to each other, the second H tone is deleted by Meeussen's Rule, i.e. the first H of the fused vowel; as a consequence, the second H resulted from the fused vowel is not realized, and a default L appears.

H.zero H → H.zero

°tu-chí-va-údiidya → tù-chí-vùdiidya we were asking for them
 °tu-chí-va-úudya → tù-chí-vùùdya we were asking them

Processes of tonal coalescence also occur with Penultimate Shortening (3.5.9).

There is a rule connected to tonal coalescence which retracts the H tone of an object concord to the preceding tense marker. This rule is called the "OC-H tone retraction". With forms with an object concord which have a Px-H tone and a vowel-initial stem with profile C or D, the Px-H tone shifts to the object concord. When there is coalescence between the vowel of the object concord and the stem-initial vowel, the H tone of the object concord is retracted to the preceding tense marker.

C °tu-ni-lí-uudíá > °tu-ní-lyuudyá
 D °tu-na-lí-uudie > °tu-ná-lyuudye

This coalescence is optional, the non-contracted forms °tu-ni-lí-uudyá and °tu-na-lí-uudye follow their own tracks in the derivation (see above).

3.5.6 H tone doubling, final H deletion and Structure simplification

With H Tone Doubling (TD), a H tone generally doubles one mora to its right, irrespective of morpheme boundaries. It is a word-based tonal rule. With Final H deletion (F), the final H tone of a complex final syllable is deleted. With Structure Simplification (S), penultimate syllables with three TBU's, mainly due to S2 tonal lengthening on disyllabic stems (TG E), are reduced to two TBU's. These processes are dealt with together because they do not have a clear order of application relative to each other. Where both H Tone Doubling and Final H deletion apply, we have in the examples below arbitrarily chosen the order TD - F.

previous rule	TD	F	next rules
C			
A °ku-pélekeedyá	> °ku-pélékeedyá	°ku-pélékeedya	DI
°ku-kúndaanyá	> °ku-kúndaanyá	°ku-kúndaanya	DI
°ku-líimya	>	°ku-líimya	DI
°ku-úudyá/	>	°ku-úudya/	DI

	°kúúdyá	>	°kúúdyá	DI
	°kúúlyá	>	°kúúlya	DI
PUL				
B	°va-lúmilaanga	>	°va-lúmilaanga	DI
	°li-híndiili	>	°li-híndiili	DI
	°va-li-pílikaane	>	°va-li-pílikaane	DI
	°va-li-tóngóole	>	°va-li-tóngóole	DI
PS				
C	°tu-ni-lí-pílikaána	>	°tu-ni-lí-pílikaána	DI
C				
	°tu-na-pelekeedyá	>	°tu-na-pelekeedya	DI
	°tu-na-kundaanyá	>	°tu-na-kundaanya	DI
	°tu-na-liimya	>	°tu-na-liimya	DI
	°tu-na-udyá	>	°tu-na-uudya	DI
	°tu-nuudyá	>	°tu-nuudya	DI
	°tu-naalyá	>	°tu-naalya	DI
	°tu-ni-pélekeedyá	>	°tu-ni-pélékeedya	DI
	°tu-ni-lí-pelekeedyá	>	°tu-ni-lí-pélekeedya	DI
	°tu-ni-kúndaanyá	>	°tu-ni-kúndaanya	DI
	°tu-ni-lí-kundaanyá	>	°tu-ni-lí-kúndaanya	DI
	°tu-ni-liimya	>	°tu-ni-liimya	DI
	°tu-ni-lí-liimya	>	°tu-ni-lí-liimya	DI
	°tu-ni-úudyá	>	°tu-ni-úudya	DI
	°tu-nyúúdyá	>	°tu-nyúúdyá	DI
	°tu-ni-lí-uudyá	>	°tu-ni-lí-úudya	DI
	°tu-ní-lyuudyá	>	°tu-ní-lyúudya	DI
	°tu-níilyá	>	°tu-níilya	DI
	°tu-ní-liilyá	>	°tu-ní-liilya	DI
PS				
D	°tu-na-pílikaane	>	°tu-na-pílikaane	DI
	°tu-na-lí-pílikaane	>	°tu-na-lí-pílikaane	DI
	°tu-na-tóngóole	>	°tu-na-tóngóole	DI
	°tu-na-lí-tongoole	>	°tu-na-lí-tóngóole	DI
	°tu-na-lí-loole	>	°tu-na-lí-lóole	DI
C				
	°tu-nam'-pílikaane	>	°tu-nam'-pílikaane	DI,TA
	°tu-na-lí-uudye	>	°tu-na-lí-úudye	DI
	°tu-ná-lyuudye	>	°tu-ná-lyúudye	DI
	°tu-ná-liilye	>	°tu-ná-liilye	DI

PUL			
E	°vi-tukútuuku	> °vi-tukútúuku	DI
	°va-li-pilíkaana	> °va-li-pilíkáana	DI
	previous rule	S	next rule
PUL			
E	°ma-vaáala	> °ma-váála	DI
	°va-li-loóola	> °va-li-lóóla	DI
C			
	°va-li-uúudia	> °va-li-úúdyá	DI
	°va-lyuúudia	> °va-lyúúdyá	DI
	°va-liíilia	> °va-líílya	DI

With Structure Simplification, three TBU's are reduced to two TBU's (and two TBU's to one TBU). Three TBU's may appear after S2-tonal lengthening on disyllabic stems, other cases are mentioned in 3.5.8. The tonal coalescence we see here is probably the same as the fourth case described in 3.5.5: zero H → HH.

Final H Deletion is blocked with certain Substitutives and Demonstratives (see 5.2 and 5.3) as well as in case of the Optative without object concord (see 7.2.4). Some examples are the following (in the rest of this section, we give the surface forms because, after H Tone Doubling and Final H Deletion, only default L tones are needed to derive the surface forms):

ùnèèné	I (emphatic)
àyùùlá, ààyú	that (cl.1)
ánèèyó, ààyó	that (referential, cl.1)
tùùlyé	we should eat
tù(-)ùdyé	we should ask
tù-lìimyé	we should make cultivate
tù-kùndàànyé	we should mix
tù-pèlèkèèdyé	we should send

There is no H tone doubling to the final syllable. The following OCP effects are observed: H tone doubling may not create a H tone bridge, nor lead to a long syllable with a level HH tone; as a consequence, there is no H tone doubling to a TBU preceding a H tone, nor to the lengthened TBU in the penultimate syllable (the second example below shows both cases).

và-nà-tù-lóólà	they (will) look at us
và-ká-tù-lóólà	they do not look at us

There is also no H tone doubling to the TBU preceding the penultimate syllable which contains a R tone.

và-nà-ví-tòngòólà	they (will) speak them (cl.8)
tù-ví-tòngòólà	we who speak them
cf. tù-ví-tòngòólà kàdiíkì	we who speak them a bit

Finally, there is no H tone doubling to another word, which confirms that doubling is a word-based tonal rule (with one exception, concerning nouns without H tones which start with the word formation element **na-**, to be dealt with in 8.3.2 in the section about Regressive H Tone Dissimilation).

tòngòólà chiìhì just speak!

Some tense markers block H tone doubling (see 7.1.5), but with larger stems with all L tones, H tone doubling is optional.

tù-chí-yàngàátà	we were helping
tù-chí-và-yàngàátà	we were helping them
tù-chí-kùndàànyà/tù-chí-kúndàànyà	we were mixing
tù-chí-vì-kùndàànyà/tù-chí-ví-kùndàànyà	we were mixing them
tù-ká-yàngèètè/tù-ká-yángèètè	we hadn't helped
tù-ká-và-yàngèètè/tù-ká-vá-yàngèètè	we hadn't helped them

In tenses where the TM does not block H tone doubling, there is an optional second H tone doubling if the remainder of the word is all-L.

kù-vá-kúndàniidyà/kù-vá-kúndániidyà	to mix for them
kù-vá-pélékèedyà/kù-vá-pélékèedyà	to send them
cf. kù-vá-pílikàniilà	to listen to them
tú-ní-kàtàpààdyà/tú-ní-kàtàpàtààdyà	we had cleaned
cf. tú-ní-pílikàniilà	we had listened
tú-ná-kàtàpààdyà/tú-ná-kàtàpàtààdyà	we cleaned
cf. tú-ná-pílikàniilà	we listened

This second doubling is obligatory with all Indirect Relative tenses with object concord with stems with all L tones. Some examples:

pà-tú-vá-yàngàátà	when we help them
pà-tú-vá-pílikàniilà	when we listen to them
pà-tú-vá-yàngèètè	when we have helped them
pà-tú-vá-pílikàniilè	when we have listened to them
cf. pà-tú-yàngàátà	when we help
cf. pà-tú-pílikàniilà	when we listen
cf. pà-tú-yàngèètè	when we have helped
cf. pà-tú-pílikàniilè	when we have listened

3.5.7 Default L tone insertion

Default L tones are inserted. The forms of the sections 3.5.1 - 3.5.6 which were followed by DI under ‘next rules’ reach their surface forms.

	previous rule	DI
A S1/SF	TB	
	°li-pélépéénde	> li-pélépééndè
	°ku-pílikáána	> kù-pílikáána
	°u-tútúúli	> ù-tútúúli
	°ku-tóngóola	> kù-tóngóola
	°ku-lí-tongoóla	> kù-lí-tòngòólà
	R	
	°ma-káála	> mà-káálà
	°di-nóóndwa	> dì-nóóndwà
	°ku-lóóla	> kù-lóólà
	C	
	°úúnu	> úúnù
	°úúchi	> úúchì
	TD,F	
	°ku-pélékeedya	> kù-pélékèèdyà
	°ku-kúndáanya	> kù-kúndáànyà
	F	
	°ku-lĩmya	> kù-lĩmyà
	°ku-úudyà/	> kù-úúdyà/
	°kúúdyà	> kúúdyà
	°kúúlya	> kúúlyà
B S1	PUL	
	°a-hĩmba	> à-hĩmbà
	°va-li-lóole	> và-li-lóòlè
	C	
	°va-li-úudye	> và-li-úúdyè
	°va-lyúúdyè	> và-lyúúdyè
	°va-líílye	> và-líílyè
	TD	
	°va-lúmilaanga	> và-lúmílààngà
	°li-híndĩili	> lì-híndĩìli
	°va-li-pílikaane	> và-li-pílikàànè
	°va-li-tóngóole	> và-li-tóngóòlè

C SF	R	
	°ma-kolobeéko	> mà-kòlòbèékò
	°li-kumbaátu	> lì-kùmbàátù
	°ma-haála	> mà-hàálà
	°lí-tíínjì	> lí-tíínjì
	°tu-na-pilikaána	> tù-nà-pilikaána
	°tu-na-tongoóla	> tù-nà-tòngòólà
	°tu-na-loóla	> tù-nà-lòólà
	PS	
	°u-njénjeéma	> ù-njénjèémà
	°tu-ni-pilikaána	> tù-ni-pílikàánà
	°tu-ni-tongoóla	> tù-ni-tòngòólà
	°tu-ni-lí-tongoóla	> tù-ni-lí-tòngòólà
	°tu-ní-loóla	> tù-ni-lòólà
	°tu-ni-lí-loóla	> tù-ni-lí-lòólà
C	°myuútwe	> myùútwè
	°mííhi	> mìíhì
	°viínu	> viðnú
TD	°tu-ni-lí-pilikaána	> tù-ni-lí-pílikàánà
TD,F	°tu-ni-pélékeedya	> tù-ni-pélèkèèdyà
	°tu-ni-lí-pélekeedya	> tù-ni-lí-pélèkèèdyà
	°tu-ni-kúndaanya	> tù-ni-kúndaànyà
	°tu-ni-lí-kúndaanya	> tù-ni-lí-kúndaànyà
	°tu-ni-lí-liimya	> tù-ni-lí-lîmyà
	°tu-ni-lí-úudya	> tù-ni-lí-úùdyà
	°tu-ní-lyúudya	> tù-ní-lyúùdyà
	°tu-ní-lílyà	> tù-ní-lîlyà
F	°tu-na-pelekeedya	> tù-nà-pèlèkèèdyà
	°tu-na-kundaanya	> tù-nà-kùndaànyà
	°tu-na-liimya	> tù-nà-liîmyà
	°tu-na-uudya	> tù-nà-ùùdyà
	°tu-nuudya	> tù-nùùdyà
	°tu-naalya	> tù-nààlyà
	°tu-ni-lîmya	> tù-ni-lîmyà
	°tu-ni-úudya	> tù-ni-úùdyà
	°tu-nyúúdyà	> tù-nyúùdyà
	°tu-nílyà	> tu-nîlyà

D	no H	PUL		
		°vi-kokoloowa	> vi-kòkòlòòwà	
		°n-tandaasa	> `n-tàndààsà	
		°vi-yeewe	> vi-yèèwè	
		°li-pilikaane	> li-pìlikàànè	
		°li-tongoole	> li-tòngòòlè	
		°li-loole	> li-lòòlè	
		PS		
		°tu-na-lóole	> tù-nà-lóòlè	
		C		
		°chaanga	> chààngà	
		°muuyo	> mùùyò	
		°li-uudye	> li-ùùdyè	
		°lyuudye	> lyùùdyè	
		°liilye	> liilyè	
		°tu-na-úudye/	> tù-nà-úùdyè/	
		°tu-núúdye	> tù-núúdyè	
		°tu-náálye	> tù-náályè	
		TD		
		°tu-na-pílikaane	> tù-nà-pìlikàànè	
		°tu-na-lí-pílikaane	> tù-nà-lí-pìlikàànè	
		°tu-nam'-pílikaane	> °tù-nàm'-pìlikàànè	> TA
		°tu-na-tóngoole	> tù-nà-tòngòòlè	
		°tu-na-lí-tóngoole	> tù-nà-lí-tòngòòlè	
		°tu-na-lí-lóole	> tù-nà-lí-lòòlè	
		°tu-na-lí-úudye	> tù-nà-lí-ùùdyè	
		°tu-ná-lyúudye	> tù-ná-lyùùdyè	
		°tu-ná-liilye	> tù-ná-liilyè	
E	S2	PUL		
		°li-putíla	> li-pùtíla	
		°chi-loóongo	> °chì-lòòòngò	> TA
		°va-li-tongóola	> vâ-li-tòngóòlà	
		S		
		°ma-váala	> mà-váálà	
		°va-li-lóóla	> vâ-li-lóólà	
		°va-li-úúdyà	> vâ-li-ùùdyà	
		°va-lyúúdyà	> vâ-lyùùdyà	
		°va-liílya	> vâ-liílyà	

TD	
[◦] vi-tukútúuku	> vî-tùkútúùkù
[◦] va-li-pilíkàana	> vâ-li-pilíkàànà

3.5.8 Tone assimilation

There are two types of tone assimilation with one-word p-phrases (see 8.2.2 and 8.2.3 for tone assimilation with longer p-phrases). The first type concerns the raising of the mora preceding a syllabic nasal with a H tone, the second type concerns the raising of the mora preceding a HL or HH tonal sequence in the same syllable.

	previous rule	TA
	DI	
D	no H	[◦] tù-nám'-pílikàànè > tù-nám'-pílikàànè
	DI	
E	S2	[◦] chì-lóòòngò > chì-lóòòngò

About the first type, with Coalescence and resyllabification, a syllabic nasal and the preceding syllable become one syllable. When the syllabic nasal has a H tone, the preceding TBU becomes H as well. Some more examples follow.

	[◦] kún-pàpàátà	>	kún-pàpàátà	to follow her/him
cf.	kù-vá-pàpàátà			to follow them
	[◦] tù-nín-pàpàátà	>	tù-nín-pàpàátà	we have followed her/him
cf.	tù-nì-vá-pàpàátà			we have followed them
	[◦] pám'-pàpàátà	>	pám'-pàpàátà	when you (pl.) follow
cf.	pà-tú-pàpàátà			when we follow

Concerning the second type, the first L of a LHL and a LHH tonal sequence within a syllable is raised to the level of a lowered H (H). We found three other nouns and a verbal form where this process occurs.

u-lóòòngò	soil
móóòtò	fire
múúùndù	chopper

và-véén-kúíímà they are cultivating

The verbal form above is a complex tense, the Present Progressive (see 7.4). It is derived from **và-véén-kúíímà** 'they are cultivating', where the **l** of **-vele-** is omitted and three syllables are fused into one. Here, too, the L tone is raised to a level of a lowered H. Note that with the nouns, the process Structure Simplification has not occurred. The blocking of this process is the reason why the LHL tonal sequence survives on the penultimate syllable; in case of Structure Simplification, such a tonal

sequence ends up as a level H tonal sequence, as occurs in the other cases (see 3.5.5 and 3.5.6). In another dialect of Makonde, Chindonde, Structure Simplification is blocked with more words with a LHL tonal penultimate, including words where this process applies in Chinnima. Some examples (tone assimilation applies in Chindonde, too):

Chindonde	Chinnima	
kúúúlyà	kúúlyà	to eat
mà-vááàlà	mà-váálà	shoulders

There are other cases in Chinnima where Structure Simplification is blocked. These cases are nouns, IPP's and verbal forms (Direct Relative Present and Direct Relative Present Perfective) with a HLH tonal sequence on the penultimate syllable of their disyllabic stems.

lúúúndù	tomorrow
hwééétù	we
à-ííivà	(s)he who steals
ndííimà	I who cultivate
tù-wééètè	we who have put on clothes

Some more information can be given about the cases above. With the verbal forms, a specific rule applies which causes an extra lengthening (see 7.2.2). The IPP's consist of two parts, the first one being a bound substitutive, the second one is the corresponding possessive stem (**hwé-** and **-éétu** in the example above, see 5.2).

3.5.9 Penultimate shortening

When there is one p-phrase (and no concatenation of p-phrases), the order of processes given in the preceding sections holds, with Tone assimilation as the last process. This is the reason why we have described the processes in the given order. But when there is a concatenation of p-phrases, the concatenation itself occurs after the processes H Tone Doubling, Final H deletion and Structure Simplification, and the two other processes, Default L tone insertion and Tone assimilation, apply when the concatenation is finished (see 3.6.1, 8.3.3 and 8.5).

As described in 3.2, PUL signals the end of a p-phrase. Thus, when two p-phrases are concatenated, PUL applies to both p-phrases.

vàlúúmè vaviili	two men
vàlúúmè vákúlúúngwà	big men

This is also the case when several p-phrases are concatenated; the example below consists of a series of one-word p-phrases.

vàlúúmè vāvīlī vānīvāíng'à vālúúmè vākúlúungwà àng'úkù `nchèchè kùkááyà

two men have given the big men four chickens at home

Every p-phrase is subject to PUL. But with fast speech, the penultimate syllable of a non-final p-phrase may be reduced. We call this process PenUltimate Shortening (PUS, see 2.9).

vàlúúmè vāvīlī
vàlúúmè vākúlúungwà

vàlúúmè vāvīlī vānīvāíng'à vālúúmè vākúlúungwà àng'úkù `nchèchè kùkááyà

Thus, PUL feeds PUS. One might think, that the forms without PUL can directly be derived from their underlying forms, but there are arguments for our analysis. We have stated in 3.2 that forms without PUL occur non-finally in longer p-phrases. These forms can directly be derived from their underlying forms. One example of a p-phrase consisting of two words in 3.2 was **vàlúúmè vāánò** 'these men'. The first word in this p-phrase without PUL can directly be derived from its underlying form **vàlúúmè** (tonal profile A: S1/SF). Compare this example with the example of the two concatenated p-phrases used above **vàlúúmè vāvīlī** 'two men' and its short variant **vàlúúmè vāvīlī**. The first word of this short variant can not directly be derived from its underlying form. But it can directly be derived from the form with PUL: shortening of the penultimate syllable involves Coalescence (vowel coalescence and tonal coalescence), and, as we have seen in 3.5.5 with respect to tonal coalescence, tonal coalescence of HH results in H.

PUS applies after the processes H Tone Doubling, Final H deletion and Structure Simplification, and after PUS, the processes Default L tone insertion and Tone assimilation apply. The results of tonal coalescence found with PUS are the same as those found with Coalescence, most of which are exemplified in the sentence above:

vàlúúmè	→ vàlúúmè	: HH → H
vāvīlī	→ vāvīlī	: zero H → H.H
vānīvāíng'á	→ vānīvāíng'à	: H.zero H → H.zero (default L) (MR)
vākúlúungwá	→ vākúlúungwà	: H.H zero → H.zero (default L) (MR)
àng'úkù	→ àng'úkù	: H zero → H

Other examples of PUS are the following:

muúundu	→ múúndù	: zero H zero → HH
hwééétu	→ hwéétù	: H zero H → H zero (F after DI) (MR)

Rarely, PUS may even apply again to the final two examples with very fast speech, e.g. in songs; even disyllabic words with penultimate length may then be shortened (we give one example).

°múúndu	→ múndù	: HH → H
°hwéetu	→ hwétù	: H zero → H
°úúmo	→ úmó	: zero H → H.H

3.6 Post-lexical processes with i-phrases and utterances

One or more p-phrases constitute an intonational phrase (i-phrase), one or more i-phrases constitute an utterance (U). Penultimate lengthening marks the end of a p-phrase, and since an i-phrase consists of one or more p-phrases, there is also PUL at the end of an i-phrase. And since an U consists of one or more i-phrases, there is also PUL at the end of an U. But the characteristic to mark the end of an i-phrase is the intonational H tone, and the characteristic to mark the end of an U is register lowering of the final two TBU's.

3.6.1 The intonational H tone and utterance-final register lowering

In the previous section, we noted that concatenation of p-phrases occurs after the processes H Tone Doubling and Final H deletion, and the processes Default L tone insertion and Tone assimilation apply after concatenation. With concatenation of p-phrases, i-phrases are formed, and it turns out that Default L tone insertion and Tone assimilation apply after the formation of i-phrases.

In addition to PUL, the end of an i-phrase is often marked by an intonational H tone on the final syllable of its final word; the H tone on the preceding TBU is deleted, so the possible tone patterns of i-phrase-final words end with ...HL.H or ...LL.H. In the examples below, the end of an i-phrase is marked by a comma (the end of the larger unit, the Utterance, is marked by a period; the end of the smaller unit, the p-phrase, can be recognized by PUL).

°méédi	→ méédi,	water
°úúhu	→ úúhú,	flour
°apaáno	→ àpààno,	here then
°likoong'we	→ likòòng'wé,	pumpkin sp.
°livákwàngiile	→ livákwàngiilé,	which has been scraped off

°nkùviká méédi, ùlápààtà mòòtò. ...and take water, getting it on fire.

ùtándìlìkà kùtípúlá úùhú, `nkùvífà.	you start to pound flour, and take it.
vìíno àpààno, ñikùhàùlìlà	now here then, I tell you...
ùtwàlà likòòng'wé, `nkùkwáàngà.	...you take a pumpkin, and scrape it off.
twàlá likòòng'wè livákwángìlè,	...take the pumpkin which has been
ùviké ñchílòòngò.	scraped off, and put it in the pot.

A final H tone originating from an underlying final H may also occur i-phrase-finally, e.g., the final H tone of a demonstrative:

màchédó pààlá, pàvèlè múúnù nà-`ndyáàwè
some time ago, there was a man and his wife

The PUL of the final word of the i-phrase may be shortened in case of fast speech, e.g., **màchédó pàlá, ...** in the example above.

Nouns with all-L tones generally get final H tone before a **na**-phrase (see also 4.7). The examples come from text B3 of appendix B.

ntandaasá na-chínduúli	cf. ntandaasa
the cassava porridge and the cassava vegetable	
utay' úhuumbwé na-múúnyu	cf. uhuumbwe
you should put into it coconut milk and salt	

This final H tone, which we analyze as the intonational H tone, is not obligatory, as the numeral **nnyaano** 'five' shows in the examples below. Note that the numeral may have penultimate lengthening before a **na**-phrase, but this lengthening may also be shortened with fast speech.

malóóve nnyaano / nnyano na-maviili	seven (five and two) words
malóóve nnyaano / nnyano na-maviili	id.

It should be noted that there is no downdrift. But there may be register lowering i-phrase-finally: the intonational H tone as well as a final "underlying" H tone may be slightly lowered to a level between H and L. The lowered H is marked by an underscore symbol. So next to **màchédó pààlá**, LHH LL.H, the next form with register lowering occurs:

màchédó pààlá, LHH LL.H

In addition to PUL, the end of an Utterance is obligatorily marked by register lowering of the final two TBU's of its final word. With this process of U-Final Register Lowering (UFRL), the final two TBU's are slightly lowered: H → H, L → L. Thus, we distinguish a total of four phonetic levels (see also Tone assimilation). Words in citation form have the same form as U-final words. In the examples below, the end of an U is marked by a period.

HH.L.	→ HH. <u>L</u> .	línà.	name
LH.L.	→ LH. <u>L</u> .	mùúnù.	person

HLH.L.	→ HLH.L.	mwééénù.	you (pl.)
HL.L.	→ HL.L.	mwáàná.	child
LL.L.	→ LL.L.	lìmè.	dew
LHL.L.	→ LHL.L.	mòóòtò.	fire

When a penultimate syllable with level H tones is followed by a final syllable which starts with a prenasalized consonant, the second H of the penultimate syllable is lowered to L rather than to (lowered) H.

liwáángwà.	bone	LHL.L
cf. chítúúví.	load	LHH.L
cf. àhîmbà.	lions	LHL.L

There is no full UFRL with forms having a final H tone (originating from an underlying final H tone); these forms are some demonstratives and the Optative without object concord. The final H tone itself is slightly lowered (H), the preceding TBU remains unchanged.

vàyéni ààvá.	those guests	LHH LL. <u>H</u>
tùùlyé.	let's eat	LL. <u>H</u>

There is no UFRL with forms with a question intonation (see 4.8, 5.6). The question intonation puts a penultimate F and final H on the final word of the question; in the first example, this final word is **vìngáàpì** 'how many'; in the second example, this final word is **vàlúúmè** 'men'.

vìnú vîngáàpì.	how many things?	LH.L LHL.H
vìnú vîngáàpì vyá-vàlúúmè.	how many things of the men?	LH.L LHL.L H-LHL.H

Since the levels on which H and L are pronounced are phonetically fairly close, UFRL complicates the situation very much. It is hard, for instance, to distinguish the following U-final words:

lìmè.	dew	LL.L	mitùùpà.	holes	LLL.L
línà.	name	HH.L	kwíkáálà.	to sit	HHH.L
mwáàná.	child	HL.L	mwíkúumbà.	turkey	HHL.L

For larger examples of U's, see the beginning of this section, and Appendix B.

3.6.2 Two other instances of utterance-final register lowering

Two other instances of U-final register lowering are optional. The first instance slightly lowers the tones of the penultimate syllable of U-final words, the tones of whole U-final words and even the tones of the final couple of U-final words. This lowering comes on top of the obligatory U-final two TBU's lowering. In the

examples below, we indicate these lowerings by double underscore symbols, the first indicates the obligatory lowering, the second indicates the optional lowering. The results of the optional lowering are as could be expected: $H \rightarrow \underline{H}$, $\underline{H} \rightarrow L$ and $L \rightarrow \underline{L}$; a lowered \underline{L} can not be distinguished from a \underline{L} . These results are given in parentheses below.

Optional U-final register lowering of last two syllables:

vàtwàlà vítéèngù.	they take chairs	LLL	<u>HHL</u> <u>L</u>	(<u>HHL</u> <u>L</u>)
tùchònà chiyyəèwè.	we see the chin	LLL	<u>LLL</u> <u>L</u>	(<u>LLL</u> <u>L</u>)
vàtèndà mádééngò.	they work	LLL	<u>HHH</u> <u>L</u>	(<u>HHH</u> <u>L</u>)
tùlìma lihàálà.	we till a field	LLL	<u>LLH</u> <u>L</u>	(<u>LLH</u> <u>L</u>)

Optional U-final register lowering of the whole final word:

vàtwàlà vítéèngù.	they take chairs	LLL	<u>HHL</u> <u>L</u>	(<u>HHL</u> <u>L</u>)
tùchònà chiyyəèwè.	we see the chin	LLL	<u>LLL</u> <u>L</u>	(<u>LLL</u> <u>L</u>)
vàtèndà mádééngò.	they work	LLL	<u>HHH</u> <u>L</u>	(<u>HHH</u> <u>L</u>)
tùlìma lihàálà.	we till a field	LLL	<u>LLH</u> <u>L</u>	(<u>LLH</u> <u>L</u>)

Optional U-final register lowering of final two words:

chitéèng'ù chūnjì.	other chair	<u>LHL</u> <u>L</u>	<u>HL</u> <u>L</u>	(<u>LHL</u> <u>L</u> <u>HL</u> <u>L</u>)
ikàànyà yá-chààngà.	mouth of Gal.	<u>LLL</u> <u>L</u>	<u>H-LL</u> <u>L</u>	(<u>LLL</u> <u>L</u> <u>H-LL</u> <u>L</u>)
màlínà lóohè.	many names	<u>LHH</u> <u>L</u>	<u>HH</u> <u>L</u>	(<u>LHH</u> <u>L</u> <u>HH</u> <u>L</u>)
tùnálìma màhàálà.	we till fields	<u>LLL</u> <u>H</u> <u>L</u>	<u>LLH</u> <u>L</u>	(<u>LLL</u> <u>H</u> <u>L</u> <u>LLH</u> <u>L</u>)

The second optional instance of U-final register lowering only concerns U-final words with one or more H tones: all H tones are deleted. This second optional instance may occur without (first example) or together with (second example, **pàwèèlù**) the first optional instance of register lowering.

...àòngé kàdiiki pàwèèlù.	LLH LLH.L	<u>LLL</u> <u>L</u>	
...àòngé kàdiiki pàwèèlù.	LLH LLH.L	<u>LLL</u> <u>L</u>	(<u>LLL</u> <u>L</u>)

...so he may take a short walk outside

With both instances of register lowering, penultimate syllables with three TBU's tend to lose the third TBU U-phrase-finally (as also often occurs with concatenation with penultimate shortening, see 3.5.9). This is seen with **mòóòtò** in the following example, where the second optional instance of U-final register lowering occurs.

...ùlápàtà mòòtò. LHL LLL
...while getting fire

3.7 Contour tones

Two different tones in one syllable are heard as a rise or as a fall. The Rise (LH) and Fall (HL) each have two different phonetic manifestations, depending on whether the penultimate syllable in which they occur belongs to an U-final word or not. When they occur in an U-final word, UFRL lowers the final two TBU's; when they occur p-phrase-finally or, as far as a F tone is concerned, i-phrase-finally, there is no lowering.

Rise (LH):	Fall (HL):	
<u>LH</u> .	<u>HL</u> .	
LH	HL	
mùúnù.	person	<u>LH</u> <u>L</u>
mùúnù wòhèwóóhè.	every person	<u>LH</u> <u>L</u> <u>LLHH</u> <u>L</u>
mwáàná.	child	<u>HL</u> <u>L</u>
mwáàná àpélékèèdyà.	child who sends	<u>HL</u> <u>L</u> <u>LHHLL</u> <u>L</u>
...méèdí,	water,	<u>HL</u> <u>H</u>

Moreover, there is no lowering with a F tone on a pre-penultimate syllable, nor on a penultimate syllable in case of question intonation.

vàchûkàálà.	they were staying	<u>LHLLH</u> <u>L</u>
viínù vîngáàpí.	how many things?	<u>LH</u> <u>L</u> <u>LHL</u> <u>H</u>

Two more manifestations of a F tone occur in U-final words, exclusively due to the obligatory UFRL, which also lowers the second TBU of a level H as well as of a level L. Examples are the U-final words in the second and fourth examples above.

Fall (from HH, LL):
<u>HH</u> .
<u>LL</u> .

A HL sequence is also possible U-finally when a syllable with level H tones is followed by a final syllable which starts with a prenasalized consonant (see 3.6.1).

With the two optional instances of U-final register lowering, two more manifestations of a Rise (LH) are possible, depending on whether the penultimate syllable in which they occur belongs to an U-final word or not. Two more manifestations of a F tone (HL and from HH) occur in U-final words, exclusively due to UFRL. The L tone below is a H tone lowered twice: first by UFRL, second by the first optional register lowering.

Rise (LH): Fall (HL, from HH):

LL. HL.
LH HL.

vàánù.	persons	<u>LH.L</u>
tùvònà vàánù.	we see the persons	<u>LL.L LL.L</u>
vàánù vàánjì.	other persons	<u>LH.L HL.L</u>
vàánù vóóhè.	many persons	<u>LH.L HL.L</u>

Penultimate syllables with three TBU's contain double contour tones. There are two double contour tones: LHL and HLH. As described in 3.5.8, the first L in a LHL double contour tone is raised to the level of a lowered H (H), resulting in another Rise: HH; this raising does not occur with the L in the double contour HLH nor in the "single" contour tone LH.

double LHL: double HLH:

HHL. HLH.
HHL HLH

mòóòtò.	fire	<u>HHL.L</u>
mòóòtò úùnjà.	another fire	<u>HHL.L HL.L</u>
hwééétù.	we	<u>HLH.L</u>
hwééétù tù-vàmákóòndè.	we are Makonde	<u>HLH.L L-LHHL.L</u>

As noted earlier, penultimate syllables with three TBU's tend to lose one TBU with concatenation as well as with both optional instances of U-final register lowering.

4. THE NOUN

- 4.1 Nominal prefixes
- 4.2 Locative nouns
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 - 4.4.1 Nouns with four-syllable stems, trisyllabic stems and disyllabic C-initial stems
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- 4.5 Nominal derivation
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- 4.6 Adjectives
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4.1 Nominal prefixes

Most nouns consist of a nominal prefix (NPx) followed by a stem. The nominal prefixes are listed below in the most frequent singular-plural pairings of the noun classes. NPx's are toneless in the lexicon. They get a default L tone post-lexically in most cases (in some other cases, they get a H tone because certain noun stems carry a tonal H instruction for their NPx in the lexicon, see 3.4 and 4.4.1).

cl.1	mu-	_____	cl.2	va-
cl.1A	u-	_____	cl.2A	a-
cl.3	mu-	_____	cl.4	mi-
cl.5	li-	_____	cl.6	ma-
cl.7	chi-	_____	cl.8	vi-
cl.9	iN-	_____	cl.10	diN-
cl.11	lu-	_____		
cl.12	ka-	_____	cl.13	tu-
cl.14	u-			
cl.15	ku-			
cl.16	pa-			
cl.17	ku-			
cl.18	mu-			

Examples of noun classes (L tones are not marked in the remainder of this grammar):

muúnu/vaánu 1/2	person
uhíimba/ahíimba 1A/2A	lion
muúwa/miíwa 3/4	sugar cane
litáawa/matáawa 5/6	clan
chipúúla/vipúúla 7/8	knife
indiíla/dindiíla 9/10	path
lutaámbo/dinaámbo 11/10	trap
kataámbo/tutaámbo 12/13	little trap
ulíindo 14/-	hair of head
kuvíina 15	to dance
pahááli 16	place
kukááya 17	home
muúha 18	top, above

All nominal prefixes have phonologically conditioned allomorphs; three types of allomorphs are found:

1. NPx's of the shape (C)V before vowel-initial stems, where vowel coalescence/ glide formation takes place;
2. NPx's of classes 1 and 3 (and of class 18, see 6.2) before consonant-initial stems, being homorganic syllabic nasals;
3. NPx's of classes 9 and 10 before all stems, where prenasalization takes place.

ad 1. NPx's of the shape (C)V before vowel-initial stems:

The vowel of the NPx may be **i** (classes 4, 5, 7 and 8), **a** (classes 2, 6, and 12) or **u** (classes 1, 3, 11, 13, 14, and 15). Locative NPx's are discussed in 4.2. A NPx with the vowel **i** does not change before stems starting with **i**. Before any other vowel it appears as **Cy-**; the glide **y** is suppressed after **ch**.

miíhi 4	pestles	líino 5	tooth
myéédi 4	months	lyeénye 5	forehead
myááka 4	years	lyaámbi 5	mat
myoóngo 4	backs of bodies	lyóóhi 5	smoke
myuúnda 4	fields	lyúúlo 5	evening
chiílo/viílo 7/8	night		
cháála/vyáála 7/8	finger		
chuúni/vyuúni 7/8	bird		

A NPx with the vowel **a** merges with any following vowel resulting in a vowel that has the quality of the stem-initial vowel. In class 6, however, all examples we found of coalescence with **i** result in **e**; this probably is a remnant of a historical process.

váana 2	children
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méédi 6/-	water		
méého 6	eyes	cf. lího 5	eye
mééno 6	teeth	cf. líno 5	tooth
kiíhi 12	little pestle	cf. mwííhi 3	pestle
kéélu 12	little field	cf. wéélu 14	field
káála 12	little finger	cf. cháála 7	finger
koóngo 12	little back	cf. moóngo 3	back of body
kúúmba 12	little arrow	cf. múúmba 3	arrow

A NPx with the vowel **u** does not change before stems starting with **u**; before any other vowel it appears as (C)**w**-. In class 3, however, the NPx merges with a following **o** into a vowel that has the quality of the latter in both examples we found; in class 1, this merging process is optional. The merging process found with class 3 and optionally with class 1 is probably a remnant of a historical process.

mwééne 1	owner	mwííhi 3	pestle
mwááli 1	girl after initiation	mwéédi 3	moon, month
móómi 1	healthy person	mwááka 3	year
mwóómi 1	healthy person	moóngo 3	back of body
múúmi 1	healthy person	moóoto 3	fire
		muúnda 3	field
lwiídi 11	door		
lwááu 11	net		
lwóógo 11	cassava		
luúnga 11	very young child		
twííhi 13	little pestles	cf. miíhi 4	pestles
twéélu 13	little fields	cf. wéélu 14	field
twáála 13	little fingers	cf. vyáála 8	fingers
twoóngo 13	little backs	cf. myoóngo 4	backs of bodies
túúmba 13	little arrows	cf. myúúmba 4	arrows
wáahi 14	grass		
wéélu 14	field		
úúchi 14	honey		
kwííva 15	to steal	cf. iiva	steal!
kwéénda 15	to enter	cf. eenda	enter!
kwóómba 15	to beat a drum	cf. oomba	beat a drum!
kúúya 15	to return	cf. uuya	return!

For restrictions on vowel coalescence between the vowel of the NPx and the vowel of vowel-initial stems, see 2.7.

ad 2. NPx's of classes 1 and 3 before consonant-initial stems:

The NPx's of classes 1 and 3 are **mu-** before monosyllabic stems.

muúnu 1 person
muúwa 3 sugar cane

Before polysyllabic stems starting with a consonant, the NPx's are homorganic syllabic nasals. Certain stem-initial consonants undergo the following changes:

v -> **m**
l -> **n**
h and **y** -> **ny**
hw and **w** -> **mw**

The homorganic syllabic nasal in the examples below is written **m-** before bilabials and **n-** before other consonants. A morphological spelling is used; there is no audible difference between, for example, **m-b** and **m-mb**.

m-píini 3	handle	cf. mipíini 4	(pl.)
n-tééla 3	medecine	cf. mitééla 4	(pl.)
n-chííla 3	tail	cf. michííla 4	(pl.)
n-kanuúnu 1	baby	cf. vakanuúnu 2	(pl.)
n-kúuka 3	boundary	cf. mikúuka 4	(pl.)
m-baleenga 3	hole (in lobe of ear)	cf. mibaleenga 4	(pl.)
n-díídi 3	rope	cf. midíídi 4	(pl.)
n-goongwe 3	shed	cf. migoongwe 4	(pl.)
m-mááhe 1	woman	cf. vamááhe 2	(pl.)
m-miili 3	body	cf. mimiili 4	(pl.)
n-neémba 1	boy (before initiation)	cf. vaneémba 2	(pl.)
m'-mbweéha 3	shadow (of things)	cf. mímbweéha 4	(pl.)
m-máláala 3	tree (species)	cf. miváláala 4	(pl.)
n-núúme 1	man	cf. valúúme 2	(pl.)
n-nyáavi 1	sorcerer	cf. vaháavi 2	(pl.)
n-nyeéni 1	guest	cf. vayeéni 2	(pl.)
m-mwíindi 3	tree (species)	cf. mihwíindi 4	(pl.)
m-múúla 3	tree (species)	cf. miwúúla 4	(pl.)

ad 3. NPx's of classes 9 and 10:

The NPx's of class 9 and 10 are indicated as **iN-** and **diN-**. The first part of these NPx's, **i-** and **di-**, are probably remnants of augments. The **N-** indicates prenasalization of following stem-initial consonants; the chart below lists the result of these prenasalizations.

m	n	ny	ng'
mb	nd	nj	ng
mbw			
hw	s	h	

The result is a reduced system where different underlying consonants merge into the same prenasalized consonants.

m	< °p or °m?
n	< °t or °n?
ny	< °ch or °ny?
ng'	< °k or °ng'?
mb	< °b or °v or zero
nd	< °d or °l or zero?
nj	< °y or zero?
ng	< °g? or zero?
mbw	< °w
hw	< °hw
s	< °s
h	< °h

In most nouns of classes 9 and 10, the underlying consonant can not be established with certainty: with the two productive alternations, diminutives of class 12 and 13 and augmentatives of class 5 and 6, prenasalized consonants seem to be maintained, except in two frequently used words.

imámáana 9	red ant	cf. kamámáana 12	(dim.)
ineémbe 9	calf	cf. lineémbe 5	(aug.)
inyúúchi 9	honey bee	cf. kanyúúchi 12	(dim.)
ing'oómbé 9	cow	cf. ling'oómbé 5	(aug.)
imbéeyu 9	seed	cf. kambéeyu 12	(dim.)
induúva 9	blossom	cf. linduúva 5	(aug.)
injénjeéma 9	mosquito	cf. kanjénjeéma 12	(dim.)
inguluúve 9	pig	cf. linguluúve 5	(aug.)
indiíla 9	path	cf. kadiíla/tudiíla 12/13	(dim.)
		but: lindiíla/mandiíla 5/6	(aug.)
ing'áváanga 9	dog	cf. likáváanga/makáváanga 5/6	(aug.)
		but: kang'áváanga/tukáváanga 12/13	(dim.)

(The original consonant in the last example is restored in class 13 but not in cl. 12.)

There are three other alternations involving class 9 and/or 10 where underlying consonants can be established: adjectives of class 9/10, nouns of class 9/10 indicating the seeds in the fruits of certain trees, and nouns of class 11/10.

Adjectives of class 9/10 (the full list; forms of class 2 are given for comparison):

ing'úlúungwa/ding'úlúungwa	big	cf. vakúlúungwa
imbííhi/dimbííhi	unripe	cf. vavííhi
indíkídííki/dindíkídííki	small	cf. vadíkídííki
indééhu/dindééhu	long, tall, high	cf. valééhu
indéémwa/dindéémwa	idle	cf. valéémwa

but: **inyóóko/dinyóóko** small cf. **vadyóóko**

Nouns of class 9/10 indicating seeds in fruits of trees:

ineéngo/dineéngo 9/10	cf. nteéngo/miteéngo 3/4	tree sp.
ing'wáájú/ding'wáájú 9/10	cf. nkwáájú/mikwáájú 3/4	tree sp.
imbiilwa/dimbiilwa 9/10	cf. mmbiilwa/mimbiilwa 3/4	tree sp.
imbúúla/dimbúúla 9/10	cf. mmúúla/miwúúla 3/4	tree sp.
but: inóónji/dinóónji 9/10	cf. nnóónji/milóónji 3/4	baobab

Nouns of class 11/10:

dimaápa 10	wings	cf. lupaápa 11	(sg.)
dinaáno 10	tales	cf. lutaáno 11	(sg.)
dinyííya 10	roots	cf. luchííya 11	(sg.)
ding'óombe 10	finger nails	cf. lukóombe 11	(sg.)
dimbaáu 10	ribs	cf. luvaáu 11	(sg.)
dindíími 10	tongues	cf. lulíími 11	(sg.)
dinjéeye 10	lips	cf. luyéeye 11	(sg.)
dimbwááni 10	fence	cf. luwááni 11	(sg.)
dihuúnde 10	valleys	cf. luhuúnde 11	(sg.)

Underlying °w becomes **mbw** after prenasalization, but when the V1 of the stem is **o** or **u**, the final **w** merges with these vowels. The full list:

dimboói 10	twisted ropes	cf. luwoói 11	(sg.)
dimbúúngo 10	quarters of houses	cf. luwúúngo 11	(sg.)

Underlying °h remains unchanged after prenasalization; there are also nouns of class 9/10 with initial **h**, e.g., **ihóomba/dihóomba** 'fish'. Parallel examples with two other initial consonants, **hw** and **s**, suggest that these consonants remain unchanged after prenasalization as well.

dihwííyo 10/-	kidney
isúuvi/disúuvi 9/10	leopard

The NPx of class 9/10 is **inj-/dinj-** before vowel-initial stems; in the first example, the NPx is **dinjaw-** before the vowel **i**. The full list:

dinjiwíidi 10	doors	cf. lwiíidi 11	(sg.)
dinjááu 10	nets	cf. lwááu 11	(sg.)
dinjaáyo 10	spoors	cf. lwaáyo 11	(sg.)
injóógo 9	very small cassava	cf. lwóógo 11	cassava
dinjuúko 10	ladles, spoons	cf. luúko 11	(sg.)
dinjuúnga 10	very young children	cf. luúnga 11	(sg.)

There is one exception: the noun **dimúúnji** 10 'cleared thickets' forms a pair with the singular **luúúnji** 11; with this class 11 noun, there is no vowel coalescence between the vowel of the NPx of class 11 and the following vowel of the vowel-initial stem.

Note that in the verbal system, there is a productive rule of prenasalization: the concords for the participant 1SG are (-)**ngu-**, or optionally (-)**N-** (prenasalization) before stems starting with the consonants **p, t, ch, k, v, l, y** and **w** (see 6.2.2).

Most animals are in class 9/10; animals in this gender are viewed of as “species-oriented”. There is an “individualized” variant of these class 9/10 forms where the old augments of class 1/2 **u-/a-** replace the first part of the NPx’s **i-/di-**; prenasalized consonants appear to be maintained. Class agreement of the forms with **u-/a-** is with class 1/2; the class of these nouns is indicated by the class numbers 1/2, followed by a “A” (of augment).

class 9/10:	class 1A/2A:	
iméémbe/diméémbe	uméémbe/améémbe	fly
ineémbe/dineémbe	uneémbe/aneémbe	calf
inyúúchi/dinyúúchi	unyúúchi/anyúúchihoney	bee
ing’oómbe/ding’oómbe	ung’oómbe/ding’oómbe	cow
imbúúdi/dimbúúdi	umbúúdi/ambúúdi	goat
injénjeéma/dinjénjeéma	unjénjeéma/anjénjeéma	mosquito
inguluúve/dinguluúve	unguluúve/anguluúve	pig
isúuvi/disúuvi	usúuvi/asúuvi	leopard
ihóomba/dihóomba	uhóomba/ahóomba	fish
ihúimba/dihúimba	uhúimba/ahúimba	lion

Animals which are in other classes than class 9/10 do not have an individualized variant of class 1A/2A.

The **a-** of class 2A is found in many relational and kinship terms. The first example is a nominalized possessive consisting of the stem **-angu** ‘my’, preceded by the pronominal prefix of class 9/2 **-i/-va-**, preceded by the NPx of class 1/2A **n-/a-**.

nnyáangu/aváangu 1/2A	my companion/companions
alongá vaangu 2A	my relatives (in a broad sense)

Next to the noun **ndyáangu** ‘my wife’, the class 2A noun **adyáangu** also occurs: the **a-** of class 2A is also found in forms indicating one person, expressing respect. These nouns generally have class 1 agreement, but with some highly respected (elder, leading) persons, class 2 agreement is used (“honorific plurals”, e.g. **ámweénye** ‘village headman’). Class 2A nouns referring to a single person are formed by prefixing **a-chá-** before the stem. The class of these nouns is indicated by “2A+”.

ámaáma/achámaáma 2A/2A+	mother
atáata/achátaáta 2A/2A+	father
adyáangu/achádyá vaangu 2A/2A+	my wife
ámweénye/achámweénye 2A/2A+	village headman

Another way to indicate plurality of certain kinship terms like ‘father’, ‘mother’ and the only way to indicate plurality of the kinship term for ‘grandparent, ancestor’ is by

making use of (v)**angáánya** ‘folk’, or in short **angáá-**, followed by the kinship term (see also 4.2 and 5.4); the initial **a-** of the kinship term disappears.

angáá-mááma	mothers	
angáá-táata	fathers	
angáá-víivi	grandparents, ancestors	cf. aviívi 2A (sg.)

Class 2A forms indicating plural (animals as well as people) can also be found as class 2 forms; this is probably an innovation under the influence of Swahili since such class 2 forms are not found in e.g. Lorenz (1914). Both forms demand class 2 agreement.

ahíimba - vahíimba	2A - 2 lions
aváángu - vaváángu	2A - 2 my companions

With some nouns of class 5, 11 and 14 with vowel-initial disyllabic stems, the (merged) NPx is interpreted as being part of the stem; these nouns are considered as complex stems with the corresponding plural forms: the complex stems are preceded by a plural NPx. These plural NPx’s are indicated by their class number plus the sign “+”. The following pairings occur: 5/6+, 14/6+ and 11/10+. The complete list:

malíidi 6+	voices	cf. líidi 5	(sg.)
malína 6+	names	cf. líina 5	(sg.)
malyeénye 6+	foreheads	cf. lyeénye 5	(sg.)
malyaámbi 6+	mats	cf. lyaámbi 5	(sg.)
malyúúlo 6+	evenings	cf. lyúúlo 5	(sg.)
mawéelu 6+	fields	cf. wéelu 14	(sg.)
mawáala 6+	beer	cf. wáala 14	(sg.)
dinduúma 10+	cracks	cf. luúma 11	(sg.)

There is one noun without a merged NPx of which the corresponding plural form starts with **ma-** of class 6; the question is whether the **lu-** of the singular form **luwáali** (adapted from SW **liwali** ‘muslim headman’) is a NPx (of class 11) or not.

maluwáali 6(+?) judges (trad.)	cf. luwáali 11? (sg.)
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Nouns with an extra, or outer, (non-locative) NPx are discussed in 4.4.4. Next to the locative NPx’s which are described in 4.2, the most frequent outer NPx’s are cl.7 **chi-**, indicating language and nature, and cl.1/2 **mu-/va-**, indicating persons belonging to a family, clan or (ethnic) group, as well as persons with a certain activity or profession.

chi-má-kóonde	Makonde language or nature
m-má-kóonde/va-má-kóonde	Makonde person
cf. ma-koónde	dry areas
m-mí-téela/va-mí-téela	local doctor
cf. mi-téela	medicines

When there is no overt inner NPx, and the stem starts with a prenasalized consonant (including **h** and **s**), we assume that this NPx is the class 9 **i-** which either has been merged with the preceding NPx or simply is absent. When a NPx with a H tone, not of class 1A/2A, 9/10 or 12/13 (or augmentative class 5/6), is followed by a stem with a prenasalized consonant, we may assume that the NPx in fact is an outer NPx, and that the inner NPx is the (absent) class 9 **i-**. We also give an example of a noun starting with the word formation element **na-** (which behaves as an outer NPx, see below and 4.4.4) as well as an example of a locative.

chí-háau	Yao language and nature
ń-nyáau/vá-háau	Yao person
chí-ndóonde	Ndonde dialect and nature
ń-ndóonde/vá-ndóonde	Ndonde person
lí-nyiindwa/má-nyiindwa	tomato
chí-nduúli	cassava vegetable
na-heembe	type of food
pa-mbúuto	instead of

As outlined in 4.4.4, the difference between locative and other outer NPx's lies in their degree of tonal integration into the word. The locative NPx's are not treated as being part of the word tonally, while other outer NPx's belong to the word from this perspective. Locative NPx's as well as some other NPx's (including **na-**) appear to get a L tone; the NPx's of cl.7 **chi-** and cl.1/2 **mu-/va-** appear to get a H tone.

There are also examples of nouns which have two NPx's from a diachronic point of view, but this is not transparent in a synchronic perspective. The first example has the NPx's of class 5 and class 15, the second example of class 14 and 5.

likuútu 5	ear
úlyaámba 14	morning

In 4.4.4, we argue that the word formation element **na-** behaves as an outer NPx. Here, we give some remarks about the structure of nouns starting with this element as well as about their class agreement. The element **na-** is followed by a full noun (except for the augmental **i** of the class 9 NPx). With some nouns, the word formation elements **-n-ka-** occur between **na-** and the full noun. The information we have about class agreement of these nouns shows the following tendency: nouns denoting people, animals and spirits have class 1 agreement, weeds and grasses have class 3 agreement and the remainder has class 9 agreement. The class of these nouns is indicated by the class number 1, 3 or 9 plus "a".

náháaku 1a	girl (before initiation)
nankakataambwe 1a	spider
namáháamba 1a	snake sp.
nakádiímu 1a	goblin, orgre
nangááhwa 3a	weed sp.
nahúúhwe 3a	weed sp.

nachííhe 9a	riddle
naheembe 9a	type of food

We classify the remainder of this group of nouns following the tendency given above: as class 1, 3 or 9 nouns. It should be noted that there is no general agreement of class 1 for people and animals (see at the end of this section). Agreement with nouns from class 3a and 9a can be avoided by using a possessive construction where the head noun is the word for ‘weed’, ‘grass’, ‘dance’, etc., followed by the specific noun from class 3a or 9a. Some examples:

lukwéékwe 11	weed	-	nachítáani 3a	weed sp.
wáahi 14	grass	-	nachítúkaana 3a	grass sp.
imbúúla 9	rain	-	nangwao 9a	late rains

tu-lu-wene lukwéékwe lwá-nachítáani

we have seen the weed sp.

tu-u-wene wáahi wá-nachítúkaana

we have seen the grass sp.

tu-i-wene imbúúla lyá-nangwao

we have seen the late rains

Nouns of class 3a and 9a do not have a plural form. Nouns of class 1a have a plural form of class 2A, **a-** (followed by **-ná-** with a H tone), or of class 2A+, **a-chá-**; the embedded nouns often change to plural as well.

náháaku/anámáháaku 1a/2A	girl (before initiation)
nankakataambwe/anámíkakataambwe 1a/2A	spider
námbéeda/anámbéeda 1a/2A	insect sp.
nakádiímu/achánakádiímu 1a/2A+	goblin, orgre
nachihuúngo/achánávihuúngo 1a/2A+	snake sp.
nankadindúmba/achánánankadindúmba 1a/2A+	lizard sp.

There is a group of prefix-less nouns which have one form for both the singular and the plural; there are also prefix-less nouns which do not have a corresponding plural form. Most (all?) of these nouns are loans. The class of these prefix-less nouns is indicated by the class number plus “b”. The complete list:

soómo /= 1b/2b	friend
twííga /= 9b/10b	giraffe
doóda /= 9b/10b	dot (as decoration)
tumbáaku 5b/-	tobacco
taáma 9b/-	desire
bakúuli 9b/-	type of dance
dáámu 9b/-	blood
mbéeni 9b/-	type of dance

There is also a group of nouns with a reduced NPx of class 9/10: the class 9 prefix is zero (three nouns also occur with the prefix **i-**, but this is less common), the class 10

prefix is **di-**; with both prefixes, no prenasalization is involved. These prefixes are indicated by the class numbers 9/10 followed by “c”. This group of nouns comprises two nouns with a reanalyzed NPx of class 12 as well as loans.

(i)kaanya/dikaanya 9c/10c	mouth
kááya/dikááya 9c/10c	homestead
piisi/dipiisi 9c/10c	measure for grain
(i)teéso/diteéso 9c/10c	adze
kandíili/dikandíili 9c/10c	lamp
básikeeli/dibásikeeli 9c/10c	bicycle
bakóola/dibakóola 9c/10c	stick
biínda/dibiínda 9c/10c	okra
(i)míia/dimíia 9c/10c	hundred
yeémbe/diyeémbe 9c/10c	mango

Finally, a very small group of nouns consists of nominalized connexives. They are analyzed as connexives, consisting of the connexive marker **-a-**, preceded by a PPx (together with the marker having a H tone) and followed by a noun. In all other respects they are nouns: they demand agreement with the class of the word-initial PPx. The class of these nouns is indicated by the class number plus “d”.

wá-mwaana/vá-vaana 1d/2d	child	cf. mwáana/váana child
chá-kuulya/vyá-kuulya 7d/8d	food	cf. kúúlya to eat
?chá-báanda/vyá-báanda 7d/8d	insect sp.	
?chá-ngoólo/vyá-ngoólo 7d/8d	millipede	

We noted above (with the nouns starting with **na-**) that there is no general agreement of class 1 for people and animals. The words ‘person/people’, ‘child/children’ and ‘animal/s’ are class 1/2 words, demanding class 1/2 agreement. The same is true of nouns indicating persons belonging to a family, clan or (ethnic) group, as well as persons with a certain activity or profession having an (outer) NPx of class 1/2.

muúnu/vaánu 1/2	person
mwáana/váana 1/2	child
nkóoko/vakóóko 1/2	animal
múnníima/vánníima 1/2	Nnima person

Animals and various types of people belong to other classes (except probably **nkúule** ‘rat’, see below). Animals of the species-oriented class 9/10 demand class 9/10 agreement everywhere, from specifiers and from verbal forms. When they appear in the individualized class 1A/2A, they demand class 1/2 agreement. With all other classes, animals demand agreement of their class. An example is **nchéche/ michéche** 3/4 ‘hyena’. The noun **nkúule** (pl. **makúule**) ‘rat’, demands class 1 agreement; this noun probably belongs to class 1. The verbal forms and specifiers are given below without tone and penultimate lengthening.

nchéhe:	SC: u-vele ; OC: va-u-wene ; POS: w-angu ; CONN: wa-a ; DEM: a-u-no ; ADJ: n-kulungwa ; NUM: u-mo ; other specifiers: u-nji, w-ohe, u-lida
michéhe:	SC: i-vele ; OC: va-i-wene ; POS: y-angu ; CONN: ya-a ; DEM: a-i-no ; ADJ: mi-kulungwa ; NUM: mi-vili ; other specifiers: i-nji, y-ohe, i-lida
nkúule:	SC: a-vele ; OC: va-m-wene ; POS: w-angu ; CONN: wa-a ; DEM: a-yu-no ; ADJ: n-kulungwa ; NUM: yu-mo ; other specifiers: yu-nji, w-ohe, a-lida
makúule:	SC: la-vele ; OC: va-la-wene ; POS: la-angu ; CONN: la-a ; DEM: a-la-no ; ADJ: ma-kulungwa ; NUM: mi-vili ; other specifiers: la-nji, l-ohe, la-lida

The plural forms of people belonging to classes other than 1/2 demand agreement of the plural class, except with adjectives and numerals which get class 2 agreement. The examples below are **mavélu** 6 ‘mischievous children’, and **mitónga** 4 ‘barren women’.

mavélu:	SC: la-vele ; OC: a-la-wene ; POS: la-angu ; CONN: la-a ; DEM: a-la-no ; other specifiers: la-nji, l-ohe, la-lida, ma-ngapi
but:	ADJ: va-kulungwa ; NUM: va-vili
mitónga:	SC: i-vele ; OC: a-i-wene ; POS: y-angu ; CONN: ya-a ; DEM: a-i-no ; other specifiers: i-nji, y-ohe, i-lida, mi-ngapi
but:	ADJ: va-kulungwa ; NUM: va-vili

With the singular forms of people belonging to classes other than 1/2, agreement appears to vary from noun to noun (following the two examples of which we have the relevant data): **liveélu** 5 ‘mischievous child’, demands class 1 agreement everywhere, while **luúnga** 11 ‘infant’, demands class 1 agreement with some specifiers and class 11 agreement with most others.

liveélu:	SC: a-vele ; OC: va-m-wene ; POS: w-angu ; CONN: wa-a ; DEM: a-yu-no ; ADJ: n-kulungwa ; NUM: yu-mo ; other specifiers: yu-nji, w-ohe, a-lida
luúnga:	SC: a-vele ; NUM: yu-mo ; yu-nji ; a-lida ;
but:	OC: va-lu-wene ; POS: lw-angu ; CONN: lwa-a ; DEM: a-lu-no ; ADJ: lu-kulungwa ; lw-ohe

Speakers of younger generations, under the influence of Swahili, more and more generalize class 1/2 agreement for all people and animals.

4.2 Locative nouns

Locative nouns are nouns preceded by a locative NPx. The locative noun classes express different notions which can roughly be described as follows. Class 16 expresses a location near the object indicated, translated as “at” below. Class 17 expresses a general location, translated as “to” below. Class 18 indicates a position inside, translated as “in” below.

The locative NPx’s are **pa-** (class 16), **ku-** (class 17) and **mu-** (class 18). These locative NPx’s occur before nouns with a consonant-initial NPx as well as before nouns with a vowel-initial NPx. We use the following nouns to show the prefixing of the locative NPx’s:

vitúúvi 8	bundles
nkúungu 3	pot
inóóndwa 9	star
ulíindo 14	hair (of head)
anámikakataambwe 2A	spiders

Before nouns with a vowel-initial NPx, locative NPx’s optionally have phonologically conditioned allomorphs, comparable to the ones found with non-locative NPx’s: class 16 **pa-** can be compared with the NPx’s of classes 2, 6, and 12, class 17 **ku-** can be compared with classes 11, 13, 14, and 15, and class 18 **mu-** can be compared with classes 1 and 3 in this respect. But there are also differences: (i) after a locative NPx, the augmental part **i** of the class 9 NPx may disappear, (ii) vowel coalescence between the vowel of the locative NPx **pa-** and the augmental part **i** of the class 9 NPx is not possible, and (iii) the locative NPx **mu-** is a homorganic syllabic nasal before consonants, but it is **mu-** if the following consonant is a syllabic nasal itself.

pavitúúvi 16	at the bundles
pankúungu 16	at the pot
painóóndwa ~ panóóndwa 16	at the star
paulíindo ~ pulíindo 16	at the hair
paanámikakataambwe ~ panámikakataambwe 16	at the spiders
kuvitúúvi 17	to the bundles
kunkúungu 17	to the pot
kuinóóndwa ~ kwinóóndwa ~ kunóóndwa 17	to the star
kuulíindo ~ kulíindo 17	to the hair
kuanámikakataambwe ~ kwanámikakataambwe 17	to the spiders
mmitúúvi 18	in the bundles
munkúungu 18	in the pot
muinóóndwa ~ mwinóóndwa ~ munóóndwa 18	in the star
muulíindo ~ mulíindo 18	in the hair
?muanámikakataambwe ~ ? mwanámikakataambwe 18	in the spiders

Some other examples of the locative NPx **mu-** being a homorganic syllabic nasal before following consonants are given below:

mmikúungu 18	in the pots	cf. mikúungu 4	pots
nchiínu/mmiínu 18	in the thing/s	cf. chiínu/viínu 7/8	thing
nding'áánde 18	in the houses	cf. ding'áánde 10	houses
nnyiye/mmaáye 18	in the egg/s	cf. liiye/maáye 5/6	egg
mmwéélu 18	in the field	cf. wéélu 14	field
but: muwáahi 18	in the grass	cf. wáahi 14	grass

The locative nouns we have seen so far demand agreement with the inherent (non-locative) class. Some examples:

pavitúví vyeétu	at our bundles
kunkúungu uúmo	to one pot
nding'ándé díino	in these houses

A locative NPx and a following noun do not form a fully integrated phonological word from a tonal point of view. As outlined in 4.4.4, tone rules apply without taking notice of the locative NPx. All two-syllable nouns, for example, have a LH tone pattern before a possessive. With some of these nouns, this tone pattern changes to HH when a NPx is prefixed; when a locative NPx is prefixed, however, the tone pattern does not change (for more arguments and details, see 4.4.4).

liná lyaángu	my name	welú waángu	my field
malíná laángu	my names	mawélú laángu	my fields
palíná laángu	at my name	kuwelú waángu	to my field

Locative NPx's are also prefixed to names of places, demanding locative agreement. With names of persons, titles or kinship terms, a nominal possessive construction is used. If one person is involved, the locative PPx plus connexive marker **-a-** is followed by the element **-kí-**; if more persons are explicitly mentioned, **(v)angáánya** 'folk', or in short **angáá-**, appears after the connexive (see also 4.1 and 5.4).

pannyáambe	at/near Nnyambe
kumajéembe	at/to Majembe
kumajéembe kukáve kuléhu na-akuúno	Majembe is not far from here
kwá-kí-mariáámu	at Mariamu's
kwá-kí-nkulúungwa	at the elder's
kw-ángáanya zakía na-wi-mariáámu , or	
kw-ángáá-zakía na-wi-mariáámu	at Zakia and Mariamu's
cf. kwá-vamákoonde	at the Makonde's

Some locative nouns are used to express specific locative concepts; these locative nouns consist of a locative NPx followed by a noun with a (non-locative) NPx that expresses a location or a body part. The complete list:

pamoóngo/kumoóngo 16/17+3	behind, after	cf. moóngo 3	back
----------------------------------	---------------	---------------------	------

kuméého 17+6	face, front, before		
paméého 16+6	publicly	cf. méého 6	eyes
pachiínu 16+7	place	cf. chiínu 7	thing
pawéélu 16+14	outside	cf. wéélu 14	field

With these locative nouns, locative agreement as well as agreement with the inherent (non-locative) class is possible; but when the inherent class is plural, only agreement with the inherent class is allowed.

pachiínu pohepóóhe ~ chohechóóhe	every place
paviínu vyohevyóóhe	all places

There also exist locative nouns of which the corresponding non-locative noun is not in use. With these nouns, the inner NPx is absent; this may be the case when the inner NPx is a vowel, which is absent after locative NPx's when it is the **i-** of class 9, or which disappears with vowel coalescence. The full list:

pambúuto 16	instead of
paáhi 16	on the ground, down to the ground
pahááli 16	place
panyéenje, nnyéenje 16, 18	beside, aside, apart/along
panyuúma, kunyuúma, nnyuúma 16, 17, 18	backwards, after/behind
kumaánga 17	coast; eastern direction
kundagaala 17	initiation place
kukaáti 17	room cf. ching'ááti 7 (in the) middle
nkaáti 18	in the middle, within
ndengaáni 18	neighbour
muunda 18	inside the body, belly
muuyo 18	front, before
muúha 18	top, above
muhíina 18	below

These locative nouns always demand locative agreement. Some examples:

paháli peétu	our place
muuyó mwaángu	in front of me
muúha nnipyáiliika	clear sky (lit. above has been swept)

Some locative nouns appear to have an inner NPx, but it is not clear how these nouns should be analyzed; neither it is clear whether the corresponding non-locative noun is still in use nor to which class it should belong. The full list:

panniíma 16+3?	height, above
kumisaati 17+4?	graveyard
palipaanda 16+5?	playing ground (for celebrations)
palitúnguúlu 16+5?	traditional fire place
palyáámba, kulyáámba 16, 17+5?	day after tomorrow/dawn

nniuúngu 18+5?	below, under
nnuvaávu 18+11?	without
pachikóóhi, kuchikóóhi, nchikóóhi 16, 17, 18+7?	behind, after
kumayaaya 17+6?	village
kuchihaanya 17+7?	doctor's place
kundóónde 17+9?	lower and desolate area to the west of the Plateau; also an indication of 'western direction'; lower and desolate parts of the Plateau near the Ruvuma

4.3 Genders

A gender is a pair of noun classes in which a noun stem occurs; a gender is also a single noun class in which a noun stem exclusively occurs. A two-class gender is a pairing of singular/plural forms. The major pairs of noun classes are:

class 1/2	nnúúme/valúúme	man
class 3/4	nnáandi/miláandi	tree
class 5/6	liváála/maváála	shoulder
class 7/8	chipúúla/vipúúla	knife
class 9/10	ing'oómbé/ding'oómbé	cow
class 11/10	lutáávi/dináávi	branch
class 12/13	kataávi/tutáávi	little branch

The gender of class 1/2 almost exclusively contains nouns indicating human beings; one noun is found in this gender indicating 'animal': **nkóoko/vakóóko**, another one, indicating 'rat' probably belongs to class 1: **nkúule**. For other two-class genders, the semantic notions are less clear-cut, except for class 12/13 which are diminutives. Augmentatives are derived by making use of class 5/6 (for examples of diminutives and augmentatives, see 4.1 and 4.5.1).

A frequent subgroup is gender 1A/2A which contains the individualized variants of the species oriented forms of animals occurring in gender 9/10.

uhóomba/ahóomba 1A/2A	ihóomba/dihóomba 9/10	fish
uhiimba/ahiimba 1A/2A	ihíimba/dihíimba 9/10	lion

Small subgroups are 5/6+, 14/6+ and 11/10+ which contain nouns that are considered as complex stems with the corresponding plural forms.

liídi/maliídi 5/6+	voice
wéélu/mawéélu 14/6+	field
luúma/dinduúma 11/10+	crack

Other small subgroups are 1a/2A and 1a/2A+ which contain nouns with the word formation element **na-**.

náháaku/anámáháaku 1a/2A	girl (before initiation)
nachihuúngo/achánávihuúngo 1a/2A+	snake sp.

Very small subgroups are 1b/2b and 9b/10b which contain prefix-less nouns that have one form for both the singular and the plural.

soómo /= 1b/2b	friend
twiíga /= 9b/10b	giraffe

Another subgroup is 9c/10c which contains nouns with a reduced NPx of class 9/10.

(i)kaanya/dikaanya 9c/10c	mouth
bakóola/dibakóola 9c/10c	stick

The final small subgroup is 1d/2d and 7d/8d which contains nominalized connexives which start with a PPx.

wá-mwaana/vá-vaana 1d/2d	child
chá-kuulya/vyá-kuulya 7d/8d	food

Other pairs of noun classes occur as well. The complete list:

class 1/6	njúumbe/majúumbe	headman
	nkúule/makúule	rat
class 3/6	nkóóno/makóóno	arm
	ntáváala/matáváala	marsh mongoose
	ntandaasa/matandaasa	cassava porridge
class 11/6	ludóódo/madóódo	foot
class 11/6+	luwáali/maluwáali	traditional judges
class 14/6	upíinde/mapíinde	bow
	uloómbi/maloómbi	marriage
	úlyaámba/mályaámba	morning
	ulwééle/malwééle	sickness
class 14/4	ukoóti/mikoóti	neck
	uúsi/miuúsi	spider web

The major one class genders are:

class 14	uliindo	hair (of head)
class 15	kung'áána	to play
class 16	pahááli	place
class 17	kukaáti	room
class 18	muuyo	front

Class 15 exclusively contains verbal nouns. Class 16-18 are the locative classes.

Subgroups are class 3a/- and 9a/- which contain nouns with the word formation element **na-**.

nahúúhwe 3a/-	weed sp.
nachííhe 9a/-	riddle

Small subgroups are 5b/- and 9b/- which contain prefix-less nouns which do not have a corresponding plural form.

tumbáaku 5b/-	tobacco
bakúuli 9b/-	type of dance

Unpaired nouns also occur in other classes. A selected list:

múúhi 3/-	daytime
muunyu 3/-	salt
mpúúta 3/-	traditional game
myáádi -/4	blood
líwu 5/-	ashes
líime 5/-	dew
lyóóhi 5/-	smoke
lipuúngo 5/-	wind
litutuúnga 5/-	dust
maáta -/6	saliva
maviíla -/6	twins
makwéedo -/6	urine
mahúúta -/6	oil
méédi -/6	water
chitéete 7/-	trembling from anxiety
chídiídi 7/-	pity
viílyo -/8	food
indaála 9/-	hunger
inyóóta 9/-	thirst
dimoóngo -/10	force, strenght, power
dihóóni -/10	shame
dihwííyo -/10	kidney
luupi 11/-	darkness
luwoóno 11/-	sleep
kuméého 17/-	face

4.4 Nominal tone: tone groups and tone patterns

The nominal tone system is the system of the possible combinations of the tones of the nominal stem with the tone of the noun class prefix (NPx).

Stems are assigned a specific tonal profile in the second lexicon. As demonstrated in 3.4.1 and repeated below, there are five tonal profiles for stems.

- A S1/SF : a H tone on the first and final TBU of the stem
- B S1 : a H tone on the first TBU of the stem
- C SF : a H tone on the final TBU of the stem
- D no H : no H tones on the stem
- E S2 : a H tone on the second TBU of the stem

Noun stems may also have a tonal H instruction for their NPx. If they do not have such an instruction, NPx's get a default L tone post-lexically, just as the toneless (non H) positions of the stem. As demonstrated in the next section, the profiles A, B and E are combined with a NPx with a (default) L tone; the profiles C and D may either be combined with a NPx with a (instructed) H tone as well as with a NPx with a (default) L tone, depending on the specific noun stem. We call the combination of the tone of the NPx with the tonal profile of the stem the Tone Group (TG) to which a noun belongs. The following TG's occur (default L tones are also given below):

TG	NPx	noun stem
A	L	S1/SF
B	L	S1
C1	L	SF
C2	H	SF
D1	L	no H tones
D2	H	no H tones
E	L	S2

It should be noted that with nouns of TG D2, the resulting tone patterns would be exactly the same as those of TG B since the H tone of the NPx of TG D2 shifts to the first TBU of the stem, the same position where the H tone of TG B is located. We didn't find a way with nouns to tell whether a H tone on the first TBU of the stem resulted from TG B or from a H tone of the NPx of TG D2. Below, we classify nouns with a H tone on the first TBU to TG B, and we leave out TG D2 in the sections 4.4.1 - 4.4.3. With nouns with an extra (outer) NPx, the situation is different, and the two TG's are distinguished (see 4.4.4). (With tenses, the two TG's can be distinguished in the following way: tenses with TG B have a H tone on the first TBU of the stem, whether or not there is an object concord. Tenses with TG D2 have a H tone on the first TBU of the stem when there is no object concord; but when there is an object concord, the H tone is found on the object concord.)

In this chapter, we deal with nouns which occur on their own (p-)phrase-finally, the so-called one-word p-phrases (see 3.5); longer p-phrases are dealt with in chapter 8 (8.2). P-phrase-final words have Penultimate Lengthening, optionally followed by Penultimate Shortening (see 3.5.9). The surface Tone Patterns (TP) resulting from the TG's include both the forms with Penultimate Lengthening as well as with Penultimate Shortening. We note here that the TP's of all one word p-phrases (nouns, adjectives, pronominal forms, verbal forms as well as invariables) are similar (see the various chapters).

First, nouns with four-syllable stems, trisyllabic stems and disyllabic consonant-initial stems are dealt with. Then, disyllabic vowel-initial stems and minisyllabic stems are considered; with these stems, the tonal and other processes which occur may result in other surface patterns than expected.

4.4.1 Nouns with four-syllable stems, trisyllabic stems and disyllabic C-initial stems

Taking nouns with four-syllable stems and trisyllabic stems together in the table below, the TG's are followed by the resulting TP's with penultimate lengthening as well as with penultimate shortening. The examples show the TP's: the nouns are followed by the specifier °-óhe 'many', with which they do not occur in the same phrase; so, before these specifiers, the noun may have penultimate lengthening, but this lengthening may also be shortened with fast speech (see 2.9 and 3.5.9). We did not find a clear example of a noun with a four-syllable stem of TG C2. (The tones of the NPx and the stem are separated by a dot.)

Nouns	trisyllabic stems		four-syllable stems
TG	NPx.stem	TP	TP
A	L.S1/SF	L.HH:L / L.HHL	L.HHH:L / L.HHHL
B	L.S1	L.HFL / L.HLL	L.HHL:L / L.HHLL
C1	L.SF	L.LRL / L.LHH	L.LLRL / L.LLHH
C2	H.SF	L.HRL / L.HLL	
D1	L.no H	L.LL:L / L.LLL	L.LLL:L / L.LLLL
E	L.S2	L.LFL / L.LHL	L.LHFL / L.LHLL

Some examples:

A	u-tútúúli / u-tútúli wóóhe	much brain
	ma-táng'únílo / ma-táng'únílo lóóhe	many molars
B	ma-híndíli / ma-híndili lóóhe	many cooking stones
	va-lúmílaanga / va-lúmílanga wóóhe	many widows, bachelors
C1	ma-kumbaátu / ma-kumbátú lóóhe	many feet
	di-molopoóndo / di-molopóndó dyóóhe	many ditches
C2	di-súnguúlu / di-súngulu dyóóhe	many ridgepoles
D1	mi-chakeeta / mi-chaketa yóóhe	many beads
	vi-kokoloowa / vi-kokolowa vyóóhe	many empty maize cobs
E	ma-putíla / ma-putíla lóóhe	many traps (type)
	vi-tukútúuku / vi-tukútuku vyóóhe	many substances

With trisyllabic vowel-initial stems and four-syllable vowel-initial stems, the tone patterns lack the first L of the NPx since the NPx is fused with the stem after vowel coalescence/glide formation. — We now turn to disyllabic consonant-initial stems.

Nouns	disyllabic C-stems	
	NPx.stem	TP
A	L.S1/SF	L.H:L / L.HL
B	L.S1	L.FL / L.HL
C1	L.SF	L.RL / L.HH
C2	H.SF	H.RL / H.LL
D1	L.no H	L.L:L / L.LL
E	L.S2	L.H:L / L.HL

Some examples:

A	ma-káála / ma-kála lóóhe	many charcoal
B	a-híimba / a-himba vóóhe	many lions
C1	di-muúla / di-múlá dyóóhe	many noses
C2	má-tiinji / má-tinji lóóhe	many pumpkins
D1	vi-yeeewe / vi-yewe vyóóhe	many chins
E	ma-váála / ma-vála lóóhe	many shoulders

Nouns with disyllabic stems, just as tenses with disyllabic stems, of TG A and E have the same tone patterns: LH:L / LHL. With verbs they can be distinguished because they appear in a paradigm. With nouns they can be distinguished in the following way: they have different tonal behaviour in p-phrases consisting of two words: when they occur after a conjoint tense with final H tone, and when they occur before a Pronominal Possessive. When occurring after a conjoint tense with a final H tone, there is a H Tone Bridge (TB) between the final H tone of the verbal form and the first H tone of the following noun. Nouns with disyllabic stems of TG A have tone pattern H.H:L after TB, while nouns with disyllabic stems of TG E have tone pattern H.FL after TB (for an explanation of this difference, see 8.3.2). When occurring before a Pronominal Possessive, nouns of TG A have tone pattern L.HH, while nouns of TG E have tone pattern L.LH (for an explanation of this difference, see 8.2.2).

valawene mákáála	they have seen the charcoal
valawene máváala	they have seen the shoulders
makálá laángu	my charcoal
mavalá laángu	my shoulders

There are four nouns without a NPx (one can also occur with NPx, **míía ~ imíía**, two of them have a plural with NPx) which we can not assign to TG A or E since we have

no data on their tonal behaviour in the crucial environments: (i)mííá/dimííá ‘hundred’, náási/dináási ‘coconut’, dáámu ‘blood’ and tááti ‘father’.

There are two related nouns with disyllabic stems which have a LHL sequence on their stems: **chiloóongo/viloóongo** 7/8 ‘cooking pot’, and **uloóongo** 14 ‘sand’. We assume them to belong to TG E, and, for unknown reasons, the process Structure Simplification has not occurred (see 3.5.6).

With two nouns, the singular and plural forms are tonally different. The singular forms belong to TG B, the plural forms belong to TG E.

nkóongwe/vakóongwe 1/2	woman
nkóoko/vakóoko 1/2	animal

The plural forms have TG E which can be determined with the test mentioned above.

vavawene vakóongwe	they have seen the women
vakongwé veétu	our women
cf. vamwené nkóongwe	they have seen the woman
cf. nkóngwé weétu	our woman
vavawene vakóoko	they have seen the animals
vakokó veétu	our animals
cf. vamwené nkóoko	they have seen the animal
cf. nkókó weétu	our animal

(The final H tone of the verbal form with the singular forms remains H under influence of the high syllabic nasal of the following noun, see 3.5.8.)

4.4.2 Nouns with disyllabic V-initial stems and minisyllabic stems

Nouns consisting of disyllabic vowel-initial stems as well as nouns consisting of minisyllabic stems are dealt with together. Minisyllabic stems are basically CV-stems but behave tonally as well as formally (in as far as the number of morae is concerned) as VCV-stems (see 3.4 and 3.4.1). The nouns in the examples below are followed by the specifier °-ohe-óhe ‘every’, with which they do not occur in the same p-phrase; thus, before these specifiers, the noun may have penultimate lengthening, but this lengthening may be shortened in fast speech. The surface tones as found p-phrase-finally are given below, together with an example of a noun with a minisyllabic stem, followed by an example of a noun with a genuine VCV-stem.

H:L	úúchi / úchi wohewóóhe	all the honey
	mwááka / mwáka wohewóóhe	every year
FL	-	
	mwáana / mwána wohewóóhe	every child

RL	muúnu / múnú wohewóóhe	every person
	moóngo / móngó wohewóóhe	every back (of body)
L:L	muuyo / muyo wohewóóhe	every front
	chaanga / changa chohechóóhe	every Galago (SW. komba)
LFL	-	
	muúundu / múundu wohewóóhe	every chopper

Nouns with minisyllabic stems are not found with FL tones and LFL tones. At first sight, these surface tones seem to result from the TG's A through E, but this is only partly the case. Deeper analysis gives the following results:

H:L	<	TG A, B and E
FL	<	TG C2
RL	<	TG C1
L:L	<	TG D1
LFL	<	TG E

The expected results according to the analysis outlined in 3.4 and 4.4 are H:L from TG A, RL from TG C1 and L:L from TG D1.

TG B has a H tone on the first TBU of the stem. Let us assume that **wéélu** 'field' belongs to this TG. Underlyingly, this would be °**u-élu**. Penultimate lengthening takes place (°**u-éelu**). Vowel coalescence/glide formation gives **ue** > **we** (see 2.9) and tonal coalescence of LHL results in a level H sequence (see 3.5.5): **wéélu**. The noun **wéélu** could also belong to TG E. TG E has a S2-H tone which occurs on the second (lengthened) TBU of the first (= penultimate) syllable: °**u-eélu**. The form after penultimate lengthening is °**u-eéelu**. There is vowel coalescence/glide formation between the NPx and the stem: °**weéelu**, and, with Structure Simplification, there is coalescence within the stem: a LHL tonal sequence on a syllable becomes a level H sequence. Note that when Structure Simplification is blocked with nouns of TG E, the tonal sequence LFL surfaces, as occurs with the example given above, **muúundu** 'chopper', as well as with **moóoto** 'fire' (see 3.5.8).

TG C2 has a H-toned NPx and stem-final H tone, e.g., **mwáana** 'child', which underlyingly is °**mú-aná**. There is penultimate lengthening and retraction of the final H tone to the preceding penultimate syllable: °**mú-aána**. Vowel coalescence/glide formation occurs, together with tonal coalescence which results in a F tone (see 3.5.5).

Nouns with H:L surface tones either belong to TG A, B or E. With most nouns with H:L surface tones, we have not found a way to determine to which TG they belong. The tests in the preceding section which we used to distinguish nouns with disyllabic consonant-initial stems with L:H:L surface tones (whether they belong to TG A or E) do not work: preceded by a conjoint tense with a final H tone, they all change their tones to F (see 8.3.2); and followed by a Pronominal Possessive, these nouns (in fact all disyllabic nouns) all have LH tones (see 8.2.2). But with the first test, we could probably have filtered out nouns with H:L surface tones which belong to TG A: they

probably do not change their tones after a conjoint tense with a final H tone. Unfortunately, we do not have tonal data for all H:L nouns, but the data we have is from disyllabic nouns which have a trisyllabic plural, and these data of the plural forms confirm that nouns of TG A do not change their penultimate tones after a conjoint tense with a final H tone. Nouns of TG A get tone pattern H.H:L, while nouns of TG B and E get H.FL. With the other test, occurring before a Pronominal Possessive, we are able to distinguish nouns of TG B from nouns of TG E: those of TG B have a L.HH tone pattern, while those of TG E have a L.LH tone pattern.

A	lwááu/dínjááu 11/10	net
	wáála/mawáála 14/6+	beer
	vadiwene dínjááu	they have seen the nets
	dínjáú dyaángu	my nets
	valakimbidile máwáála	they have drunk the beers
	mawáá laángu	my beers
B	líina/malíina 5/6+	name
	wéélu/mawéélu 14/6+	field
	valapilikene malíina	they have heard the names
	malíná laángu	my names
	valawene máwéelu	they have seen the fields
	mawélú laángu	my fields

With two nouns, we are not able to determine to which TG they belong. With one of them, we do not have data about the tonal behaviour after a conjoint tense with a final H tone: **lyúúlo/malyúúlo** 11/6+ ‘evening’; with the other noun, the plural has a H tone on the second syllable, and this H tone is the right edge of the H tone Bridge which is established when occurring after a conjoint tense with a final H tone, and we can not see what happens with the stem tonally: **íinde/acháíinde** 9/2A+ ‘centipede’.

In the table below, we summarize the TG’s and the resulting TP’s of the nouns with disyllabic vowel-initial stems and minisyllabic stems. (* = not occurring with minisyllabic stems.)

Nouns	disyllabic V-stems, minisyllabic stems	
	NPx.stem	TP
A	L.S1/SF	H:L / HL
B	L.S1	H:L / HL
C1	L.SF	RL / HH
C2	H.SF	*FL / HL
D1	L.no H	L:L / LL
E	L.S2	H:L, *LFL / HL

4.4.3 Distribution of nouns over tone groups

In the table below, the distribution of nouns over the TG's is given, together with the resulting TP's when occurring p-phrase-finally. The nouns are divided according to the number of syllables of the stem: 1/2v means: minisyllabic stems/disyllabic vowel-initial stems, 2c means: disyllabic consonant-initial stems, etc. The tone patterns under 3c/3v and 4+c/4+v (4+ means four or more syllables) are with initial L with consonant-initial stems and without initial L with vowel-initial stems (indicated by (L)). From the 1/2v nouns with a H:L tone pattern, we could only distinguish five nouns: two belong to TG A and three belong to TG B. The rest of this group (25 nouns, 8 with minisyllabic stems and 17 with disyllabic vowel-initial stems) is given in between TG A and B in the table below, although it is possible that some belong to TG E.

TG	TP 1/2v	TP 2c	TP 3c/v	TP 4+c/v	Total
A	H:L -/2 { 8/17	L.H:L 131	(L)HH:L 15/-	(L)HHH:L 10/1	172
B	H:L -/3	L.FL 124	(L)HFL 35/15	(L)HHL:L 12/-	201
C1	RL 14/17	L.RL 204	(L)LRL 25/1	(L)LLRL 5/1	267
C2	FL -/5	H.RL 15	(L)HRL 9/2	(L)HHRL 1/-	32
D1	L:L 7/1	L.L:L 40	(L)LL:L 7/3	(L)LLL:L 2/-	60
E	LFL -/2	L.H:L 67	(L)LFL 10/1	(L)LHFL 2/-	82
Total	29/47	581	101/22	32/2	814

Included are plural nouns which have a different profile compared to the singular form: **nkóongwe** 'woman' and **nkóoko** 'animal' belong to TG B, while the plural forms **vakóóngwe** and **vakóoko** belong to TG E. Also included are the nouns without a NPx (most of them have a plural with NPx). Some examples:

2c: mbéeni	type of dance	(TG B)
biínda/dibiínda	okra	(TG C1)
kááya/dikááya	homestead	(TG E)
3c: jápáani/dijápáani	type of clothing	(TG B)
bakúuli	type of dance	(TG E)
4c. básikeeli/dibásikeeli	bicycle	(TG B)

There are four (2c) nouns without a NPx with a H:L tone pattern (one can also occur with NPx, two of them have a plural with NPx) which we could not classify to TG A or E because of lack of tonal data (see preceding section). We have divided the number of these nouns between the two TG's (two to TG A and two to TG E, not specifically indicated in the table): (i)**míía/dimíía** 'hundred', **náási/dináási** 'coconut', **dáámu** 'blood' and **tááti** 'father'.

Some compound nouns are included, e.g., **adyáangu** 'my wife'; it is possible that there are more nouns included which in fact are compound nouns.

It should be noted that trisyllabic (and longer) vowel-initial stems are not always recoverable because the initial vowel may have disappeared after vowel coalescence; it is possible that the numbers under 2c in fact are a bit lower and the numbers under 3c of the same TG in fact are a bit higher, etc.

4.4.4 Nouns with an outer NPx

The outer NPx is the one which precedes the inner (inherent) NPx. There are four kinds of outer NPx's:

- the locative NPx's **pa-**, **ku-** and **mu-**;
- the pluralizing NPx's, i.e., the NPx's which precede nouns with a disyllabic vowel-initial stem in the plural (e.g. **malíína**, plural of **líína** 'name')
- cl.7 **chi-**, indicating language and nature, and cl.1/2 **mu-/va-**, indicating persons belonging to a family, clan or (ethnic) group, as well as persons with a certain activity or profession;
- the word formation element **na-**, which behaves as an outer NPx.

The differences between these four kinds of NPx's lie in their varying degree of tonal integration into the word. The element **na-** behaves as a regular part of the word for HTA and for all later tone rules. The three other kinds of NPx's are outside the domain of HTA; we claim that they are adjoined later. The locative NPx's remain outside word level tonology throughout the derivation. The addition of a pluralizing NPx does not change the pattern of the assigned H tones, but the addition of one of the NPx's **chi-** and **mu-/va-** does: all assigned H tones are deleted. Both kinds of NPx's are regarded as part of the word for the purposes of further tonal derivation.

The locative NPx's are prefixed to words to which HTA has applied; so, the locative NPx's are not part of the domain of H Tone Assignment, and they do not play a role in the tone rules that lead to the surface tone patterns. Only the general rule Default L tone insertion does apply to locative NPx's.

pa-malóóve	at words	cf. malóóve	words
pa-miláandi	at trees	cf. miláandi	trees
pa-lwááu	at the net	cf. lwááu	net
pa-wéélu	outside	cf. wéélu	field
pa-chiínu	place	cf. chiínu	thing
pa-moóngo	behind, after	cf. moóngo	back (of body)
pa-ntííma	abdomen	cf. ntííma	heart
pa-méého/ku-méého	publicly/face	cf. méého	eyes

These locative nouns are not counted separately in the table of the preceding section.

There are locative nouns for which the inherent noun does not exist on its own. Their full list is given in 4.2. The assumed inherent nouns of these locatives belong to the tone groups A through E (remember that we are not able to distinguish TG B and D2 with nouns; TG B is taken to cover both TG's, see 4.4). Nouns with disyllabic stems with a penultimate level H belong to either TG A or to TG E; to distinguish them we use one of the tests described in 4.4.1: after a conjoint tense with a final H tone, they have different tone patterns. It turns out that one noun belongs to TG A, while five belong to TG E. (A noun which appears in more than one locative class is counted as one noun here.) Below, we give the underlying forms of the inherent nouns; note that with most of them, their (inner) NPx is absent or has disappeared, indicated by an initial dot. The tone patterns are given with penultimate lengthening as well as with penultimate shortening.

TG			TP
A	L.S1/SF	°pa-.háí	L-.H:L / L-.HL
B	L.S1	°pa-.mbúto	L-.FL/ L-.HL
C1	L.SF	°pa-.nnimá	L-L.RL / L-L.HH
		°n-.nuvavú	L-L.RL / L-L.HH
		°n-.niungú	L-L.RL / L-L.HH
		°pa-.hí	RL / HH
		°pa-.nyumá	L-.RL/ L-.HH
		°ku-.katí	L-.RL/ L-.HH
		°ku-.mangá	L-.RL/ L-.HH
		°n-.dengani	L-.LRL / L-.LHH
		°mu-.há	RL / HH
C2	H.SF	°pa-.lítungulú	L-L.HRL / L-L.HLL
D1	L.no H	°pa-.lipanda	L-L.L:L / L-L.LL
		°ku-.misati	L-L.L:L / L-L.LL
		°ku-.mayaya	L-L.L:L / L-L.LL
		°ku-.chihanya	L-L.L:L / L-L.LL

E	L.S2	°ku-.ndagala	L-.LL:L / L-.LLL
		°mu-.nda	L:L/ LL
		°mu-.yo	L:L/ LL
		°pa-chikoóhi	L-L.H:L / L-L.HL
		°pa-lyaámba	L-.H:L / L-.HL
		°pa-.nyeénje	L-.H:L / L-.HL
		°ku-.ndoónde	L-.H:L / L-.HL
		°mu-.hiína	L-.H:L / L-.HL

With TG C2, the H tone of the inherent NP_x shifts to the S1-position by the process Px-H tone shift (see 3.5.4).

These (inherent) nouns are not counted in the preceding section, but they are counted in the table at the end of this section.

The pluralizing NP_x's are also prefixed to words to which H Tone Assignment has applied. There are two sub-types of pluralizing NP_x's. The first one consists of NP_x's which are prefixed to nouns of classes 5, 11 and 14 with vowel-initial disyllabic stems, where the inherent NP_x is merged with the stem. Examples are **mawáála** 'beers', **malíína** 'names' and **mawéélu** 'fields'. The second sub-type is represented by the class 10 NP_x which is prefixed to a vowel-initial stem, e.g. **dinjááu** 'nets' (see 4.1). The TG's of the singular nouns are established in 4.4.2.

A	lwááu/dinjááu	net/s	B	líína/malíína	name/s
	wáála/mawáála	beer/s		wéélu/mawéélu	field/s

The difference between locative NP_x's and pluralizing NP_x's is that pluralizing NP_x's become fully integrated into the word as soon as they are adjoined, whereas locative NP_x's don't. This can be seen with tonal processes, but another indication might be the agreement shown by specifiers: specifiers that follow locative nouns (from which the inherent nouns exist) agree with the inherent noun, they do not have locative agreement; specifiers that follow nouns with pluralizing NP_x's have agreement with the pluralized noun, not with the singular form. Some examples:

ku-welú waángu	to my field
mawélú laángu	my fields

Locative nouns behave tonally like their inherent nouns in environments such as before a pronominal possessive. This can be seen with 2_v-nouns. These nouns all have a LH tone pattern before a pronominal possessive, regardless of the TG to which they belong. A locative NP_x before such a noun of any TG has no influence on the tone pattern. Compare this to what happens when any other outer NP_x is added to such a noun, for example one of the pluralizing NP_x's. In such cases the tone pattern changes to L-HH, which is the expected tone pattern of nouns with disyllabic stems of TG A and B before pronominal possessives (see 8.2.2). For comparison, two nouns with CVCV-stems are given below, **makáála** 'charcoal' (TG A) and **litáawa** 'clan' (TG B).

A	lwaú lwaángu	my net	
	dínjáú dyaángu	my nets	
	pa-lwaú lwaángu	at my net	
	walá waángu	my beer	
	mawálá laángu	my beers	
	pa-walá waángu	at my beer	cf. makálá laángu my charcoal
B	liná lyaángu	my name	
	malíná laángu	my names	
	pa-líná laángu	at my name	
	welú waángu	my field	
	mawélú laángu	my fields	
	ku-welú waángu	to my field	cf. litáwá lyaángu my clan

After a conjoint tense with a final H tone, there is a H Tone Bridge (HTB) to the first H tone of the inherent noun, via the locative NPx. There is no HTB with nouns of TG D1 (all-L).

valiwene líina	they have seen the name
valawene málíina	they have seen the names
vapawene pá-líina	they have seen at the name
valiwené liime	they have seen the dew
vapawené pa-liime	they have seen at the dew

With nouns of TG A, it can be seen that the locative NPx is not part of the noun tonally.

valuwene lwááu	they have seen the net
vadiwene dínjááu	they have seen the nets
vapawene pá-lwááu	they have seen at the net
vaukimbidile wáála	they have drunk the beer
valakimbidile máwáála	they have drunk the beers
vapawene pá-wáala	they have seen at the beer

The different TP of nouns of TG A which are preceded by a locative NPx is explained as follows: the locative NPx does not belong to the noun tonally, and the H tone of the locative NPx and the penultimate H tones of the noun are felt as “different” H tones next to each other. Meeussen’s Rule deletes the penultimate H tones, and there is H Tone Doubling from the locative NPx to the next TBU, resulting in a F tone. These processes occur with all TG’s, except for TG D1 (see above) and TG C1. Nouns of TG C1 have a penultimate R tone, and TB applies to this R tone. An example is **mwííhi** ‘pestle’.

vauwene mwííhi	they have seen the pestle
vapawene pá-mwííhi	they have seen at the pestle

The first H tone of the penultimate syllable is part of the HTB, just as the H tone of the locative NPx. This is not felt as being “different” H tones, and Meeussen’s Rule does not apply.

With one pair of locative nouns, of which the inherent nouns **muúnu/váánu** ‘person/people’ belong to TG C1, there is no full HTB in the environment after a conjoint tense with a final H tone; the locative NPx gets a H tone, and the final H tone of the inherent noun does not retract to the penultimate syllable but appears on the final syllable.

vamwene muúnu	they have seen the person
vavawene váánu	they have seen the people
vapawene pá-muunú	they have seen at someone
vapawene pá-vaanú	they have seen at the people

Nouns with a pluralizing NPx are not counted separately in the preceding section.

There are also other outer NPx’s (in some examples more than one) which have the same characteristics as pluralizing NPx’s: they are adjoined to words after H Tone Assignment, but then they become part of these words. The inherent NPx is absent or has disappeared with some of these nouns. With **mwááli** ‘girl’, we are not sure whether it belongs to TG A, B or E (see 4.4.2). Note that we can use TG D2 because the initial H tone of the nouns **chínáanda** ‘bed’ and **chínúmba** ‘calabash’ indicates a H-toned NPx. The full list:

A	nahúúhwe	weed sp.	
	nangááhwa	weed sp.	
	nachííhe	riddle	
	?namwááli	s.o. taking care of girl	cf. mwááli
B	nantítíili	flea	
C1	nkanuúnu	baby	
	chiswahiili/nswahiili	Swahili language/person	
C2	namwáana	mother	cf. mwáana child
	m’mbweéha	shadow (things)	
	úlyaámba	morning	
	chínuúli	cassava vegetable	
	ámweénye	headman	
	umbwilimbwiindi	termite sp.	
	umbulúkuúta	butterfly	
	unyukúduúmba	soldier ant	
	likambángoóhi	tool for making pots	
D2	chínáanda	bed	
	chínúmba	calabash	
E	nkangóóhu	gruel	
	nankalaváanya	lier	cf. -lavanya lie
	nankadindúmba	lizard sp.	

With some nouns belonging to C2 and D2, it is impossible to decide whether the inherent or the outer NPx has a H tone (or possibly both): **chínduúli**, **chínáanda**, **m'mbweéha** and **chínúmba**. With others, it is clear that the outer NPx has a H tone: **úlyaámba** and **ámweénye**; with the rest, the H tone must be on the inherent NPx. Some nouns with outer NPx's normally belonging to the third and fourth kind (to be discussed below) may also exceptionally belong to this type. There are no examples of TG D1 above, and this may be due to the fact that nouns of D1 of this kind and those which are given with the fourth kind below can not be distinguished.

There are some nouns, partly loans, with penultimate level H tones which resemble nouns with an outer NPx of the kind we are describing now: they behave as if they had an inherent noun which belongs to either TG A or TG E. In the environments after a conjoint tense with a final H tone and before a pronominal possessive, their tonal behaviour is comparable to that of nouns belonging to TG A or TG E. We indicate this below by "A*" and "E*".

A*	lipelééko	medicine
	lipenéési	jack-fruit
	lipitíihu	stomach
	chibatááli	lamp
	chibalúúa	work
	likulambíila	type of food
E*	litimbíisi	sandy ground
	libulangééti	blanket
	chingwalangwáanja	type of dance

Some examples in the environments mentioned above:

A*	vachiwene chibatááli	they have seen the lamp
	chibatáli cheétu	our lamp
	valiwene líkulámbíila	they have seen the food
	likulambíla lyeétu	our food
E*	valiwene lítimbwíisi	they have seen the sandy ground
	litimbisi lyeétu	our sandy ground
	valiwene libúlangeeti	they have seen the blanket
	libulangeti lyaángu	my blanket

There are two other nouns with a penultimate level H which behave the same as nouns of TG A. These nouns may be compound nouns of which the first part is **mwáana** 'child'; the second part of the first noun probably is the possessive stem 2PL °-etú or °-itú.

A*	mwanéétu	younger sister
	mwanéédi	neighbour

vamwene mwánéétu	they have seen the younger sister
mwánétú waángu	my younger sister

Finally, there are nominalized connexives. The merged pronominal prefix and the connexive marker precede a noun and have a H tone. We have two clear examples of which we know the inherent noun (which probably loses its inherent tones because of the preceding H tone of the connexive by Meeussen's Rule; there is no H Tone Doubling in these cases), the other two examples are less certain. The nouns resemble tonally those of TG C2 and D2.

C2*	? chángóólo	millipede	
D2*	wámwaana/vávaana	child	cf. mwáana/váana child
	chákuulya/vyákuulya	food	cf. kúúlya to eat
	? chábáanda	insect sp.	

All nouns above are counted in the table at the end of this section, except for **namwááli** and **namwáana** of which the inherent noun is counted in the table of the preceding section.

The third kind of outer NPx's includes cl.7 **chi-**, indicating language and nature, and cl.1/2 **mu-/va-**, indicating persons belonging to a family, clan or (ethnic) group, as well as persons with a certain activity or profession. These NPx's are also not part of the word for the purposes of H Tone Assignment, but when they are adjoined, a derivational process occurs which deletes all H tones of the inherent noun. New nouns are formed. We assume that these NPx's have a H tone which shifts to the former inherent NPx (just as the H tone of a subject concord in verbal forms shifts to the object concord); from there, it doubles to the next TBU. With some nouns, there is no inherent NPx in the surface forms. With the two nouns with a third H tone, the extra H tone is due to the syllabic nasal (see 3.5.8); with one noun, H Tone Doubling has not applied. These nouns are classified to TG D2: a H-toned NPx, the rest has no H tones. The full list:

D2	nkúliima/vakúliima	farmer/s	cf. kulíima to cultivate
	mmítéela/vamítéela	local doctor	cf. mitééla medicine
	mmiláandi/vamiláandi	local doctor	cf. miláandi trees
	íng'oole/váng'oole	musician/s	cf. ing'oóle dance
	múntáanda/vántáanda	person/people	of the Ntanda clan cf. ntaánda Ntanda clan
	chimákóonde/mmákóonde/	Makonde language, nature/person/	
	vamákoónde	people	cf. makoónde desert area
	chínúúima/múnúúima/vánúúima	Nnima dialect, nature/person/people	cf. panniíma heigh
	chíndóonde/ńndóonde/	Ndonde dialect, nature/person/	
	vándóonde	people	cf. kundóonde lower parts of the Plateau

There are also some examples of which we do not know the inherent noun nor a related noun.

m'múidi/vámúidi	people outside the family
chíháau/únyáau/váháau	Yao language, nature/person/people
chímwéela/ m'mwéela/vámwéela	Mwera language/nature/person/people

The nouns (one of each set of related nouns) are counted in the table at the end of this section.

The fourth and final kind of outer NPx's includes the word formation element **na-**, as well as the elements **n-ka-**. Together with the inherent noun, they form a new word to which H Tone Assignment applies. This means that this new word has its own tonal profile which is different from the profile of the inherent noun. The full list:

C2	namáloóve	echo	cf. malóóve words (TG A)
D2	námwáaka	this year	cf. mwáaka year (TG A?)
	nánnúume	full grown man	cf. nnúume man (TG A)
	namáháamba	snake sp.	cf. mahaámba leaves (TG C1)

We found one word with the verbal stem **-lya** 'eat'.

D2 **namúulya** glutton

For most nouns starting with **na-**, however, we did not find an existing inherent noun. In some cases, the inherent NPx is absent or has disappeared. There are some nouns to which H Tone Doubling has not applied. The full list:

C1	nancheéta	jackal
	namahiíhi	owl
	nachihuúngo	snake sp.
	nampalanguúla	locust
C2	náhuúndu	grass sp.
	námboóle	grass sp.
	náñkoónda	crow
	namáluútu	snake sp.
	nakádiímu	goblin
	nachísúvéle	grass sp.
	nkáláng'oómbe	tree sp.
D1	naheembe	type of food
	nangwaau	late rains
	nantiikwi	chrysalis
	nankakataambwe	spider
D2	náháaku	girl (before initiation)
	námweeve	hawk
	námbéeda	insect sp.
	náñkóope	cucumber

nánniidi	bereaved person
ná m' maata	rash
nachiláawa	answer to riddle
nachitáani	weed sp.
nachitúkaana	grass sp.
nkákáhiimba	type of calabash seed

There are no nouns here that belong to TG A, B and E. These TG's have S1-H tone or S2-H tone, and we assume that nouns to which **na-** is added (which in fact become new words) do not recognize a stem and can not be assigned a S1-H tone or a S2-H tone. Nouns with **na-** (**n-ka-**) are counted in the table below; not counted are their plurals (if existing) of which examples are given in 4.1.

In the table below, the distribution of the nouns with outer NPx's over the TG's as well as the resulting tone patterns are summarized. Tone patterns without H Tone Doubling and those with an extra H tone are not indicated specifically in the table, nor is the extra L tone of the locative NPx of most locatives. Since nouns with more than one outer NPx's are also included in the description above, it should be noted that in certain cases, it is not fully clear whether a particular morpheme is an outer NPx, an inherent NPx or just a part of the stem; in these cases, we have made the most likely choice. It is not useful to divide nouns with outer NPx's according to the number of syllables of stems; we classify them only according to their outer NPx.

	1. loc. NPx's	2. plur. NPx's	3. chi- , mu-/va-	4. na-	Total
A	L-H:L 1	LH:L 3			4
A*		(LL)LH:L 8			8
B	L-FL 1	LLHFL 1			2
C1	(L-L)RL 9	LLRL 2		(LL)LLRL 4	15
C2	L-LHRL 1	(LL)HRL 9		(LH)HRL 8	18
C2*		HRL 1			1
D1	(L-L)L:L 7			(LL)LL:L 4	11
D2		HFL 2	(L)HFL 11	(LH)HFL 14	27
D2*		HFL 3			3
E	L-(L)H:L 5	(L)LLH:(F)L 3			8
E*		(L)LLH:L 3			3
Tot.	24	35	11	30	100

Two nouns are found with deviant tone patterns (LLFL and LLLLHFL). The first seems to be a reduplicated noun, the second seems to be a compound noun the first part of which exists of **mmútúuka** 'car'.

wapiwáapi	business
mmutukasikéeni	motorcycle

4.5 Nominal derivation

The nouns with an outer NPx described in the previous section belong to the kind of productive nominal derivation that derives nouns from nouns. Strictly speaking, diminutives and augmentatives also belong to this type as they are formed by substituting the NPx's of class 12/13 and class 5/6, respectively, for the inherent NPx's. A similar kind of derivation concerns the fruits of trees and the kernels or stones in them (being seeds). As trees belong to class 3/4, their fruits and seeds are indicated by replacing the NPx's of class 3/4 by the NPx's of class 5/6 and 9/10, respectively. Reduplicated nouns also belong to the kind of derivation that derives nouns from nouns, though here the nominal stem is involved rather than the NPx. In 4.5.1, augmentatives (with some details about diminutives, which are discussed in 4.1) are described together with fruit-seed-derivations and reduplication. There is another kind of productive nominal derivation: verb-to-noun derivation. This kind includes the Infinitive which consists of the class 15 NPx **ku-** followed by a verbal stem. It has typical nominal as well as verbal characteristics: like other nouns, it can be preceded by the connexive and the locative prefixes, and like other verbal forms, it may contain an object concord and the Pre-Final **-ang-**. Other productive processes of this type are the formation of agent nouns, instrument nouns and manner nouns. These derivations, described in 4.5.2, consist of an NPx followed by an Infinitive (agent nouns), or by a verbal base followed by a specific final (instrument nouns and manner nouns). The descriptions of the nominal derivations in 4.5.1 and 4.5.2 include tonal information, in line with how we have treated nouns with outer NPx's in the previous section.

4.5.1 Augmentatives and reduplication

Augmentatives are formed by replacing the inherent NPx's by the NPx's of class 5/6 **li-/ma-**. (With diminutives, the inherent NPx's are replaced by the NPx's of class 12/13 **ka-/tu-**; the examples below would become diminutives accordingly.)

lipíini/mapíini	big handle/s	cf. mpíini/mipíini 3/4 handle/s
lichíila/machíila	big tail/s	cf. nchíila/michíila 3/4 tail/s
lipúúla/mapúúla	big knife/s	cf. chipúúla/vipúúla 7/8 knife/s

Phonological rules may change the inherent first consonant of the stem, e.g., after a syllabic nasal and after prenasalization, but with the augmentative NPx's (not being syllabic nasals nor prenasalizations) the inherent consonant reappears. Some examples follow (without separate translation of the augmentative forms).

liváláala/maváláala	cf. mmáláala/miváláala 3/4 tree/s
lilóónji/malóónji	cf. nnóónji/valóónji 3/4 baobab/s
lihoóngo/mahoóngo	cf. nnyoóngo/vahoóngo 1/2 snake/s

lipaápa/mapaápa	cf. lupaápa/dimaápa 11/10 wing/s
litaámbo/mataámbo	cf. lutaámbo/dinaámbo 11/10 trap/s
lilíími/malíími	cf. lulíími/dindíími 11/10 tongue/s

But, as noted in 4.1, in most nouns of classes 9 and 10 (which have prenasalization of the first consonant of the stem as NPx), the prenasalized consonants appear to be maintained, except in two frequently used words. Some examples follow.

limbéeyu/mambéeyu	cf. imbéeyu/dimbéeyu	9/10 seed/s
linduúva/manduúva	cf. induúva/dinduúva	9/10 blossom/s
linguluúve/manguluúve	cf. inguluúve/dinguluúve	9/10 pig/s
lindiíla/mandiíla	cf. indiíla/dindiíla	9/10 path/s
likáváanga/makáváanga	cf. ing'áváanga/ding'áváanga	9/10 dog/s

The initial element **na-** is not replaced by the augmentative NPx's; the augmentative NPx's precede the element. Some examples follow.

linámbéeda/ma-	cf. námbéeda	insect (sp.)
lináháaku/ma-	cf. náháaku	girl (before initiation)
linankakataambwe/ma-	cf. nankakataambwe	spider

Augmentatives and diminutives may be regularly formed from nouns with vowel-initial disyllabic stems, though special forms are often attested. In most cases, augmentatives are formed in the same way as nouns with a vowel-initial disyllabic stem which inherently belong to class 5, 11 and 14: the plural is formed by the singular form preceded by the NPx of class 6, e.g. **líina/malíina** 5/6+ 'name/s', **wéélu/mawéélu** 14/6+ 'field/s' (see the pluralizing NPx's of the preceding section). Diminutives often have a second possible form: the NPx's of class 12/13 followed by the forms with the inherent NPx's. The examples below give a good idea of the possibilities.

liihi/miihi 5/6 big pestle/s
kiíhi/twiihi 12/13 little pestle/s
cf. mwiihi/miihi 3/4 pestle/s
lyéélu/malyéélu 5/6+ big field/s
kéélu/twéélu 12/13, kawéélu/tuwéélu 12+/13+ little field/s
cf. wéélu/mawéélu 14/6+ field/s
lyáála/malyáála 5/6+ big finger/s
káála/twáála 12/13, kacháála/tuvyáála 12+/13+ little finger/s
cf. cháála/vyáála 7/8 finger/s
lyoóngo/malyoóngo 5/6+ big back/s
koóngo/twoóngo 12/13, -tumyoóngo -/13+ little back/s
cf. moóngo/myoóngo 3/4 back/s
lyuútwe/malyuútwe 5/6+ big head/s
kaátwe/tuútwe 12/13, -tumyuútwe -/13+ little head/s

cf. **muútwe/myuútwe** 3/4 head/s

lyuúto/- 5/- big river

kuúto/tuúto 12/13, **kamuúto/-** 12+/- little river/s

cf. **muúto/myuúto** 3/4 river/s

lyúúmba/mamyúúmba 5/6+ big arrow/s

kúúmba/túúmba 12/13, **kamúúmba/tumyúúmba** 12+/13+ little arrow/s

cf. **múúmba/myúúmba** 3/4 arrow/s

Note that there are no diminutive singular forms **kamoóngo* and **kamuútwe* nor the plural form **tumyúúto*, and that the plural augmentative forms **malyuúto* and **malyúúmba* are not used, nor **mamyuúto*, contrary to **mamyúúmba**. With nouns with a vowel-initial disyllabic stem which inherently belong to class 11, the plural is formed by the singular form preceded by the NPx of class 10, e.g. **luúnga/dinjuúnga** 11/10+ infant/s. Remarkably, the augmentative and diminutive forms derived from such nouns may be built from the plural forms preceded by the augmentative and diminutive NPx's, although there are other possibilities which vary from form to form. Some examples are the following.

linjwiídi/manjwiídi 5+/6+ big door/s

kanjwiídi/tunjwiídi 12+/13+ little door/s

cf. **lwiídi/dinjwiídi** 11/10+ door/s

linjááu/manjááu 5+/6+ big net/s

kalwááu/- 12+/-, **kanjááu/tunjááu** 12+/13+ little net/s

cf. **lwááu/dinjááu** 11/10+ net/s

lyuúnga/malyuúnga 5/6+, **linjuúnga/manjuúnga** 5+/6+ big infant/s

kaluúnga/- 12+/-, **kanjuúnga/tunjuúnga** 12+/13+ little infant/s

cf. **luúnga/dinjuúnga** 11/10+ infant/s

Nouns which inherently belong to class 5/6, like **litáawa/matáawa** 'clan/s' and **lideéngo/madeéngo** 'work', are followed by the word **lituúpa/matuúpa** 'huge object/s' to indicate bigness (or, of course, by the adjectives **likúlúungwa/makúlúungwa**, but this holds for every noun). Another way to indicate bigness, which also holds for every noun, is by reduplication. Reduplication is discussed below, but we first turn to a similar kind of derivation as augmentatives: the fruit-seed-derivation.

Names of trees belong to class 3/4, their fruits and seeds are indicated by replacing the NPx's of class 3/4 by the NPx's of class 5/6 (fruits) or class 9/10 (seeds). Here again, the inherent first consonant of the stem may change when preceded by a syllabic nasal (class 3) and after prenasalization (class 9/10). Some examples follow.

nteéngo/miteéngo 3/4 tree sp.

liteéngo/mateéngo 5/6 fruit

ineéngo/dineéngo 9/10 seed/s

mmbiilwa/mimbiilwa 3/4 tree sp.

limbiilwa/mambiilwa 5/6 fruit

mmúúla/miwúúla 3/4 tree sp.	imbiilwa/dimbiilwa 9/10 seed/s
	liúúla/maúúla 5/6 fruit
nnóónji/milóónji 3/4 baobab	imbúúla/dimbúúla 9/10 seed/s
	lilóónji/malóónji 5/6 fruit
	inóónji/dinóónji 9/10 seed/s

Note that the baobab seeds in the final example are **inóónji/dinóónji** which is unexpected because prenasalization of the consonant **l** normally creates **nd** and not **n**.

We now continue with reduplication. With reduplication, the noun stem is repeated, and all H tones are deleted, from the stem as well as from the NPx. The TG to which reduplicated nouns belong is therefore D1 (all-L). Reduplication indicates ‘bigger than normal’. Some examples are the following.

chituvituuvi/vituvituuvi 7/8 big bundle/s
 cf. **chitúúvi/vitúúvi** 7/8 bundle/s
nnonjiloonji/milonjiloonji 3/4 big baobab/s
 cf. **nnóónji/milóónji** 3/4 baobab/s
nnyituhiitu/mihituhiitu 3/4 big thicket/s
 cf. **nnýítu/mihítu** 3/4 thicket/s

The inherent first consonant of the stem may be restored in the reduplicated stem, but such forms are not always possible, e.g. **nnyenyeeeni* (from **nnyeéni/vayeéni** 1/2 guest/s). With most nouns which inherently belong to class 11, of which the plural is formed by the singular form preceded by the NPx of class 10, reduplication is not possible; we only found the the following forms:

lutavitaavi/dinavinaavi 11/10+ big branch/es
 cf. **lutaávi/dinaávi** 11/10+ branch/es
lunjwidinjwiidi/dinjwidinjwiidi 11/10+ door/s
 cf. **lwiídi/dinjwiídi** 11/10+ door/s

The final example above is the only one we found of a reduplicated noun with a disyllabic vowel-initial stem. Reduplication is also impossible with nouns with trisyllabic and longer stems, among which most nouns starting with **na-**; we only found the following plural forms:

achanankakatambwetaambwe, anamikakatambwetaambwe spiders
 cf. **nankakataambwe/achánánákakataambwe, anámikakataambwe** spider/s
achanambedanambeeda insects
 cf. **námbeeda/achánámbeeda** insect/s

When turned into augmentatives, reduplication is possible with all nouns; its meaning is ‘very big’.

lituvituuvi/matuvituuvi 5/6 very big bundle/s
 cf. **litúúvi/matúúvi** 5/6 big bundle/s, **chitúúvi/vitúúvi** 7/8 bundle/s
lilonjiloonji/malonjiloonji 5/6 very big baobab/s
 cf. **lilóónji/malóónji** 5/6 big baobab/s, **nnóónji/milóónji** 3/4 baobab/s

- lihituhiitu/mahituhiitu** 3/4 very big thicket/s
 cf. **lihíítu/mahíítu** 5/6 big thicket/s, **nyíítu/mihíítu** 3/4 thicket/s
liyeniyeeeni/mayenyeeeni 5/6 very big guest/s
 cf. **liyeéeni/mayeéeni** 5/6 big guests, **nyeeéeni/vayeéeni** 1/2 guest/s
litavitaavi/matavitaavi 5/6 very big branche/s
 cf. **litaávi/mataávi** 5/6 big branche/s, **lutaávi/dinaávi** 11/10+ branche/s
lilimiliimi/- 5/-, lindimindiimi/mandimindiimi 5+/6+ very big tongue/s
 cf. **lilíími/malíími** 5/6 big tongue/s, **lulíími/dindíími** 11/10+ tongue/s
linjwidinjiwiidi/manjwidinjiwiidi 5+/6+ door/s
 cf. **linjiwiídi/manjiwiídi** 5+/6+ big door/s, **lwiídi/dinjiwiídi** 11/10+ door/s
linjaunjaau/manjaunjaau 5+/6+ very big net/s
 cf. **linjááu/manjááu** 5+/6+ big net/s, **lwááu/dinjááu** 11/10+ net/s
lyutwelyuutwe/malyutwelyuutwe 5/6+ very big head/s
 cf. **lyuútwwe/malyuútwwe** 5/6+ big head/s, **muútwwe/myuútwwe** 3/4 head/s
lyundalyuunda/malyundalyuunda 5/6+ very big field/s
 cf. **lyuúnda/malyuúnda** 5/6+ big field/s, **muúnda/myuúnda** 3/4 field/s
linankakatambwetaambwe/manankakatambwetaambwe 5+/6+ very big spider/s
 cf. **linankakataambwe/manankakataambwe** 5+/6+ big spider/s,
nankakataambwe/achánáńkakataambwe spider/s
linambedanambeeda/manambedanambeeda 5+/6+ very big insect/s
 cf. **linámbéeda/manámbéeda** 5+/6+ big insect/s,
námbéeda/achánámbeeda insect/s
linahakuhaaku/manahakuhaaku 5+/6+ very big girl/s
 cf. **lináháaku/manáháaku** 5+/6+ big girl/s, **náháaku/achánáhaaku** girl/s

We found one example of a reduplicated noun with basic stem longer than disyllabic:

- likavangakavaanga/makavangakavaanga** 5/6 very big dog/s
 cf. **likáváanga/makáváanga** 5/6 big dog/s, **ing'áváanga/ding'áváanga** 9/10 dog/s

4.5.2 Agent nouns, instrument nouns and manner nouns

Agent nouns are formed by the Infinitive preceded by the NPx's of class 1 and 2. As stated in the beginning of 4.5, the Infinitive itself is a verb-to-noun derivation which consists of a verbal base preceded by the NPx of class 15. With H Tone Assignment in the second lexicon, the Infinitive gets its tonal profile S1/SF, and since the Infinitive marker does not get a H tone, the tone group to which the Infinitive belongs is TG A (L.S1/SF). With the derivation of agent nouns, the NPx's of class 1 and 2 are added. These NPx's are not part of the word with H Tone Assignment, but with adjoining them, a derivational process occurs which deletes all H tones of the inherent noun. New nouns are formed which have tonal profile "no H tones". The

added NPx's have a H tone, and the TG to which these noun belongs is therefore TG D2 (H.no H). The H tone of the NPx shifts to the Infinitive marker (like the H tone of a subject concord in verbal forms shifts to the object concord); from there, it doubles to the next TBU (if there is place).

nkúulya/vakúulya	eater/s	cf. kúúlya to eat
nkúliima/vakúliima	farmer/s	cf. kuliíma to cultivate
nkutéleeka/vakutéleeka	cook/s	cf. kutélééka to cook
nkúpélekeedya/vakúpélekeedya	sender/s	cf. kupélékeedya to send

That agent nouns are derived from Infinitives can be seen from the fact that an object concord may be included, and that an object may follow.

nkúpócheela/vakúpócheela	receiver/s
cf. kupóchééla	to receive
nkúvápócheela/vakúvápócheela	receiver/s of them
cf. kuvápócheéla	to receive them
nkutéeya/vakutéeya	person/s who trap
cf. kutéeya	to trap
nkúteya/dihóómba/vakúteya/dihóómba	fisherman/-men
cf. dihóómba	fish

Instrument nouns and manner nouns consist of a verbal base which is preceded by the NPx of class 6 or 7/8 and which is followed by the final **-i** or **-o**. The TG's to which these nouns belong is either A (L.S1/SF) or C1 (L.SF). Although there are exceptions, there is a clear general pattern:

Instrument nouns:	chi-/vi-verbal base-o,	TG A (L.S1/SF)
Manner nouns:	1. ma-verbal base-o,	TG A (L.S1/SF)
	2. chi-/vi-/ma-verbal base-i,	TG C1 (L.SF)

Instrument nouns often contain a verbal base with an applicative extension. The first example is a form without an applicative: **-pyaila** 'sweep' (applicative **-pyailila**).

chipyáíilo/vi-	thing/s to sweep with	cf. -pyaila sweep
chilímíilo/vi-	thing/s to cultivate with	cf. -limila cultivate with
chitwálíilo/vi-	thing/s to seize with	cf. -twalila seize with
chipímíilo/vi-	thing/s to measure with	cf. -pimila measure with
chihíníkíilo/vi-	cover/s	cf. -hinikila cover with
chipwéchéléélo/vi-	thing/s to receive with	cf. -pwechelela receive with
chipélékédíidyo/vi-	thing/s to send with	cf. -pelekedidya send with

The first way of forming manner nouns is by replacing the NPx of the instrument noun by the NPx of class 6. This kind of derivation is fully productive; the applicative extension is retained: **mapyáíilo** 'way of sweeping', **malímíilo** 'way of cultivating', **matwálíilo** 'way of seizing', **mapímíilo** 'way of measuring', etc. The second way of forming manner nouns involves a verbal base with the final **-i** preceded by the NPx of class 7/8 or 6. The final **-i** changes a preceding consonant **l**

into **d**, just like the causative **i** and the first vowel of the Perfective final **-ile**. Below, we give examples with the same verbal bases as the ones used above with instrument nouns, to which we add examples without applicative extension.

chipyaiídi/vi-/ma-	way/s of sweeping	
chilimiídi/vi-/ma-	way/s of cultivating	
chilimi/vi-/ma-	way/s of cultivating	cf. -lima cultivate
chitwaliídi/vi-/ma-	way/s of seizing	
chitwaádi/vi-/ma-	way/s of seizing	cf. -twala seize
chipimiídi/vi-/ma-	way/s of measuring	
chipiími/vi-/ma-	way/s of measuring	cf. -pima measure
chihinikiídi/vi-/ma-	way/s of covering	
chihiniíki/vi-/ma-	way/s of covering	cf. -hinika cover
chipwecheleédi/vi-/ma-	way/s of receiving	
chipwecheédi/vi-/ma-	way/s of receiving	cf. -pwechela receive
chipelekeídi/vi-/ma-	way/s of sending	
chipelekeédi/vi-/ma-	way/s of sending	cf. -pelekedya send

4.6 Adjectives

Adjectives are stems that are preceded by a NPx which agrees in class with the noun it specifies. The adjectives of Chinnima are listed below with their TG's and their TP's with penultimate lengthening and with penultimate shortening.

TG	NPx.stem	Adjectives	TP
A	L.S1/SF	°-dyókó small	L.H:L / L.HL
A	L.S1/SF	°-víhí unripe	L.H:L / L.HL
A	L.S1/SF	°-díkidikí small	L.HHH:L / L.HHHL
B	L.S1	°-lémwa idle, lazy	L.FL / L.HL
B	L.S1	°-kúlungwa big	L.HFL / L.HLL
E	L.S2	°-leéhu long, tall, high	L.H:L / L.HL

Examples of the adjectives in classes 3/4 and 9/10:

cl.3/4	cl.9/10
nkúlúungwa/mikúlúungwa	ing'úlúungwa/ding'úlúungwa
ndíkídííki/midíkídííki	indíkídííki/dindíkídííki
ndyóóko/midyóóko	inyóóko/dinyóóko (NB: no -d-)
nnééhu/milééhu	indééhu/dindééhu
nnémwa/miléemwa	indémwa/dindémwa
mmííhi/mivííhi	imbííhi/dimbííhi

An adjective and the preceding noun that is specified do not occur in the same phonological phrase: the noun has penultimate lengthening, which occurs when a word is in final position of a phonological phrase (3.5.1). With fast speech, there is penultimate shortening, and the rules of tonal coalescence occur (see 3.5.9).

chitúúvi / chitúvi chikúlúungwa	big bundle
chiyeewe / chiyewe chidíkídííki	small chin
lutáávi / lutávi ludyóóko	small branch
miláandi / milándi milééhu	high trees
náháaku / náhaku nnémwa	idle girl
litiínji / litiínji livííhi	unripe pumpkin

The same processes occur with adjectives when they are followed by another phonological phrase. We use the same examples as above, but in reversed order: adjective - noun. The potential differences in meaning as a result of the reversed order are not worked out here.

chikúlúungwa / chikúlungwa chitúúvi	big bundle
chidíkídííki / chidíkídíki chiyeewe	small chin
ludyóóko / ludyóko lutáávi	small branch
milééhu / miléhu miláandi	high trees
nnémwa / nnémwa náháaku	idle girl
livííhi / livíhi litiínji	unripe pumpkin

Since an adjective and a preceding noun do not occur in the same phonological phrase, the tone pattern of the adjective in attributive position is the same as its tone pattern in non-attributive position.

chitúúvi chikúlúungwa	big bundle
chitúúvi chiimo chikúlúungwa	one big bundle, one bundle is big

However, there is one environment where the tone pattern of adjectives changes: when it appears directly after a conjoint tense with a final H tone; there is a H Tone Bridge (HTB) between the final H of the verbal form and the first H of the adjective. Such a HTB occurs in the same way as with nouns following such a conjoint tense with a final H tone (see 8.3). Adjectives operate as if they were the head of the complement following the verbal form. (Adjectives are the only specifiers to which this HTB may apply.)

achiwéné chíkúlúungwa	(s)he has seen the big one (cl.7)
achiwéné chídíkídííki	(s)he has seen the small one (cl.7)
aluwéné lúdyóóko	(s)he has seen the small one (cl.14)
aiwéné míléchu	(s)he has seen the high ones (cl.4)
amwéné únéemwa	(s)he has seen the idle one (cl.1)
aliwéné lívííhi	(s)he has seen the unripe one (cl.5)

Adjectives with disyllabic stems with the tone pattern L.H:L (**lúdyóóko**, **lívííhi** and **míléchu**) either belong to TG A or E. As shown in 4.4.1 with respect to nouns with disyllabic stems with the tone pattern L.H:L, they can be distinguished according to their tonal behaviour after a conjoint tense with a final H tone where TB occurs. The TP of TG A changes to H.H:L after TB (**lúdyóóko**, **lívííhi**) while the TP of TG E changes to H.FL after TB (**míléchu**).

4.7 Numerals

The word for ‘one’ is a pronominal form, taking the pronominal prefix (PPx). The words for ‘two’ and ‘three’ are nominal forms, taking the NPx. The words for ‘four’ and ‘five’ are probably nouns, as are the words for ‘ten’ and ‘hundred’.

°PPx:- mó	one (a minisyllabic stem)
°NPx- víí	two
°NPx- tatú	three
° ncheche 3?	four
° nnyano 3?	five
° likumí/makumí 5/6	ten
°(i) míá/dimíá 9/10	hundred

Examples of the words for ‘one’, ‘two’ and ‘three’ in some classes, followed by the other numerals.

cl.3	uúmo	cl.4	mivííli/mitaátu
cl.9	íimo	cl.10	dimbííli/dinaátu
	ncheeche		
	nnyaano		
	likuúmi/makuúmi		
	(i)mííá/dimííá		

The numbers from ‘six’ until ‘thousand’ are built from ‘five’ and ‘ten’ by addition with **na-** and by juxtaposition. Nouns with all-L tones generally get final H tone before a **na**-phrase (see 3.6.1). Non-final numerals are given with penultimate shortening in the examples below, preceding nouns are given with penultimate lengthening.

6 = 5(+)	1	nnyanó na- -'mo
7 = 5(+)	2	nnyanó na- -viili
8 = 5(+)	3	nnyanó na- -taátu
9 = 5(+)	4	nnyanó na-ncheeche

váana nnyanó na-yuúmo	six children
malóóve nnyanó na-maviili	seven words
dinóóndwa nnyanó na-dinaátu	eight stars
vyáála nnyanó na-ncheeche	nine fingers

11 = 10(+)	likúmi na- -.´mo
12 = 10(+)	likúmi na- -vili
13 = 10(+)	likúmi na- -taátu
14 = 10(+)	likúmi na-ncheeche
16 = 10(+)	likúmi na-nnyanó na- -.´mo
20 = 10(x)	makúmi maviili
30 = 10(x)	makúmi mataátu
40 = 10(x)	makúmi ncheeche
50 = 10(x)	makúmi nyaano
60 = 10(x)	makúmi nnyanó na-liímo
61 = 10(x)	makúmi nnyanó na-límó na- -.´mo
70 = 10(x)	makúmi nnyanó na-maviili
71 = 10(x)	makúmi nnyanó na-mavili na- -.´mo
80 = 10(x)	makúmi nnyanó na-mataátu
82 = 10(x)	makúmi nnyanó na-matátú na- -vili
90 = 10(x)	makúmi nnyanó na-ncheeche
93 = 10(x)	makúmi nnyanó na-ncheché na- -taátu
100= 10(x)	makúmi likúmi - (i)mía iímo
200= 10(x)	makúmi likúmi maviili - dimía dimbiili
thousand(s)	makúmi makuúmi

Ordinal numbers from 'second' onwards are nominal possessive constructions; this is also the case for 'last': **-a-chihwaango** (tones unknown). There is a special word for 'first', related to the verbal noun **kutándilika** 'to begin': **-tándi/-táandi**, preceded by the NPx; penultimate lengthening is optional.

NPx-tá(a)ndi:	ntándi kuvéléekwa , or	
	ntáandi kuvéléekwa	the first to be born
	mahaámba matándi , or	
	mahaámba matáandi	the first leaves
PPx-a-Num:	mwáana ntándi , or	
	mwáana ntáandi	the first child
	wá-vili kuvéléekwa	the second to be born
	lá-ncheeche	the fourth (e.g. leaf)
	mwáana wá-chihwaango	the last child

The nouns **mwáánda/myáánda** 3/4 ‘time, period, journey’, followed by a numeral, serve as multiplicatives.

mwáánda uúmo once
myáánda miviili twice

Finally, there is a word which resembles the numeral ‘two’, preceded by the class 12 prefix **ka-** or the (class 17?) prefix **ku-**.

kavíila ~ kuvíila again

A numeral and the preceding noun that is specified do not occur in the same phonological phrase, indicated by penultimate lengthening of the preceding noun. Two numerals following each other also do not occur in the same phonological phrase; in the examples above, we have given preceding numerals with penultimate shortening. As indicated above, nouns with L tones throughout generally get final H tone before a **na-** phrase. This is not the case in other environments.

nnyaano / nnyano dinóóndwa five stars

Numerals fall into the following tone groups:

TG	Px.stem	Numerals	TP
A	L.S1/SF	°(i)míá/dímíá	L.H:L / L.HL
B	L.S1	°-tándi	(L.FL) / L.HL
C1	L.SF	°-.mó °-vilí °-tatú °likumí/makumí	RL / HH L.RL / L.HH L.RL / L.HH L.RL / L.HH
D1	L.no H	°ncheche °nnyano	L.L:L / L.LL L.L:L / L.LL

4.8 Other nominal forms

°-ngápi ‘how many’

Examples of this interrogative in some classes:

cl.2 **vangáapi**
 cl.4 **mingáapi**
 cl.6 **mangáapi**
 cl.8 **vingáapi**
 cl.10 **dingáapi**

When the interrogative is the final word of a question, it has penultimate F and final H; this is the question melody.

alawené mangáapi (s)he has seen how many ones (cl.6)?
mituupa mingáapi how many holes?

The interrogative °-ngápi and a preceding nouns with which it agrees do not occur in the same phonological phrase (as can be seen by the penultimate lengthening of the noun in the last example above), except when there is no question melody, but a surprise intonation. A question with this intonation has **yé** at the beginning, and the noun followed by the interrogative gets penultimate H and final H (see 8.2.2, 5.4 and 5.6).

yé mitúpá mingáapi (what?) how many holes

When the interrogative is not the final word in a question, it does not get the question melody; the question melody then goes to the final word in such a question, e.g. to **valúúme** and **vakanúunu** in the examples below.

viínu vingáapi vyá-valúumé how many things of the men?
viínu vingáapi vyá-vakanúunu how many things of the babies?

The interrogative as well as the preceding noun may have penultimate shortening in this environment.

vinú vingápi vyá-valúumé
vinú vingápi vyá-vakanúunu

The tone group and the corresponding tone patterns relevant for this nominal form are given in the table below.

TG	NPx.stem		TP
B	L.S1	°-ngápi	L.FL / L.HL

°-ninga ‘how many’ (tones unknown)

The only information we have about this stem is that it takes a NPx of a plural class.

cl.2 **vaniinga**
 cl.4 **miniinga**
 cl.6 **maniinga**
 cl.8 **viniinga**
 cl.10 **diniinga**

°-naní ‘who’

The only NPx’s that precede this stem are of class 1 and 2.

cl.1 **nnaání**
cl.2 **vanaání**

Alternatively, these forms can be considered to be nouns, they only occur in non-attributive position.

When the interrogative °-naní is the final word in a question, it has the question melody penultimate F and final H.

vayeéni vanáani the guests are who?
vayeéni vakúlúungwa vanáani the big guests are who?
avawené vanáani (s)he has seen who?

When the interrogative °-naní is not the final word in a question, it does not get the question melody; the question melody then goes to the final word in such a question, e.g. to **vayeéni** in the example below (without and with penultimate shortening).

vanaání vayeéni who are the guests?
vanání vayeéni

Finally, the nominal possessive construction is used to indicate ‘whom/whose’.

vayeéni va-vanáani whose guests / the guests are whose?

The tone group and the corresponding tone patterns relevant for this nominal form are given in the table below.

TG	NPx.stem		TP
C1	L.SF	°-naní	L.RL / L.HH

5. PRONOMINAL FORMS AND INVARIABLES

- 5.1 Pronominal prefixes
- 5.2 Substitutives
- 5.3 Demonstratives
- 5.4 Nominal possessives
- 5.5 Pronominal possessives
- 5.6 Other pronominal forms
- 5.7 Invariables

5.1 Pronominal prefixes

Pronominal forms consist of a pronominal prefix (PPx) and a stem. The chart below lists the pronominal prefixes.

cl.1	(y)u-	cl.2	va-
cl.3	u-	cl.4	i-
cl.5	li-	cl.6	la-
cl.7	chi-	cl.8	vi-
cl.9	i-	cl.10	di-
cl.11	lu-		
cl.12	ka-	cl.13	tu-
cl.14	u-		
cl.15	ku-		
cl.16	pa-		
cl.17	ku-		
cl.18	mu-		

The PPx of class 1 is **yu-** before consonant-initial stems and **w-** (< °**u-**) before vowel-initial stems. The PPx of class 18 is **mu-** before vowel-initial stems and minisyllabic stems; it is a homorganic syllabic nasal before consonant-initial stems. (For more details about the syllabic nasal, see 4.1, 4.2 and 6.2.1).

munkúngú mwéene	in the deep dish itself	cf. °- éne self
munkúungu múunji	in the other deep dish	cf. ° ^H - .nji other
munkúungu nníida	in which deep dish?	cf. °- lída which

The PPx's are toneless in the lexicon. They get a default L tone post-lexically in most cases (in some other cases, they get a H tone because some pronominal stems carry a tonal H instruction for their PPx in the lexicon, see 3.4, and 5.3, 5.5 and 5.6).

Historically, the PPx of class 1 probably was °H. This can be concluded from the Direct Relative Present and the Direct Relative Present Perfective, which historically

started with a PPx. The participants as well as class 1 get a H tone in these tenses, while the other classes get a L tone (see 7.1.2).

5.2 Substitutives

The basic substitutives are bound forms. They refer to a participant or to a noun (phrase) of any class. The forms of the participants are built from what might be called the minimal pronominal forms of the participants, followed by **-é**. The forms of the classes are built from the PPx followed by **-ó**.

1SG	-né	1PL	-hwé
2SG	-wé	2PL	-mwé
cl.1	-yó	cl.2	-vó
cl.5	-lyó	cl.6	-ló

These bound substitutives are used after **na-** ‘and, with’, and after PPx-**á** as part of a nominal possessive construction. Between **na-** and the form of class 1, the element **-wi-** intervenes (as it does between **na-** and any noun, demonstrative and substitutive of class 1), but a form identical with 2SG is also used.

1SG	naa-né	1PL	naa-hwé
2SG	naa-wé	2PL	naa-mwé
cl.1	na-wii-yó ~ naa-wé	cl.2	naa-vó
cl.5	naa-lyó	cl.6	naa-ló

Between the connexive PPx-**á** and the forms of the participants and class 1, the elements **-ng’u-** (1SG), **-ku-** (2SG), **-tu-** (1PL), **-nu-** (2PL), **-ki-** (cl.1) intervene (as they do between PPx-**á** and any substitutive of participants, and any noun, demonstrative and substitutive of class 1); these elements are derived from the pronominal possessive stems (see 5.4 and 5.5). The PPx in the examples below is of class 9, e.g., in agreement with **ing’áánde** 9 house. The H tone of the connexive doubles to the intervening elements. Some of the meanings of the forms below are ‘of mine’ (1SG), ‘of us’ (1PL), ‘of them’ (cl.2), etc.

1SG	yá-ng’úu-né	1PL	yá-túu-hwé
2SG	yá-kúu-wé	2PL	yá-núu-mwé
cl.1	yá-kíi-yó	cl.2	yáa-vó
cl.5	yáa-lyó	cl.6	yáa-ló

Free substitutives are independent pronouns; they exist for participants and for classes 1 and 2. There are two series for the participants. The first series consists of the bound substitutive of the participant, followed by the possessive stem (including the preceding connexive) of that participant (tone pattern HRL; for the derivation, see 5.5); the second series, which expresses more emphasis, is built from the reduplicated bound substitutive of the participant, preceded by **u-** (tone pattern LFH).

	I	II		I	II
1SG	nááangu	unéené	1PL	(u)hwééetu	uhwéehwé
2SG	wáaáko	uwéewé	2PL	mwééenu	umwéemwé
	uwéewé nneémba iida na-hóóti			hey you there boy, come first!	
	wáaáko nneémba iida na-hóóti			you boy, come first!	

For 2SG, **u** may be used to attract someone's attention.

u nneémba iida na-hóóti hey boy, come first!

There are also two forms for classes 1 and 2; the second form, which is more emphatic in meaning, differs from the first form in having an initial **u-** and in its tone pattern. The structure of the class 1 forms is unclear; the structure of the first class 2 form is identical with the class 2 form of the pronominal **°naáng'o** 'the same, the very one' (see 5.6).

	I	II		I	II
cl.1	nááng'e	unááng'é	cl.2	vanááng'o	uvanááng'ó

When the free substitutives of the first series **nááng'e** and **vanááng'o** occur after a conjoint tense with a final H tone, their tones change to FL and HFL respectively.

vamwene nááng'e	they have seen him
vavawene vanááng'o	they have seen them

These changes are the same as found with nouns with similar tones after a conjoint tense with a final H tone; in 4.4.1, we note that these nouns have S2-H tone, i.e., a H tone on the second TBU of the stem. We propose the same analysis for the free substitutives of the first series: **°nááng'e** and **°vanaáng'o**.

Free substitutives of the second series have a final H tone which does not retract to the preceding penultimate syllable; furthermore, the first H tone probably has been shifted from the initial **°ú-** (and doubles to the next TBU in case of **uvanááng'o**).

Free substitutives of the first series can be placed after pronominal possessives to indicate 'my own', 'your own', etc.; they can also occur after kinship terms instead of the pronominal possessives (and in combination of pronominal possessives in cases of contractions and the use of the special pronominal stems for participant 2SG and class 1, see 5.5).

chipulá chaangu nááangu	my own knife
chipulá chaako wáaáko	your own knife
chipulá chaake nááng'e	his/her own knife
vipulá vyeetu hwééetu	our own knives
vipulá vyeenu mwééenu	your own knives
vipulá vyao vanááng'o	their own knives
atáta nááangu or atátá vaangu or atáata my father	
mwanétu nááangu or mwanétú waangu my younger sibling	

The L tones of the intermediate pronominal possessives in the examples above are due to Meeussen's Rule.

Free substitutives can be preceded by **na-**, where the forms of series I of the participants have the tone pattern L:H; the tone pattern of the forms of the classes may be unchanged or all-L. The tone pattern of the forms of series II remains unchanged. Note the intervening element before class 1 forms.

Series I:	1SG	na-naangú	1PL	na-hweetú
	2SG	na-waakó	2PL	na-mweenú
	cl.1	na-wi-nááng'e ~ na-wi-naang'e	cl.2	na-vanááng'o ~ na-vanaang'o
Series II:	1SG	na-unééné	1PL	na-uhwéehwé
	2SG	na-uwéewé	2PL	na-umwéemwé
	cl.1	na-wi-unáang'é	cl.2	na-uvánáang'ó

Free substitutives can also be part of a nominal possessive construction, preceded by PPx-á. Note the intervening elements before the forms of participants and class 1.

Series I:	1SG	yá-ng'ú-náaangu	1PL	yá-tú-hwéeétu
	2SG	yá-kú-wáaáko	2PL	yá-nú-mwéeénu
	cl.1	yá-kí-nááng'e	cl.2	yá-vanááng'o
Series II:	1SG	yá-ng'ú' nééné	1PL	yá-tú' hwéehwé
	2SG	yá-kú' wéewé	2PL	yá-nú' mwéemwé
	cl.1	yá-kí-únáang'é	cl.2	yá-úvánáang'ó

5.3 Demonstratives

There are three series of demonstratives: I. the near demonstrative °(a)-PPx-.nó (minisyllabic final part), II. the far demonstrative °(a)-PPx-lá, and III. the referential demonstrative °(á)-ne-PPx-ó. The demonstratives below are given as they occur in attributive position.

I. the near demonstrative °(a)-PPx-.nó:

cl.1	(á)yúúno	cl.2	(á)vááno
cl.3	(á)úúno	cl.4	(á)íino
cl.5	(á)líino	cl.6	(á)lááno
cl.7	(á)chíino	cl.8	(á)víino
cl.9	(á)íino	cl.10	(á)díino
cl.11	(á)lúúno		
cl.12	(á)kááno	cl.13	(á)túúno
cl.14	(á)úúno		
cl.15	(á)kúúno		

- cl.16 (á)pááno
 cl.17 (á)kúúno
 cl.18 (á)múúno

II. the far demonstrative °(a)-PPx-lá:

- | | |
|----------------|----------------|
| cl.1 (a)yuulá | cl.2 (a)vaalá |
| cl.3 (a)uulá | cl.4 (a)iilá |
| cl.5 (a)liilá | cl.6 (a)laalá |
| cl.7 (a)chiilá | cl.8 (a)viilá |
| cl.9 (a)iilá | cl.10 (a)diilá |
| cl.11 (a)luulá | |
| cl.12 (a)kaalá | cl.13 (a)tuulá |
| cl.14 (a)uulá | |
| cl.15 (a)kuulá | |
| cl.16 (a)paalá | |
| cl.17 (a)kuulá | |
| cl.18 (a)muulá | |

III. the referential demonstrative °(á)-ne-PPx-ó:

- | | |
|-----------------|-----------------|
| cl.1 (á)néeyó | cl.2 (á)néevó |
| cl.3 (á)néewó | cl.4 (á)néeyó |
| cl.5 (á)néelyó | cl.6 (á)néeló |
| cl.7 (á)néechó | cl.8 (á)néevyó |
| cl.9 (á)néeyó | cl.10 (á)néedyó |
| cl.11 (á)néelwó | |
| cl.12 (á)néekó | cl.13 (á)néetwó |
| cl.14 (á)néewó | |
| cl.15 (á)néekwó | |
| cl.16 (á)népó | |
| cl.17 (á)néekwó | |
| cl.18 (á)néemwó | |

Demonstratives and preceding nouns which they specify occur in the same phonological phrase: the noun does not have penultimate lengthening, and the noun gets penultimate H tone and final H tone (see 8.2.2).

ndídí	(á)úúno/(a)uulá/(á)néewó	cf. ndíídi	rope
chiténg'ú	(á)chííno/(a)chiilá/(á)néechó	cf. chitéeng'u	chair
nnyéni	(á)yúúno/(a)yuulá/(á)néeyó	cf. nnyeéni	guest
chiyéwé	(á)chííno/(a)chiilá/(á)néechó	cf. chiyeewe	chin
lítínjí	(á)lííno/(a)liilá/(á)néelyó	cf. litiínji	pumpkin

There is a short form for each series of demonstratives: I. °(a)-PPx, II. °(a)-PPx^H (= H-toned PPx) and III. °(a)-PPx-ó. There is no clear difference in meaning with the first three series of demonstratives. These demonstratives and preceding nouns which

they specify occur in one phonological phrase: the noun does not have penultimate lengthening and gets penultimate H tone and final H tone; in two cases the final H changes to F: before forms without initial **a-**, which cliticize to the preceding noun, and when the forms with initial **a-** show vowel coalescence with the final vowel of the preceding noun (examples below with classes 1 and 2).

I. short near demonstrative °(a)-PPx:

cl.1	nnyéní aayu nnyéníi-yu nnyény' áayu	cl.2	vayéní aava vayéníi-va vayény' áava	this/these guest/s
cl.3	ndídí aa ndídíi-u	cl.4	ndídí aai ndídíi-i	this/these rope/s
cl.5	likútú aali likútúu-li	cl.6	makútú aala makútúu-la	this/these ear/s
cl.7	chiténg'ú aachi chiténg'úu-chi	cl.8	viténg'ú aavi viténg'úu-vi	this/these chair/s
cl.9	imbédó aai imbédóo-i	cl.10	dimbédó aadi dimbédóo-di	this/these axe/s
cl.11	lutámbó aalu lutámbóo-lu			this trap
cl.12	katámbó aaka katámbóo-ka	cl.13	tutámbó aatu tutámbóo-tu	this/these small trap/s
cl.14	ulíndó aa ulíndóo-u			this hair (of head)
cl.15	kulímá aaku kulímáa-ku			this cultivating
cl.16	pachínú aapa pachínúu-pa			this place
cl.17	kukátí aaku ukátíi-ku			this room
cl.18	nnyénjé aamu nnyénjée-mu			along this

II. short far demonstrative °(a)-PPx^H:

cl.1	nnyéní aayú nnyéníi-yú	cl.2	vayéní aavá vayéníi-vá	that/those guest/s
cl.3	ndídí aaú ndídíi-ú	cl.4	ndídí aaí ndídíi-í	that/those rope/s
cl.5	likútú aalí likútúu-lí	cl.6	makútú aalá makútúu-lá	that/those ear/s
cl.7	chiténg'ú aachí chiténg'úu-chí	cl.8	viténg'ú aaví viténg'úu-ví	that/those chair/s
cl.9	imbédó aaí imbédóo-í	cl.10	dimbédó aadí dimbédóo-dí	that/those axe/s

cl.11	lutámbó aalú lutámbóo-lú			that trap
cl.12	katámbó aaká katámbóo-ká	cl.13	tutámbó aatú tutámbóo-tú	that/those small trap/s
cl.14	ulíndó aaú ulíndóo-ú			that hair (of head)
cl.15	kulímá aakú kulímáa-kú			that cultivating
cl.16	pachínú aapá pachínúu-pá			that place
cl.17	kukátí aakú kukátíi-kú			that room
cl.18	nyénjé aamú nyénjée-mú			along that

III. short referential demonstrative °(a)-PPx-ó:

cl.1	nyení aayó nyéníi-yó	cl.2	vayení aavó vayéníi-vó	that/those guest/s
cl.3	ndídí aawó ndídíi-wó	cl.4	ndídí aayó ndídíi-yó	that/those rope/s
cl.5	likútú aalyó likútúu-lyó	cl.6	makútú aaló makútúu-ló	that/those ear/s
cl.7	chiténg'ú aachó chiténg'úu-chó	cl.8	viténg'ú aavyó viténg'úu-vyó	that/those chair/s
cl.9	imbédó aayó imbédóo-yó	cl.10	dimbédó aadyó dimbédóo-dyó	that/those axe/s
cl.11	lutámbó aalwó lutámbóo-lwó			that trap
cl.12	katámbó aakó katámbóo-kó	cl.13	tutámbó aatwó tutámbóo-twó	that/those small trap/s
cl.14	ulíndó aawó ulíndóo-wó			that hair (of head)
cl.15	kulímá aakwó kulímáa-kwó			that cultivating
cl.16	pachínú aapó pachínúu-pó			that place
cl.17	kukátí aakwó kukátíi-kwó			that room
cl.18	nyénjé aamwó nyénjée-mwó			along that

The short demonstratives without initial **a-** can cliticize to words other than nouns, e.g., pronominal forms, invariables and verbal forms. With most of these words, the same tonal changes occur (...HF), but in case of cliticization to **na-** and to verbal forms, no changes occur. (The tonal changes of the noun in the examples below

(**chitúúvi/vitúúvi** 7/8 bundle) are not due to cliticization but are regular changes due to the following word.)

vivílii-vi/vivílii-ví/vivílii-vyó	these/those two
vitúvi vivílii-vi	these two bundles
cf. vitúvi vivílii	two bundles
chángúu-chi/chángúu-chí/chángúu-chó	this/that my one
chitúví chángúu-chi	this my bundle
cf. chitúví chaángu	my bundle
ńtwáníi-chi/-chí/-chó (all classes)	what kind of this/that?
chituví ńtwáníi-chi	what kind of this bundle?
cf. chituví ńtwáani	what kind of bundle?
cháa-va/cháa-vá/cháa-vó (all classes)	of these/those (cl.2)
chitúvi cháa-va	bundle of these (cl.2)
cf. chitúvi chá-vanááng'o	bundle of them
naa-chi/naa-chí/naa-chó (all classes)	and, with this/that
cf. na-chitúúvi	and, with the bundle
utulaa-chi/utulaa-chí/utulaa-chó	you set down this/that one
cf. utula chitúúvi	you set down the bundle

The initial **a-** of the demonstratives is optional in attributive position (AP), i.e., directly after the (head-)noun (or specified noun) with which it agrees. In non-attributive position (NAP), however, the initial **a-** is obligatory. Demonstratives are in NAP when they appear (i) without the head-noun, e.g., as a subject or a complement of a verb, or as a predicate, (ii) after the head-noun, often with intervening specifiers, as a predicate, and (iii) before the head-noun (the precise meaning of this marked word order has not been analysed); when occurring before the head noun, the demonstrative may have penultimate lengthening or penultimate shortening.

The tone pattern of the demonstratives of series I in NAP differs from the tone pattern of these demonstratives in attributive position (AP).

	I		II		III	
	AP	NAP	AP	NAP	AP	NAP
cl.1	(á)yúúno	ayuúno	(a)yuulá	ayuulá	(á)néeyó	ánéeyó
	(aa)yu	aáyu	(aa)yú	aayú	(aa)yó	aayó
cl.2	(á)vááno	avaáno	(a)vaalá	avaalá	(á)néevó	ánéevó
	(aa)va	aáva	(aa)vá	aavá	(aa)vó	aavó
etc.						

Some examples of demonstratives of series I in AP:

uhimbá (á)yúúno	this lion
uhimbá (aa)yu	id.

Some examples of demonstratives of series I in NAP:

ayuúno	(it is) this one
aáyu	id.
amwené ayuúno	(s)he has seen him/her
amwené aáyu	id.
uhíimba nkúlúungwa ayuúno	the big lion is this one
uhíimba nkúlúungwa aáyu	id.
ayuúno uhíimba	this (is the) lion
ayúnó uhíimba	id. (Penultimate Shortening)
aáyu uhíimba	id.

Some demonstratives are used to refer to time, especially locative demonstratives (which may refer to place as well). The last two examples below show demonstratives in AP:

viíno	now, then, well	
ánéépó viíno	now then	
viíno apaáno	now (then) here	
ánéépó, ánéékó	here, there, then	
amúnó nnyuúma	meanwhile	cf. nnyuúma behind, after
palyámbáa-pó	2nd day after tomorrow	cf. palyáámba day after tomorrow
machédó paalá	year before last year, some time ago	cf. machéédo last year

The tone pattern of demonstratives of series I in attributive position is different from their tone pattern in non-attributive position (for demonstratives of the other series, these tone patterns are similar). This is probably due to a H Tone Bridge (HTB) from the noun to the demonstrative with penultimate R (a similar process of HTB occurs with emphatic demonstratives, see later this section, as well as with certain pronominal forms, see 5.6). The result of this HTB is level H penultimate tones, as happens to nouns with penultimate R (see 8.3.2). These nouns have final °H tone and belong to tone group C1. We may assume that demonstratives of series I also have final °H which retracts to the penultimate syllable. But there is no retraction of the final H tone to the penultimate syllable with the other demonstratives, hence no HTB. With demonstratives of series III, the initial **á-** has a H tone which doubles to the next TBU.

There are also three series of emphatic demonstratives: I. °**ú**-PPx-**nó**, II. °**ú**-PPx-**lá** and III. °(**ú**)-PPx-**o**-PPx-**ó**. The initial **u-** of demonstratives of series I and II is not optional; the PPx in these series has a F tone. The forms are given below as in AP.

I. emphatic near demonstratives °ú-PPx-nó:

cl.1	úyúunó	cl.2	úváanó
cl.3	úúunó	cl.4	úiinó
cl.5	úliinó	cl.6	úláanó
cl.7	úchiinó	cl.8	úviinó
cl.9	úiinó	cl.10	údiinó
cl.11	úlúunó		
cl.12	úkáanó	cl.13	útúunó
cl.14	úúunó		
cl.15	úkúunó		
cl.16	úpáanó		
cl.17	úkúunó		
cl.18	úmúunó		

II. emphatic far demonstratives °ú-PPx-lá:

cl.1	úyúulá	cl.2	úváalá
cl.3	úúulá	cl.4	úiilá
cl.5	úliilá	cl.6	úláalá
cl.7	úchiilá	cl.8	úviilá
cl.9	úiilá	cl.10	údiilá
cl.11	úlúulá		
cl.12	úkáalá	cl.13	útúulá
cl.14	úúulá		
cl.15	úkúulá		
cl.16	úpáalá		
cl.17	úkúulá		
cl.18	úmúulá		

III. emphatic referential demonstratives °(ú)-PPx-o-PPx-ó:

cl.1	(ú)yóoyó	cl.2	(ú)vóonó
cl.3	(ú)wóowó	cl.4	(ú)yóoyó
cl.5	(ú)lyóolyó	cl.6	(ú)lóoló
cl.7	(ú)chóochó	cl.8	(ú)vyóonyó
cl.9	(ú)yóoyó	cl.10	(ú)dyóodyó
cl.11	(ú)lwóolwó		
cl.12	(ú)kóokó	cl.13	(ú)twóotwó
cl.14	(ú)wóowó		
cl.15	(ú)kwóokwó		
cl.16	(ú)póopó		
cl.17	(ú)kwóokwó		
cl.18	(ú)mwóomwó		

The emphatic referential demonstratives can be combined with short demonstratives of series I and II in order to express 'right that one here/there'. The short demonstratives have their NAP-tone, also when there is vowel coalescence of the initial **a-** with the final **-o** of the preceding referential demonstrative.

I	(ú)chóochó aáchi	(ú)chóoch' aáchi
II	(ú)chóochó aachí	(ú)chóoch' aachí

There is another form which may have both meanings ‘right that one here’ and ‘right that one there’; its structure is (ń)-PPx-**60**-PPx^H (second PPx is H-toned). The demonstratives below are given as in AP.

cl.1	(ú)yóoyú	cl.2	(ú)vóová
cl.3	(ú)wóowú	cl.4	(ú)yóoyí
cl.5	(ú)lyóolí	cl.6	(ú)lóolá
cl.7	(ú)chóochí	cl.8	(ú)vyóoví
cl.9	(ú)yóoyí	cl.10	(ú)dyóodí
cl.11	(ú)lwóolú		
cl.12	(ú)kóóká	cl.13	(ú)twóotú
cl.14	(ú)wóowú		
cl.15	(ú)kwóokú		
cl.16	(ú)póopá		
cl.17	(ú)kwóokú		
cl.18	(ú)mwóomú		

Like all demonstratives, emphatic demonstratives and nouns which they specify occur in the same phonological phrase: the noun does not have penultimate lengthening, and the noun also gets penultimate H tone and final H tone (see 8.2.2). One example:

chiyéwé **úchíinó/úchíilá/(ú)chóochó/(ú)chóochó aáchi/
(ú)chóochó aachí/(ú)chóochí**

cf. **chiyeewe** chin

When the emphatic demonstratives appear in NAP, there is always an initial **u-** with a L tone.

	I		II		III	
	AP	NAP	AP	NAP	AP	NAP
cl.1	úyúunó	uyúunó	úyúulá	uyúulá	(ú)yóoyó (ú)yóoyú	uyóoyó uyóoyú
cl.2	úváanó	uváanó	úváalá	uváalá	(ú)vóonó (ú)vóonú	uvóonó uvóonó

Some (emphatic) demonstratives are used to refer to time, especially locative demonstratives (which may refer to place as well). The last example shows a demonstrative in AP:

(na) upóopó (and) right here/then, and also

ukóókó	right at that time
mwándá úwóowó	right at that time, moment
	cf. mwáánda time, period, journey

The tone pattern of emphatic demonstratives in attributive position is different from their tone pattern in non-attributive position. This is probably due to a H Tone Bridge (HTB) from the noun to the demonstrative (a similar process of HTB occurs with non-emphatic demonstratives, see earlier this section, as well as with certain pronominals, see 5.6). The result of this HTB is that the initial **u-** is raised; the HTB then stops because of the H tone on the PPx. The emphatic demonstrative stems all have a final °H, just as the non-emphatic demonstratives; the stem is reduplicated together with the PPx with part of demonstratives of series III (with the other part, only the PPx is reduplicated). The emphatic demonstratives also have a H-toned PPx; an alternative analysis is that the initial has a °H which has been shifted to the PPx.

5.4 Nominal possessives

The nominal possessive construction consists of the connexive PPx-**á-** followed by a nominal or pronominal form.

cl.1	wá-	cl.2	vá-
cl.3	wá-	cl.4	yá-
cl.5	lyá-	cl.6	lá-
cl.7	chá-	cl.8	vyá-
cl.9	yá-	cl.10	dyá-
cl.11	lwá-		
cl.12	ká-	cl.13	twá-
cl.14	wá-		
cl.15	kwá-		
cl.16	pá-		
cl.17	kwá-		
cl.18	mwá-		

As the result of Meeussen's Rule, which also applies across word boundaries (see 5.1), the connexive has a L tone when the final syllable of the preceding word has a H tone. This occurs with penultimate shortening (PS) of nouns of TG C1, e.g. **mahaámba**. With nouns of other tone groups, there is no final H tone after PS, e.g. **dináávi**, tone group A.

mahaámba lá-nnáandi	leaves of the tree
mahámbá la-nnáandi	id. (PS)
dináávi dyá-miláandi	branches of trees
dinávi dyá-miláandi	id. (PS)

When the connexive has a H tone and the following noun starts with a H tone, then the H tone of the following noun is lowered by Meeussen's Rule. (The second H tone of **náháaku** is the result of H Tone Doubling.) Meeussen's Rule does not occur with fixed nominal possessive constructions (see later this section).

makumbaátu lá-nahaaku	feet of the girl
makumbátú la-náháaku	id. (PS)
makumbaátu lá-nánjii	short feet cf. PPx-á-nánjii short

As the examples show, a noun and a following specifying nominal possessive construction do not occur in the same phonological phrase: the noun has penultimate lengthening, but penultimate shortening may also occur. In the examples below, both possibilities are used.

As shown in 5.2, specific elements intervene between PPx-á and the forms of the participants (Substitutives, abbreviated below as Subst.) and class 1. These elements have the same tone as the connexive, probably due to H Tone Doubling from the connexive.

muúnda wá-ng'ú-náaángu	field of me	cf. náaángu	1SG.Free Subst.
muúnda wá-ng'úu-né	id.	cf. -F- né	1SG.Bound Subst.
muúnda wá-kú-wáaáko	field of you	cf. wáaáko	2SG.Free Subst.
muúnda wá-kúu-wé	id.	cf. -F- wé	2SG.Bound Subst.
muúnda wá-tú-hwéeétu	field of us	cf. hwéeétu	1PL.Free Subst.
muúnda wá-túu-hwé	id.	cf. -F- hwé	1PL.Bound Subst.
muúnda wá-nú-mwéeénu	field of you	cf. mwéeénu	2PL.Free Subst.
muúnda wá-núu-mwé	id.	cf. -F- mwé	2PL.Bound Subst.
muúnda wá-kí-nááng'e	field of him	cf. nááng'e	1.Free Subst.
muúnda wá-kíi-yó	id.	cf. -F- yó	1.Bound Subst.
muúnda wá-kí-nnúúme	field of man	cf. nnúúme	1.man
ntánó wa-ng'u-náaángu	tale of mine		
ntánó wa-ki-nááng'e	tale of him/her		
ntánó wa-ki-nnúúme	tale of man		

These intervening elements are derived from (or are a part of?) the pronominal possessive stems.

elements:		pron. possessive stems:	
1SG -ng'u-	1PL -tu-	1SG -ngu	1PL -itu
2SG -ku-	2PL -nu-	2SG -ko	2PL -inu
cl.1 -ki-		cl.1 -ke	

The element **-ki-** is also found between the connexive and a following proper name or kinship term. If there is more than one name or kinship term, (**v**)**angáánya** 'folk', or in short **angáá**, appears between the connexive and the proper names or kinship terms (see also 4.1 and 4.2).

lihálá lya-ki-zakíia field of Zakia

lihálá ly-angáánya zakía na-wi-mariáámu, or

lihálá ly-angáá zakía na-wi-mariáámu, or

lihálá lya vangáánya zakía na-wi-mariáámu field of Z. and Mariamu

vitúvi vy-angáánya zakía na-wi-mariáámu, or

vitúvi vy-angáá zakía na-wi-mariáámu, or

vitúvi vyá vangáánya zakía na-wi-mariáámu bundles of Z. and M.

Nouns from classes other than class 1 denoting persons (and in stories also animals) may optionally be preceded by the element **-ki-**.

chipúla chá(-kí)-likutúkúutu knife of the troublesome child

Fixed nominal possessive constructions exist which express certain qualities.

PPx-á-náápi	black	cf. kudíimba 15 to be black
PPx-á-nááswe	white	cf. kuswélééla 15 to be white
PPx-á-nahúúvi	red	cf. kuhúvílila 15 to be red
PPx-á-mbóóne	good	
PPx-á-táangu	old, former	
PPx-á-háámbi	new	
PPx-á-nánjípí	short	cf. kwínjípáála 15 to be short
PPx-á-mwáana	small	cf. mwáana/váana 1/2 child
PPx-á-chilúúme	male	cf. nnúúme/valúúme 1/2 man
PPx-á-chikóongwe	female	cf. nkóongwe/vakóongwe 1/2 woman
PPx-á-mbaleenga	pierced (of ear lobe)	
	cf. mbaleenga/mibaleenga 3/4 hole in ear lobe	
PPx-á-víili	second	cf. -víili two
PPx-á-táatu	third	cf. -taátu three etc.
PPx-á-chihwaango (tones unknown)	last	cf. kúúhwa 15 to die
PPx-á-NPx-naáni	whose	

If a nominal possessive construction is separated from the head-word by a specifier, the connexive loses its H tone.

vipúla vyóóhe vya-valúúme	many knives of the men
vipúla víinji vya-ku-wáaáko	other knives of you (sg.)
chikápú chaangu cha-nahúúvi	my red basket

There is one exception: the connexive keeps its H tone when the specifier is an interrogative. Questions containing interrogatives have a special melody, i.e., the final word has penultimate F and final H; such a melody is also possible without interrogatives (see 4.8, 5.6 and 8.2.2).

vipulá ntwani vyá-valúúmé what kind of knives of the men?

vikápu vingápi vyá-kú-wáakó	how many baskets of you (sg.)?
chikápu chilída chá-nahúuví	which red basket?
vipúla vyóóhe vya-valúumé	many knives of the men?
vipúla víinji vya-ku-wáakó	other knives of you (sg.)?
chikápú chaangu cha-nahúuví	my red basket?

5.5 Pronominal possessives

The pronominal possessive construction consists of the connexive PPx-**a-** (for tones, see below), followed by the possessive stem (with a final H tone). Special possessive stems exist for participants and classes 1; in class 2, the connexive is followed by the bound substitutive of that class, the **v** being optional. Other classes make use of the class 1 pronominal possessive stem. The possessive stems are:

1SG	-ngú	1PL	-itú
2SG	-kó	2PL	-inú
cl.1	-ké	cl.2	-(v)ó

We assume that with the possessive stems of 1PL and 2PL, an **-e-** appears as the result of (the historical) vowel coalescence of the connexive **-a-** with the initial **-i-**: **-etú** (1PL) and **-enú** (2PL). The pronominal possessive construction has RL tones in attributive position; the R tone results from retraction of the final H of the stem to the preceding penultimate syllable. The possessive and its preceding noun appear in the same phonological phrase: the preceding noun does not have penultimate lengthening and appears with a final H tone (see below, and 8.2.2).

chiyewé chaángu	my chin	cf. chiyeewe 7	chin
malóvé laáko	your words	cf. malóóve 6	words
lutambó lwaáke	his trap	cf. lutaámbo 11	trap
viténg'ú vyeétu	our chairs	cf. vitéeng'u 8	chairs
vipulá vyeénu	your knives	cf. vipúúla 8	knives
mátínjí laá(v)o	their pumpkins	cf. mátínji 6	pumpkins

nnáandi na-dínávi dyaáke the tree and its branches

In non-attributive position, the tones of the pronominal possessive are FL.

avawene váangu	(s)he has seen mine (cl.2)
vayeéni vavilí váangu	two guests are mine (cl.2)
váangu vayeéni	my guests, mine are the guests
vángu vayeéni	id. (Penultimate Shortening)

Assuming that the connexive **-a-** is L-toned, and assuming that the connexive plus the possessive stem count as a disyllabic vowel-initial stem (**-angú**, **-akó**, **-aké**, etc.), we can compare possessives with nouns with disyllabic vowel-initial stems. Nouns with

disyllabic vowel-initial stems with a FL tone pattern belong to TG C2, i.e., they have a H-toned NPx and a final °H tone (see 4.4.2). We assume that possessives also have a H-toned PPx as well as a final °H. This final H tone retracts to the lengthened penultimate syllable where a R tone appears. There is vowel coalescence of the PPx with the stem; if there would have been space, the H tone of the PPx would have shifted back to escape the vicinity of the R tone on the stem. Next, tonal coalescence of the H tone of the PPx and the R tone of the stem results in a F tone (see 3.5.5). In attributive position, the H tone of the PPx has space to shift back to the final syllable of the preceding noun. The preceding noun gets a H on the final syllable, and the possessive remains with a penultimate R.

An alternative analysis would be that the connexive has its normal H tone rather than the PPx. We would then have to assume further that a H tone of the connexive, too, shifts back under the influence of a R tone.

Contractions take place between certain terms of kinship and relation and a following pronominal possessive. Note the tonal changes that occur in case of contraction compared to the non-contracted forms. There are special pronominal stems for 2SG and cl.1 (see below).

nkúlwaángu	nkúlweétu	or	nkúlú waángu	nkúlú weétu
	nkúlweénu			nkúlú weénu
	nkúlwaáo			nkúlú waáo

cf. **nkúulu/vakúulu** 1/2 elder sibling (of same sex)

There probably is a H Tone Bridge in the contracted form (more or less similar to what happens with a noun plus demonstrative, see 5.3).

nnúmbwaángu	nnúmbweétu	or	nnumbú waángu	nnumbú weétu
	nnúmbweénu			nnumbú weénu
	nnúmbwaáo			nnumbú waáo

cf. **nnuúmbu/valuúmbu** 1/2 elder sibling (of opposite sex)

The final H tone of the noun shifts back to the preceding syllable with contraction.

nnúng'únwáángu	nnúng'únweétu
	nnúng'únweénu
	nnúng'únwááo
or nnúng'úné wáángu	nnúng'úné weétu
	nnúng'úné weénu
	nnúng'úné waáo

cf. **nnúng'úúne/vanúng'úúne** 1/2 younger sibling (of same sex)

There are more examples of contractions.

atátaáko your father

atátaáke his father

cf. **atáata** father, my father; **atátá veétu** our father

ntwáangu my husband

ndyáangu/adyáangu my wife

mwanáangu my child

cf. **mwáana/váana** 1/2 child; **mwaaná weétu** our child

cf. **mwanéétu/vanéétu** 1/2 younger sibling (of opposite sex);

mwanétú waangu my younger sibling

The following forms are nominalized possessives consisting of the stem **-angu** 'my', preceded by the pronominal prefix of class 9/class 2 **-i/-va-**, preceded by the NPx of class 1/2A **n-/a-**.

companion

nnyáangu nnyéetu

nnyááko nnyéenu

nnyááke nnyááo

companions

aváangu avéetu

avááko avéenu

avááke avááo

Another kinship term where contraction has taken place is:

mwípwaangu/vípwaangu 1/2 nephews/nieces

Special pronominal possessive stems exist for the participant 2SG and cl.1., occurring with certain kinship terms.

2SG **-(l)o**

cl.1 **-we**

The tonal changes which occur in adding these possessive stems are similar to the tonal changes which occur in case of contraction (see above).

nkúlúúlo your elder sibling (of same sex)

nkúlúúwe his/her elder sibling

cf. **nkúlwáangu** my elder sibling

nnúmbuúlo your elder sibling (of opposite sex)

nnúmbuúwe his/her elder sibling

cf. **nnúmbwaangu** my elder sibling

nnúng'úúno your younger sibling (of same sex)

nnúng'úúuwe his/her younger sibling

cf. **nnúng'únwáangu** my younger sibling

ntwáalo your husband

ntwáawe her husband

cf. **ntwáangu** my husband

ndyáalo/adyáalo your wife

ndyáawe/adyáawe his wife

cf. **ndyáangu/adyáangu** my wife

mwanaálo your child

mwanaáwe his/her child

cf. **mwanaáangu** my child

There are two words for ‘mother’, **ámaáma** and **aayu**. Both words have special forms for 2SG and class 1.

amámaáyo your mother

amámaáye his/her mother

cf. **ámaáma** mother, my mother; **ámamá veétu** our mother

ányoóko your mother

ányoókwe his/her mother

cf. **aayú veétu** our mother; there is no form for 1SG.

The special pronominal possessive stem **-we** of class 1 is also used in class 17 pronominal possessive constructions.

kung’ándé kwááwe to his/her house

kwááwe at his/her home

cf. **pang’ándé paáke** at his/her house

After some terms of kinship and relation, the pronominal possessive **mwa-** (class 18?) followed by a possessive stem is used; the possessive stems used for the participant 2SG and class 1 are the special stems. With relational terms, it indicates ‘fellow-’. The tone of the pronominal possessive is H:L; a H Tone Bridge might have occurred with these forms.

vahívání mwáángu my cousins

mwáálo

mwááwe

cf. **nnyíváani/vahíváani** 1/2 cousin

vahívání mwéétu our cousins

mwéénu

mwáávo

ńng’ándá mwáángu my husband

mwáálo

mwááwe

cf. **ńng’aánda/váng’aánda** 1/2 husband

ńng’ándá mwéétu our husband

mwéénu

mwáávo

nnémbá-mwááwe his fellow boyfriend

amwánda-mwááwe his fellow travellers

cf. **nneémba** 1 boy

cf. **mwáánda** 3 journey

Contracted forms as well as forms with special pronominal possessive stems may be followed by another pronominal possessive or by a free substitutive; this indicates ‘my own’, ‘your own’, etc.

nkúlwángú waángu or **nkúlwángú nááangu**

ndyáwé waáke or **ndyáwe nááng’e**

my own elder sibling

his own wife

The intervening elements **-ki-/-wi-** between the connexive/**na-** and a following word of class 1 do not appear in class 1 contracted forms and forms with special pronominal possessive stems.

chitúúvi chá-adyáawe	the bundle of his wife
nnúúme na-adyáawe	the man and his wife

5.6 Other pronominal forms

°-**mó** ‘one’, ‘a(n), some’

This pronominal stem is a minisyllabic stem which has a first TBU indicated by the sign “.” (see 3.4.1 and 6.3.1).

cl.1	yuúmo	cl.2	vaámo
cl.3	uúmo	cl.4	iímo
cl.5	liímo	cl.6	laámo
cl.7	chiímo	cl.8	viímo
cl.9	iímo	cl.10	diímo
cl.11	luúmo		
cl.12	kaámo	cl.13	tuúmo
cl.14	uúmo		
cl.15	kuúmo		
cl.16	paámo		
cl.17	kuúmo		
cl.18	muúmo		

The tone pattern of this stem including the preceding PPx is RL in attributive position as well as in non-attributive position. Preceding nouns with which it agrees do not occur in the same phonological phrase, as can be concluded from the penultimate lengthening of the noun (with possible penultimate shortening).

lutaávi luúmo	one/a branch
lutávi luúmo	id.
aluwené luúmo	(s)he has seen the one
lutaávi lukúlungwa luúmo	one big branch
luúmo lutaávi	one branch
lúmó lutaávi	id.

The penultimate R tone is a clear indication that this pronominal form has a (final) °H (°-**mó**), belonging to TG C1.

TG	PPx.stem		TP
C1	L.SF	°- mó	RL / HH

°-**óhe** ‘much, many’

This stem is not used in class 1.

		cl.2	vóóhe
cl.3	wóóhe	cl.4	yóóhe
cl.5	lyóóhe	cl.6	lóóhe
cl.7	chóóhe	cl.8	vyóóhe
cl.9	yóóhe	cl.10	dyóóhe
cl.12	twóóhe	cl.13	twóóhe
cl.14	wóóhe		
cl.15	kwóóhe		
cl.16	póóhe		
cl.17	kwóóhe		
cl.18	mwóóhe		

The tone pattern of this stem including the preceding PPx is H:L in attributive position as well as in non-attributive position. Preceding nouns with which it agrees do not occur in the same phonological phrase, as can be concluded from the penultimate lengthening of the noun.

lyóóhi lyóóhe	much smoke
malóóve lóóhe	many words
malóve lóóhe	id. (Penultimate Shortening)
ding’áánde dyóóhe	many houses
ding’ánde dyóóhe	id. (Penultimate Shortening)
alawene lóóhe	(s)he has seen many (cl.6)
vikáapu vyá-nahúvi vyóóhe	many red baskets/red baskets are many
lóóhe mahaámba	many (are the) leaves

As seen in 4.4.2, nouns with disyllabic vowel-initial stems with a H:L tone pattern may belong to TG A, B, D2 or E; we may assume that this pronominal form also belongs to one of these TG’s, but we do not know how to determine to which TG exactly this pronominal belongs.

°-**ohe-óhe**/°-**ahi-óhe** ‘every, all’

This stem is a reduplication of the stem °-**óhe** ‘much, many’; its variant is °-**ahi-óhe**.

cl.1	wohe-wóóhe	cl.2	vohe-vóóhe
cl.3	wohe-wóóhe	cl.4	yohe-yóóhe
cl.5	lyohe-lyóóhe	cl.6	lohe-lóóhe
cl.7	chohe-chóóhe	cl.8	vyohe-vyóóhe
cl.9	yohe-yóóhe	cl.10	dyohe-dyóóhe
cl.11	lwohe-lwóóhe		
cl.12	kohe-kóóhe	cl.13	twohe-twóóhe
cl.14	wohe-wóóhe		
cl.15	kwohe-kwóóhe		
cl.16	pohe-póóhe		
cl.17	kwohe-kwóóhe		
cl.18	mwohe-mwóóhe		

The tone pattern of this compound stem including the preceding PPx is LLH:L in attributive position as well as in non-attributive position. Preceding nouns with which it agrees do not occur in the same phonological phrase, as can be concluded from the penultimate lengthening of the noun.

líina lyohelyóóhe	every name
dinaávi dyohedyóóhe	all branches
dináví dyohedyóóhe	id. (Penultimate Shortening)
avawené vohevóóhe	(s)he has seen all (cl.2)
vikáapu vyá-nahúvi vyohevyóóhe	all red baskets
vohevóóhe vaánu	all people
vohevóóhe vaánu	id. (Penultimate Shortening)

We would classify this LLH:L tone pattern as another remaining tone pattern next to the two which are listed at the end of section 4.4.4.

^oH-**.nji** ‘other’

This pronominal stem is a minisyllabic stem which has a first TBU indicated by the sign “.” (see 3.4.1 and 6.3.1). The sign “^oH” indicates that the pronominal stem imposes a H tone on the preceding PPx.

cl.1	yúunji	cl.2	váanji
cl.3	úunji	cl.4	íinji
cl.5	líinji	cl.6	láanji
cl.7	chíinji	cl.8	víinji
cl.9	íinji	cl.10	díinji
cl.11	lúunji		
cl.12	káanji	cl.13	túunji
cl.14	úunji		
cl.15	kúunji		

- cl.16 **páanji**
 cl.17 **kúunji**
 cl.18 **múunji**

The tone pattern of this stem including the preceding PPx is FL in attributive position as well as in non-attributive position. The final H tone retracts to the lengthened penultimate syllable and the HLH tonal sequence, which appears on the penultimate syllable, becomes a F tone after tonal coalescence which applies together with VC/GF (see 3.5.5 and 4.4.2). Nouns with which it agrees do not occur in the same phonological phrase, as can be concluded from the penultimate lengthening of the noun.

- váana váanji** other children
likáála línji other charcoal
likála línji id. (Penultimate Shortening)
- avawene váanji** (s)he has seen the other ones
valúúme vakúlungwa váanji other big men
váanji valúúme other men
vánji valúúme id. (Penultimate Shortening)

Surprisingly, we found the following expression, where the tone pattern of the pronominal form is H:L.

- nááng'e yúúnji** (s)he is the other one

As this pronominal form has a final H tone as well as a H-toned PPx, the TG to which it belongs is TG C2.

TG	PPx.stem		TP
C2	H.SF	^o H-.njí	FL / HL

^o-lída 'which'

The PPx preceding this stem has a L tone and the stem itself has a F tone in attributive as well as in non-attributive position. The PPx of class 1 is **a-**.

- | | | | |
|-------|-----------------|-------|----------------|
| cl.1 | alíida | cl.2 | valíida |
| cl.3 | ulíida | cl.4 | ilíida |
| cl.5 | lilíida | cl.6 | lalíida |
| cl.7 | chilíida | cl.8 | vilíida |
| cl.9 | ilíida | cl.10 | dilíida |
| cl.11 | lulíida | | |
| cl.12 | kalíida | cl.13 | tulíida |

- cl.14 **ulíida**
 cl.15 **kulíida**
 cl.16 **palíida**
 cl.17 **kulíida**
 cl.18 **nníida**

When the interrogative is the final word of a question, it has penultimate F and final H; this is the question melody (see 4.8 and 5.4).

- mituupa ilíidá** which holes?
mitupa ilíidá id. (Penultimate Shortening)
amwené alíidá (s)he has seen which one (cl.1)?
nnúúme nkúlungwa alíidá which big man?

Preceding nouns with which it agrees do not occur in the same phonological phrase (as can be concluded from the penultimate lengthening of the noun), except when there is no question melody, but a “surprise”-melody. A question with this melody has **yé** at the beginning, and the noun to which the interrogative is attributive gets penultimate H and final H (see 4.8 and 8.2.2).

yé mitúpá ilíida (what?) which holes

When the interrogative is not the final word in a question, it does not get the question melody; the question melody then goes to the final word in such a question.

- vínu vilíida vyá-valúumé** which things of the men?
vínu vilíida vyá-valúumé id. (Penultimate Shortening)

We can establish the tone group to which this form belongs after comparing this form with nouns (see 4.4.1) with respect to its tone pattern with penultimate lengthening as well as its tone pattern with penultimate shortening.

TG	PPx.stem		TP
B	L.S1	^o -líida	L.FL / L.HL

^o-ómi/^o-úmi ‘healthy, strong, whole’

In class 1 (and class 2?), the NPx is used.

- | | | | |
|-------|---------------|-------|---------------|
| cl.1 | múúmi | cl.2 | vúúmi |
| cl.3 | wúúmi | cl.4 | yúúmi |
| cl.5 | lyúúmi | cl.6 | lúúmi |
| cl.7 | chúúmi | cl.8 | vyúúmi |
| cl.9 | yúúmi | cl.10 | dyúúmi |
| cl.11 | lúúmi | | |

cl.12	kúúmi	cl.13	túúmi
cl.14	wúúmi		
cl.15	kúúmi		
cl.16	púúmi		
cl.17	kúúmi		
cl.18	múúmi		

The tone pattern of this stem including the preceding PPx is H:L in attributive as well as in non-attributive position. Preceding nouns with which it agrees do not occur in the same phonological phrase, as can be concluded from the penultimate lengthening of the noun.

vakóóngwe vúúmi	healthy women
vakóngwe vúúmi	id. (Penultimate Shortening)
ing'áánde yúúmi	whole house
ing'ánde yúúmi	id. (Penultimate Shortening)
avawene vúúmi	(s)he has seen the healthy ones (cl.2)
vaaná vaangu vúúmi	my healthy children
vúúmi váana	healthy (are) the children

The forms of classes 1 and 2 as well as the forms of the participants are used as greetings.

umúúmi	how are you? (lit.: are you healthy?)
nimúúmi	I am fine (lit.: I am healthy)

As seen in 4.4.2, nouns with disyllabic vowel-initial stems with a H:L tone pattern may belong to TG A, B, D2 or E; we may assume that this pronominal form also belongs to one of these TG's, but we do not know how to determine to which TG exactly this pronominal belongs.

°-éne 'self'

In class 1 (and class 2?), the NPx is used.

cl.1	mwéene	cl.2	véene
cl.3	wéene	cl.4	yéene
cl.5	lyéene	cl.6	léene
cl.7	chéene	cl.8	vyéene
cl.9	yéene	cl.10	dyéene
cl.11	lwéene		
cl.12	kéene	cl.13	twéene
cl.14	wéene		
cl.15	kwéene		
cl.16	péene		
cl.17	kwéene		
cl.18	mwéene		

The tone pattern of this stem including the preceding PPx is FL in attributive position. This pronoun demands occurrence of a preceding word with which it agrees, but there is one other position where it can appear, i.e., in postverbal position. This pronoun and preceding nouns which it specifies occur in one phonological phrase: the noun does not have penultimate lengthening and gets penultimate H tone and final H tone (see 8.2.2).

nankakatámbwé mwéene the spider itself cf. **nankakataambwe** spider
paháli péene the place itself cf. **paháli** place

avawene véene (s)he has seen they themselves (cl.2)

A different tone pattern, H:L, occurs in the following expression.

naáng'e mwéene (s)he is him-/herself

With the participants SG (and PL?) the NPx is preceded by the verbal prefix (VPx); with most stems, this VPx is exclusively used as a copula, but with °-éne it can also be used in a non-copulative sense: 'I myself', 'you yourself', etc.

1SG **nimwéene** 2SG **umwéene**
 1PL **tuvéene** 2PL **mméene**

The tone pattern of this pronominal form in attributive position (FL) is probably due to a H Tone Bridge (HTB) from the noun to the H:L-toned pronominal (a similar process of HTB occurs with nouns and following demonstratives, see 5.3). As seen in 4.4.2, nouns with disyllabic vowel-initial stems with a H:L tone pattern may belong to TG A, B, D2 or E; when occurring after a conjoint tense with a final H tone, nouns of TG B, D2 and E have a FL tone pattern after HTB. Thus, comparing the tone patterns of this pronominal form to those of nouns with the same structure, we may conclude that the pronominal form belongs to one of the TG's B, D2 or E.

°-**naáng'o** 'the same, the very one'

The class 1 form is not used.

	cl.2	vánaang'o	
cl.3	únaang'o	cl.4	ínaang'o
cl.5	línaang'o	cl.6	ánaang'o
cl.7	chínaang'o	cl.8	vínaang'ó
cl.9	ínaang'o	cl.10	dínaang'o
cl.11	lúnaang'o		
cl.12	kánaang'o	cl.13	túnaang'o
cl.14	únaang'o		
cl.15	kúnaang'o		
cl.16	pánaang'o		
cl.17	kúnaang'ó		
cl.18	ónaang'o		

In attributive position, the tone pattern of this stem including PPx is HFL; this pronoun occurs in one phonological phrase with a preceding noun: the noun does not have penultimate lengthening and gets penultimate and final H tone (see 8.2.2).

lidúvá línáang'o the very day
ing'ándé ínáang'o the same house
linááng'o lidúúva that very day or: **lináng'o lidúúva** (with PUS)

In non-attributive position, its tone pattern is LH:L; the class 2 form in non-attributive position is similar to the class 2 free substitutive.

vanááng'o vaánu the same people
vanááng'o they

Preceded by **na-** 'and, with', the meaning is 'likewise, as well'. The tone pattern can alternatively be all-L.

na-chínduúli na-chinááng'o taaya múnkúungu úunji, or
na-chínduúli na-chinaang'o taaya múnkúungu úunji
 and the cassava vegetable likewise, put it in the other bowl

With a locative PPx, the meaning may either be 'likewise, as well' (without reference to place or time) or 'et cetera'.

The tone pattern in attributive position (HFL) is probably due to a H Tone Bridge (HTB) from the noun to the LH:L-toned pronominal (a similar process of HTB occurs with nouns and following demonstratives, see 5.3). The TG of °-**naáng'o** is established on the basis of comparison with nouns when occurring after a conjoint tense with a final H tone. Nouns of TG E with the same structure (disyllabic stem) and the same tone pattern (LH:L) as this pronominal form (and free substitutive, see 5.2) have the same HFL tone pattern after HTB (see 4.4.1 and 8.3.2 and 8.3.3); they also have the same tones after penultimate shortening. We therefore assume that this pronominal form also belongs to TG E.

TG	PPx.stem		TP
E	L.S2	°- naáng'o	L.H:L / L.HL

5.7 Invariables

Invariables are words which neither demand nor undergo agreement; they do not belong to any of the major categories (noun, adjective, verb, pronominal form), but some of them probably are derived in one way or another from one of the major

categories. The syntactic functions of invariables are mainly adjunct, conjunction, interjection or exclamation.

Invariables which are probably derived from pronominal forms are:

panjííka,		
chípáanji	perhaps	cf. ° ^H - njí other
napanááng'o,		
nakunááng'o,		
namunááng'o	also, likewise, therefore	cf. °- naáng'o the same
chaluúmo	together	cf. °- mó one

There are two words which probably are Nominal Connexives, in view of the initial H tone.

chákaáni	when
chámaáni	what

Invariables which are probably derived from nominal forms as adjectives and a numeral are:

mwaléehu	directly	cf. °- leéhu tall
kadiíki	a bit	cf. °- díkidikí small
kavíila	again,	
kuvíila	again,	
uvíila	thus, so, as follows	cf. °- vilí two

Invariables which are probably derived from verbs are:

péépi	near	cf. -ipika be short, -a-nanjipi (nominal connexive) short
kwááli	perhaps, maybe, I don't know	cf. -pali be
kóóka	then, finally, at the end; if	cf. -uka go away
kwaáchi	where,	
muuchi	as, like,	
daachi	hey, tell me!, what?,	
mwadaáchi	why	cf. -.chi say

The other invariables in our word list either do not seem to be derived (synchronically) or are Swahili loans. The list below includes ideophones.

baáhi	and so, accordingly, well, enough!, stopt it!, be it so! (< Sw. basi)
daáhu	bare, naked, useless
eélo	yes!
eéma	or
heeká	but, to the contrary
kaála	formerly, the past (cf. Sw. kale)
maiíka	since, because
malíínga	as, like

muhíú	real, right, ready
mwááha	right
nahóóti	now (immediate future)
namaádi	on purpose
námeéne,	
namééne	very, especially
naanga	no!, there is no, Negative particle
nááno	and so, accordingly, well, enough!, stopt it!, be it so!
nduulu	not yet, still
ndúvaáni	when (Chimaraba)
neélo	today (cf. chiílo cl.7 night)
ngóoo	oh no! (something bad happened)
ngwaáá	sound of stubbing, e.g. one's toe
nngééé	sound expressing the sunrise
njóóóni	so and so, such a one
ńtwáani	what kind of
núúúndu	tomorrow (also lúúúndu cl.11)
pííí	sound expressing that the sun has disappeared
píuú	sound expressing that the sun is about to disappear
saána	very (< Sw. sana)
taangu	formerly, the past (< Sw. tangu)
waalá	nor (< Sw. wala)
weéka	alone, on one's own

Comparing the tone patterns of the invariables with those of nouns, we can assign the invariables to the tone groups A through E, but we are less certain than with nouns. The first problem is that invariables do not have a prefix like nouns, although some of them do have a lexicalized one; we must therefore compare the tone pattern of the combined nominal prefix and nominal stem with the whole tone pattern of the invariable. Also, the tests described in 4.4.1 to distinguish nouns of certain tone groups can not be used with invariables since they do not appear in the same p-phrase with a preceding verbal form. So, we are not able to distinguish TG B and D2, nor TG A and E with respect to (inherent) disyllabic stems with a penultimate level H.

TG	Px-stem	?	Invariables	TP
A / E	L-S1/SF / L-S2		napanááng'o	LLH:L
			nakunááng'o	LLH:L
			namunááng'o	LLH:L
			panjííka	LH:L
			kavííla	LH:L
			kuvííla	LH:L
			péépi	H:L
			kwááli	H:L
			kóóka	H:L

			malíínga	LH:L
			muhííu	LH:L
			mwááha	H:L
			nahóóti	LH:L
			namééne	LH:L
			nááno	H:L
B / D2	L-S1 / H-no H	?	°chípanji	HFL
		?	°mwaléhu	LFL
		?	°uvíla	LFL
		?	°ngóo	FL
		?	°ńtwani	HFL
C1	L-SF		°chalumó	LRL
			°kadikí	LRL
			°kwachí	RL
			°mwadachí	LRL
			°bahí	RL
			°dahú	RL
			°eló	RL
			°emá	RL
			°heká	L:H
			°kalá	RL
			°maiká	LRL
			°namadí	LRL
			°neló	RL
		?	°ngwaá	LH:
			°saná	RL
			°walá	L:H
			°weká	RL
C2	H-SF		°chákaní	HRL
			°chámaní	HRL
			°námené	HRL
			°ndúvaní	LHRL
			°núundú	HRL
			°pííí	HRL
			°píuú	HRL
			°njóoní	HRL
			°nngééé	LHRL
D1	L-noH		°muchí	L:L
			°dachi	L:L
			°nanga	L:L
			°ndulu	L:L
			°tangu	L:L

The preclitic **na-** cliticizes to words of all major categories. The element **-wi-** intervenes between **na-** and any form of class 1. The preclitic basically means ‘and’ and ‘with’; together with the verbs **-va** ‘to be’ and **-ké** ‘not to be’, it expresses ‘to have’ and ‘to have not’ respectively. In passive sentences, it indicates the agent.

paámo na-vaánu váánji	together with other people
paámo na-wi-muúnu yúúnji	together with another person
váníikaála na-vyááka vyóóhe	they lived during many years
vadíkidíiki na-vakúlúungwa	the small ones and the big ones
kulééhu na-kúúno kuntwáála	far from this (place) Mtwara
nkuwhéná unáháuula nding’ándé dyaáo paámo na-kuláhumya mávéélu	
loohelóóhe	and went speaking in their houses while (lit. together with) throwing out all mischievous children
avelé na-dimoóngo	(s)he has the authority
nikée na-vikáapu vitaátu	I do not have three baskets
múndá úúno unaliimwa na-vaánu váánji	this field is cultivated by other people

When a nominal with the preclitic **na-** appears after a conjoint verbal form with a final H tone, this final H tone remains on the final syllable of the verbal form, and there is no H Tone Bridge. This is exemplified by the example above: **avelé na-dimoóngo** (s)he has the authority. Without the preclitic, there is a H Tone Bridge from the final H tone of the verbal form to the first H tone of the following noun (followed by lowering of the final H tone of the verbal form, see 8.3.2): **avele dímoóngo** (s)he is the authority.

6. THE VERB

- 6.1 The structure of verb forms
- 6.2 Concords
 - 6.2.1 The concord °**mu-**
 - 6.2.2 The 1SG concord
 - 6.2.3 Subject concords of the participants as copulas
- 6.3 The verb stem
 - 6.3.1 Minisyllabic stems
 - 6.3.2 Causative stems and Passive stems
 - 6.3.3 Applicative stems and Perfective stems
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 - 6.3.5 Reciprocal stems and forms with the Pre-Final **-ang-**
 - 6.3.6 Reduplicated stems
 - 6.3.7 The macrostem
- 6.4 Verbs 'to be' and 'to say'

6.1 The structure of verb forms

The following positions, or slots, can be distinguished in verb forms:

1	2	3	4	5	6	7	8	9
PreIn	In	PoIn/Fo	Fo2	PreRa	Ra	PoRa	PreFi	Fi

					VB			

					VS			

				MS				

- | | | |
|---|----------------------------|--|
| 1 | Pre-Initial | = Indirect Relative Initial: PPx, pa- when, mu- as, u- while, chi- how; Sequential n- |
| 2 | Initial | = Subject Concord, Infinitive ku- |
| 3 | Post-Initial/
Formative | = Negative marker: -ká- , in Neg. Optative: -na-
= Tense (= Time/Aspect/Mood) marker |
| 4 | Formative 2 | = Tense (= Time/Aspect/Mood) marker |
| 5 | Pre-Radical | = Object Concord; Reflexive -li- |
| 6 | Radical | = Verbal Radical or Root |
| 7 | Post-Radical | = Expansion(s) and/or Extension(s) |
| 8 | Pre-Final | = Tense (= Time/Aspect/Mood) marker -ang- |

- 9** Final = Past, Non-Past **-a**, Perfective **-ile**, Optative **-e**
6-7 Verbal Base (VB)
6-9 Verb Stem (VS)
5-9 MacroStem (MS)

The minimal verbal form consists of a Verbal Base and a Final (= Verb Stem). The minimal verbal form occurs as the Imperative:

iid-a come!
hween-a go!

In the maximal verbal form, the positions 1 to 9 are filled. One example is the Indirect Relative Far Past Perfective.

1 2 3 4 5 6 7 7 8 9
pa- tw- á- ná- vá- súm- is- idy- aang- a
 when we had constantly bought for them

The verbal base consists of the verb root, to which one or more expansions and/or extensions may be added. The verb stem consists of the verbal base, including the Pre-Final and the Final. The macrostem is formed by the verb stem plus a preceding object concord.

6.2 Concords

The forms of the subject concords (SC) and those of the object concords (OC) are the same for the participants PL and the classes 2ff. They are different for the participant 2SG and class 1. The subject concord of the participant 1SG has two basic forms, one of which is identical with the object concord. The reflexive object concord is used for all participants and classes.

	SC	OC		SC	OC
1SG	ngu-/ni-	-ngu-	1PL	tu-	-tu-
2SG	u-	-ku-	2PL	mu-	-mu-
cl.1	á-	-mu-	cl.2	vá-	-va-
cl.3	ú-	-u-	cl.4	í-	-i-
cl.5	lí-	-li-	cl.6	lá-	-la-
cl.7	chí-	-chi-	cl.8	ví-	-vi-
cl.9	í-	-i-	cl.10	dí-	-di-
cl.11	lú-	-lu-			
cl.12	ká-	-ka-	cl.13	tú-	-tu-
cl.14	ú-	-u-			
cl.15	kú-	-ku-			
cl.16	pá-	-pa-			

cl.17	kú-	-ku-
cl.18	mú-	-mu-
REFLEXIVE OC		-li-

The SCs of the classes have a (assigned) H tone, the subject concords of the participants have a (default) L tone. In a number of tenses, the tones of the subject concords are neutralized to H or (default) L. The object concords of the participants as well as the classes are (default) L; in one tense (Infinitive with OC), they are H.

All verbal concords have phonologically conditioned allomorphs before vowel-initial stems and tense markers. In these environments, vowel coalescence takes place, with the same results as for nominal prefixes before vowel-initial stems (see 4.1).

tw-ona miláandi	we see trees	
vona miláandi	they (cl.2) see trees	
va-ch-ona chíínu	they see it the (cl.7) thing	
tw-a-lólá víínu	we looked at things	(Far Past -a-)
va-lólá víínu	they (cl.2) looked at things	id.
dy-a-vélé páwéelu	they (cl.10) were outside	id.

The form of the concords of the participant 2PL, the SC of class 18 and the OC of class 1 is °**mu-**. This form has allomorphs that are mainly phonologically conditioned (6.2.1). The concords of the participant 1SG have forms and allomorphs that are partly phonologically and partly morphologically conditioned (6.2.2).

6.2.1 The concord °**mu-**

The concords of the participant 2PL, the subject concord of class 18 and the object concord of class 1 (°**mu-**) are homorganic syllabic nasals in exactly the same environments as with nominal prefixes of classes 1 and 3 before consonant-initial stems (see 4.1) and of class 18 (see 4.2). The homorganic syllabic nasal in the examples below is written as **m-** before bilabials and as **n-** before other consonants.

Subject concord for 2PL:

m-pwechela vayeéni	you (pl.) receive guests	
n-toha limbéénde	you touch skin	
n-komola kukááya	you arrive home	
n-chima lwiidi	you shut a door	
m-minganga ung'áváanga	you chase a dog	cf. -vinganga
n-nambela chiínu	you want something	cf. -lambela
n-nyedya viilyo	you taste food	cf. -yedya
m-mwadya mwaaná waángu	you dress my child	cf. -wadya
m-mwika kukááya	you arrive home	cf. -hwika

n-nyinika chiloóongo	you cover a pot	cf. -hinika
m-badula chiínu	you bite off something	
n-gong'ola liyáanga	you push a stone	
n-suma chiínu	you buy something	
n-ng'ana pawéélu	you play outside	

No syllabic nasal is formed before vowel-initial stems and minisyllabic stems.

mu-uya kukaáya	you return home
mw-omba likuungwa	you beat a (big) drum
muu-lya ing'oówo	you eat a banana

Subject concord of cl.18 (some examples):

n-ng'áánde n-katápéele	in the beautiful house
cf. -katapele , Perf. of -katapala	be beautiful
n-ng'áánde m-melé na-vaánu	in the house there are people
cf. -vele , Perf. of -va	be

Before consonant-initial tense markers and object concords, the subject concords of 2PL and cl.18 are also homorganic syllabic nasals, but not before object concords that start with one of the consonants that change after such a syllabic nasal (i.e. **v** and **l**) nor before object concords that are syllabic nasals themselves; the form of the subject concords in these environments is **mu-**.

n-chí-lima liháála	you (pl.) were cultivating a field
n-ká-lima liháála	you (pl.) do not cultivate a field
n-na-líme liháála	you (pl.) should not cultivate a field
m-pa-lola pang'áámbo	you (pl.) look at the other side
n-tu-lola tunóóndwa	you (pl.) look at the small stars
n-chi-lola chitúúvi	you (pl.) look at the bundle
n-ka-lola kanóóndwa	you (pl.) look at the small star
n-di-lola pawéélu	you (pl.) look at them outside
n-ngu-lola nng'áánde	you (pl.) look at me inside the house
mu-va-lola pawéélu	you (pl.) look at them outside
mu-li-toha limbéénde	you (pl.) touch the skin
mu-m-minganga mwáana	you (pl.) chase the child

Object concord of 2PL and cl.1 (some examples):

tu-m-pwechela mwééenu/nááng'e	we receive you (pl.)/him	
tu-m-minganga mwééenu/nááng'e	we chase you (pl.)/him	
tu-n-nambela mwééenu/nááng'e	we like you (pl.)/him	
tu-n-nyakula mwééenu/nááng'e	we carry you (pl.)/him	cf. -yakula
tu-m-mwadya mwééenu/nááng'e	we dress you (pl.)/him	
tu-m-mwikila mwééenu/nááng'e	we reach you (pl.)/him	cf. -hwikila
tu-n-nyinika mwééenu/nááng'e	we cover you (pl.)/him	

tu-n-gong'ola mwééenu/nááng'e	we push you (pl.)/him
tu-mu-udya mwééenu/nááng'e	we ask you (pl.)/him
tu-mu-lya mwééenu/nááng'e	we eat you (pl.)/him

The object concord of class 18 before consonant-initial stems is not **-mu-** rather than a homorganic syllabic nasal.

a-mu-lolite múńkúungu	(s)he has looked into the bowl
cf. a-n-nolite mwééenu	(s)he has looked at you (pl.)
a-n-nolite múúnu	(s)he has looked at the person (cl.1)

The syllable preceding a syllabic nasal with a H tone becomes also H-toned (see 3.5.8).

pá-m'-míngaanga	when you (pl.) chase	cf. pa-mú-víngaanga
mú-ń-noóla	you (pl.) who look at him/her	cf. mu-mú-loóla
va-ná-m'-mwalaála	they (will) kill you/him,her	cf. va-na-mú-walaála

6.2.2 The 1SG concord

The subject concord of 1SG has forms which are partly morphologically conditioned; three environments can be distinguished: 1. preceding a verb stem, 2. preceding an object concord, and 3. preceding a tense marker.

ad 1. The subject concord is **ngu-** when it immediately precedes a verb stem. The concord is **N-** (prenasalization) as an optional variant before polysyllabic stems starting with the consonants **p, t, ch, k, v, l, y** and **w** (i.e. those consonants that are not recoverable after prenasalization, see 4.1). Given the allomorph **ngu-** is the only acceptable form before the other consonants, the result is that all forms with **N-** are transparent.

ngu-pwechela / mwechela vayeéni	I receive guests
ngu-toha / noha limbéénde	I touch skin
ngu-komola / ng'omola kukááya	I arrive home
ngu-chima / nyima lwiídi	I shut a door
ngu-vinganga / mbinganga ung'áváanga	I chase a dog
ngu-lambela / ndambela chíínu	I want something
ngu-yedya / njedya viílyo	I taste food
ngu-wadya / mbwadya mwaaná waángu	I dress my child
ngu-badula chíínu	I bite off something
ngu-gong'ola liyáanga	I push a stone
ngu-hwika kukááya	I arrive home
ngu-suma chíínu	I buy something

ngu-hinika chiloóongo	I cover a pot
ngu-ng'ana pawéélu	I play outside
ngu-uya kukááya	I return home
ngw-omba likuungwa	I beat a (big) drum

Before minisyllabic stems, the only possible concord is **ngu-**; before disyllabic verb stems which appear without their final syllable (see 7.1.7), the concord can be **N-**.

nguu-twa malóombe	I pound maize
nguu-lya ing'óowo	I eat a banana
ngu-ve / mbe kukááya	I am home cf. -vele , Perf. stem of -va 'be'

ad 2. The subject concord is **ngu-** or **ni-** preceding an object concord; prenasalization is not possible.

ngu-m-pwechela / ni-m-pwechela kukááya	I receive him/her at home
ngu-ku-pwechela / ni-ku-pwechela kukááya	I receive you (sg) at home
ngu-li-toha / ni-li-toha limbéénde	I touch the skin
ngu-va-lola / ni-va-lola valúúme	I look at the men

ad 3. The shape of the subject concord depends on the following tense marker; there are five cases:

a) The SC is **ngu-** or **ni-** before the tense marker **-chí-** (Past Progressive) and preferably **ngu-** before **-chí-** ('say') of the (compound) Future.

ngu-chí-lima / ni-chí-lima líháála	I was cultivating a field
nguu-chí-ngu-lime líháála	I will cultivate a field
? nii-chí-ngu-lime líháála	id.

b) The SC is **ni-** before any marker **-ka-**.

ni-ka-líima lihaála	if I cultivate a field (Conditonal)
ni-kání-líima lihaála	if I would cultivate a field (Suppositional Condit.)
ni-kana-líima lihaála	although I cultivate a field (Concessive)
ni-ka-líime lihaála	I should cultivate a field (Subsecutive Optative)
ni-ka-limiite lihaála	if I would have cultivated a field (Suppos.Cond. Pf.)
ni-ká-líima lihaála	I don't cultivate a field (Negative Present)
ni-kánáa-límá líháála	I haven't yet cultivated a field (Unexp.Neg.Perf.)

c) The SC is zero before **-na-** (Non-Past) and **-nachi-** (Non-Past Progressive).

na-yeedya chitúnduúni	I (will) taste chitunduni (= type of food)
nachi-yédyá chitúnduúni	I am/will be tasting chitunduni

d) The SC is a syllabic nasal before other tense markers starting with a **n**, i.e., **-ni-** as well as other instances of **-na-**.

ń-ní-yeedya ntandaasa	I tasted cassava porridge (Past Perfective)
n-ni-yéedya ntandaasa	I have tasted cassava porridge (Present Perfective)

ń-ná-yeedyā ntandaasa	I was tasting cassava porridge (Past)
n-na-yéedyē ntandaasa	I should not taste cassava porridge (Neg. Optative)

e) The SC merges with the tense marker **-a-** (Far Past tenses) into **na-**.

na-chí-lima líháála	I was cultivating a field (Far Past Progressive)
ná-ní-yeedyā ntandaasa	I tasted cassava porridge (Far Past Perfective <i>djt</i>)
na-límíté líháála	I had cultivated a field (Far Past Perfective <i>cjt</i>)

The object concord of 1SG is **-ngu-**; it has an optional variant **N-** (prenasalization) in the same environments as the subject concord for 1SG.

u-ngu-pwechela / u-mwechela kukááya	you receive me at home
u-ngu-telekela / u-nelekela kukááya	you cook for me at home
u-ngu-chema / u-nyema kukááya	you call me at home
u-ngu-lola / u-ndola chíihi	you only look at me
u-ngu-vinganga / u-mbinganga pawéélu	you chase me outside
u-ngu-wadya / u-mbwadya kukááya	you dress me at home
u-ngu-sumila chíínu	you buy something for me
u-ngu-hinikila chiloóongo	you cover a pot for me
u-ngu-uyila upéehi	you return to me quickly
u-ngw-ombela likuungwa	you beat a drum for me
? u-ngu-lya kukááya	you eat me at home

As shown in 3.5.5, when an object concord with a H tone fuses with a vowel-initial stem, the H tone appears one TBU to the left of the fused stem. The same process occurs when the object concord is **N-**.

u-ná-lyóone	you should not see it	cf. u-na-lí-óone
u-ná-ndóole	you should not look at me	cf. u-na-ngú-lóole

6.2.3 Subject concords of the participants as copulas

The subject concords for the participants may be used as copulas to express untensed nominal predication. For the participant 1SG, the concord **ni-** is used. The subject concords may precede nominal forms (nouns, adjectives, numerals, interrogatives) as well as pronominal forms; the subject concords of the singular participants are followed by (pro)nominal forms of class 1, the subject concords of the plural participants are followed by (pro)nominal forms of class 2. The full forms can be preceded by free substitutes, as shown in the first example.

Nominals (cf. 4.6 - 4.8 for other nominals than nouns):

múńńiima/váńńiima 1/2 Nnima person

- 1SG (nááángu) **ni-múńńíma** I am a Nnima
 2SG (wáááko) **u-múńńíma**
 1PL (hwééetu) **tu-váńńíma**
 2PL (mwééenu) **m-máńńíma**

mmákóonde/vamákóonde 1/2 Makonde person

- 1SG **ni-mmákóonde** I am a Makonde
 2SG **u-mmákóonde**
 1PL **tu-vamákóonde**
 2PL **m-mamákóonde**

nkwíiva/vakwíiva 1/2 thief

- | | | | |
|-----|--------------------------------|-----|--------------------|
| 1SG | ni-nkwíiva I am a thief | 1PL | tu-vakwíiva |
| 2SG | u-nkwíiva | 2PL | m-makwíiva |

muúnu/vaánu 1/2 person; **ńtwáani** (I, interrogative) what kind of

The SC of the participant 2PL is also used for the participant 1PL before **vaánu**.

- 1SG **ni-munú ńtwáani** what kind of person am I
 2SG **u-munú ńtwáani**
 1PL/2PL **m-manú ńtwáani**

°-**kúlungwa** (A) big; **nkúlúungwa/vakúlúungwa** cl.1/2

- | | | | |
|-----|-------------------------------|-----|-----------------------|
| 1SG | ni-nkúlúungwa I am big | 1PL | tu-vakúlúungwa |
| 2SG | u-nkúlúungwa | 2PL | m-makúlúungwa |

°-**léehu** (A) long, tall, high; **nnéehu/valéehu** cl.1/2

- | | | | |
|-----|----------------------------|-----|-------------------|
| 1SG | ni-nnéehu I am tall | 1PL | tu-valéehu |
| 2SG | u-nnéehu | 2PL | m-maléehu |

°-**vilí** (NUM) two; **vaviili** cl.2

- 1PL **tu-vaviili** we are two
 2PL **m-maviili**

°-**naní** (nominal interrogative) who; **nnaáni/vanaáni** cl.1/2

The class 1 form is also used for both the participants SG; alternatively, it can be considered to be a noun (as well as the class 2 form, see 4.8).

- 1SG/2SG **n-naáni** who am I/are you?
 1PL **tu-vanaáni**
 2PL **m-manaáni**

°-**ngápi** (nominal interrogative) how many; **vangáapi** cl.2

- 1PL **tu-vangáapi** how many are we?
 2PL **m-mangáapi**

Pronominals (cf. 5.6):

^oH **-njí** other; **yúúnji/váánji** cl.1/2

This pronominal has FL tones in attributive position.

1SG	ni-yúúnji I am the other one	1PL	tu-váánji
2SG	u-yúúnji	2PL	m-máánji

^o-ómi, ^o-úmi healthy, strong, whole; **móómi/vóómi** cl.1/2

The class 1 form takes the NPx.

1SG	ni-móómi I am fine, healthy (greeting)	2SG	u-móómi
1PL	tu-vóómi	2PL	m-móómi

^o-lída which; **alíida/valíida** cl.1/2

The class 1 form takes the subject concord. The form following the concords for the participants SG probably consists of the NPx of class 1 followed by the stem.

1SG	ni-nnída which one am I?	1PL	tu-valíida
2SG	u-nnída	2PL	m-malíida

^o-óhe much, many; **vóóhe** cl.2

1PL	tu-vóóhe we are many
2PL	m-móóhe

^o-mó one (minisyllabic stem); **yuúmo** cl.1

1SG	ni-yuúmo I am the one
2SG	u-yuúmo

With two stems, **-éne** 'self' and **-ohe-óhe** 'every, all', the subject concord can also be used in a non-copulative sense.

^o-éne self; **mwééne/vééne** cl.1/2

The class 1 form takes the NPx. This pronominal has FL tones in attributive position.

1SG	ni-mwééne I myself/I am myself	1PL	tu-vééne
2SG	u-mwééne	2PL	m-mééne

^o-ohe-óhe, ^o-ahi-óhe every, all; **vohevóóhe** cl.2

1SG	tu-vohevóóhe we all/we are all
2PL	m-mohemóóhe

The concords of the participant 2PL and class 2 may be used to address, or refer to, single persons in order to express respect (see 4.1 about the **a-** in terms of kinship and relation).

ń-ní-ngu-haulíla	you told me (addressing an elder)
vá-ní-ngu-haulíla	(s)he told me (referring to an elder)

6.3 The verb stem

With stem formation in the second lexicon, verbal bases and Finals are joined together. Verbal bases consist of a root to which one or more expansions and/or extensions may be added.

In 3.4 and 3.4.1, it is stated that monosyllabic stems do not exist because there is a structure condition which says that a stem should have at least two syllables. Monomoraic vowel-final roots and Finals **-a** and **-e** form monosyllabic stems because of the condition that the syllables within verbal stems must have an onset. They are augmented by a structural position left to the stem (indicated by a dot) which serves as the first syllable of the stem. This position gets phonetic content by a copy of the vowel of the preceding morpheme (e.g., the tense marker). In this way, these stems become disyllabic vowel-initial stems, and to distinguish them from the original VCV-stems, we call them minisyllabic stems.

In 3.5.2, it is stated that the final syllable of minisyllabic stems as well as of causative stems and passive stems is complex. In a complex final syllable, there are two vowels which appear next to each other because of the condition mentioned above that syllables within a verbal stem must have an onset. The second vowel is the Final, the first vowel is part of the root (minisyllabic stems) or the extension (causative and passive stems).

Extensions like the Passive and the Causative are part of the verbal base. The whole stem is named after the extension it contains, e.g., passive stems, causative stems, etc. In the sections below, we analyse stems with the (more or less) productive extensions as well as stems with the Pre-Final **-ang-**. We look at the form of extensions/Pre-Final, combined extensions, and we investigate them with respect to their final syllable being complex or not. We start with minisyllabic stems and we end with macrostems.

6.3.1 Minisyllabic stems

The following minisyllabic stems exist:

-.pa	bear fruit
-.pya	be scorched, be burnt
-.twa	pound
-.cha	dawn
-.swa	set (of sun)
-.hwa	die
-.va	be
-.lya	eat
-.nya	defecate

-.chi say

The verb stem **-.chi** 'say' is irregular in that it does not occur with the Finals **-a**, **-e**, or **-ile**. It may occur in a limited number of tenses, and it is more defective than the verb stem **-.va** 'be', which may occur in many (but not all) tenses; neither verb stem may have an object concord (see 6.9).

In the second lexicon, minisyllabic stems have the structure **-.CVa**; they contain two vowels (the root and the Final), and an initial structural position (indicated by a dot). With some stems, we know the root vowel, °**-.pia** 'be scorched, be burnt', °**-.hua** 'die', and °**-.lia** 'eat': it can be deduced from the harmonic vowel of extensions like the Applicative, which harmonize with the root vowel; with the other stems, the quality of the root vowel can not be told with certainty from the harmonic vowel of extensions (see 6.3.3). That all minisyllabic stems have two vowels, and thus have a complex final syllable (just as causative stems and passive stems) can be seen from the differences in tone patterns when comparing verbal forms with and without a complex final syllable (see 3.5.2). With verbal forms with SF-H tone, there is retraction to the penultimate syllable in case the final syllable is not complex, and there is no retraction to the penultimate syllable when the final syllable is complex; in the latter case, the SF-H tone retracts to the root vowel (with minisyllabic stems) or to the vowel of the extension (with causative and passive stems) and disappears with Final H Deletion (3.4.6), except with the Optative.

tu-naalya	we (will) eat
tu-naava	we (will) be
tu-na-liíma	we (will) cultivate
tu-na-liimya	we (will) make cultivate
tuulyé	we should eat
tuuvé	we should be
tu-liíme	we should cultivate
tu-liimyé	we should make cultivate

When there is no retraction to the penultimate syllable, there is also no H Tone Bridge from the S1-H tone to the retracted SF-H tone, as in the Infinitive.

ku-kátápáála	to be beautiful (< ° ku-kátapaála)
ku-kátapaadya	to make beautiful (< ° ku-kátapaadía)

Retraction to the penultimate syllable does not take place when the final syllable is complex. We have to mention here a remarkable similarity between stems with a complex final syllable and Imperatives. In the Imperative consisting of minisyllabic stems, the vowel **i** appears as the first TBU of the stem, and the SF-H tone does not retract to the penultimate syllable. With all Imperatives consisting of disyllabic stems, including those without a complex final syllable, the SF-H tone does not retract to the penultimate syllable.

Imperatives:		stems:
iipa	bear fruit!	(cf. -pa bear fruit)
iilya	eat!	(cf. -lya eat)
iiva	steal!	(cf. -iva steal)
iivya	make steal!	(cf. -ivya make steal)
liima	cultivate!	(cf. -lima cultivate)
liimya	make cultivate!	(cf. -limya make cultivate)
cf. yangaáta	help!	(cf. -yangata help)
yangaatya	make help!	(cf. -yangatya make help)

We know that all Imperatives forms have SF-H tone because this tone appears on the Final when followed by a word like **kadiiki** ‘a bit’.

ilyá kadiiki	eat a bit!
ivá kadiiki	steal a bit!
ivyá kadiiki	make steal a bit!
limá kadiiki	cultivate a bit!

One might suspect that these forms are too short for a SF-H tone to be assigned, and that the SF-H tone is a floating final H tone (indicated by the symbol ^H) which appears on the Final when followed by another word (°**lima**^H). But a SF-H tone (like other H tones) is assigned to stems, not to the whole form, and with the other tenses with SF-H tone, the SF-H tone is indeed assigned to disyllabic stems. I therefore suggest that these forms are too short according to a (minimal) structure condition on verbal forms (something like: a verbal form should at least have three TBU’s underlyingly), and that this lack of TBU is compensated by creating a complex final syllable analogous to the final syllable of minisyllabic stems (and causative stems and passive stems) which contains a position to which the SF-H tone retracts. The creation of a complex final syllable also occurs with certain other stems, such as special causative and passive stems, reciprocal stems and stems with the Pre-Final, all of which are discussed below.

We have stated that syllables within a verbal stem must have an onset. Because of this condition, complex final syllables appear with minisyllabic stems, causative stems and passive stems. Without this condition, the root vowel (with minisyllabic stems) and the vowel of the extension (with causative and passive stems) would form a syllable on their own, and this syllable would be the penultimate syllable where penultimate lengthening would take place. It is clear that this is not the case: the syllable before the complex one is the penultimate syllable where penultimate lengthening occurs. So, the condition mentioned above causes complex final syllables to appear; minisyllabic stems therefore consist of one syllable, and because of another condition that stems must have two syllables, the initial (S1-)position is created which makes them structural identical with disyllabic vowel-initial stems. In 3.4.1, this analysis was supported by the fact that minisyllabic stems have the same tonal behaviour as disyllabic vowel-initial stems. It was also made clear in the same section

that the S1-position of minisyllabic stems is filled by a separate vowel, not by the vowel of the preceding morpheme itself, but by a copy of it. In the Imperative, as seen above, there is no preceding vowel, and the vowel *i* appears as the first TBU of the stem.

iipa bear fruit!
iilya eat!

With an analysis in which there is no initial S1-position with minisyllabic stems, several problems arise, and ultimately we would be unable to derive the correct surface forms. In such an analysis, the S1-H tone is assigned to the root vowel, and the SF-H tone retracts to the root vowel. An example is the Infinitive which has S1/SF H tones. The form with the verb stem [°]**-lia** 'eat', would be [°]**ku-liá**. The verb stem has one syllable because penultimate lengthening lengthens the preceding syllable: [°]**kuu-liá**. To which position should the SF-H tone retract in the form? Assuming that it stays on the Final, and assuming that the S1-H tone is realized on the preceding TBU after VC/GF (as occurs with the H tone on a fused object concord, see 3.5.5), the form would be [°]**kuú-lyá**. We then would need another rule to derive the correct surface form **kúúlya**, i.e. contour simplification, which would lead to unnecessary complication of the analysis. Another example is the Present Perfective (disjoint) which has SF-H tone and Px-H tone (H tone on the subject concord): [°]**tú-ni-liá**. The form would be [°]**tú-nii-liá** after penultimate lengthening, and the SF retracts to the root vowel being the S1-position: [°]**tú-nii-liá**. The problem here is that the H tone of a subject concord shifts to the S1-position, but this position is already occupied by the retracted SF-H tone. Where should it shift to? There is no shifting of a H tone to a position before another H tone, so if VC/GF precedes the shifting process, the H tone on the root vowel appears on the preceding TBU, there is no shifting possible, and the wrong form ^{*}**tú-nii-lyá** appears instead of the correct form **tu-nii-lyá**. If the shifting process precedes VC/GF, the H tone on the root vowel would appear on the Final, and the wrong form ^{*}**tu-nii-lyá** appears. Another example is the Conditional ([°]**tu-ka-lia**) which has S2-H tone. But to which position should we assign a S2-H tone? And how to derive the surface form **tu-káálya**?

It should be noted that when monomoraic vowel-final roots and the Perfective Final **-ile** are joined together, a stem with two syllables appears after syllabification (and not three because of the condition mentioned above), and there is no need to create an initial S1-position. This is also true when extensions with the structure **-VC-** are added. Below, we give examples of the applicative extension, the long passive extension and the Perfective Final.

-lila < [°]**-li-il-a** eat for
-liiwa < [°]**-li-iw-a** be eaten
-liile < [°]**-li-il(-)e** have eaten

The S1-position is the first TBU of the disyllabic stem. This can be seen, for example, with the Present Negative which has S1-H tone (first example), with the Negative Optative of which the subject concord has a H tone which shifts to the S1-

position (second example), and with the Negative Present Perfective which has S1/SF-H tones, where the SF-H tone retracts to the penultimate syllable (third example).

tu-ká-va-líla	we do not eat for them	(< ° tu-ká-va-líla)
va-na-liiwe	they should not be eaten	(< ° vá-na-liiwe)
tu-ká-va-líle	we have not eaten them	(< ° tu-ká-va-lílé)

Most of these stems do not have complex final syllables, as the third example above demonstrates, where the SF-H tone has retracted to the penultimate syllable. Another example is the applicative stem in the Non-Past which has SF-H tone.

tu-na-va-líla	we (will) eat for them	(< ° tu-na-va-lílá)
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Exceptions are causative and passive stems since these extensions have a complex final consonant where vowel incorporation has taken place (see next sections).

6.3.2 Causative stems and Passive stems

Verbal bases with the causative extension °-i- arise in two ways: when the causative extension is added at the formation of verbal bases in the second lexicon, and as lexicalized causatives in the first lexicon. See also 2.3 for the distribution of the causative forms.

Syllabification creates one (complex) syllable when verbal bases with the causative extension °-i- and the Final -a are joined together.

°-tepia	< °-tepi-a	< °-tep-i-	make bow down	(cf. -tepa bow down)
°-kutia	< °-kuti-a	< °-kut-i-	make cry	(cf. -kuta cry)
°-lamia	< °-lami-a	< °-lam-i-	cure	(cf. -lama heal)

Lexicalized causatives:

°-yedia	< °-yedi-a	< °-yedi-	taste; imitate	
°-wadia	< °-wadi-a	< °-wadi-	dress	(cf. -wala put on)

Although the final example °-wadia can be derived directly from -wala (the **l** becomes **d** when occurring before the causative vowel, see 2.3), forms with combined extensions prove that the form is lexicalized (see below). After penultimate lengthening, the SF-H tone (of the Non-Past, for example) retracts to the vowel of the extension, and not to the penultimate syllable.

°tu-na-teepiá	< °tu-na-tepiá	(cf. tu-na-teépa	< °tu-na-tepá)
°tu-na-kuutiá	< °tu-na-kutiá	(cf. tu-na-kuúta	< °tu-na-kutá)
°tu-na-laamiá	< °tu-na-lamiá	(cf. tu-na-laáma	< °tu-na-lamá)
°tu-na-yeediá	< °tu-na-yediá		
°tu-na-waadiá	< °tu-na-wadiá	(cf. tu-na-waála	< °tu-na-walá)

The retracted H tone disappears with Final H Deletion, a process which occurs after VC/GF when the extension becomes **y**.

tu-na-teepya	we (will) make bow down
tu-na-kuutya	we (will) make cry
tu-na-laamya	we (will) cure
tu-na-yeedya	we (will) taste
tu-na-waadya	we (will) dress

When both the causative extension and the applicative extension (**-il/-el-**) are added, the applicative appears before the causative in the verbal base (which changes the **l** of the applicative into **d**). When the Final is added, the final syllable becomes complex.

-tepedya	< °-tepedia	< °-tepedi-a	< °-tep-el-i-	make bow down for
-kutidya	< °-kutidia	< °-kutidi-a	< °-kut-il-i-	make cry for
-lamidya	< °-lamidia	< °-lamidi-a	< °-lam-il-i-	cure for
tu-na-va-tepeedya	we (will) make bow down for them			
tu-na-va-kutiidya	we (will) make cry for them			
tu-na-va-lamiidya	we (will) cure for them			

With lexicalized causatives, the applicative is added after the extension. The causative vowel is copied to the position after the applicative, changing the **l** of the applicative into **d**. It appears that when a morpheme is added to a form with a complex final syllable, the newly derived final syllable must also be complex; this phenomenon is also observed with other forms, e.g. with lexicalized passives (see below).

-yedyedya	< °-yediedia	< °-yediedi-a	< °-yedi-el-i-	< °-yedi-el-
-wadiidya	< °-wadiidia	< °-wadiidi-a	< °-wadi-il-i-	< °-wadi-il-
tu-na-va-yedyeedya	we (will) taste for them			
tu-na-va-wadiidya	we (will) dress for them			

Next to **-yedyedya**, a form without the first glide is also possible, **-yededya**, suggesting that the applicative may also be added before the causative; in that case, we do not need to assume copying of the causative vowel. With the final example, we can see that °-wadi is lexicalized. If it were productively derived from °-wala, then the combined causative/applicative extensions would follow the same path as the non-lexicalized forms, and the form **-walidya** (via < °-walidia < °-walidi-a < °-wal-il-i-) would occur, which is not the case.

There are two other causative extensions, °-ihi/-ehi- and °-isi/-esi-. (For the distribution of the different forms of the causative, see 2.3.) There are also lexicalized forms with these causative extensions. When the Final is added, a complex final syllable appears.

°-lolehia/-lolesia	< °-lolehi-a/-lolesi-a	< °-lol-ehi-/°-lol-esi-
make look at (cf. -lola look at)		

$^{\circ}\text{-vihia/-visia} < ^{\circ}\text{-vihi-a/-visi-a} < ^{\circ}\text{-vihi/-visi-}$ be angry

After penultimate lengthening, the SF-H tone retracts to the final vowel of these extensions.

	$^{\circ}\text{tu-na-loleehía}$	$< ^{\circ}\text{tu-na-lolehiá}$
	$^{\circ}\text{tu-na-loleesía}$	$< ^{\circ}\text{tu-na-lolesiá}$
cf.	tu-na-va-loleéla	$< ^{\circ}\text{tu-na-va-lolelá}$ we (will) watch for them
	$^{\circ}\text{tu-na-viihía}$	$< ^{\circ}\text{tu-na-vihiá}$
	$^{\circ}\text{tu-na-viisía}$	$< ^{\circ}\text{tu-na-visiá}$

The retracted H tone disappears when the final vowel of the extension is incorporated into the preceding consonant with VC/GF. The surface forms of the extensions are **-ih/-eh-** and **-is/-es-**.

tu-na-loleeha	we (will) make look at
tu-na-loleesa	id.
tu-na-viiha	we (will) be angry
tu-na-viisa	id.

When both the causative extensions and the applicative extension are added, the applicative appears before the final vowel of the causative extensions (which changes the **l** of the applicative into **d**). When the Final is added, the final syllable becomes complex. Lexicalized causatives have the same form.

-lolehidya $< ^{\circ}\text{-lolehidia} < ^{\circ}\text{-lolehidi-a} < ^{\circ}\text{-lol-eh-il-i-}$ observe, notice
tu-na-lolehiidya we (will) notice

With lexicalized causatives, the applicative is added after the extension. And the causative vowel is copied to the position after the applicative, changing the **l** of the applicative into **d**.

-visidya $< ^{\circ}\text{-visiidia} < ^{\circ}\text{-visiidi-a} < ^{\circ}\text{-visi-il-i-} < ^{\circ}\text{-visi-il-}$ be angry for
tu-na-va-visiidya we (will) be angry for them

Not every **h** in the final syllable indicates that the stem consists of a lexicalized causative where the vowel is incorporated with the **h**. The retraction of a SF-H tone is a good test to detect whether or not a **h** has an incorporated causative vowel. When a SF-H tone does not retract to the preceding penultimate syllable, it does contain an incorporated vowel; when a SF-H tone does retract to the penultimate syllable, it does not contain an incorporated vowel, and the stem is simple. In addition, the combination with an applicative extension also shows different forms.

lexicalized causatives:	non-causatives:
tu-na-toooha we touch	tu-na-piíha we hide
tu-na-taaha we look for	tu-na-yaáha we throw away
-tohedya touch for	-pihila hide for
-tahidya search for	-yahila throw away for

Stems with a **s** in the final syllable are always lexicalized causatives; the **s** always has an incorporated vowel.

tu-na-viisa we are/will be angry
tu-na-uusa we (will) take off
-visidya be angry for
-usidya take off for

With the **ch**, we found one example with an incorporated vowel, probably an old lexicalized causative.

lexicalized causatives:	non-causatives:
tu-na-yoocha we roast	tu-na-koócha we poke
	tu-na-kwichakwiícha we sharpen
-yochedya roast for	-kochela poke for
	-kwichakwichila sharpen for

Finally, the retraction test as well as the addition test can also be used to distinguish the palatal nasal **ny** from the palatalized nasal **ny** (°**n+i**).

lexicalized causatives:	non-causatives:
i-ná-tóonya it rains	tu-na-paánya we beat
tu-na-kundaanya we mix	tu-na-miinya we squeeze
-tonedya rain for	-panyila beat for
-kundanidya mix for	-minyila squeeze for

In 2.3, we also find examples of lexicalized causatives with a causative extension (e.g. **-tonyeha** make rain) as well as with a passive extension (e.g. **-udywa** be asked).

We now turn to passives. Verbal bases with the passive extension °**-u-** also arise in two ways: when the passive extension is added in the second lexicon, and as lexicalized passives in the first lexicon. (There is also a long passive extension **-iw/-ew-**; for the distribution of the passive forms, see 2.3.)

When passive verbal bases are formed, syllabification creates one (complex) syllable from the extension °**-u-** and the Final **-a**.

° -tepua	< ° -tepu-a	< ° -tep-u-	be bowed down	(cf. -tepa bow down)
° -kutua	< ° -kutu-a	< ° -kut-u-	be cried	(cf. -kuta cry)
° -lamua	< ° -lamu-a	< ° -lam-u-	be healed	(cf. -lama heal)

Lexicalized passives:

° -tamua	< ° -tamu-a	< ° -tamu-	like, love
° -humbua	< ° -humbu-a	< ° -humbu-	infect

After penultimate lengthening, the SF-H tone retracts to the vowel of the extension, not to the penultimate syllable.

^o tu-na-teepúa	< ^o tu-na-tepuá
^o lí-na-kuutúa	< ^o lí-na-kutuá
^o tu-na-laamúa	< ^o tu-na-lamuá
^o tu-na-taamúa	< ^o tu-na-tamuá
^o vá-na-huumbúa	< ^o vá-na-humbuá

The retracted H tone disappears with Final H Deletion, a process which occurs after VC/GF when the extension becomes **w**.

tu-na-teepwa	we will be bowed down
li-na-kúutwa	it will be cried
tu-na-laamwa	we will be healed
tu-na-taamwa	we will like
va-na-húumbwa	they will infect

With the second example and the fifth example, the subject concord has a H tone which shifts to the S1-position.

When both the passive extension and the applicative extension are added, the passive extension follows the applicative extension. When the Final is added, the final syllable becomes complex.

-tepelwa	< ^o -tepelua	< ^o -tepelu-a	< ^o -tep-el-u-	be bowed down for
-kutilwa	< ^o -kutilua	< ^o -kutilu-a	< ^o -kut-il-u-	be cried for
-lamilwa	< ^o -lamilua	< ^o -lamilu-a	< ^o -lam-il-u-	be healed for
tu-na-va-tepelwa	we will be bowed down for them			
li-na-vá-kútiilwa	it will be cried for them			
tu-na-va-lamiilwa	we will be healed for them			

With lexicalized passives, the applicative follows the passive extension. A vowel appears in the position after the applicative, changing the **l** of the applicative into **d**. It appears that the final syllable is shaped by analogy with the final syllable of causatives.

-tamwidya	< ^o -tamuidia	< ^o -tamuidi-a	< ^o -tamu-il-i-
			< ^o -tamu-il-
-humbwidya	< ^o -humbuidia	< ^o -humbuidi-a	< ^o -humbu-il-i-
			< ^o -humbu-il-
tu-na-va-tamwiidya	we (will) like for them		
va-na-vá-húmbwiidya	they (will) infect for them		

In 2.3, we also find examples of lexicalized passives with a passive extension (e.g. **-tamwiwa** be loved) as well as with a causative extension (e.g. **-tamwiha** make love).

Causatives as well as passives have complex final syllables. When an applicative is added, they also have a complex final syllable. Lexicalized causatives and lexicalized passives have complex final syllables as well. When an applicative is added, they have a copied complex final syllable, by analogy with the non-lexicalized forms. The situation is different when separative and neuter/impositive extensions are added. Causatives as well as passives may not be combined with these extensions. Lexicalized causatives as well as lexicalized passives may be combined with these extensions, but then they do not have a copied complex final syllable (see 6.3.4).

Not every **w** in the final syllable indicates that the stem is a lexicalized passive. The retraction test and addition test can be used to distinguish the **w** from the passive **w** ([°]**u**).

lexicalized passives:

tu-na-paawa we are somewhere
tu-na-chiimwa we are angry
-pawidya be somewhere for
-tamwidya like for

non-passives:

tu-na-moówa we cut hair
tu-na-loówa we do witchcraft
-mowela cut hair for
-lowela do witchcraft for

6.3.3 Applicative stems and Perfective stems

The similarity in behaviour between the applicative extension and the Perfective Final **-ile** is striking. The applicative is added with the formation of verbal bases, while the addition of the Final occurs with stem formation.

-himbila < [°]**-himb-il-a** dig for (cf. **-himba** dig)
-himbile < [°]**-himb-ile** have dug
tu-na-va-himbiila we dig for them
tu-himbiile we who have dug

When combined, the Perfective Final appears after the applicative extension, or Imbrication occurs.

-himbidile < [°]**-himb-il-ile** have dug for
-himbile < [°]**-himbi-i-l-e** have dug for
tu-himbidiile we who have dug for
tu-himbiile we who have dug for

When combined with the causative, the causative [°]**-i-** appears after the applicative; the Final **-a** is added, and the final syllable is complex after syllabification. Here we can see that the Perfective Final acts as if it existed of an applicative-like part **-il-** and a Final **-e**: the causative appears after the **-il-**, before the **-e**, and the final syllable becomes complex.

-himbidya	<°-himbidia	<°-himb-il-i-a <°-himb-il-i	make dig for
-himbidye	<°-himbidie	<°-himb-il-i-e	have made dig
tu-na-va-himbiidya	we make them dig for (sth.)		
tu-vá-himbiidye	we who have made them dig		

The passive extension °-u- appears before the final **e** of the Perfective Final **-ile**, **-ite** or Imbrication, and the final syllable is complex after syllabification.

-pilikenwe	<°-piliken-u-e	have been heard	(cf. -pilikana hear)
-limitwe	<°-lim-it-u-e	have been cultivated	(cf. -lima cultivate)
-himbilwe	<°-himb-il-u-e	have been dug	
li-pílikeenwe	it (e.g. the word) that has been heard		
li-límúitwe	it (e.g. the field) that has been cultivated		
li-hímbúilwe	it that has been dug		

Alternatively, the Perfective Final **-ile** may also follow the passive extension, and as we have seen in the previous section with lexicalized passives followed by the applicative extension, they have a copied complex final syllable. Note that **-ile** replaces **-ite** with **-lima**.

-limwidye	<°-lim-u-il-i-e	have been cultivated
-himbwidye	<°-himb-u-il-i-e	have been dug
li-límwúidye	it (e.g. the field) that has been cultivated	
li-hímbwúidye	it that has been dug	

In combination with lexicalized causatives and lexicalized passives, the applicative extension and the Perfective Final have similar behaviour. Their first vowel only differs in case vowel harmony determines that the first vowel of the applicative is **e** (the first vowel of the Perfective Final is not a harmonic vowel; it always is **i**).

-udidya	ask for	(cf. -udya ask (a question))
-udidye	have asked	
-lombwedya	be married for	(cf. -lombwa be married)
-lombwidye	have been married	
tu-na-va-udiidya	we ask for them	
tu-vá-údiidye	we who have asked them	
tu-na-va-lombweedya	we are married for them	
tu-vá-lómbwúidye	we who have been married	

When added to monomoraic vowel-final roots, the applicative extension appears after the root-final vowel; the root vowel determines vowel harmony, but this does not give us certainty about the quality of the root vowel in all cases. For example, with the applicative **-pela** (cf. **-pa** bear fruit), there seems to be a harmonic vowel, but it is more likely that the root vowel is **a**, the applicative is **-il-**, and VC/GF results in **-el-** (there are indeed some nouns where VC/GF of **a** and **i** results in **e**, probably an old process, see 2.7). In the absence of an overt glide in the basic stem, we provisionally

analyse the root vowel as **a** in all cases of applicative **-el-**. We have not found applicatives with **°-va-** ‘be’ and **-chi** ‘say’.

-pela	< °-pa-il-a	(cf. -pa bear fruit)
-pila	< °-pi-il-a	(cf. -pya be scorched, be burnt)
-twela	< °-to-el-a	(cf. -twa pound)
-chela	< °-cha-il-a	(cf. -cha dawn)
-swela	< °-so-el-a	(cf. -swa set (of sun))
-hwila	< °-hu-il-a	(cf. -hwa die)
-lila	< °-li-il-a	(cf. -lya eat)
-nyela	< °-nya-il-a	(cf. -nya defecate)

With the Perfective forms made of these monomoraic vowel-final roots, the same forms appear as the applicatives ones, including the forms with (harmonic) **-el-** (except for the Final, which is **-e**; we assume that Imbrication applies to these applicative forms to form the Perfective, see 6.3.5). The form **-vele** comes from the root (which probably is) **°-va-** ‘be’; there is no Perfective form of **-chi** ‘say’.

-pele	-chele	-lile
-pile	-swele	-nye
-twele	-hwile	-vele < °-va-ile ? (cf. -va be)

When the applicative and Perfective Final are added to these roots, disyllabic stems occur, not minisyllabic stems where a S1-position is created to the left (see 6.3.1). In addition, their final syllable is not complex.

va-ni-tú-hwiila	they have died for us
a-tú-hwiile	(s)he who has died for us

Imbrication occurs in most cases when the Perfective Final is added to polysyllabic verbal bases. Many polysyllabic verbal bases appear as the result of added (productive) extensions, like in the first example below where an applicative and a passive extension are combined (**°-tep-el-u-** < **°-tep-el-** < **°-tep-** stoop). With imbrication, the Final **-e** is added, and a harmonic vowel appears after the vowel of the preceding syllable. Imbrication applies to forms with and without a complex final syllable.

-tepelwe	< °-tepelue	< °-tepe-e-lu-e	< °-tepelu-	be stooped
-hipwike	< °-hipuike	< °-hipu-i-k-e	< °-hipuk-	sprout
-olwete	< °-oloete	< °-olo-e-t-e	< °-olot-	point
-katapedye	< °-katapaidie	< °-katapa-i-di-e	< °-katapadi-	clean
tu-ólweéte	we who have pointed			
tu-kátápeedye	we who have cleaned			

See 7.1.4 for more details about the Perfective Final.

6.3.4 Separative stems and neuter/impositive stems

It remains a question how productive these extensions are. The form **-chimula** ‘unfasten, open’ can directly be derived from **-chima** ‘fasten, close’: °**-chim-ul-a**. But it is more likely that this form is lexicalized, just as the causative **-wadya** ‘dress’ and the passive **-lombwa** ‘be married’ are lexicalized, although they can be directly derived from resp. **-wala** ‘put on clothes’ and **-lomba** ‘marry’ (see previous sections). The structure of the separative and neuter/impositive extensions is shown by the following examples.

-malilika < °**-malil-ik-a** be completed (cf. **-malila** finish)

tu-na-i-chimuúla we unfasten it
chi-ni-málilíka it is/has been completed

We did not find many examples combined with a causative or passive extension. The examples which we found are probably all lexicalized forms, for example **-chimulwa** (< °**-chimul-u-a** ‘be opened’). But the separative and neuter/impositive extensions can be combined with lexicalized causatives and lexicalized passives. In these cases, they appear after the causative and passive extensions, but their final syllable is not a copied complex final syllable, as is the case when applicatives are added to lexicalized causatives and passives (see 6.3.2).

-tahuka < °**-tahi-uk-a** disagree, deny (cf. **-taha** search)
-sumisika < °**-sumisi-ik-a** (can) be sold (cf. **-sumisa** sell)
-kaleweka < °**-kaleu-ek-a** become drunk (cf. **-kalewa** be drunk)

tu-na-tahuúka we (will) disagree, deny
tu-na-sumisiika we are/can be sold
tu-na-kaleweéka we become drunk

One possible example of a lexicalized verbal base consisting of a monomoraic vowel-final root (°**-to-**) is **-tula** ‘set down’.

6.3.5 Reciprocal stems and forms with the Pre-Final -ang-

The reciprocal extension **-an-** and the Pre-Final **-ang-** have similar behaviour in all environments. We start with simple stems.

-lolana < °**-lol-an-a** look at each other (cf. **-lola** look at)
-lolanga < °**-lol-ang-a** look intensively

tu-na-lolaána we look at each other
tu-na-lolaánga we look intensively

Both the extension and the Pre-Final are added with stem formation. This is unexpected, at least for the extension, because extensions are generally added with

the formation of verbal bases. What makes them even more special is that they are added at a second stage of stem formation where stems are already formed. This means that with the examples above, the extension and the Pre-Final are added to the stem **-lola**, where they appear before the Final **-a**. Minisyllabic stems have a created S1-position after (the first stage of) stem formation, and a complex final syllable (e.g. °**-lia** ‘eat’, the S1-position is indicated by a dot). With Imperatives, the created S1-position is filled by the vowel **i**, as documented in 6.3.1, and the final H tone retracts to the preceding vowel in the complex final syllable where it disappears with Final H Deletion, as described in 3.5.2 and 3.5.6: **iilya** < °**iliá** eat! When the reciprocal extension or the Pre-Final are added to minisyllabic stems, the S1-position is already created; this can be seen with reciprocal Imperatives and Imperatives with the Pre-Final, where the initial vowel **i** appears.

ilyaanga < °**ili-ang-á** keep on eating! (stem: °**-li-ang-a**)
ilyaana < °**ili-an-á** eat each other! (stem: °**-li-an-a**)

The reciprocal and the Pre-Final are inserted into the complex final syllable before the Final **-a**. Remarkably, and this is another indication that they are added to stems, the derived final syllable is also complex, as can be seen with the final H tone which does not retract to the penultimate syllable and is not realized. Probably, when added to a complex final syllable, the derived final syllable should also be complex. This means that a syllable is created in analogy with the final syllable of minisyllabic stems, causative stems and passive stems which contains a position to which the SF-H tone retracts. The same process occurs with Imperatives with disyllabic stems, where a complex final syllable is created too, but for a different reason: because of a (minimal) structure condition on verbal forms (see 6.3.1). This is a similar process as seen with lexicalized causatives and lexicalized passives to which the applicative extension is added, where the derived final syllable is shaped in analogy with the final syllable of non-lexicalized causatives (see 6.3.2).

The reciprocal and the Pre-Final are added at a second stage of stem formation where other extensions already have been added, and this means that combined with other extensions, the reciprocal and the Pre-Final appear finally at the end of the sequence. For example, when combined with causatives and passives, lexicalized or not, they appear at the end before the Final **-a**. And since both causatives and passives have complex final syllables, the derived final syllables are also complex.

-kutyanga < °**-kuti-ang-a** be constantly made to cry
-wadyana < °**-wadi-an-a** dress each other
-lolwanga < °**-lolu-ang-a** be looked at intensively
-tamwana < °**-tamu-an-a** love each other

tu-na-kutyaanga we are constantly made to cry
tu-na-wadyaana we dress each other
tu-na-lolwaanga we are intensively looked at
tu-na-tamwaana we love each other

There is also tonal evidence that the reciprocal and the Pre-Final are added to stems. Minisyllabic stems have a created S1-position after (the first stage of) stem formation, and only then are the reciprocal or the Pre-Final added. This can be seen with the tonal process Prefix-H Tone Shift. As described in 3.5.4, the H tone of a subject concord shifts to the S1-position of the stem. With minisyllabic stems, it shifts to the created S1-position (which is filled with a copy of the vowel of the preceding morpheme), also in case the reciprocal or Pre-Final are added.

va-naálya	< ° va-na-áliá	< ° vá-na-aliá	they eat
va-nályaánga	< ° va-na-áli-ang-á	< ° vá-na-ali-ang-á	they keep eating

The second H tone in the form with the Pre-Final is due to doubling of the first H tone. Here, too, the “new” final syllable is complex, just as the final syllable in the form without the Pre-Final. That the “new” final syllable is complex can be seen by the fact that there is no retraction of the final H tone to the penultimate syllable (which would result in a penultimate R).

Addition of the other extensions occurs earlier in the derivation, with the formation of verbal bases. As described in 6.3.1, when one of the other extensions (e.g. passive **-iw-**) is added to a monomoraic vowel-final root (e.g. **-li-** eat) with the formation of verbal bases (°**li-iw-**), and when a Final is added to them with stem formation (**-li-iw-a**), the stems consist of two syllables. They are not minisyllabic stems with a created S1-position, but their S1-position is the vowel of the first syllable.

va-na-liiwa	they are eaten
va-na-liwáanga	they are continuously eaten

Perfective reciprocal stems and Perfective stems with the Pre-Final are formed with Imbrication. Addition of the full Perfective Final is not possible because this occurs at the first stage of stem formation. Imbrication occurs at the second stage of stem formation, after addition of the reciprocal and the Pre-Final. With Imbrication, the Final is (or becomes) **-e**, and an harmonic vowel appears after the vowel of the penultimate syllable; all vowels of a stem being **a**, they (may) all change to **e** (see 7.1.4).

-lolene	< -lolana	have looked at each other
-lolenge	< -lolanga	have intensively looked
-kutyenge	< -kutyanga	have made constantly cry
-tamwene	< -tamwana	have loved each other

tu-lóleéne	we who have looked at each other
tu-lóleénge	we who have intensively looked
tu-kútyéenge	we who have made constantly cry
tu-támwéene	we who have loved each other

The examples above are examples of the Relative Present Perfective; this tense has a H-toned subject concord (which shifts to the S1-position) as well as a final H tone (SF-H). As expected, a simple final syllable remains simple after Imbrication (first two examples above) and a complex final syllable remains complex after Imbrication (final two examples above). The difference can be seen by the (absence of) retraction of the final H tone to the penultimate syllable. The second H tone in the final two examples is due to doubling of the first H tone.

Perfective stems with the Pre-Final formed from minisyllabic stems are shaped differently, just as Perfective reciprocal stems formed from minisyllabic stems. For example, the Pre-Final added to the minisyllabic stem °-**lia** ‘eat’ results in the form °-**lianga**, and we would expect the Perfective form °-**lienge**, but this form does not exist. Instead, as we have seen in 6.3.3, the Perfective stems formed from monomoraic roots (like **-li-** ‘eat’) make use of the applicative forms (**-lila** ‘eat for’) to which Imbrication probably applies (**-lile** have eaten). Consequently, the form with the Pre-Final is shaped via the applicative form (**-lilanga** < °-**lil-ang-a**) to which Imbrication applies: **-lilenge** ‘have kept on eating’. As the applicative from which it is made is a disyllabic stem and not a minisyllabic stem, there is no created S1-position and no complex final syllable. This can be seen with the example below of the Relative Present Perfective: the H tone of the subject concord shifts to the S1-position which is the vowel of the first syllable, and the final H tone retracts to the penultimate syllable.

tu-líleénge	we who have kept on eating
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6.3.6 Reduplicated stems

In 3.4.1, we have shown that verbal reduplication applies to whole stems, including the Final **-a**, **-e** or **-ile** (or **-ite**, or an imbricated form). Its meaning is something like ‘keep on ...’.

-himbahimba	cf. -himba dig
-himbehimbe	cf. -himbe (Optative)
-himbilehimbile	cf. -himbile (Perfective)
-tongolatongola	cf. -tongola speak
-tongoletongole	cf. -tongole (Optative)
-tongweletongwele	cf. -tongwele (Perfective)

-tohatoha	cf. -toha touch
-tohetohe	cf. -tohe (Optative)
-tohidyetohidy	cf. -tohidye (Perfective)
-malamala	cf. -mala know
-malemale	cf. -male (Optative)
-maitemaite	cf. -maite (Perfective)
-twalatwala	cf. -twala take away
-twaletwale	cf. -twale (Optative)
-twetetwete	cf. -twete (Perfective)

In 7.1.7, we describe how final syllables beginning with **l** and its complex variant **dy** may be omitted in verbal forms, and this can be seen with reduplication, too. Some examples follow.

-tongwetongwe, -tongwetongwele	cf. -tongweletongwele
-tohitohi, -tohitohidy	cf. -tohidyetohidy

Since extensions are part of the stem, applicative stems, passive stems, causative stems, etc., may all be reduplicated, as well as stems with the Pre-Final **-ang-**. Reduplicated forms have a complex final syllable when the unreduplicated forms from which they are derived have one.

-himbilahimbila	cf. -himbila dig for; -himba dig
-tepyatepya	cf. -tepya make bow down; -tepa bow down
-kutwakutwa	cf. -kutwa be cried; -kuta cry
-chimulachimula	cf. -chimula unfasten; -chima fasten
-malilikamalilika	cf. -malilika be completed; -malila finish
-lolanalolana	cf. -lolana look at each other; -lola look at
-limangalimanga	cf. -limanga cultivate on and on; -lima cultivate

Reduplication occurs before H Tone Assignment in the second lexicon, the reduplicated stem as a whole is assigned a tonal profile, depending on the tense. In 3.4.1, we have given examples of verbal forms with reduplicated stems of all TG's. Here, we pick out two TG's: TG A (L.S1/SF) and TG E (L.S2). The Negative Present Perfective, for example, belongs to TG A; the stem is assigned S1-H tone and SF-H tone (e.g. °-**límité** 'have cultivated', °-**límitelimité** 'have kept on cultivating') and after penultimate lengthening and retraction, a H Tone Bridge occurs (°-**límiíte**, °-**límitélímiíte**). When there is no object concord, the H tone of the Negative marker (°-**ká-**) immediately precedes the S1-H tone, and the S1-H tone is deleted due to Meeussen's Rule.

tu-ká-la-límiíte	we have not cultivated them
tu-ká-límiíte	we have not cultivated
tu-ká-la-límitélímiíte	we have not kept on cultivating them
tu-ká-límitélímiíte	we have not kept on cultivating

We now turn to TG E; the Conditional, for example, belongs to this TG. As described in 3.4.1, when a S2-H tone is assigned to a disyllabic stem, tonal lengthening occurs in the first syllable and the S2 is assigned to this lengthened TBU (e.g. °-lííma); the tonal structure of the first syllable becomes level H after the processes penultimate lengthening (°-líííma) and structure simplification including tonal coalescence (°-lííma, see 3.5.6).

tu-ka-lííma	if we cultivate
tu-ka-la-lííma	if we cultivate them
tu-ka-limálííma	if we keep on cultivating
tu-ka-la-limálííma	if we keep on cultivating them

The examples with an object concord show that H Tone Assignment applies to the stem, and not to the macrostem (otherwise the S2-H tone would be on the first TBU of the stem). They also show that the stem is reduplicated, not the macrostem (the object concord appears only once).

In 3.4.1, we have described what happens with reduplication of minisyllabic stems: the reduplicated part contains the created S1-position filled with a copy of the vowel of the preceding morpheme. Some more examples follow (the copy of the vowel is underlined).

pa-tú-úlya-úlya matandaasa	when we keep on eating cassava porridge
pa-tú-lá-álya-álya matandaasa	when they keep on eating the cassava porr.
tu-ní-ilyá-ilya matandaasa	we have kept on eating cassava porridge

6.3.7 The macrostem

The macrostem consists of the verb stem plus the preceding object concord (if present). The macrostem is the domain of processes at some stages of the derivation; the verb stem is the domain of other processes at other stages of the derivation. The process H Tone Assignment, for example, has the verb stem as its exclusive domain: the S1-H tone is assigned to the first TBU of the verb stem, not of the macrostem (see 3.4.1). This is a process of the second lexicon. But later tone rules, e.g. Prefix H Tone Shift which applies post-lexically, apply to the macrostem: the H tone of the subject concord shifts to the first TBU of the macrostem, i.e., to the object concord if present, otherwise to the stem (see 3.5.4).

In 3.5.5, we have presented the Object Concord H Tone Retraction rule. A H tone on the object concord retracts to the preceding TBU when the object concord merges with a vowel-initial stem. Such a retraction rule is unique to object concords; generally, it does not occur in other merging processes. Compare the following examples.

tu-na-lí-óone, tu-ná-ly-óone we should not see it (cl.5)

The second H tone is due to doubling of the first H tone. The merging process above is optional, but when it happens, the H tone on the object concord shifts back. The example above is an example of the Negative Optative which has a subject concord with a H tone which shifts to the object concord. The example below is an Infinitive with object concord which has its own H tone. Here, too, the H tone of the object concord shifts back in case the object concord merges with a vowel-initial stem.

ku-lí-oóna, kú-ly-oóna to see it

When the object concord is 1SG, the concord is N- (prenasalization) as an optional variant before stems starting with certain consonants (see 6.2.2). When the object concord is N-, in both the Negative Optative (where a H tone shifts to the object concord) and in the Infinitive (where the object concord has its own H tone), the H tone also appears on the preceding TBU.

u-na-ngú-páanye, u-ná-máanye you should not beat me
ku-ngú-paánya, kú-maánya to beat me

In an alternative analysis, the merging process precedes the shifting process, so that in the first case above, where the object concord gets its H tone by shifting, the shift stops on the TBU preceding the merged object concord. But there are good reasons to assume that the shifting process precedes the merging process; in particular, we need this order to derive the correct tone patterns.

In all cases but one, the merging process of an object concord and a vowel-initial stem is optional. It is obligatory in case of minisyllabic stems due to a different syllabification compared to other stems (see 3.4.1). With minisyllabic stems, the Object Concord H tone Retraction rule applies, and the H tone appears on the preceding TBU. Remember that minisyllabic stems have a created S1-position (e.g., °-**lie**, °-**lia** ‘eat’) which is filled with a copy of the vowel of the preceding morpheme (the object concord **-la-** of cl.6 in the example below).

tu-ná-láalye < °**tu-na-lá-alie** < °**tú-na-la-alie** we should not eat them
kú-láalya < °**ku-lá-aliá** to eat them

6.4 Verbs ‘to be’ and ‘to say’

The verb **kúúva** ‘to be’:

The verb stem **-va** is a minisyllabic verb stem, which is reanalyzed as a vowel-initial disyllabic verb stem with a complex final syllable underlyingly. When followed by a locative, it expresses ‘to be somewhere’; followed by **na-** introducing a nominal phrase, it expresses ‘to have’. And as we have seen in the preceding sections, it is used as part of Complex Tenses as well as Compound Tenses. No object concord is possible with this verb. The verb may occur in almost every tense (for examples, see

7.4, type 2a)), but not in a complex tense where the first part also consists of this verb (e.g. *tu-ve-nkuuva).

tuuva kukááya	we are (generally) at home
vaava kúkáaya	they are (generally) at home
tuuva na-vikáapu vitaátu	we have three baskets
vaavá na-vikáapu vitaátu	they have three baskets

The verb **kupáawa** ‘to be somewhere’.

The verb stem **-pawa** is a disyllabic verb stem with a complex final syllable (this is seen, e.g., by the F tone on the penultimate syllable in the Infinitive, and by the Perfective final **-idyé**). The verb expresses ‘to be somewhere’, and it may occur without a locative. Followed by **na-** introducing a nominal phrase, it expresses ‘to be together with’, but not ‘to have’. No object concord is possible with this verb. The verb may occur in almost every tense, but not in the Past *djt* (*ánápawa).

Negative Present:

akápáawa	(s)he is not here/there
akápáawa kukááya	(s)he is not at home

Present Perfective:

apawidyé na-vikáapu vitaátu	(s)he is (here/there) with three baskets
------------------------------------	--

The defective verb stem **-pali** ‘to be somewhere’.

The verb stem expresses ‘to be somewhere’, and it may occur without a locative; the stem itself probably consists of cl.16 prefix **pa-**, followed by the (original) stem **-li**. When followed by **na-** introducing a nominal phrase, it expresses ‘to be with’, but not ‘to have’. No object concord is possible. The only possible tense for this verb stem is the Negative Present; there is no H Tone Doubling of the H tone of the Negative marker to the verb stem.

akápaali	(s)he is not there
akápaali kukááya	(s)he is not at home
akápaali na-vikáapu vitaátu	(s)he is not (here/there) with three baskets

The defective Negative **-ké** ‘not to be’:

It expresses ‘it is not...’ followed by the entity “which is not”. The SC is either **a-** or the proper SC for the participants or classes. Followed by **na-** introducing a nominal phrase, it expresses ‘not to have’; the SC **a-** is not possible in this case. No object concord is possible. The form is often pronounced as **-kéé** with a short fall from H to a lowered H (H).

akée/nikée náángu	it is not me
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akée/tukée hwéeétu	it is not us
akée/likée lihaámba	it is not the leave
akée/chikée chikáapu	it is not the basket
nikée na-vikáapu vitaátu	I do not have three baskets

The verb **kúúchi** ‘to say’:

This verb is irregular in that it does not have stems with the Finals **-a**, **-e** or **-ile**, nor with the Pre-Final **-ang-**. Its use on its own is limited, but as shown in the preceding section, it is used as the first part of Compound Tenses. No object concord is possible with this verb. The verb may occur in many tenses, but not in those with the Finals **-e** and **-ile**, nor in the Perfective *djt* (**tuníichi*). Some examples:

Present:

tuuchi malóóve lóóhe	we say many words
vaachi malóóve lóóhe	they say many words

Direct Relative:

túuchi málóóve	we who say words
vááchi malóóve	they who say words

Conditional:

tukááchi malóóve	if we say words
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The Present form of this verb is used in greetings (but without final H tone).

uuchi dachi úlyámbá úúno	how are you this morning? lit. what do you say this morning?
vaachi dachi váváana	how are the children? lit. what do the children say?

The Infinitive form of this verb is used as a Complementizer, either on its own or together with **-doóno**. The Sequential Infinitive of the verb, also in combination of **-doóno**, is often used in stories as a reply or reaction expressing ‘saying’, ‘and...said’.

ngu-va-hauli kúchí(doóno)...	I tell them that...
naáng’e nkúchí(doóno)...	and he said...
nkúchí(doóno)...	saying...

7. TENSES

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7.1 The tense system

Three systems are involved in constituting the verbal forms and their manifestations. The *tense system* is the system of possible combinations for Tense (i.e., Time/Aspect/Mood and Negative) morphemes (TM) including the Final (F). The *tone system* is the system of possible combinations for the tones of the verbal stem (VS) with the tone of the subject concord (SC) plus the tone(s) of the TM's. The *conjoint/disjoint system* is the system of verbal forms which constitute a phonological phrase on their own (i.e., one-word p-phrases: verbal focus tenses or disjoint tenses, marked *djt* below) and verbal forms which form a phonological phrase with a following noun (i.e., longer p-phrases: post-verbal focus tenses or conjoint tenses, marked *cjt* below); there are also verbal forms which have both characteristics (not marked below).

We start with the tense system. A tense is defined by the TM's of slots 3 and 4 (including the negative marker), of slot 8 (Pre-Final) and the Final of slot 10. A verbal form should have at least one TM, viz. the Final; next to the Final, verbal

forms may have zero, one or two TM's; a third TM is possible with all tenses, the Pre-Final **-ang-**, which is dealt with in 7.1.6. The TM **-a-** in slot 3 added to Past tenses marks Far Past Tenses. Below, the tenses are ordered according to their Final which distinguishes Past/Non-Past tenses (**-a**, **-á**) from Perfective tenses (**-ile**, **-ilé**), Optative tenses (**-e**, **-é**) and Imperative tenses. The symbol | before or after a TM in the tables below expresses that there is blocking of the Shift of the H tone of the SC to the first TBU of the macrostem or to the Final, but H Tone Doubling is not blocked. With the first two tenses in the table, the Present *cjt* and the Non-Past *djt*, the SC for the participants are (default) L while the SC for the classes are H. When one tone is indicated under SC with a tense, this means that in that tense the subject concords are tonally neutralized to either H or (default) L. The Infinitive marker **ku-** in slot 2 can be found under SC. The meaning of S1 and S2 in the tone row is: H tone on the first TBU of the stem resp. on the second TBU of the stem. The Tone Group (TG) of the tenses are listed after the description of the tenses, before the examples. The examples, with the verb **-yangata** 'help', are given such that the underlying tones are shown best: followed by an adverb (indicated by #) and, in case of disjoint tenses, with penultimate shortening. The full paradigms of all tenses are given in appendix A.

7.1.1 Affirmative tenses and negation

Affirmative tenses:

1. Present *cjt*
2. Non-Past *djt*
3. Present Perfective *djt*
4. Past Perfective *djt*
5. Far Past Perfective *djt*
6. Suppositional Conditional *djt*
7. Past *djt*
8. Far past *djt*
9. Infinitive
10. Past *cjt*
11. Far Past *cjt*
12. Conditional *djt*
13. Concessive *djt*
14. Subsecutive Infinitive *djt*
15. Present Perfective *cjt*
16. Situative Perfective *djt*
17. Suppositional Conditional Perfective *djt*
18. Past Perfective *cjt*
19. Far Past Perfective *cjt*
20. Optative

21. Subsecutive Optative *djt*
22. Optative with OC *djt*
23. Imperative with OC *djt*
24. Imperative

Slot:	2	3	4			9	Examples	
TM:		TM	TM			F		
Tone:	SC	TM	TM	S1	S2	F	TG	
1.	L /					a	D1 /	tuyangata # /
	H					a	D2	vayangatá #
2.	L /		na			á	C1 /	tunayangatá # /
	H		na			á	C2	vanayangatá #
3.	H		ni			á	C2	tuniyangatá #
4.	H		ni			á	C2	túniyangatá #
5.	H	a	ni			á	C2	twániyangatá #
6.	H	ka	ni			á	C2	tukániyangatá #
7.	H		na			á	C2	túnayangatá #
8.	H	a	na			á	C2	twánayangatá #
9.	(k)u			H		á	A	kuyángatá #
10.	L			H		á	A	tuyángatá #
11.	L	a		H		á	A	twayángatá #
12.	L	ka			H	a	E	tukayangáta #
13.	L	ka	na		H	a	E	tukanayangáta #
14.	(k)u		ná			a	D1	kunayangáta #
15.	H					ile	D2	tuyangeté #
16.	L					ile	D1	tuyangete #
17.	L	ka				ile	D1	tukayangete #
18.	L			H		ilé	A	tuyángeté #
19.	L	a		H		ilé	A	twayángeté #
20.	L					é	C1	tuyangaté #
21.	H	ka				e	D2	tukayangate #
22.	L			H		e	B	tuvayangate #
23.						e	D1	tuyangate #
24.						á	C1	yangatá #

In all tenses but one, the OC gets a (default) L tone. In the Infinitive, the OC is neutralized to H (or: H is assigned to the first TBU of the macrostem, MS1). One example is **kuváyangaáta** ‘to help them’. As can be seen in the table above, the stem tones of the Infinitive are S1 and F; a H Tone Bridge occurs between the S1 and the F in case there is no OC. In case there is a OC, Meeussen’s Rule deletes the S1 H tone of the stem because of the preceding H tone of the OC, and there is no H Tone Bridge (see 3.4.3). The other tenses do not have a H tone instruction for their OC’s in the lexicon. Nevertheless, OC’s in tenses with a H-toned SC may get a H tone by a specific tone rule. This rule, Px-H Tone Shift which is worked out in 3.5.4, shifts the

H tone of the SC to the first TBU of the stem (the S1-position) if there is no OC (e.g. **tuniyángaaáta** ‘we have helped’, Present Perfective *djt*); if there is a OC, the H tone of the SC shifts to the OC (e.g. **tuniváyangaáta** ‘we have helped them’). This shift is via the tense marker(s), so when a tense marker has a block for shifting, the H tone stays on the preceding TBU (e.g. **túniyangaáta** ‘we had helped’, Past Perfective *djt*) and doubles to the next TBU by H Tone Doubling. There is one other case of shift of the H tone of the SC which is described in 8.3.2: with conjoint tenses, the H tone of the SC shifts to the final TBU of the verb form (e.g. **vayangatá kadiiki** ‘they help a bit’, Present *cjt* / SC=any class).

The Subsecutive Infinitive structurally behaves like an affirmative tense, but tonally it behaves like an Indirect Relative: it has no H tones on the stem (the H tone of the S1-position is due to H Tone Doubling), and when there is an OC, there is an extra tone doubling from the OC to the S1-position (e.g. **kunáváyángaaata**).

With Negative Tenses, the Negative Marker operates as the first TM (slot 3). The symbol || after a TM indicates that there is blocking of the tonal processes H Tone Doubling as well as of H Tone Shift (if relevant). All Negative Tenses are disjoint.

1. Negative Present
2. Negative Infinitive
3. Negative Past Perfective
4. Negative Present Perfective 1
5. Negative Present Perfective 2
6. Negative Optative
7. Negative Conditional/Concessive
8. Negative Suppositional Conditional

Slot:	2	3	4			9	Examples	
TM:		NEG	TM			F		
Tone:	SC	NEG	TM	S1	S2	F	TG	
1.	L	ká		H		a	B	tukávayángata #
2.	u	ngá				a	D1	ungáyángata #
3.	L	ká 				ile	D1	tukáyangete #
4.	H	ka 		H		ilé	A?	tukávayángéte #
5.	L	ká	na			ile	D1	tukánáyangete #
6.	H	na				e	D2	tunayángate #
7.	L	ka	na			e	D1	tukanayangate #
8.	L	ká	na			e	D1	tukánáyangate #

As shown in 3.4.3, the Negative Present without OC has a different tone pattern from the Negative Present with OC due to Meeussen’s Rule. In the forms with OC, the S1-H tone is separated from the H tone of the TM by the OC: **tukávayángaaata** ‘we do not help them’ (and the S1-H tone doubles to the right); in the forms without OC, the two H tones are not adjacent, and the S1-H tone is deleted by Meeussen’s Rule: **tukáyángaaata** ‘we do not help’ (and the H tone of the TM doubles to the right, the

S1-position; that this H tone on the S1-position is not the S1-H tone itself can be seen from the fact that it does not itself double to the right). For the Negative Present Perfective (1) a similar analysis holds. In the forms with OC, the S1-H tone is separated by the OC from the H tone which has been shifted from the SC to the TM: **tukávayángééte** ‘we have not helped them’ (and there is a H Tone Bridge from the S1-H tone to the retracted SF-H tone); in the forms without OC, the two H tones are adjacent, and the S1-H tone is deleted by Meeussen’s Rule: **tukáyangééte** ‘we have not helped’. Note that the rest of the H Tone Bridge remains intact; this can be better seen with longer stems, e.g. **tukápilíkééne** ‘we have not heard’, **tukálapilíkééne** ‘we have not heard them’. The H Tone Bridge in this tense is the reason for the analysis of a SC with a H tone (which is exceptional in combination with tonal profile A) which shifts to a L-toned Negative marker (because it blocks shifting): the Shift occurs after the H tone Bridge in the derivation, so when the H tone on the TM and the S1-H tone meet, the H Tone Bridge already exists, and only the S1-H tone itself is deleted. But it should be noted that this analysis (of a H-toned SC and a TM with a block for shifting) can also be given for the other Negative tenses, except for the Negative Optative and the Negative Conditional/Concessive, but we found no compelling reasons to do so. Finally, there is no H Tone Doubling with the Negative Present Perfective (1) nor with the Negative Past Perfective: **tukáliile** ‘we have not eaten’, **tukáyangeete** ‘we had not helped’. — No difference in meaning has been found between Perfective 1 and Perfective 2.

The Negative Infinitive may not occur with OC. There is an alternative for the Negative Infinitive: an affirmative Infinitive (with or without OC) preceded by the Negative particle **naanga** (with penultimate shortening: **nanga**).

nanga kúúlya no eating

nanga kuyángááta/nanga uyángááta/nang ’uyángááta no helping

The alternative way to negate other verbal forms is to use **naanga** after them which indicates a contrastive No!

ahwenite kúkáaya naanga he has not gone home
lit. he has gone home (?) no!

The Negative particle **naanga** may occur with all Negative verbal forms; it adds emphasis to the negation.

nanga unahwéene kúkáaya you should absolutely not go home

When **naanga** precedes an Indirect Relative starting with **pa-** ‘when’, its meaning is the same as its Negative non-relative variant (see next section).

7.1.2 Relative tenses and negation

There is a distinction between Direct Relatives (Subject Relatives) and Indirect Relatives (Object Relatives and Adjunct Relatives). With Direct Relatives, the SC historically was the Pronominal Prefix (PPx); this probably explains the difference in tone between the participants and cl.1 (H tone) versus the cl.2ff. (L tone) in the Direct Relative Present and the Direct Relative Present Perfective. The Direct Relative Present with SC cl.2ff. and the Direct Relative Present Perfective with SC cl.2ff. appear to be disjoint. The other Direct Relatives can either be conjoint or disjoint. The final H tone of these two Direct Relatives possibly is a copy of the H tone of the old PPx. There is no special Negation for Direct Relatives.

1. Direct Relative Present with SC participants and cl.1
Direct Relative Present with SC cl.2ff.
2. Direct Relative Present Perfective with SC participants and cl.1
Direct Relative Present Perfective with SC cl.2ff.
3. Direct Relative Past Perfective
4. Direct Relative Far Past Perfective

Slot:	2	3	4			9	Examples
TM:		TM	TM			F	
Tone:	SC	TM	TM	S1	S2	F	TG
1.	H					á	C2 tuyángatá #
	L				H	a	E vayangáta #
2.	H					ilé	C2 tuyángeté #
	L				H	ile	E vayangéte #
3.	L		na		H	ile	E tunayangéte #
4.	L	a	na		H	ile	E twanayangéte #

Indirect Relatives historically have a Pre-Initial (PI) which is a Pronominal Prefix, with a L tone, followed by a H-toned SC. There are four “fixed” Indirect Relatives with a fixed Pre-Initial: **pa-** ‘when’, **mu-** ‘as’, **u-** ‘while’ and **chi-** ‘how’. All Indirect Relatives are disjoint.

1. Indirect Relative Present
2. Indirect Relative Non-Past
3. Indirect Relative Present Perfective
4. Indirect Relative Past Perfective
5. Indirect Relative Far Past Perfective

Slot:	1	2	3	4			9	Examples
TM:			TM	TM			F	
Tone:	PI	SC	TM	TM	S1	S2	F	TG
1.	L	H					a	D2 patúyángata #
2.	L	H		na	H		a	B patúnayángata #
3.	L	H					ile	D2 patúyángete #
4.	L	H		ná			ile	D2 patúnáyángete #
5.	L	H	a	ná			ile	D2 patwánáyángete #

Forms with an OC have an extra doubling of the H tone of the SC: the H tone of the SC doubles twice, to the OC as well as to the S1-position, so that there are three H tones in a row (e.g. **patúváyángaata** ‘when we help them’, Indirect Relative Present; **patúváyángete** ‘when we have helped them’, Indirect Relative Present Perfective). There is one exception: with the Indirect Relative Non-Past, there is no second doubling: **patúnávayángáata** ‘when we (will) help them’; a second doubling would create a H tone bridge which is not allowed (see 3.5.6).

With negation, the forms are tonally identical with the Negative (non-relative) tenses (except for the H tone of the SC). There are no special negated forms for Indirect Relative Non-Past and Indirect Relative (Far) Past Perfective. The forms are disjoint.

1. Negative Indirect Relative Present
2. Negative Indirect Relative Present Perfective

Slot:	1	2	3	4			9	Examples
TM:			NEG	TM			F	
Tone:	PI	SC	NEG	TM	S1	S2	F	Tg
1.	L	H	ká		H		a	B patúkávayángata #
2.	L	H	ká 		H		ilé	A patúkávayángéte #

When the Negative particle **naanga** precedes an Indirect Relative starting with **pa-** ‘when’, its meaning is the same as its Negative non-relative variant.

nanga patúliima - tukáliima we do not cultivate
nanga patúyángete - tukáyángéete we have not helped

A Negative verb form followed by **naanga** makes the negation stronger.

nanga patúkáng’ána when we absolutely do not play

7.1.3 The Finals

The following types of Finals occur:

-a, -á -e, -é -ile, -ilé

In tenses with TG A, C1 and C2, the Finals get a (final) H tone. The final H tone of the Direct Relative Present and Direct Relative Perfective, both with participants and cl.1 as SC, possibly is a copy of the H tone of the SC (which originally was a PPx). The Final **-a** or **-á** is used with Past, Perfective, Present, Non-Past, and Relative tenses. The Final **-ile** or **-ilé** is used with Perfective and Relative tenses. The final **-e** or **-é** is used in Optative tenses; it forms a sub-system, being in opposition with **-a, -á/-ile, -ilé**. The Imperative uses two Finals: **-á** (forms without OC) and **-e** (forms with OC). The various allomorphes of the Perfective Final are worked out in the next section.

Tenses with the various Finals distributed over the TG's:

-a:

- B Negative Present *djt*
 Negative Indirect Relative Present *djt*
 Indirect Relative Non-Past *djt*
- D1 Present with SC participants *cjt*
 Negative Infinitive *djt*
 Indirect Relative Present *djt*
- D2 Present with SC classes *cjt*
 Subsecutive Infinitive *djt*
- E Conditional *djt*
 Concessive *djt*
 Direct Relative Present with SC cl.2ff. *djt*

-á:

- A Past *cjt*
 Far Past *cjt*
 Infinitive
- C1 Non-Past with SC participants *djt*
 Imperative (without OC)
- C2 Non-Past with SC classes *djt*
 Present Perfective *djt*
 Past Perfective *djt*
 Far Past Perfective *djt*
 Suppositional Conditional *djt*
 Past *djt*
 Far Past *djt*
 Direct Relative Present with SC participants + cl.1

-ile:

- D1 Situative Perfective *djt*
Suppositional Conditional Perfective *djt*
Negative Present Perfective 2 *djt*
Negative Past Perfective *djt*
- D2 Present Perfective *cjt*
Indirect Relative Present Perfective *djt*
Indirect Relative Past Perfective *djt*
Indirect Relative Far Past Perfective *djt*
- E Direct Relative Present Perfective with SC cl.2ff. *djt*
Direct Relative Past Perfective *djt*
Direct Relative Far Past Perfective *djt*

-ilé:

- A Past Perfective *cjt*
Far Past Perfective *cjt*
Negative Present Perfective 1 *djt*
Negative Indirect Relative Present Perfective *djt*
- C2 Direct Relative Present Perfective with SC participants + cl.1

-e:

- B Optative (with OC) *djt*
- D1 Imperative (with OC) *djt*
Negative Conditional/Concessive *djt*
Negative Suppositional Conditional *djt*
- D2 Subsecutive Optative *djt*
Negative Optative *djt*

-é:

- C1 Optative (without OC)

7.1.4 The Perfective Final

The manifestations of the Perfective Final with CVC-verbal bases generally are **-ile** and **-ite** (without vowel harmony); **-ie** is often heard instead of **-ile**. Either **-ile** or **-ite** may be used in most cases, but **-ile** tends to be more used with verbal bases with one of the final consonants **p, t, k, ch, b, d, l, ng', mb, nd, ng**, while **-ite** tends to be more used with verbal bases with one of the final consonants **h, v, y, w, m, n, ny, nj**. But this is only a tendency, which means that in a group of verbal bases with a particular final consonant, most verbs of that group get one of the finals as a first choice by the speakers. The final consonant **l** changes to **d** when **-ile** is added, but not when **-ite** is added (e.g. **-mila** 'swallow' **-midile** resp. **-lola** 'look at' **-lolite**). When added to the causatives **-y-**, **-ih-/is-** as well as to the **h** and **ch** with incorporated causative

(lexicalized causatives), the Perfective final becomes **-idyē**. This means that the underlying **i** (or a copy of it) of the causatives appears before the final **-e**, and the **l** of the Perfective final becomes **d**. When added to lexicalized Passives **-w-** and **-iw-**, the same final is found as with causatives: **-idyē**. With the examples below, the verbal base with final **-a** is given for comparison.

Perf. -ile/-ite :			Perf. -idyē (with lexicalized causatives and lexicalized passives):		
-ipa	cut grass	— -ipile			
-pwata	quarrel	— -pwatile			
-kocha	poke	— -kochile	-yocha	roast	— -yochidyē
-leka	leave	— -lekile			
-piha	hide	— -pihite	-visa	be angry	— -visidyē
-doba	be tired	— -dobile	-toha	touch	— -tohidye
-ida	come	— -idile			
-tuva	rem. weeds	— -tuvite			
-taya	put	— -taite			
-mowa	shave	— -mowite	-pawa	be s.wh.	— -pawidyē
-mila	swallow	— -midile			
-lima	cultivate	— -limite			
-hwena	go	— -hwenite			
-panya	beat	— -panyite	-tonya	rain	— -tonidyē
-ing'a	give	— -ing'ile			
-himba	dig	— -himbile			
-tenda	do, make	— -tendile			
-kunja	bend	— -kunjite			
-linga	try	— -lingile			

Perf. -idyē (with causatives):	make cut	-ipyā	— -ipidyē
	make cult.	-limya	— -limidyē
	make dig	-himbya	— -himbidye
	make poke	-kocheha	— -kochehidye
		/-kochesa	— -kochesidyē
	make shave	-moweha	— -mowehidyē
		/-mowesa	— -mowesidyē
	make try	-lingiha	— -lingihidyē
		/-lingisa	— -lingisidyē

With **-lola** 'look at', **-lolite** is preferred; with **-mala** 'know', the form is **-maite** (next to **-mele**, see below; **-ile** is not possible). With some verbal bases ending in **y**, we find **-dile** as if there were a **l** instead of **y**.

-teya	trap	—	-teite/-tedile
-taya	put	—	-taite/-tadile
-meya	take piece	—	-meite (not *-medile)
-haya	grind	—	-haite (not *-hadile)
-uya	return	—	-wite (not *-udile)

With a number of disyllabic verbal bases, imbrication is also possible. Imbrication is possible with all verbal bases where the base vowel is **a**; for example:

-lapa	be surprised	—	-lepe
-pata	get	—	-pete

Imbrication is the preferred form with bases ending in **-ala**; some bases ending in **-ala** have the form **-ele**, some have the form **-ete**:

-vala	shine	—	-vele	-wala	put on	—	-wete
-lala	lie	—	-lele	-twala	seize	—	-twete
-pala	scratch	—	-pele				
-mala	know	—	-mele				

Imbrication is possible with some bases where the base vowel is **i**, **u**, **o**; I have no example of imbrication with bases with **e** als V1.

-hika	close	—	-hike	-vika	put	—	not *-vike , but -vikile
-tuva	rem. w.	—	-twive	-huva	long	—	not *-hwive , but -huvite
-ona	see	—	-wene	-ona	sleep	—	not *-wene , but -onite

With verbal bases having three or more syllables, the Perfective Final is imbricated, except with bases with final **l**. With such bases, the Perfective final is **-ile**, and the **l** changes to **d** under influence of the **i** of the final.

-malila	finish	—	-malidile
-lambila	deceive	—	-lambidile
-kimbila	drink	—	-kimbidile

I found only one example where imbrication is possible:

-pwechela	receive	—	-pwechedile/-pwechele
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With all other verbal bases, imbrication is found. The imbricated vowel is an harmonic one.

-pikita	break away	—	-pikite
-cheketa	cut	—	-chekete
-papata	follow	—	-papete
-olota	point	—	-olwete
-tukuta	run	—	-tukwite
-haura	tell	—	-hawile

When all vowels are **a**, imbrication may continue up to the first syllable (see also 2.5).

-walala	kill	—	-walele/-welele
-kalanga	fry	—	-kalenge/-kelenge
-kahama	become sour	—	-kaheme/-keheme

Imbrication also occurs when the final syllable is complex (as with causatives).

-sumisa	sell	—	-sumise
-pelekedya	send	—	-pelekedye
-kundanya	mix	—	-kundenye
-tongosa	seduce	—	-tongwese
-widuha	sweat	—	-widwihe

With verbal bases consisting of monomoraic roots (CV-verbal bases), the following Perfective forms are found (the forms with final **-a** are given for comparison).

-.pa	bear fruit	—	-pele
-.pya	be scorched	—	-pile
-.twa	pound	—	-twele
-.cha	dawn	—	-chele
-.swa	set (of sun)	—	-swele
-.hwa	die	—	-hwile
-.lya	eat	—	-lile
-.nya	defecate	—	-nyele
-.va	be	—	-vele

As described in detail in 6.3.3, except for the final vowel, these forms are similar to Applicative stems which are derived from monomoraic roots: **-pela**, **-pila**, **-twela**, **-chela**, **-swela**, **-hwila**, **-lila** and **-nyela** (there is no applicative with the root for ‘to be’). These forms are formed as follows: with the formation of verbal bases, the applicative extension appears after the root-final vowel, and since the root vowel determines vowel harmony, it determines whether the applicative extension is **-il-** or **-el-**. With the formation of stems, the final **-a** is added. Since we find the same forms with the Perfective forms (except for the Final which is **-e**) including the forms with (harmonic) **-el-**, and since we have noticed in 6.3.3 that the similarity in behaviour between the Applicative and the Perfective in general is remarkable, we assume that the Perfective forms are built from the Applicative forms. In particular, we think that applicative verbal bases derived from monomoraic roots are used to form applicative stems as well as Perfective stems: applicative stems by adding the Final **-a**, and Perfective stems by Imbrication: the Final is **-e**, and an harmonic vowel is imbricated which appears after the vowel of the preceding syllable. But since the vowel of the preceding syllable is **i** or **e**, the imbricated vowel gets the same quality, and it disappears with VC/GF. The form **-vele** is either built in analogy with these forms or is an exception in that it is built from the root °**-va** and the Perfective **-ile**, resulting in **-vele** after VC/GF.

7.1.5 The tense markers in Formative positions

Tenses may have zero, one or two Tense Markers (TM) in the Post-Initial and Formative slots. A zero TM is a TM without phonetic content, but with certain types of instructions which all TM's have in the lexicon, such as for the tonal profile of the stem, the possible H tone(s) of prefixes, and other (semantic) information.

Tenses with zero TM are:

- A Past *cjt*
Past Perfective *cjt*
Infinitive
- B Optative with OC *djt*
- C1 Imperative
Optative (without OC)
- C2 Direct Relative Present with SC participants + cl.1
Direct Relative Present Perfective with SC participants + cl.1
- D1 Present with SC participants *cjt*
Situative Perfective *djt*
Imperative with OC *djt*
- D2 Present with SC classes *cjt*
Present Perfective *cjt*
Indirect Relative Present *djt*
Indirect Relative Present Perfective *djt*
- E Direct Relative Present with SC cl.2ff. *djt*
Direct Relative Present Perfective with SC cl.2ff. *djt*

The TM of tenses with one TM (including the Negative marker) have a L tone or a H tone. There are TM's with a L tone which have an initial block to prevent a preceding H tone of the SC from shifting. There are TM's with a L or a H tone which have a final block to prevent the H tone from shifting as well as doubling. So, four types may be distinguished:

- a) L
- b) H
- c) lL
- d) Ll, Hll

Tenses which belong to the first type (L) are:

	slot 3	slot 4
A Far Past <i>cjt</i>	-a-	
Far Past Perfective <i>cjt</i>	-a-	
B Indirect Relative Non-Past <i>djt</i>		-na-
C1 Non-Past with SC participants <i>djt</i>		-na-
C2 Non-Past with SC classes <i>djt</i>		-na-
Present Perfective <i>djt</i>		-ni-
D1 Suppositional Conditional Perfective <i>djt</i>	-ka-	

D2	Subsecutive Optative <i>djt</i>	-ka-	
	Negative Optative <i>djt</i>	-na-	
E	Conditional <i>djt</i>	-ka-	
	Direct Relative Past Perfective		-na-

Tenses which belong to the second type (H) are:

		slot 3	slot 4
B	Negative Present <i>djt</i>	-ká-	
B	Negative Indirect Relative Present <i>djt</i>	-ká-	
D2	Negative Infinitive	-ngá-	
	Subsecutive Infinitive <i>djt</i>		-ná-
	Indirect Relative Past Perfective <i>djt</i>		-ná-

The H tone of the TM **-ká-** of the Negative Present *djt* and the Negative Indirect Relative Present *djt* provoke deleting of the immediately following S1-H tone with forms without OC (by Meeussen's Rule).

TM's of the third type, i.e. those having a L tone and an initial block to prevent a preceding H tone of the SC from shifting, are:

		slot 3	slot 4
C2	Past <i>djt</i>		- na-
	Past Perfective <i>djt</i>		- ni-

The H tone of the SC remains on the SC because there is a block for shifting; the H tone does, however, double to the TM.

tú-ná-yangaáta	we helped
tú-ná-va-yangaáta	we helped them
tú-ní-yangaáta	we had helped
tú-ní-va-yangaáta	we had helped them

TM's of the fourth type, i.e. those having a L or a H tone and a final block to prevent the H tone from doubling and shifting, are:

		slot 3	slot 4
A	Negative Present Perfective 1 <i>djt</i>	-ka -	
	Negative Indirect Relative Perfective <i>djt</i>	-ká -	
D1	Negative Past Perfective <i>djt</i>	-ká -	

The shifted H tone on the Negative marker of the Negative Present Perfective 1 *djt* and the H tone of the Negative marker of the Negative Indirect Relative Present Perfective *djt* provokes deleting of the immediately following S1-H tone with forms without OC (by Meeussen's Rule). The form with a disyllabic stem without OC has a suitable environment for doubling of the H tone of the marker, but H doubling does not occur. We conclude that there is a block.

tu-ká-liile	we have not eaten
cf. tu-ká-vi-líile	we have not eaten them

- pa-tú-ká-liile** when we have not eaten
 cf. **pa-tú-ká-vi-liile** when we have not eaten them

The doubling of the H tone of the TM **-ká-** of the Negative Past Perfective *djt* is also blocked:

- tu-ká-yangeete** we had not helped
tu-ká-va-yangeete we had not helped them

Finally, there are tenses with two TM's. The following types occur:

- a) L L
 b) L lL
 c) L H
 d) H L

The following tenses belong to the first type (L L):

		slot 3	slot 4
D1	Negative Conditional/Concessive <i>djt</i>	-ka-	-na-
E	Concessive <i>djt</i>	-ka-	-na-
	Direct Relative Far Past Perfective	-a-	-na-

The following tenses belong to the second type (L lL):

		slot 3	slot 4
C2	Far Past <i>djt</i>	-a-	- na-
	Far Past Perfective <i>djt</i>	-a-	- ni-
	Suppositional Conditional <i>djt</i>	-ka-	- ni-

The H tone of the SC does not shift beyond the first TM since there is a block before the second TM; the H tone does, however, double to the TM.

- tw-á-ná-yangaáta** we helped long ago
tw-á-ná-va-yangaáta we helped them long ago
tw-á-ní-yangaátawe had helped long ago
tw-á-ní-va-yangaáta we had helped them long ago
tu-ká-ní-yangaáta we would help
tu-ká-ní-va-yangaáta we would help them

The third type (L H) consists of the Indirect Relative Far Past Perfective *djt*.

		slot 3	slot 4
D2	Indirect Relative Far Past Perfective	-a-	-ná-

The H tone of the SC appears on the first TM. The H tone of the second TM doubles to the first TBU of the stem with forms without OC; with forms with OC, there is a second doubling to the first TBU of the stem.

- pa-tw-á-ná-yángaaata** when we had helped
pa-tw-á-ná-vá-yángaaata when we had helped them

Two tenses belong to the fourth type (H L):

		slot 3	slot 4
D1	Negative Present Perfective 2 <i>djt</i>	-ká-	-na-
	Negative Suppositional Conditional	-ká-	-na-

The H tone of the first TM doubles to the second TM.

tu-ká-ná-yangeete	we have not helped
tu-ká-ná-va-yangeete	we have not helped them
tu-ká-ná-yangaate	we would not help
tu-ká-ná-va-yangaate	we would not help them

7.1.6 The Pre-Final tense marker -ang-

The Pre-Final **-ang-** may occur in all tenses. It changes the Present into a Habitual, in other tenses, it expresses intensive/repetitive action. With many verbs, it is not fully clear what exact meaning the verb gets after addition of the Pre-Final; the Pre-Final added to the verb **-kalewa** ‘to be drunk’, changes the meaning to ‘to be totally drunk, to be drunk the whole time’. Especially in the Imperative, the Pre-Final is used as plural addressee marker.

Present *cjt*:

tu-lim-ang-a mahaála	we habitually cultivate fields
va-lim-ang-a máháála	they habitually cultivate fields

Non-Past *djt*:

tu-na-lim-aáng-a	we cultivate intensively/repeatedly
tu-na-kalew-aang-a	we are totally drunk/the whole time
va-na-lim-aáng-a	they cultivate intensively/repeatedly
va-na-káléw-aang-a	they are totally drunk/the whole time

Direct Relative Present:

tu-lím-aáng-a	we who cultivate intensively/repeatedly
tu-káléw-aang-a	we who are totally drunk/the whole time
va-lím-aáng-a	they who cultivate intensively/repeatedly
va-kaléw-áang-a	they who are totally drunk/the whole time

Indirect Relative Present *djt*:

pa-tú-lím-aang-a	when we cultivate intensively/repeatedly
pa-tú-káléw-aang-a	when we are totally drunk/the whole time

Conditional *djt*:

tu-ka-lim-áng-a	if we cultivate intensively/repeatedly
tu-ka-kaléw-áng-a	if we are totally drunk/the whole time

Optative (without OC):

tu-lim-aáng-e	we should cultivate intensively/repeatedly
tu-kalew-aang-e	we should be totally drunk/the whole time

Negative Optative *djt*:

tu-na-lím-áng-e	we shouldn't cultivate intensively/repeatedly
tu-na-kaléw-aang-e	we shouldn't be totally drunk/the whole

Imperative:

lim-aáng-a	cultivate! (addressing several persons)
kalew-aang-a	be drunk! (addressing several persons)

Imperative with OC *djt*:

la-lim-aange cultivate them (cl.6)! (addressing several persons)

There are verbs where the complex plural addressee marker **-ang'an-** is possible as well; for **-uka** 'go away, come from; arise, come forward' the longer form in fact is the only form used since the shorter form is identical with a term of abuse.

hwen-aáng-a/hwen-ang'aán-a	go! (addressing several persons)
id-aáng-a/id-ang'aán-a	come! (addressing several persons)
uy-aáng-a/uy-ang'aán-a	return! (addressing several persons)
uk-ang'aán-a	go away, arise! (addressing several persons)

The Pre-Final behaves like an extension, especially like the Reciprocal extension **-an-** (see 6.3.5). The Perfective final is added after the addition of the Pre-Final since the process Imbrication takes place on the stem including the Pre-Final.

-lim-ang-a	->	-lim-eng-e	cultivate
-yangat-ang-a	->	-yangat-eng-e	help

With minisyllabic stems, e.g. **-lya** 'eat', the form including the Pre-Final is **-lyanga** (with complex final syllable). The Perfective form is not ***-lyangile** nor ***-lyenge**, but the form is **-lilenge** *without* complex final syllable. We think that the form is built via the Applicative **-lila**, which does not have a complex final syllable, to which the Pre-Final is added: **-lilanga**. This analysis is in line with our analysis of the Perfective form with minisyllabic stems (without the Pre-Final): as described in 7.1.4, Perfective forms with minisyllabic stems are built from the Applicative forms with minisyllabic stems.

tu-líl-céng-e	we who have eaten the whole time/?
ni-ká-lil-ééng-e	we haven't eaten the whole time/?

7.1.7 The final syllable before objects and adjuncts

The final syllables **-la** and Optative/Imperative variant **-le** (and their complex variants **-dya** and **-dye**) as well as Perfective **-le/-te** (and their complex variant **-dye**) may be omitted when followed by objects or adjuncts.

tu-va-pweche(la) vayeéni	we receive the guests
tu-tongo(la) kadiiki	we talk a bit
ku-vá-pélekedí(dya) váyééni	to send them guests
tu-pweche(le) váyééni	we should receive guests
tu-peleke(dye) váyééni	we should send guests
tu-va-pwechedi(le) váyééni	we have received the guests
tu-la-limí(te) máháála	we have cultivated the fields
tu-va-pelekedí(dye) váyééni	we have send them guests

Other final syllables may not be omitted, like **-ta** (e.g. **-yangata** ‘help’), **-ka** (e.g. **-pweteka** ‘hurt’) and **-nya** (e.g. **-kundanya** ‘mix’).

With disjoint tenses, the penultimate syllables remain long after the omission of the final syllable when containing a contour tone; when there are two equal tones, the penultimate syllable tends to be short. This is also true within complex verbal forms.

va-limíí(te) lihaála	they who have cultivated a field
tu-na-va-limíí(la) lihaála	we cultivate a field for them
tu-ká-limí(íte) lihaála	we have not cultivated a field
va-pweche(ele) vayeéni	receive the guests!
va-veé-ńkúlííma (/va-velé-ńkúlííma)	we are cultivating
cf. va-vé-ńkúlííma (/va-vélé-ńkúlííma)	we were cultivating

With conjoint tenses, the penultimate syllable is always short. When the final syllable has a H tone, this H tone disappears together with the syllable when preceded by a H-toned penultimate syllable, it does appear on a preceding penultimate syllable without a H tone.

ku-pwéché(lá) váyééni	to receive guests
ku-vá-hángalalí kadiiki	to make them happy a bit
cf. ku-vá-hángalalilá kadiiki	to make them happy a bit

7.2 The verbal tone system

The verbal tone system embraces the system of possible combinations of the tones of the verbal stem (tonal profiles) with the tone of the subject concord plus the tone(s) of the tense marker(s). Remember that in the second lexicon stems are formed, and that with word formation verbal prefixes and tense markers are joined to verbal stems. H Tone Assignment occurs, stems get their tonal profiles, and verbal prefixes and tense

markers get a H tone in case there is a H tone instruction for them. The category tense determines the profile of the stem as well as the tones of the prefixes and tense markers. If there is no H tone instruction, prefixes and tense markers get a default L tone post-lexically, just as the toneless (non H) positions of the tonal profiles of stems.

Stems are assigned a specific tonal profile in the second lexicon. As demonstrated in 3.4.1 and 4.4, and repeated below, there are five tonal profiles for stems.

- A S1/SF : a H tone on the first and final TBU of the stem
- B S1 : a H tone on the first TBU of the stem
- C SF : a H tone on the final TBU of the stem
- D no H : no H tones on the stem
- E S2 : a H tone on the second TBU of the stem

With nominal tone (4.4), we call the combination of the tone of the NPx with the tonal profile of the stem the Tone Group (TG) to which a noun belongs. In line with this analysis, we call the combination of the tone of the subject concord (SC) with the tonal profile of the stem the TG to which a verbal form belongs. Just as with nominal tone, the profiles A, B and E are combined with a SC with a (default) L tone; the profiles C and D may either be combined with a SC with a (instructed) H tone as well as with a SC with a (default) L tone, depending on the specific tense. As demonstrated in 4.4 and repeated below, the following TG's occur (default L tones are also given below):

TG	NPx	verb stem
A	L	S1/SF
B	L	S1
C1	L	SF
C2	H	SF
D1	L	no H tones
D2	H	no H tones
E	L	S2

The TG's are divided over the tenses described in 7.1 as follows:

- A Past *cjt*
Far Past *cjt*
Past Perfective *cjt*
Far Past Perfective *cjt*
Negative Present Perfective 1 *djt*
Negative Indirect Relative Present Perfective *djt*
Infinitive
- B Optative with OC *djt*
Negative Present *djt*
Negative Indirect Relative Present *djt*
- C1 Non-Past with SC participants *djt*

- Optative without OC
- Imperative without OC
- C2 Non-Past with SC classes *djt*
 - Present Perfective *djt*
 - Past Perfective *djt*
 - Far Past Perfective *djt*
 - Suppositional Conditional *djt*
 - Past *djt*
 - Far past *djt*
 - Direct Relative Present with SC participants + cl.1
 - Direct Relative Present Perfective with SC participants + cl.1
- D1 Present with SC participants *cjt*
 - Subsecutive Infinitive *djt*
 - Situative Perfective *djt*
 - Suppositional Conditional Perfective *djt*
 - Imperative with OC *djt*
 - Negative Infinitive *djt*
 - Negative Past Perfective *djt*
 - Negative Present Perfective 2 *djt*
 - Negative Conditional/Concessive *djt*
 - Negative Suppositional Conditional *djt*
- D2 Present with SC classes *cjt*
 - Present Perfective *cjt*
 - Subsecutive Optative *djt*
 - Negative Optative *djt*
 - Indirect Relatives *djt*
- E Conditional *djt*
 - Concessive *djt*
 - Relative Past Perfective *djt*
 - Relative Far Past Perfective *djt*
 - Direct Relative Present with SC cl.2ff. *djt*
 - Direct Relative Present Perfective with SC cl.2ff. *djt*

In this chapter, we deal with verbal forms which occur on their own (p-)phrase-finally, the so-called one-word p-phrases (see 3.5) or disjoint tenses (marked *djt*). Larger p-phrases are dealt with in chapter 8; they are conjoint tenses (marked *cjt*, see also 7.3). P-phrase-final words undergo penultimate lengthening, optionally followed by penultimate shortening. The surface Tone Patterns (TP) resulting from the TG's include both the forms with penultimate lengthening as well as with penultimate shortening.

First, verbal forms with four-syllable stems, trisyllabic stems and disyllabic stems are described. Then, VCV-stems are considered; with these stems, the tonal and other processes which occur may result in other surface patterns than expected. In 7.2.3 and 7.2.4, the subject concord and the object concord are viewed from a tonal

perspective. In 7.2.5, we deal with the influence of the tone of an intervening TM on the TP of a TG.

7.2.1 Verbal forms with four-syllable stems, trisyllabic stems and disyllabic stems

Taking four-syllable stems and trisyllabic stems stems together, in the table below, the TG's are followed by the resulting TP's with penultimate lengthening as well as with penultimate shortening. The tones of the SC and the stem are separated by a dot in the description of the TG's, but because of possible intervening prefixes like TM's and OC's, only the tones of the stem are given in the TP's. The TP's are the same as those of noun stems before specifiers with which they do not occur in the same p-phrase (see 4.4), except for two cases. The first case is that verb stems of TG A, C1 and C2 have TP's in addition (in bold in the table below). The extra TP's of these TG's result from verbal forms with a complex final syllable, e.g. verbal forms with causative stems and passive stems; with these verbal forms, there is no Retraction of the final H tone to the penultimate syllable, so there is no H Tone Bridge with TG A (but only H Tone Doubling) and no penultimate R with TG C1 and C2 (see 3.5.2). It should be noted that the TP's of forms with a complex final syllable of the other TG's (which lack a final H tone) are not different from those with a simple final syllable, as shown with the examples which follow the table of TP's below.

Verbs disjoint			
		four-syllable stems	trisyllabic stems
TG	SC.stem	TP	TP
A	L.S1/SF	.HHH:L / .HHHL .HHL:L / .HHLL	.HH:L / .HHL .HFL / .HLL
B	L.S1	.HHL:L / .HHLL	.HFL / .HLL
C1	L.SF	.LLRL / LLHH, <i>.LLLH</i> .LLL:L / .LLLL	.LRL / .LHH, <i>.LLH</i> .LL:L / .LLL
C2	H.SF	.HLRL / .HLHH, <i>.HHLH</i> .HHL:L / .HHLL	.HRL / .HLL, <i>.HLH</i> .HFL / .HLL
D1	L.no H	.LLL:L / .LLLL	.LL:L / .LLL
D2	H.no H	.HHL:L / .HHLL	.HFL / .HLL
E	L.S2	.LHFL / LHLL	.LFL / .LHL

The second case in which verb stems have TP's in addition concerns the forms of TG C1 and C2 with penultimate shortening (in italics in the table above): there is a (less

frequent) variant ...*LH* to the common ...*HH* (or *LL* in one case) as the result of shortening of ...*RL* (since forms with a complex final syllable do not have a penultimate *R*, they do not have such a TP variant).

To know the TP's of stems with five or more syllables, we take those of stems with four syllables plus *H(s)* when there is an initial *H* or *L(s)* when there is an initial *L*, e.g., TG B: .*HHHL:L* / .*HHHLL*, and TG D1: .*LLLL:L* / .*LLLLL*. The table shows the TP's of tenses which are followed by an object with which they do not occur in the same p-phrase (because the tenses we deal with in this chapter are one-word p-phrases). The examples below represent the following tenses.

- A Negative Present Perfective *djt*
- B Optative with OC *djt*
- C1 Non-Past with participants as SC *djt*
- C2 Non-Past with classes as SC *djt*
- D1 Imperative with OC *djt*
- D2 Negative Optative *djt*
- E Conditional *djt*

For a detailed description of the role of the OC in tenses with respect to their classification into TG's and the influence of the OC on TP's, see 7.2.4.

- A **tu-ká-la-pílikééne / tu-ká-la-pílikéne maliídi**
we haven't heard the voices
tu-ká-di-kátápeedye / tu-ká-di-kátápedye ding'áánde
we haven't cleaned the houses
tu-ká-va-pwéchééle / tu-ká-va-pwéchéle vayeéni
we haven't received the guests
tu-ká-vi-kúndéénye / tu-ká-vi-kúndenye vituúndi
we haven't mixed the yams
- B **tu-la-pílikaane / tu-la-pílikane maliídi**
we should hear the voices
tu-di-kátápaadye / tu-di-kátápadye ding'áánde
we should clean the houses
tu-va-pwéchééle / tu-va-pwéchele vayeéni
we should receive the guests
tu-vi-kúndáanye / tu-vi-kúndanye vituúndi
we should mix the yams
- C1 **tu-na-la-pilikaána / tu-na-la-pilikáná, tu-na-la-pilikaná maliídi**
we (will) hear the voices
tu-na-di-katapaadya / tu-na-di-katapadya ding'áánde
we (will) clean the houses
tu-na-va-pwecheéla / tu-na-va-pwechélá, tu-na-va-pwechelá vayeéni
we (will) receive the guests
tu-na-vi-kundaanya / tu-na-vi-kundanya vituúndi
we (will) mix the yams

- C2 **va-na-pílikaána / va-na-pílikáná, va-na-pílikaná maliídi**
 they (will) hear voices
va-na-kátápaadya / va-na-kátápadya ding'áánde
 they (will) clean houses
va-na-pwéchéela / va-na-pwéchela, va-na-pwéchelá vayeéni
 they (will) receive guests
va-na-kúndáanya / va-na-kúndanya vituúndi
 they (will) mix yams
- D1 **la-pilikaane / la-pilikane maliídi**
 hear the voices!
di-katapaadye / di-katapadye ding'áánde
 clean the houses!
va-pwecheele / va-pwechele vayeéni
 receive the guests!
vi-kundaanye / vi-kundanye vituúndi
 mix the yams!
- D2 **va-na-pílikaane / va-na-pílikane maliídi**
 they should not hear voices
va-na-kátápaadye / va-na-kátápadye ding'áánde
 they should not clean houses
va-na-pwéchéele / va-na-pwéchele vayeéni
 they should not receive guests
va-na-kúndáanye / va-na-kúndanye vituúndi
 they should not mix yams
- E **tu-ka-la-pílikáana / tu-ka-la-pílikana maliídi**
 if we hear the voices
tu-ka-di-katápáadya / tu-ka-di-katápadya ding'áánde
 if we clean the houses
tu-ka-va-pwechéela / tu-ka-va-pwechela vayeéni
 if we receive the guests
tu-ka-vi-kundáanya / tu-ka-vi-kundanya vituúndi
 if we mix the yams

Note that the TP's of stems with a complex final syllable of TG A are the same as the TP's of TG B, and that TP's of stems with a complex final syllable of TG C1 and C2 are the same as the TP's of TG D1 and D2 respectively. This is the reason why we have chosen the present order of TG's in this work: A-B and C-D.

We now turn to disyllabic stems. The H tone of the SC does not appear on the stem with forms with a simple final syllable of TG C2 because of the penultimate R, but it appears on the preceding syllable (not with forms with a complex final syllable because they do not have penultimate R).

Verbs disjoint	disyllabic stems	
	SC.stem	TP
A	L.S1/SF	.H:L / .HL .FL / .HL
B	L.S1	.FL / .HL
C1	L.SF	.RL / .HH, .LH .L:L / .LL
C2	H.SF	H.RL / H.LL, H.LH .FL / .HL
D1	L.no H	.L:L / .LL
D2	H.no H	.FL / .HL
E	L.S2	.H:L / .HL

The examples below represent the same tenses as the ones used with forms with four-syllable stems and trisyllabic stems above.

- A **tu-ká-vi-líle / tu-ká-vi-líle viílyo**
we haven't eaten the food
tu-ká-vi-léedye / tu-ká-vi-lédye viínu
we haven't laid down the things
- B **tu-la-liíme / tu-la-líme mahaála**
we should cultivate the fields
tu-vi-láadye / tu-vi-ládye viínu
we should lay down the things
- C1 **tu-na-la-liíma / tu-na-la-límá, tu-na-la-limá mahaála**
we (will) cultivate the fields
tu-na-vi-laadya / tu-na-vi-ladya viínu
we (will) lay down the things
- C2 **va-ná-liíma / va-ná-lima, va-ná-limá mahaála**
they (will) cultivate fields
va-na-láadya / va-na-ládye viínu
they (will) lay down things
- D1 **la-liíme / la-lime mahaála**
cultivate the fields!
vi-laadye / vi-ladye viínu
lay down the things!
- D2 **va-na-liíme / va-na-líme mahaála**
they should not cultivate fields
va-na-láadye / va-na-ládye viínu

- they should not lay down things
 E **tu-ka-la-líma / tu-ka-la-líma mahaála**
 if we cultivate the fields
tu-ka-vi-láádyá / tu-ka-vi-ládyá viínu
 if we lay down the things

Stems of TG A (with simple final syllable) and TG E have the same TP's: .H:L / .HL. With tensed verbs they can be distinguished because they appear in a paradigm, with nouns, they can only be distinguished by behaving tonally different in certain grammatical environments such as before a Pronominal Possessive (see 4.4.1) and after a conjoint tense with a final H tone (see 8.3.3).

7.2.2 Verbal forms with V-initial disyllabic stems and minisyllabic stems

In 3.4, 3.4.1, and 4.4.2, we have shown that minisyllabic stems are adjusted to vowel-initial disyllabic stems. In 6.3.1, we have shown that minisyllabic verbal stems in particular are vowel-initial disyllabic stems with a complex final syllable (in analogy with vowel-initial disyllabic causative and passive stems); therefore, minisyllabic verbal stems and vowel-initial disyllabic verbal stems with a complex final syllable are dealt with together in this section. In the previous section, the TP's of disyllabic verbal stems in general are given. From that table, we take the TP's of the forms with a complex final syllable and repeat them below (remember that the TP's of TG B, D and E, which lack a final H tone, are the same for forms with a complex final syllable and a simple final syllable).

Verbs disjoint	disyllabic stems with a complex final syllable	
	SC.stem	TP
A	L.S1/SF	.FL / .HL
B	L.S1	.FL / .HL
C1	L.SF	.L:L / .LL
C2	H.SF	.FL / .HL
D1	L.no H	.L:L / .LL
D2	H.no H	.FL / .HL
E	L.S2	.H:L / .HL

In the previous section, we gave examples of consonant-initial disyllabic verbal stems, we now give examples of vowel-initial disyllabic verbal stems. The examples below represent the same tenses as the ones used in the previous section, except for the first one with TG A: in our vocabulary, there is no disyllabic vowel-initial

perfective stem with a complex final syllable. But there is no other disjoint (or: one p-phrase) tense of TG A, so we take the Infinitive, which is a conjoint-disjoint tense; it is disjoint without following noun, but conjoint when a noun is following (see 7.3). Thus, to show at least one TP of the disjoint TG A, we use the Infinitive without a following noun here.

- A **ku-úudya**
to ask
- B **tu-la-úudye / tu-la-údye malóóve**
we should ask the words
- C1 **tu-na-la-uudya / tu-na-la-udya malóóve**
we (will) ask the words
- C2 **va-na-úudya / va-na-údya malóóve**
they (will) ask words
- D1 **la-uudye / la-udye malóóve**
ask the words!
- D2 **va-na-úudye / va-na-údye malóóve**
they should not ask words
- E **tu-ka-la-úúdyá / tu-ka-la-údya malóóve**
if we ask the words

These forms may also undergo Vowel Coalescence/Glide Formation (VC/GF) between the initial vowel of the stem and the vowel of the preceding morpheme; this process applies post-lexically. Since the stem and the preceding morpheme merge, we omit the dot in the TP's below. The following forms (and resulting TP's) appear after this process.

Verbs disjoint	disyllabic stems with a complex final syllable (after VC/GF)	
	SC.stem	TP
A	L.S1/SF	H:L (probably: / HL)
B	L.S1	H:L / HL
C1	L.SF	L:L / LL
C2	H.SF	H:L / HL
D1	L.no H	L:L / LL
D2	H.no H	H:L / HL
E	L.S2	H:L / HL

- A **kúúdyá**
to ask
- B **tu-lúúdye / tu-lúdye malóóve**
we should ask the words
- C1 **tu-na-luudya / tu-na-ludya malóóve**
we (will) ask the words

- C2 **va-núúdyá / va-núdyá malóóve**
they (will) ask words
- D1 **luudye / ludyé malóóve**
ask the words!
- D2 **va-núúdye / va-núdye malóóve**
they should not ask words
- E **tu-ka-lúúdyá / tu-ka-lúdyá malóóve**
if we ask the words

Two TP's remain: H:L / HL and L:L / LL. As described in detail in 3.5.5, tonal coalescence occurs with VC/GF. One case of tonal coalescence occurs in the examples above: zeroHzero -> HH (with the examples of TG A, B, C2, D2 and E). Penultimate shortening occurs after VC/GF.

We now turn to minisyllabic stems. Minisyllabic stems are structurally identical with disyllabic vowel-initial stems with a complex final syllable. The vowel-initial disyllabic stem used above is **-udya** 'ask', °**-udia** underlyingly. The minisyllabic stems we use below is **-.lya** 'eat', °**-vlia** underlyingly; the created S1-position, indicated by the lower case "v", is filled by a copy of the preceding vowel in the verbal form. This lexical process is followed by the assignment of tonal profiles and other H tones, and post-lexically, the H tone of the SC of forms with TG C2 and D2 shifts to the S1-position. These processes are shown in the examples below (see 3.4.1 and 3.5.4), the S1-position also being indicated by small vowels.

- A °**ku-úulia**
to eat
- B °**tu-la-áalie**
we should eat them
- C1 °**tu-na-vi-iília**
we (will) eat them
- C2 °**va-na-áalia** (<°**vá-na-aalia**)
they (will) eat
- D1 °**la-aalie**
eat them!
- D2 °**va-na-áalie** (<°**vá-na-aalie**)
they should not eat
- E °**tu-ka-vi-iília**
if we eat them

All forms are identical with the vowel-initial disyllabic forms above before VC/GF between the stem and the preceding morpheme. The big difference is that vowel-initial disyllabic stems may appear without VC/GF, but minisyllabic stems may not appear without this process (due to a different syllabification, see 3.4.1). Hence, the forms and TP's concerning minisyllabic stems below are identical with those concerning vowel-initial disyllabic stems with a complex final syllable above where VC/GF has occurred (see 3.4.1 and 3.5.6).

Verbs disjoint	minisyllabic stems	
	SC.stem	TP
TG	SC.stem	TP
A	L.S1/SF	H:L (probably: / HL)
B	L.S1	H:L / HL
C1	L.SF	L:L / LL
C2	H.SF	H:L / HL
D1	L.no H	L:L / LL
D2	H.no H	H:L / HL
E	L.S2	H:L / HL

- A **kúúlya**
to eat
- B **tu-láálye / tu-lálye mátiínji**
we should eat the pumpkins
- C1 **tu-na-viilya / tu-na-vilya vituúndi**
we (will) eat the potatoes
- C2 **va-náálya / va-nálya mátiínji**
they (will) eat pumpkins
- D1 **laalye / lalye mátiínji**
eat the pumpkins!
- D2 **va-náálye / va-nálye mátiínji**
they should not eat pumpkins
- E **tu-ka-viilya / tu-ka-vilya vituúndi**
if we eat the yams

7.2.3 The subject concord

Next to the tonal profile of the verbal stem, the category tense ultimately determines the tones of the verbal prefixes. To begin with the subject concord, the tense determines whether the tone of the SC is neutralized to H or to (default) L, or whether the SC carries its own lexical tone.

Tenses where the SC carries its lexical tone are the Present *cjt* and the Non-Past *djt*. The lexical tones are as follows: classes have a tonal H instruction in the lexicon, participants lack such an instruction and they get a (default) L tone post-lexically. The Present *cjt* belongs to TG D (D1/D2), the Non-Past *djt*, which we use as example below, belongs to TG C (C1/C2).

L-toned SC (participants):

C1	u-na-pwecheéla	you (will) receive
	u-na-va-pwecheéla	you (will) receive them
	tu-na-pwecheéla	we (will) receive
	tu-na-va-pwecheéla	we (will) receive them
	u-na-kundaanya	you (will) mix
	u-na-vi-kundaanya	you (will) mix them
	tu-na-kundaanya	we (will) mix
	tu-na-vi-kundaanya	we (will) mix them

H-toned SC (classes):

C2	a-na-pwécheéla	(s)he (will) receive(s)
	a-na-vá-pwécheéla	(s)he (will) receive(s) them
	va-na-pwécheéla	they (will) receive
	va-na-vá-pwécheéla	they (will) receive them
	a-na-kúndaanya	(s)he (will) mix(es)
	a-na-ví-kúndaanya	(s)he (will) mix(es) them
	va-na-kúndaanya	they (will) mix
	va-na-ví-kúndaanya	they (will) mix them

The H tone of the subject concord shifts to the first TBU of the macro-stem: the S1-position, or the OC if present (from where it may double to the next TBU). This shifting process is described in 3.5.4; it is explained there that the other tenses which have a similar tonal behaviour as the Non-Past *djt* with a H-toned SC are considered to have a H-toned SC as well. These other tenses, where the tone of the SC is neutralized to H, are either connected with a verbal stem with tonal profile C (final H tone) and thus belong to TG C2, or with a verbal stem with tonal profile D (no H tones) and belong to TG D2. There is one exception: the Negative Present Perfective 1 *djt*, which we analyze to have a H-toned SC, has tonal profile A, and this combination is exceptional (see 7.1.1).

A?

Negative Present Perfective 1 *djt*

C2	D2
Present Perfective <i>djt</i>	Present Perfective <i>cjt</i>
Past Perfective <i>djt</i>	Subsecutive Optative <i>djt</i>
Far Past Perfective <i>djt</i>	Negative Optative <i>djt</i>
Suppositional Conditional <i>djt</i>	
Past <i>djt</i>	
Far past <i>djt</i>	
Direct Relative Present (with SC participants and cl.1)	
Direct Relative Present Perfective (with SC participants and cl.1)	

Examples from the Present Perfective *djt* and Negative Optative *djt*:

C2	tu-ni-pwécheéla	we have received
----	------------------------	------------------

	tu-ni-vá-pwecheéla	we have received them
	va-ni-pwécheéla	they have received
	va-ni-vá-pwecheéla	they have received them
	tu-ni-kúndaanya	we have mixed
	tu-ni-ví-kúndaanya	we have mixed them
	va-ni-kúndaanya	they have mixed
	va-ni-ví-kúndaanya	they have mixed them
D2	tu-na-pwéchéele	we should not receive
	tu-na-vá-pwécheele	we should not receive them
	va-na-pwéchéele	they should not receive
	va-na-vá-pwécheele	they should not receive them
	tu-na-kúndaanye	we should not mix
	tu-na-ví-kúndaanye	we should not mix them
	va-na-kúndaanye	they should not mix
	va-na-ví-kúndaanye	they should not mix them

There is one tense in the table above which has the same tonal behaviour as the Present *cjt* with a H-toned SC, which we consider to have a H-toned SC as well: Present Perfective *cjt*; these tenses, where the H tone of the SC shifts to the final TBU instead of to the first TBU of the macro-stem, are discussed in 8.3.2 where the conjoint tenses are analysed. The Direct Relative tenses in the table above are conjoint-disjoint tenses. Their division of H-toned and L-toned subject concords is different from the other tenses, and for reasons of comparison, we deal with these tenses here. Direct Relative tenses have subject concords which were pronominal prefixes historically (see 7.1.2); the historical tones of the pronominal prefixes are probably still reflected by the subject concords with two Direct Relative tenses: the Direct Relative Present, which we use as our example below, and the Direct Relative Present Perfective. With these tenses, subject concords of the participants and class 1 have a H tone, while subject concords of class 2ff. have a (default) L tone. Forms with a H-toned SC are connected with a verbal stem with tonal profile C (final H tone) and they thus belong to TG C2, while forms with a L-toned SC are connected with a verbal stem with tonal profile E (S2-H tone) and they belong to TG E. The final H tone of tonal profile C probably was a copy of the H tone of the pronominal prefix historically with these Relative tenses.

H-toned SC (participants + cl.1):

C2	tu-pwécheéla	we who receive
	tu-vá-pwecheéla	we who receive them
	tu-pílikaána	we who hear
	tu-vá-pílikaána	we who hear them
	a-pwécheéla	(s)he who receives
	a-vá-pwecheéla	(s)he who receives them
	a-pílikaána	(s)he who hears
	a-vá-pílikaána	(s)he who hears them
	tu-kúndaanya	we who mix

tu-ví-kúndaanya	we who mix them
tu-pélékeedya	we who send
tu-vá-pélékeedya	we who send them
a-kúndaanya	(s)he who mixes
a-ví-kúndaanya	(s)he who mixes them
a-pélékeedya	(s)he who sends
a-vá-pélékeedya	(s)he who sends them

L-toned SC (cl.2ff.):

E va-pwechéela	they who receive
va-va-pwechéela	they who receive them
va-pilikáana	they who hear
va-va-pilikáana	they who hear them
li-pilikáana	(e.g. likuútu ear) that hears
li-la-pilikáana	(ear) that hears them (e.g. malóóve words)
va-kundáanya	they who mix
va-vi-kundáanya	they who mix them
va-pelékéedya	they who send
va-va-pelékéedya	they who send them
la-pelékéedya	they (e.g. maveélu mischievous children) who send
la-va-pelékéedya	they who send them

Two unexpected tonal phenomena occur with disyllabic stems and minisyllabic stems of these Direct Relative forms with a H-toned SC and a stem-final H tone (TG C2). With forms with disyllabic stems, the H tone of the SC normally shifts to the S1-position (or the OC if present) in case the stem has a complex final syllable.

tu-láadya	we who lay down
tu-ví-láadya	we who lay them down
a-láadya	(s)he who lays down
a-ví-láadya	(s)he who lays them down
tu-léedye	we who have laid down
tu-ví-léedye	we who have laid them down
a-léedye	(s)he who have laid down
a-ví-léedye	(s)he who have laid them down

When the stem has a simple final syllable, there is a penultimate R tone, and we would expect the H tone of the SC to stay on the SC because there is no shifting to a penultimate syllable with a R tone, as we have seen in other tenses where the H tone stays on the preceding tense marker (e.g. **tu-ní-liíma** we have cultivated). But there is an unexpected shift of the H tone of the SC to the penultimate syllable, which is possible because the penultimate syllable is (extra) lengthened for that purpose, and a HR tonal sequence appears on the penultimate syllable (but when there is an OC, the normal shift to the OC occurs, and there is no extra lengthening).

tu-liíima	we who cultivate
tu-lá-liíima	we who cultivate them

a-liíima	(s)he who cultivates
a-lá-liíima	(s)he who cultivates them
tu-liíile	we who have eaten
tu-ví-liíile	we who have eaten them
a-liíile	(s)he who has eaten
a-ví-liíile	(s)he who has eaten them

The extra lengthening is connected with the shift to the stem because when there is no retraction (in case of a form followed by an object or adjunct with which it constitutes a p-phrase), the lengthening still occurs, also with forms with a complex final syllable (again, when there is an OC, the normal shift to the OC occurs, and there is no extra lengthening).

tu-liíima máháála	we who cultivate fields
tu-liímá kadiíiki	we who cultivate a bit
tu-lá-lima máháála	we who cultivate the fields
tu-lá-limá kadiíiki	we who cultivate them a bit
tu-láadya vínu	we who spread out things
tu-láadyá kadiíiki	we who spread out a bit
tu-ví-ladya vínu	we who spread out the things
tu-ví-ladyá kadiíiki	we who spread them out a bit

This phenomenon does not occur with forms with cl.2ff. as subject concords because, since they belong to TG E, they do not have a H-toned SC nor a stem-final H tone, and they get their expected TG E-tones.

va-liíima	they who cultivate
va-la-liíima	they who cultivate them
va-liíile	they who have cultivated
va-la-liíile	they who have cultivated them
va-láádyá	they who lay down
va-vi-láádyá	they who lay them down
va-léédye	they who have laid down
va-vi-léédye	they who have laid them down

With minisyllabic stems, there is another unexpected tonal phenomenon in these tenses. As minisyllabic stems have a complex final syllable, we would expect no retraction of the final H tone because this never happens in verbal forms (but it does happen with nouns, as we have seen in ch. 4). We would expect the H tone of the SC to shift to the (created) S1-position, and tonal coalescence of the zeroHzero sequence with VC/GF would result in a level H tonal sequence (see 3.5.5), as occurs in other tenses like the Negative Optative. As expected, a similar derivation occurs with vowel-initial disyllabic stems with a complex final syllable in the Direct Relative tenses we deal with here.

tu-naáalye	< °tu-naáalie < °tu-na-áalie < °tú-na-aalie
we should not eat	

a-naálye < °a-naáalie < °a-na-áalie < °á-na-aalie
(s)he should not eat

twíivya < °tuíivíá < °tu-íivíá < °tú-iivíá
we who make steal

víivya < °viíivíá < °vi-íivíá < °ví-iivíá
(s.th.) that make steal

With minisyllabic stems, there is an unexpected retraction of the final H tone. The resulting tonal sequence is HLH, and this sequence becomes a F tone after tonal coalescence.

túulya < °túuúlia < °tú-uúlia < °tú-uuliá we who eat
áalya < °áaáalia < °á-aáalia < °á-aaliá (s)he who eats

The confirmation for this analysis of final H tone retraction comes from the dialect Chindonde. Chindonde shares many (tonal) rules with Chinnima, but differs with respect to VC/GF. In Chindonde, there is no VC/GF in case of a sequence of three identical vowels, so a tonal sequence HzeroH on a sequence of three identical vowels remains intact. With minisyllabic stems, there is such a tonal sequence in these tenses with participants and cl.1 as subject concords, which proves that H Tone retraction has taken place.

túuúlya < °tú-uúlia < °tú-uuliá we who eat
áaálya < °á-aáalia < °á-aaliá (s)he who eats

Such a retraction does, however, not occur when an OC is present. The H tone of the SC normally shifts to the OC, and this H tone retracts to the SC with VC/GF (the OC H tone retraction rule, see 3.5.5 and the next section about the OC), followed by doubling of this H tone. (In case of retraction, the non-attested form *tú-víflya would have surfaced.)

tú-víilya < °tú-víilyá < °tu-víiiliá < °tu-ví-iiliá < °tú-vi-iiliá
we who eat it
á-víilya < °á-víilyá < °a-víiiliá < °a-ví-iiliá < °á-vi-iiliá
(s)he who eats it

Again, this phenomenon of retraction does not occur with forms with cl.2ff. as subject concords because, since they belong to TG E, they do not have a H-toned SC nor a stem-final H tone. But as described in detail in 3.4.1, the S2-H tone provokes an extra lengthening on disyllabic stems and minisyllabic stems, thus keeping them distinct from forms with a S1-H tone.

va-líima < °va-liíima < °va-liíima they who cultivate
va-li-líima < °va-li-liíima < °va-li-liíima they who cultivate it
váálya < °vaaáalia < °va-aáalia < °va-aáalia they who eat
va-víilya < °va-víiilia < °va-vi-iíilia < °va-vi-iíilia they who eat it

The Indirect Relatives *djt* (except for the Indirect Relative Non-Past *djt*) belong to TG D2, i.e. they have a H-toned SC and a verb stem without H tones. The initial tonal sequence LH for the Pre-Initial-SC with Indirect Relatives has been established for Proto-Bantu by Meeussen (BGR, 1967). Since the H tone always appears on the SC, and since with forms with OC, there is an extra H tone doubling, their tone patterns are different from other tenses of D2. One example is the Indirect Relative Present *djt*.

- D2 **pa-tú-líima / pa-tú-lima mahaála**
when we cultivate fields
pa-tú-lá-líima / pa-tú-lá-lima mahaála
when we cultivate the fields
pa-tú-láadya / pa-tú-ladya viínu
when we lay down things
pa-tú-ví-láadya / pa-tú-ví-ladya viínu
when we lay down the things
pa-vá-pwécheela / pa-vá-pwéchela vayeéni
when they receive guests
pa-vá-vá-pwécheela / pa-vá-vá-pwéchela vayeéni
when they receive the guests
pa-vá-kúndaanya / pa-vá-kúndanya vituúndi
when they mix yams
pa-vá-ví-kúndaanya / pa-vá-ví-kúndanya vituúndi
when they mix the yams
pa-tú-pílikaana / pa-tú-pílikana malóóve
when we hear words
pa-tú-lá-pílikaana / pa-tú-lá-pílikana malóóve
when we hear the words
pa-tú-pélekeedya / pa-tú-pélekedya vaánu
when we send people
pa-tú-vá-pélekeedya / pa-tú-vá-pélekedya vaánu
when we send the people

The Subsecutive Infinitive *djt* also has these tone patterns, except that it has no Pre-Initial. The example below consists of a trisyllabic stem.

- D2 **ku-ná-pwécheela / ku-ná-pwéchela vayeéni**
to go and receive guests
ku-ná-vá-pwécheela / ku-ná-vá-pwéchela vayeéni
to go and receive the guests
ku-ná-kúndaanya / ku-ná-kúndanya vituúndi
to go and mix yams
ku-ná-ví-kúndaanya / ku-ná-ví-kúndanya vituúndi
to go and mix the yams

The Indirect Relative Non-Past *djt* has a H-toned SC combined with a stem tonal profile B; this combination is exceptional. The H tone of the SC doubles to the next TBU when there is an OC; when there is no OC, there is no doubling because doubling would place a H tone next to the S1-H tone (see 3.5.6).

- B? **pa-tú-na-líima / pa-tú-na-líma mahaála**
 when we (will) cultivate fields
pa-tú-ná-la-liíima / pa-tú-ná-la-líma mahaála
 when we (will) cultivate the fields
pa-tú-na-láadya / pa-tú-na-lády viínu
 when we (will) lay down things
pa-tú-ná-vi-láadya / pa-tú-ná-vi-lády viínu
 when we (will) lay down the things
pa-vá-na-pwéchéela / pa-vá-na-pwéchela vayeéni
 when they (will) receive guests
pa-vá-ná-va-pwéchéela / pa-vá-ná-va-pwéchela vayeéni
 when they (will) receive the guests
pa-vá-na-kúndáanya / pa-vá-na-kúndanya vituúndi
 when they (will) mix yams
pa-vá-ná-vi-kúndáanya / pa-vá-ná-vi-kúndanya vituúndi
 when they (will) mix the yams
pa-tú-na-pílikaana / pa-tú-na-pílikana malóóve
 when we (will) hear words
pa-tú-ná-la-pílikaana / pa-tú-ná-la-pílikana malóóve
 when we (will) hear the words
pa-tú-na-pélékeedya / pa-tú-pélékedy vaánu
 when we (will) send people
pa-tú-ná-va-pélékeedya / pa-tú-ná-va-pélékedy vaánu
 when we (will) send the people

The Negative Indirect Relative Present *djt* has the same tones as the Negative Present *djt*, except for the H-toned SC. The same is true for the Negative Indirect Relative Present Perfective *djt* when compared to the Negative Present Perfective 1 *djt*.

Tenses where the tone of the SC is neutralized to (default) L are the following (we add the Infinitive with its L-toned marker **ku-** to these tenses):

A	B	C1
Past <i>cjt</i>	Optative with OC <i>djt</i>	Optative (without OC)
Far Past <i>cjt</i>	Negative Present <i>djt</i>	
Past Perfective <i>cjt</i>		
Infinitive		
Far Past Perfective <i>cjt</i>		
Negative Present Perfective 1 <i>djt</i>		

D1	E
Situative Perfective <i>djt</i>	Conditional <i>djt</i>
Suppositional Conditional Perfective <i>djt</i>	Concessive <i>djt</i>
Negative Infinitive <i>djt</i>	Direct Relative Past Perfective <i>djt</i>
Negative Present Perfective 2 <i>djt</i>	Dir. Relative Far Past Perfective <i>djt</i>
Negative Past Perfective <i>djt</i>	
Negative Conditional/Concessive <i>djt</i>	
Negative Suppositional Conditional <i>djt</i>	

The examples below are from the Negative Present Perfective 1 *djt*, Optative with OC *djt*, Optative (without OC), Situative Perfective *djt* and the Conditional *djt*:

A	tu-ká-pwechédiile	we have not received
	tu-ká-va-pwéchédiile	we have not received them
	va-ká-pwechédiile	they have not received
	va-ká-va-pwéchédiile	they have not received them
	tu-ká-kúndeenyé	we have not mixed
	tu-ká-vi-kúndéenyé	we have not mixed them
	va-ká-kúndeenyé	they have not mixed
	va-ká-vi-kúndéenyé	they have not mixed them
B	tu-va-pwéchééle	we should receive them
	va-va-pwéchééle	they should receive them
	tu-vi-kúndáanyé	we should mix them
	va-vi-kúndáanyé	they should mix them
C1	tu-pwechééle	we should receive
	va-pwechééle	they should receive
	tu-kundaanyé	we should mix
	va-kundaanyé	they should mix
D1	tu-pwechediile	while (we) having received
	tu-va-pwechediile	while (we) having received them
	va-pwechediile	while (they) having received
	va-va-pwechediile	while (they) having received them
	tu-kundeenyé	while (we) having mixed
	tu-vi-kundeenyé	while (we) having mixed them
	va-kundeenyé	while (they) having mixed
	va-vi-kundeenyé	while (they) having mixed them
E	tu-ka-pwechéela	if we receive
	tu-ka-va-pwechéela	if we receive them
	va-ka-pwechéela	if they receive
	va-ka-va-pwechéela	if they receive them
	tu-ka-kundáanya	if we mix
	tu-ka-vi-kundáanya	if we mix them
	va-ka-kundáanya	if they mix
	va-ka-vi-kundáanya	if they mix them

Finally, there are two tenses which do not have a SC at all: the Imperative and the Imperative with OC *djt*. We classify them according to the tonal profile of the verbal stem, and since the tones of the verbal stem are similar to those of tenses with the same tonal profile and with a L-toned SC, we classify them to TG C1 and D1 resp.

C1	pwecheéla	receive!
	kundaanya	mix!
D1	va-pwecheele	receive them!
	vi-kundaanye	mix them!

7.2.4 The object concord

There is only one tense that has a tonal H instruction in the lexicon for its OC: the Infinitive. With all other tenses, their OC does not have such an instruction, and it gets a default L tone post-lexically unless the SC has a H tone which has been shifted to it. The Infinitive belongs to TG A, the Infinitive marker is L and the stem has tonal profile S1/SF. There is a H Tone Bridge between the S1-H tone and the SF-H tone with forms with a simple final syllable.

A	ku-líima	to cultivate
	ku-láadya	to lay down
	ku-pwéchééla	to receive
	ku-kúndaanya	to mix
	ku-pílikáána	to hear
	ku-pélékeedya	to send

With the forms with OC, the H tone of the OC deletes the S1-H tone by Meeussen's Rule, and there is no H Tone Bridge to the retracted SF-H tone. H Tone Doubling, however, does occur whenever it is possible. So, the H tone of the OC alters the TP of the stem.

A	ku-lá-liíma	to cultivate them
	ku-ví-láadya	to lay them down
	ku-vá-pwechééla	to receive them
	ku-ví-kúndaanya	to mix them
	ku-lá-pílikaána	to hear them
	ku-vá-pélekeedya	to send them

Except for one Negative tense and one Indirect Relative tense (see 7.1.1 and 7.1.2), tenses with a H-toned SC either belong to TG C2 (H.SF) or to D2 (H.no H). With disjoint tenses, the H tone of the SC shifts to the S1-position, but when there is an OC, it shifts to the OC (with conjoint tenses, the H tone of the SC shifts to the final TBU, see 8.3.2). So the forms of TG C2 and D2 which we have given in 7.2.1 and 7.2.2 have slightly different TP's when they have an OC: the H tone in S1-position is

then in the position of the OC, that is one position to the left, before the dot (e.g. H.HLL:L instead of .HHL:L, H.HLLH instead of .HHLH, H.HL:L instead of .HFL, H.LRL instead of .HRL, H.LL instead of .HL, and H.LHH instead of .HLL which is the second TP of the trisyllabic stem with a simple final syllable of TG C2). We use the same examples as in 7.2.1 and 7.2.2, but now with OC.

Verbs disjoint + OC	four-syllable stems			trisyllabic stems	
	TG	SC.stem	TP	TP	
C2		H.SF	H.HLRL / H.HLHH, <i>H.HLLH</i> H.HLL:L / H.HLLL	H.LRL / H.LHH, <i>H.HLH</i> H.HL:L / H.HLL	
D2		H.no H	H.HLL:L / H.HLLL	H.HL:L / H.HLL	

Verbs disjoint + OC	disyllabic stems	
	TG	SC.stem TP
C2		H.SF H.RL / H.LL, <i>H.LH</i> H.FL / H.LL
D2		H.no H H.FL / H.LL

- C2 **va-na-lá-pílikaána / va-na-lá-pílikána, va-na-lá-pílikaná maliídi**
they (will) hear the voices
va-na-dí-kátapaadya / va-na-dí-kátapadya ding'áánde
they (will) clean the houses
va-na-vá-pwecheéla / va-na-vá-pwechélá, va-na-vá-pwéchelá vayeéni
they (will) receive the guests
va-na-ví-kúndaanya / va-na-ví-kúndanya vituúndi
they (will) mix the yams
va-na-lá-liíma / va-na-lá-lima, va-na-lá-limá mahaála
they (will) cultivate the fields
va-na-ví-láadya / va-na-ví-ladya viínu
they (will) lay down the things
- D2 **va-na-lá-pílikaane / va-na-lá-pílikane maliídi**
they should not hear the voices
va-na-dí-kátapaadye / va-na-dí-kátapadye ding'áánde

they should not clean the houses

va-na-vá-pwécheele / va-na-vá-pwéchele vayeéni

they should not receive the guests

va-na-ví-kúndaanye / va-na-ví-kúndanye vituúndi

they should not mix the yams

va-na-lá-líime / va-na-lá-lime mahaála

they should not cultivate the fields

va-na-ví-láadye / va-na-ví-ladye viínu

they should not lay down the things

The forms with disyllabic vowel-initial stems with a complex final syllable with OC are as follows:

Verbs disjoint + OC	disyllabic stems with a complex final syllable	
TG	SC.stem	TP
C2	H.SF	H.FL / H.LL
D2	H.no H	H.FL / H.LL

C2 **va-na-lá-úudya / va-na-lá-udya malóóve**

they (will) ask the words

D2 **va-na-lá-úudye / va-na-lá-udye malóóve**

they should not ask the words

Here, too, the TP's are slightly different compared to the TP's of forms without OC. When there is Vowel Coalescence/Glide Formation (VC/GF) between the vowel of the OC and the initial vowel of the stem, and the OC has a H tone, the tonal process OC H Tone Retraction occurs: the H tone of the OC is shifted back one TBU to the left (from where doubling may occur, see 3.5.5).

Verbs disjoint + OC		disyllabic stems with a complex final syllable (after VC/GF)
TG	SC.stem	TP
C2	H.SF	H.FL / H.LL
D2	H.no H	H.FL / H.LL

C2 **va-ná-lúudya / va-ná-ludya malóóve**

they (will) ask the words

D2 **va-ná-lúudye / va-ná-ludye malóóve**

they should not ask the words

This retraction rule applies wherever there is an OC with a H tone which merges with the following stem, not only when a H tone has been shifted to the OC (as with the examples above), but also when the OC has a lexical H tone, as in the Infinitive; and of course also with stems longer than disyllabic ones.

- A **ku-lá-úudya** — **kú-lúudya** to ask them
 ku-lá-ííva — **kú-liíva** to steal them
 C2 **va-ni-tú-éneleedya** — **va-ní-twéneleedya** they have dispersed us

Forms consisting of minisyllabic stems with OC are identical with the vowel-initial disyllabic forms above before VC/GF between the stem and the preceding morpheme. We therefore give underlying forms.

- C2 °**va-na-lá-aalya** (<°**vá-na-la-aalya**)
 they (will) eat them
 D2 °**va-na-lá-aalye** (<°**vá-na-la-aalye**)
 they should not eat them

The big difference is that vowel-initial disyllabic stems may appear without VC/GF, but minisyllabic stems may not appear without these processes. So, the forms and TP's concerning minisyllabic stems below are identical with those concerning vowel-initial disyllabic stems with a complex final syllable above where VC/GF have occurred (see 3.4.1 and 3.5.5).

Verbs disjoint + OC	minisyllabic stems	
	TG	SC.stem TP
C2	H.SF	H.FL / H.LL
D2	H.no H	H.FL / H.LL

- C2 **va-ná-láalya / va-ná-lalya mátiínji** they (will) eat the pumpkins
 D2 **va-ná-láalye / va-ná-lalye mátiínji** they should not eat the pumpkins

As a consequence of the obligatory VC/GF with minisyllabic stems, the OC H Tone Retraction rule always applies with minisyllabic stems with a OC with a H tone, also in case of an lexical H tone. Below, we follow the derivation of an Infinitive consisting of a minisyllabic stem with OC starting from H Tone Assignment (HTA). HTA results in a H tone on the OC, and in the tonal profile S1/SF (A) on the stem. Meeussen's Rule (MR) deletes the S1-H tone of the stem because of the preceding H on the OC, and Retraction of the SF-H tone occurs (R). VC/GF applies which results in the glide in the final syllable, the OC merges with the stem and its H tone retracts to the previous TBU (this is the Object Concord H Tone Retraction rule, OCHTR). Resyllabification occurs (not indicated below). H Tone Doubling (HTD) and Final H deletion (F) apply, followed by Default L tone insertion (DI).

DI	HTD, F	VC/GF, OCHTR	MR, R	HTA
kú-láàlyà <	°kú-láalya <	°kú-lalyá <	°ku-lá-aalíá <	°ku-lá-áaliá
to eat them				

There are two tenses where the forms with and without OC belong to a different TGs: the Optative and the Imperative. Both tenses without OC belong to TG C1, the Optative with OC belongs to TG B while the Imperative with OC belongs to TG D1. The final H tone with Optative forms without OC (C1) with a complex final syllable is surprising, as well as the lack of the final H tone with Imperative forms with disyllabic stems without OC (C1) with a simple final syllable (see 6.3.1).

B	tu-la-liime	we should cultivate them
	tu-vi-láadye	we should lay them down
	tu-va-pwéchééle	we should receive them
	tu-vi-kúndaanye	we should mix them
	tu-la-pilikaane	we should hear them
	tu-va-pélékeedye	we should send them
C1	tu-liime	we should cultivate
	tu-laadyé	we should lay down
	tu-pwechééle	we should receive
	tu-kundaanyé	we should mix
	tu-pilikaáne	we should hear
	tu-pelekeedyé	we should send
C1	liima	cultivate!
	laadya	lay down!
	pwechééla	receive!
	kundaanya	mix!
	pilikaána	hear!
	pelekeedya	send!
D1	la-liime	cultivate them!
	vi-laadye	lay them down!
	va-pwechééle	receive them!
	vi-kundaanye	mix them!
	la-pilikaáne	hear them!
	va-pelekeedye	send them!

7.2.5 The tense markers

Intervening TM's contribute to the TP's of the tenses. But there are two types of TM's which alter the TP's of the stems. The first type is a H-toned TM which deletes the S1-H tone of the stem (by Meeussen's Rule). This occurs with the Negative Present *djit* (and Negative Indirect Relative Present *djit*, TG B). Only forms without OC are affected; with forms with OC, the OC intervenes between the H-toned TM

and the S1-H tone, and Meeussen's Rule does not apply. Some examples are the following (see 3.4.3 and 7.1.1 for more details):

B	tu-káalya	we do not eat
	tu-ká-líima	we do not cultivate
	tu-ká-yángáata	we do not help
	tu-ká-pílikaana	we do not hear
	tu-ká-pílikaniila	we do not listen
	tu-ká-víilya	we do not eat it
	tu-ká-la-líima	we do not cultivate them
	tu-ká-va-yángáata	we do not help them
	tu-ká-la-pílikaana	we do not hear them
	tu-ká-la-pílikaniila	we do not listen to them

There is H Tone Doubling to the first TBU of the stem. With the Negative Present, forms with a complex and with a simple final syllable have the same tone pattern.

The second type of TM which alters a tone pattern has a L tone that blocks the shift of the H tone of the SC. The H tone appears on the SC or the (first) TM. There are two cases. The first case is the Negative Present Perfective 1 *djt* (and Negative Indirect Relative Perfective *djt*) where the shifted H tone on the TM deletes the S1-H tone of the stem by MR in the same way as described above with the negative Present. The H tone of the TM does not double to the first TBU of the stem.

A	tu-ká-liile	we have not eaten
	tu-ká-leedye	we have not laid down
	tu-ká-yangééte	we have not helped
	tu-ká-kundeenye	we have not mixed
	tu-ká-pílikééne	we have not heard
	tu-ká-katapeedye	we have not cleaned
	tu-ká-pílikáníle	we have not listened
	tu-ká-pelekediidye	we have not sent
	tu-ká-vi-líile	we have not eaten it
	tu-ká-vi-léedye	we have not laid them down
	tu-ká-va-yangééte	we have not helped them
	tu-ká-vi-kundeenye	we have not mixed them
	tu-ká-la-pílikééne	we have not heard them
	tu-ká-di-katapeedye	we have not cleaned them
	tu-ká-la-pílikáníle	we have not listened to them
	tu-ká-va-pélékediidye	we have not sent them

The second case consists of the Past *djt*, the Past Perfective *djt* and the Suppositional Conditional *djt*. These tenses lack a S1-H tone, and due to the blocking, the H tone of the SC does not shift to the S1-position. Some examples are the following:

C2	tú-ná-yangaáta	we helped
	tú-ná-va-yangaáta	we helped them
	tú-ná-kundaanya	we mixed
	tú-ná-vi-kundaanya	we mixed them
	tú-ní-yangaáta	we had helped
	tú-ní-va-yangaáta	we had helped them
	tú-ní-kundaanya	we had mixed
	tú-ní-vi-kundaanya	we had mixed them
	tu-ká-ní-yangaáta	we would help
	tu-ká-ní-va-yangaáta	we would help them
	tu-ká-ní-kundaanya	we would mix
	tu-ká-ní-vi-kundaanya	we would mix them

7.3 The conjoint/disjoint system

Makonde has conjoint, disjoint and conjoint-disjoint verbal forms. Conjoint verbal forms always form a single p-phrase with the following word, conjoint-disjoint verbal forms may or may not form a p-phrase with a following word, and disjoint verbal forms form a p-phrase on their own whether or not followed by a word. Most tenses are disjoint. There are six conjoint tenses which form pairs with six disjoint tenses. There are five conjoint-disjoint tenses; except for the Infinitive, four of them are interconnected with four disjoint tenses in that both sets of tenses have half of the verbal paradigm (e.g. the Optative with object concord is a disjoint tense while the Optative without object concord is a conjoint-disjoint tense). Before going into details, we start with a brief history of notes, remarks and (short) descriptions of conjoint and disjoint forms (often called differently) in various languages.

7.3.1 A brief history

Ndumbu and Whiteley (1962) note that in several languages of zone E, it has been recorded that some ‘one-word tenses’ are characterized by an initial nasal element (*n*, *ne*, *ni*), and that in some cases these may be related semantically to other tenses in which such an initial nasal element does not occur, as in Gusii, Kuria, Gikuyu, Kamba and Nyore. They further note that a similar phenomenon occurs in Chaga and possibly also in Bemba, and in Remi of zone F. They state that where such a semantic correlation does occur it has been variously described, e.g., by Barlow (1927): ‘Thus it will be seen that the effect of *ni* is to give positiveness or emphasis to the word or phrase it precedes. Preceding a verb, it conveys a definiteness, an assertiveness which the verb would not otherwise possess.’ For another language, Gusii, Whiteley (1956,

p.93) describes: '...The most important distinction between the two forms is that the *n*-forms introduce a new point or theme; either by starting a conversation, or continuing a conversation in a new topic. By the same token, *n*-less forms continue a discussion already in progress.' Ndumbu and Whiteley believe that some pairing of tenses into an 'emphatic' / 'unemphatic' or 'stable' / 'unstable' series is more widespread.

(It should be noted that the term 'stabilization construction' as used in the literature (e.g. by Carter, 1956) also includes forms which are capable of standing by itself as a complete sentence like independent nominals and proper names, as Pongweni (1980) explains; he describes such forms preceded by a 'stabilization prefix' as *i* and *ndi* with the meaning 'it is...' in Karanga.)

In other Bantu literature, a similar distinction is termed 'strong' / 'weak'. Meeussen (1959) names the distinction in Rundi 'disjoint' / 'conjoint', translated as 'disjunctive' / 'conjunctive' by Creissels (1996) for Setswana. Creissels states that only the disjunctive form can be used in final sentence position, implying a break between the verb and what follows, whereas the conjunctive form implies a continuity. He says that the use of a conjunctive form means that the verb is followed by an element which belongs to the clause in which the verb in question fulfils the predicate function, and that this element provides some new information. If a disjunctive form is followed by an element which might be considered as belonging to the clause in which the verb in question fulfils the predicate function, this element is in fact a postclausal topic. Liphola, in his description of Shimakonde of Mozambique (2001), tells 'tenses which phrase together with the following noun' apart from the other tenses without elaborating on this subject. Manus, describing a variant of the same language (2004), distinguishes 'formes disjointes' from 'formes conjointes' in their possibility of being used in prepausal position or not; conjoint forms must be followed by something, their penultimate syllable is monomoraic, and they form a unique prosodic group with what follows.

Devos' description of Makwe, a Makonde variant of Tanzanian Chimaraba spoken in Mozambique (2004) has the same classification into conjoint, disjoint and conjoint-disjoint forms, but her excellent description is much more detailed. She states that the choice between a conjoint or disjoint tense is determined by pragmatics. About conjoint forms, she notes that by expressing the verb and the following word in one and the same p-phrase, the speaker either indicates that the constituent following the verb is focussed in one way or another (constituent focus which may be replacing, completive or contrastive) or posits the verb and the following constituent as a single piece of information (thetic). 'These two quite different pragmatic functions can be unified if one thinks in terms of information peaks: p-phrases expressing focus typically contain one information peak, and a p-phrase used to posit a single piece of information likewise contains one information peak'. She further notes that 'Verb-object sequences more often than not occur in one p-phrase whether they are focussed or not; objects typically include an information peak, i.e., they constitute the most salient information of the utterance. If the speaker does not choose to present the

object as new information, a disjoint verb form is used or if the context allows it, the object is omitted altogether'. According to her, conjoint-disjoint forms are used in a conjoint or in a disjoint way depending on the way the speaker wants to package the information. Below, we describe the conjoint/disjoint system in Chinnima without going into detail with respect to the pragmatics which determine the choice between the different types tenses, but we take Devos' description as suitable and applicable for the description of Chinnima and probably of all Makonde variants either in Tanzania and in Mozambique.

7.3.2 Conjoint, disjoint and conjoint-disjoint tenses

The conjoint/disjoint system is the system of verbal forms which constitute a phonological phrase on their own (i.e., one-word p-phrases: verbal-focus tenses or disjoint tenses, marked *djt*) and verbal forms which form a phonological phrase with a following noun (i.e., longer p-phrases: post verbal focus tenses or conjoint tenses, marked *cjt*); there are also verbal forms which have both characteristics: they may form a p-phrase on their own, but when they are followed by a noun, they form a p-phrase with it (conjoint-disjoint tenses, not followed by an abbreviation below).

Most tenses are disjoint tenses. Disjoint tenses in general appear to be the unmarked tenses.

Present/Non-Past *djt*
 Past *djt*
 Far Past *djt*
 Present Perfective *djt*
 Past Perfective *djt*
 Far Past Perfective *djt*
 Imperative (with OC) *djt*
 Optative (with OC) *djt*
 Direct Relative Present (with SC cl.2ff.) *djt*
 Direct Relative Present Perfective (with SC cl.2ff.) *djt*
 Suppositional Conditional *djt*
 Conditional *djt*
 Concessive *djt*
 Subsecutive Infinitive *djt*
 Situative Perfective *djt*
 Suppositional Conditional Perfective *djt*
 Subsecutive Optative *djt*
 Direct Relative Past Perfective *djt*
 Direct Relative Far Past Perfective *djt*

Also disjoint are:

- all Indirect Relative tenses
- all Negative tenses

The six disjoint tenses of the first block above form pairs with the conjoint tenses (see below); the disjoint tenses of the second block above are one part of the verbal paradigm, the other part being the conjoint-disjoint tenses Imperative (without OC), Optative (without OC) and the Direct Relative Present and Perfective with SC participants + cl.1 (see below). Disjoint tenses form a p-phrase on their own; they have penultimate lengthening (and retraction of a final H tone, if present), whether or not followed by an object or adjunct.

Some examples follow:

Past *djt*:

tú-ná-(va-)yangaáta (vayeéni) we helped them/the guests

Optative with OC *djt*:

tu-va-yángáate (vayeéni) we should help them/the guests

Conditional *djt*:

tu-ka-(va-)yangáata (vayeéni) if we help them/the guests

Indirect Relative Present *djt*:

pa-tú-(vá-)yángáata (vayeéni) when we help them/the guests

Negative Present *djt*:

tu-ká-(va-)yángáata (vayeéni) we do not help them/the guests

There are six conjoint tenses, presented in the left column below. All conjoint tenses have disjoint counterparts; the conjoint tenses form pairs with the disjoint tenses of the first block above, repeated below in the right column.

Present <i>cjt</i>	Present/Non-Past <i>djt</i>
Past <i>cjt</i>	Past <i>djt</i>
Far Past <i>cjt</i>	Far Past <i>djt</i>
Present Perfective <i>cjt</i>	Present Perfective <i>djt</i>
Past Perfective <i>cjt</i>	Past Perfective <i>djt</i>
Far Past Perfective <i>cjt</i>	Far Past Perfective <i>djt</i>

With the label Present/Non-Past *djt*, we indicate that this tense may designate (near) Future, next to Present; we have simply called this tense Non-Past elsewhere in this book. Conjoint tenses can not form a p-phrase on their own; they constitute a p-phrase with a following object or adjunct, they do not have penultimate lengthening, and when the verbal form has a final H tone, there is a H Tone Bridge between this final H tone and the first H tone of the following word (see 8.3.2 for more details).

Conjoint tenses are post-verbal focus tenses, the focus being on the word following the verbal form in the same p-phrase. Their disjoint counterparts, being a p-phrase on their own, either have verbal focus, or simply are the unmarked forms. Below, we give examples of each pair; the disjoint forms may occur on their own, and focus is not indicated with them (the focus with conjoint tenses is indicated by capitals).

Present *cjt* – Present/Non-Past *djt*:

tu-(va-)yangata vayeéni	we help (THE) GUESTS
tu-na-(va-)yangaáta (vayeéni)	we (will) help them/the guests

Past *cjt* – Past *djt*:

tu-(va-)yángatá váyééni	we helped (THE) GUESTS
tú-ná-(va-)yangaáta (vayeéni)	we helped them/the guests

Far Past *cjt* – Far Past *djt*:

tw-a-(va-)yángatá váyééni	we helped (THE) GUESTS
tw-á-ná-(va-)yangaáta (vayeéni)	we helped them/the guests

Present Perfective *cjt* – Present Perfective *djt*:

tu-(va-)yangete váyééni	we have helped (THE) GUESTS
tu-ni-(vá-)yangaáta (vayeéni)	we have helped them/the guests

Past Perfective *cjt* – Past Perfective *djt*:

tu-(va-)yángété váyééni	we had helped (THE) GUESTS
tú-ni-(va-)yangaáta (vayeéni)	we had helped them/the guests

Far Past Perfective *cjt* – Far Past Perfective *djt*:

tw-a-(va-)yángété váyééni	we had helped (THE) GUESTS
tw-á-ni-(va-)yangaáta (vayeéni)	we had helped them/the guests

All conjoint tenses have a zero tense marker in the formative positions; their disjoint counterparts all have a tense marker, **-na-** or **-ni-** (preceded by the tense marker **-a-** in the Far Past).

The conjoint-disjoint tenses are presented in the left column below. The other part of the verbal paradigm of these tenses (except for the Infinitive) are the disjoint tenses of the second block above, repeated below in the right column.

Infinitive	
Imperative (without OC)	Imperative (with OC) <i>djt</i>
Optative (without OC)	Optative (with OC) <i>djt</i>
Direct Relative Present	Direct Relative Present <i>djt</i>
(with SC participants + cl.1)	(with SC cl.2ff.)
Direct Relative Present Perfective	Direct Relative Present Perfective <i>djt</i>
(with SC participants + cl.1)	(with SC cl.2ff.)

Conjoint-disjoint tenses may form a p-phrase on their own, but when followed by an object or adjunct, they form a p-phrase with them. Below, we give examples of the Infinitive as well as of each part of the verbal paradigm of the other tenses.

Infinitive:

ku-yángááta	to help
ku-vá-yangaáta	to help them
ku-yángátá váyééni	to help guests
ku-vá-yángata váyééni	to help the guests

Imperative (without OC) – Imperative (with OC) *djt*:

yangaáta	help!
yangata váyééni	help the guests!
va-yangaate (vayeéni)	help them/the guests!

Optative (without OC) – Optative (with OC) *djt*:

tu-yangaáte	we should help
tu-yangate váyééni	we should help guests
tu-va-yángáate (vayeéni)	we should help them/the guests

Direct Relative Present (with SC participants + cl.1) – Direct Relative Present (with SC cl.2ff.) *djt*:

a-(vá-)yángááta	(s)he who helps (them)
a-(vá-)yángata váyééni	(s)he who helps (the) guests
va-(va-)yangáata (vayeéni)	they who help them/the guests

Direct Relative Present Perfective (with SC participants + cl.1) – Direct Relative Present Perfective (with SC cl.2ff.) *djt*:

a-(vá-)yángéete	(s)he who have helped (them)
a-(vá-)yángete váyééni	(s)he who have helped (the) guests
va-(va-)yangéete (vayeéni)	they who have helped them/the guests

When conjoint-disjoint tenses occur on their own, there is penultimate lengthening (and retraction of the final H tone); when an object or adjunct is following, they are like conjoint tenses: there is no penultimate lengthening, and there is a H Tone Bridge between the final H tone of the verbal form and the first H tone of the following nominal (see 8.3.2). Conjoint-disjoint tenses have a zero TM. They form conjoint-disjoint pairs on their own, without having a difference in TM's. The choice between the conjoint form and the disjoint form is not determined by focus, but by the syntactic environment. The striking difference between the conjoint-disjoint parts of the verbal paradigm and the disjoint parts of the verbal paradigm of these tenses is that the disjoint parts do not have final H tone, while the conjoint-disjoint parts, including the Infinitive, do have final H tone. This phonological difference may be the reason for the different behaviour of the two kinds of tenses: the final H tone probably is connected with forming a p-phrase with a following nominal with these tenses, the H Tone Bridge being the instrument.

In this chapter, we have worked out the tonology of disjoint tenses (7.2). In chapter 8, we will work out the tone system of conjoint tenses and conjoint-disjoint tenses. Conjoint tenses and conjoint-disjoint tenses also belong to one of the TG's A through E which are established for disjoint tenses in this chapter, but some adaptations with certain TG's are needed for conjoint tenses because of tone rules like H Tone Bridge, where there is a stretch of H tones from the final syllable of the verbal form to the first H tone of the following object.

7.4 Complex tenses

Complex tenses consist of the Infinitive preceded by special verbal prefixes or by SC + TM(s) or by a verbal form. The larger complex tenses consist of the Infinitive preceded by SC + TM(s) or a verbal form; in case a conjoint verbal form with a final H tone precedes the Infinitive, there is a H Tone Bridge between this final H tone and the first H tone of the Infinitive. The smallest complex tenses are the Sequential Infinitive (i.e. an Infinitive preceded by the class 18 prefix **n-** (^o**mu-**)), the Situative Infinitive (i.e. an Infinitive preceded by the Situative **u-**) and the Situative Sequential Infinitive (i.e. the Sequential Infinitive preceded by the Situative **u-**); these complex tenses themselves may occur as final part of larger complex tenses. The structural descriptions are (without tonal descriptions):

	ku- (OC)-Verbal Base- a	(Infinitive)
n-	ku- (OC)-Verbal Base- a	(Sequential Infinitive)
u-	ku- (OC)-Verbal Base- a	(Situative Infinitive)
u- n-	ku- (OC)-Verbal Base- a	(Situative Sequential Infinitive)

Just like the Infinitive, the Sequential Infinitive has a Subsecutive variant with the TM **-ná-** after the initial:

	ku-ná- (OC)-Verbal Base- a
n-	ku-ná- (OC)-Verbal Base- a

There are four types of larger complex tenses. The first type is composed of an Infinitive preceded by a verbal form or TM(s). There are three such forms:

- 1a) a verbal form with the verb **-lembela** 'want' or part of it, **-(le)mbe(la)**, followed by an Infinitive with or without the initial **ku-** or **u-**; these complex tenses designate Future and Past Intentional.
- 1b) the verbal forms **-kana(.va)** and **-kanamba**, followed by an Infinitive with or without the initial **ku-** or **u-**; these complex tenses designate "Not Yet" Negative Perfective and "Before" Negative Perfective.
- 1c) the TM's **-chi-** and **-nachi-** followed by an Infinitive without initial; these complex tenses designate Past Progressive and Non-Past Progressive.

In the second type of complex tenses the Sequential Infinitive is preceded by:

- 2a) a verbal form with the verb **-.va** 'be'; these complex tenses designate general Progressive tenses.
- 2b) a verbal form with the Perfective of **-.va** or part of it, **-ve(le)**; these complex tenses designate specific Progressive tenses.

In the third type of complex tenses the Situative Sequential Infinitive is preceded by:

- 3a) a verbal form with the verb **-.va** 'be' followed by **-chi-**; these complex tenses designate Non-Past Progressive.
- 3b) a verbal form with the Perfective of **-.va** or part of it, **-ve(le)** followed by **-chi-**; these complex tenses designate Present Progressive and (Far) Past Progressive.

The fourth type of complex tenses is composed of certain combinations of parts of complex tenses mentioned above:

- 4a) the TM's **-chi-** and **-nachi-** followed by complex tenses with **-lembe-** and **-.va-**; these tenses designate Past Intentional Progressive, Past Progressive and Non-Past Progressive.
- 4b) the initials **n-ku-** of the Sequential Infinitive may be followed by other non-Negative complex tenses, the initials replacing the SC; these tenses designate Sequential Future and Sequential Progressive tenses.
- 4c) the Subsequential Present Progressive may be preceded by a verbal form with **-ve**; its meaning is still unclear.

Structural descriptions of the complex tenses (without tonal description):

	SC	verb/TM	Sit.	Seq.	Infinitive
1a)	SC	-lembe-			((k) u)- (OC)-Verbal Base- a
	SC	-mbe-			(u)- (OC)-Verbal Base- a
1b)	SC	-kanaa-			((k) u)- (OC)-Verbal Base- a
	SC	-kanaava-			(k) u - (OC)-Verbal Base- a
	SC	-kanaamba-			(k) u - (OC)-Verbal Base- a
1c)	SC	-chi-			(OC)-Verbal Base- a
	SC	-na-chi-			(OC)-Verbal Base- a
2a)	SC	-.va-	n-	ku-	(OC)-Verbal Base- a
2b)	SC	-ve-	n-	ku-	(OC)-Verbal Base- a
3a)	SC	-na.va-chi-	u-	n-	ku- (OC)-Verbal Base- a
3b)	SC	-ve-chi-	u-	n-	ku- (OC)-Verbal Base- a
4a)	SC	-chi-lembe-			((k) u)- (OC)-Verbal Base- a
	SC	-chi.va-	n-	ku-	(OC)-Verbal Base- a
	SC	-na-chi.va-	n-	ku-	(OC)-Verbal Base- a
4b)	n-ku	-lembe-			((k) u)- (OC)-Verbal Base- a
	n-ku	-lembe-chi-	u-	ku-	(OC)-Verbal Base- a
	n-ku	-.va-	n-	ku-	(OC)-Verbal Base- a
	n-ku	-na-chi-			(OC)-Verbal Base- a
	n-ku	-chi-			(OC)-Verbal Base- a
	n-ku	-chi.va-	n-	ku-	(OC)-Verbal Base- a
4c)	SC- ve-	n-ku	-.va-	n-	ku- (OC)-Verbal Base- a

We now work out the different types in more detail.

Type 1a):

Present tense verb forms and Past tense verb forms with **-lembe(la)**, and its variant **-lambe(la)**, followed by an Infinitive designate various kinds of Future and of Past Intentional. The following tenses exist:

-lembe(la) in the:	designates:
Present	Future
Negative Present	Negative Future
Direct Relative Present	Direct Relative Future
Indirect Relative Present	Indirect Relative Future
Negative Indirect Relative Present	Negative Indirect Relative Future
Past	Past Intentional
Far Past	Far Past Intentional

Although the full form **-lambela/-lambela** is possible, generally only the part **-lembe-/lambe-** is used. The Infinitive appears with or without the initial **ku-**, but the initial **u-** is the most common; with minisyllabic stems the initial **ku-** appears, but with OC

the initial is optional. There are no tonal changes compared to the Infinitive on its own.

FUTURE:

ngu-lembe-kulííma/ngu-lembe-lííma/ngu-lembe-ulííma

I will cultivate

ngu-lembe-kuláliíma/ngu-lembe-láliíma/ngu-lembe-uláliíma

I will cultivate them (cl.6)

ngu-lembe-kúúlya

I will eat

ngu-lembe-díílya/ngu-lembe-kú-díílya

I will eat them (cl.10)

As with the Present tense on its own, forms with participants as SC have no H tone; forms with classes as SC have a H toned SC. This H tone shifts to the final TBU of the Present tense part from where there is a H Tone Bridge to the first H of the Infinitive. The H tone on the final syllable is deleted by the process Regressive H Tone Dissimilation (see 8.3.2), but not when the Infinitive lacks an initial; when the initial is **u-**, the preceding vowel **e** of the verb is raised to H. Note that a H Tone Bridge to a minisyllabic verb results in a F tone on its penultimate syllable.

va-lembe-kulííma/va-lembe-lííma/va-lembe-ulííma

they will cultivate

va-lembe-kuláliíma/va-lembe-láliíma/va-lembe-uláliíma

they will cultivate them (cl.6)

va-lembe-kúulya

they will eat

va-lembe-díílya/va-lembe-kú-díílya

they will eat them (cl.10)

The shorter form **-mbe-** of **-lembela/-lambela** is also possible with this complex tense, but there are some differences with the larger forms. The following Infinitive may not have the initial **ku-**, except with minisyllabic stems. The form with SC 1SG is the larger form **-lembe-** but the SC is not **ngu-** (or **ni-**) but the variant Prenasalization of the initial C of **-lembe-**.

tu-mbe-lííma/tu-mbe-ulííma

we will cultivate

tu-mbe-kúúlya

we will eat

ndembe-lííma/ndembe-ulííma

I will cultivate

NEGATIVE FUTURE:

The first part consists of the Negative Present of **-(le)mbe-/-(la)mbe-**; the second part is the Infinitive.

tu-ká-lémbe-kulííma/tu-ká-lémbe-lííma/tu-ká-lémbe-ulííma
tu-ká-mbe-lííma/tu-ká-mbe-ulííma
 we will not cultivate

DIRECT RELATIVE FUTURE:

The first part consists of the Direct Relative of **-(le)mbe-/-(la)mbe-**. The forms with participants and cl.1 as SC have a H toned SC (which appears on the first TBU of the stem) and final H tone (which acts the same way as we saw with the Present, except that it does not appear on the final TBU); the forms with cl.2ff. as SC have a S2-H tone.

tu-lémbe-kulííma/tu-lémbe-lííma/tu-lémbe-ulííma
tú-mbe-lííma/tú-mbe-ulííma
 we who will cultivate

va-lembé-kulííma/va-lembé-lííma/va-lembé-ulííma
va-mbé-lííma/va-mbé-ulííma
 they who will cultivate

(NEGATIVE) INDIRECT RELATIVE FUTURE:

These tenses have as first part the (Negative) Indirect Relative of **-(le)mbe-/-(la)mbe-**.

pa-tú-lémbe-kulííma/pa-tú-lémbe-lííma/pa-tú-lémbe-ulííma
pa-tú-mbe-lííma/pa-tú-mbe-ulííma
 when we will cultivate
vayeéni va-tú-lémbe-uváyangaáta
vayeéni va-tú-mbe-uváyangaáta
 the guests who we will help

pa-tú-ká-lémbe-kulííma/ etc.
pa-tú-ká-mbe-ulííma...
 when we will not cultivate
vayeéni va-tú-ká-lémbe-uváyangaáta
vayeéni va-tú-ká-mbe-uváyangaáta
 the guests who we will not help

(FAR) PAST INTENTIONAL:

The first part consists of the (Far) Past of **-(le)mbe-/-(la)mbe-**, with a H Tone Bridge to the following Infinitive:

tu-lémbé-kulííma/tu-lémbé-lííma/tu-lémbé-ulííma
tú-mbé-lííma/tú-mbé-ulííma etc.
 we would cultivate (we had the intention to cultivate)
tw-a-lémbé-kulííma/tw-a-lémbé-lííma/tw-a-lémbé-ulííma
tw-á-mbé-lííma/tw-á-mbé-ulííma etc.
 we would cultivate long ago

Type 1b):

“NOT YET” NEGATIVE PERFECTIVE:

The “Not Yet” Negative Perfective is formed by an Infinitive preceded by three possible forms: SC + **-ká-náa(va)** and SC + **-ká-náamba**. The first part **-ká-** is the Negative marker. The **-naa-** of the first two forms is a TM (the H tone in the form is due to H Tone Doubling of the H tone of the Negative marker), followed by the verb **-va** ‘be’ (which may be omitted). **-namba** of the third form in fact is the Subsecutive Infinitive of the ancient verb **-amba** ‘get light’, **-ná-amba** (where the initial of the Infinitive is omitted), and is used as such only in the following construction: **ku-ná-amba kúúcha** ‘and it goes on with dawning’. Also the negative form is used with this Infinitive: **ku-ká-ná-amba kúúcha** ‘and it has not yet started to dawn’. The Infinitive appears with the initials **ku-** or **u-**; when preceded by **-kánáa**, the initials may also be omitted (except with minisyllabic stems).

tu-kánáamba-kulííma/tu-kánáamba-ulííma

tu-kánáava-kulííma/tu-kánáava-ulííma

tu-kánáa-kulííma/tu-kánáa-ulííma/tu-kánáa-lííma

we have not yet cultivated

tu-kánáamba-kuláliíma/tu-kánáamba-uláliíma etc.

we have not yet cultivated them (cl.6)

There is also a Indirect Relative with all forms:

u-tú-kánáamba-kulííma etc.

while we have not yet cultivated

“BEFORE” NEGATIVE PERFECTIVE:

The “Before” Negative Perfective is formally identical with the “Not Yet” Negative Perfective, but tonally there is one difference: the Negative marker has a L tone. This tense can be regarded as the “relative” version of the “Not Yet” Negative Perfective: ‘when not yet...’ (= ‘before’).

tu-kanáamba-kulííma/tu-kanáamba-ulííma

tu-kanáava-kulííma/tu-kanáava-ulííma

tu-kanáa-kulííma/tu-kanáa-ulííma/tu-kanáa-lííma

before we cultivate (or: when we not yet cultivate)

tu-kanáamba-kuláliíma/tu-kanáamba-uláliíma etc.

before we cultivate them (cl.6) (or: when we not yet cultivate them)

Type 1c):

NON-PAST PROGRESSIVE:

The Non-Past Progressive is formed by an Infinitive without the initial **(k)u-** preceded by SC + **-nachi-**.

tu-nachi-lííma	we are cultivating
tu-nachi-la-lííma	we are cultivating them (cl.6)

As in the Non-Past, the SC for the participants has L tone, but the SC for the classes has a H tone, which shifts to the TM **-chi-**. In forms without an OC, Meeussen's Rule applies, so the S1-H tone is deleted, and there is no H Tone Bridge.

va-nachí-lííma	they are cultivating
va-nachí-la-lííma	they are cultivating them (cl.6)

There is no H tone Doubling of the H tone of the **-chi-** to the disyllabic and trisyllabic stem when the stem has a penultimate R tone; with stems with a complex final syllable, there is no penultimate R tone (because Retraction of the final H tone does not occur) and H Tone Doubling is optional.

va-nachí-toooha/va-nachí-tóoha	we are touching
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INDIRECT RELATIVE NON-PAST PROGRESSIVE:

pa-tú-ná-chi-lííma	when we are cultivating
pa-tú-ná-chi-la-lííma	when we are cultivating them (cl.6)

PAST PROGRESSIVE:

The Past Progressive is formed by an Infinitive without the initial (**k**)**u-** preceded by SC + **-chi-**. We assume that all SC's have a H tone which appears on the **-chi-**, with the same tonal behaviour as the forms with **-nachi-** with SC's with a H tone.

tu-chí-lííma/va-chí-lííma	we/they were cultivating
tu-chí-li-lííma/va-chí-li-lííma	we/they were cultivating it
tu-chí-toooha/va-chí-tóoha	we were touching

The TM **-a-** may appear between the SC and the TM **-chi-** designating Far Past Progressive.

tw-a-chí-lííma	we were cultivating (long ago)
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NEGATIVE PAST PROGRESSIVE:

The Negative marker **-ká-** appears between the SC and the TM **-chi-**.

tu-ká-chi-lííma	we were not cultivating
tu-ká-chi-la-lííma	we were not cultivating them (cl.6)

(NEGATIVE) INDIRECT RELATIVE (FAR) PAST PROGRESSIVE:

pa-tú-chí-lííma	when we were cultivating
pa-tw-á-chí-lííma	id. long ago
pa-tú-chí-la-lííma	when we were cultivating them (cl.6)
pa-tw-á-chí-la-lííma	id. long ago
pa-tú-ká-chi-lííma	when we were not cultivating
pa-tú-ká-chi-la-lííma	when we were not cultivating them

Type 2a):

General Progressive tenses are formed by the Sequential Infinitive preceded by a verbal form with the verb **-va** 'be'. This verb may occur in almost every tense, on its own as well as in combination with the Sequential Infinitive. Its first TBU is a copy of the vowel of the preceding SC with which it forms a long syllable (see 8.3.1). With conjoint tenses with a final H tone, there is a H Tone Bridge between this final H tone and the first H tone of the Sequential Infinitive. Some examples:

Present:

tuuva-nkulííma we are (generally) cultivating

vaavá-ńkulííma they are (generally) cultivating

Negative Present:

tukáava-nkulííma we are not cultivating

Direct Relative:

túuvá-ńkulííma we who are not cultivating

vááva-nkulííma they who are not cultivating

Indirect Relative:

patúuva-nkulííma when we are cultivating

Negative Indirect Relative:

patúkáava-nkulííma when we are not cultivating

Optative:

tuuvé-ńkulííma we should be cultivating

Negative Optative:

tunááve-nkulííma we should not be cultivating

Suppositional Conditional:

tukániiva-nkulííma we would be cultivating

Negative Suppositional Conditional:

tukánáave-nkulííma we would not be cultivating

Type 2b):

Another group of Progressive tenses are formed by the Sequential Infinitive preceded by a verbal form with the Perfective of **-va**, viz. **-vele**, or its part **-ve** (often pronounced as **-vee**, especially when having a contour tone). All Perfective verb forms are possible in combination with the Sequential Infinitive. With conjoint tenses with a final H tone, there is a H tone Bridge between this final H tone and the first H tone of the Sequential Infinitive; but there is one exception: the Present Perfective on its own has a final H tone with all SC's; in combination with the Sequential Infinitive, forms with SC's for the participants do not have a H tone. Some examples:

Present Perfective:

tuve-nkulííma we are cultivating
vaveé-ñkulííma they are cultivating

Past Perfective:

tuvé-ñkulííma we were cultivating

Negative Past Perfective:

tukáve-nkulííma we were not cultivating

Direct Relative Perfective:

tuvéé-nkulííma we who are cultivating
vavé-ñkulííma they who are cultivating

Indirect Relative Perfective:

patúvéé-nkulííma when we are cultivating

Suppositional Conditional:

tukave-nkulííma we would be cultivating

Type 3a):

NON-PAST PROGRESSIVE:

The Non-Past Progressive is formed by the Situative Sequential Infinitive preceded by the Non-Past of the verb **-va** 'be' plus **-chi-**.

tu-naavá-chi-úñkulííma we are/will be cultivating
va-naavá-chi-úñkulííma they are/will be cultivating

Type 3b):

PRESENT PROGRESSIVE:

The Present Progressive is formed by the Situative Sequential Infinitive preceded by the Present Perfective of **-va** 'be' plus **-chi-**.

tu-veé-chi-úñkulííma we are cultivating

(FAR) PAST PROGRESSIVE:

The (Far) Past Progressive is formed by the Situative Sequential Infinitive preceded by the (Far) Past Perfective of **-va** 'be' plus **-chi-**.

tu-vé-chi-úñkulííma we were cultivating
tw-a-vé-chi-úñkulííma we were cultivating long ago

Type 4a):

PAST INTENTIONAL PROGRESSIVE:

This tense is formed by the complex tense with **-lembe-** (the short form **-mbe-** is not in use) preceded by the first part of the complex tense with **-chi-**.

tu-chí-lembe-kúlííma we had the intention to cultivate

NEGATIVE PAST INTENTIONAL PROGRESSIVE:

tu-ká-chi-lémbé-kúlííma we did not have the intention to cultivate

INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:

pa-tú-chí-lembe-kúlííma when we had the intention to cultivate

NEGATIVE INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:

pa-tú-ká-chi-lémbé-kúlííma when we did not have the intention to cultivate

PAST PROGRESSIVE:

This tense is formed by the complex tense with **-.va-** preceded by the first part of the complex tense with **-chi-**.

tu-chíiváńkúlííma we were in the process of cultivating

NEGATIVE PAST PROGRESSIVE:

tu-ká-chiiváńkúlííma we were not in the process of cultivating

INDIRECT RELATIVE PAST PROGRESSIVE:

pa-tú-chíiváńkúlííma when we were in the process of cultivating

NEGATIVE INDIRECT RELATIVE PAST PROGRESSIVE:

pa-tú-ká-chiiváńkúlííma when we were not in the process of cultivating

NON-PAST PROGRESSIVE:

This tense is formed by the complex tense with **-.va-** preceded by the first part of the complex tense with **-nachi-**.

tu-nachíiváńkúlííma we will be cultivating

INDIRECT RELATIVE NON-PAST PROGRESSIVE:

pa-tú-ná-chiiváńkúlííma when we will be cultivating

Type 4b):

The initials **n-ku-** of the Sequential Infinitive may be followed by other non-Negative complex tenses, the initials replacing the SC; these tenses designate Sequential Future and Sequential Progressive tenses.

SEQUENTIAL FUTURE:

nku-lémbé-úlííma and will cultivate

SEQUENTIAL FUTURE PROGRESSIVE:

nku-lémbé-chi-ukúlííma and will be cultivating

SEQUENTIAL PRESENT PROGRESSIVE:

nkúu-váńkúlíma and are cultivating

SEQUENTIAL NON-PAST PROGRESSIVE:

nku-náchí-liíma and will be cultivating

SEQUENTIAL PAST PROGRESSIVE:

nku-chí-liíma and was cultivating

SEQUENTIAL PAST PROGRESSIVE:

nku-chiiváńkúlíma and was in the process of cultivating

Type 4c):

The Sequential Present Progressive may be preceded by a verbal form with **-ve** which seems to be a Relative Present Perfective. Its meaning is still unclear.

tuvée-nkúuváńkúlíma

7.5 Compound tenses

Compound tenses consist of two inflected verb forms, an auxiliary and a (semantic) main verb. Both verbs share the same subject. The auxiliary is a verbal form with the verb **-.chi** 'say', **-.va** 'be' or the Perfective of **-.va**, **-ve(le)**; the auxiliary may be a Sequential Infinitive (which implies a subject). The main verb is not one of the Infinitives, it always has a subject concord. When the first verb form is a conjoint tense with a final H tone, there is no H Tone Bridge to the first H tone of the second verb form.

1. Compound tenses with **-.chi** 'say'.

- 1a) the first part is SC-**chí** (Present of **-.chi** 'say'), the second part is an Optative; this tense designates Future.
- 1b) the first part is SC-**chí-chi** (Past Progressive of **-.chi** 'say'), the second part may be one of a number of tenses; the exact meanings are still unclear.

2. Compound tenses with **-.va** 'be'.

- 2a) the first part is the Non-Past with **-.va**, the second part is the Perfective, the Unexpected Negative Perfective or the Situative; these tenses designate Future tenses.
- 2b) the first part is the Sequential Infinitive, and its Subsecutive variant plus **-.chi**, with **-.va**, the second part is a Situative; this tense designates (Subsecutive) Situative Progressive.

3. Compound tenses with **-ve(le)**.

- 3a) the first part is the (Far) Past with **-ve(le)**, the second part is the Perfective, the Unexpected Negative Perfective or the Situative; these tenses designate (Far) Past tenses.
- 3b) the first part is a verbal form with **-ve**, the second part is a larger complex tense; its meaning is still unclear.

Structural descriptions of compound tenses (without tonal description):

1a) SC- .chi	SC-	(OC)-Verbal Base- e
1b) SC- chi-<i>.chi</i>	SC-	(OC)-Verbal Base- a/-e/-ile
2a) SC- na-<i>.va</i>	SC-	(OC)-Verbal Base- ile
SC- na-<i>.va</i>	SC- kanaa-((k)u)-	(OC)-Verbal Base- a
SC- na-<i>.va</i>	SC- kana.va-(k)u-	(OC)-Verbal Base- a
SC- na-<i>.va</i>	SC- kanaamba-(k)u-	(OC)-Verbal Base- a
SC- na-<i>.va</i>	u- SC-	(OC)-Verbal Base- a
2b) n-ku-<i>.va</i>	u- SC-	(OC)-Verbal Base- a
n-kuna.vachi	u- SC-	(OC)-Verbal Base- a
3a) SC- ve	SC-	(OC)-Verbal Base- ile
SC- ve	SC- kanaa-((k)u)-	(OC)-Verbal Base- a
SC- ve	SC- kana.va-(k)u-	(OC)-Verbal Base- a
SC- ve	SC- kanaamba-(k)u-	(OC)-Verbal Base- a
SC- ve	u- SC-	(OC)-Verbal Base- a
3b) SC- ka-ve	SC- ve-n-ku-	(OC)-Verbal Base- a

We have also found an example of a compound tense followed by a complex tense (described under 1a)) and a combination of two compound tenses (described under 1b)). We now work out the different types in more detail.

Type 1a):

FUTURE:

The Future is formed by an Optative preceded by the Present of **-chi** 'say', where all SC's have a H tone (which appears on the verb), and all SC's are long (appearing before a minisyllabic stem).

tuuchí tu-liíme	we will cultivate
tuuchí tu-la-liíme	we will cultivate them (cl.6)

NEGATIVE FUTURE:

tu-káachi tu-liíme	we will not cultivate
tu-káachi tu-la-liíme	we will not cultivate them (cl.6)

INDIRECT RELATIVE FUTURE:

pa-túuchi tu-liíme	when we will cultivate
pa-túuchi tu-la-liíme	when we will cultivate them (cl.6)

NEGATIVE INDIRECT RELATIVE FUTURE:

pa-tú-káachi tu-liíme	when we will not cultivate
pa-tú-káachi tu-la-liíme	when we will not cultivate them

The Future may be combined with the complex tense Sequential Infinitive preceded by a verbal form with **-.va** 'be'.

tuuchí tuu-vé-ńkúlíma we will be cultivating

Type 1b):

The Past Progressive of **-.chi** 'say' may be followed by non-relative tenses (also complex tenses). Negation occurs in the first or second part. Indirect Relatives occur with the first part, the Past Progressive form. Some examples:

+ Optative:

tu-chíichi tu-liíme	lit.: we were saying we should cultivate
tu-ká-chíichi tu-liíme	Negation
pa-tú-chíichi tu-liíme	Indirect Relative
pa-tú-ká-chíichi tu-liíme	Negation

+ Negative Optative:

tu-chíichi tu-na-liíme

+ Non-Past:

tu-chíichi tu-na-liíma
va-chíichi va-ná-liíma

+ Present Progressive:

tu-chíichi tu-ve-nkulíma

The second part may also be formed by the compound tense of 1a), the Future:

tu-chíichi tuuchí tu-liíme

Type 2a):

FUTURE PERFECTIVE:

The first part consists of the Non-Past with **-.va** 'be', the second part is the Present Perfective.

tu-naava tu-limite líháála	we will have cultivated a field
va-naava va-limite líháála	they will have cultivated a field

FUTURE "NOT YET" NEGATIVE PERFECTIVE:

The first part consists of the Non-Past with **-.va** 'be', the second part is one of the three forms of the "Not Yet" Negative Perfective.

**tu-naava tu-kánaamba-kulíma/tu-kánaamba-ulíma/
tu-kánaava-kulíma/tu-kánaava-ulíma/**

tu-kánáa-kulííma/tu-kánáa-ulííma/tu-kánáa-lííma

we will not yet have cultivated

FUTURE SITUATIVE:

The first part is Non-Past with **-.va** ‘be’, the second part is the Situative.

tu-naava u-tú-lííma while we will cultivate
va-náava u-vá-lííma while they will cultivate

Type 2b):

SITUATIVE PROGRESSIVE:

The first part is the Sequential Infinitive with **-.va**, the second part is a Situative.

nkúvá u-tú-lííma and while (we) being cultivating

SUBSECUTIVE SITUATIVE PROGRESSIVE:

nku-náavachi u-tú-lííma and while (we go and are) cultivating

Type 3a):

(FAR) PAST PERFECTIVE:

The first part is the (Far) Past Perfective of **-.va** ‘be’, the second part is the Present Perfective.

tu-vé(lé) tu-limite líháála we had been cultivating a field
tw-a-vé(lé) tu-limite líháála id. long ago

(FAR) PAST “NOT YET” NEGATIVE PERFECTIVE:

The first part is the (Far) Past Perfective of **-.va** ‘be’, the second part is one of the three forms of the “Not Yet” Negative Perfective.

tu-vé(lé) tu-kánáamba-kulííma/... we had not cultivated yet
tw-a-vé(lé) tu-kánáamba-kulííma/... id. long ago

(FAR) PAST SITUATIVE PERFECTIVE:

tu-vé(lé) u-tú-lííma while we had been cultivating
tw-a-vé(lé) u-tú-lííma id. long ago

With the short **-vé**, the initial **u-** of the Situative may be omitted.

tuvé tú-lííma while we had been cultivating

Type 3b):

The first part is a verbal form with **-ve** (which one is unclear), the second part is a larger complex tense which seems to consist of the Sequential Infinitive preceded by a Relative Present Perfective; its meaning is still unclear.

tu-ka-vé tu-vée-nkulííma

8. PHRASAL TONOLOGY

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- 8.2** The Noun Phrase (NP) and p-phrases
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- 8.3** The Verb Phrase (VP) and p-phrases
 - 8.3.1** Types of verbal forms
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- 8.4** NP + VP and p-phrases
- 8.5** Post-lexical processes with i-phrases and utterances

8.1 P-phrases consisting of more than one word

In the chapter on Prosody (ch. 3), we restricted ourselves to processes which occur in p-phrases consisting of one word. We continued with this restriction in the description of the Noun (ch. 4), Pronominal Forms, Invariables (ch. 5) and the Tenses (ch. 7). In this chapter, the processes which occur in p-phrases consisting of more than one word are described. P-phrases consisting of more words have specific rules of shifting and bridging, specific Noun-Specifier rules, specific instances of Structure Simplification and Tone Assimilation, and a rule called Regressive H Tone Dissimilation. These rules are the rules of phrasal tonology.

In 3.2, we described that p-phrases do not necessarily fall together with syntactic phrases. In particular, there are VP's where the verbal form and the object do not appear in the same p-phrase; there are also NP's where the noun and the specifier do

not appear in the same p-phrase. We suspected that the difference between a verb-object and a noun-specifier in the same p-phrase and a verb-object and a noun-specifier in different p-phrases has to do with Focus in VP's and something like Determination in NP's. In this chapter, we give a more accurate description of the relation between the NP, the VP and p-phrases, and we describe phrasal tonology within NP and VP. We conclude this chapter with a short description of the processes which apply in the domains which are larger than p-phrases: (intonational) i-phrases and utterances (U).

We start with the relation between the NP, the VP and the p-phrase. We first recognize that there are three types of NP's and VP's with respect to p-phrases (8.2.1 and 8.3.1). The three types of VP's are described earlier in 7.3.2. The different types are determined by the verbal forms they contain: whether the verbal forms are disjoint, conjoint or both. Disjoint verbal forms constitute a p-phrase on their own (i.e., verbal focus tenses, marked *djit*). Conjoint verbal forms constitute a p-phrase with a following noun (i.e., post verbal focus tenses, marked *cjit*). And there are also verbal forms which have both characteristics: they may form a p-phrase on their own, but when they are followed by a noun, they form a p-phrase with it (conjoint-disjoint tenses, not followed by an abbreviation). There are also three types of NP's. These types are determined by the specifiers they contain, and they are described in the next section.

8.2 The Noun Phrase and p-phrases

First, we describe the three types of specifiers in NP's. Then, we describe phrasal tonology: special tone rules for nouns when they are combined with specifiers (such as: delete all H tones of the noun when followed by *ńtwáani* 'what kind of?'), an instance of H Tone Bridge (where there is a bridge between the last H tone of the noun and the first H tone of the specifier), a H Tone Retraction rule (which shifts the H tone of the pronominal prefix of the possessive to the final TBU of the preceding noun), Regressive H Tone Dissimilation (which deletes the first H tone when a second one appears next to it), Tone Assimilation (which raises the TBU preceding a syllabic nasal with a H tone), and Structure Simplification (which reduces two penultimate TBU's to one TBU).

8.2.1 Conjoint, disjoint and conjoint-disjoint specifiers

There are specifiers which do not form a p-phrase with a preceding noun (disjoint specifiers), there are specifiers which do form a p-phrase with a preceding noun (conjoint specifiers), and there are specifiers which have both characteristics: they

may form a p-phrase on their own, but when they are preceded by a noun, they form a p-phrase with it (conjoint-disjoint specifiers). These three types resemble the three types of verbal forms disjoint, conjoint and conjoint-disjoint mentioned above (and described below in 8.3). Devos (2004) also recognizes these three types of specifiers (which she calls modifiers) for Makwe. She notes that conjoint modifiers appear to be inherently focussed, and that they all have the function of selecting one or more things to the exclusion of others and thus indicate contrastive focus. She describes that Demonstratives appear to be the only true conjoint-disjoint modifiers because whether a p-phrase is formed depends on the way the speaker wants to present the information. She concludes that whether or not the head noun and the following modifier appears in the same p-phrase is to a large extent lexically determined. In our work, we do not go into detail in such a way as Devos does, and this is also not done by Liphola (2001) nor by Manus (2003) who also describe noun-specifier tonology. Manus distinguishes noun-specifier constructions which appear in one prosodic group from constructions in different prosodic groups (while two noun-specifier constructions, noun-possessive and noun—**ene**, may choose between the two possibilities). In the first case, the preceding noun does not have penultimate lengthening, in the case of different prosodic groups, the preceding noun does have penultimate lengthening. Liphola's analysis is different. He assumes that all words have penultimate lengthening in every environment. When the specifiers are numbers and quantifiers, the preceding noun has penultimate lengthening; with the other specifiers, Liphola posits a 'phrasal vowel shortening' to get rid of the penultimate lengthening of the preceding nouns.

For our description below, it must be known that specifiers may be nominals (N), pronominals (P), or Invariables (I). First, there are specifiers that do not form a p-phrase with preceding nouns: numerals (N, P), adjectives (N), connexives (P), **na-** (I) 'with', ^H**-nji** (P) 'other', ^o**-óhe** (P) 'many', ^o**-ohe-óhe** (P) 'all', ^o**-ómi** (P) 'healthy, strong, whole', ^o**-lída** (P) 'which' and ^o**-ngápi** (N) 'how many'. They form phonological phrases on their own, and this is shown by the penultimate length of the noun.

lipoóndo límo	one hole
mapoóndo mavíli	two holes
lipoóndo lidíkídíiki	small hole
valúúme vá-pantwáála	men of Mtwara
valúúme na-váana	men with children
vitéeng'u víinji	other chairs
ding'áande dyóóhe	many houses
chitaámbo chohechóóhe	every country
vaánu vóómi	healthy people
lilóóve lilíida	which word?
malóóve mangáapi	how many words?

Remarkably, when the interrogatives °-lída and °-ngápi are preceded by yé which indicates amazement, they form a p-phrase with the preceding noun they specify (see 8.2.2).

Second, there are specifiers which can not occur on their own; they are generally preceded by a noun with which they form a p-phrase. When there is no noun, they are preceded by a verbal form or by another specifier. The preceding word never has penultimate length. These specifiers are **wééka** (I) ‘on one’s own’, °-éne (P) ‘self’, **chiihi** (N) ‘only’ and **útwáani** (I) ‘what kind of?’.

valúmé wéeka	men on their own
vavawene véene	they have seen themselves
valúmé chiihi	only men
avanó útwáani	what kind of these (cl.2)?

Third, there are specifiers which can occur on their own, but when they are preceded by a noun, they must form a p-phrase with it. These specifiers are the Possessives (P), Demonstratives (P) and °-naáng’o (P) ‘the same, the very one’.

cháangu	mine (cl.7)
chiténg’ú chaángu	my chair
achiíno	this one (cl.7)
chiténg’ú áchiíno	this chair
chinááng’o	the very same (cl.7)
chiténg’ú chináang’o	the same chair

These three types show the relation between the NP and p-phrases. With the first type, there are two different p-phrases within the NP, and there is no phrasal tonology (see ch. 4 and 5). With the second and the third type, there is one p-phrase within the NP, and there is phrasal tonology. In the next section, we describe the post-lexical processes that take place in the NP’s of the second and third type. In 8.2.2, we start with NP’s with a noun and one specifier; more complex NP’s are described in 8.2.3.

8.2.2 Post-lexical processes with nominal p-phrases consisting of two words

Special phrasal processes occur in nominal p-phrases consisting of two words: noun-specifier tone rules, as well as the Prefix-H tone Retraction rule, Structure Simplification, Tone Assimilation and Regressive H Tone Dissimilation; H Tone Bridge, too, applies especially to nominal p-phrases consisting of two words. Phrasal processes occur post-lexically (for more details, see 8.3.3).

NOUN-SPECIFIER TONE RULE 1 (penultimate H on the noun)
+ H TONE BRIDGE (HTB)

From the specifiers of the second type, i.e., those which must constitute a p-phrase with a preceding noun, there are three specifiers which add a H tone to the penultimate syllable of the preceding noun (**wééka** ‘on one’s own’, °-**éne** ‘self’ and **chiihi** ‘only’), and there is one specifier which lowers all H tones of the preceding noun (**útwáani** ‘what kind of?’). We first describe the former case: specifiers which cause a H tone on the penultimate syllable of the preceding word; there appears to be a H Tone Bridge between this H tone and the first H tone of the specifier. The tonal influence is best shown with nouns of TG D1 which have all L tones, e.g., °**nankakatambwe**, surface form: **nankakataambwe** ‘spider’.

D1	L.no H	nankakatámbwé wéeka	the spider on its own
		nankakatámbwé mwéene	the spider itself
		nankakatámbwé chiihi	only the spider

The following nouns of all TG’s are used as examples below. Remember that nouns of TG B and D2 can not be distinguished; below, they are classified to TG B.

				surface form (in isolation):
A	L.S1/SF	° chitúví	chitúúvi	bundle
		° utútulí	utútúuli	brain
B	L.S1 / H.no H	° litáwa	litáawa	clan
		° lihíndili	lihíndiili	cooking stone
C1	L.SF	° lutaví	lutaávi	branch
		° lukalongó	lukaloóngo	throat
C2	H.SF	° lítinjí	litiinji	pumpkin
		° únjenjemá	unjénjeéma	mosquito
D1	L.no H	° chiyewe	chiyeewe	chin
		° ntandasa	ntandaasa	porridge
E	L.S2	° limbeénde	limbéénde	skin
		° liputíla	liputiila	trap sp.

These nouns are followed below by the specifier °-**éne** ‘self’:

A	chitúví chéene	the bundle itself
	utútulí wéene	the brain itself
B	litáwá lyéene	the clan itself
	lihíndilí lyéene	the cooking stone itself
C1	lutáví lwéene	the branch itself
	lukalóngó lwéene	the throat itself
C2	lítinjí lyéene	the pumpkin itself
	unjénjemá mwéene	the mosquito itself
D1	chiyéwé chéene	the chin itself
	ntandásá wéene	the porridge itself
E	limbéndé lyéene	the skin itself
	liputílá lyéene	the trap itself

Words in a p-phrase are concatenated post-lexically. This means that all words have their H tones which are assigned in the lexicon, and in case of this Noun-Specifier Tone Rule (NSTR) 1, the penultimate H is assigned in addition to the lexical H's of the noun. Together with this process of placing a penultimate H, the final H (SF, with TG A, C1 and C2) is deleted, and there is a H Tone Bridge from the penultimate H of the noun to the first H of the specifier. It is maybe Meeussen's Rule (MR) which deletes the final H, but MR maybe also deletes the penultimate H in case of a preceding H (as with °**lihíndili**) and the HTB is then from this preceding H (to the first H of the specifier). The examples below represent TG C1 (°**lutaví**) and TG B (°**lihíndili**).

post-lex. concat.	PUL	NSTR 1 and MR	HTB
° lutaví luéne >	° lutaví luéene >	° lutávi luéene >	° lutávi lúéene
post-lex. concat.	PUL	NSTR 1	
° lihíndili liéne >	° lihíndili liéene >	° lihíndili liéene >	
	MR	HTB	
	° lihíndili liéene >	° lihíndilí liéene	

The surface form is reached after Glide Formation. The FL melody of **wéeka** after HTB is unexpected since HTB from the penultimate H of the noun to the R tone of the specifier results in level H tones on the specifier (as occurs with demonstratives, see below). But I suspect that with this invariable, the FL tones are very close or similar to the tones which appear after register lowering of the final two TBU's utterance-finally (see 3.6.1). The penultimate R of this word can for example be seen when it occurs after a verbal form: **vachiwené wéeka** 'they have seen it on its own'. The invariable **chiihi** has no H tones, and the HTB stops at the final TBU of the preceding noun.

As noted in 8.2.1, there are two specifiers of the type that does not have tonal influence on the preceding noun (since they form a p-phrase on their own), the interrogatives °**-ngápi** 'how many' and °**-lída** 'which', which probably forms a p-phrase with the preceding noun when the noun is preceded by **yé**; this particle indicates amazement, and the noun gets penultimate H. But there is a difference with the specifiers we have described above: there is no H Tone Bridge from the penultimate H of the noun to the first H of the specifier, although there is a final H everywhere which probably comes from doubling of the penultimate H (see also the Pronominal Possessives below). The two interrogatives are the only specifiers with which this occurs in combination with the particle **yé**.

	yé mátínjí mangáapi	(what?) how many pumpkins?
cf.	mátínjí mangáapi	how many pumpkins?
	yé chiyéwé chilíida	(what?) which chin?
cf.	chিয়েwe chilíida	which chin?

NOUN-SPECIFIER TONE RULE 2 (delete all H tones of the noun) + TONE ASSIMILATION

Before the specifier **ńtwáani** ‘what kind of?’, all words become (default) L-toned. However, under influence of the H-toned syllabic nasal of the specifier, the final mora of the preceding noun becomes H; cases like this one are described as instances of tone assimilation in 3.5.8 and 8.3.2.

A	chituví ńtwáani	what kind of bundle?
	ututulí ńtwáani	what kind of brain?
B	litawá ńtwáani	what kind of clan?
	lihindilí ńtwáani	what kind of cooking stone?
C1	lutaví ńtwáani	what kind of branch?
	lukalongó ńtwáani	what kind of throat?
C2	litinjí ńtwáani	what kind of pumpkin?
	unjenjemá ńtwáani	what kind of mosquito?
D1	chiyewé ńtwáani	what kind of chin?
	ntandasá ńtwáani	what kind of porridge?
E	limbendé ńtwáani	what kind of skin?
	liputilá ńtwáani	what kind of trap?

From the third type of specifiers, i.e., those which may occur on their own as well as form a p-phrase with other words, the Demonstratives and °-**naáng’o** ‘the same, the very one’ also add a H tone to the penultimate syllable of the preceding noun (NSTR 1), from where there is also an H Tone Bridge to the first H tone of the specifier. The other specifiers of the third type, the Pronominal Possessives, add a H tone to the final syllable of the preceding noun. But we first describe the tonal influence of the Demonstratives and °-**naáng’o**; this influence is best shown with nouns of TG D1: all L tones.

D1	chiyéwé áchíino	this chin
	ntandasá únáang’o	the same porridge

In the examples below, we use the demonstrative °**a-PPx-nó** ‘this’, which has a R tone on its penultimate syllable when occurring on its own (e.g. **achíino** this one, cl.7).

A	chituví áchíino	this bundle
	ututulí áúúno	this brain
B	litawá álíino	this clan
	lihindilí álíino	this cooking stone
C1	lutaví álúúno	this branch
	lukalongó álúúno	this throat
C2	litinjí álíino	this pumpkin
	unjenjemá áyúúno	this mosquito

D1	chiyéwé áchííno	this chin
	ntandásá áúúno	this porridge
E	limbéndé álíino	this skin
	liputílá álíino	this trap

Px-H TONE RETRACTION

Pronominal Possessives which occur on their own have a FL tone pattern, e.g., **cháangu** ‘mine’ (cl.7). In 5.5 we have explained that the FL melody is the result of tonal coalescence of the HLH tones on the penultimate syllable after vowel coalescence/glide formation (VC/GF):

VC/GF Retraction PUL

cháangu < °**cháaangu** < °**cháangú** < °**chiángú**

The underlying tones of the Pronominal Possessives are a H-toned PPx and a stem-final H tone. When Pronominal Possessives and nouns are concatenated, we assume that the H tone of the PPx of the Pronominal Possessive retracts to the final mora of the preceding noun after VC/GF. The example below has a noun of TG D1 which has all L tones.

VC/GF and Px-Retraction PUL and Retraction

ntandasá weétu < °**ntandasa úeétu** < °**ntandasa úetú**

Examples with nouns of all TG’s are the following:

A	chitúví chaángu	my bundle
	utútúlí waángu	my brain
B	litáwá lyeétu	our clan
	lihíndílí lyeétu	our cooking stone
C1	lutaví lwaáke	his branch
	lukalongó lwaángu	my throat
C2	lítínjí lyeétu	our pumpkin
	unjénjémá waáke	his mosquito
D1	chiyewé chaángu	my chin
	ntandasá weétu	our porridge
E	limbéndé lyaángu	my skin
	liputílá chaáko	your trap

With nouns of TG A, C1 and C2, the retracted H tone coincides with the SF-H tone. There is a bridge between the H tone on the S1-position and the retracted H tone on the final syllable of nouns with stems of TG B and C2 having three or more syllables. Maybe Meeussen’s Rule occurs in case a H tone precedes the retracted H tone (as with °**litáwa**), but then we must assume that this preceding H tone doubles to the final syllable (just as we did with nouns followed by the interrogatives °**-ngápi** and °**-lída** in combination with the particle **yé** above).

The OC-H Tone Retraction rule, described in 3.5.6, is another instance of this rule.

REGRESSIVE H TONE DISSIMILATION (RHTD)

As can be seen above, nouns with disyllabic stems of TG E (S2-H tone) only appear with the retracted H tone on the final syllable. This is described by the tonal process Regressive H Tone Dissimilation: the retracted H causes the preceding H to be deleted. This resembles Meeussen's Rule, but in reversed order. This process is also the reason why all disyllabic nouns (with minisyllabic stems, disyllabic vowel-initial stems as well as disyllabic consonant-initial stems without a NPx) have a LH tone pattern before Pronominal Possessives. The examples below demonstrate this tone pattern.

			surface form (in isolation):
A	lwaú lweétu	our net	lwááu net sp.
B	liiná lyaángu	my name	líina name
C1	mongó waángu	my back	moóngo back (of body)
	tesó yaángu	my adze	teéso adze
C2	mwaná waángu	my child	mwáana child
D1	muuyó mweétu	before us	muuyo front
	kanyá yaángu	my mouth	kaanya mouth
E	muundú waángu	my chopper	muúundu chopper
	kaayá yeétu	our homestead	kááya homestead

Regressive H Tone Dissimilation (RHTD) deletes the first H tone when a second one appears next to it. Such an environment appears with a noun with a disyllabic stem of TG E which has S2-H tone, e.g. °limbeénde 'skin', followed by a Pronominal Possessive. When the retracted H tone of the Possessive appears on the final syllable of the noun, a (default L)H.H tonal sequence occurs word-finally. In such an environment, the first H is deleted (see 8.3.2 for an environment where RHTD occurs with verbal forms).

post-lex. concatenation	PUL and Retraction	VC/GF and Px-Retracton
°limbeénde líangú >	°limbeénde líáángu >	°limbeéndé lyaángu >
RHTD		
°limbeénde lyaángu		

It is expected that nouns consisting of minisyllabic stems and vowel-initial disyllabic stems of TG C1 and D1 have a LH tone pattern before Possessives, but the fact that those of TG A, B and C2 also have this tone pattern needs explanation: such nouns have similar underlying configurations before Possessives as nouns of TG E.

	post-lexical concatenation	PUL and Retraction, Px-H Tone Shift (C2)	VC/GF and Px-Retracton
A	°luáu lúetú >	°luáu lúéétu >	°lwáú lweétu
B	°líina líangú >	°líina líáángu >	°líina lyaángu
C2	°múaná úangú >	°muáná úaángu >	°mwáná waángu

E	[◦] muuúndu úángú > [◦] kaáyá íetú >	[◦] muuúndu úaángu > [◦] kaáyá íeétu >	[◦] muúndú waángu [◦] kaáyá yeétu
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There is no VC/GF in case of identical vowels within non-final words in p-phrases which become disyllabic, as is the case with [◦]liíná of TG B. With this first word of the p-phrase, the vowel of the NPx and the vowel of the stem are identical, they do not merge, and after resyllabification, a disyllabic word appears with two (identical) penultimate TBU's. This phenomenon is very common with non-final verbal forms consisting of minisyllabic stems preceded by a SC (see 8.3.1), and we suspect that it is the result of a minimal structure condition such as the one on verbal forms suggested in 6.3.1 (a verbal form should at least have three TBU's underlyingly). Below, RHTD removes the first H of the noun.

	RHTD
A	[◦] lwaú lweétu
B	[◦] liíná lyaángu
C2	[◦] mwaná waángu
E	[◦] muundú waángu [◦] kaayá yeétu

The process Structure Simplification (see below), which reduces two penultimate TBU's to one TBU, is blocked in case of non-final disyllabic words in p-phrases with identical penultimate TBU's, as is the case with nouns of TG B and E.

STRUCTURE SIMPLIFICATION (SS)

With SS, two penultimate TBU's of non-final words in p-phrases are reduced to one TBU, except in the cases mentioned above. Two penultimate TBU's are mainly due to S2 tonal lengthening with disyllabic stems (TG E). After the specific Specifier-Noun rules, Tone Assimilation, the Px-Retraction rule, H Tone Bridge and Regressive H Tone Dissimilation, nouns with a disyllabic stem of TG E still have two penultimate TBU's. SS reduces them to one TBU.

Noun-Specifier Tone Rule 1 and H Tone Bridge:

NSTR 1	HTB	SS
[◦] limbéende lyéene >	[◦] limbééndé lyéene >	[◦] limbéndé lyéene

Noun-Specifier Tone Rule 2 and Tone Assimilation:

NSTR 2	TA	SS
[◦] limbeende ntwaani >	[◦] limbeéndé ntwaani >	[◦] limbendé ntwaani

Px-H Tone Retraction and Regressive H Tone Dissimilation:

VC/GF and Px-Retraction	RHTD	SS
[◦] limbeéndé lyaángu >	[◦] limbeendé lyaángu >	[◦] limbendé lyaángu

Another instance of SS is described in 3.5.6.

We conclude this section by giving a summary of the tonal consequences of combining specifiers with nouns they specify.

specifiers	tonal influence on noun
disjoint:	
numerals (N, P)	-
adjectives (N)	-
connexives (P)	-
na- (I) 'with'	-
^{°H} -nǰí (P) 'other'	-
[°] -óhe (P) 'many'	-
[°] -ohe-óhe (P) 'all'	-
[°] -ómi (P) 'healthy, strong, whole'	-
[°] -lída (P) / [°] yé... [°] -lída (P) 'which'	- / penult. H
[°] -ngápi (N) / [°] yé... [°] -ngápi (N) 'how many'	- / penult. H
conjoint:	
weéka (I) 'on one's own'	penult. H
[°] -éne (P) 'self'	penult. H
chiihi (N) 'only'	penult. H
ńtwáani (I) 'what kind of?'	delete all H's
conjoint-disjoint:	
pronominal possessives	final H
demonstratives	penult. H
[°] -naáng'o (P) 'the same, the very one'	penult. H

8.2.3 Post-lexical processes with longer nominal p-phrases

When two specifiers follow the noun, the first specifier has tonal influence on the preceding noun as described in the previous section (and forms a p-phrase with it), the second specifier generally has no tonal influence on the preceding specifier and shows its inherent tones (and forms a p-phrase on its own; there are two exceptions, see below). There is also no tonal influence from the second specifier when the first specifier is a short demonstrative which cliticizes to the preceding noun.

ntandaasa úunji auúno	this other porridge
ntandásá áúúno úunji	id.
ntandásáa-u úunji	id. (clitic demonstrative)
ntandásá áúúno wáavo	this their porridge
ntandasá wáavo auúno	id.
ntandásáa-u wáavo	id. (clitic demonstrative)

If a nominal possessive construction occurs after a specifier, the connexive loses its H tone, except when the specifier is an interrogative (see 5.4).

chikápú chaángu cha-nahúúvi	my red basket
chikapú átwáani chá-nahúúvi	what kind of red basket?

There are specifiers which do have tonal influence on the preceding specifier: when **átwáani** is the second specifier, the specifier preceding it gets all (default) L tones. This is the NSTR 2 rule described in the previous section.

ntandasá aunó átwáani	what kind of this porridge?
ntandasá wáwó átwáani	what kind of their porridge?

When the second specifier is a short demonstrative which cliticizes to the preceding specifier, the preceding specifier gets penultimate H tone, and the same things occur as with nouns (except when it cliticizes to **na-**, see 5.3). This is an instance of the NSTR 1 rule described in the previous section.

ntandasá wáwó-u	this their porridge
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Both are cases of p-phrases consisting of three words. Note that in both cases, the preceding specifier still determines the tonal influence on the preceding noun. So first the rules of p-phrases consisting of two words described in the previous section apply to the first two words, followed by (the same) rules applying to the second and the third word. With a special question intonation, demonstratives are also specifiers which do have tonal influence on the preceding specifier: the preceding specifier gets penultimate H tone, and there is HTB to the (first) H tone of the demonstrative. This is the NSTR 1 rule.

ntandasá wáwó áúúno	this their porridge?
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Note that the tonal influence of the third word on the second word also occurs when the second word is a specifier which does not have tonal influence on the first word, a preceding noun. These NP's consist of a one-word p-phrase followed by a p-phrase consisting of two words.

ntandaasa unjé átwáani	what kind of other porridge?
ntandaasa únjé-u	this other porridge
ntandaasa únjé áúúno	this other porridge?

When in a nominal possessive construction the connexive is directly followed by a demonstrative, and the initial vowel of the demonstrative merges with the vowel of the connexive marker with a H tone, there is HTB from the H tone of the connexive to the first H tone of the demonstrative (**akuúno** and **ukúunó** in the examples below).

vayéeni v'ákuúno	guests of this (place)	(connexive vá-)
vayéni v'akuúno	id.	(connexive va-)
vayéni va-ukúunó	id.	(connexive va-)
vayéeni vá-ukúunó	id.	(connexive vá-)
vayéeni v'úkuunó	id.	(connexive vá-)

The specifiers **éne** and **weéka** can not occur as second specifier; they always follow the noun immediately.

In marked contexts, specifiers may occur before the noun, except for °-éne, weéka and ñtwáani. Preposed specifier and noun do not occur in the same p-phrase, but each forms a p-phrase on its own, and the specifier has its own tone. The specifier has penultimate lengthening, but penultimate shortening may also occur with faster speech.

váanji / vánji valúúme	other men
chá-kí-mariáamu / chá-kí-mariámu chitéeng'u	Mariamamu's chair
vaviili / vavíli valúúme	two men
vangáapi / vangápi valúúme	how many men?
avaáno / avánó valúúme	these men
váangu / vángu vayeéeni	my guests

There may also be two specifiers before the noun, all being separate p-phrases. The specifiers °-éne and weéka may be the second specifier, but ñtwáani obligatory occurs after the noun; when °-éne and weéka are the second specifier, they form a p-phrase with the preceding specifier, having tonal influence on it. When a demonstrative is the second specifier, it can tonally influence the preceding specifier, just as we have seen earlier.

aála maviili makáála	these two pieces of charcoal
vahivóhé véene valúúme	all men themselves
vavíli wéeka valúúme	two men on their own
vaviili avaáno valúúme	these two men
vavíli ávááno valúúme	id.

8.3 The Verb Phrase and p-phrases

First, we describe the three types of verbal forms (conjoint, disjoint and conjoint-disjoint) in more detail. Then, we describe phrasal tonology: special tone rules for conjoint verbal forms being followed by other words with different grammatical functions (object, adjunct). These rules involve Prefix-H Tone Shift (where the H tone of the SC is shifted to the final syllable), H Tone Bridge (where there is a bridge between the final H tone of the verb and the first H tone of the following nominal), Regressive H Tone Dissimilation (which deletes the first H tone of the H Tone Bridge), and Tone Assimilation (which raises the L to the level of a lowered H in a LH.H environment). Due attention is paid to H Tone Bridge, trying to solve questions as: how does HTB work, to what kind of words does it extend from the verb, and at what stage of the derivation does it occur?

8.3.1 Types of verbal forms

As outlined in 7.3, the conjoint/disjoint system distinguishes three types of verbal forms: verbal forms which constitute a p-phrase on their own (i.e., verbal focus tenses or disjoint tenses, marked *djt*); verbal forms which form a p-phrase with a following noun (i.e., post-verbal focus tenses or conjoint tenses, marked *cjt*); and verbal forms which have both characteristics, i.e., they may form a p-phrase on their own, but when they are followed by a noun, they form a p-phrase with it (conjoint-disjoint tenses, not followed by an abbreviation). In 7.2, the disjoint tenses are presented in detail. The other two types are described here, and we start with the conjoint tenses.

Conjoint tenses fall into three TG's: A, D1 and D2.

A	L.S1/SF	Past <i>cjt</i> Far Past <i>cjt</i> Past Perfective <i>cjt</i> Far Past Perfective <i>cjt</i>
D1	L.no H	Present with participants as SC <i>cjt</i>
D2	H.no H	Present with classes as SC <i>cjt</i> Present Perfective <i>cjt</i>

The tenses used below as examples are the Past *cjt* (TG A), the Present with participants as SC *cjt* (TG D1) and the Present with classes as SC *cjt* (TG D2). The forms are given with and without OC, the OC is placed in parentheses when no vowel coalescence/glide formation with a vowel-initial stem is involved. The forms given first are followed by a nominal (object), viz. **maliídi** 'voices', **vayééni** 'guests', **mahaála** 'fields', **malóóve** 'words' and **viilyo** 'food'. The forms given in second place are followed by a non-nominal (adjunct), **kadiiki** 'a bit'. Conjoint verbal forms constitute a p-phrase with a following object or adjunct.

With conjoint tenses with a final H tone (TG A), there is a H Tone Bridge (HTB) from the final H tone of the verbal form to the first H tone of the following object. When an object follows without H tones (TG D1), or when an adjunct is following, there is no HTB (see 8.3.3 for further details).

Conjoint tenses of TG D2 have a H-toned SC. This H tone shifts to the final syllable (see 8.3.2), and there is HTB, just as we have seen with verbal forms with TG A, followed by Regressive H Tone Dissimilation which deletes the final H tone of the verbal form (see 8.3.2). Here, too, when an object follows without H tones, or when an adjunct is following, there is no HTB; the final H tone stays on the final syllable of the verbal form. Conjoint tenses of TG D1 do not have a H tone at all; there is no HTB, and the TP's are the same whatever follows.

A	L.S1/SF	tu-(la-)pílikáná maliídi, tu-(la-)pílikáná kadiiki we heard (the) voices, we heard (them) a bit tu-(va-)yángátá vayééni, tu-(va-)yángátá kadiiki we helped (the) guests, we helped (them) a bit tu-(la-)límá máháála, tu-(la-)límá kadiiki
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		we cultivated (the) fields, we cultivated (them) a bit
		túúdyá málóóve, túúdyá kadiíki
		tu-lúdyá málóóve, tu-lúdyá kadiíki
		we asked (the) words, we asked (them) a bit
		túúlyá víílyo, túúlyá kadiíki
		tu-vílyá víílyo, tu-vílyá kadiíki
		we ate (the) food, we ate (it) a bit
D1	L.no H	tu-(la-)pilikana malíídi, tu-(la-)pilikana kadiíki
		we hear (the) voices, we hear (them) a bit
		tu-(va-)yangata vayeéni, tu-(va-)yangata kadiíki
		we help (the) guests, we help (them) a bit
		tu-(la-)lima mahaála, tu-(la-)lima kadiíki
		we cultivate (the) fields, we cultivated (them) a bit
		tuudya málóóve, tuudya kadiíki
		tu-ludya málóóve, tu-ludya kadiíki
		we ask (the) words, we ask (them) a bit
		tuulya víílyo, tuulya kadiíki
		tu-vilya víílyo, tu-vilya kadiíki
		we eat (the) food, we eat (it) a bit
D2	H.no H	va-(la-)pilikana malíídi, va-(la-)pilikaná kadiíki
		they hear (the) voices, they hear (them) a bit
		va-(va-)yangata váyééni, va-(va-)yangatá kadiíki
		they help (the) guests, they help (them) a bit
		va-(la-)lima máháála, va-(la-)limá kadiíki
		they cultivate (the) fields, they cultivated (them) a bit
		vudya málóóve, vudyá kadiíki
		va-ludya málóóve, va-ludyá kadiíki
		they ask (the) words, they ask (them) a bit
		vaalya víílyo, vaalyá kadiíki
		va-vilya víílyo, va-vilyá kadiíki
		they eat (the) food, they eat (it) a bit

Since there is no penultimate lengthening and hence no retraction of the final H tone, there is no difference in TP's between verbal forms with a simple final syllable and those with a complex final syllable. In the table below, we give the TG's and the resulting TP's (including the tone of the subject concord) of the conjoint verbal forms, also those with minisyllabic stems and disyllabic vowel-initial stems (1/2v). HTB is indicated by placing "h" after the first TP's (before the comma). All tenses have zero TM's, except for the two Far Past tenses which have the TM **-a-** in slot 3. The tones of the subject concord and the stem are separated by a dot, indicating that there may be a tense marker **-a-** and/or a OC. The tone before the dot indicates the tone immediately preceding the stem: if there is a OC, it indicates the tone of the OC, otherwise it indicates the tone which appears on the preceding subject concord (with fused **-a-** with the two Far Past tenses). With verbal forms with minisyllabic stems as

well as with vowel-initial disyllabic stems, the immediately preceding prefix, SC or OC, is fused with the stem.

Verbs conjoint	four-syllable stems	trisyllabic stems	disyllabic C stems
TG	TP	TP	TP
A	L.HHHH-h, L.HHHH	L.HHH-h, L.HHH	L.HH-h, L.HH
D1	L.LLLL, L.LLLL	L.LLL, L.LLL	L.LL, L.LL
D2	L.LLLL-h, L.LLLH	L.LLL-h, L.LLH	L.LL-h, L.LH

Verbs conjoint	disyllabic V-stems and minisyllabic stems	with OC
TG	TP	TP
A	H:H-h, H:H	L.HH-h, L.HH
D1	L:L, L:L	L.LL, L.LL
D2	L:L-h, L:H	L.LL-h, L.LH

There is penultimate length with forms having disyllabic vowel-initial stems as well as those having minisyllabic stems because there is no VC/GF nor SS within non-final disyllabic words in p-phrases where the vowel of the SC and the initial vowel of the stem are identical (see 8.2.2).

We now turn to conjoint-disjoint verbal forms. Conjoint-disjoint verbal forms fall into three TG's: A, C1 and C2.

A	L.S1/SF	Infinitive
C1	L.SF	Optative (without OC) Imperative (without OC)
C2	H.SF	Direct Relative Present with participants + cl.1 as SC Direct Relative Perfective with participants + cl.1 as SC

The tenses used as examples below are the Infinitive (TG A), the Optative without OC (TG C1) and the Direct Relative Present with participants or cl.1 as SC (TG C2). Below, the forms given first exemplify the disjoint variant constituting a p-phrase on its own, without a following object or adjunct. The forms given in second and third place exemplify the conjoint variant constituting a p-phrase with a following object or adjunct. The nouns used as objects below are **maliídi** 'voices', **ding'áánde** 'houses', **vayeéni** 'guests', **vitúúndi** 'yams', **mahaála** 'fields', **viínu** 'things', **malóóve** 'words' and **viilyo** 'food'. The adjunct used below is **kadiiki** 'a bit'. The conjoint variants have the same behaviour as the conjoint forms seen above. All have a final H tone,

and there is a H Tone Bridge (HTB) from the final H tone of the verbal form to the first H tone of the following object. When an object follows without H tones, or when an adjunct is following, there is no HTB.

The OC with an Infinitive of TG A has a H tone instead of a (default) L tone (see 7.2.4); this H tone deletes the S1-H tone by Meeussen's Rule, and there is no HTB (see 3.4.3).

Conjoint forms of TG C2 have a H-toned SC. This H tone shifts to the S1-position in case there is no OC; it shifts to the OC if present (3.4.4). Just as we have seen above with conjoint verbal forms, Regressive H Tone Dissimilation applies whenever the proper environment is met. Since there is penultimate lengthening and retraction of the final H tone with the first (disjoint) forms, there is a difference in TP's between verbal forms with a simple final syllable and those with a complex final syllable.

Remarkable forms are the Optative forms without OC of TG C1 with a complex final syllable where the final H tone stays on the final syllable instead of being removed by the process Final H deletion (see 3.5.6). Also remarkable are the Direct Relative forms with disyllabic stems of TG C2 where the shift of the H tone of the SC to the S1-position triggers an extra lengthening of the stem instead of the shift being stranded on the syllable preceding the stem because of the penultimate R on simple stems (see 7.2.3).

- A **ku-pílikáána, ku-pílikáná málíidi, ku-pílikáná kadiiki**
ku-lá-pílikaána, ku-lá-pílikana málíidi, ku-lá-pílikaná kadiiki
 to hear (them), to hear (the) voices, to hear (them) a bit
ku-kátápaadya, ku-kátápádyá dǐng'áande, ku-kátápádyá kadiiki
ku-dí-kátapaadya, ku-dí-kátapadya dǐng'áande, ku-dí-kátapadyá kadiiki
 to clean (them), to clean (the) houses, to clean (them) a bit
ku-yángááta, ku-yángátá váyééni, ku-yángátá kadiiki
ku-vá-yangaáta, ku-vá-yángata váyééni, ku-vá-yángatá kadiiki
 to help (them), to help (the) guests, to help (them) a bit
ku-kúndáanya, ku-kúndányá vítúúndi, ku-kúndányá kadiiki
ku-ví-kúndaanya, ku-ví-kúndanya vítúúndi, ku-ví-kúndanyá kadiiki
 to mix (them), to mix (the) yams, to mix (them) a bit
ku-líima, ku-límá máháála, ku-límá kadiiki
ku-lá-liíma, ku-lá-lima máháála, ku-lá-limá kadiiki
 to cultivate (them), to cultivate (the) fields, to cultivate (them) a bit
ku-láadya, ku-ládyá víinu, ku-ládyá kadiiki
ku-ví-láadya, ku-ví-ladya víinu, ku-ví-ladyá kadiiki
 to spread (them) out, to spread out (the) things, to spread (them) out a bit
kúúdyá, kúúdyá málóóve, kúúdyá kadiiki
kú-lúudya, kú-ludya víílyo, kú-ludyá kadiiki
 to ask (them), to ask (the) words, to ask (them) a bit
kúúlya, kúúlyá víílyo, kúúlyá kadiiki
kú-víilya, kú-vilya víílyo, kú-vilyá kadiiki

- to eat (it), to eat (the) food, to eat (it) a bit
- C1 **tu-pilikaáne, tu-pilikane málíídi, tu-pilikané kadiiki**
 we should hear, we should hear voices, we should hear a bit
tu-katapaadyé, tu-katapadye dǐng'áande, tu-katapadyé kadiiki
 we should clean, we should clean houses, we should clean a bit
tu-yangaáte, tu-yangate váyééni, tu-yangaté kadiiki
 we should help, we should help guests, we should help a bit
tu-kundaanyé, tu-kundanye vítúúndi, tu-kundanyé kadiiki
 we should mix, we should mix yams, we should mix a bit
tu-liíme, tu-lime máháála, tu-limé kadiiki
 we should cultivate, we should cultivate fields, we should cultivate a bit
tu-laadyé, tu-ladye víínu, tu-ladyé kadiiki
 we should spread out, we should spread things out, we should spread out a bit
tuudyé, tuudyé málóóve, tuudyé kadiiki
 we should ask, we should ask words, we should ask a bit
tuulyé, tuulye víílyo, tuulyé kadiiki
 we should eat, we should eat food, we should eat a bit
- C2 **tu-pilikaána, tu-pílikana málíídi, tu-pílikaná kadiiki**
tu-lá-pílikaána, tu-lá-pílikana málíídi, tu-lá-pílikaná kadiiki
 we who hear (them), we who hear (the) voices, we who hear (them) a bit
tu-kátapaadya, tu-kátapadya dǐng'áande, tu-kátapadyá kadiiki
tu-dí-kátapaadya, tu-dí-kátapadya dǐng'áande, tu-dí-kátapadyá kadiiki
 we who clean (them), we who clean (the) houses, we who clean (them) a bit
tu-yangaáta, tu-yángata váyééni, tu-yangatá kadiiki
tu-vá-yangaáta, tu-vá-yángata váyééni, tu-vá-yangatá kadiiki
 we who receive (them), we who receive (the) guests, we who receive (them) a bit
tu-kúndaanya, tu-kúndanya vítúúndi, tu-kúndanyá kadiiki
tu-ví-kúndaanya, tu-ví-kúndanya vítúúndi, tu-ví-kúndanyá kadiiki
 we should mix (them), we should mix (the) yams, we should mix (them) a bit
tu-líiima, tu-liima máháála, tu-liímá kadiiki
tu-lá-liiima, tu-lá-liima máháála, tu-lá-limá kadiiki
 we who cultivate (them), ... (the) fields, ... (them) a bit
tu-láadya, tu-láadya víínu, tu-láadyá kadiiki
tu-ví-láadya, tu-ví-ladya víínu, tu-ví-ladyá kadiiki
 we who spread (them) out, ... (the) things out, ... (them) out a bit
túúdyá, túúdyá málóóve, túúdyá kadiiki
tú-lúudya, tú-ludya málóóve, tú-ludyá kadiiki
 we who ask (them), we who ask (the) words, we who ask (them) a bit
túulya, túulya víílyo, túulyá kadiiki
tú-víilya, tú-vilya víílyo, tú-vilyá kadiiki
 we who eat (it), we who eat (the) food, we who eat (it) a bit

In the table below, we give the TG's and the resulting TP's (including the tone of the subject concord) of the conjoint-disjoint verbal forms. HTB is indicated by placing a "-h" after the TP's in the table below. All tenses have zero TM's. The tone before the

dot indicates the tone immediately preceding the stem: if there is an OC, it indicates the tone of the OC, otherwise it indicates the tone which appears on the preceding subject concord. With verbal forms with minisyllabic stems as well as with vowel-initial disyllabic stems, the immediately preceding prefix, SC or OC, is fused with the stem. The second row of each TG indicates the TP's of forms with complex final syllable (in italics in the tables below).

Verbs cjt-djt	four-syllable stems	with OC
TG	TP	TP
A	L.HHH:L, L.HHHH-h, L.HHHH <i>L.HHL:L, L.HHHH-h, L.HHHH</i>	LH.HLRL, LH.HLLL-h, LH.HLLH <i>LH.HLL:L, LH.HLLL-h, LH.HLLH</i>
C1	L.LLRL, L.LLLL-h, L.LLLH <i>L.LLL:H, L.LLLL-h, L.LLLH</i>	
C2	L.HLRL, L.HHLL-h, L.HHLH <i>L.HHL:L, L.HHLL-h, L.HHLH</i>	LH.HLRL, LH.HLLL-h, LH.HLLH <i>LH.HLL:L, LH.HLLL-h, LH.HLLH</i>

Verbs cjt-djt	trisyllabic stems	with OC
TG	TP	TP
A	L.HH:L, L.HHH-h, L.HHH <i>L.HFL, L.HHH-h, L.HHH</i>	LH.LRL, LH.HLL-h, LH.HLH <i>LH.HL:L, LH.HLL-h, LH.HLH</i>
C1	L.LRL, L.LLL-h, L.LLH <i>L.LL:H, L.LLL-h, L.LLH</i>	
C2	L.HRL, L.HLL-h, L.HLH <i>L.HFL, L.HLL-h, L.HLH</i>	LH.LRL, LH.HLL-h, LH.HLH <i>LH.HL:L, LH.HLL-h, LH.HLH</i>

Verbs cjt-djt	disyllabic stems	with OC
TG	TP	TP
A	L.H:L, L.HH-h, L.HH <i>L.FL, L.HH-h, L.HH</i>	LH.RL, LH.LL-h, LH.LH <i>LH.FL, LH.LL-h, LH.LH</i>
C1	L.RL, L.LL-h, L.LH <i>L.L:H, L.LL-h, L.LH</i>	
C2	L.HLHL, L.FL-h, L.FH <i>L.FL, L.FL-h, L.FH</i>	LH.RL, LH.LL-h, LH.LH <i>LH.FL, LH.LL-h, LH.LH</i>

Verbs cjt-djt	disyllabic V-stems with complex final syllable and minisyllabic stems	
		with OC
TG	TP	TP
A	<i>H:L, H:H-h, H:H</i>	<i>H.FL, H.LL-h, H.LH</i>
C1	<i>L:H, L:L-h, L:H</i>	
C2	<i>H:L/FL, H:L/FL-h, H:H/FH</i>	<i>H.FL, H.LL-h, H.LH</i>

Note the different TP's of Direct Relative forms with disyllabic vowel-initial stems and forms with minisyllabic stems of TG C2. Minisyllabic stems have a different status in Direct Relatives: their final syllable allows retraction of the final H tone to the penultimate syllable, a process which never applies in that way when the final syllable is complex, as is the case with minisyllabic stems (see 7.2.3).

8.3.2 Post-lexical processes with verbal p-phrases consisting of two words

We here describe the phrasal tonology of VP's containing conjoint and conjoint-disjoint verbal forms followed by one other word. In these VP's, the verbal form and the following word form one p-phrase, and we call it a verbal p-phrase consisting of two words. Special processes occur within these p-phrases: Prefix-H Tone Shift, H Tone Bridge, Regressive H Tone Dissimilation and Tone Assimilation.

Four out of seven conjoint tenses have final H tone because they belong to TG A. Two tenses get final H tone since they belong to TG D2 where the H tone of the SC shifts to the final TBU by the process Prefix-H Tone Shift. There is a H Tone Bridge from a final H tone to the first H of the following object. One conjoint tense belongs to TG D1 (no H tones), and there is no tonal influence upon a following object. All five conjoint-disjoint tenses have final H tone: one belongs to TG A, two belong to TG C1 and two belong to TG C2. There is a H Tone Bridge from a final H tone to the first H of the following object.

H TONE BRIDGE (HTB)

HTB has the following consequences for the tone patterns of following objects (the tense used below as an example is the Past *cjt* which belongs to TG A):

vachóná chítúúvi	they saw the bundle	A	chítúúvi
vawóná útútúúli	they saw the brain		útútúúli
valyóná lítáawa	they saw the clan	B	lítáawa

valyóná líhíndíili	they saw the cooking stone		lihíndíili
valwóná lútáávi	they saw the branch	C1	lutaávi
valwóná lúkálóóngo	they saw the throat		lukaloóngo
valyóná lítiínji	they saw the pumpkin	C2	lítiínji
vawóná únjénjeéma	they saw the mosquito		unjénjeéma
vachóná chiyeewe	they saw the chin	D1	chiyeewe
valóná matandaasa	they saw the porridges		matandaasa
valyóná límbéende	they saw the skin	E	límbéende
valyóná lípútíila	they saw the trap		lipútíila

HTB does not extend to the first surface H tone of the following object, as the analysis in the next section shows (see 8.3.3). Nouns of TG D1 do not have H tones, and there is no HTB: the final H tone stays on the final syllable of the verb. This can be seen best with tenses of TG C1 which have only a final H tone. The Optative (without OC) of TG C1 (**valolé** ‘they should look at...’) is used in the examples below.

valole chítúúvi	they should look at a bundle
valole útútúúli	they should look at a brain
valole lítáawa	they should look at a clan
valole líhíndíili	they should look at a cooking stone
valole lútáávi	they should look at a branch
valole lúkálóóngo	they should look at a throat
valole lítiínji	they should look at a pumpkin
valole únjénjeéma	they should look at a mosquito
valolé chiyeewe	they should look at a chin
valolé matandaasa	they should look at porridges
valole límbéende	they should look at a skin
valole lípútíila	they should look at a trap

The same melodies appear with the Imperative (without OC), which also has a final H tone.

lola chítúúvi	look at a bundle!
lola útútúúli	look at a brain!
lola lítáawa	look at a clan!
lola líhíndíili	look at a cooking stone!
lola lútáávi	look at a branch!
lola lúkálóóngo	look at a throat!
lola lítiínji	look at a pumpkin!
lola únjénjeéma	look at a mosquito!
lolá chiyeewe	look at a chin!
lolá matandaasa	look at porridges!
lola límbéende	look at a skin!
lola lípútíila	look at a trap!

In 6.3.1, we stated that there is a (minimal) structure condition on words that demands a word to have at least three TBU's in its underlying representation. Imperatives have only two TBU's, and we argued that a third TBU is created in the final syllable, making a complex final syllable analogous to the final syllable of minisyllabic, causative and passive stems, e.g. °**ivíá** 'make steal'. This third TBU is filled with a copy of the final vowel, indicated by a smaller letter: °**lolaá**. When not followed by a noun, the final H tone retracts to this newly created vowel after penultimate lengthening, exactly as happens with minisyllabic, causative and passive stems which have complex final syllables: °**looláa** (cf. °**iivíá** 'make steal'). This is why disyllabic Imperatives do not have the retraction of the final H tone to the penultimate syllable causing a penultimate R with trisyllabic Imperatives: **loola** 'watch!', **iivya** 'make steal!', cf. **tongoóla** 'speak!'. When followed by a noun, there is no penultimate lengthening with the Imperative, hence no retraction, and with VC/GF, the extra vowel in the final syllable merges with the final vowel (or becomes a glide with causatives and passives): °**lolá...** (cf. °**ivyá...**).

PREFIX-H TONE SHIFT (PHTS)

The tone patterns of tenses of TG D2 are the same as those of tenses of TG C1. With tenses of TG D2, the H tone of the SC shifts to the final syllable by PHTS. From that final H tone, there is HTB just as we have seen above with tenses of TG C1. The present with classes as SC *cjt* of TG D2 (°**váchona**, °**váwona** 'they see...', etc.) is used in the examples below.

vachona chítúúvi	they see the bundle
vawona útútúli	they see the brain
valyona lítáawa	they see the clan
valyona líhíndíili	they see the cooking stone
valwona lútáávi	they see the branch
valwona lúkálóóngo	they see the throat
valyona lítiínji	they see the pumpkin
vawona únjénjeéma	they see the mosquito
vachoná chiyeewe	they see the chin
valoná matandaasa	they see the porridges
valyona límbéende	they see the skin
valyona lípútúila	they see the trap

Another instance of this rule is described in 3.5.4.

REGRESSIVE H TONE DISSIMILATION (RHTD)

The verbal forms which are followed by a noun of TG D1 (no H tones) show that the shift of the H of the SC is to the final syllable of the verbal form. They also show that HTB starts from the final syllable of the verbal form. With nouns of the other TG's, the H on the final syllable of the verbal form is deleted after HTB. It seems that the first H of a sequence of H's is deleted when this first H is on a different word; it is

probably viewed as a different H which is deleted by Regressive H Tone Dissimilation. Below, we give the derivation of the first example above.

Post-lex. concatenation	PUL, Retraction	PHTS
°vǎ-chi-ona chítúví >	°vǎ-chi-ona chítúúvi >	°va-chi-onǎ chítúúvi >
HTB, VC/GF	RHTD	
°va-chonǎ chítúúvi >	°va-chona chítúúvi	

Note that with nouns of TG D1, the tonal process H Tone Doubling does not occur: the final H tone of the tense does not double to the first syllable of the noun. There is, however, one exception: when the following noun is a noun of TG D1 which starts with the word formation element **na-**, the final H tone of the tense doubles to this element. This is shown by the example below where the noun **nankakataambwe** ‘spider’ is used. (The H tone of the following syllabic nasal is due to Tone Assimilation, see 3.5.8.)

vamwonǎ náǎkakataambwe they see the spider

tone assimilation (TA)

Just as we have seen in 3.5.8, there are two cases of TA: a syllabic nasal with a H tone raises the preceding TBU, and a L tone is raised to the level of a lowered H in a LHH or LHL environment. First, when a non-initial word in a p-phrase has a syllabic nasal with a H tone, the final TBU of the preceding word is raised.

There is also a reversed case: when a syllabic nasal with a L tone is preceded by a word with a final H tone in a p-phrase, the syllabic nasal is raised. When the raised syllabic nasal is followed by a L-toned syllable, a F tone may be heard instead of a H tone (not indicated in the example below).

vamwonǎ ńnyééni	they see the guest	C1 nnyeéni/
cf. vavona váyééni	they see the guests	vayeéni
vawónǎ ńtandaasa	they saw the cassava porridge	D1 ntandaasa/
cf. valónǎ matandaasa	they saw the cassava porridges	matandaasa

Second, the first L in a LH.H or LH.L sequence is raised to a level of a lowered H. Such an environment may appear in a p-phrase consisting of more words where the initial word is disyllabic containing a minisyllabic or vowel-initial disyllabic stem, and where the vowel of the SC is identical with the initial vowel of the stem; these vowels being identical, there is neither VC/GF nor SS, and penultimate length survives. When the word is a conjoint or conjoint-disjoint verbal form and belongs to TG A (S1/SF) or C2 (H.SF), the LH.H sequence (TG A) and the LH.L sequence (TG C2) appear. The first example below consists of the Infinitive of TG A with the minisyllabic stem °-lia ‘to eat’. The second example consists of the Relative Present with the disyllabic stem °-udia ‘to ask’.

Post-lex. concat.	PUL and Retraction	VC/GF and HTB	DI and TA
°ku-úliǎ vi-ilyó >	°ku-úliǎ vi-iílyo >	°kuúlyǎ víílyo >	kúúlyǎ víílyò

Post-lex. concat.	PUL and Retraction	Px-H Tone Shift, VC/GF and HTB	RHTD
°tú-udíá vi-inú >	°tú-udíá vi-iínu >	°tuúdyá víínu >	°tuúdyá víínu >
DI and TA			
túúdyà víínù			

Similar tonal sequences are found on nouns before pronominal possessives, but there the first H is lowered due to the second H which has been shifted from the noun (as the reversed case of MR, see RHTD, 8.2.2). Note also that the proper environments for TA described here only appear with initial words in p-phrases. A LH.L sequence is very common with words of TG C1 p-phrase-finally, but no TA applies. A LH.H sequence may appear with words of TG C1 i-phrase-finally (with the intonational H), but no TA applies. But as TA applies in the first words in a sequence of words, the lowered H is often pronounced as a H, so that a level H sequence is heard. This is why we have given the level H sequence in the relevant examples of 8.3.1.

8.3.3 The level of application of post-lexical processes

In this section, we try to answer the following question: at what level of the derivation do phrasal processes (like HTB) apply?

We suggest that the words in a p-phrase are concatenated at the very first stage post-lexically, before penultimate lengthening (PUL). PUL (and Retraction of the final H tone, if relevant) applies to the final word in a p-phrase. Then, the processes which follow PUL (described in chapter 3) occur to all words individually in the p-phrase. The Px-H Tone Shift rule, the Px-H Tone Retraction rule, Structure Simplification and Tone Assimilation apply to individual words (described in chapter 3) as well as to the whole p-phrase (described in this chapter). There are also processes which specifically occur in the whole p-phrase, and not to words individually: special Noun-Specifier rules, a variant of H Tone Bridge and Regressive H Tone Dissimilation). These phrasal rules apply together at a certain stage of the derivation.

The level of the derivation at which these phrasal processes apply is analyzed more carefully here by trying to answer the question at what level HTB from the final syllable of a verbal form to a following noun occurs: is the right edge of this instance of HTB the first surface H tone of the following noun, and, if not, at what level does the first underlying H tone of the following noun arise? This question first came up in 4.4.1 where we observed the different tone patterns of nouns with disyllabic stems of TG A and TG E after HTB. As described there, HTB is one of the tests to distinguish these nouns which all have a L.H:L tone pattern when occurring on their own: nouns of TG A have a H.HH.L tonal sequence after HTB, while nouns of TG E have a H.HL.L tonal sequence after HTB. One set of examples:

A **chihúúndu** knot**tu-chi-wéné chihúúndu**
we had seen the knotE **chipúúla** knife**tu-chi-wéné chipúula**
we had seen the knife

The difference can be explained by assuming that the right edge of HTB is not the surface H tone of the following word, but the first H tone of the underlying level after Penultimate Lengthening and (if there is a SF-H tone) Retraction of the final H tone. Note that the noun of TG E has S2-H tone which causes tonal lengthening of the stem in the second lexicon (*°chipuúla*).

Post-lexical concatenation

*°tu-chi-wéné chihúndú >**°tu-chi-wéné chipuúla >*

PUL and Retraction

*°tu-chi-wéné chihúúndu >**°tu-chi-wéné chipuúula >*

HTB

tu-chi-wéné chihúúndu*°tu-chi-wéné chipuúula >*

SS

tu-chi-wéné chipúula

HTB extends to the S2-H tone. Structure Simplification (SS) reduces three TBU's to two TBU's, and a tonal sequence of HHzero becomes F (see 3.5.5 and 3.5.8). What we learn from the derivation above is that the processes which specifically apply to phrases occur after PUL and Retraction, and before Structure Simplification.

To be more precise about the level of application of the phrasal rules, we follow the derivation of three examples:

1. **kwívílá má-híndílí leétu** to steal our cooking stones for someone or for some purpose
2. **kú-vívilá ntándásá úúno** to steal for them this cassava porridge
3. **va-vivýá li-tinjí ntwáani** they make them steal what kind of pumpkin?

First, we give the lexical forms of the words individually. Meeussen's Rule applies in one word where the H tone of the OC deletes the S1-H tone of the stem. Then, after concatenation, we follow the post-lexical processes as described in chapter 3. The specific phrasal processes described in this chapter are in italics. They apply before the processes H Tone Doubling, Final H Deletion and Structure Simplification and after the processes Coalescence, Resyllabification and Prefix-H Tone Retraction. The underlining in the examples indicates where the processes apply.

SECOND LEXICON,
AFTER WORD FORMATION:

1. °ku-ívilá, °má-hindili, °lá-etú
2. °ku-vá-ívilá, °ntandasa, °u-unó
3. °vá-va-ivia, °lí-tinjí, °ńtwani

Meeussen's Rule

1. —
2. °ku-vá-ívilá
3. —

POST-LEXICAL PROCESSES:

Post-lexical concatenation

1. °ku-ívilá má-hindili lá-etú
2. °ku-vá-ívilá ntandasa u-unó
3. °vá-va-ivia lí-tinjí ńtwani

Penultimate lengthening

1. °ku-ívilá má-hindili lá-eetú
2. °ku-vá-ívilá ntandasa u-uunó
3. °vá-va-ivia lí-tinjí ńtwaani

Retraction of the final H tone

1. °ku-ívilá má-hindili lá-eétu
2. °ku-vá-ívilá ntandasa u-uúno
3. —

H tone bridge (between S1 and SF
in stems)

1. °ku-ívilá má-hindili lá-eétu
2. —
3. —

Prefix-H tone shift

1. °ma-híndili
2. —
3. °va-va-iviá lí-tinjí ńtwaani

Coalescence, Prefix-H tone retraction
(and resyllabification, not indicated in
the examples)

1. °kwívilá ma-híndilí leétu
2. °kú-vívilá ntandasa uúno
3. °va-vívyá lí-tinjí ńtwaani

Noun-specifier tone rules

1. —
2. °kú-vívilá ntandásá uúno
3. °va-vívyá lí-tinjí ńtwaani

H tone bridge

1. °kwívilá ma-híndilí leétu, and
°kwívilá má-híndilí leétu
2. °kú-vívilá ntandásá uúno, and
°kú-vívilá ntándásá uúno
3. —

Regressive H tone dissimilation

1. —
2. °kú-vívilá ntándásá uúno
3. —

H tone doubling (and Final H deletion and Structure Simplification, but they do not occur in the examples)	1. — 2. ° <u>kú</u> -vívila ntándásá úúno 3. ° <u>và</u> -vivyá li-tinji ntwaàni
Default L tone insertion	1. kwívilá má-híndílí lèétù 2. ° <u>kù</u> -vìvilà ntándásá úúnò 3. ° <u>và</u> -vìvyá li-tìnjì ntwaàni
Tone assimilation	1. — 2. <u>kú</u> -vìvilá ntándásá úúnò 3. <u>và</u> -vìvyá li-tìnjì ntwaàni

8.3.4 The syntactic status of the verb-headed p-phrase

Conjoint and conjoint-disjoint verb forms always build a single p-phrase with the following word, as can be seen from the short penultimate vowel of the verb form. In this section, we investigate whether there are restrictions as to word category or syntactic function of what follows. In the previous sections, we have simply called the words that appear inside the verbal p-phrase objects and those that appear outside of it adjuncts. These terms indicate grammatical functions which are connected with syntactic phrases like NP and VP, but they are inadequate to describe the categorial status of the words (N, V, P, etc.) which may appear inside a p-phrase. We see below that in addition to nominals (N), also verbals (V), pronominals (P) and invariable (I) forms may appear inside p-phrases, including syntactic phrases built from them (NP, VP, etc.). Note that Adjectives are nominal forms (N/A), as well as the Numerals ‘two’ and ‘three’ (N/NUM); the Numeral ‘one’ is a pronominal from (P/NUM). Independent Personal Pronouns (IPP) are classified as pronominal forms. In the examples below, the Present (with participant SC) *cjt* is used; these verb forms belong to TG D1 which has no H tones and hence no HTB can occur.

category	syntactic phrase	word
tu-lima mahaála we cultivate fields	NP	N
tu-lima mahaála madyóóko we cultivate small fields	NP	N+N/A
tu-lima mahaála maviili we cultivate two fields	NP	N+N/NUM
tu-lima lihaála líimo we cultivate one field	NP[N+PP]	N+P/NUM
tu-lima mahaála loheloóhe we cultivate all fields	NP[N+PP]	N+P
tu-lima madyóóko we cultivate small ones	NP	N/A
tu-lima maviili we cultivate two (of them)	NP	N/NUM
tu-lima líimo we cultivate one (of them)	NP[N+PP]	P/NUM
tu-lima loheloóhe we cultivate all (of them)	NP[N+PP]	P
tu-n-chimulila nááng'e we release him	PP	P/IPP
tu-n-chimulila ayuúno we release this one	NP[N+PP]	P/DEM
tu-n-chimulila aoóngé we release him so that he may take a walk	S[VP]	V
tu-n-chimulila aongé kadiiki we release him so that he may take a short walk	S[VP[V+IP]]	V+I
tu-n-chimulila kadiiki we release him a bit	IP	I

Most phrases following the verb form have the syntactic status of object (complement). The Invariable in the last example has the syntactic status of (VP-external) adjunct (the same Invariable in the one but last example is a VP-internal adjunct). Adjuncts can be Invariables, nouns and pronominal forms:

tu-n-chimulila chakaáni when do we release him?	IP	I
tu-n-chimulila kwaáchi where do we release him?	IP	I
tu-n-chimulila mwadaáchi why do we release him?	IP	I
tu-chimulila chamaáni what do we release?	IP	I
tu-n-chimulila nnaáni	NP	N

who do we release?		
tu-n-chimulila upéehi	NP	N
we release him quickly		
tu-n-chimulila pawéélu	NP	N
we release him outside		
tu-n-chimulila chiílo	NP	N
we release him at night		
tu-n-chimulila vííno	PP	P
we release him now		
tu-n-chimulila paámo	PP	P
we release him together		

The example below shows that words in a p-phrase can also be VP-external (post-posed) subjects. The example is from the Present (with classes SC) *cjt* with final H tone (which has been shifted from the SC).

a-li-chimulilá náńkakataambwe	NP	N
the spider releases itself		

A conjoint tense with a final H tone either keeps its final H tone in place (as in the example above), or forms a H Tone Bridge (HTB) with the first H tone of an immediately following word. Interestingly, HTB does not apply to all kinds of post-verbal constituents. Whether it does or does not apply depends on the category of the word directly following the verb: HTB only occurs when the following word is a noun, adjective, IPP or demonstrative. Below, we use the same examples in the same order as above. The examples which contain a word which is subject to HTB are preceded by a plus-sign '+'. Remember that after HTB, the final H tone of the tense is deleted by Regressive H Tone Dissimilation.

+ va-lima máháála	N
they cultivate fields	
+ va-lima máháála madyóóko	N
they cultivate small fields	
+ va-lima máháála maviili	N
they cultivate two fields	
+ va-lima líháála líímo	N
they cultivate one field	
+ va-lima máháála loheloóhe	N
they cultivate all fields	
+ va-lima mádyóóko	N/A
they cultivate small ones	
va-limá maviili	N/NUM
they cultivate two (of them)	
va-limá líímo	P/NUM
they cultivate one (of them)	

va-limá loheloóhe	P
they cultivate all (of them)	
+ va-n-chimulila náang'e	P/IPP
they release him	
+ va-n-chimulila áyúúno	P/DEM
they release this one	
va-n-chimulilá aoóngé	V
they release him so that he may take a walk	
va-n-chimulilá aongé kadiíki	V
they release him so that he may take a short walk	
va-n-chimulilá kadiíki	I
they release him a bit	
va-n-chimulilá chakaáni	I
when do they release him?	
va-n-chimulilá kwaáchi	I
where do they release him?	
va-n-chimulilá mwadaáchi	I
why do they release him?	
va-chimulilá chamaáni	I
what do they release?	
va-n-chimulilá nnaáni	N
who do they release?	
+ va-n-chimulila úpéchi	N
they release him quickly	
+ va-n-chimulila páwéelu	N
they release him outside	
+ va-n-chimulila chíílo	N
they release him at night	
va-n-chimulilá vííno	P
they release him now	
va-n-chimulilá paámo	P
they release him together	
a-li-chimulilá náńkakataambwe	N
the spider releases itself	

Since HTB is only observable when the verb form ends in a H tone and when the following word has a non-final H tone, HTB neither applies to nouns without any H tone (as the noun in the last example, where its two initial H tones are the result of Doubling and Assimilation) nor to demonstratives with a final H tone.

va-n-chimulilá yuulá	they release that one
va-n-chimulilá aayó	they release that (referential) one

Apart from these environments, the application of HTB does not depend on the syntactic status of the post-verbal constituent, but it does depend on the category of the word directly following the verb: HTB occurs when the following word is a noun, adjective, IPP or demonstrative. One exception is found: there is no HTB when the noun (or: nominal form, see 4.8) **nnaáni** ‘who?’ follows the verb form. There is HTB to a following noun regardless of its grammatical function: it can be an object, a (VP-external, post-posed) subject, or an adjunct. When an adjunct is not a noun but an Invariable (e.g., **kadiiki**, **chakaáni**), there is no application of HTB, although both adjuncts are within the p-phrase.

8.3.5 Post-lexical processes with longer verbal p-phrases

In this section, we describe VP’s which consist of a verbal form followed by a noun plus one or two specifiers. The phrasal tonology of a noun plus specifier(s), and of a verbal form plus a noun is described in 8.2 and 8.3.2 respectively. Now, we want to know what happens when a verbal form precedes a noun plus specifier(s).

It is clear that when the verbal form is disjoint, and the specifier which follows the noun is of the type that constitutes a p-phrase on its own, the VP consists of three different p-phrases. When the specifier within the NP is of one of the other two types than the one mentioned above, it forms a p-phrase with the preceding noun, and there is phrasal tonology within NP. When the verbal form is conjoint or conjoint-disjoint, it forms a p-phrase with a following noun, and there is phrasal tonology within VP. When a conjoint or conjoint-disjoint verbal form is combined with a noun and a specifier, the result is that there is one p-phrase which contains three words. The question is whether the phrasal tonology of the noun and specifier or the phrasal tonology of the verbal form and the noun occurs first in this p-phrase. It turns out that the phrasal tonology of the noun and specifier occurs first: it depends on the tonal influence of the specifier on the preceding noun what happens to the noun after HTB. When the specifier adds a penultimate H tone to the preceding noun, HTB applies to this penultimate H (when the noun already has a pre-penultimate H tone, HTB applies to this tone, of course); since there is also HTB between the penultimate H on the noun and the first H of the specifier, the noun has all H tones. The examples used below are with the the pronominal specifier °-éne ‘self’, and the demonstrative °-a-nó ‘this’.

	A	
vachona	chítúví chéene	they see the bundle itself
vachona	chítúví áchúno	they see this bundle
vawona	útútúlí wéene	they see the brain itself
vawona	útútúlí áúúno	they see this brain
	B/D2	
valyona	lítáwá lyéene	they see the clan itself

valyona	lítáwá álíno	they see this clan
valyona	líhíndílí lyéene	they see the cooking stone itself
valyona	líhíndílí álíno	they see this cooking stone
	C1	
valwona	lútáví lwéene	they see the branch itself
valwona	lútáví álúúno	they see this branch
valwona	lúkálóngó lwéene	they see the throat itself
valwona	lúkálóngó álúúno	they see this throat
	C2	
valyona	lítínjí lyéene	they see the pumpkin itself
valyona	lítínjí álíno	they see this pumpkin
vawona	únjénjémá wéene	they see the mosquito itself
vawona	únjénjémá áúúno	they see this mosquito
	D1	
vachona	chíyewé chéene	they see the chin itself
vachona	chíyewé áchíino	they see this chin
vawoná	ntándásá wéene	they see the porridge itself
vawoná	ntándásá áúúno	they see this porridge
	E	
valyona	límbéndé lyéene	they see the skin itself
valyona	límbéndé álíno	they see this skin
valyona	lípútílá lyéene	they see the trap itself
valyona	lípútílá álíno	they see this trap

With pronominal possessives, a H tone appears on the final syllable of the preceding noun, shown most clearly with nouns of TG D1 (all L tones), e.g. **chiyeewe** ‘chin’: **chíyewé chaángu** ‘my chin’. When a conjoint verbal form with a final H tone precedes such a construction, HTB applies from the final H tone of the verbal form to the final H tone of the noun (when the noun already has a pre-final H tone, HTB occurs to this tone, of course), and the noun has all H tones. But precisely with nouns of TG D1, there is a second possibility: no HTB at all, and the final H tone of the verbal form remains in place; the nouns (and the verbal forms) have the same tones as when the nouns occur without the pronominal possessive.

	A	
vachona	chítúví chaángu	they see my bundle
vawona	útútúlí waángu	they see my brain
	B/D2	
valyona	lítáwá lyeétu	they see our clan
valyona	líhíndílí lyaángu	they see my cooking stone
	C1	
valwona	lútáví lwaáke	they see its branch
valwona	lúkálóngó lwaángu	they see my throat
	C2	
valyona	lítínjí lyaáke	they see its pumpkin

vawona	únjénjémá waáke D1	they see its mosquito
vachona	chíyewé chaángu /	
vachoná	chíyewé chaángu	they see my chin
vawoná	ńtándásá weétu /	
vawoná	ńtandasá weétu E	they see our porridge
valyona	límbéndé lyaángu	they see my skin
valyona	lípútilá lyaángu	they see my trap

The process Tone Assimilation (see 8.3.2) is assigned in two ways in the last two examples of TG D1: the final H tone of the verbal form in **vawoná ńtándásá weétu** is due to the H-toned syllabic nasal of the noun; the H tone of the syllabic nasal of the noun in **vawoná ńtandasá weétu** is due to the H-toned final syllable of the verbal form.

With the specifier **ńtwáani** ‘what kind of’, which is a specifier of the type that can not occur on its own, preceding nouns become (default) L-toned; because of Tone Assimilation, the final TBU of the preceding noun becomes H under influence of the H-toned syllabic nasal of the specifier. When a conjoint verbal form with a final H tone precedes such a construction, there is no HTB at all, just as with the second possibility with nouns of TG D1 with following pronominal possessives (see above).

	A	
vachoná	chituví ńtwáani	they see what kind of bundle?
vawoná	ututulí ńtwáani	they see what kind of brain?
	B/D2	
valyoná	litawá ńtwáani	they see what kind of clan?
valyoná	lihindilí ńtwáani	they see what kind of cooking stone?
	C1	
valwoná	lutaví ńtwáani	they see what kind of branch?
valwoná	lukalongó ńtwáani	they what kind of throat?
	C2	
valyoná	litinjí ńtwáani	they see what kind of pumpkin?
vawoná	unjenjemá ńtwáani	they see what kind of mosquito?
	D1	
vachoná	chíyewé ńtwáani	they see what kind of chin?
vawoná	ntandasá ńtwáani	they see what kind of porridge?
	E	
valyoná	limbendé ńtwáani	they see what kind of skin?
valyoná	liputilá ńtwáani	they see what kind of trap?

Constructions of V + NP are derived in steps. The first step is that the specifier is added to the noun, and the second step is that the NP is added to the verbal form. This is best shown with nouns of TG D1 (all L tones). When occurring without specifier after the verbal form, HTB does not apply to these nouns (**vachoná**

chiyeewe). When occurring after the verbal form with a specifier (e.g. a demonstrative which adds a penultimate H to the noun, **chíyewé áchííno**), HTB does apply to these nouns because of the penultimate H (**vachona chíyewé áchííno**).

We now describe the phrasal tonology of a verbal p-phrase consisting of a conjoint or conjoint-disjoint verbal form followed by a noun and two specifiers. Some examples:

vawoná ntándásá aunó ntwáani	they see what kind of this porridge?
vawoná ntandasá wavó ntwáani /	
vawoná ntándásá wavó ntwáani	they see what kind of their porridge?

We have seen earlier in this section that in a p-phrase with a verbal form, a noun and a specifier, the phrasal tonology of the noun and the specifier is derived first, followed by the phrasal tonology of the verbal form and the NP. We have seen in 8.2.3 that in a nominal p-phrase with a noun and two specifiers, the phrasal tonology of the noun and the first specifier is derived first, followed by the phrasal tonology of the first and the second specifier. When a verbal form, a noun and two specifiers appear in one p-phrase, which we describe now, the phrasal tonology of the noun and the first specifier is derived first: the Noun-Specifier Tone Rules, e.g. NSTR 1 which puts a penultimate H on the preceding noun **ntandasa** when followed by the demonstrative **aunó**, must apply before there can be HTB from the final H of the verbal form to this penultimate H on the noun. The phrasal tonology of the noun and the first specifier must also apply before the tonal interaction between the first and second specifier occurs: there must be first retraction of the H tone of the PPx of the pronominal possessive **úavó** to the final syllable of the preceding noun **ntandasa** (by Px-H Tone Retraction) before **ntwáani** (by NSTR 2) deletes all H tones of this preceding pronominal possessive (its final H tone is due to Tonal Assimilation with the initial H-toned nasal of **ntwáani**). We assume that the order of derivation is that the NP is derived first: the noun plus the first specifier (S1) followed by the second specifier (S2). Then the VP is derived: the verb plus the NP.

The verbal form may be followed by a NP without a nominal head, as we have seen in 8.3.4, and the specifier directly follows the verbal form. Adjectives behave like nouns in such environments (there is HTB from the final H of the verbal form to the first H of the adjective), while other specifiers do not (there is no HTB, and the final H of the verbal form stays on the its final syllable). The specifier may be followed by another specifier or by a noun. Some examples are the following.

vavona vádyóoko	they see the small ones
vavona vádyóoko avaáno	they see these small ones
vavona vádyóoko váana	they see the small children
vavona vádyóoko avaáno váana	they see these small children
vavona vádyókó véene	they see the small ones themselves
vavona vádyókó véene váana	they see the small children themselves
vavoná vadyókó ntwáani	they see what kind of small ones?
vavoná vaviili	they see two (of them)

vavoná vaviili avaáno	they see these two
vavoná vaviili váana	they see two children
vavoná vaviili avaáno váana	they see these two children
vavoná vaviili véene	they see the two themselves
vavoná vaviili véene váana	they see the two children themselves
vavoná vaviili ítwáani	they see what kind of two?

8.4 NP + VP and p-phrases

NP's appearing before a VP and after a VP may be subjects, preposed and postposed objects, or adjuncts. NP's which appear before and after a VP never occur in the same p-phrase as the VP, they constitute a p-phrase on their own. They have penultimate lengthening, but penultimate shortening may also occur when appearing before a VP.

valúúme vahwena kúkáaya	men go home
valúme vahwena kúkáaya	id.
valúmé ávááno vahwena kúkáaya	these men go home
valúmé áváno vahwena kúkáaya	id.
vahwena kúkáaya valúmé ávááno	they go home, these men
valúmé ávááno tuvawene kúkáaya	these men have we seen at home
valúmé áváno tuvawene kúkáaya	id.
tuvawene kúkáaya valúmé ávááno	we have seen them at home these men
kúkáaya tuvawene valúmé ávááno	at home we have seen these men
kúkáaya tuvawene valúmé ávááno	id.
valúúme vatúwene kúkáaya	the men who have seen us at home
valúme vatúwene kúkáaya	id.
valúúme vatúvawéene kúkáaya	the men who we have seen at home
valúme vatúvawéene kúkáaya	id.
kúkáaya kutúdídéenga ding'áánde	at home where we build the houses
kúkáaya kutúdídéenga ding'áánde	id.

8.5 Post-lexical rules with i-phrases and U's

A p-phrase consists of one or more words, an (intonational) i-phrase consists of one or more p-phrases, an utterance (U) consists of one or more i-phrases. Every p-phrase ends with a word with penultimate lengthening. When p-phrases are concatenated to form an i-phrase, the lengthened penultimate syllables of p-phrase-final words may be shortened by the process Penultimate Shortening (PUS, see 2.9), and every i-phrase may end with a word with an intonational H tone on its final TBU (iH, see 3.6.1).

Among the post-lexical processes as listed in 8.3.3, PUS and iH apply before Default L tone insertion and Tone Assimilation.

Every U ends with a word with lowered tones on its final two TBU's by the process Utterance-final Register Lowering (UFRL, see 3.6.1). This process follows Default L tone insertion and Tone Assimilation. In the example below, the angled brackets < > indicate p-phrases, the curly braces { } indicate i-phrases and the parentheses () indicate the U. The intonational H tone is indicated under the words by "iH" where it occurs, penultimate shortening by "PUS" and utterance-final register lowering by "UFRL". Note that not all i-phrases need to end in an intonational H tone. Since PUS is optional, we have not indicated PUS in all possible cases. UFRL lowers the tones of the final two TBU's of the utterance to the level of a lowered H and an extra L respectively, both indicated by an underscore. There are two other instances of utterance-final register lowering which are not indicated below, one of which is the deletion of all H tones of the final word of an utterance (see 3.6.2). The three processes of utterance-final register lowering are the last post-lexical processes, following Default L tone insertion and Tone assimilation. The square brackets [] above the line of words indicate the syntactic phrases into which the utterance is divided, and we have also given their grammatical functions. It clearly shows that syntactic phrases do not necessarily match with phonological phrases.

NP-subject	PP	VP	NP-object
[[]]	[
((<váánú>)	{<và-kùhúvà>}	{<vánítwívyà>}	<màhíndilì> <màvìilì>}
iH	PUS		PUS

People in trouble had made us steal two cooking stones,

PP-adjunct	VP	NP-object	VP
[[]]	[
{<vîínó>}	{<vátwívyà	vángóndóló váànó>}	{<̀nkùvákàmùúlà>}}
iH		iH	UFRL

now they make us steal these sheep, and seize them.

APPENDIX A: TENSE PARADIGMS

- Introduction
- A.1 Conjoint tenses
- A.2 Conjoint-disjoint tenses
- A.3 Disjoint tenses

Introduction

In this appendix, the tense paradigms are given, preceded by some introductory remarks. The paradigms of the Conjoint tenses (*cjt*) are given first, followed by the paradigms of the Conjoint-Disjoint tenses, and then the paradigms of the Disjoint tenses (*djt*). The tenses appear in the following order:

1. Present *cjt*
2. Past *cjt*
3. Far Past *cjt*
4. Present Perfective *cjt*
5. Past Perfective *cjt*
6. Far Past Perfective *cjt*
7. Infinitive
8. Imperative (without object concord)
9. Optative (without object concord)
10. Direct Relative Present (with participants + cl.1 as subject concord)
11. Direct Relative Present Perfective (with participants + cl.1 as subject concord)
12. Non-Past *djt*
13. Past *djt*
14. Far Past *djt*
15. Present Perfective *djt*
16. Past Perfective *djt*
17. Far Past Perfective *djt*
18. Imperative (with object concord) *djt*
19. Optative (with object concord) *djt*
20. Direct Relative Present (with cl.2ff. as subject concord) *djt*
21. Direct Relative Present Perfective (with cl.2ff. as subject concord) *djt*
22. Suppositional Conditional *djt*
23. Conditional *djt*
24. Concessive *djt*
25. Subsecutive Infinitive *djt*
26. Situative Perfective *djt*

27. Suppositional Conditional Perfective *djt*
28. Subsecutive Optative *djt*
29. Negative Present *djt*
30. Negative Infinitive *djt*
31. Negative Present Perfective 1 *djt*
32. Negative Past Perfective *djt*
33. Negative Present Perfective 2 *djt*
34. Negative Optative *djt*
35. Negative Conditional/Concessive *djt*
36. Negative Suppositional Conditional *djt*
37. Direct Relative Past Perfective *djt*
38. Direct Relative Far Past Perfective *djt*
39. Indirect Relative Present *djt*
40. Indirect Relative Non-Past *djt*
41. Indirect Relative Present Perfective *djt*
42. Indirect Relative Past Perfective *djt*
43. Indirect Relative Far Past Perfective *djt*
44. Negative Indirect Relative Present *djt*
45. Negative Indirect Relative Present Perfective *djt*

In the formulas describing the tenses, the Tense Markers and Finals are given with tones (e.g., in the formula of the Non-Past, SC/LH - **na** - (OC) - VB - **á**, the Tense Marker **-na-** has a L tone and the Final **á** has a H tone); other tones are indicated as follows:

SC/L = L-toned Subject Concord

SC/H = H-toned Subject Concord

VB/S1 = S1-H tone, i.e., a H tone on the first TBU of the Stem/Verbal Base

VB/S2 = S2-H tone, i.e., a H tone on the second TBU of the Stem/Verbal Base

In case a tense has SC's with different tones (noted SC/LH), the forms are shown separately. The Object Concord (OC) has a L tone, except in the Infinitive (noted OC/H). The H tone on the Final is indicated as VB/SF = SF-H tone, i.e., a H tone on the final TBU of the Stem/Verbal Base. The tone group to which a tense belongs is also given: A, B, C1, C2, D1, D2 or E; a tone group consists of the combination of the tone of the SC (L or H) and the tonal profile of the stem/verbal base (see 3.4, 4.4 and 7.2):

tone group	tone of the SC	tonal profile of the stem
A:	L	S1/SF
B:	L	S1
C1:	L	SF
C2:	H	SF
D1:	L	no H
D2:	H	no H
E:	L	S2

There is a distinction between stems with a simple final syllable and stems with a complex final syllable. The verbal stems and OC's used in the examples are:

simple final syllable	OC	complex final syllable	OC
		-lya eat	-vi- cl.8
-lima cultivate	-la- cl.6	-toha touch	-li- cl.5
-yangata help	-va- cl.2	-kundanya mix	-vi- cl.8
-pilikana hear	-la- cl.6	-pelekedya send	-va- cl.2

Stems like **-lya** are called minisyllabic stems; their derivation starts with the creation of a TBU which is a copy of the vowel of the preceding morpheme (TM, SC or OC; see 6.3.1 and 7.2.2). The following perfective stems are used in the examples are:

simple final syllable	complex final syllable
-lile have eaten	
-limite have cultivated	-tohidye have touched
-pilikene have heard	-pelekedidye have sent

The nouns used in the paradigms and in the examples are:

viilyo food	viilyo food
mahaála fields	limbéénde skin
vayeéni guests	vitúúndi yams
malóóve words	valúúme men

The adjunct used to show the tones realized on the verbal stem is **kadiiki** 'a bit'.

The Conjoint tenses are given without OC because in these tenses, OC's do not play a role in the realization of H tones. The forms are followed by objects (or adjuncts) since Conjoint tenses may not occur p-phrase-finally. The Conjoint-Disjoint tenses are given with OC only when the OC's play a role in the realization of H tones. The forms are given as they occur with and without a following object (or adjunct). The Disjoint tenses are given with OC only when the OC's are involved in the realization of H tones. The Disjoint forms are always p-phrase-final, whether or not followed by an object (or adjunct). With each Disjoint tense, the fast speech forms are given, i.e., the forms with Penultimate Shortening, followed by an object (or adjunct).

A.1 Conjoint tenses**1. PRESENT** *cjt*: SC/LH - (OC) - VB - a

SC: L (participants): tone group: D1.

tu-lima mahaála	tuulya víilyo
tu-yangata vayeéni	tu-toha límbéende
tu-pilikana malóóve	tu-kundanya vítúúndi
	tu-pelekedyá válúúme

SC: H (classes): tone group: D2.

va-lima máháála	vaalya víilyo
va-yangata váyéeni	va-toha límbéende
va-pilikana malóóve	va-kundanya vítúúndi
	va-pelekedyá válúúme

The H tone of the SC appears on the final TBU of the verbal form, from where a H Tone Bridge is formed to the first H tone of the following object; the H tone on the final TBU of the verbal form is lowered by the process Regressive H Tone Dissimilation (see 8.3.2). When followed by an adjunct, the H tone of the SC is realized on the final TBU of the verbal form.

va-límá kadiiki	vaalyá kadiiki
va-yangatá kadiiki	va-tohá kadiiki
va-pilikáná kadiiki	va-kundanyá kadiiki
	va-pelekedyá kadiiki

This tense is best described as General Present, i.e., it states general truths, facts, habits, not related to a particular time.

2./3. (FAR) PAST *cjt*: SC/L - (a) - (OC) - VB/S1 - á

Tone group: A. (All SC's have a L tone.)

PAST *cjt*:

tu-límá máháála	túúlyá víilyo
tu-yángatá váyéeni	tu-tóhá límbéende
tu-pilikáná malóóve	tu-kúndanyá vítúúndi
	tu-pélékedyá válúúme

FAR PAST *cjt*:

tw-a-límá máháála	tw-áályá víilyo
tw-a-yángatá váyéeni	tw-a-tóhá límbéende
tw-a-pilikáná malóóve	tw-a-kúndanyá vítúúndi
	tw-a-pélékedyá válúúme

4. PRESENT PERFECTIVE *cjt*: SC/H - (OC) - VB - **ile**

Tone group: D2.

tu-lile víílyo	
tu-limite máháála	tu-tohidyé límbéende
tu-pilikene málóóve	tu-pelekedidyé válúúme

All SC's have a H tone. The H tone of the SC appears on the final TBU of the verbal form, from where a H Tone Bridge is formed to the first H tone of the following object; the H tone on the final TBU of the verbal form is lowered by the process Regressive H Tone Dissimilation. When followed by an adjunct, the H tone of the SC is realized on the final TBU of the verbal form.

tu-lilé kadiiki	
tu-limité kadiiki	tu-tohidyé kadiiki
tu-pilikené kadiiki	tu-pelekedidyé kadiiki

5./6. (FAR) PAST PERFECTIVE *cjt*: SC/L - (a) - (OC) - VB/S1 - **ilé**

Tone group: A. (All SC's have a L tone.)

PAST PERFECTIVE *cjt*:

tu-lilé víílyo	
tu-limíté máháála	tu-tóhidyé límbéende
tu-pílikéné málóóve	tu-pélékédidyé válúúme

FAR PAST PERFECTIVE *cjt*:

tw-a-lilé víílyo	
tw-a-limíté máháála	tw-a-tóhidyé límbéende
tw-a-pílikéné málóóve	tw-a-pélékédidyé válúúme

A.2 Conjoint-Disjoint tenses**7. INFINITIVE:** (k)u - (OC/H) - VB/S1 - **á**

Tone group: A.

+ object:

	kúúlyá víílyo
ku-límá máháála	ku-tóhá límbéende
ku-yángátá váyééni	ku-kúndányá vítúúndi
ku-pílikáná málóóve	ku-pélékédýá válúúme

p-phrase-finally:

ku-líima	kúúlya
ku-yángááta	ku-tóoha
ku-pílikáána	ku-kúndaanya
	ku-pélekeedya

The tone patterns of forms with a complex final syllable are the same as those of tone group B.

+ OC:

ku-lá-lima máháála	kú-vilya víilyo
ku-vá-yángata váyééni	ku-lí-toha límbéende
ku-lá-pílikana málóóve	ku-ví-kúndanya vítúúndi
	ku-vá-pélekedya válúúme

With forms with OC, the S1-H tone is lowered by Meeussen's Rule (see 3.4.3); there is H Tone Doubling of the H tone of the OC to the S1-position. When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.

ku-lá-limá kadiiki	kú-vilyá kadiiki
ku-vá-yángatá kadiiki	ku-lí-tohá kadiiki
ku-lá-pílikaná kadiiki	ku-ví-kúndanyá kadiiki
	ku-vá-pélekedýá kadiiki

p-phrase-finally:

ku-lá-liíma	kú-víilya
ku-vá-yangaáta	ku-lí-tóoha
ku-lá-pílikaána	ku-ví-kúndaanya
	ku-vá-pélekeedya

The tone patterns of forms with a simple final syllable are the same as those of tone group C2; the tone patterns of forms with a complex final syllable are like those of tone group D2.

8. IMPERATIVE without OC: VB - á

Tone group: C1.

+ object:

lima máháála	iilya víilyo
yangata váyééni	toha límbéende
pílikana málóóve	kundanya vítúúndi
	pelekedya válúúme

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.

limá kadiiki	iilyá kadiiki
yangatá kadiiki	tohá kadiiki
pilikaná kadiiki	kundanyá kadiiki
	pelekedyá kadiiki

p-phrase-finally:

liima	iilya
yangaáta	tooha
pilikaána	kundaanya
	pelekeedya

The tone patterns of forms with a complex final syllable are the same as those of tone group D1.

The Imperative plural is formed with the Pre-Final **-ang-**. The examples are phrase-final.

lim-aánga	iily-aanga
yangat-aánga	toh-aanga
pilikan-aánga	kundany-aanga
	pelekeedy-aanga

There are verbs where also the longer plural addressee marker **-ang'an-** is possible; for **-uka** 'go away, come from; arise, come forward' the longer form is the only form used since the shorter form is identical with a term of abuse.

hwen-aáng-a/hwen-ang'aán-a	go! (to more persons)
id-aáng-a/id-ang'aán-a	come! (to more persons)
uy-aánga/uy-ang'aán-a	return! (to more persons)
uk-ang'aán-a	go away, arise! (to more persons)

Imperatives of verbs with an indirect object are Imperatives with OC. The Imperative with OC is a disjoint tense; it is number 18 in this appendix.

9. OPTATIVE without OC: SC/L - VB - é

Tone group: C1.

+ object:

tu-lime máháála	tuulye víilyo
tu-yangate váyééni	tu-tohe límbéende
tu-pilikane málóóve	tu-kundanye vítúúndi
	tu-pelekedye válúúme

The H tone of the SC appears on the final TBU of the verbal form, from where a H Tone Bridge is formed to the first H tone of the following object; the H tone on the final TBU of the verbal form is lowered by the process Regressive H Tone

Dissimilation. When followed by an adjunct, the H tone of the SC is realized on the final TBU of the verbal form.

tu-limé kadiiki	tuulyé kadiiki
tu-yangaté kadiiki	tu-tohé kadiiki
tu-pilikané kadiiki	tu-kundanyé kadiiki
	tu-pelekedyé kadiiki

p-phrase-finally:

tu-liíme	tuulyé
tu-yangaáte	tu-toohé
tu-pilikaáne	tu-kundaanyé
	tu-pelekeedyé

Note the final H tone of forms with a complex final syllable (see 7.2.4). The Optative with OC is a disjoint tense; it is number 19 in this appendix.

10. DIRECT RELATIVE PRESENT with SC part. + cl.1:

SC/H - (OC) - VB - á

Tone group: C2.

The final H tone is probably a copy of the H tone of the SC.

+ object:

tu-liíma máháála	túulya víílyo
tu-yángata váyééni	tu-tóoha límbéende
tu-pílikana málóóve	tu-kúndanya vítúúndi
	tu-pélékedyá válúúme

p-phrase-finally:

tu-liíma	túulya
tu-yangaáta	tu-tóoha
tu-pílikaána	tu-kúndaanya
	tu-pélékeedyá

Phrase-finally, forms with disyllabic stems and a simple final syllable have a HLH tonal sequence on their penultimate syllables.

+ OC:

tu-lá-lima máháála	tú-vilya víílyo
tu-vá-yángata váyééni	tu-lí-toha límbéende
tu-lá-pílikana málóóve	tu-ví-kúndanya vítúúndi
	tu-vá-pélékedyá válúúme

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.

tu-lá-limá kadiiki	tú-vílyá kadiiki
tu-vá-yángatá kadiiki	tu-lí-tohá kadiiki
tu-lá-pílikaná kadiiki	tu-ví-kúndanyá kadiiki
	tu-vá-pélekedyá kadiiki

p-phrase-finally:

tu-lá-liíma	tú-víilya
tu-vá-yangaáta	tu-lí-tóoha
tu-lá-pílikaána	tu-ví-kúndaanya
	tu-vá-pélekeedya

The tone patterns of forms with a complex final syllable are the same as those of tone group D2. The Direct Relative Present with SC cl.2ff. is a disjoint tense; it is number 20 in this appendix.

11. DIRECT RELATIVE PRESENT PERFECTIVE with SC part. + cl.1:

SC/H - (OC) - VB - ilé

SC: H (part. + cl.1): tone group: C2.

The final H tone is probably a copy of the H tone of the SC.

+ object:

tu-liíle víilyo	
tu-límite máháála	tu-tóhidye límbéende
tu-pílikene málóóve	tu-pélékedidye válúúme

p-phrase-finally:

tu-liííle	
tu-límiíte	tu-tóhiidye
tu-píliikeéne	tu-pélékediidye

Phrase-finally, forms with disyllabic stems and a simple final syllable have a HLH melody on their penultimate syllables.

+ OC:

tu-ví-lile víilyo	
tu-lá-límite máháála	tu-lí-tóhidye límbéende
tu-lá-pílikene málóóve	tu-vá-pélekedidye válúúme

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.

tu-ví-lilé kadiiki	
tu-lá-límité kadiiki	tu-lí-tóhidyé kadiiki
tu-lá-pílikené kadiiki	tu-vá-pélekedidyé kadiiki

p-phrase-finally:

tu-ví-liíle	
tu-lá-limiíte	tu-lí-tóhiidye
tu-lá-pílikeéne	tu-vá-pélekediiidye

The tone patterns of forms with a complex final syllable are the same as those of tone group D2. The Direct Relative Perfective with SC cl.2ff. is a disjoint tense; it is number 21 in this appendix.

A.3 Disjoint tenses

12. NON-PAST *djt*: SC/L/H - **na** - (OC) - VB - **á**

SC: L (participants); tone group: C1.

With and without a following object (or adjunct):

tu-na-liíma (mahaála)	tu-naalya (viílyo)
tu-na-yangaáta (vayeéni)	tu-na-toooha (limbéénde)
tu-na-pilikaána (malóóve)	tu-na-kundaanya (vituúndi)
	tu-na-pelekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

tu-na-límá mahaála	tu-nalya viílyo
tu-na-yangátá vayeéni	tu-na-toha limbéénde
tu-na-pilikaná malóóve	tu-na-kundanya vituúndi
	tu-na-pelekedyá valúúme

The forms with Penultimate Shortening:

tu-na-límá mahaála	tu-nalya viílyo
tu-na-yangátá vayeéni	tu-na-toha limbéénde
tu-na-pilikáná malóóve	tu-na-kundanya vituúndi
	tu-na-pelekedyá valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D1.

SC: H (classes); tone group: C2.

With and without a following object (or adjunct):

va-ná-liíma (mahaála)	va-náálya (viílyo)
	va-na-tóoha (limbéénde)

va-na-yángááta (vayeéni)
va-na-pílikaána (malóóve)

va-na-kúndaanya (vituúndi)
va-na-pélékeedya (valúúme)

+ OC:

va-na-lá-liíma (mahaála)
va-na-vá-yángááta (vayeéni)
va-na-lá-pílikaána (malóóve)

va-ná-víilya (viílyo)
va-na-lí-tóoha (limbéénde)
va-na-ví-kúndaanya (vituúndi)
va-na-vá-pélekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

va-ná-limá mahaála
va-na-yángatá vayeéni
va-na-pílikaná malóóve

va-nálya viílyo
va-na-tóha limbéénde
va-na-kúndanya vituúndi
va-na-pélékedya valúúme

+ OC:

va-na-lá-limá mahaála
va-na-vá-yángatá vayeéni
va-na-lá-pílikaná malóóve

va-ná-víilya viílyo
va-na-lí-toha limbéénde
va-na-ví-kúndanya vituúndi
va-na-vá-pélekedya valúúme

The forms with Penultimate Shortening are the following:

va-ná-lima mahaála
va-na-yángata vayeéni
va-na-pílikana malóóve

va-nálya viílyo
va-na-tóha limbéénde
va-na-kúndanya vituúndi
va-na-pélékedya valúúme

+ OC:

va-na-lá-lima mahaála
va-na-vá-yángata vayeéni
va-na-lá-pílikaná malóóve

va-ná-víilya viílyo
va-na-lí-toha limbéénde
va-na-ví-kúndanya vituúndi
va-na-vá-pélekedya valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

13./14. (FAR) PAST *dít*: SC/H - (a) - lna - (OC) - VB - á

Tone group: C2.

PAST *djt*:

With and without a following object (or adjunct):

tú-ná-liíma (mahaála)	tú-náalya (viílyo)
tú-ná-yangaáta (vayeéni)	tú-ná-toooha (limbéénde)
tú-ná-pilikaána (malóóve)	tú-ná-kundaanya (vituúndi)
	tú-ná-pelekeedya (valúúme)

+ OC:

tú-ná-la-liíma (mahaála)	tú-ná-viílyo (viílyo)
tú-ná-va-yangaáta (vayeéni)	tú-ná-li-toooha (limbéénde)
tú-ná-la-pilikaána (malóóve)	tú-ná-vi-kundaanya (vituúndi)
	tú-ná-va-pelekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

tú-ná-limá mahaála	tú-nalya viílyo
tú-ná-yangátá vayeéni	tú-ná-toha limbéénde
tú-ná-pilikaná malóóve	tú-ná-kundanya vituúndi
	tú-ná-pelekedya valúúme

+ OC:

tú-ná-la-limá mahaála	tú-ná-viílyo viílyo
tú-ná-va-yangátá vayeéni	tú-ná-li-toha limbéénde
tú-ná-la-pilikaná malóóve	tú-ná-vi-kundanya vituúndi
	tú-ná-va-pelekedya valúúme

The forms with Penultimate Shortening:

tú-ná-lima mahaála	tú-náalya viílyo
tú-ná-yangátá vayeéni	tú-ná-toha limbéénde
tú-ná-pilikáná malóóve	tú-ná-kundanya vituúndi
	tú-ná-pelekedya valúúme

+ OC:

tú-ná-la-limá mahaála	tú-ná-viílyo viílyo
tú-ná-va-yangátá vayeéni	tú-ná-li-toha limbéénde
tú-ná-la-pilikáná malóóve	tú-ná-vi-kundanya vituúndi
	tú-ná-va-pelekedya valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

FAR PAST *djt*:

The TM **-a-** intervenes between the SC and the TM **-lna-**. In case of glide formation applying to the SC, the H tone of the SC appears on the **-a-**. For the rest, the forms

are the same as those of the Past *djt.* Below, we give the forms with and without a following object or adjunct.

tw-á-ná-liíma (mahaála)	tw-á-náalya (viílyo)
tw-á-ná-yangaáta (vayeéni)	tw-á-ná-toooha (limbéénde)
tw-á-ná-pílikaána (malóóve)	tw-á-ná-kundaanya (vituúndi)
	tw-á-ná-pelekeedya (valúúme)

15. PRESENT PERFECTIVE *djt.*

SC/H - ni - (OC) - VB - á

Tone group: C2.

tu-ní-liíma (mahaála)	tu-níílya (viílyo)
tu-ni-yángaaáta (vayeéni)	tu-ni-tóoha (limbéénde)
tu-ni-pílikaána (malóóve)	tu-ni-kúndaanya (vituúndi)
	tu-ni-pélékeedya (valúúme)

+ OC:

tu-ni-lá-liíma (mahaála)	tu-ní-víílya (viílyo)
tu-ni-vá-yangaáta (vayeéni)	tu-ni-lí-tóoha (limbéénde)
tu-ni-lá-pílikaána (malóóve)	tu-ni-ví-kúndaanya (vituúndi)
	tu-ni-vá-pélekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

tu-ní-limá mahaála	tu-nílya viílyo
tu-ni-yángatá vayeéni	tu-ni-tóoha limbéénde
tu-ni-pílikaná malóóve	tu-ni-kúndanya vituúndi
	tu-ni-pélékedya valúúme

+ OC:

tu-ni-lá-limá mahaála	tu-ní-vílya viílyo
tu-ni-vá-yángatá vayeéni	tu-ni-lí-toha limbéénde
tu-ni-lá-pílikaná malóóve	tu-ni-ví-kúndanya vituúndi
	tu-ni-vá-pélekedya valúúme

The forms with Penultimate Shortening are the following:

tu-ní-lima mahaála	tu-nílya viílyo
tu-ni-yángata vayeéni	tu-ni-tóoha limbéénde
tu-ni-pílikana malóóve	tu-ni-kúndanya vituúndi
	tu-ni-pélékedya valúúme

+ OC:

tu-ní-lá-lima mahaála
tu-ní-vá-yángata vayeéni
tu-ní-lá-pílikáná malóóve

tu-ní-vilya viílyo
tu-ní-lí-toha limbéénde
tu-ní-ví-kúndanya vituúndi
tu-ní-vá-pelekedya valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

16./17. (FAR) PAST PERFECTIVE *djt*: SC/H - (a) - |ni - (OC) - VB - á

Tone group: C2.

PAST PERFECTIVE *djt*:

With and without a following object (or adjunct):

tú-ní-liíma (mahaála)
tú-ní-yangaáta (vayeéni)
tú-ní-pílikaána (malóóve)

tú-níilya (viílyo)
tú-ní-tooha (limbéénde)
tú-ní-kundaanya (vituúndi)
tú-ní-pelekeedya (valúúme)

+ OC:

tú-ní-la-liíma (mahaála)
tú-ní-va-yangaáta (vayeéni)
tú-ní-la-pílikaána (malóóve)

tú-ní-viílyo (viílyo)
tú-ní-li-tooha (limbéénde)
tú-ní-vi-kundaanya (vituúndi)
tú-ní-va-pelekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

tú-ní-limá mahaála
tú-ní-yangátá vayeéni
tú-ní-pílikáná malóóve

tú-nílyo viílyo
tú-ní-toha limbéénde
tú-ní-kundanya vituúndi
tú-ní-pelekedya valúúme

+ OC:

tú-ní-la-limá mahaála
tú-ní-va-yangátá vayeéni
tú-ní-la-pílikáná malóóve

tú-ní-vilya viílyo
tú-ní-li-toha limbéénde
tú-ní-vi-kundanya vituúndi
tú-ní-va-pelekedya valúúme

The forms with Penultimate Shortening:

tú-ní-lima mahaála
tú-ní-yangátá vayeéni
tú-ní-pílikáná malóóve

tú-nílyo viílyo
tú-ní-toha limbéénde
tú-ní-kundanya vituúndi
tú-ní-pelekedya valúúme

+ OC:

tú-ní-la-límá mahaála	tú-ní-vilya viilyo
tú-ní-va-yangátá vayeéni	tú-ní-li-toha limbéénde
tú-ní-la-pilikáná malóóve	tú-ní-vi-kundanya vituúndi
	tú-ní-va-pelekedyá valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

FAR PAST PERFECTIVE *djt*:

The TM **-a-** intervenes between the SC and the TM **-ni-**. In case of glide formation applying to the SC, the H tone of the SC appears on the **-a-**. For the rest, the forms are the same as those of the Past Perfective *djt*. Below, we give the forms with and without a following object or adjunct.

tw-á-ní-liíma (mahaála)	tw-á-núilya (viilyo)
tw-á-ní-yangaáta (vayeéni)	tw-á-ní-toohe (limbéénde)
tw-á-ní-pilikaána (malóóve)	tw-á-ní-kundaanya (vituúndi)
	tw-á-ní-pelekeedya (valúúme)

18. IMPERATIVE with OC *djt*: OC - VB - **e**

Tone group: D1.

With and without a following object (or adjunct):

la-liime (mahaála)	viilye (viilyo)
va-yangaate (vayeéni)	li-toohe (limbéénde)
la-pilikaane (malóóve)	vi-kundaanye (vituúndi)
	va-pelekeedye (valúúme)

The forms with Penultimate Shortening (not common with minisyllabic stems) are the following:

la-lime mahaála	li-tohe limbéénde
va-yangate vayeéni	vi-kundanye vituúndi
la-pilikane malóóve	va-pelekedye valúúme

Imperatives of verbs with an indirect object are Imperatives with OC. Remarkably, the final may be either **-e** or **-a**.

ni-ing'e/ni-ing'a	give me!
mw-ing'e/mw-ing'a	give him/her!
tw-ing'e/tw-ing'a	give us!
ngu-tendeele/ngu-tendeela	do for me!
ngu-telekeele/ngu-telekeela	cook for me!
tu-telekeele/tu-telekeela	cook for us!

The Imperative without OC is a conjoint-disjoint tense, it is number 8 in this appendix.

19. OPTATIVE with OC *djt*: SC/L - OC - VB/S₁ - **e**

Tone group: B.

With and without a following object (or adjunct):

tu-la-líime (mahaála)	tu-víilye (viílyo)
tu-va-yángáate (vayeéni)	tu-li-tóohe (limbéénde)
tu-la-pílikaaane (malóóve)	tu-vi-kúndáanye (vituúndi)
	tu-va-pélékeedye (valúúme)

The forms with Penultimate Shortening:

tu-la-líime mahaála	tu-vílye viílyo
tu-va-yángate vayeéni	tu-li-tóhe limbéénde
tu-la-pílikane malóóve	tu-vi-kúndanye vituúndi
	tu-va-pélékedye valúúme

The Optative without OC is a conjoint-disjoint tense (number 9 in this appendix).

20. DIRECT RELATIVE PRESENT with SC cl.2ff. *djt*:

SC/L - (OC) - VB/S₂ - **a**

SC: L (cl.2ff.): tone group: E.

With and without a following object (or adjunct):

va-líima (mahaála)	váálya (viílyo)
va-yangáata (vayeéni)	va-tóoha (limbéénde)
va-pílikáana (malóóve)	va-kundáanya (vituúndi)
	va-pelékédya (valúúme)

The forms with Penultimate Shortening:

va-líima mahaála	váálya viílyo
va-yangáata vayeéni	va-tóoha limbéénde
va-pílikana malóóve	va-kundáanya vituúndi
	va-pelékédya valúúme

The form with OC with minisyllabic stems is **va-víílya**. The Direct Relative Present with SC participants + cl.1 is a conjoint-disjoint tense (see number 10).

21. DIRECT RELATIVE PRESENT PERFECTIVE with SC cl.2ff. *djt*:

SC/L - (OC) - VB/S₂ - **ile**

SC: L (cl.2ff.): tone group: E.

With and without a following object (or adjunct):

va-líle (viílyo)	
va-limíite (mahaála)	va-tohíidye (limbéénde)
va-pilíkéene (malóóve)	va-pelékédiidye (valúúme)

The forms with Penultimate Shortening:

va-líle viílyo	
va-limíte mahaála	va-tohíidye limbéénde
va-pilíkene malóóve	va-pelékédiidye valúúme

The Direct Relative Perfective with SC participants + cl.1 is a conjoint-disjoint tense (number 11 in this appendix).

22. SUPPOSITIONAL CONDITIONAL *djt*:

SC/H - (a) - ka - |ní - (OC) - VB - á

Tone group: C2.

With and without a following object (or adjunct):

	tu-ká-nílyo (viílyo)
tu-ká-ní-liíma (mahaála)	tu-ká-ní-tooha (limbéénde)
tu-ká-ní-yangaáta (vayeéni)	tu-ká-ní-kundaanya (vituúndi)
tu-ká-ní-pilikaána (malóóve)	tu-ká-ní-pelekeedya (valúúme)

+ OC:

	tu-ká-ní-viílyo (viílyo)
tu-ká-ní-la-liíma (mahaála)	tu-ká-ní-li-tooha (limbéénde)
tu-ká-ní-va-yangaáta (vayeéni)	tu-ká-ní-vi-kundaanya (vituúndi)
tu-ká-ní-la-pilikaána (malóóve)	tu-ká-ní-va-pelekeedya (valúúme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

	tu-ká-nílyo viílyo
tu-ká-ní-limá mahaála	tu-ká-ní-toha limbéénde
tu-ká-ní-yangatá vayeéni	tu-ká-ní-kundanya vituúndi
tu-ká-ní-pilikaná malóóve	tu-ká-ní-pelekedya valúúme

+ OC:

	tu-ká-ní-viílyo viílyo
tu-ká-ní-la-limá mahaála	tu-ká-ní-li-toha limbéénde
tu-ká-ní-va-yangatá vayeéni	tu-ká-ní-vi-kundanya vituúndi
tu-ká-ní-la-pilikaná malóóve	tu-ká-ní-va-pelekedya valúúme

The forms with Penultimate Shortening:

tu-ká-ní-líma mahaála	tu-ká-nílyá viílyo
tu-ká-ní-yangátá vayeéni	tu-ká-ní-tohá limbéénde
tu-ká-ní-pilikáná malóóve	tu-ká-ní-kundanya vituúndi
	tu-ká-ní-pelekedya valúúme

+ OC:

tu-ká-ní-la-límá mahaála	tu-ká-ní-vílyá viílyo
tu-ká-ní-va-yangátá vayeéni	tu-ká-ní-li-tohá limbéénde
tu-ká-ní-la-pilikáná malóóve	tu-ká-ní-vi-kundanya vituúndi
	tu-ká-ní-va-pelekedya valúúme

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

23. CONDITIONAL *djt*: SC/L - **ka** - (OC) - VB/s₂ - **a**

Tone group: E.

With and without a following object (or adjunct):

tu-ka-líma (mahaála)	tu-káálya (viílyo)
tu-ka-yangáata (vayeéni)	tu-ka-tóóha (limbéénde)
tu-ka-pilikáana (malóóve)	tu-ka-kundáanya (vituúndi)
	tu-ka-pelékéedya (valúúme)

The form with OC with minisyllabic stems is **tu-ka-víílyá**.

The forms with Penultimate Shortening:

tu-ka-líma mahaála	tu-kálya viílyo
tu-ka-yangáata vayeéni	tu-ka-tóóha limbéénde
tu-ka-pilikana malóóve	tu-ka-kundáanya vituúndi
	tu-ka-pelékedya valúúme

24. CONCESSIVE *djt*: SC/L - **ka** - **na** - (OC) - VB/s₂ - **a**

Tone group: E.

With and without a following object (or adjunct):

tu-ka-na-líma (mahaála)	tu-ka-náálya (viílyo)
tu-ka-na-yangáata (vayeéni)	tu-ka-na-tóóha (limbéénde)
tu-ka-na-pilikáana (malóóve)	tu-ka-na-kundáanya (vituúndi)
	tu-ka-na-pelékéedya (valúúme)

The form with OC with minisyllabic stems is **tu-ka-na-víílyá** ‘although we eat it (food), ...’.

The forms with Penultimate Shortening:

tu-ka-na-líma mahaála	tu-ka-nálya viílyo
tu-ka-na-yángáta vayeéni	tu-ka-na-tóha limbéénde
tu-ka-na-pílikana malóóve	tu-ka-na-kundánya vituúndi
	tu-ka-na-pelékedya valúúme

25. SUBSECUTIVE INFINITIVE *djt:* (k)u - ná - (OC/H) - VB - a

Tone group: D1.

With and without a following object (or adjunct):

ku-ná-líima (mahaála)	ku-náalya (viílyo)
ku-ná-yángáata (vayeéni)	ku-ná-tóoha (limbéénde)
ku-ná-pílikaana (malóóve)	ku-ná-kúndaanya (vituúndi)
	ku-ná-pélekedya (valúúme)

+ OC:

ku-ná-lá-líima (mahaála)	ku-ná-víilya (viílyo)
ku-ná-vá-yángáata (vayeéni)	ku-ná-lí-tóoha (limbéénde)
ku-ná-lá-pílikaana (malóóve)	ku-ná-ví-kúndaanya (vituúndi)
	ku-ná-vá-pélekedya (valúúme)

The tone patterns found with this tense occur with most Indirect Relatives. The forms with Penultimate Shortening are the following:

ku-ná-líma mahaála	ku-nálya viílyo
ku-ná-yángata vayeéni	ku-ná-tóha limbéénde
ku-ná-pílikana malóóve	ku-ná-kúndanya vituúndi
	ku-ná-pélekedya valúúme

+ OC:

ku-ná-lá-líma mahaála	ku-ná-vílyo viílyo
ku-ná-vá-yángata vayeéni	ku-ná-lí-tóha limbéénde
ku-ná-lá-pílikana malóóve	ku-ná-ví-kúndanya vituúndi
	ku-ná-vá-pélekedya valúúme

26. SITUATIVE PERFECTIVE *djt:* SC/L - (OC) - VB - ile

Tone group: D1.

With and without a following object or adjunct:

tu-liile (viílyo)	
tu-limiite (mahaála)	tu-tohiidye (limbéénde)
tu-piliikeene (malóóve)	tu-pelekediidye (valúúme)

The forms with Penultimate Shortening:

tu-lile viilyo	
tu-limite mahaála	tu-tohidye limbéénde
tu-pilikene malóóve	tu-pelekedidye valúúme

27. SUPPOSITIONAL CONDITIONAL PERFECTIVE *djt*:

SC/L - **ka** - (OC) - VB - **ile**

Tone group: D1.

With and without a following object (or adjunct):

tu-ka-liile (viilyo)	
tu-ka-limiite (mahaála)	tu-ka-tohiidye (limbéénde)
tu-ka-pilikeene (malóóve)	tu-ka-pelekediidye (valúúme)

The forms with Penultimate Shortening:

tu-ka-lile viilyo	
tu-ka-limite mahaála	tu-ka-tohidye limbéénde
tu-ka-pilikene malóóve	tu-ka-pelekedidye valúúme

28. SUBSECUTIVE OPTATIVE *djt*: SC/H - **ka** - (OC) - VB - **e**

Tone group: D2.

With and without a following object (or adjunct):

	tu-káálye (viilyo)
tu-ka-líime (mahaála)	tu-ka-tóohe (limbéénde)
tu-ka-yángáate (vayeéni)	tu-ka-kúndáanye (vituúndi)
tu-ka-pílikaane (malóóve)	tu-ka-pélékeedye (valúúme)

+ OC:

	tu-ká-viilye (viilyo)
tu-ka-lá-líime (mahaála)	tu-ka-lí-tóohe (limbéénde)
tu-ka-vá-yángáate (vayeéni)	tu-ka-ví-kúndaanye (vituúndi)
tu-ka-lá-pílikaane (malóóve)	tu-ka-vá-pélekeedye (valúúme)

The forms with Penultimate Shortening:

	tu-kálye viilyo
tu-ka-líime mahaála	tu-ka-tóhe limbéénde
tu-ka-yángate vayeéni	tu-ka-kúndanye vituúndi
tu-ka-pílikane malóóve	tu-ka-pélékedye valúúme

+ OC:

tu-ka-lá-lime mahaála	tu-ká-vilye viilyo
tu-ka-vá-yángate vayeéni	tu-ka-lí-tohe limbéénde
tu-ka-lá-pílikane malóóve	tu-ka-ví-kúndanye vituúndi
	tu-ka-vá-pélekedye valúúme

29. NEGATIVE PRESENT *djt*: SC/L - **ká** - (OC) - VB/S1 - **a**

Tone group: B.

With and without a following object (or adjunct):

tu-ká-líima (mahaála)	tu-káalya (viilyo)
tu-ká-yángata (vayeéni)	tu-ká-tóoha (limbéénde)
tu-ká-pílikaana (malóóve)	tu-ká-kúndaanya (vituúndi)
	tu-ká-pélekeedya (valúúme)

+ OC:

tu-ká-la-líima (mahaála)	tu-ká-viilya (viilyo)
tu-ká-va-yángáata (vayeéni)	tu-ká-li-tóoha (limbéénde)
tu-ká-la-pílikaana (malóóve)	tu-ká-vi-kúndaanya (vituúndi)
	tu-ká-va-pélekeedya (valúúme)

In forms without OC, the S1-H tone is lowered by Meeussen's Rule (see 3.4.3, 7.1.1 and 7.2.5); there is H Tone Doubling of the H tone of the negative marker to the S1-position. The forms with Penultimate Shortening are the following:

tu-ká-lima mahaála	tu-kálya viilyo
tu-ká-yángata vayeéni	tu-ká-toha limbéénde
tu-ká-pílikana malóóve	tu-ká-kúndanya vituúndi
	tu-ká-pélekedya valúúme

+ OC:

tu-ká-la-líima mahaála	tu-ká-vilya viilyo
tu-ká-va-yángata vayeéni	tu-ká-li-tóoha limbéénde
tu-ká-la-pílikaana malóóve	tu-ká-vi-kúndanya vituúndi
	tu-ká-va-pélekedya valúúme

30. NEGATIVE INFINITIVE *djt*: **u** - **ngá** - VB - **a**

Tone group: D1.

With and without a following object (or adjunct):

u-ngá-líima (mahaála)	u-ngáalya (viilyo)
u-ngá-yángata (vayeéni)	u-ngá-tóoha (limbéénde)
u-ngá-pílikaana (malóóve)	u-ngá-kúndaanya (vituúndi)
	u-ngá-pélekeedya (valúúme)

The Negative Infinitive may not occur with OC. The forms with Penultimate Shortening are the following:

u-ngá-<i>lima</i> mahaála	u-ngálya viilyo
u-ngá-yángata vayeéni	u-ngá-toha limbéénde
u-ngá-pílikana malóóve	u-ngá-kúndanya vítuúndi
	u-ngá-pélekedya valúúme

31. NEGATIVE PRESENT PERFECTIVE 1 *djt*:

SC/H - **kall** - (OC) - VB/S1 - **ilé**

Tone group: A (? : exceptional H on the SC, which shifts to the TM).

With and without a following object (or adjunct):

tu-ká-liile (viilyo)	
tu-ká-limíite (mahaála)	tu-ká-tohiidye (limbéénde)
tu-ká-pílikéene (malóóve)	tu-ká-pélékediidye (valúúme)

The S1-H tone is lowered by Meeussen's Rule. The tone patterns of forms with a complex final syllable are the same as those of tone group E.

+ OC:

tu-ká-vi-liile (viilyo)	
tu-ká-la-limíite (mahaála)	tu-ká-li-tóhiidye (limbéénde)
tu-ká-la-pílikéene (malóóve)	tu-ká-va-pélékediidye (valúúme)

The tone patterns of forms with a complex final syllable are the same as those of tone group B. The forms with Penultimate Shortening are the following:

tu-ká-lile viilyo	
tu-ká-limíite mahaála	tu-ká-tohiidye limbéénde
tu-ká-pílikéene malóóve	tu-ká-pélékediidye valúúme

+ OC:

tu-ká-vi-lile viilyo	
tu-ká-la-limíite mahaála	tu-ká-li-tóhidye limbéénde
tu-ká-la-pílikéene malóóve	tu-ká-va-pélékediidye valúúme

32. NEGATIVE PAST PERFECTIVE *djt*: SC/L - **káll** - (OC) - VB - **ile**

Tone group: D1.

With and without a following object (or adjunct):

tu-ká-liile (viilyo)	
tu-ká-limiite (mahaála)	tu-ká-tohiidye (limbéénde)
tu-ká-pílikeene (malóóve)	tu-ká-pelekediidye (valúúme)

+ OC:

tu-ká-vi-liile (viilyo)	
tu-ká-la-limiite (mahaála)	tu-ká-li-tohiidye (limbéénde)
tu-ká-la-pilikeene (malóóve)	tu-ká-va-pelekedidye (valúúme)

The forms with Penultimate Shortening are the following:

tu-ká-lile viilyo	
tu-ká-limite mahaála	tu-ká-tohidye limbéénde
tu-ká-la-pilikene malóóve	tu-ká-va-pelekedidye valúúme

33. NEGATIVE PRESENT PERFECTIVE 2 *djt*:

SC/L - **ká** - **na** - (OC) - VB - **ile**

Tone group: D1.

With and without a following object (or adjunct):

tu-ká-ná-liile (viilyo)	
tu-ká-ná-limiite (mahaála)	tu-ká-ná-tohiidye (limbéénde)
tu-ká-ná-pilikeene (malóóve)	tu-ká-ná-pelekedidye (valúúme)

The forms with Penultimate Shortening:

tu-ká-ná-lile viilyo	
tu-ká-ná-limite mahaála	tu-ká-ná-tohidye limbéénde
tu-ká-ná-pilikene malóóve	tu-ká-ná-pelekedidye valúúme

34. NEGATIVE OPTATIVE *djt*: SC/H - **na** - (OC) - VB - **e**

Tone group: D2.

With and without a following object (or adjunct):

	tu-náálye (viilyo)
tu-na-líime (mahaála)	tu-na-tóohe (limbéénde)
tu-na-yángáate (vayeéni)	tu-na-kúndáanye (vituúndi)
tu-na-pilikaane (malóóve)	tu-na-pélékeedye (valúúme)

+ OC:

	tu-ná-viilye (viilyo)
tu-na-lá-líime (mahaála)	tu-na-lí-tóohe (limbéénde)
tu-na-vá-yángáate (vayeéni)	tu-na-ví-kúndaanye (vituúndi)
tu-na-lá-pilikaane (malóóve)	tu-na-vá-pélekeedye (valúúme)

The forms with Penultimate Shortening are the following:

tu-na-lime mahaála	tu-nálye viílyo
tu-na-yángate vayeéni	tu-na-tóhe limbéénde
tu-na-pílikane malóóve	tu-na-kúndanye vituúndi
	tu-na-pélékedye valúúme

+ OC:

tu-na-lá-lime(mahaála	tu-ná-vilye viílyo
tu-na-vá-yángate vayeéni	tu-na-lí-tohe limbéénde
tu-na-lá-pílikane malóóve	tu-na-ví-kúndanye vituúndi
	tu-na-vá-pélekedye valúúme

35. NEGATIVE CONDITIONAL/CONCESSIVE *djt*:

SC/L - ka - na - (OC) - VB - e

Tone group: D1.

With and without a following object (or adjunct):

tu-ka-na-liime (mahaála)	tu-ka-naalye (viílyo)
tu-ka-na-yangaate (vayeéni)	tu-ka-na-toohe (limbéénde)
tu-ka-na-pílikaane (malóóve)	tu-ka-na-kundaanye (vituúndi)
	tu-ka-na-pelekedye (valúúme)

The forms with Penultimate Shortening are the following:

tu-ka-na-lime mahaála	tu-ka-nalye viílyo
tu-ka-na-yangate vayeéni	tu-ka-na-tohe limbéénde
tu-ka-na-pílikane malóóve	tu-ka-na-kundanye vituúndi
	tu-ka-na-pelekedye valúúme

36. NEGATIVE SUPPOSITIONAL CONDITIONAL *djt*:

SC/L - ká - na - (OC) - VB - e

Tone group: D1.

With and without a following object (or adjunct):

tu-ká-ná-liime (mahaála)	tu-ká-náalye (viílyo)
tu-ká-ná-yangaate (vayeéni)	tu-ká-ná-toohe (limbéénde)
tu-ká-ná-pílikaane (malóóve)	tu-ká-ná-kundaanye (vituúndi)
	tu-ká-ná-pelekedye (valúúme)

The forms with Penultimate Shortening are the following:

tu-ká-ná-lime mahaála	tu-ká-nalye viilyo
tu-ká-ná-yangate vayeéni	tu-ká-ná-tohe limbéénde
tu-ká-ná-pilikane malóóve	tu-ká-ná-kundanye vituúndi
	tu-ká-ná-pelekedye valúúme

37./38. DIRECT RELATIVE (FAR) PAST PERFECTIVE *djt*:

SC/L - (a) - na - (OC) - VB/s2 - ile

Tone group: E.

DIRECT RELATIVE PAST PERFECTIVE *djt*:

With and without a following object (or adjunct):

tu-na-líile (viilyo)	
tu-na-limiite (mahaála)	tu-na-tohiidye (limbéénde)
tu-na-pilikéene (malóóve)	tu-na-pelékédiidye (valúúme)

The forms with Penultimate Shortening:

tu-na-líle viilyo	
tu-na-limíte mahaála	tu-na-tohíidye limbéénde
tu-na-pilikene malóóve	tu-na-pelékédidye valúúme

DIRECT RELATIVE FAR PAST PERFECTIVE *djt*:

The TM -a- intervenes between the SC and the TM -na-. For the rest, the forms are the same as those of the Direct Relative Past Perfective *djt*. Some examples:

tw-a-na-líile (viilyo)	
tw-a-na-limiite (mahaála)	tw-a-na-tohiidye (limbéénde)
tu-na-pilikéene (malóóve)	tu-na-pelékédiidye (valúúme)

The Direct Relative (Far) Past perfective is also found with the tones of the Indirect Relative (Far) Past Perfective (and vice versa, see there): tone group: D2. Some examples:

tú-ná-líile (viilyo)	
tú-ná-límiite (mahaála)	tú-ná-tóhiidye (limbéénde)
tú-ná-pílikeene (malóóve)	tú-ná-pélekeedidye (valúúme)

+ OC:

tú-ná-ví-líile (viilyo)	
tú-ná-lá-límiite (mahaála)	tú-ná-lí-tóhiidye (limbéénde)
tú-ná-lá-pílikeene (malóóve)	tú-ná-vá-pélekeedidye (valúúme)

39. INDIRECT RELATIVE PRESENT *djt*: PI/L - SC/H - (OC/H) - VB - a

Tone group: D2.

With and without a following object (or adjunct):

pa-tú-líima (mahaála)	pa-túulya (viílyo)
pa-tú-yángáata (vayeéni)	pa-tú-tóoha (limbéénde)
pa-tú-pílikaana (malóóve)	pa-tú-kúndaanya (vituúndi)
	pa-tú-pélekeedya (valúúme)

+ OC:

pa-tú-lá-líima (mahaála)	pa-tú-viílya (viílyo)
pa-tú-vá-yángáata (vayeéni)	pa-tú-lí-tóoha (limbéénde)
pa-tú-lá-pílikaana (malóóve)	pa-tú-ví-kúndaanya (vituúndi)
	pa-tú-vá-pélekeedya (valúúme)

The forms with Penultimate Shortening are the following:

pa-tú-lima mahaála	pa-túlya viílyo
pa-tú-yángata vayeéni	pa-tú-toha limbéénde
pa-tú-pílikana malóóve	pa-tú-kúndanya vituúndi
	pa-tú-pélekedya valúúme

+ OC:

pa-tú-lá-lima mahaála	pa-tú-vilya viílyo
pa-tú-vá-yángata vayeéni	pa-tú-lí-toha limbéénde
pa-tú-lá-pílikana malóóve	pa-tú-ví-kúndanya vituúndi
	pa-tú-vá-pélekedya valúúme

40. INDIRECT RELATIVE NON-PAST *djt*:

PI/L - SC/H - na - (OC) - VB/S1 - a

Tonal Profile: B.

With and without a following object (or adjunct):

pa-tú-na-líima (mahaála)	pa-tú-náalya (viílyo)
pa-tú-na-yángáata (vayeéni)	pa-tú-na-tóoha (limbéénde)
pa-tú-na-pílikaana (malóóve)	pa-tú-na-kúndaanya (vituúndi)
	pa-tú-na-pélekeedya (valúúme)

+ OC:

pa-tú-ná-la-líima (mahaála)	pa-tú-na-viílya (viílyo)
pa-tú-ná-va-yángáata (vayeéni)	pa-tú-ná-li-tóoha (limbéénde)
pa-tú-ná-la-pílikaana (malóóve)	pa-tú-ná-vi-kúndaanya (vituúndi)
	pa-tú-ná-va-pélekeedya (valúúme)

The forms with Penultimate Shortening:

pa-tú-na-líma mahaála	pa-tú-na-lyá viílyo
pa-tú-na-yángata vayeéni	pa-tú-na-tóha limbéénde
pa-tú-na-pílikana malóóve	pa-tú-na-kúndanya vituúndi
	pa-tú-na-pélékedyá valúúme

+ OC:

pa-tú-ná-la-líma mahaála	pa-tú-na-vílyá viílyo
pa-tú-ná-va-yángata vayeéni	pa-tú-ná-li-tóha limbéénde
pa-tú-ná-la-pílikana malóóve	pa-tú-ná-vi-kúndanya vituúndi
	pa-tú-ná-va-pélékedyá valúúme

41. INDIRECT RELATIVE PRESENT PERFECTIVE *djt*:

PI/L - SC/H - (OC/H) - VB - ile

Tone group: D2.

With and without a following object (or adjunct):

pa-tú-líile (viílyo)	
pa-tú-límiite (mahaála)	pa-tú-tóhiidye (limbéénde)
pa-tú-pílikeene (malóóve)	pa-tú-pélekediidye (valúúme)

+ OC:

pa-tú-ví-líile (viílyo)	
pa-tú-lá-límiite (mahaála)	pa-tú-lí-tóhiidye (limbéénde)
pa-tú-lá-pílikeene (malóóve)	pa-tú-vá-pélekediidye (valúúme)

pa-tú-líle viílyo	
pa-tú-límiite mahaála	pa-tú-tóhidye limbéénde
pa-tú-pílikene malóóve	pa-tú-pélekedidye valúúme

+ OC:

pa-tú-ví-líle viílyo	
pa-tú-lá-límiite mahaála	pa-tú-lí-tóhidye limbéénde
pa-tú-lá-pílikene malóóve	pa-tú-vá-pélekedidye valúúme

42./43. INDIRECT RELATIVE (FAR) PAST PERFECTIVE *djt*:

PI/L - SC/H - (a) - ná - (OC/H) - VB - ile

Tone group: D2.

INDIRECT RELATIVE PAST PERFECTIVE *djt*:

With and without a following object (or adjunct):

pa-tú-ná-líile (viílyo)	
pa-tú-ná-límiite (mahaála)	pa-tú-ná-tóhiidye (limbéénde)
pa-tú-ná-pílikeene (malóóve)	pa-tú-ná-pélekediidye (valúúme)

+ OC:

pa-tú-ná-ví-líile (viílyo)	
pa-tú-ná-lá-límiite (mahaála)	pa-tú-ná-lí-tóhiidye (limbéénde)
pa-tú-ná-lá-pílikeene (malóóve)	pa-tú-ná-vá-pélekediidye (val.)

The forms with Penultimate Shortening:

pa-tú-ná-lile viílyo	
pa-tú-ná-límite mahaála	pa-tú-ná-tóhidye limbéénde
pa-tú-ná-pílikeene malóóve	pa-tú-ná-pélekedidye valúúme

+ OC:

pa-tú-ná-ví-lile viílyo	
pa-tú-ná-lá-límite mahaála	pa-tú-ná-lí-tóhidye limbéénde
pa-tú-ná-lá-pílikeene malóóve	pa-tú-ná-vá-pélekedidye valúúme

INDIRECT RELATIVE FAR PAST PERFECTIVE *djt*:

The TM **-a-** intervenes between the SC and the TM **-lna-**. When glide formation affects the SC, the H tone of the SC appears on the **-a-**. For the rest, the forms are the same as those of the Indirect Relative Past Perfective *djt*. Some examples:

pa-tw-á-ná-líile (viílyo)	
pa-tw-á-ná-límiite (mahaála)	pa-tw-á-ná-tóhiidye (limbéénde)
pa-tw-á-ná-pílikeene (malóóve)	pa-tú-ná-pélekediidye (valúúme)

This tense is also found with the tones of the Direct Relative (Far) Past Perfective (and vice versa, see there): tone group: E. Some examples:

pa-tu-na-líile (viílyo)	
pa-tu-na-límiite (mahaála)	pa-tu-na-tohiidye (limbéénde)
pa-tu-na-pílikéene (malóóve)	pa-tu-na-pelékédiidye (valúúme)

+ OC:

pa-tu-na-vi-líile (viílyo)	
pa-tu-na-la-límiite (mahaála)	pa-tu-na-li-tohiidye (limbéénde)
pa-tu-na-la-pílikéene (malóóve)	pa-tu-na-va-pelékédiidye (val.)

44. NEGATIVE INDIRECT RELATIVE PRESENT *djt*:PI/L - SC/H - **ká** - (OC) - VB/S₁ - **a**

Tonal Profile: B.

With and without a following object (or adjunct):

pa-tú-ká-liima (mahaála)	pa-tú-káalya (viilyo)
pa-tú-ká-yángáata (vayeéni)	pa-tú-ká-tóoha (limbéénde)
pa-tú-ká-pílikaana (malóóve)	pa-tú-ká-kúndaanya (vituúndi)
	pa-tú-ká-pélekeedya (valúúme)

+ OC:

pa-tú-ká-la-liima (mahaála)	pa-tú-ká-viilya (viilyo)
pa-tú-ká-va-yángáata (vayeéni)	pa-tú-ká-li-tóoha (limbéénde)
pa-tú-ká-la-pílikaana (malóóve)	pa-tú-ká-vi-kúndaanya (vituúndi)
	pa-tú-ká-va-pélekeedya (valúúme)

The forms with Penultimate Shortening:

pa-tú-ká-lima mahaála	pa-tú-kalya viilyo
pa-tú-ká-yángata vayeéni	pa-tú-ká-toha limbéénde
pa-tú-ká-pílikana malóóve	pa-tú-ká-kúndanya vituúndi
	pa-tú-ká-pélekedya valúúme

+ OC:

pa-tú-ká-la-lima mahaála	pa-tú-ká-viilya viilyo
pa-tú-ká-va-yángata vayeéni	pa-tú-ká-li-tóha limbéénde
pa-tú-ká-la-pílikana malóóve	pa-tú-ká-vi-kúndanya vituúndi
	pa-tú-ká-va-pélékedy valúúme

45. NEGATIVE INDIRECT RELATIVE PRESENT PERFECTIVE *djt*:PI/L - SC/H - **káll** - (OC) - VB/S₁ - **ilé**

Tone group: A.

With and without a following object (or adjunct):

pa-tú-ká-liíle (viilyo)	
pa-tú-ká-limíite (mahaála)	pa-tú-ká-tohiidye (limbéénde)
pa-tú-ká-pílikééne (malóóve)	pa-tú-ká-pélékédiidye (valúúme)

The tone patterns of forms with a complex final syllable resemble those of tone group E.

+ OC:

pa-tú-ká-vi-lííle (viílyo)	
pa-tú-ká-la-límiíte (mahaála)	pa-tú-ká-li-tóhíidye (limbéénde)
pa-tú-ká-la-pílikééne (malóóve)	pa-tú-ká-va-pélékediidye (val.)

The tone patterns of forms with a complex final syllable resemble those of tone group B. The forms with Penultimate Shortening are the following:

pa-tú-ká-líle viílyo	
pa-tú-ká-límiíte mahaála	pa-tú-ká-tohíidye limbéénde
pa-tú-ká-pílikéne malóóve	pa-tú-ká-pélékédidye valúúme

+ OC:

pa-tú-ká-vi-líle viílyo	
pa-tú-ká-la-límiíte mahaála	pa-tú-ká-li-tóhidye limbéénde
pa-tú-ká-la-pílikéne malóóve	pa-tú-ká-va-pélékediidye valúúme

APPENDIX B: TEXTS

- Introduction
- B.1 The Makonde people
- B.2 Story of reclaiming the monkey
- B.3 Preparation of cassava porridge with cassava vegetable
- B.4 Preparation of Likulambila
- B.5 Ten proverbs with short explanations
- B.6 Twelve riddles with short explanations
- B.7 Eleven songs

Introduction

The first text explains the origin of the Makonde people and of the different dialects. The second text is an animal story with songs. Texts 3 and 4 are two accounts of how to prepare common types of food. Then, some proverbs and riddles are given together with brief explanations. Finally, eleven songs are presented which are sung during celebrations such as marriage and initiation.

Each text has an interlinear translation and a free translation. In the interlinear translation, specifiers are preceded by the class number of the noun with which they agree. With verbal forms, the final label identifies the tense, i.e., the combination of the Tense Marker (TM), the Final and the tone pattern; the label is followed by “REL1” or “REL2” in case the verbal form is a Direct Relative or an Indirect Relative, and the label is preceded by “APP”, “ASS”, “NEUT”, “PAS” or “RED” in case the verbal stem contains an applicative, associative, neuter or passive extension, or when it is reduplicated. Tense markers (marked “TM”) and negative markers (marked “NEG”) follow the subject concord and the object concord (if present), which may also be reflexive (marked “REFL”). Subject concords and object concords are marked by their class number. Infinitives (“INF”, “SEC” and “SEQ”) and Imperatives do not have subject concords.

The sound **ng'** represents the velar nasal; in other cases of sounds followed by the symbol ', vowel coalescence/glide formation, liaison or the loss of the final syllable is involved.

The small characters above words indicate tonal processes like Tone assimilation and the Intonational H tone, including intonational lengthening. Both instances of intonational lengthening (**H_e** and **L_e**) are not described elsewhere in this work. The small characters are explained below, following the list of labels.

Labels for grammatical morphemes:

APP	applicative
ASS	associative
COND	Conditional <i>djt</i>
CONN	connexive
DEM1	demonstrative, near
DEM2	demonstrative, far
DEM3	demonstrative, referential
DEM3e	demonstrative, referential, emphatic
FUT1	Future 1 (complex tense 1a)
FUT1.REL1	Direct relative Future 1 (complex tense 1a)
FUT2	Future 2 (compound tense 1a)
IMP	Imperative (without OC)
INF	Infinitive
LOC	locative
NEG	negative marker
NEUT	neuter
NP	Non-Past <i>djt</i>
NPPROG	Non-Past Progressive (complex tense 1c)
NPPROG.REL2	Indirect Relative Non-Past Progressive (complex tense 1c)
OPT	Optative (without OC)
PAPF1	Past Perfective <i>cjt</i>
PAPF2	Past Perfective <i>djt</i>
PAPF.REL2	Indirect Relative Past Perfective <i>djt</i>
PAPROG	Past Progressive (complex tense 1c)
PAPROG.REL2	Indirect Relative Past Progressive (complex tense 1c)
PAS	passive
1PL	1st person plural
2PL	2nd person plural
POSS	possessive
PR	Present <i>cjt</i>
PRPROG1	Present Progressive 1 (complex tense 3b)
PRPROG2	Present Progressive 2 (complex tense 2a)
PR.REL1	Direct Relative Present
PR.REL2	Indirect Relative Present <i>djt</i>
PRPF1	Present Perfective <i>cjt</i>
PRPF2	Present Perfective <i>djt</i>
PRPF.REL1	Direct Relative Present Perfective
PRPF.REL2	Indirect Relative Present Perfective <i>djt</i>
QUES	question word with question intonation
RED	reduplication
REFL	reflexive
SEC	Subsecutive Infinitive <i>djt</i>
SEQ	Sequential Infinitive (complex tense)

1SG	1st person singular
1SGTM	1st person singular incorporated in tense marker
2SG	2nd person singular
SITPF	Situative Perfective <i>djt</i>
SUPCOND	Suppositional Conditional <i>djt</i>
SUPCONDPF	Suppositional Conditional Perfective <i>djt</i>
TM	tense marker

Tone labels above words:

- Hi** above a sound with a H tone indicates an intonational H tone without which the sound should have a L tone.
- Hn** above a sound with a H tone indicates that the H tone is due to the H tone of the following nasal, or, as found once (text B4), to the H tone of the following vowel; in case the sound is a nasal itself, the H tone is due to a preceding vowel with a H tone (Tone assimilation, without which the sound should have a L tone).
- Hc** above a sound with a H tone indicates that the H tone is due to a coalescence with a preceding vowel with a H tone, or to a coalescence of the vowel of the following OC (which should have a H tone) with the vowel-initial stem, or to prenasalization of the following OC which should have a H tone (OC-H tone retraction). Without these coalescences, the sound should have a L tone.
- He** above a sound indicates intonational lengthening of the preceding sound with a H tone; the lengthening also has a H tone.
- H-** above a sound indicates the raising of a L tone to the level of a lowered H when followed by a sequence of HH or HL in the same syllable (Tone assimilation).
- Le** above a sound indicates intonational lengthening of the preceding sound with a H tone; the lengthening has a L tone.
- Li** above a sound with a L tone indicates an intonational L tone without which the sound should have a H tone, due to utterance-final register lowering.
- Hi-Li-Hi** indicates question intonation: a final HLH tonal sequence occurs instead of the original (L)RL tonal sequence.

B.1 The Makonde people

litáawa lyá-chimákóonde.

ethnic group CONN-Makonde nature
The Makonde people.

vamákoonde, litáwá lyavo liheleke chíláambo

Makonde people ethnic group POSS5 5.come from.PRPF1 country
The Makonde people, their ethnic group has come from a country

chá-kulééhu, kupítá pá-ng'áambo. ánéekó kuvátándilike

CONN-far 15.pass.INF LOC-other side DEM3 17.2.begin.PRPF.REL2
far away, farther than Mozambique. It was where they started

kwikálá véene, vámakonde vatándi vá-chínyákaala.

15.live.INF themselves Makonde people first CONN-old nature
to live themselves, the first Makonde people of the past.

paváúki' ánéekó váníhwená nkutándilíká kwikálá

16.2.go away.PRPF.REL2 DEM3 2.TM.go.PAPF2 18.15.begin.SEQ 15.live.INF
When they went away from there, they started to live

pá-ng'áambo. akuulá vánímahikáná muchi vaméeto,

LOC-other side DEM2 2.TM.be known.PAPF2 as Meto people
in Mozambique. There, they were known as Meto people,

nkwikálá mwitéepa mwá-pa-ng'áambo na-tanganyíika. akuulá

18.15.live.SEQ corner CONN-LOC-other side and-Tanzania DEM2
and they lived in the corner of Mozambique with Tanzania. There

vamahikene muchi vamátáambwe. vamátáambwe, liná lyaávo

2.be known.PRPF1 as Matambwe people Matambwe people name POSS5
they are known as Matambwe people. The Matambwe people got their name

valipete íng'anya yá-litaambwe, lichív' ánéeko

2.5.get.PRPF1 cause CONN-haze 5.TM.be.PAPROGDEM3
because of the haze, which was there

kuváchíikaála. paváikele mwánda nnéhu kadiiki,

17.2.TM.live.PAPROG.REL2 16.2.live.PRPF.REL2 time long a bit
where they were living. When they had lived there for quite a long time,

nkuhwéná kú-máchíinga, nkumáhikáná muchi vámakonde

18.15.go.SEQ LOC-mountains 18.15.be known.SEQ as Makonde people
they went to the mountains, and they were known as Makonde

vá-pa-ng'áambo. vámakóonde, liná lyaávo valipete íng'anya

CONN-LOC-other side Makonde people name POSS5 2.5.get.PRPF1 cause
of Mozambique. The Makonde people got their name because

yá-kwíkálá pá-mákóonde, pachínú pahóva méédi.
 CONN-15.live.INF LOC-dry areas place 16.lack.PR.REL1 water
 of living in a dry area, a place which lacks water.

akuulá ing'óondo yá-vili yá-chilámbo p'inákámweele,
 DEM2 war CONN-two CONN-world 16.9.TM.arrive.PAPF.REL2
 When the second world war had started there,

nk'úká pá-ng'ámbo, nkutúkútilá mwítepa
 18.15.go away.SEQ LOC-other side 18.15.run.APP.SEQ corner
 they went away from Mozambique and ran to the corner

mwá-tanganyika ku-machiinga, nkulipiha. paváikele
 CONN-Tanzania LOC-mountains 18.15.REFL.hide.SEQ 16.2.live.PRPF.REL2
 of Tanzania to the mountains and hid themselves. When they had lived

Hc

ku-machiinga, nkuhwéná pá-nníma, nkulék' uválicheema
 LOC-mountains 18.15.go.SEQ LOC-height 18.15.leave.SEQ 3.2.REFL.call.PR.REL2
 in the mountains, they went to a high area, and they left while calling themselves:

Hn

hwééetu tu-vánníma. na-alalá machiinga nkuléká uváchéema
 we 1PL-Nnima people and-DEM2 mountains 18.15.leave.SEQ 3.2.call.PR.REL2
 we are Nnima people. And they left, calling those mountains

machinga lá-chimákóonde. machingá léne alaala lá-ku-ndaanda,
 mountains CONN-Makonde nature mountains self DEM2 CONN-LOC-Ndanda
 Makonde mountains. Those mountains themselves consist of the Ndanda mountains,

Hn

na-lá-ku-nkúdúumba, na-lá-ku-nníma. hwééetu tu-vánníma,
 and-CONN-LOC-Nkudumba and-CONN-LOC-Nnima we 1PL-Nnima people
 the Nkudumba mountains and Nnima mountains. We are Nnima people,

Hc

tuvelé na-avéetu vá-chimákonde chá-chindóonde.
 1PL.be.PRPF1 with-companions.POSS1PL CONN-Makonde CONN-Ndonde
 we have our Makonde-Ndonde companions.

Hn

vaikalá n-nyenje mwá-pa-ng'ámbo, pépi na-ku-luúuma.
 2.live.PR LOC-aside CONN-LOC-other side near and-LOC-Ruvuma
 They live along the border with Mozambique, near the Ruvuma.

Hc

vavachema vándóonde. liná lyaávo valipete ing'anya yá-lína
 2.2.call.PR Ndonde people name POSS5 2.5.get.PRPF1 cause CONN-name
 They call them Ndonde people. They got their name because of the name

lyá-ndóónde. ánéeyó vachema ndóónde:

CONN-Ndonde DEM3 2.call.PR Ndonde:

Ndonde. This is what they call Ndonde:

méédi paláúmbala n-nuhúndé lwa-luúuma, nkupúlúng’anya
 water 16.6.be full.PR.REL2 LOC-river CONN-Ruvuma 18.15.increase.SEQ
 when the river Ruvuma is full of water, it becomes more and more

nkuhwiká kúválímite mawéelu, nkwikálá
 18.15.arrive.SEQ 17.2.cultivate.PRPF.REL2 fields 18.15.stay.SEQ
 and it reaches where they have cultivated the fields, and it stays there

^{Hc}
mádúúva kadiiki, nkulék’ uláuuya. na-upóopó tuvelé
 days a bit 18.15.leave.SEQ 3.6.return.PR.REL2 and-DEM3e 1PL.be.PRPF1
 for some days, and it leaves while returning. And we also have

na-avéetu váanji vá-chimákóonde, vavachema vamálaaba
 with-companions.POSS1PL other CONN-Makonde 2.2.call.PR Maraba
 our other Makonde companions, they are called Maraba people.

^{Hn}
vaikalá n-nyenje mwá-médi makúlúungwa, kumangá kweétu.
 2.live.PR LOC-aside CONN-water big coast POSS17
 They live along the ocean, along our coast.

matangodi laávo lanilékanila na-lá-chimákonde
 speech POSS6 6.TM.be different.PRPF2with-CONN-Makonde nature
 Their speech is different from the Makonde-

^{Hn} ^{Hc}
chá-chínniima na-lá-chimákonde chá-chíndóonde.
 CONN-Nnima nature and-CONN-Makonde nature CONN-Ndonde nature
 Nnima speech and from the Makonde-Ndonde speech.

vanááng’o, malóóve lóóhe vakundanidyé na-chiswahiili.
 they words many 2.mix.APP.PRPF1 with-Swahili
 They, they mix many words with Swahili.

^{Hc}
matangoódi lá-vándóonde lakálekánile námeéne
 speech CONN-Ndonde people 6.NEG.be different.PRPF1 very
 The speech of the Ndonde people is not very different

^{Hn}
na-lá-chimákonde chá-chínniima. tulekanii’-chi lilóve
 with-CONN-Makonde nature CONN-Nnima nature 1PL.differ.APP.PR-only word
 from the Makonde-Nnima speech. We only differ in

^{Hn} **limoliímo.** ^{Hc} **ánéepo váńńiima na-vándóonde na-vamáláaba**
 one.RED DEM3 Nnima people and-Ndonde people and-Maraba people
 one single word. So, if the Nnima people and the Ndonde people and the Maraba
tukahimáana, tunamalaána.
 1PL.TM.meat.COND 1PL.TM.know.ASS.NP
 people meet, we are familiar with each other.

B.2 Story of reclaiming the monkey

^{Hi}
ntaánó wa-kulóngáná língwéele.
 story CONN-15.reclaim.INF monkey
 Story of reclaiming the monkey.

machédó paalá pavele múúnu na-ndyáawe, nkulángá
 last year DEM2 16.be.PRPF1 person and-wife.POSS1 18.15.confine.SEQ
 Some time ago, there was a man and his wife, and they kept in confinement

^{Li}
língwele livé' na-michííla miviili. uhííku ukáácha,
 monkey 5.be.PRPF.REL1 with-tails two night 14.TM.dawn.COND
 a monkey which had two tails. During the night,

^{Hn}
vanáńchimiíla n-chitúúndu. lisííku líímo nnúúme apité
 2.TM.1.shut.APP.NP LOC-enclosure day one man 1.pass.PAPF1
 they lock him up in the enclosure. One day, the man went

^{Hc} ^{Li} ^{Hi}
mwáánda nnééhu unách'oonga. amuúnó n-nyuuma wá-chimááhe
 journey long 3.TM.TM.stroll.NPPROGDEM1 LOC-back CONN-female
 on a long, strolling journey. Meanwhile the woman

nkúchí ndambel' ulíngá kadiíki kulíchímulila língwéele,
 18.15.say.SEQ 1SG.want.PR 15.try.INF a bit 15.5.open.APP.INF monkey
 said: I want to try to give the monkey some freedom,

aongé kadíki pa-wéelu. nkúchí anawáláwaála,
 1.walk.OPT a bit LOC-field 18.15.say.SEQ 1.TM.get lost.NP
 he may take a short walk outside. That is to say, the monkey gets lost

Hi

akanchimúlíla lingwééle; linidáng'ilá au nnándí
 1.TM.1.open.APP.COND monkey 5.TM.leap.APP.PRPF2 DEM1 tree
 if she releases the monkey; he has lept from tree

Hi Hn

au nnándí lingwééle nkuwáláwáála, mwáanda wá- m' mihíítu.
 DEM1 tree monkey 18.15.get lost.SEQ journey CONN-LOC-thickets
 to tree, and the monkey got lost, on his journey in the dense thickets.

Hi

ku-mihíítu kwápiité, ahimené na-avááke.
 LOC-thickets 17.1.pass.PRPF.REL2 1.meet.PRPF1 with-companions.POSS1
 In the thickets which he passed, he has met his companions.

H- Hn Li

aáyu mmááhe, aveénkútáhá lingwééle, akámwoona.
 DEM1 woman 1.be.18.15.look for.PRPROG1 monkey 1.NEG.1.see.PR
 This woman is looking for the monkey, but she doesn't see him.

na-nnúúme mwandá waáke wánápiite, aníuúya. akahwééna
 and-man journey POSS1 3.1.TM.PAPF.REL2 1.TM.return.PRPF2 1.TM.go.COND
 And the man has returned from his journey which he had made. When he goes

Li Hc

ku-chitúúndu chá-lingwééle, lingwé' lyaáke akályoona. nkúmudya
 LOC-enclosure CONN-monkey monkey POSS1 1.NEG.5.see.PR 18.15.1.ask.SEQ
 to the enclosure of the monkey, he doesn't see him. And he asked

Hi-Li-Hi

ndyáawe ndyáangu lingwélé lyaángu livé' kwáachi.
 wife.POSS1 wife.POSS1SG monkey POSS1SG 5.be.PRPF1 where.QUES
 his wife: my wife, where is my monkey?

mmááhe nkúchí ndyaangu nááangu, ngutúmídilé
 woman 18.15.say.SEQ husband.POSS1SG I 1SG.use.PAPF1
 The woman said: my dear husband, I was

Li

úvéelu. nníliinga kulíchímúlilá aongé kadiiki pa-weelu,
 stupidity 1SG.TM.PAPF2 15.5.open.APP.INF 1.walk.OPT a bit LOC-field
 stupid. I had tried to release him so he that may take a short walk outside,

Hi

viínó, nikámwóona. nnúúme nkúchí litahe lingwééle,
 now 1SG.NEG.1.see.PR man 18.15.say.SEQ 5.look for.IMP monkey
 now, I don't see him. The man said: look for the monkey,

Li

ulyoóne, tuuchí-tupatane úlómbí weetu.
 2SG.5.see.OPT 1PL.TM-1PL.come to terms.FUT2 marriage POSS1PL
 you should find him, then we will come to terms in our marriage.

Hi Hi

ukanampaaté, na-wáaáko unawalawaálá, chiliwélewele
 2SG.TM.NEG.1.get.COND and-you 2SG.TM.get lost.NP 7.5.get lost.PRPF.REL2
 If you don't get him, yeah you, you will get lost like my monkey has got lost.

Hn

lingwélé lyaángu. mmááhe nkuúúka, mwáánda kúntaha
 monkey POSS1SG woman 18.15.go away.SEQ journey 15.1.look for.INF
 The woman went away on a journey to look for

Li

lingwele lyá-michíla miviili. anihwena mwánda nnéehu,
 monkey CONN-tails two 1.TM.go.PRPF2 journey long
 the monkey with two tails. She went on a long journey,

nkuhímáná na-likúndi lyá-mangwééle. mmááhe nkuímbá lúhíímu
 18.15.meet.SEQ with-group CONN-monkeys woman 18.15.sing.SEQ song
 and she met a group of monkeys. And the woman sang a song:

lingwéle liva tááti
lingwéle liva tááti
 monkey 5.be.PR father
 Monkey of father

michíla mivíli tááti
 tails two father
 two tails, father

nchíla úmó tááti
 tail one father
 one tail, father

nkuítíkííla:
 18.15.answer.SEQ
 and the monkeys answered:

loola nchíla úmó loola
loola nchíla úmó loola
 look.IMP tail one look.IMP
 look, one tail, look!

lingwéle liva tááti
lingwéle liva tááti

michíla mivílí tááti
nchíla úmó tááti

nkuítíkííla:

loola nchíla úmó loola
loola nchíla úmó loola, lóla-yó
loola nchíla úmó loola
loola nchíla úmó loola

Hi Hc

mmáhé pá'wéene pa-likúndi nanga lingwéle lyá-michíla
 woman 16.1.see.PRPF.REL2 LOC-group none monkey CONN-tails
 When the woman saw the group, there was no monkey with two tails,

miviíli, nkuúúka nkuhwéná muuyo. aníhwena mwáánda
 two 18.15.arise.SEQ 18.15.go.SEQ front 1.TM.go.PRPF2 journey
 and she arose and went forward. She has gone on a long journey,

nnééhu, nkuhímáná na-likúúndi línji lyá-mangwééle. mmááhe
 long 18.15.meet.SEQ with-group other CONN-monkeys woman
 and she met another group of monkeys. And the woman

nkuímbá kavííla
 18.15.sing.SEQ again
 sang again:

lingwéle liva tááti;	lingwéle liva tááti
michíla mivílí tááti;	nchíla úmó tááti

nkuítíkííla:

loola	michíla	mivílí	loola;
loola	michíla	mivílí	loola
look.IMP	tails	two	look.IMP
look, two tails, look!			

lingwéle liva tááti;	lingwéle liva tááti
michíla mivílí tááti;	nchíla úmó tááti

nkuítíkííla:

loola michíla mivílí loola;	loola michíla mivílí loola, lóla-yó
loola michíla mivílí loola;	loola michíla mivílí loola

nkuhólóká	lingwéele	lyá-michíla	miviíli,	nkúnkamuúlá,
18.15.come out.SEQ	monkey	CONN-tails	two	18.15.1.seize.SEQ
And the monkey with two tails came out, and she seized him,				

Hn Hi Hi
nkú m'pelekedidyá ndyáawé, uloómbi viíno mmííhi.
 18.15.1.send.APP.SEQ husband.POSS1 marriage now unripe
 and sent him to her husband, their marriage is now like in the beginning.

B.3 Preparation of cassava porridge with cassava vegetable

chivátéleka ntandasa n-chínduúli.
 7.2.cook.PR.REL2 porridge LOC-vegetable
 How to (they) cook porridge (cassava flour) with vegetable (cassava leaves).

Le
ánéépóo unatandilíká utwálá chínduúli, nkuhéépa
 DEM3 2SG.TM.begin.NP 15.take.INF vegetable 18.15.pluck.SEQ
 Now then, you begin by taking the vegetable plant and pluck the leaves

nahóóti nkuvíká' pa, viíno unakumbanya moóoto pa-chiúúli,
 first 18.15.put.SEQ DEM1 now 2SG.TM.kindle.NP fire LOC-fireplace
 first, and put them here, now you kindle a fire at the fireplace,

Hi Li
nkuvíká méedí, ulápata mooto. ánéépó viíno,
 18.15.put.SEQ water 3.6.get.PR.REL2 fire DEM3 now
 and put water there while getting fire. Now then,

uponde máháámba' lá, lá-chínduúli. lakapondéeka,
 2SG.pound.OPT leaves DEM2 CONN-vegetable 6.TM.pound.NEUT.COND
 you should pound those leaves, those of the vegetable. If they are pounded,

unataáya m-méédi, l'uviki' pa-chiúúli. ánéépó
 2SG.TM.put in.NP LOC-water 6.2SG.put.PRPF1 LOC-fireplace DEM3
 you put them into the water which you have put at the fireplace. Then,

Hi
laikalá kadiiki, ánéépó kóka utay' úhuumbwé na-múúnyu.
 6.stay.PR a bit DEM3 then 2SG.put in.OPT coconut milk and-salt
 they stay there for a while, now then, you should put into it coconut milk and salt.

Li
vinó chileeke kadiiki chínduúli, chitokoté kadiiki.
 now 7.leave.IMP a bit vegetable 7.be boiled.OPT a bit
 Now leave the vegetable for a while, it should be boiled for a while.

kóka uteuúle, ánéépó vínó chínduúli,
 then 2SG.take off fire.OPT DEM3 now vegetable
 Then you should take it off the fire, now then the vegetable's

chinimáliliika kutókóóta. nkulilá ntandaasa.
 7.TM.complete.NEUT.PRPF2 15.be boiled.INF 18.15.eat.APP.SEQ porridge
 boiling is completed. And then it is ready to be eaten with porridge.

viíno ndambetéléká ntandaasa vitukútuku vilembéléewa.
 now 1SG.want.cook.FUT1 porridge things 8.want.PAS.PR.REL1
 Now I will cook porridge, the things which are necessary to do that.

Hi-Le

chínú chitáandi, utandilika utípú' úuhúu nkuvíika.
 thing first 2SG.begin.PR 15.pound.INF flour 18.15.put.SEQ
 The first thing, you begin to pound flour and put it there.

Le

nkukúmbányá móoto pa-chiúúli, nkuviká méédi. médí ánelóo,
 18.15.kindle.SEQ fire LOC-fireplace 18.15.put.SEQ water water DEM3
 And you kindle a fire at the fireplace, and put water on it. That water,

liinda layaukiíle, kóoka upungule méédi kadiiki,
 wait.IMP 6.boil.OPT then 2SG.diminish.OPT water a bit
 wait, it should boil, then you should diminish the amount of water,

ulekelé kadiiki. ánéépó taya úúhu. utwale lúúko,
 2SG.leave.APP.OPT a bit DEM3 put in.IMP flour 2SG.take.OPT spoon
 you should leave it there for a while. Now then, put flour in the water. You should take a spoon,

Hi

upindikulaanyé. viíno ukapindikulaanyá, unaóná
 2SG.stir up.OPT now 2SG.TM.stir up.COND 2SG.TM.see.NP
 you should stir it up. Now if you stir it up, you see

uvenkukááma. ánéépó viíno, unitókoóta.
 14.be.18.15.curdle.PRPROG1 DEM3 now 14.TM.be boiled.PRPF2
 it is getting curdled. Now then, it is boiled.

uteuli' mu-nkúungu. na-chínduúli na-chinááng'o,
 14.serve food.APP.IMP LOC-deep dish and-vegetable and-the same
 Serve it in a deep dish. And the vegetable likewise,

Hn Hi

tayá nkungu úúnji. ánéépó viíno, ntandaasá na-chínduúli,
 put in.IMP deep dish other DEM3 now porridge and-vegetable
 put it in another deep dish. Now then, the porridge and vegetable,

iilyá chiihi.
eat.IMP just
just eat it!

B.4 Preparation of Likulambila

chivátéleka likulambíla.
7.2.cook.PR.REL2 Likulambila
How to cook Likulambila (rice with watery pumpkin).

vínó apánó nikuhaila chivátéleeka chínú chíinji,
now DEM1 1SG.2SG.tell.APP.PR 7.2.cook.PR.REL2 thing other
Now then, I tell you how to cook something else

vachema líkulámbíla. vateleka véene, angáá-vívi,
2.call.PR Likulambila 2.cook.PR themselves folk-ancestor
called Likulambila. They themselves already cooked it,

Hn

vá-chimákonde chá-chííníma. likulambila utwala
CONN-Makonde nature CONN-Nnima nature Likulambila 2SG.take.PR
the Makonde-Nnima ancestors. As for the Likulambila, you take

Hi Hn

likong'wé nkukwáánga. ukakwáánga, ukumbanya
watery pumpkin sp. 18.15.peel.SEQ 2SG.TM.peel.COND 2SG.kindle.PR
a Likong'we and peel it. If you peel, you kindle

móoto nkutwálá nkuvíká pá-chíúúli, líkáavankutókóóta,
fire 18.15.take.SEQ 18.15.put.SEQ LOC-fireplace 5.NEG.be.18.15.boil.PRPROG2
a fire and take the Likong'we and put it at the fireplace, but it is not being boiled yet,

Hn

utwala nnyéle wá-m'punga nkutááya. pa-chíúúli
2SG.take.PR rice CONN-rice plant 18.15.put in.SEQ LOC-fireplace
you take rice-grain and put it in a cooking pot. At the fireplace,

Hi Hn

línji likoóng'we, utaya muúha mwá-nnyéle n-chiloóongo,
other Likong'we 2SG.put in.PR top CONN-rice LOC-cooking pot
you put another Likong'we on top of the rice in the cooking pot,

Hi

nkulíndá kadiiki, chitokoóte. ánéépó viino palila móotó
 18.15.wait.SEQ a bit 7.be boiled.OPT DEM3 now put above.IMP fire
 and wait for a while, it should be boiled. Now then, put the fire

Hi

muhá mwake chiloóongo. ánéépó vínó uusa, initókoóta. viínó
 top POSS18 cooking pot DEM3 now take.IMP9.TM.be boiled.PRPF2now
 above the cooking pot. Now then, take off the fire, it has been boiled. Now

Hn

twalá likong'we livákwangiile. uviké n-chilóongo.
 take.IMP Likong'we 5.2.peel.PRPF.REL22SG.put.OPT LOC-cooking pot
 take the Likong'we which has been peeled. You should put it in the cooking pot.

utaleéke, unalyóná ulítókoóta. ánéépó viino
 2SG.cook.OPT 2SG.TM.5.see.NP 3.5.be boiled.PR.REL2 DEM3 now
 You should cook it, you see it while being boiled. Now then,

Hc

Li

taay' úhuumbwe. utokoté kadiiki, uteuule.
 put in.IMP coconut milk 14.be boiled.OPT a bit 2SG.take off fire.OPT
 put in the coconut milk. It should be boiled for a while, then take it off the fire.

Hi

Hn

Hi

Hn

viínó twalá nkungú, uteulilé imándá' ai.
 now take.IMP deep dish 2SG.serve food.APP.OPT rice DEM1
 Now take a deep dish, and serve this cooked rice in it.

Hi

LiLi

Hi

na-imboówá utaáye na-inaang'o. viínó iilyá chiihi.
 and-vegetable 2SG.put in.OPT and-the same now eat.IMP just
 And the vegetable, you should put it in likewise. Just eat now!

B.5 Ten proverbs with short explanations

malonjeédi.
 proverbs.

1.

kupaswiik' ing'úuva.
 17.be burst.PRPF.REL1 lightning
 Where the lightning has burst.

Hi

kwátóngola nnuúngu kutónyá ímbúúla, umaálé chihuúku.
 17.1.speak.PR.REL2 god 15.rain.INF rain 2SG.know.OPT rainy season
 Where God speaks rain will fall, you should know there is the rainy season.

2.
paimídúle nnándí mwúva.
 16.stand.PRPF.REL1 tree thorn
 Where a thorn tree stands.

vaánu vaámo, váanji vava mávéelu, váanji valimwúike.
 people one others 2.be.PR mischievous others 2.respect.PRPF.REL1
 People are one, some are mischievous, others behave with respect.

3.
likaváála yoota.
 5.TM.shine.COND bask.IMP
 If the sun shines, bask in it!

Hi

apaánó pa-chilaámbo muwóonga, ukayakúula chíinu,
 DEM1 LOC-country 18?.walk.INF 2SG.TM.carry.COND thing
 When walking here in the country, if you carry something,

Hi

unalákáleele, madeéngó lanáhoóva.
 2SG.NEG.neglect.OPT work 6.TM.get lost.NP
 you should not neglect it, otherwise the work gets lost.

4.
chikúlúungwa chitúúta.
 big rubbish heap
 Big is the rubbish heap.

Hi

muúnú akávakáméke vakúlúngwá vaáke, paláńkodya
 person 1.NEG.2.recognize.PRPFelders POSS1 16.6.1.meet.PR.REL2
 A person who does not recognize his elders, when having to face
makúlúungwa, unamwoóna.
 big 2SG.TM.1.see.NP
 big problems, you will see him getting into trouble.

5.
chilakéléé' ímbúúla chikáténdeke na-liime.
 7.neglect.PRPF1.REL1 rain 7.NEG.do.NEUT.PR with-dew
 Which is omitted by the rain can not be done by the dew.

Hi

muúnú wahiwóóhe akápílikana malóóve lá-vakúlúngwá vaáke,
 person every 1.NEG.hear.PR words CONN-elders POSS1
 Whatever person does not hear the words of his elders,

nanga yúunji ambéñnyuluúla.
 no other 1.want.1.be able.FUT1.REL1
 there is nobody else who will get control over him.

6.

chá-véene chiyoope.
 CONN-themselves 7.fear.IMP
 Thing of themselves, fear it!

Hi

chiínú chohechóhe chikákuvándúke, chilolele chihi
 thing every 7.NEG.2SG.concern.PRPF1 7.look.APP.IMP only
 Everything which does not concern you, look at it only from

kulééhu. nkóoko ayohé ámwálalá ñkokó muúnu.
 far animal 1.frighten.OPT 1.1.kill.PR.REL1 animal person
 a distance. An animal should frighten the one who kills the animal: a human being.

7.

onga mwá-weéka alinowel' útúkúúta.
 stroll.IMP CONN-alone 1.REFL.be proud.APP.PR 15.run away.INF
 Stroll alone, he is proud to run away.

p'úwóonga m-madiila, unalínówele anáng'ala
 16.2SG.stroll.PR.REL2 LOC-paths 2SG.NEG.REFL.be proud.APP.OPT uncle
 When you stroll on paths, you should not be proud that the uncle is yours

váako na-atátaáko. linowele ding'anó dyaáko,
 POSS2SG and-father.POSS2SG REFL.be proud.APP.IMP intellect POSS2SG
 and that someone is your father. Be proud of your own intellect,

wonge námene na'-váako pa-chilaámbo.
 2SG.stroll.OPT very and-companions.POSS2SG LOC-country
 you should stroll often with your companions in the country.

8.

náñnúume mpíni w'imbeédo p'úlumuuka,
 full grown man handle CONN-axe 16.1.break.PR.REL2
 When a full grown man breaks the handle of an axe,

mpaváyáaha, Hn Hi
 nánnúume muúnú wa-kuhúúva.
 ?.16.2.throw away.PR.REL2 full grown man person CONN-15.have problems.INF
 and when they throw it away, the full grown man is a person in trouble.

nnúme	wohewóóhe	avé'	na-madeéngo,	na-madéngó	ntííma,
person	every	1.be.PRPF1	with-work	and-work	heart
Everyone has work, and work is heart,					

ukánaave na-ntíima, madéngó ukáláhúlúula,
2SG.TM.NEG.be.SUPCOND with-heart work 2SG.NEG.6.be able.PR
if you had no heart, you would not be able to work;

unaava	muchì	mpíni	upaswíike,	valeeká-chi
2SG.TM.be.NP	like	handle	3.be split.PRPF.REL1	2.leave.PR-only
you are like a handle which is split, they just leave it				

ukú-nyíítu, nk'úyá na-imbédó wéeka.
 ?LOC-thicket 18.15.return.SEQ with-axe alone
 in the thicket, and return with the axe on its own.

9. **chikapele** **mw-ilaánga,** **tukániheépa.**
 7.TM.bear fruit.SUPCOND PF LOC-wasteland 1PL.TM.TM.pluck.SUPCOND
 If it would bear fruit in the wasteland, we would pluck it.

Hi

chiínú	chohechóhe	chá-mw-ilaंगा	ukáyúuwa,
thing	every	CONN-LOC-wasteland	2SG.NEG.ask for.PR
Anything of the wasteland you do not ask for,			

chivéle **pa-kááya** **unayuúwa.**
7.be.PRPF.REL1 LOC-homestead 2SG.TM.ask for.NP
you will ask for what is at home.

10. Hn
akápilikana unániduma mpátfila.
 1.NEG.hear.PR 2SG.TM.1I.rebuke.NP big bag
 You rebuke a deaf person for being a big bag.

Hi

mwána wá-chimááhe	akápílikana	malonjeédi	lá-vákúlúngwá	vaáke
child	CONN-female	1.NEG.hear.PR	sayings	CONN-elders
A girl does not hear the sayings of her elders,				

kunáńduma kwíkútá chítúúmbo.
 15.TM.1.rebuke.SEC 15.be pregnant.INF embryo
 rebuking her for being pregnant.

B.6 Twelve riddles with short explanations

nachííhe. **nachíláawa.**
 (I ask) a riddle! (I give) the solution!

1.
imuúka tumwálóote nnuúngu. kutípúúla.
 awake.IMP 1PL.1.point.OPT god 15.pound.INF
 Wake up, let us point at God. To pound.
uhíku ukáácha, vá-pa-chimááhe madéngó makúlúungwa
 night 14.TM.dawn.COND CONN-LOC-female work big
 At dawn, the big work for the women is
kutípúúla, vá-váana vaalyé ntandaasa. patútípuula
 15.pound.INF CONN-children 2.eat.OPT cassava porridge 16.1PL.pound.PR.REL2
 to pound, the children should eat cassava porridge. When we pound,
mwííhi tulodya muúha.
 pestle 1PL.be directed towards above
 we direct the pestle towards the sky.

2.
nnyumbaila nkáliwélééle. utoóhi.
 2PL.limp.PR 2PL.NEG.REFL.kill.PRPF1 chicken droppings
 You limp, you have not hurt yourself. Chicken droppings.
ukalyóóna wááako uvelé na-chiínu, unaléeke
 2SG.TM.5.see.COND you 2SG.PRPF1 with-thing 2SG.NEG.leave.OPT
 If you see you have something, you should not leave
chihwéní ch'úvélekwiidye, nkúvá muchi ukadembe
 gait 7.2SG.be born.PRPF.REL2 18.15.be.SEQ like 2SG.step in.PRPF1
 the gait with which you were born, to be as if you had stepped into
máávi, aváako vaachí-vakutiile.
 excrements companions.POSS2SG 2.TM-2.2SG.run away.FUT2
 excrements, your companions will run away from you.

3.

ngwá' ^{Hn} **ńkulílóola.** **lihiichi.**
 (sound of) stubbing 18.15.REFL.look at.SEQ stump
 Stub, and look at oneself. Stump.

^{Hi}
p'útéenda **chiínú** **chohechóóhe** **apánó** **pa-chilaámbo,**
 16.2SG.do.PR.REL2 thing every DEM1 LOC-land
 When you do anything here in the country,

unalúváliile **n-nyuúma** **m'úhéleeke,**
 2SG.NEG.forget.OPT LOC-back 18.2SG.come from.PRPF.REL2
 you should not forget where you have come from,

unalóole **chiihi** **méhó** **muuyo.**
 2SG.NEG.look.OPT only eyes front
 you should not only look ahead.

4.

chindóóla' **achi.** **chitánóóno.**
 7.1SG.look.PR.REL2 DEM1 small hole
 This thing that looks at me. Window.

muúnu **wohewóóhe** **unaachi** **p'ákúlóola,** **akulolá**
 person every 2SG.TM.say.NP 16.1.2SG.look.PR.REL2 1.2SG.look.PR
 Anyone you say that when he looks at you, he looks at you

ukátápáála, **avelé** **na-láake** **muunda.**
 15.be good.INF 1.be.PRPF1 with-POSS2SG inside
 nicely, he hides something.

5.

chivákáhinikiila. **chihíima.**
 7.2.NEG.cover.APP.PR.REL2 well
 What they do not cover. Well.

méého **naanga** **chikálóola** **panúng'a** **chihekéléenge,**
 eyes no 7.NEG.look.PR 16.stink.PR.REL1 7.be dirty.PRPF.REL1
 The eyes, there is really nothing that looks at the place where it stinks badly,

méého **kulóóla.**
 eyes 15.look.INF
 the eyes only look.

6.

padéenge wá-nanjípi pa-nnaángo. ntíkúúlo.
 padenge CONN-short LOC-door padlock
 The short Padenge at the door. Padlock.

ukaikódya ing'áande vachimile vén' ing'áande,
 2SG.TM.9.meet.CONDhouse 2.shut.APP.PRPF1 owners house
 If you come upon a house the owners have closed,

^{Hn}**ikalá ñ-núpéénu, uvaliinde** ^{Hc}**vén' ing'áande vachumuúle,**
 stay.IMP LOC-verandah 2SG.2.wait.OPT owners house 2.open.OPT
 stay at the verandah, you should wait for the owners to open it,

^{Hc}**kóka vakuháúlife idá' ng'áande.**
 then 2.2SG.tell.APP.OPT come.IMP house
 then they should tell you: come in.

7.

váán' ámbáángo vakimbila chíhúko chiímo. dihomeélo.
 children wild pigs 2.drink.PR pool one beams
 The young wild pigs drink from one pool. Roof beams.

^{Hn}**angáá-víivi vá-chíínníima vavélé na-káya itumbwúle,**
 folk-ancestor CONN-Nnima nature 2.be.PAPF1 with-homestead 9.be big.PRPF.REL1
 The Nnima ancestors had a big homestead,

vaánu vaava vóóhe, angáá-táata, angáá-mááma na-udúkúulu.
 people 2.be.PR many folk-father folk-mother and-grandchild
 the people are many, fathers, mothers and grandchildren.

pavátéleka chákuulya, vá-chimááhe vanachémana vahivóóhe,
 16.2.cook.PR.REL2 food CONN-female 2.TM.call.ASS.NPall
 When they cook food, the women call everybody together,

nkúlyá paámo muchi miláandi mw-isúngula ing'áande.
 18.15.eat.SEQ together like trees LOC-pole house
 and they eat together like the beams in the roof of the house.

8.

Hi

mwana waangu p'avélekwidyé npindo nnéehu.
 child POSS1SG 16.1.be born.PRPF.REL2 piece of cloth long
 When my child was born, a long cloth for private parts

ntóota na-ndíidi.
 needleand-rope
 Needle and thread.

mwána wohewóhe p'aváleekwa, mwing'a mapiíndi
 child every 16.1.2.be born.PR.REL2 1.give.IMP loin clothes
 Give every child when it is born loin clothes

Hc

nkúmwáadya, akakulúmúuka, atenda mwéene madeéngo.
 18.15.1.dress.SEQ 1.TM.grow up.COND 1.do.PR self work
 and dress it; if it grows up, it does the work itself.

9.

ung'ukú wangu ataidi' pá-míiva.
 chicken POSS1SG 1.lay egg.PRPF1 LOC-thorns
 My chicken has laid an egg in the thorns.

chikoówo./lulími na-mééno.
 pineapple./tongue and-teeth
 Pineapple./Tongue and teeth.

Hi

muúnú nkwíiva aavá na-mavaánga muchi p'úchéketa
 person thief 1.be.PR with-marks of wounds like 16.2SG.chop.PR.REL2
 A thief has marks of wounds like when you chop

chikoówo, míiva inakúhoóma. ung'úuku ukamwóóna
 pineapple thorns 4.TM.2SG.pierce.NP chicken 2SG.TM.1.see.COND
 a pineapple, thorns pierce you. If you see a chicken

Hc

wóonga, akáveéle wa-ku-'wé, unámwíive.
 15.stroll.INF 1.NEG.be.PRPF1 CONN-2SG.you2SG.NEG.1.steal.OPT
 strolling, and it is not yours, you should not steal it.

10.

Hi Hc

lihahamaángá l'-ínguluvé líkápya moóoto. indiila.
 hair on back CONN-pig 5.NEG.be burnt.PR fire path
 The hair on the back of a pig is not burnt. Path.

Hi

pavéele **muúnú nkúlúungwa,** **wahiwóóhe** **apéele**
 16.be.PRPF.REL1 person big everybody 1.spring up.PRPF.REL1
 When there was a big person, everybody who was born

Hi

máchéédo aavá na-ding'aáno muchi chiv'óonga **indiilá vakóóko.**
 last year 1.be.PR with-intellect like 7.2.walk.PR.REL2 path animals
 last year is intelligent in the way the animals walk on the path.

11.

Hc

chilongó changu chinilíhuniika. **mavéle l'-úngoómbe.**
 cooking pot POSS1SG 7.TM.REFL.cover.PRPF2 milk CONN-cow
 My cooking pot has covered itself. Milk of the cow.

Hi

imboówá nang' umwádiliika, **muúnu mwápiita**
 vegetable no 15.spill.NEUT.INF person 18?.1.pass.PR.REL2
 A vegetable without being spilled; a person passing

wánach'óonga, **ahimaná na-vakóko vóóhe, vakókó véene,**
 3.1.TM.TM.stroll.NPPROG.REL2 1.meet.PR with-animals many animals self
 while strolling meets many animals, the animals themselves,

mavéle lalolite pááhi. víino ukáachi-ul'óone
 breasts 6.look.PRPF1 ground now 2SG.NEG.TM-2SG.6.see.FUT2
 the breasts point down to the ground. Now you will not see the milk

ulámwádiliika, **vatuhaulilá tuvayóope,**
 3.6.spill.NEUT.PR.REL2 2.1PL.tell.APP.PR 1PL.2.fear.OPT
 while being spilled; they tell us we should fear them,

vatuvélééke.
 2.1PL.give birth.PRPF.REL1
 they who have given birth to us.

12.

Hi

hunikahuniika n-kaátí lihúla lyá-nááswe. **náási.**
 cover.RED.IMP LOC-centre rag CONN-white coconut
 Cover deeply inside a white rag. Coconut.

véne angáá-víivi vatuhaulilá tunnyóope nnuúngu,
 self folk-ancestor 2.1PL.tell.APP.PR 1PL.1.fear.OPT god
 The ancestors themselves tell us we should fear God, what He has created

ch'áumbite paáhi kúvá úlóongo, muúha nkúvá lǎhúúnde
 7.1.create.PRPF.REL2 ground 15.be.INF soil top 18.15.be.SEQ cloud
 below to be earth, and above to be cloud,

Hi

muchì pa-nniímá nási na-n-kaáti náási, nnuúngu tunnyóope.
 like LOC-height coconut and-LOC-centre coconut god 1PL.1.fear.OPT
 like high up a coconut and inside a coconut; we should fear God.

B.7 Eleven songs

dihíímu.
 Songs.

dihímú aadi div'ímba pa-lihángáwila lyohelyóóhe,
 songs DEM1 10.2.sing.PR.REL2 LOC-crowd every
 These songs people sing when they are together for any celebration,

lyá-uloómbi naméne lyá-malaangwe (kuyálúká vana vá-chilúme
 CONN-marriage especially CONN-initiation 15.initiate.INF children CONN-male
 of marriage and especially of initiation rites (to initiate boys

na-vá-chimááhe).
 and-CONN-female
 and girls).

Dance: **chingééenge.**

1.
unááche kunówá chingééenge ching'áti chíilo.
 14.NEG.dawn.OPT 15.enjoy.INF Chingenge middle night
 It should not become light to enjoy the Chingenge in the middle of the night.

2.
 Hi Hc
apaánó p'ánáíkele ntwáalo, ntúmé w'-álláahi
 DEM1 16.1.TM.live.PAPF.REL2 husband.POSS2SG prophet CONN-Allah
 Here where your husband had lived, Prophet of Allah (oath)!

napambanya dikaánga dyá-namwááka, nayavaanya.
 1SGTM.tie together.NP cloths CONN-this year 1SGTM.divide.NP
 I will fasten together the cloths of this year and divide them.

apaánó p'ánáikele ntwaalo, ntúmé wálláahi.

napambanya muúnda wá-namwááka, nayavaanya.
 1SGTM.fasten together field CONN-this year 1SGTM.divide.NP
 I will fasten together pieces of the field of this year and divide them.

apaánó pánáikele ntwaalo, ntúmé wálláahi.

napambanya muúnda wá-namwááka, nayavaanya.

3.

nnyítu wá-dimbéléenje namwááka unalíime,
 thicket CONN-not full grown this year 2SG.NEG.cultivate.OPT
 The thicket which is not full grown you should not cultivate it this year,

njopa malóóve hee tindiínga. (2x) kuléká live ngóo.
 1SG.fear.PR words hee ruin.IMP 15.leave.INF 5.be.PRPF1 oh
 I fear the words, hee, ruin it! To leave it is bad.

ukahwéna ku-chibalúúwa, ntwángu unatíime,
 2SG.TM.go.COND LOC-work together husband.POSS1SG 2SG.NEG.linger.OPT
 If you go to the place of working together, my husband you should not linger,

HeHe

unankodya mwána hééé ku-mayaya-kóóó, ku-mayaya-hééé.
 2SG.TM.1.meet.NP child heee LOC-village-DEM1 LOC-village-heee
 you meet a child in this village, in the village.

4.

unangutenda dachi íng'ándá mwáángu wee. (2x)
 2SG.TM.1SG.do.NP what master POSS1SG wee
 What are you doing to me my husband?

Hi

mwána ndíkídíiki pa-muútwé panatóhoóma ee.
 child small LOC-head 16.TM.go up and down.NP ee
 On the baby's head, the fontanel goes up and down.

njama njama hee njama, ngupate lúwóono
 1SG.go to bed.PR hee 1SG.get.OPT sleep
 I go to bed, I go to bed, I go to bed, I should get some sleep.

Dance: **machéénga.**

5.

mahaamba lá-ntunguúlu kupákátiká chíílo,
 leaves CONN-ntungulu tree 15.fall bit by bit.INF night
 The leaves of the Ntungulu fall bit by bit at night,

avétú valeele.

companions.POSS1PL 2.lie down.SITPF
our companions are asleep.

dihímú aadi vaimba páváhwena váana vá-pa-chilúme mu-nyíítu
songs DEM1 2.sing.PR 16.2.go.PR.REL2 children CONN-LOC-male LOC-thicket
These songs the boys sing when they go into the thicket

ku-makuúmbi.

LOC-initiation rites
to the initiation rites.

Dance: **ing'oóle yá-vangaliíba** 'dance of the ones who circumcise'.
[No instruments, hand clapping.]

6.

hassáni nakatapadya vannyawile kwííva wee kwííva wee
Hassani Nakatapadya 2.1.tell.PRPF1 15.steal.INF wee
Hassani Nakatapadya, they have told him to steal.

ee kwííva we ee ee.

likavele mwa-litaáno, likavele litanwike
5.TM.be.SUPCONDPF like-lid 5.TM.be.SUPCONDPF 5.be widened.SITPF
If it were something like a lid, it would have widened,

litanwike tánu, kutánúkiíla. chikavele mwa-chitúumba,
15.be widened.APP.INF 7.TM.be.SUPCONDPF like-gourd
widened wide, to make it wider. If it would be something like a gourd,

chikavele chitumbwike-chó chitumbwike-chó túmbu
7.TM.be.SUPCONDPF 7.break.SITPF-DEM3
it would have broken that thing, broken that thing, broke,

kutúmbúkiíla

15.break.APP.INF
to break it to pieces.

hassáni nakatapadya vannyawile
kwííva wee kwííva wee ee kwííva we ee ee.

7.

nchenje, (7x)
source of heat and fire
The sun,

kupwétéká m'-mátúumbo nkanamwáli, lipwaleele.
15.hurt.INF LOC-abdomens caretakers of girl REFL.feel uncomfortable.IMP
to hurt the caretakers of the girl in the abdomens, let them feel uncomfortable!

8.

namáháamba mwálápéleele, tumpíinde dachi.

Namahamba snake ?-1.be long.APP.APP.PRPF.REL2 1PL.1.bend.OPT how

The Namahamba, as he is very long, how should we bend him?

namáháamba mwálápéleele mpindeee.

1.bend.IMP

The Namahamba, as he is very long, bend him!

9.

váná' mbángo vachumulile v'ende véene n-chivaava eeee.

children wild pig 2.open.APP.SITPF 2.enter.OPT self LOC-haunt eeee

The children of the wild pig while having opened (it), let them enter themselves the haunt.

luhímú aalu luv'íimba paváuya váana vá-pa-chilúme

song DEM1 11.2.sing.PR.REL2 16.2.return.PR.REL2 children CONN-LOC-male

This song they sing when the boys return

ku-nyíítu ku-makuúmbi.

LOC-thicket LOC-initiation rites

from the thicket from the initiation rites.

10. [No drum, hand clapping.]

litéwe litéwe kuúúya litéwe kuúúya kundagaala. (3x)

initiates 15.return.INF initiation place

The initiates return, the initiates return from the initiation place.

muunda kwángála kwángálilá vána,

inside 15.rejoice.INF 15.rejoice.APP.INF children

Inside to rejoice, to rejoice for the children,

namwáli kwángála kwángálilá vána. (3x)

caretaker of girl

caretaker of a girl, to rejoice, to rejoice for the children.

litéwe litéwe kuúúya litéwe kuúúya kundagaala (2x)

luhímú aalu luv'íimba pa-lihángáwila lyá-uloómbi.

song DEM1 11.2.sing.PR.REL2 LOC-crowd CONN-marriage

This song they sing when people are together for a marriage.

11. [No drum, hand clapping.]

ayuúno mwána daudi mwachichi akálóombwa,

DEM1 child Daudi ?-1.TM.say.PAPROG 1.NEG.marry.PAS.PR

This child Daudi was saying she will not been married,

^{Hi-Li-Hi}
nkembeéyu nnáaní ^{Hi-Li-Hi} **náaní, nkembeéyu** ^{Hi-Li-Hi} **nnáaní.** (3x)
 now he who.QUES
 now who is he, who?

^{Hc}
kúndékelá luwaawa (wa.) (4x)
 15.1SG.leave.APP.INF remain plot of field
 To leave me behind at the remaining plot of the field!

APPENDIX C: VOCABULARY

- Introduction
- C.1 Chinnima – English
- C.2 English – Chinnima index
- C.3 Comparative wordlist of five dialects

Introduction

The first part of this vocabulary (Chinnima – English) contains over 1800 Chinnima entries and some Chimaraba ones; the same entries are used in the second part (English – Chinnima). The questionnaires used to collect these data are the following: the Questionnaire on Basic and Common Vocabulary in Bantu Languages, and the extensive Questionnaire on Cultural Vocabulary, both designed by the project group The Linguistic Atlas of Tanzania, University of Dar es Salaam, Tanzania. The short word list of Frederick Johnson in his “Notes on Kimakonde” (1923) was checked, and finally, words were added as they came up during our field work.

In general, there are no separate entries for words derived with one of the productive processes of word derivation, like passive, causative and applicative verbs, and agent, manner and instrument nouns. But exceptions are made when such words are lexicalized, show formal or semantic irregularities, or are frequently used basic words. We have marked a number of words as Swahili loans, but we do not claim that we have identified all of them in our vocabulary. With verbs, no attempt is made to subclassify them on whatever basis.

The first part of this vocabulary is organized as follows. The Chinnima entry (without penultimate lengthening) is followed by the surface tones (including penultimate lengthening) and the underlying tones (including the tone group) in capitals, the grammatical category (N = noun, V = verb, P = pronominal form, A = adjective and I = invariable) in italics, the English gloss, and some remarks if needed. In the second part of the vocabulary the English gloss is followed by the Chinnima entry in italics, the surface and underlying tones in capitals, and the grammatical category.

The nouns (N) are given in their singular and plural form (if different); with some nouns, there is no singular form, with others, there is no plural form. The underlying tone starts with the tone group to which the noun belongs (A, B, C1, C2, D1, D2, E), followed by the corresponding H tones which are assigned in the lexicon (see 4.4, e.g. A:S1/SF and C1:H.SF: in the first case, the noun belongs to tone group A which means that there are H tones on the first mora of the stem (S1) and on the final mora of the stem (SF), the tone of the NPx is default L, and is not indicated; in the second case, the noun belongs to tone group C1 which means that there is a H tone on the

NPx, and a H tone on the final mora of the stem). Generally, the tones are identical for the singular form and the plural form, with some exceptions which are indicated in the tone field. The sign of the grammatical category N is followed by the class number(s), explained in 4.1 - 4.3.

The verbs (V) are cited as stems with initial hyphen. The surface tones are the tones of the Infinitive (without marker). The underlying tones are not indicated since they depend on the tense of the verb, and are the same for all verbs. The Infinitive belongs to tone group A:S1/SF, which results in penultimate level H surface tones when the final syllable is simple (or penultimate R in case of reflexive verbs), and in penultimate L: (or F) when the final syllable is complex. The sign of the grammatical category may be followed by “refl.” (reflexive), “caus.” (causative), “refl/caus” (reflexive/causative), “pas.” (passive), “red.” (reduplication), “irr.” (irregular verb) and “fin.” (finite verb form).

The pronominal forms (P) take a pronominal prefix (PPx), and they are either given with PPx (like substitutives) or cited as a stem with initial hyphen (like possessive stems). When cited as a stem, the surface tones are indicated without PPx, except when the stem is minisyllabic or disyllabic vowel-initial. If possible, the surface tones are followed by the underlying tones. The sign of the grammatical category may be followed by “con.” (connexive), “dem.” (demonstrative), “nom.” (nominalized form), “pos.” (possessive) and “subst.” (substitutive). Stems that take a nominal prefix (NPx) in class 1 are indicated by “P/A”, the A referring to the grammatical category Adjective.

The adjectives (A) take a NPx; they are cited as stems with initial hyphen. The surface tones are indicated without NPx.

The invariables (I) are invariable words like conjunctions, interjections, exclamations and clitics. An attempt has been made to classify them into one of the tone groups.

The last part of this Appendix contains a short comparative word list of five different Makonde dialects.

C.1 Chinnima – English

A

- (a)- RL, *P dem.* this (short forms); **ayu** RL cl.1, **au** RL cl.3, **ai** RL cl.9; attributive tones: (L:)L, the initial **a-** is optional (dem. without **a-** is clitic): **nnume ayu** LHH L:L, **nnume-yu** LHF-L this man
- (a)- L:H, *P dem.* that (short forms); **ayu** L:H cl.1, **au** L:H cl.3, **ai** L:H cl.9; attributive tones: (L:)H, the initial **a-** is optional (dem. without **a-** is clitic): **nnume ayu** LHH L:H, **nnume-yu** LHF-H that man
- (a)-la LL:H, *P dem.* that; **ayula** LL:H cl.1, **aula** LL:H cl.3, **aila** LL:H cl.9; attributive tones: (L)L:H, the initial **a-** is optional; **machedo pala** LHH L:H year before last year, time ago
- (a)ne-o HFH, *P dem.* this, that (referential); **aneyo** HFH cl.1, **anewo** HFH cl.3, **aneyo** HFH cl.9; attributive tones: (H)FH, the initial **a-** is optional; **anepo (vino)** HFH (RL) cl.16 well, then, now (then)
- (a)-no LRL, *P dem.* this; **ayuno** LRL cl.1, **auno** LRL cl.3, **aino**, LRL cl.9; attributive tones: (H)H:L, the initial **a-** is optional; cf. **vino** RL I now; **vino apano** RL LRL now then here
- (a)-o L:H, *P dem.* this, that (referential short forms); **ayo** L:H cl.1, **awo** L:H cl.3, **ayo** L:H cl.9; attributive tones: (L:)H, the initial **a-** is optional (dem. without **a-** is clitic): **nnume ayo** LHH L:H, **nnume-yo** LHF-H this, that man (ref.)
- a(v)o RL, C1:SF, *P pos.* their; tones including PPx; **wa(v)o** RL cl.1, **wa(v)o** RL cl.3, **ya(v)o** RL cl.9; predicative: FL tones
- a-nani HLRL, *P con.* whose; tones including prefixes; the second prefix is an NPx; cf. **-nani** -RL A who
- achihwango ?, *P con.* last; tones unknown; cf. **-hwa** V die, **chihwa/vihwa** H:L cl.7/8 death
- achikongwe HLFL, *P con.* female; tones including PPx; cf. **nkongwe** LFL cl.1 woman
- achilume HLH:L, *P con.* male; tones including PPx; cf. **nnume** LH:L cl.1 man
- achinyakala HLHFL, *P con.* of former days, old, of the past; tones including PPx; cf. **-atangu**
- adyangu/achadya vangu LFL/LHH RL, C2:H.SF, *N 2A/2A+* my wife; **adyalo** LFL your (sg.) wife; **adyawe** LFL his wife; also **ndyangu** LFL my wife, etc.; also used for ‘husband’
- ahambi HH:L, *P con.* new; tones including PPx
- akahwena/vakahwena LHFL, *V fin.* lame person; lit. s.o. who does not walk (Neg.Pres.)
- akalola/vakalola LHFL, *V fin.* blind person; lit. s.o. who does not see (Neg.Pres.)
- akapilikana/vakapilikana LHLL:L, *V fin.* deaf person; lit. s.o. who does not hear (Neg.Pres.)
- akatongola/vakatongola LHHL:L, *V fin.* dumb person; lit. s.o. who does not speak (Neg.Pres.); also **akatangola/vakatangola** LHHL:L
- ake RL, C1:SF, *P pos.* his, her; tones including PPx; **wake** RL cl.1, **wake** RL cl.3, **yake** RL cl.9; predicative: FL tones
- ako RL, C1:SF, *P pos.* your (sg.); tones including PPx; **wako** RL cl.1, **wako** RL cl.3, **yako** RL cl.9; predicative:

FL tones
amama/achamama/angaa-mama HRL/LHRL/LH:-H:L, C2:H.SF, *N* 2A/2A+ mother; my m.; **amamayo** LHRL your (sg.) m.; **amamaye** LHRL his/her m.; **ayu vetu** L:H RL our m.; **ayu venu** your (pl.) m.; **ayu vao** our m.; cf. **anyokwe**
amati LRL, C1:SF, *N* 2A/- aunt (father's sister); also **mati** H:L; **amatiyo** LHH:L your (sg.) fa-si; **amatiye** LHH:L his/her fa-si
-ambalenga HLLL:L, *P con.* pierced (ear); tones including PPx; cf. **mbalenga** LLL:L cl.3 lobe
-ambone HH:L, *P con.* good; tones including PPx; cf. **-katapala** V be good, **chikatapele** V fin. good
-amwana HFL, *P con.* small; tones including PPx; also **-dikidiki** A, **-dyoko** A; cf. **mwana** FL cl.1 child
amwenye/achamwenye HRL/LHRL, C2:H.SF, *N* 2A/2A+ headman of village (traditional); cf. **umwenye** LRL cl.14 chiefhood; cf. **njumbe/majumbe** cl.3/6
-anahuvi HLH:L, *P con.* red; tones including PPx; cf. **-huvilila** be red
anambuye LHFL, D2:H.no H, *N* 2A/- grandfather; master
anang'ala LHFL, D2:H.no H, *N* 2A/- uncle (mother's brother); also **njomba/vajomba** cl.1/2
-ananjipi HHH:L, *P con.* short; tones including PPx; cf. **-ipika** V be short
-anapi HH:L, *P con.* black; tones including PPx; cf. **-dimba** V be black
-anaswe HH:L, *P con.* white; tones including PPx; cf. **-swelela** V be white
-angala -HH:L, *V* please, make happy
-angu RL, C1:SF, *P pos.* my; tones including PPx; **wangu** RL cl.1, **wangu** RL cl.3, **yangu** RL cl.9; predicative: FL tones
anyokwe HRL, C2:H.SF, *N* 2A/- mother; his mother; **anyoko** HRL your mother; used more or less as

terms of abuse; cf. **amama** cl.2A, **ayu** L:L cl.2A mother
-apila -HH:L, *V* swear an oath
-atangu HFL, *P con.* old, of the past; tones including PPx; cf.
-achinyakala, **-komala** V,
-kongopala V
atata/achata/angaa-tata LFL/LHRL/LH:-FL, D2:H.no H, *N* 2A/2A+ father; my f.; **atatako** LHRL your (sg.) f.; **atatake** LHRL his/her f.; **atata vetu** LHH RL our f.; **atata venu** your (pl.) f.; **atata vao** their f.
-atatu HFL, *P con.* third; tones including PPx; cf. **-tatu** -RL A three
-avili HFL, *P con.* second; tones including PPx; cf. **-vili** -RL A two
avivi/angaa-vivi LRL/LH:-H:L, C1:SF, *N* 2A+ grandparent, ancestor; sg. also **vivi** H:L
ayu/achayu L:L/LH:L, D1:no H, *N* 2A/2A+ mother; see **amama** HRL; pl.: **achayu vetu** LHH RL our m.'s; **achayu venu** LHH RL your (pl.) m.'s; **achayu vao** LHH RL their m.'s; cf. **anyokwe** cl.2A

B

-badula -HH:L, *V* bite off; also **-bedula** -HH:L
bahi RL, C1:SF, *I* and so, accordingly, well, enough!, stop it!, be it so!; < Sw. basi; see **nano** I
bakola/dibakola LFL/LLFL, E:S2, *N* 9c/10c stick (to walk with); also **nkangojo/mikangojo** cl.3/4
bakuli LFL, E:S2, *N* 9b/- type of dance (every celebration)
-bana -H:L, *V* press tight, squeeze; also **-kaba**; cf. **-toha**; see afflict
-bana -H:L, *V* afflict, oppress; cf. neut.
-banika -HH:L be afflicted, caus.
-baniha -HFL annoy, **-lagasa**; see press tight
-baniha -HFL, *V caus.* annoy; caus. <
-bana -H:L afflict
-banika -HH:L, *V* get problems, be afflicted; neut. < **-bana** -H:L afflict;

cf. **-huva**, **-tunduwila**, **-laga**
basikeli/dibasikeli HHL:L/LHHL:L,
 B:S1, *N 9c/10c* bicycle; < Sw.
 baisikeli; see **injinga/dinjinga** cl.9/10
-bedula -HH:L, *V* bite off; also **-badula**
 -HH:L
binda/dibinda RL/LRL, C1:SF, *N*
9c/10c okra
-boba -H:L, *V* shoot (arrow, gun)
-bomola -HH:L, *V* destroy a house; also
-bamola -HH:L
-buhuka -HH:L, *V* go out, come out
 suddenly
-bulika -HH:L, *V* pile up things upside
 down; cf. **-lundanya**

Ch

-cha H:L, *V* dawn; tones with Infinitive
 marker; **uhiku ukacha** LHL LH:L
 until dawn, lit. if the night dawns; cf.
kulyamba cl.17, **umambumbu** cl.14
 dawn
chabanda/vyabanda HFL, B:S1, *N 7/8*
 insect sp. (damaging produce of
 fields); grammar: N or P nom.?
chaka/vyaka H:L, A:S1/SF, *N 7/8* year;
 also **mwaka/myaka** H:L cl.3/4
chakani HRL, C2:H.SF, *I* when; tones
 also LRL; question phrase-finally:
 final FH **chakani** HFH; also **nduvani**
 I (< Chimaraba)
-chakapala -HHH:L, *V* become small;
 cf. **-dikidiki** A, **-dyoko** A, **-amwana**
 P con.
chakulya/vyakulya HL:L, D2:H.no H,
P nom. food; < Sw. **chakula**; see **vilyo**
 cl. -/8
chala/vyala H:L, A:S1/SF, *N 7/8* finger
chalumo LRL, C1:SF, *I* together;
chalumo na LRL L together with;
 also **pamo (na)** RL (L) P
chamani HRL, C2:H.SF, *I* what; tones
 also LRL; question phrase-finally:
 final FH **chamani** HFH
chambu/vyambu FL, C2:H.SF, *N 7/8*
 dry season
changa/vyanga L:L, D1:no H, *N 7/8*
 galago, bushbaby (Sw. **komba**)
changa/vyanga FL, C2:H.SF, *N 7/8*
 size, position
changolo/vyangolo HRL, C2:H.SF, *N*
7/8 millipede; grammar: N or P nom.?
-chapa -H:L, *V* wash (clothes)
chechele/dichechele LL:L/LLL:L,
 D1:no H, *N 9c/10c* type of clothing
-cheha -FL, *V caus.* incise, cut to shape,
 trim; **kucheha dinembo** LHH HH:L
 to make incision mark(s)
chekecheke LLRL, C1:SF, *N 7/-* sieve
-cheketa -HH:L, *V* cut, chop (e.g.
 branches); harvest bananas, millet
 sp.(Sw. **ulezi**); also **-chaketa** -HH:L
-chela -H:L, *V* cut, chop (trees)
-chema -H:L, *V* call
-chemusa -HFL, *V caus.* boil; cf. Sw.
 -chemsha; see **-yaukidya**, **-kodya**; cf.
-yaula, **-yaukila**, **-tokota**, **-tiniha**
-chengula -HH:L, *V* cut hair; cf. **-mowa**
-chi H:L, *V* say; tones with Infinitive
 marker; **kuchi(dono)/kuchi(doni)**
 HH(RL)/HH(RL) that (Compl.); cf.
-tongola; in greetings: **uchi/vachi**
dachi... L:L/L:H LL how are
 you/they? (today, etc.)
chibalua LLH:L, A:S1/SF, *N 7/-*
 cultivating together (paid with food,
 beer, etc.); < Sw. **kibarua**
chibatali/vibatali LLH:L, A:S1/SF, *N*
7/8 lamp (small)
chiboko/viboko LRL, C1:SF, *N 7/8*
 hippopotamus
-chichima -HH:L, *V* taste sour, unripe
-chida -H:L, *V* be avaricious, give small
 things
chididi HFL, B:S1, *N 7/-* pity
-chidika -HH:L, *V* bolt, bar; be end of
 sth.
chidiu/vidiu LRL, C1:SF, *N 7/8* plug,
 cork
chidodelo/vidodelo LLRL, C1:SF, *N*
7/8 hammer; nom. < **-doda** V
 hammer; also **inyundo/dinyundo**
 cl.9/10
chidole/vidole LH:L, A:S1/SF, *N 7/8*
 type of dance (esp. girls)
chidumba LRL, C1:SF, *N 7/-* fever,

- influenza
chidwadwa LH:L, A:S1/SF, *N* 7/-
 barren ground
chigoda/vigoda LFL, B:S1, *N* 7/8 stool
-chiha -FL, *V caus.* leap (of joy, with
 celebrations, etc.); red. > **-chihachiha**
 -HHL:L jump about
chiha/viha RL, C1:SF, *N* 7/8 bundle of
 grass; cf. **lifungu/mafungu** cl.5/6,
chituvu/vituvu cl.7/8
chihakau LHH:L, A:S1/SF, *N* 7/-
 misfortune
chihako/vihako LRL, C1:SF, *N* 7/8
 hunt; nom. < **-haka** *V* hunt
chiamula/viamula LLL:L, D1:H.no
 H, *N* 7/8 comb; cf. **-hamulila/**
-samulila *V* comb
chihanu/vihanu LRL, C1:SF, *N* 7/8
 grass sp.
chihapo/vihapo LH:L, A:S1/SF, *N* 7/8
 type of basket (big)
chihau HFL, D2:H.no H, *N* 7/- Yao
 language, nature; cf. **nnnyau/vahau**
 HFL cl.1/2 Yao person
chihoko LRL, C1:SF, *N* 7/- laughter;
 nom. < **-heka** *V* laugh
chihelo/vihelo LRL, C1:SF, *N* 7/8
 winnowing tray
chihepo/vihepo LRL, C1:SF, *N* 7/8
 plucked food, e.g. fruit; nom. < **-hepa**
V pluck, gather (e.g. fruit)
chihi L:L, D1:no H, *N* 7/- only, in vain,
 for free, no matter; **chihi**
cha-ng'ande L:L H-H:L there is no
 light or fire in the house
chihima/vihima LFL, B:S1, *N* 7/8 well
 (digged); cf. **muto/myuto** cl.3/4
chihing'ino/vihing'ino LHH:L,
 A:S1/SF, *N* 7/8 heel, elbow;
chihing'ino cha-ludodo LHHL
 H-LH:L heel; **chihing'ino cha-nkono**
 LHHL H-LH:L elbow
chihoba LRL, C1:SF, *N* 7/- smallpox
chihohi/vihohi LH:L, E:S2, *N* 7/8 fruit
chiholo/viholo LRL, C1:SF, *N* 7/8
 thorny thicket
chihonde LH:L, A:S1/SF, *N* 7/-
 discussion; **kutaya chihonde** LHH
 HH:L to participate in a discussion
chihongahonga LHHH:L, A:S1/SF, *N*
 7/- quarrelsome; cf. **-honga** *V* bribe;
 adjunct
chihuko/vihuko LRL, C1:SF, *N* 7/8
 rainy season; pool, puddle; also
chihuko/vihuko LRL cl.7/8; cf.
litanda/matanda cl.5/6
chihukuhuku/vihukuhuku LHHL:L,
 B:S1, *N* 7/8 mask
chihulu/vihulu LH:L, A:S1/SF, *N* 7/8
 bladder, bubble, lather
chihumbo/vihumbo LRL, C1:SF, *N* 7/8
 torch
chihundo/vihundo LH:L, A:S1/SF, *N*
 7/8 knot; also **chihundo/vihundo**
 LH:L cl.7/8
chihuva LH:L, A:S1/SF, *N* 7/- cold (in
 the chest); see chest; also **mahuva**
 LH:L cl.6; also in use **lihuva** LH:L
 cl.5 less severe cold, partly in the
 nose
chihuva/vihuva LH:L, A:S1/SF, *N* 7/8
 chest; see also cold (in the chest)
chihwa/vihwa H:L, A:S1/SF, *N* 7/8
 death; also used **kuhwa** H:L cl.15 to
 die; cf. **-achihwango** *P* con. last
chihweni/vihweni LRL, C1:SF, *N* 7/8
 gait; nom. < **-hwena** *V* walk
chijembe/vijembe LH:L, E:S2, *N* 7/8
 razor
-chika -H:L, *V* draw borderline
chikapu/vikapu LFL, B:S1, *N* 7/8
 basket
chikatapele LLHFL, *V fin.* good,
 beautiful, fine; lit. (thing, cl.7) which
 is good, etc. (Relative Present
 Perfective of **-katapala** be good,
 etc.); cf. **-ambone** -LH:L *P* con.
chikocha/vikocha LL:L, D1:no H, *N*
 7/8 type of dance (esp. weddings)
chikokolowa/vikokolowa LLLL:L,
 D1:no H, *N* 7/8 maize cob (empty);
 also **chikokwa/vikokwa** LL:L cl.7/8
chikokwa/vikokwa LL:L, D1:no H, *N*
 7/8 maize cob (empty); also
chikokolowa/vikokolowa LLLL:L
 cl.7/8

- chikongo/vikongo** LFL, B:S1, *N* 7/8
stick (for beating)
- chikong'o/vikong'o** LFL, B:S1, *N* 7/8
stick (for beating)
- chikoo/vikoo** LRL, C1:SF, *N* 7/8
pineapple; often heard as **chikowo/vikowo** LRL; also **chikou/vikou** LRL cl.7/8
- chikota/vikota** LRL, C1:SF, *N* 7/8
sweet millet stalk; millet sp. (red)
- ntama wa-vikota** LHL H-LRL
- chikudi/vikudi** LRL, C1:SF, *N* 7/8
age-mate ceremony (of elders)
- chikula** -HH:L, *V* raise up (in order to prop)
- chikunda/vikunda** LFL, B:S1, *N* 7/8
red soil (used as building material); also **ingunja/dingunja** cl.9/10
- chikundu/vikundu** LFL, B:S1, *N* 7/8
waist; **kuhuma damu kuchikundu** LHH HL LLFL to menstruate, lit. to come out blood from the waist
- chikungo/vikungo** LH:L, A:S1/SF, *N* 7/8 type of trap (rope, to trap birds)
- chikuti** LH:L, A:S1/SF, *N* 7/- pleiades
- chikuti/vikuti** LH:L, A:S1/SF, *N* 7/8
circle around the sun, moon
- chila** -H:L, *V* establish sth. new
- chilakali/vilakali** LHFL, B:S1, *N* 7/8
tongil
- chilambo/vilambo** LRL, C1:SF, *N* 7/8
land, area, country
- chilatu/vilatu** LRL, C1:SF, *N* 7/8 shoe, sandal
- chileu/vileu** LRL, C1:SF, *N* 7/8 beard
- chilimu/vilimu** LRL, C1:SF, *N* 7/8
cleared land (before being cultivated)
- chilo** RL, C1:SF, *N* 7/- night; also **uhiku** cl.14
- chilolo/vilolo** HRL, C2:H.SF, *N* 7/8
mirror; pane of glass; pl. eyeglasses; nom. < **-lola** *V* look at; cf **chilolo/vilolo** LL:L cl.7/8 mirror (implement of divination)
- chilolo/vilolo** LL:L, D1:no H, *N* 7/8
mirror (implement of divination); nom. < **-lola** *V* look at; cf. **chilolo/vilolo** HRL cl.7/8 mirror
- chilonda/vilonda** LRL, C1:SF, *N* 7/8
wound
- chiloongo/viloongo** LLFL, E:S2, *N* 7/8
pot
- chima** -H:L, *V* shut, fasten; hate; sep. > **-chimula** -HH:L open, unfasten; cf. **-hika**
- chimakonde** LHFL, D2:H.no H, *N* 7/-
Makonde language, nature; cf. **makonde** LRL cl.6 desert areas (without water), **mmakonde/vamakonde** LHFL cl.1/2 Makonde person
- chimalaba** LHFL, D2:H.no H, *N* 7/-
Maraba dialect, nature; cf. **mmalaba/vamalaba** LHFL cl.1/2 Maraba person
- chimanga** LRL, C1:SF, *N* 7/- Swahili language, nature; cf. **kumanga** LRL cl.17 coast; also **chiswahili** cl.7/-
- chimatambwe** LHFL, D2:H.no H, *N* 7/-
Matambwe dialect, nature; cf. **mmatambwe/vamatambwe** LHFL cl.1/2 Matambwe person
- chimbeta/vimbeta** LL:L, D1:no H, *N* 7/8 flute; **kwomba chimbeta** HH LL:L to flute
- chimbunga** LRL, C1:SF, *N* 7/- rain bringing winds
- chimbwahedi/vimbwahedi** HHH:L, A:S1/SF, *N* 7/8 shadow (of people); also **chimbwehedi/vimbwehedi** HHH:L cl.7/8
- chimbwehedi/vimbwehedi** HHH:L, A:S1/SF, *N* 7/8 shadow (of people); also **chimbwahedi/vimbwahedi** HHH:L cl.7/8
- chimbwimbwi** HRL, C2:H.SF, *N* 7/-
swampy soil
- chimula** -HH:L, *V* open, unfasten; sep. < **-chima** -H:L shut, fasten; also **-chumula** -HH:L
- chimwa** -FL, *V pas.* be angry; also **-visa, -viha**; cf. **-sunala**
- chimwela** HFL, D2:H.no H, *N* 7/-
Mwera language, nature; cf. **mmwela/vamwela** HFL cl.1/2 Mwera person

- chimwemwe** LL:L, D1:no H, *N* 7/- joy
chinanda/vinanda HFL, D2:H.no H, *N* 7/8 bed
chindindi/vindindi LRL, C1:SF, *N* 7/8 head cloth
chindonde HFL, D2:H.no H, *N* 7/- Ndonde dialect, nature; cf. **ndonde/vandonde** HFL cl.1/2 Ndonde person, **kundonde** LH:L cl.17 lower parts of the Plateau; western direction
chinduli/vinduli HRL, C2:H.SF, *N* 7/8 cassava vegetable; cf. **ntandasa nchinduli** LLLL LHRL type of food
chinemba LRL, C1:SF, *N* 7/- friendship
ching'ati LH:L, E:S2, *N* 7/- middle, in the middle, among, between; cf. **nkati** LRL cl.18 within, in the middle, **kukati** LRL cl.17 room
chingenge/vingenge LH:L, A:S1/SF, *N* 7/8 type of dance (any celebration)
chingoni LRL, C1:SF, *N* 7/- Ngoni language, nature; cf. **nngoni/vangoni** LRL cl.1/2 Ngoni person
chingulimba/vingulimba LHRL, C2:H.SF, *N* 7/8 calf of leg; very short person
chingungunda/vingungunda LLL:L, D1:no H, *N* 7/8 joint (of body)
chingungwa/vingungwa LH:L, E:S2, *N* 7/8 calabash bottle; cf. **lingungwa/mangungwa** LH:L cl.5/6 skin of calabash; cf. **litikiti/matikiti** cl.5/6; cf. **indumba/dindumba** cl.9/10
chingwalangwanja/vingwalangwanja LLLH:L, E:S2, *N* 7/8 type of dance (esp. initiation); also **lingwalangwanja/mangwalangwanja** LLLH:L cl.5/6
-chinjila -HH:L, *V* jump (long); cf. **-uluka, -chitika, -dang'a**
chinnima HHFL, D2:H.no H, *N* 7/- Nnima dialect; cf. **munnimma/vannima** HHFL cl.1/2 Nnima person, **pannima** LLRL cl.16 height, high, above
chinu/vinu RL, C1:SF, *N* 7/8 thing; cf. **chitukutuku/vitukutuku** cl.7/8
chinumba/vinumba HFL, D2:H.no H, *N* 7/8 calabash (for drinking beer, unfermented drink); cf. **chitumba/vitumba** LFL cl.7/8 gourd, calabash
chinyemavi/vinyemavi LHRL, C2:H.SF, *N* 7/8 puff adder
chipala/vipala LRL, C1:SF, *N* 7/8; smithy; nom. < **-pala** *V* scratch, peck
chipanda/vipanda LFL, B:S1, *N* 7/8 pillar
chipanga/vipanga LFL, B:S1, *N* 7/8 tsetse fly
chipanji HFL, D2:H.no H?, *I* perhaps; also **panji** FL P, **panjika** LH:L I; cf. **kwali** I
chipeda/vipeda LRL, C1:SF, *N* 7/8 beehive
chipele LRL, C1:SF, *N* 7/- rash; cf. **nammata** cl.9a/-
chipeto/vipeto LH:L, A:S1/SF, *N* 7/8 sifting basket; nom. < **-peta** *V* sift
chipini/vipini LH:L, A:S1/SF, *N* 7/8 pin's head in left wing of the nose (as decoration)
chipula/vipula LH:L, E:S2, *N* 7/8 knife; **chipula cha-mutwe** LHL HRL circumcision knife, lit. knife of head
chiputu LRL, C1:SF, *N* 7/- initiation rites (girls)
chipweng'e LH:L, A:S1/SF, *N* 7/? type of food (beans with millet or rice)
chipyai/vipyai LRL, C1:SF, *N* 7/8 broom; nom. < **-pyaila** *V* sweep
chisanga/visanga LFL, B:S1, *N* 7/8 snake sp. (big, very fast, brown, white)
chisinja/visinja HRL, C2:H.SF, *N* 7/8 hawk sp. (black, white, attacking chickens without taking them)
chisukali LHFL, B:S1, *N* 7/- banana sp. (small)
chisulu/visulu LFL, B:S1, *N* 7/8 termite hill
chisumila/visumila LHFL, B:S1, *N* 7/8 snake sp. (small, very poisonous, making jumping movements)
chiswahili LLRL, C1:SF, *N* 7/- Swahili language, nature; also **chimanga** cl.7/-; cf. **nswahili/vaswahili** LLRL

- cl.1/2 Swahili person
chisweswe/visweswe LH:L, E:S2, *N* 7/8
 highest point of round roof; also
chiswesi/viswesi LH:L cl.7/8
-chita -H:L, *V* build up (wall or hut,
 from the ground); cf. **-denga**
chitale/vitale LFL, B:S1, *N* 7/8 iron;
 also **chitali/vitali** LFL cl.7/8
chitamo LRL, C1:SF, *N* 7/?
 pre-marriage procedures
chitehi/vitehi LH:L, E:S2, *N* 7/8 nest
 (of bird)
chiteleko/viteleko LLRL, C1:SF, *N* 7/8
 pot (for cooking); nom. < **-teleka/**
-taleka *V* cook; also **lihanja/**
mahanja cl.5/6
chiteng'u/viteng'u LFL, B:S1, *N* 7/8
 chair
chitete LFL, B:S1, *N* 7/- the shivers;
 also **chitetemedi/vitetemedi** LLLRL
 cl.7/8; cf. **-tetema** *V*, **-tetemela** *V*
 shiver, tremble
-chitika -HH:L, *V* jump down; cf.
-uluka, **-chinjila**, **-dang'a**
chitipu/vitipu LFL, B:S1, *N* 7/8 type of
 dance (to remember the deceased)
chitoko/vitoko LFL, B:S1, *N* 7/8
 testicle; also **litoko/matoko** LFL
 cl.5/6; also **inongo/dinongo** cl.9/10
chitongo/vitongo LRL, C1:SF, *N* 7/8
 penis; also **chivolo/vivolo** cl.7/8; cf.
inongo/dinongo LRL cl.9/10 testicle
chitongodi/vitongodi LLRL, C1:SF, *N*
 7/8 language; also **chitangodi** LLRL;
 nom. < **-tongola/-tangola** *V* speak
chitonono/vitonono LHH:L, A:S1/SF,
N 7/8 window; also **chitanono/**
vitanono LHH:L
chitowe/vitowe LH:L, A:S1/SF, *N* 7/8
 frog
chitukutuku/vitukutuku LLHFL,
 E:S2, *N* 7/8 thing, substance, what a
 thing is made of; cf. **chinu/vinu** cl.7/8
 thing
chitumba/vitumba LFL, B:S1, *N* 7/8
 calabash, gourd; (edible) seed:
inumba/dinumba LFL cl.9/10;
 calabash with long neck: **chitumba**
cha-nangongondingo LHL
 H-LLLRL; cf. **chinumba/vinumba**
 HFL cl.7/8
chitumbili/vitumbili LHFL, B:S1, *N*
 7/8 monkey (Sw. tumbili)
chitumbo/vitumbo LRL, C1:SF, *N* 7/8
 pregnancy, embryo; **ave na-chitumbo**
 LH L-LRL she is pregnant
 (Pres.Perf); **chitumbo cha-pannyitu**
 LHH L-LLH:L out of wedlock
 pregnancy, lit. embryo of the thicket
chitundi/vitundi LRL, C1:SF, *N* 7/8
 yam
chitundu/vitundu LFL, B:S1, *N* 7/8
 enclosure for keeping animals; grime,
 soot
chitunduni/vitunduni LHRL, C2:H.SF,
N 7/8 type of food (with cassava)
chitundwe LL:L, D1:no H, *N* 7/- anger;
 also **chitundi** LL:L cl.7/-
chituta/vituta LH:L, A:S1/SF, *N* 7/8
 rubbish heap
chitututu/vitututu LHRL, C2:H.SF, *N*
 7/8 motorcycle; also
mmutukasikeni/miutukasikeni
 cl.3/4
chituvi/vituvi LH:L, A:S1/SF, *N* 7/8
 bundle (of things tied together with a
 cloth), load; cf. **lifungu/mafungu**
 cl.5/6, **chiha/viha** cl.7/8
chiumbi LH:L, A:S1/SF, *N* 7/- drizzling
 rains
chiumbi/viumbi LRL, C1:SF, *N* 7/8
 screen (used in hunting)
chivalavala/vivalavala LHHH:L,
 A:S1/SF, *N* 7/8 scorpion
chivanga LRL, C1:SF, *N* 7/- drought
chivava/vivava LL:L, D1:no H, *N* 7/8
 haunt (of animal)
chivolo/vivolo LFL, B:S1, *N* 7/8 penis;
 also **chitongo/vitongo** cl.7/8
chiwiduhu LHFL, B:S1, *N* 7/- sweat;
 nom. < **-widuha** *V* sweat
chiwuli/viwuli LH:L, A:S1/SF, *N* 7/8
 fireplace; also **lijiko/majiko** cl.5/6
chiyewe/viyewe LL:L, D1:no H, *N* 7/8
 chin
chiyoha/viyoha LH:L, E:S2, *N* 7/8 term

of abuse; nom. < **-yoha** V abuse; cf.
kutongo-viyoha LHH HFL abuse,
 insult, lit. speak terms of abuse
-chocha -H:L, *V* prick, pierce
-chonga -H:L, *V* converse, gossip
-chukudula -HHH:L, *V* squeeze skin;
 cf. **-kamila**, **-minya**, **-kada**
chuma H:L, A:S1/SF, *N* 7/- musical
 instrument (pieces of iron)
chuma/vyuma H:L, A:S1/SF, *N* 7/8
 bead, string of beads; cf. **nchaketa/**
michaketa cl.3/4
-chungu -H:L, *V* herd, tend; cf.
-ongolela
chuni/vyuni RL, C1:SF, *N* 7/8 bird

D

dachi L:L, D1:no H, *I* hey, tell me!,
 what?; interrog. particle; in greetings:
dachi waako umomi L:L HRL LFH
 how are you?, **vachi dachi vavana**
 L:H L:L HFH how are the children?
-dadamila -HHH:L, *V* stand on toes
dahu RL, C1:SF, *I* bare, naked, useless
-damila -HH:L, *V* mount, ascend; cf.
-kwela
damu H:L, ?, *N* 9b/- blood; < Sw.
 damu; see **myadi** cl. -/4
-dang'a -H:L, *V* leap; cf. **-chitika**,
-chinjila, **-uluka**
-deka -H:L, *V* walk with swagger; also
-nema
-dekedela -HHH:L, *V* carry load on
 head without touching it
-denga -H:L, *V* build; cf. **-chita**
-didima -HH:L, *V* cool down (itr.), be
 cold; red. < **-dima** -H:L extinguish;
 cf. **-pola**; cf. **-itula**, **-tulila**
dihakalawe LHHL:L, B:S1, *N* -/10
 gravel
dihoni LH:L, A:S1/SF, *N* -/10 shame,
 modesty; **kwona dihani** HH HH:L be
 ashamed
dihuli LH:L, A:S1/SF, *N* -/10 grey hair
 (of age); also **imbulisa/dimbulisa**
 cl.9/10
dihumi LRL, C1:SF, *N* -/10 belch;
kutaya dihani LHH HH:L to belch;

cf. **-tukula** V belch
dihwiyo LH:L, A:S1/SF, *N* -/10 kidney
-dikadika -HHH:L, *V* red. tickle; also
-dukuladukula -HHHHH:L
-dikidiki -HHH:L, A:S1/SF, *A* small;
ndikidiki/midikidiki LHHH:L cl.3/4,
-indikidiki/dindikidiki LHHH:L
 cl.9/10; also **-dyoko** A, **-amwana** P
 con.; cf. **kadiki** LRL I; predicative:
 same tones
-dima -H:L, *V* extinguish; cf. red.
-didima -HH:L cool down, be cold
-dimba -H:L, *V* be black, be dark, be
 dirty; cf. **-anapi** P con. black
dimbelenje LHFL, B:S1, *N* -/10
 half-grown, not full-grown (e.g. tree,
 forest); **nnyitu wa-dimbelenje** LHL
 H-LHFL thicket which has stopped
 growing before reaching maturity;
 also **dimbalenje** LHFL cl. -/10
dimongo LRL, C1:SF, *N* -/10+3
 strength, force, power; cf. **mongu** RL
 cl.3 back (of body)
dinako LRL, C1:SF, *N* -/10 buttocks
dinombo LH:L, A:S1/SF, *N* -/10
 incision mark
ding'ano LRL, C1:SF, *N* -/10 wisdom,
 intellect, understanding
ding'ombe LRL, C1:SF, *N* -/10 present
 for a special occasion (esp. initiation);
 also **inudyo/dinudyo** cl.9/10
ding'opedi LHFL, B:S1, *N* -/10 idiocy;
 also **ding'apedi** LHFL cl. -/10
-dingudika -HHH:L, *V* coil
-dinguka -HH:L, *V* go round
dinjahango LLRL, C1:SF, *N* -/10
 miscarriage (stillborn child); **tuve**
kudinjahango LL HHHH:L
 expression for 'we got a stillborn
 child'; cf. **ukuluha** cl.14 miscarriage
dinjuga LRL, C1:SF, *N* -/10 music
 instrument (bells worn around the
 ankle as a chain)
dinyoka LH:L, A:S1/SF, *N* -/10 bracelet
disalamu LLRL, C1:SF, *N* -/10
 greetings; < Sw. salamu; greet
 him/her: **nnyaulile/mwing'e**
disalamu dyake LLLLL/L:L LLLH

RL lit. tell/give him his greetings; see
-imuka V, **-chi** V, **-omi** P
-divika -HH:L, *V* faint, collapse; cf.
-dulumbuka
-divila -HH:L, *V* prevent, hinder
-doba -H:L, *V* be tired, be hungry; cf.
indala cl.9/- hunger
-dobola -HH:L, *V* pull out, uproot; also
-dabola -HH:L, **-yupula**; **kudobola**
dinguo LHHH HH:L undress, lit. pull
out clothes
-doda -H:L, *V* hammer; cf. **doda**= RL
cl.9b/10b dots on cheeks and between
the eyes (as decoration); cf. nom.
chidodelo/vidodelo LLRL cl.9/10
hammer
doda= RL, C1:SF, *N* 9b/10b dots on
cheeks and between the eyes (as
decoration); cf. **-doda** V hammer
-dodoma -HH:L, *V* rob, take by force;
also **-dadoma** -HH:L, **-kutula**,
-pokonyola, **-pakanyola**
-dokadoka -HHH:L, *V* red. show
oneself by a certain way of dancing
-dolola -HH:L, *V* cause diarrhoea
-dong'a -H:L, *V* clap hands, catch
-dovola -HH:L, *V* bore; also **-davola**
-HH:L; cf. **-tolola**
-dowela -HH:L, *V* rely on (fellows)
-dududa -HH:L, *V* pulverize
-dukula -HH:L, *V* tap, knock, beat (of
heart); also **-papa**; cf. red.
-dukuladukula HHHHH:L tickle
-dukuladukula -HHHHH:L, *V* red.
tickle; also **-dikadika** -HHH:L
-dulumbuka -HHH:L, *V* become weak
and slack; cf. **-divika**
-duma -H:L, *V* scold, rebuke; cf.
-dumila -HH:L groan because of
pain; also **-kalipa**
-dumila -HH:L, *V* groan because of
pain; cf. **-duma** -H:L scold; cf.
-gumila -HH:L
-dyoko -H:L, A:S1/SF, *A* small;
ndyoko/vadyoko LH:L cl.1/2 (as
nouns: youth), **inyoko/dinyoko** LH:L
cl.9/10 (forms are without -d-); also
-dikidiki A, **-amwana** P con.;

predicative: same tones
-dyovelela -HHH:L, *V* be used to, get
accustomed; also **-dyavelela** -HHH:L
-dyuha -FL, *V* *caus.* revive; cf. **-dyuka**
-H:L be changed
-dyuka -H:L, *V* be changed; cf. **-dyuha**
-FL revive

E

elo RL, C1:SF, *I* yes!
ema RL, C1:SF, *I* or; whether...or
kuva...ema H:L...RL, lit. to be...or
-enda -H:L, *V* enter; also **-yinjila**
-ene FL, ?, *P/A* self; tones including
prefix; NPx in cl.1: **mwene** FL, PPx
in other classes: **weene** FL cl.3, **yeene**
FL cl.9; predicative: same tones
-eneledya -HHL:L, *V* *caus.* extend,
abound; *caus.* < **-enelela** -HHH:L
spread
-enelela -HHH:L, *V* spread, infect; cf.
caus. **-eneledya** -HHL:L extend
-enu RL, C1:SF, *P* *pos.* your (pl.); tones
including PPx; **wenu** RL cl.1, **wenu**
RL cl.3, **yenu** RL cl.9; predicative:
FL tones
-etu RL, C1:SF, *P* *pos.* our; tones
including PPx; **wetu** RL cl.1, **wetu**
RL cl.3, **yetu** RL cl.9; predicative: FL

F

-fundisa -HFL, *V* *caus.* teach; < Sw.
-fundisha; cf. refl. **-lifundisa** -HHL:L
learn; cf. **-hunda**

G

-gong'ola -HH:L, *V* push (once); also
-gang'ola -HH:L; cf. **-hingiliha**
-gulugusa -HHL:L, *V* *caus.* fail (after
promise); cf. **-lugusa** -HFL be loose
-guma -H:L, *V* beat (with hand); cf. ?
app. > **-gumila** -HH:L groan
-gumila -HH:L, *V* groan; ?app. < **-guma**
-H:L beat (with hand); cf. **-dumila**
-HH:L

H

-hachila -HH:L, *V* hunt for; also **-hakila**

- HH:L
-haha -H:L, *V* ferment; cf. **-hahama**
 -HH:L be fermented
-hahama -HH:L, *V* be fermented; cf.
-haha -H:L ferment
-hahula -HH:L, *V* clean; cf.
-katapadya, -swelela
-haka -H:L, *V* hunt; cf. app. **-hakila/**
-hachila -HH:L hunt for; cf. nom.
chihako/vihako LRL cl.7/8 hunt
-hakalanga -HHH:L, *V* be bad, be dirty,
 be worn out; also **-nyata**
-hakalika -HHH:L, *V* be busy with
 affairs, act restlessly
-hakila -HH:L, *V* hunt for; app. < **-haka**
 -H:L hunt; also **-hachila** -HH:L
-hamata -HH:L, *V* filter, strain
-hamulila -HHH:L, *V* comb; also
-samulila -HHH:L; cf. **chihamula/**
vihamula LLL:L cl.7/8 comb
-hana -H:L, *V* clear land for cultivation;
 forge; frequently used with Pre-Final
-ang-: -hananga -HH:L; cf.
-kang'ana, -kuluwanya, -lima
-hang'a -H:L, *V* be confused, be
 anxious
-hangalala -HHH:L, *V* rejoice; cf.
-tamba, -poka
-hangola -HH:L, *V* sharpen teeth;
kuhangola meno LHHH H:L
-hanjila -H:L, *V* cut down (millet)
-hapa -H:L, *V* choose; also **-tondola**
-hapuka -HH:L, *V* break off, terminate;
 also **-yamila, -papatula**; see pass,
 abate
-hapuka -HH:L, *V* pass, abate; cf. ass.
-hapukana -HHH:L separate,
 divorce; see break off
-hapukana -HHH:L, *V* separate,
 divorce; ass. < **-hapuka** -HH:L pass,
 abate; break off
-hatula -HH:L, *V* disengage a trap
-haua -HH:L, *V* tell, say, speak,
 explain; cf. app. **-haulila** -HHH:L tell
 s.o.
-haulila -HHH:L, *V* tell s.o., explain,
 advise; app. < **-haua** -HH:L tell, say;
 to welcome: **ku-n-nyaulila ida**
- ing'ande/kukaya** H-H-HLLH L:H
 HFL/HFL lit. to tell him/her come
 house/home(steed)
-haya -H:L, *V* grind
-heka -H:L, *V* laugh; cf. **chiheko** LRL
 cl.7/- laugh(ter)
heka L:H, C1:SF, *I* but, to the contrary;
heka vino L:H RL but, and now
-hengelela -HHH:L, *V* approach, draw
 near; also **-vandikila**; cf. **-pepekela**
-hepa -H:L, *V* pluck, gather (beans,
 fruit, wild greens); **chihepo/vihepo**
 LRL cl.7/8 plucked food, e.g. fruit; cf.
-yola, -heva
-heva -H:L, *V* gather; cf. **-yola, -hepa**
-hika -H:L, *V* close loosely; cf. **-chima**
-hikalila -HHH:L, *V* guard, defend
-hila -H:L, *V* cease, finish
-himana -HH:L, *V* meet; **tunahimana**
 LLLRL goodbye, we'll meet again;
 cf. **-kodyana**
-himba -H:L, *V* dig; harvest peanuts, all
 sorts of potatoes, cassava
-hindila -HH:L, *V* nod
-hinga -H:L, *V* bathe; cf. refl. **-lihinga**
 -HRL bathe oneself
-hingiliha -HHL:L, *V caus.* push (over
 and over again); cf. **-gong'ola**
-hinginika -HHH:L, *V* be sorry; also
-sikitika
-hinika -HH:L, *V* cover; **-hinikila**
 -HHH:L cover with (put a cover or lid
 on sth.); also **-hunika** HH:L; cf.
-hunukula -HHH:L uncover
-hinikila -HHH:L, *V* cover with (put a
 cover or lid on sth.); cf. **-hinika**
 -HH:L cover; cf. **-hunukula** -HHH:L
 uncover
-hipuka -HH:L, *V* sprout, shoot up; cf.
 Sw. **-chipuka**; see **-mela**
-hita -H:L, *V* deny, refuse
-hiya -H:L, *V* kill, die; cf. **-walala**
-hiyala -HH:L, *V* be left, remain
-hodika -HH:L, *V* announce arrival; say
hodi H:L and clap hands
-hola -H:L, *V* thresh; harvest millet,
 peas; also **-hula**
-holoha -HFL, *V caus.* make a hole,

- break into; also **-haloha** -HFL
-holoka -HH:L, *V* come from, come out, appear; also **-haloka** -HH:L; cf. **-uka**, **-huma**, **-oneka**
-holola -HH:L, *V* pull (softly); also **-halola** -HH:L; cf. **-uta**
-homa -H:L, *V* pierce; **kuhoma nkuchi** LHH HFL to spear
-homola -HH:L, *V* draw out, take out, bring to light; also **-hamola** -HH:L; cf. **-kohomola** -HHH:L cough
-honda -H:L, *V* suck
-honga -H:L, *V* bribe; cf. **chihongahonga** LHHH:L I quarrelsome
-hova -H:L, *V* lack, get lost
-huhulila -HHH:L, *V* fill in (holes)
-hula -H:L, *V* thresh; harvest millet, peas; also **-hola**
-hulula -HH:L, *V* be able; defeat; neut. > **-hululika** -HHH:L, **inahululika** LLHLRL it is possible (Non-Past, SC cl.9)
-huma -H:L, *V* come out; cf. **-holoka**
-humbaila -HHH:L, *V* limp
-humbwa -FL, *V pas.* infect (and destroy) fruit, trees
-huna -H:L, *V* ripen badly; cf. **-ula**, **-lapata**
-hunda -H:L, *V* teach (to behave with respect and dignity); cf. refl. **-lihunda** -HRL learn; cf. **-fundisa** teach
-hunga -H:L, *V* tie, fasten, fix; cf. **-pambilila**
-hunika -HH:L, *V* cover; also **-hinika** -HH:L; cf. **-hunukula** -HHH:L uncover; cf. nom. **lihuniko/mahuniko** LLRL cl.5/6 cover
-hunukula -HHH:L, *V* uncover, take off lid; also **-hunukula** -HHH:L; sep. < **-hunika** -HH:L, **-hinika** -HH:L cover; cf. **-hinikila** -HHH:L cover with
-hunukula -HHH:L, *V* uncover, take off lid; also **-hunukula** -HHH:L
-huva -H:L, *V* have problems; cf. **-banika**, **-tunduwila**
-huvilila -HHH:L, *V* be red; cf. **-anahuvi** P con. red
-hwa H:L, *V* die; tones with Infinitive marker; corpse: **munu ahwile** LRL HRL lit. person who died;
anihwiliwa na anyoke LLHLL L HRL his mother died; cf. **-hapuka**; cf. **-achihwango** P con.
hweetu HRL, C2:H:SF, *P subst.* we;
uhwehwe LFH (emphatic)
-hwena -H:L, *V* go; cf. red.
-hwenahwena -HHH:L walk; cf. nom. **chihweni/vihweni** LRL cl.7/8 gait
-hwenahwena -HHH:L, *V red.* walk; red. < **-hwena** -H:L go; cf. **-kwonga**
-hwika -H:L, *V* arrive; also **-komola**; cf. **-hwikanila** -HHH:L reach
-hwikanila -HHH:L, *V* reach; cf. **-hwika** -H:L arrive; **-hwikanilana** -HHHH:L reach one another

I

- ida** -H:L, *V* come; **ida nahoti** L:L LH:L come first
-ida na -H:L L, *V* bring; lit. come with
-idopa -HH:L, *V* be heavy
ihango/dihango LRL, C1:SF, *N 9/10* divining board; incantation (spoken by sorcerer); **kulola/ku-la-udya** **ihango** LHH/L-H-LL HH:L to divine, lit. to look at/to ask them (cl.6, probably referring to ‘words’) the divining board
ihato/dihato LH:L, A:S1/SF, *N 9/10* python; species oriented; also **ihatu/dihatu** LH:L cl.9/10; individualized: **uhatu/ahatu, uhato/ahato** LH:L cl.1A/2A
ihikidi/dihikidi LHFL, B:S1, *N 9/10* desire; also **tama** cl.9c/-; cf. **lukou** cl.11/-
ihimba/dihimba LFL, B:S1, *N 9/10* lion; species oriented; individualized: **uhimba/ahimba** LFL cl.1A/2A
ihinga/dihinga LRL, C1:SF, *N 9/10* calabash (for storing milk)
ihomba/dihomba LFL, B:S1, *N 9/10* fish; species oriented; individualized:

- uhomba/ahomba** LFL cl.1A/2A
ihomelo/dihomelo LLRL, C1:SF, *N 9/10* beam
ihondo/dihondo LRL, C1:SF, *N 9/10* stone used with firesticks
ihonga/dihonga LRL, C1:SF, *N 9/10* teat
ihong'o/dihong'o LRL, C1:SF, *N 9/10* maggot; species oriented; individualized: **uhong'o/ahong'o** LRL cl.1A/2A
ihuhi/dihuhi LRL, C1:SF, *N 9/10* snake sp. (related to python); species oriented; individualized: **uhuhi/ahuhi** LRL cl.1A/2A
ihungo/dihungo LH:L, E:S2, *N 9/10* genet; species oriented; individualized: **uhungo/ahungo** LH:L cl.1A/2A
ihuti/dihuti LL:L, D1:no H, *N 9/10* gun
-ikala -HH:L, *V* sit down, stay, live
ikanava LH:L, *V fin.* although; in compound tenses, also possible with same SC as following verb form; lit. although it (cl.9) is (Concessive of -va be)
ikanya/dikanya LL:L, D1:no H, *N 9c/10c* mouth; sg. also **kanya** L:L cl.9c
ikave LHL, *V fin.* except; lit. it (cl.9) is not/has not been (Negative Perfective of -va be)
-ikuta -HH:L, *V* be pregnant; also **-ve pammili** -L HHH:L lit. be at body, **-ve na-chitumbo** -H L-LRL lit. have embryo; cf. **chitumbo/vitumbo** cl.7/8; see satisfied: be
-ikuta -HH:L, *V* be satisfied (food); see pregnant: be
-ila -H:L, *V* repeat; also **-uila** -HH:L
-ima -H:L, *V* refuse to give sth. to s.o.
imaka/dimaka LRL, C1:SF, *N 9/10* cat; species oriented; individualized: **umaka/amaka** LRL cl.1A/2A
imamana/dimamana LHFL, B:S1, *N 9/10* ant sp. (small, red); species oriented; individualized: **umamana/amamana** LHFL cl.1A/2A
imamba/dimamba LFL, B:S1, *N 9/10* crocodile; cf. Sw. mamba; species oriented; individualized: **umamba/amamba** LFL cl.1A/2A; see **imbulu/dimbulu** cl.9/10
imanda/dimanda LH:L, A:S1/SF, *N 9/10* cooked rice
imande/dimande LH:L, E:S2, *N 9/10* grasshopper; species oriented; individualized: **umande/amande** LH:L cl.1A/2A
-imba -H:L, *V* sing
imbai/dimbai LH:L, A:S1/SF, *N 9/10* bee sp.; species oriented; individualized: **umbai/ambai** LH:L cl.1A/2A
imbalu/dimbalu LH:L, A:S1/SF, *N 9/10* bamboo
imbango/dimbango LH:L, A:S1/SF, *N 9/10* wild pig; species oriented; individualized: **umbango/ambango** LH:L cl.1A/2A
imbedo/dimbedo LRL, C1:SF, *N 9/10* axe
imbelekeho/dimbelekeho LHHL:L, B:S1, *N 9/10* hole (through sth.); also **imenya/dimenya** cl.9/10
imbeyu/dimbeyu LFL, B:S1, *N 9/10* seed
imboko/dimboko LH:L, A:S1/SF, *N 9/10* louse; species oriented; individualized: **umboko/amboko** LH:L cl.1A/2A
imbowa/dimbowa LRL, C1:SF, *N 9/10* vegetable
imbudi/dimbudi LH:L, A:S1/SF, *N 9/10* goat; species oriented; individualized: **umbudi/ambudi** LH:L cl.1A/2A
imbula/dimbula LH:L, A:S1/SF, *N 9/10* rain
imbulisa/dimbulisa LHFL, B:S1, *N 9/10* grey hair (of age); also **dihuli** cl. -/10
imbulu/dimbulu ?, *N 9/10* crocodile; tones unknown; species oriented; individualized: **umbulu/ambulu**; also **imamba/dimamba** cl.9/10

- imbulukuta/dimbulukuta** LLHRL, C2:H.SF, *N 9/10* butterfly; species oriented; individualized:
umbulukuta/ambulukuta LLHRL cl.1A/2A
- imbuntu** LH:L, A:S1/SF, *N 9/-* early rains
- imbutuka/dimbutuka** LLRL, C1:SF, *N 9/10* antelope sp. (klipspringer); species oriented; individualized:
umbutuka/ambutuka LLRL cl.1A/2A
- imbwe/dimbwe** L:L, D1:no H, *N 9/10* cataract (of the eye)
- imbwilimbwindi/dimbwilimbwindi** LLHRL, C2:H.SF, *N 9/10* termite sp. (small winged, not edible); species oriented; individualized:
umbwilimbwindi/ambwilimbwindi LLHRL cl.1A/2A
- imembe/dimembe** LH:L, E:S2, *N 9/10* fly; species oriented; individualized:
umembe/amembe LH:L cl.1A/2A
- imene/dimene** LRL, C1:SF, *N 9/10* pigeon-pea
- imenya/dimenya** LL:L, D1:no H, *N 9/10* hole (through sth.); also
imbelekeho/dimbelekeho cl.9/10
- imepo** LH:L, A:S1/SF, *N 9/-* air (cold)
- imete/dimete** LRL, C1:SF, *N 9/10* flash of light
- imia/dimia** LH:L, ?, *N 9c/10c* hundred; < Sw. *mia*; sg. also **mia** H:L cl.9c; also **makumi likumi** LHH LRL N6 + N5
- imila** -HH:L, *V* stand
- imilipili/dimilipili** LHHL:L, B:S1, *N 9/10* pepper
- iminda/diminda** LRL, C1:SF, *N 9/10* knuckle of sugar cane
- imindi/dimindi** LRL, C1:SF, *N 9/10* knockly part of the stem of a maize plant
- imu/dimu** RL, C1:SF, *N 9/10* spirit, demon (Sw. *jini*)
- imuka** -HH:L, *V* rise, get up; cf. **-imula** -HH:L; morning greeting:
uvenkwimuka LLLHFH; greet them:
- vaudye chivaimwike nelo** LLL LHHLL RL lit. ask them how they rose today
- imukusa/dimukusa** LHFL, B:S1, *N 9/10* calabash seed (edible); cf.
nkakahimba/mikakahimba cl.3/4
- imula** -HH:L, *V* awake; cf. **-imuka** -HH:L
- imula/dimula** LRL, C1:SF, *N 9/10* nose
- imunda/dimunda** LH:L, A:S1/SF, *N 9/10* dove; species oriented; individualized: **umunda/amunda** LH:L cl.1A/2A
- imundu/dimundu** LH:L, A:S1/SF, *N 9/10* bald patch on the head; **kumowa imundu** LHH HH:L to get a clear head
- imwedo/dimwedo** LRL, C1:SF, *N 9/10* pea
- inambili/dinambili** LHFL, B:S1, *N 9/10* partridge; species oriented; individualized: **unambili/anambili** LHFL cl.1A/2A
- indala** LRL, C1:SF, *N 9/-* hunger; be hungry: **kwona indala** HH HH:L lit. feel hunger, **-ve na-indala** -H L-LRL lit. be with hunger (Pres.Perf. of **-va** be); cf. **-doba** *V* be hungry
- indau/dindau** LRL, C1:SF, *N 9/10* type of ointment (perfumed)
- inde/achainde** H:L/LHH:L, ?, *N 9/2A+* centipede sp.
- indege/dindege** LRL, C1:SF, *N 9/10* plane
- indila/dindila** LRL, C1:SF, *N 9/10* path, road
- indonga/dindonga** LFL, B:S1, *N 9/10* heavy stick, cudgel
- indongo/dindongo** LFL, B:S1, *N 9/10* hunting stick
- indonya/dindonya** LL:L, D1:no H, *N 9/10* lip-plug (in upper lip)
- indowa/dindowa** LRL, C1:SF, *N 9/10* marriage; cf. Sw. *ndoa*; see **ulombi/malombi** cl.14/6
- indu/dindu** L:L, D1:no H, *N 9/10* groundnut
- indumba/dindumba** LFL, B:S1, *N 9/10*

- calabash bottle (small, implement of divination); cf. **litikiti/matikiti** cl.5/6, **chingungwa/vingungwa** cl.7/8
indunda/dindunda LRL, C1:SF, *N* 9/10 type of drum (small)
induva/dinduva LRL, C1:SF, *N* 9/10 flower, blossom; cf. **liuwa/mauwa**, **liwuwa/mawuwa** cl.5/6
inembe/dinembe LRL, C1:SF, *N* 9/10 calf; species oriented; individualized: **unembe/anembe** LRL cl.1A/2A
inembo/dinembo LFL, B:S1, *N* 9/10 elephant; species oriented; individualized: **unembo/anembo** LFL cl.1A/2A
inete/dinete LL:L, D1:no H, *N* 9/10 grass sp.
-ing'a -H:L, *V* give (to s.o.); cf. **-usa** give, display, show
ing'ambe/ding'ambe LFL, B:S1, *N* 9/10 tortoise; species oriented; individualized: **ung'ambe/ang'ambe** LFL cl.1A/2A
ing'ambo/ding'ambo LH:L, E:S2, *N* 9/10 other side (e.g. of river, valley), beyond; **pang'ambo** LH:L cl.16 Mozambique
ing'ande/ding'ande LH:L, E:S2, *N* 9/10 house; augm.: **likande/makande** LH:L cl.5/6; also **inyumba/dinyumba** cl.9/10; cf. **libanda/mabanda** cl.5/6
ing'anga/ding'anga LH:L, A:S1/SF, *N* 9/10 guinea-fowl; species oriented; individualized: **ung'anga/ang'anga** LH:L cl.1A/2A
ing'anya LFL, B:S1, *N* 9/- cause, reason; court case, debt; **ing'anya** (ya-...) LFL (H-...) because (of), **ing'anya ntwani** LLH HFL why, lit. what kind of reason; cf. **maika** I, **liyongo/ mayongo** cl.5/6
ing'avanga/ding'avanga LHFL, B:S1, *N* 9/10 dog; species oriented; individualized: **ung'avanga/ang'avanga** LHFL cl.1A/2A
ing'oha/ding'oha LH:L, E:S2, *N* 9/10 digging stick
ingokwa/dingokwa LH:L, A:S1/SF, *N* 9/10 stone of mango
ing'okwe/ding'okwe LL:L, D1:no H, *N* 9/10 storage of produce; cf. **likungwi/makungwi** cl.5/6
ing'ole/ding'ole LRL, C1:SF, *N* 9/10 dance
ing'ombe/ding'ombe LRL, C1:SF, *N* 9/10 cow; species oriented; individualized: **ung'ombe/ang'ombe** LRL cl.1A/2A
ing'ondo/ding'ondo LFL, B:S1, *N* 9/10 quarrel, war
ing'ondo/ding'ondo LH:L, A:S1/SF, *N* 9/10 lizard sp. (big, living on land); species oriented; individualized: **ung'ondo/ang'ondo** LH:L cl.1A/2A
ingondolo/dingondolo LLRL, C1:SF, *N* 9/10 sheep; species oriented; individualized: **ungondolo/angondolo** LLRL cl.1A/2A
ingongo/dingongo LH:L, E:S2, *N* 9/10 forest (area with many trees)
ing'oo/ding'oo LRL, C1:SF, *N* 9/10 banana; often heard as **ing'owo/ding'owo** LRL; also **ing'ou/ding'ou** LRL
ing'uku/ding'uku LFL, B:S1, *N* 9/10 chicken; species oriented; individualized: **ung'uku/ang'uku** LFL cl.1A/2A
ing'ulungu/ding'ulungu LLRL, C1:SF, *N* 9/10 round stone (for smoothening surfaces, e.g. pots)
inguluve/dinguluve LLRL, C1:SF, *N* 9/10 pig; species oriented; individualized: **unguluve/anguluve** LLRL cl.1A/2A
ingumbi/dingumbi LFL, B:S1, *N* 9/10 termite sp. (winged); species oriented; individualized: **ungumbi/angumbi** LFL cl.1A/2A
ing'unde/ding'unde LH:L, A:S1/SF, *N* 9/10 bean sp.; **ing'unde ya-chimahe/ding'unde dya-chimahe** LHL H-LH:L the small species, lit. female bean(s)
ing'ung'uni/ding'ung'uni LHH:L,

- A:S1/SF, *N 9/10* bed bug; species oriented; individualized:
ung'ung'uni/ang'ung'uni LHH:L cl.1A/2A
- ingunja/dingunja** LFL, B:S1, *N 9/10* red soil (used as building material); also **chikunda/vikunda** cl.7/8
- inguo/dinguo** LRL, C1:SF, *N 9/10* clothing
- ing'uva/ding'uva** LFL, B:S1, *N 9/10* lightning
- ingwamba/dingwamba** LL:L, D1:no H, *N 9/10* hoe (big)
- ingwangwalati/dingwangwalati** LHHH:L, A:S1/SF, *N 9/10* dog sp. (digging up corpses); species oriented; individualized:
ungwangwalati/angwangwalati LHHH:L cl.1A/2A; **nngwangwalati/vangwangwalati** LHHH:L cl.1/2 killer, savage person
- ing'wapa/ding'wapa** LH:L, E:S2, *N 9/10* armpit
- inikila** -HHH:L, *V* set a trap
- ininji/dininji** HRL, C2:H.SF, *N 9/10* pumpkin seed
- injalahu/dinjalahu** LHH:L, A:S1/SF, *N 9/10* ant sp. (big, red); species oriented; individualized: **unjalahu/anjalahu** LHH:L cl.1A/2A
- injele/dinjele** LFL, B:S1, *N 9/10* maize cob
- injenjema/dinjenjema** LHRL, C2:H.SF, *N 9/10* mosquito; species oriented; individualized: **unjenjema/anjenjema** LHRL cl.1A/2A
- injinga/dinjinga** LH:L, A:S1/SF, *N 9/10* bicycle; also **basikeli/dibasikeli** cl.9c/10c
- injinji/dinjinji** LL:L, D1:no H, *N 9/10* type of fence
- injiipala** -HHH:L, *V* be short; also **-ipika**; cf. **-ananjipi** P con. short
- injiipika** -HHH:L, *V* be sufficient, be (with) many, be available; cf. **-kolodya, -tanjila**
- inondwa/dinondwa** LH:L, A:S1/SF, *N 9/10* star
- inongo/dinongo** LRL, C1:SF, *N 9/10* testicle; also **litoko/matoko** cl.5/6, **chitoko/vitoko** cl.7/8; cf. **chitongo/vitongo** LRL cl.7/8 penis
- inono/dinono** LFL, B:S1, *N 9/10* dorsal muscle
- inudyo/dinudyo** LL:L, D1:no H, *N 9/10* present for a special occasion (esp. initiation); nom. < **-tudya** V offer present for a special occasion; also **ding'ombe** cl. -/10
- inumbati** LHFL, B:S1, *N 9/?* traditional powder
- inunda/dinunda** LH:L, E:S2, *N 9/10* ankle
- inungu/dinungu** LFL, B:S1, *N 9/10* navel
- inuta/dinuta** LH:L, A:S1/SF, *N 9/10* ant sp. (red); species oriented; individualized: **unuta/anuta** LH:L cl.1A/2A
- inyama/dinyama** LRL, C1:SF, *N 9/10* meat
- inyambo** LH:L, E:S2, *N 9/-* syphilis
- inyanga/dinyanga** LFL, B:S1, *N 9/10* hawk sp. (big, striking colours); species oriented; individualized: **unyanga/anyanga** LFL cl.1A/2A
- inyanja/dinyanja** LL:L, D1:no H, *N 9/10* plume on top of maize plant
- inyati/dinyati** LH:L, A:S1/SF, *N 9/10* buffalo; species oriented; individualized: **unyati/anyati** LH:L cl.1A/2A
- inyedi/dinyedi** LH:L, A:S1/SF, *N 9/10* snail; species oriented; individualized: **unyedi/anyedi** LH:L cl.1A/2A
- inyehe/dinyehe** LFL, B:S1, *N 9/10* flock of birds
- inyima/dinyima** LH:L, A:S1/SF, *N 9/10* monkey (Sw. kima); species oriented; individualized: **unyima/anyima** LH:L cl.1A/2A
- inyingamu/dinyingamu** LHH:L, A:S1/SF, *N 9/10* rainbow
- inyomoko/dinyomoko** LLRL, C1:SF, *N 9/10* kernel of pumpkin
- inyota** LH:L, A:S1/SF, *N 9/-* thirst; be

thirsty: **kwona inyota** HH HH:L lit. feel thirst, **-ve na-inyota** -H L-LH:L lit. be with thirst (Pres.Perf. of **-va** be); cf. **-yuma** V be thirsty
inyuchi/dinyuchi LH:L, A:S1/SF, *N* 9/10 honey-bee; species oriented; individualized: **unyuchi/anyuchi** LH:L cl.1A/2A
inyukudumba/dinyukudumba LLHRL, C2:H.SF, *N* 9/10 soldier ant; species oriented; individualized: **unyukudumba/anyukudumba** LLHRL cl.1A/2A
inyumba/dinyumba LH:L, E:S2, *N* 9/10 house; cf. Sw. nyumba; see **ing'ande/ding'ande** cl.9/10; cf. **libanda/mabanda** cl.5/6
inyumbu/dinyumbu LRL, C1:SF, *N* 9/10 tail (implement of divination)
inyundo/dinyundo LRL, C1:SF, *N* 9/10 hammer; cf. Sw. nyundo; see **chidodelo/vidodelo** cl.7/8
inyung'unyung'u/dinyung'unyung'u LHHH:L, A:S1/SF, *N* 9/10 wrist
-ipa -H:L, *V* cut grass
-ipika -HH:L, *V* be short; also **-injipala**; cf. **-ananjipi** P con. short; cf. **pepi** I near
-isala -HH:L, *V* stay behind; cf. **-isalila** -HHH:L remain
-isalila -HHH:L, *V* remain; cf. **-isala** -HH:L stay behind
isungu/disungu LFL, B:S1, *N* 9/10 spirit, heart, soul
isungula/disungula LHRL, C2:H.SF, *N* 9/10 hare; species oriented; individualized: **usungula/asungula** LHRL cl.1A/2A
isungula/disungula LHRL, C2:H.SF, *N* 9/10 poles
isuvi/disuvi LFL, B:S1, *N* 9/10 leopard; species oriented; individualized: **usuvi/asuvi** LFL cl.1A/2A
iteso/diteso LRL, C1:SF, *N* 9c/10c adze
-itula -HH:L, *V* cool down (tr.); cf. **-didima**, **-pola**, **-tulila**
-iva -H:L, *V* steal

J

japani/dijapani HFL/LHFL, B:S1, *N* 9c/10c type of clothing

K

-kaba -H:L, *V* press tight, squeeze; also **-bana**; cf. **-toha**
-kachakacha -HHH:L, *V* red. rustle (in shrubs); cf. **-waya**
-kada -H:L, *V* squeeze, massage; cf. **-kamila**, **-minya**, **-chukudula**
-kadamba -HH:L, *V* step in
kadiki LRL, C1:SF, *I* few, a bit; cf. **-dikidiki** -HHH:L A small; **nahoti kadiki** LHL LRL presently
kahwivi/tuhwivi LH:L, E:S2, *N* 12/13 not yet full-grown chicken
kala RL, C1:SF, *I* formerly, the past; also **tangu** I
-kalala -HH:L, *V* be bitter; **kukalala isungu** LHHH HFL cruel spirit (reply to question “how are you”; reply in Sw.: mambo mabaya)
-kalamuka -HHH:L, *V* be clever, be cunning
-kalanga -HH:L, *V* fry; cf. Sw. kaanga; see **-nanuha**; refl. > **-likalanga** -HLRL be troubled by sun and heat
-kalava -HH:L, *V* wash (hands); **kukalava mmakono** HHH HHH:L lit. wash in hands
-kalewa -HFL, *V* pas. get drunk; also **-kelewa** -HFL
-kalipa -HH:L, *V* scold, rebuke; also **-duma**
-kama -H:L, *V* get tied, curdle; cf. **-kamata** -HH:L mould, **-kamula** -HH:L seize, **-kamila** -HH:L squeeze
-kamasa -HFL, *V* caus. greet; greet older people by clapping with cupped hands and say **siam** LL:L; cf. **disalamu** cl.10, **-imuka**, **-chi**, **-omi** H:L P, **dachi** LL I
-kamata -HH:L, *V* mould; cont. <
-kama -H:L get tied; cf. **-umba**, **-munya**
-kameka -HH:L, *V* know, understand,

- recognize; **nikakameka** LHH:L I don't know (Neg.Pres.), **nikakameke** LHLH:L I don't understand (Neg.Perf.); cf. **-mala**
- kamila** -HH:L, *V* squeeze; cf. **-kama** -H:L get tied; cf. **-minya**, **-kada**, **-chukudula**
- kamula** -HH:L, *V* seize; cf. **-kama** -H:L get tied; **ku-n-kamula** **umwenye** H-H-HLL HH:L to be made headman, lit. to seize him for chiefhood
- kanda** -H:L, *V* make completely straight, knead; cf. **-nyoka**, **-udula**
- kandika** -HH:L, *V* be rotten
- kandila** -HH:L, *V* eat fish or meat
- kandili/dikandili** LFL/LLFL, E:S2, *N* 9c/10c lamp
- kanga** -H:L, *V* be scattered abroad
- kanga/dikanga** RL/LRL, C1:SF, *N* 9c/10c piece of cloth (worn by women); cf. Sw. *kanga*
- kangana** -HH:L, *V* be astonished, be surprised; also neut. > **-kanganika** -HHH:L; also **-lapa**
- kang'ana** -H:L, *V* hoe (a field); cf. **-kuluwanya**, **-hana**, **-lima**
- kanya/dikanya** L:L/LL:L, D1:no H, *N* 9c/10c mouth; sg. also **ikanya** LL:L cl.9c
- katapadya** -HHL:L, *V caus.* prepare, arrange, put in order, clean; caus. < **-katapala** -HHH:L be good, beautiful
- katapadya** -HHL:L, *V caus.* decorate; also **-lemba**; see prepare
- katapala** -HHH:L, *V* be good, be beautiful; cf. **-ambone** P con. good; cf. caus. > **-katapadya** -HHL:L prepare, arrange, put in order, clean; cf. **chikatapele** LLHFL *V* fin. good, fine, beautiful
- kavila** LH:L, A:S1/SF?, *I* again; also **kuvila** LH:L; cf. **-vili** -RL A two; cf. **uvila** LFL thus, so, as follows
- kaya/dikaya** H:L/LH:L, E:S2, *N* 9c/10c homestead, village; cf. **kumayaya** LLL:L cl.17
- kedekeda** -HHH:L, *V* be troubled
- kelewa** -HFL, *V pas.* get drunk; also **-kalewa** -HFL
- kimbila** -HH:L, *V* drink; also **-kumbila** -HH:L
- kocha** -H:L, *V* poke into
- kodidya** -HFL, *V caus.* find; app. < **-kodya** -FL meet, come across, find
- kodola** -HH:L, *V* circumcise; also **-kadola** -HH:L; cf. **-yaluka**, **nngaliba/vangaliba** cl.1/2 s.o. who circumcises
- kodya** -FL, *V caus.* boil, put on fire; also **-yaukidya**, **-chemusa** boil; cf. **-yaula**, **-yaukila**, **-tokota**, **-tiniha**; see meet
- kodya** -FL, *V caus.* meet, come across, find; ass.> **-kodyana** -HFL meet each other; app.> **-kodidya** -HFL find; see boil
- kodyana** -HFL, *V* meet each other; ass. < **-kodya** -FL meet; **tunakodyana** LLLL:L goodbye, we'll meet again; cf. **-himana**
- kodyoka** -HH:L, *V* vomit; also **-kadyoka** -HH:L, **-tapika**
- kohomola** -HHH:L, *V* cough; also **-kahamola** -HHH:L; cf. **-kumula**
- koka** H:L, A:S1/SF?, *I* then, finally, at the end; if; cf. **-uka** *V* go away, come from
- kola** -H:L, *V* do, receive (sth. out of s.o.'s hand); be sharp; cf. **-tenda**
- koledya** -HFL, *V caus.* kindle fire; also **-kumbanya**
- kolodya** -HFL, *V caus.* be enough, be sufficient; also **-kalodya** -HFL; cf. **-injipika**
- koloma** -HH:L, *V* snore
- kolova** -HH:L, *V* stir; cf. Sw. *koroga*; cf. **-kolowanya**, **-pindikulanya**
- kolowanya** -HHL:L, *V caus.* turn round, stir (e.g. in making cassava porridge); cf. **-pindikulanya**, **-kolova**
- koma** -H:L, *V* bring to an end
- komala** -HH:L, *V* be old, healthy and strong; also **-kamala** -HH:L; cf. **-lama**, **-kongopala**, **-atangu** P con. old, **-achinyakala** -LLHFL P con. old

- kombola** -HH:L, *V* redeem; also
 -**kambola** -HH:L
 -**komela** -HH:L, *V* drive in (e.g. a nail)
 -**komodya** -HFL, *V caus.* be hard, be difficult; also -**kamodya** -HFL, -**nonopa**
 -**komola** -HH:L, *V* arrive; also -**kamola** -HH:L, -**hwika**
 -**konda** -H:L, *V* flourish
 -**kong'ona** -HH:L, *V* strike, beat hard
 -**kongopala** -HHH:L, *V* be old (of people); also -**kangapala** -HHH:L, -**konga** -H:L; cf. -**komala**; cf. -**atangu** P con. old, -**achinyakala** P con. old, of past
 -**kongovela** -HHH:L, *V* crow (cock); also -**kangavela** -HHH:L
 -**konidya** -HFL, *V caus.* shut eyes; cf. -**kona** -H:L to sleep
 -**konyela** -HH:L, *V* poke up, put more wood on fire
 -**kova** -H:L, *V* dish out food (with ladle)
 -**koveka** -HH:L, *V* hang (up); cf. sep. > -**kovokola** -HHH:L take down sth. hanging (e.g. dried clothing)
 -**kovokola** -HHH:L, *V* take down sth. hanging (e.g. dried clothing); sep. < -**koveka** -HH:L hang up; also -**kavakola** -HHH:L
kuchi H:H, *V fin.* that (Compl.); cf. -**chi** say; also **kuchidono** HHRL
kuchidono HHRL, *V fin.* that (Compl.); cf. -**chi** say; also **kuchi** H:H
kuchihanya LLL:L, D1:no H, *N 17* doctor's place
kukati LRL, C1:SF, *N 17* room; cf. **ching'ati** LH:L cl.7 middle, in the middle, between, **nkati** LRL within, in the middle
 -**kula** -H:L, *V* grow, grow up; cf. Sw. -**kua**; see -**kulumuka** -HHH:L
kulehu LH:L, E:S2, *A* far; **kulehu na-kukaya kwetu** LHL L-LLH RL far from our home(stead); cf. -**lehu** -H:L *A* long, tall, high, **mwalehu** LFL I directly
 -**kuluha** -HFL, *V caus.* have miscarriage; cf. nom. **ukuluha** LHFL cl.14 miscarriage; cf. **dinjahango** cl. -/10; to miscarry: **kuveleka mwana-nkuya** LHHH FL-LFL lit. bear a child-return
 -**kulumuka** -HHH:L, *V* grow, grow up; also -**kula** -H:L
 -**kulungwa** -HFL, B:S1, *A* big; **nkulungwa/vakulungwa** LHFL cl.1/2 (as nouns: elder), **nkulungwa/mikulungwa** LHFL cl.3/4, **ing'ulungwa/ding'ulungwa** LHFL cl.9/10; cf. -**tumbula** *V* be big, be fat; predicative: same tones
 -**kulupidya** -HHL:L, *V caus.* raise s.o.'s hopes; caus. < -**kulupila** -HHH:L trust s.o., hope
 -**kulupila** -HHH:L, *V* trust, hope; also -**kulupilila** -HHHH:L; cf. caus. -**kulupidya** -HHL:L raise s.o.'s hopes
 -**kuluva** -HH:L, *V* glide, trickle, slide along (esp. water through a channel)
 -**kuluwanya** -HHL:L, *V caus.* hoe (a cleared area); cf. -**kang'ana**, -**hana**, -**lima**
kulyamba LH:L, E:S2, *N 17* dawn; cf. **ulyamba** HRL cl.14 morning, **palyamba** LH:L cl.16 day after tomorrow; cf. -**cha** *V* dawn, **umambumbu** cl.14 early in the morning
kumanga LRL, C1:SF, *N 17* coast; eastern direction; cf. **chimanga** LRL cl.7/- Swahili language, nature
kumayaya LLL:L, D1:no H, *N 17* village; cf. **kaya/dikaya** cl.9c/10c
 -**kumba** -H:L, *V* cheat
 -**kumbanga** -HH:L, *V* incite
 -**kumbanya** -HFL, *V caus.* kindle fire; also -**koledya**
 -**kumbila** -HH:L, *V* drink; also -**kimbila** -HH:L
 -**kumbukila** -HHH:L, *V* remember, think
 -**kumbula** -HH:L, *V* invite; inform
 -**kumbusa** -HFL, *V caus.* remind
kumeho LH:L, E:S2, *N 17+6* face, front, before; cf. **meho** H:L cl.6 eyes, **pameho** LH:L cl.16 publicly; cf.

muyo cl.18
-kumila -HH:L, *V* swallow
kumisati LLL:L, D1:no H, *N* 17
 graveyard
-kumula -HH:L, *V* cough with force,
 groan; cf. **-kohomola**
kundagala LLL:L, D1:no H, *N* 17
 initiation place (bush)
-kundanila -HHH:L, *V* share; cf.
-kundanya -HFL mix, collect
 together
-kundanya -HFL, *V caus.* mix, collect
 together, add; cf. **-kundanila** -HHH:L
 share
kundonde LH:L, E:S2, *N* 17 lower
 parts of Plateau; western direction
 (and land located there); cf. **nndonde**/
vandonde HFL cl.1/2 Ndonde
 person, **chindonde** HFL cl.7 Ndonde
 dialect, nature
-kunga -H:L, *V* collect, gather together
-kunguluka -HHH:L, *V* talk, converse;
 also **-lonjela**
-kungumika -HHH:L, *V* respect, obey;
 cf. **-limuka**
-kunja -H:L, *V* fold; cf. Sw. **-kunja**
-kupula -HH:L, *V* singe
-kuta -H:L, *V* cry; cf. **-lila**
-kutula -HHH:L, *V* rob, take by force;
 also **-dodoma**, **-pokonyola**,
-pakanyola
-kuva -H:L, *V* draw a line
-kuvala -HH:L, *V* stub oneself (esp. toe)
kuvila LH:L, A:S1/SF?, *I* again; also
kavila LH:L I; cf. **-vili** -RL A two; cf.
uvila LFL thus, so, as follows
-kuwa -H:L, *V* pluck (fowl)
kwachi RL, C1:SF, *I* where; question
 phrase-finally: FH **kwachi** FH; cf.
-chi *V* say
kwaki -HH-, *P* at one's place; followed
 by a name of a person, title or kinship
 term: **kwaki mariamu** HH LLH:L at
 Mariamu's; cf. **kwanga**
kwali H:L, A:S1/SF?, *I* perhaps, maybe,
 I don't know; probably an old form
 derived from an irregular verb 'to be'
 which consists of a locative prefix

followed by **-li**, cf. **-pali** -H:L *V*; cf.
panji P
-kwama -H:L, *V* urinate
-kwanga -H:L, *V* scrape off, peel; cf.
-palata, **-pukusula**
kwanga -HH-, *P* at the persons' place;
 followed by names of persons, titles
 or kinship terms (of more than one
 person): **kwanga vantanda** HH
 HHFL at the Vantanda's; cf. **kwaki**
-kwela -H:L, *V* climb, ascend; cf.
-damila
-kwichakwicha -HHH:L, *V red.*
 sharpen (knife); cf. **-tema**
-kwina -H:L, *V* be erect

L

-laduka -HH:L, *V* be flat (of taste)
-ladya -FL, *V caus.* spread, lay down;
 caus. < **-lala** -H:L lie down; cf. **-vika**
-laga -H:L, *V* be afflicted, be
 discomforted; cf. **-lagasa** -HFL
 afflict; cf. **-banika**
-lagasa -HFL, *V caus.* afflict; cf. **-laga**
 -H:L be afflicted, **-bana**
-laila -HH:L, *V* take leave of, bid
 farewell
-lala -H:L, *V* lie down, go to bed; also
-dama; cf. caus. **-ladya** -FL spread,
 lay down; **lidi lilala** RL LH:L not
 being able to speak, lit. the voice
 which lies down
-laleha -HFL, *V caus.* be sweet (taste)
-lama -H:L, *V* recover; live/exist long;
 cf. caus. **-lamya** -FL cure; cf. nom.
ulama LH:L cl.14 life; cf. act.-pos.
-lamala -HH:L be handicapped; cf.
-komala, **-kongopala**
-lamala -HH:L, *V* be handicapped;
 act.-pos. < **-lama** -H:L recover
-lamba -H:L, *V* lick
-lambila -HH:L, *V* deceive, lie; cf. refl.
-lilambila -HLRL pretend
-lamya -FL, *V caus.* cure; caus. < **-lama**
 -H:L recover
-langa -H:L, *V* rear, breed, keep in
 confinement
-langala -HH:L, *V* be light; also

- langula** -HH:L
 -**langudya** -HFL, *V caus.* show; cf. -**usa**
 -**langula** -HH:L, *V* be light; also
 -**langala** -HH:L
 -**lanika** -H:L, *V* curse
 -**lapa** -H:L, *V* be astonished, be surprised; also -**kangana**
 -**lapata** -HH:L, *V* ripen; cf. -**ula**, -**huna**
 -**lapilila** -HHH:L, *V* kill at a distance (witchcraft)
 -**lauka** -HH:L, *V* turn
 -**lavanya** -HFL, *V caus.* lie; cf.
 nankalavanya/achanankalavanya
 LLLLFL/LHLLLLFL cl.1a/2A+ liar
 -**legeya** -HH:L, *V* be loose; cf. Sw. legea; also -**lageya** -HH:L; see
 -**lugusa**
 -**lehu** -H:L, E:S2, *A* long, tall, high;
 nnehu/milehu LH:L cl.3/4, **indehu/dindehu** LH:L/E cl.9/10; cf. **kulehu (na)** LH:L (L) far (from), **mwalehu** LFL *I* directly; predicative: same tones
 -**leka** -H:L, *V* leave, leave behind, stop doing sth.; **nguleka** LLL nor, lit. *I* stop (doing it); cf. -**lekelela** -HHH:L omit, neglect, -**lekanila** -HHH:L be different
 -**lekanila** -HHH:L, *V* be different; cf.
 -**leka** -H:L leave, -**lekelela** -HHH:L omit, neglect
 -**lekelela** -HHH:L, *V* omit, neglect, leave (in a certain condition); app.+ app. < -**leka** -H:L leave; cf. -**lekanila** -HHH:L be different
 -**lela** -H:L, *V* rear (a child)
 -**leleka** -HH:L, *V* be obedient
 -**lemba** -H:L, *V* decorate; also
 -**katapadya**; see get ripe, put medicine..., write
 -**lemba** -H:L, *V* ripen (of papaya, mango, not of banana); see put medicine..., decorate, write
 -**lemba** -H:L, *V* write; also -**yandika**; see get ripe, put medicine..., decorate
 -**lemba** -H:L, *V* put medicine on wound with finger; see get ripe, decorate, write
 -**lembela** -HH:L, *V* want, like, desire, wish, look for; also -**lambela** -HH:L; cf. -**tamwa**; app. -**lembelela** -HHH:L look for; welcome: **nakulembela uide kukaya** LLLLL LLL HFL lit. *I* wish you to come home
 -**lembelela** -HHH:L, *V* look for; also
 -**lambelela** -HHH:L; app. < -**lembela** -HH:L want, like, etc., look for; cf.
 -**taha**, -**loleha**
 -**lembula** -HH:L, *V* mock, ridicule, gossip
 -**lemwa** -FL, B:S1, *A* idle; **nnemwa/milemwa** LFL cl.3/4, **indemwa/dindemwa** LFL cl.9/10; cf. nom. **ulemwa** LFL cl.14 idleness, laziness; cf. -**lisinga** *V* be idle; predicative: same tones
 -**lenga** -H:L, *V* slice; harvest (cassava)
 -**lepa** -H:L, *V* be long; also -**lepelela** -HHH:L, -**lapelela** -HHH:L; cf. -**lehu** -H:L *A* long, tall
 -**leva** -H:L, *V* fail, make mistake, miss
libadang'a/mabadang'a LHFL, B:S1, *N* 5/6 head (esp. of animals)
libaka/mabaka LRL, C1:SF, *N* 5/6 wall
libanda/mabanda LRL, C1:SF, *N* 5/6 house (big, with square roof); cf. **ing'ande/ding'ande** cl.9/10, **inyumba/dinyumba** cl.9/10
libibu/mabibu LRL, C1:SF, *N* 5/6 cashew apple
libongo/mabongo LH:L, A:S1/SF, *N* 5/6 foetus
libuda/mabuda LH:L, A:S1/SF, *N* 5/6 field (without yield)
libuda/mabuda LFL, B:S1, *N* 5/6 cheek
libulangeti/mabulangeti LLLH:L, E:S2, *N* 5/6 blanket
lichehe/machehe LRL, C1:SF, *N* 5/6 type of storage of produce (plaited of grass)
lichela/machela LFL, B:S1, *N* 5/6 harvest time; also **nchela/michela** LFL cl.3/4
lichelela/machelela LLRL, C1:SF, *N* 5/6 wildcat sp.
 -**lichilinganya** -HHLL:L, *V refl./caus.*

- protect against evil
lichindachinda/machindachinda LHHH:L, A:S1/SF, *N* 5/6 young child
lichinga/machinga LFL, B:S1, *N* 5/6 mountain
lichungwa/machungwa LFL, B:S1, *N* 5/6 orange
-lida -FL, B:S1, *P* which; **alida** LFL cl.1, **ulida** LFL cl.3, **ilida** LFL cl.9; question phrase-finally: FH; predicative: same tones
lidambi/madambi LRL, C1:SF, *N* 5/6 worn piece of clothing
lidengo/madengo LRL, C1:SF, *N* 5/6 work; cf. **-denga** V build; **kutenda lidengo/madengo** LHH HH:L to work, lit. to do work
lidi/malidi RL/LRL, C1:SF, *N* 5/6+ voice
-lidila -HRL, *V refl.* scream (until exhaustion); cf. **-nyokonya**
lidingilo/madingilo LLRL, C1:SF, *N* 5/6 rope for building
lido RL, C1:SF, *N* 5/- yesterday
liduva/maduva LH:L, A:S1/SF, *N* 5/6 sun, day (daytime); **liduva kuswa** LHL H:L all day long
-lienga -HRL, *V refl.* congeal
-lifundisa -HHL:L, *V refl./caus.* learn; < Sw. -jifundisha; refl. < **-fundisa** -HFL teach; see **-liyedya**; cf. **-lihunda**
lifungu/mafungu LFL, B:S1, *N* 5/6 bundle, bunch; cf. Sw. fungu; see **chituvi/vituvi** cl.7/8, **chiha/viha** cl.7/8
ligoma/magoma LRL, C1:SF, *N* 5/6 drum; cf. Sw. ngoma
liguma/maguma LH:L, E:S2, *N* 5/6 field which has not been cultivated in the right way
ligwambu/magwambu LFL, B:S1, *N* 5/6 banana bark
-liha -FL, *V caus.* feed, make eat; also **-lisa** -FL; caus. < **-lya** eat
lihahamanga/mahahamanga LLLRL, C1:SF, *N* 5/6 hair (of back)
lihahi/mahahi LRL, C1:SF, *N* 5/6 leaves of maize cob
lihala/mahala LRL, C1:SF, *N* 5/6 field which has been cultivated twice in succession
lihawe/mahalawe LLL:L, D1:no H, *N* 5/6 anvil
lihamba/mahamba LRL, C1:SF, *N* 5/6 leaf; cf. **namahamba** LHFL cl.1a snake sp. (big, green)
lihame/mahame LH:L, E:S2, *N* 5/6 abandoned homestead
lihangahi LLRL, C1:SF, *N* 5/? white soil
lihangawila LHHL:L, B:S1, *N* 5/? crowd of celebrating people;
palihangawila LLHHL:L cl.16+5 place of gathering during celebrations
lihanja/mahanja LL:L, D1:no H, *N* 5/6 pot (for cooking); also **chiteleko/viteleko**, **chitaleko/vitaleko** cl.7/8
lihichi/mahichi LRL, C1:SF, *N* 5/6 stump, trunk of a fallen tree
lihiku/mahiku LH:L, A:S1/SF, *N* 5/6 day (24 h); also **lisiku/masiku** LH:L cl.5/6
lihinda/mahinda LH:L, A:S1/SF, *N* 5/6 honey comb
lihindili/mahindili LHFL, B:S1, *N* 5/6 cooking stone
-lihinga -HRL, *V refl.* bathe oneself; refl. < **-hinga** -H:L bathe
lihiye/mahiye LH:L, A:S1/SF, *N* 5/6 locust; also **lipalangula/mapalangula** cl.5/6, **nampalangula** cl.1a
liho/meho H:L, A:S1/SF, *N* 5/6 eye; sg. also **liso** H:L; evil eye: **liho**
lukulungwa HL LHFL, lit. big eye, **liho lya-kumawelu** HL H-LLH:L lit. eye of outside
lihoho/mahoho LFL, B:S1, *N* 5/6 wild-dog (Sw. mbwamwitu)
lihoka/mahoka LRL, C1:SF, *N* 5/6 spirit (ancestral)
lihonga/mahonga LH:L, E:S2, *N* 5/6 wooden arrow
lihongo/mahongo LH:L, E:S2, *N* 5/6 arrow shaft
lihonje LH:L, A:S1/SF, *N* 5/? millet sp.;

- full name: **ntama wa-lihonje** LHL
H-LH:L
- lihonyo/mahonyo** LFL, B:S1, *N 5/6*
ant-hill
- lihula/mahula** LH:L, E:S2, *N 5/6* rag
- lihunda** -HRL, *V refl.* learn (to behave
with respect and dignity); refl. <
-hunda -H:L teach; cf. **-liyedya**,
-lifundisa
- lihunde/mahunde** LRL, C1:SF, *N 5/6*
cloud
- lihuniko/mahuniko** LLRL, C1:SF, *N 5/6*
cover; nom. < **-hunika** V cover
- lihuta/mahuta** LH:L, A:S1/SF, *N 5/6*
oil; sg. used for oil from animals
- lihwang'anidya** -HHLL:L, *V refl./caus.* smear; also **-lipakala**
- lijamanda/majamanda** LLFL, E:S2, *N 5/6*
sifting basket (round, small)
- lijiko/majiko** LRL, C1:SF, *N 5/6*
fireplace; cf. Sw. jiko; see
chiwuli/viwuli cl.7/8
- lika** -H:L, *V* be worn out
- likabuli/makabuli** LHFL, B:S1, *N 5/6*
grave; < Sw. kaburi; see
litembe/matembe cl.5/6
- likahi/makahi** LFL, B:S1, *N 5/6* outer
covering (of trees (= bark), plants,
animals); **likahi ly'unyedi** LHL
HH:L snail shell
- likala/makala** LH:L, A:S1/SF, *N 5/6*
charcoal
- likalala/makalala** LHFL, B:S1, *N 5/6*
sifting basket (long)
- likalanga** -HLRL, *V refl.* get hold of
oneself
- likambangohi/makambangohi**
LLHRL, C2:H.SF, *N 5/6* bark of
Christmas tree
- likande/makande** LH:L, A:S1/SF, *N 5/6*
sleeping mat; also **likandi/**
makandi LH:L cl.5/6; cf. **lyambi/**
malyambi cl.5/6+
- likando/makando** LRL, C1:SF, *N 5/6*
unfermented beer (start of final stage
in preparation of beer)
- likangala/makangala** LLRL, C1:SF, *N 5/6*
ceiling
- likasaula** -HHLRL, *V refl.* wash
private parts (women)
- likocho/makocho** LH:L, A:S1/SF, *N 5/6*
type of trap (rope, to trap bigger
animals)
- likolo** LH:L, A:S1/SF, *N 5/6* mother, i.e.
having given birth (esp. animals)
- likonde/makonde** LRL, C1:SF, *N 5/6*
desert area (without water); cf.
mmakonde/vamakonde LHFL cl.1/2
Makonde person, **chimakonde** LHFL
cl.7 Makonde language, nature
- likong'we/makong'we** LL:L, D1:no H,
N 5/6 pumpkin sp. (watery)
- likote/makote** LRL, C1:SF, *N 5/6* dip
(in terrain)
- likowe/makowe** LRL, C1:SF, *N 5/6*
partridge sp.
- likulambila** LLLH:L, A:S1/SF, *N 5/6*
type of food (rice with watery
pumpkin sp.)
- likule/makule** LFL, B:S1, *N 5/6* rat; sg.
also **nkule** LFL cl.3
- likulukulu/makulukulu** LHHH:L,
A:S1/SF, *N 5/6* field which has been
cultivated more than three times in
succession; (cultivation usually ends
after four crops)
- likumbatu/makumbatu** LLRL, C1:SF,
N 5/6 foot
- likumbi/makumbi** LRL, C1:SF, *N 5/6*
initiation rites (boys)
- likumbila/makumbila** LHFL, B:S1, *N 5/6*
water lemon; cf. **-kumbila** V
drink
- likumi/makumi** LRL, C1:SF, *N 5/6* ten;
makumi mavili LHH LRL twenty,
makumi likumi LHH LRL hundred
- likundi/makundi** LH:L, A:S1/SF, *N 5/6*
crowd, company, group; cf. Sw.
kundi; see **likuwa/makuwa** cl.5/6
- likungwa/makungwa** LL:L, D1:no H,
N 5/6 type of drum (big); dance (to
remember the deceased)
- likungwi/makungwi** LRL, C1:SF, *N 5/6*
type of storage of produce; cf.
ing'okwe/ding'okwe cl.9/10
- likuti/makuti** LH:L, A:S1/SF, *N 5/6*

- type of drum (big, esp. used at boy's initiation)
- likutu/makutu** LRL, C1:SF, *N* 5/6 ear
- likutukutu/makutukutu** LLHFL, E:S2, *N* 5/6 mischievous child; also
- livelu/mavelu** cl.5/6
- likuwa/makuwa** LFL, B:S1, *N* 5/6 crowd, company, group; also **likundi/makundi** cl.5/6
- likwanda/makwanda** LRL, C1:SF, *N* 5/6 scar
- likwati/makwati** LRL, C1:SF, *N* 5/6 leaves of maize plant
- likwikwi/makwikwi** LRL, C1:SF, *N* 5/6 eyebrow
- lila** -H:L, *V* cut navel string; cry
- lilala/malala** LRL, C1:SF, *N* 5/6 wild date tree
- lilambila** -HLRL, *V refl.* pretend; refl. < **-lambila** -HH:L deceive; cf. **-twesa**
- lilanga/malanga** LRL, C1:SF, *N* 5/6 wasteland (grass, few trees)
- lilaula** -HRL, *V refl.* eat first products of new crop
- lilava** -HRL, *V refl.* get up early
- lileha/maleha** LRL, C1:SF, *N* 5/6 feather, hair (on legs)
- lilema/malema** LH:L, A:S1/SF, *N* 5/6 bat
- lilenga/malenga** LRL, C1:SF, *N* 5/6 stem
- liloda/maloda** LRL, C1:SF, *N* 5/6 wildcat sp.
- lilombe/malombe** LH:L, E:S2, *N* 5/6 maize
- lilonjedi/malonjedi** LLRL, C1:SF, *N* 5/6 saying; nom. < **-lonjela** *V* talk, converse
- lilove/malove** LH:L, A:S1/SF, *N* 5/6 word; cf. **namalove** LHRL cl.9a echo
- lilundi/malundi** LH:L, E:S2, *N* 5/6 knee
- lilutu/malutu** LFL, B:S1, *N* 5/6 rat sp.
- lilwedo/malwedo** LH:L, E:S2, *N* 5/6 earthworm
- lima** -H:L, *V* cultivate; cf. nom. **nkulima/vakulima** LHFL cl.1/2 farmer; cf. **-kang'ana**, **-hana**, **-kuluwanya**
- limbende/mambende** LH:L, E:S2, *N* 5/6 skin
- limbidya** -HFL, *V caus.* forbid, refuse s.o.
- lime** L:L, D1:no H, *N* 5/- dew
- limuka** -HH:L, *V* behave with respect, dignity; cf. **-kungumika**
- lina/malina** H:L/LH:L, B:S1, *N* 5/6+ name
- linadi/manadi** LH:L, E:S2, *N* 5/6 skin of coconut
- linda** -H:L, *V* wait
- lindima** -HH:L, *V* make a loud noise; thunder; cf. **-valula**
- lindimuka** -HHH:L, *V* begin, start; cf. **-tandilika**
- lindunya/mandunya** LH:L, E:S2, *N* 5/6 blunt cutting tool
- linga** -H:L, *V* try, attempt
- lingongo/mangongo** LL:L, D1:no H, *N* 5/6 type of fence
- lingoti/mangoti** LH:L, A:S1/SF, *N* 5/6 type of **ndimu** dance
- lingungwa/mangungwa** LH:L, E:S2, *N* 5/6 skin of calabash; cf. **chingungwa/vingungwa** LH:L cl.7/8
- lingungwe/mangungwe** LH:L, A:S1/SF, *N* 5/6 bow; also
- upinde/mapinde** cl.14/6
- lingupa/mangupa** LRL, C1:SF, *N* 5/6 centipede sp.
- lingwalangwanja/mangwalangwanja** LLLH:L, E:S2, *N* 5/6 type of dance (esp. initiation); also
- chingwalangwanja/vingwalangwanja** LLLH:L cl.7/8
- lingwangula/mangwangula** LLFL, E:S2, *N* 5/6 lizard
- lingwele/mangwele** LH:L, E:S2, *N* 5/6 monkey (Sw. nyani)
- lino/meno** H:L, A:S1/SF, *N* 5/6 tooth
- linoha/manoha** LFL, B:S1, *N* 5/6 liver
- linowa** -HRL, *V refl.* be proud of oneself, boast; refl. < **-nowa** -H:L be sweet, pleasant
- linyindwa/manyindwa** HRL, C2:H.SF, *N* 5/6 tomato

- lipa -H:L, *V* pay
lipadango/mapadango LLRL, C1:SF, *N* 5/6 door post
lipahu/mapahu LRL, C1:SF, *N* 5/6 lungs
-lipakala -HLRL, *V refl.* smear; also
-lihwang'anidya
lipalangula/mapalangula LLLRL, C1:SF, *N* 5/6 locust; nom. <
-palangula *V* hop; also
nampalangula LLLLRL cl.1a; also
lihiye/mahiye cl.5/6
lipamba/mapamba LH:L, E:S2, *N* 5/6 fear, doubt
lipapa/mapapa LH:L, A:S1/SF, *N* 5/6 potsherd
lipapai/mapapai LHFL, B:S1, *N* 5/6 papaya
lipatela/mapatela LLFL, E:S2, *N* 5/6 brown snake sp. (big, colours white, black and yellow)
lipela/mapela LFL, B:S1, *N* 5/6 guava
lipleko/mapeleko LLH:L, A:S1/SF, *N* 5/6 medicine; nom. < **-peleka** *V* do witchcraft; cf. **ntela/mitela** cl.3/4
lipelende/mapelende LHHH:L, A:S1/SF, *N* 5/6 grass sp.
liplepente/mapelepente LHHH:L, A:S1/SF, *N* 5/6 cockroach
lipenesi/mapenesi LLH:L, A:S1/SF, *N* 5/6 jack-fruit
lipenga/mapenga LH:L, E:S2, *N* 5/6 horn, whistle; **kwomba lipenga** HH HFL to blow the horn
lipiku/mapiku LRL, C1:SF, *N* 5/6 type of **ndimu** dance
lipili/mapili LH:L, A:S1/SF, *N* 5/6 adder
-lipinda -HRL, *V refl.* crouch; refl. <
-pinda -H:L bend
lipindi/mapindi LRL, C1:SF, *N* 5/6 loin-cloth
lipinji LRL, C1:SF, *N* 5/- half, part, portion
lipinji/mapinji LHL, A:S1/SF, *N* 5/6 banana tree; no lengthening of penultimate vowel
lipitihu/mapitihu LLH:L, A:S1/SF, *N* 5/6 stomach
lipondo/mapondo LRL, C1:SF, *N* 5/6 hole (in sth., e.g. in the ground)
liposa/maposa LL:L, D1:no H, *N* 5/6 snuff (of tobacco); cf. **-tona** *V* take a snuff (tobacco)
lipote/mapote LFL, B:S1, *N* 5/6 boil, abscess
lipuhi/mapuhi LRL, C1:SF, *N* 5/6 millet ear
lipungo LRL, C1:SF, *N* 5/- wind; cf.
-punga *V* blow (of wind); also
mpapa/mipapa cl.3/4
liputula/maputula LLFL, E:S2, *N* 5/6 type of trap (rope, to trap small bush animals)
-lipwelela -HLRL, *V refl.* be restless, feel uncomfortable; also **-lipwalela** -HLRL
lipyanda/mapyanda LFL, B:S1, *N* 5/6 afterbirth
lisanje/masanje LRL, C1:SF, *N* 5/6 musical instrument (tin with stone inside and stick pierced through)
-lisinga -HRL, *V refl.* remain idle; cf.
-lemwa A idle
lisuvele LHFL, B:S1, *N* 5/- measles
litamba/matamba LFL, B:S1, *N* 5/6 bean sp. (big)
litambwe/matambwe LL:L, D1:no H, *N* 5/6 fog, mist, haze
litanda/matanda LFL, B:S1, *N* 5/6 lake, pool; cf. **chihuko/vihuko** cl.7/8
litandehu/matandehu LHFL, B:S1, *N* 5/6 bee sp.
litang'unilo/matang'unilo LHHH:L, A:S1/SF, *N* 5/6 molar tooth; cf.
-tang'una *V* chew
litano/matano LRL, C1:SF, *N* 5/6 lid (of pot)
-litapa -HRL, *V refl.* boast; also **-tapa** -H:L
litatoli/matatoli LLFL, E:S2, *N* 5/6 gruel; also **nkangohu/mikangohu** cl.3/4
litawa/matawa LFL, B:S1, *N* 5/6 clan, ethnic group
litembe/matembe LRL, C1:SF, *N* 5/6

- grave; also **likabuli/makabuli** cl.5/6
litende/matende LH:L, A:S1/SF, *N* 5/6
 water pot (big)
litenga/matenga LRL, C1:SF, *N* 5/6
 type of basket (huge, tall)
litenge/matenge LL:L, D1:no H, *N* 5/6
 type of dance (to remember the deceased)
litepo/matepo LH:L, A:S1/SF, *N* 5/6
 trunk
litesa/matesa LL:L, D1:no H, *N* 5/6
 opportunity, space
litetele/matetele LHFL, B:S1, *N* 5/6 hut
 for girls during initiation rites
litewe LH:L, E:S2, *N* 5/- initiates
 (returning from bush)
litikiti/matikiti LHFL, B:S1, *N* 5/6
 calabash bottle; cf. **lutikiti/dinikiti**
 LHFL cl.11/10 calabash plant; cf.
chingungwa/vingungwa cl.7/8; cf.
indumba/dindumba cl.9/10
litimbe/matimbe LL:L, D1:no H, *N* 5/6
 field (near a valley, where rice is
 planted)
litimbwisi LLH:L, E:S2, *N* 5/- sandy
 ground
litinji/matinji HRL, C2:H.SF, *N* 5/6
 pumpkin fruit
litoko/matoko LFL, B:S1, *N* 5/6
 testicle; also **chitoko/vitoko** LFL
 cl.7/8, **inongo/dinongo** cl.9/10
litope/matope LRL, C1:SF, *N* 5/6 mud
lituku/matuku LRL, C1:SF, *N* 5/6
 blister
litukuta/matukuta LLRL, C1:SF, *N* 5/6
 heat of body
-litumba -HRL, *V refl.* prepare oneself
 to do sth. which needs strength
litumbo/matumbo LRL, C1:SF, *N* 5/6
 abdomen; cf. Sw. tumbo; see **pantima**
 cl.16
litungutungu/matungutungu LHHH:L,
 A:S1/SF, *N* 5/6 banana flower
litupa/matupa LH:L, A:S1/SF, *N* 5/6
 dead root (found when clearing a
 field)
litupa/matupa LRL, C1:SF, *N* 5/6 huge
 object (person, animal, thing, etc.)
- litutunga** LLRL, C1:SF, *N* 5/- dust
litwala/matwala LH:L, A:S1/SF, *N* 5/6
 abduction (of a woman); sg.
 nowadays: the name of the bride
 during the first week; pl. those living
 in another place after marriage
-litwaliha -HHL:L, *V refl./caus.* hide
 oneself; refl., caus. < **-twala** -H:L
 take
litwene/matwene LFL, B:S1, *N* 5/6
 drop
liu RL, C1:SF, *N* 5/- ashes
liuku/mauku LH:L, A:S1/SF, *N* 5/6 owl
 sp.
liumi/maumi LRL, C1:SF, *N* 5/6 frog
 sp. (big, living in mud, edible)
liuwa/mauwa LRL, C1:SF, *N* 5/6
 flower; cf. Sw. ua; also **liwuwa/**
mawuwa LRL; see **induva/dinduva**
 cl.9/10
livala/mavala LH:L, E:S2, *N* 5/6
 shoulder
-livalila -HHH:L, *V* forget sth. or s.o.;
 also **-luvalila** -HHH:L
livanga/mavanga LRL, C1:SF, *N* 5/6
 mark of a wound or injury
livanga/mavanga LH:L, E:S2, *N* 5/6
 mushroom sp. (in the bush)
livanu/mavanu LRL, C1:SF, *N* 5/6
 arrow barb
-livata -HH:L, *V* tread on, put food on;
 also **-luvata** -HH:L; cf. **livata/**
mavata LRL cl.5/6 tread
livata/mavata LRL, C1:SF, *N* 5/6 tread;
 cf. **-livata** *V* tread on
livavi/mavavi LH:L, A:S1/SF, *N* 5/6
 caterpillar
livele/mavele LH:L, A:S1/SF, *N* 5/6
 breast (female); see milk
livelu/mavelu LRL, C1:SF, *N* 5/6
 mischievous child; also **likutukutu/**
makutukutu cl.5/6
livila/mavila LH:L, A:S1/SF, *N* 5/6
 twin
-livimba -HRL, *V refl.* wrap around;
 refl. < **-vimba** -H:L thatch; swell
liwangwa/mawangwa LH:L, A:S1/SF,
N 5/6 bone

- liwondo/mawondo** LRL, C1:SF, *N* 5/6
bark cloth
- liyamilila** -HHLRL, *V refl.* defend oneself; cf. **-yamila** -HH:L slap off
- liyanda/mayanda** LRL, C1:SF, *N* 5/6
palm (of hand)
- liyanga/mayanga** LFL, B:S1, *N* 5/6
stone
- liye/maye** RL, C1:SF, *N* 5/6 egg; also **lii/mai, liyi/mayi** RL cl.5/6
- liyedyā** -HFL, *V refl./caus.* learn; refl. < **-yedyā** -FL taste; imitate; refresh; also **-lifundisa**; cf. **-lihunda**
- liyembe/mayembe** LRL, C1:SF, *N* 5/6
hoe (small)
- liyeni/mayeni** LRL, C1:SF, *N* 5/6 gift, present; cf. **nnyeni/vayeni** LRL cl.1/2
guest, stranger
- liyongo/mayongo** LRL, C1:SF, *N* 5/6
reason, cause; cf. **ing'anya** cl.9/-, **maika** I
- liyonjo/mayonjo** LH:L, E:S2, *N* 5/6
broken thing, potsherd
- liyuva** -HRL, *V refl.* change skin, peel
- liyuwu/mayuwu** LH:L, E:S2, *N* 5/6
skin of snake
- lodya** -FL, *V caus.* be directed towards, face the opposite; caus. < **-lola** -H:L
look at
- loha** -FL, *V caus.* cause to dream, talk while dreaming
- lokotanya** -HHL:L, *V caus.* make s.o. look a fool (by witchcraft); cf. **-peleka, -lowa**; see harvest pumpkins
- lokotanya** -HHL:L, *V caus.* harvest pumpkins, water lemons, cucumbers; see befool
- lola** -H:L, *V* look at; cf. **-loleha** -HFL
look for, **-lodya** -FL be directed towards, **-lolana** -HH:L move fro and to (eyes); cf. **chilolo/vilolo** HRL/LL:L cl.7/8 mirror
- lolana** -HH:L, *V* move to and fro (of eyes); ass. < **-lola** -H:L look at
- loleha** -HFL, *V caus.* look for, search; caus. < **-lola** -H:L look at; also **-taha**; cf. **-lolehidyā** -HHL:L observe, notice; cf. **-lembela, -lembelela**
- lolehidyā** -HHL:L, *V caus.* observe, notice; appl. < **-loleha** -HFL look for, search; cf. **-tumba**
- loloma** -HH:L, *V* grumble, speak in oneself; also **-tongodika**
- lomba** -H:L, *V* marry (of man); cf. **-lombwa** -FL marry of woman; **nkulomba/vakulomba** LHFL cl.1/2
bridegroom
- lombolela** -HHH:L, *V* applaud, recommend sth.
- lombwa** -FL, *V pas.* marry (of woman); pas. < **-lomba** -H:L marry of man; **nkulombwa/vakulombwa** LHFL cl.1/2 bride
- londa** -H:L, *V* be true, be effective (medicine)
- londola** -HH:L, *V* follow; reap; also **-landola** -HH:L; cf. **-papata**
- longa** -H:L, *V* sue; cf. ass. **-longana** -HH:L reclaim
- longana** -HH:L, *V* reclaim; ass. < **-longa** -H:L sue; see accompany
- longana** -HH:L, *V* accompany; see reclaim
- longoledya** -HHL:L, *V caus.* send on in advance, put forward; caus. < **-longolela** -HHH:L guide
- longolela** -HHH:L, *V* guide, go ahead; cf. caus. **-longoledya** -HHL:L put forward
- lonjela** -HH:L, *V* talk, converse; cf. Sw. -ongea; cf. nom. > **lilonjedi/ malonjedi** LLRL cl.5/6 saying; see **-kunguluka**
- lopola** -HH:L, *V* grope about; also **-lapola** -HH:L
- lota** -H:L, *V* dream
- lova** -H:L, *V* get wet, be soaked
- lovela** -HH:L, *V* wither
- lowa** -H:L, *V* practice witchcraft, bewitch; cf. **-peleka, -lokotanya**
- luba** -H:L, *V* rave
- lubadili/dibadili** LHRL, C2:H.SF, *N* 11/10c amulet (Sw. talasimu)
- luचेche/dinyeche** LFL, B:S1, *N* 11/10
stalk (of the smaller kind of grains)
- luchiya/dinyiya** LH:L, A:S1/SF, *N*

- 11/10* root
ludodo/madodo LH:L, E:S2, *N 11/6* leg
-lugusa -HFL, *V caus.* be loose; also
-legeya, -lageya, -yegeya; cf.
-gulugusa -HHL:L fail (after
promise)
luhalelo/dihalelo LLRL, C1:SF, *N 11/10*
11/10 valley; cf. **luhunde/dihunde**
cl.11/10
luhengo/dihengo LRL, C1:SF, *N 11/10*
passage (e.g. through a forest)
luhichi/dihichi LRL, C1:SF, *N 11/10*
house post
luhimo/dihimo LH:L, A:S1/SF, *N 11/10*
song; also **luhimu/dihimu**
LH:L cl.11/10
luhimu/dihimu LH:L, A:S1/SF, *N 11/10*
song; also **luhimo/dihimo**
LH:L cl.11/10
luhole/dihole LRL, C1:SF, *N 11/10*
uncleared space in field
luhunde/dihunde LRL, C1:SF, *N 11/10*
valley, river; cf. **luhalelo/dihalelo**
cl.11/10
-luka -H:L, *V* twist, plait; cf. **-pota,**
-popota
lukalongo/ding'alongo LLRL, C1:SF,
N 11/10 throat
lukasu/ding'asu LFL, B:S1, *N 11/10*
calabash (for eating)
luko/dinjuko RL/LRL, C1:SF, *N 11/10*
ladle, spoon
lukombe/ding'ombe LFL, B:S1, *N 11/10*
fingernail
lukope/ding'ope LH:L, A:S1/SF, *N 11/10*
eyelash
lukoto HFL, B:S1, *N 11/-* afterwards,
later
lukou LH:L, A:S1/SF, *N 11/-* lust,
desire; cf. **ihikidi/dihikidi** cl.9/10,
tama cl.9c/-
lukukutu/ding'ukutu LHH:L,
A:S1/SF, *N 11/10* snake sp. (long,
brown)
lukumbi/ding'umbi LL:L, D1:no H, *N 11/10*
assembly, court; **kupelekedya**
malove kulukumbi LHHLL HHL
LLL:L to accuse, lit. to send words to
the assembly, court
lukundu/ding'undu LFL, B:S1, *N 11/10*
private part
lukuni/ding'uni LH:L, A:S1/SF, *N 11/10*
firewood; cf.
luwalahanji/dimbwalahanji cl.11/10
lukwedo LH:L, E:S2, *N 11/-* pain while
urinating; cf. **makwedo** LFL cl. -/6
urine
lukwekwe/ding'wekwe LH:L, E:S2, *N 11/10*
weed
lulembo/dinembo LFL, B:S1, *N 11/10*
notch in face (as decoration)
lulimi/dindimi LH:L, A:S1/SF, *N 11/10*
tongue
lulomo/dindomo LRL, C1:SF, *N 11/10*
sting, beak
-luluta -HH:L, *V* scream (shrill scream)
-luma -H:L, *V* bite; cf. **lumila** -HH:L
eat fried fish or roasted meat...
luma/dinduma RL/LRL, C1:SF, *N 11/10*
+ crack
-lumba -H:L, *V* mention name of the
clan when hitting the animal (while
hunting); also app. **-lumbila** -HH:L;
cf. **-lumbata** -HH:L hunt, aim
-lumbata -HH:L, *V* hunt (with a sling),
aim (with shooting, throwing); cf.
-lumba -H:L, **-lumbila** -HH:L
-lumila -HH:L, *V* eat fried fish or
roasted meat without steaming
(ugali/soup); cf. **-luma** -H:L bite
-lumuka -HH:L, *V* break (tr., small
things, e.g. utensils); cf. **-lumula**
-HH:L, **-tumbuka**
-lumula -HH:L, *V* break (tr., small
things, e.g. utensils); cf. **-lumuka**
-HH:L, **-tumbula**
lunda RL, C1:SF, *N 11/-* right, justice
-lundanya -HFL, *V caus.* pile up; cf.
-bulika
lunga/dinjunga RL/LRL, C1:SF, *N 11/10*
infant (between 2 and 6 months
old)
-lungudula -HHH:L, *V* show a
disapproving sign with mouth
lupambahi/dimambahi LHFL, B:S1, *N 11/10*
millet stalk

- lupapa/dimapa** LRL, C1:SF, *N 11/10*
wing
- lupehu/dimehu** LH:L, E:S2, *N 11/10*
straw (for drinking beer, unfermented drink)
- lupembe/dimembe** LFL, B:S1, *N 11/10*
horn
- lupenu/dimenu** LRL, C1:SF, *N 11/10*
verandah, place before a house
- lupi** L:L, D1:no H, *N 11/-* darkness
- lupia/dimia** LFL, B:S1, *N 11/10* money
(formerly rupee)
- lupipi/dimipi** LFL, B:S1, *N 11/10* spike
(used with hoes to fix the blade to the handle)
- lupolopondo/dimolopondo** LLLRL,
C1:SF, *N 11/10* ditch
- lupupuso/dimupuso** LLL:L, D1:no H,
N 11/10 type of trap (rope, to trap e.g.
klipspringers)
- lupwawa/dimwawa** LFL, B:S1, *N 11/10*
ladle (for gravy)
- lutambo/dinambo** LRL, C1:SF, *N 11/10* trap
- lutano/dinano** LRL, C1:SF, *N 11/10*
story; also **ntano/mitano** LRL cl.3/4;
also **lutanu/dinanu** LRL cl.11/10;
kutana lutano LHH HH:L to tell a
story
- lutavi/dinavi** LH:L, A:S1/SF, *N 11/10*
branch
- lutikiti/dinikiti** LHFL, B:S1, *N 11/10*
calabash plant; cf. **litikiti/matikiti**
LHFL cl.5/6 calabash bottle
- lutondolo/dinondolo** LLRL, C1:SF, *N 11/10*
rope (to tighten animals)
- luuma** LFL, B:S1, *N 11?/-* Ruvuma
- luundu** HRL, C2:H.SF, *N 11/-*
tomorrow; also **nuundu** HRL I
- luunji/dimunji** LH:L, E:S2, *N 11/10*
cleared thicket (before being
cultivated)
- luvala** -HH:L, *V* forget; app. >
-luvalila -HHH:L forget sth. or s.o.;
luvalavala/dimbalavala LHHL:L,
B:S1, *N 11/10* kind of sticks (long
and thin)
- luvale/dimbale** LRL, C1:SF, *N 11/10*
sweet sp. potato (tall)
- luvalila** -HHH:L, *V* forget sth. or s.o.;
cf. **-luvala** -HH:L forget; **una-ngu-**
luvalile LL-H-HLL:L you should not
forget me; also **-livalila** -HHH:L
- luvata** -HH:L, *V* tread on, put foot on;
also **-livata** -HH:L
- luvau/dimbau** LRL, C1:SF, *N 11/10* rib
- luvoo/dimboo(?)** LH:L, A:S1/SF, *N 11/10*
bee poison
- luwalahanji/dimbwalahanji** LHHL:L,
B:S1, *N 11/10* small piece of
firewood; cf. **lukuni/ding'uni**
cl.11/10
- luwali/maluwali** LFL/LLFL, E:S2, *N 11/6+*
judge
- luwani/dimbwani** LH:L, A:S1/SF, *N 11/10*
type of fence
- luwawa** LL:L, D1:no H, *N 11/-*
remaining plot field
- luwoi/dimboi** LRL, C1:SF, *N 11/10*
twisted rope
- luwono** LRL, C1:SF, *N 11/-* sleep; cf.
-ona *V* sleep
- luwungo/dimbungo** LH:L, A:S1/SF, *N 11/10*
quarter (of town or village)
- luyeye/dinjeye** LFL, B:S1, *N 11/10* lip
- lwadi** H:L, A:S1/SF, *N 11/-* blood
disease (visible by rash on skin); cf.
myadi H:L blood cl. -/4
- lwau/dinjau** H:L/LH:L, A:S1/SF, *N 11/10*
net
- lwayo/dinjayo** RL/LRL, C1:SF, *N 11/10*
track
- lwidi/dinjwidi** RL/LRL, C1:SF, *N 11/10+*
door (traditional, made from
millet stalks); cf. **nnango/milango**
cl.3/4
- lya** H:L, *V* eat; tones with Infinitive
marker; cf. **namulya** LFL N.1a
glutton; **-lisa** -FL *V* caus. feed, make
eat
- lyambi/malyambi** RL/LRL, C1:SF, *N 5/6+*
mat (made of plants); also
likande/makande cl.5/6
- lyenye/malyenye** RL/LRL, C1:SF, *N 5/6+*
forehead
- lyohi** H:L, A:S1/SF, *N 5/-* smoke

lyulo/malyulo H:L/LH:L, A:S1/SF?, *N* 5/6+ evening

M

mabati LFL, B:S1, *N* -/6 type of hair dressing (with pigtail)
machedo LH:L, A:S1/SF, *N* -/6 last year; **machedo pala** LHH L:H year before last year, some time past
machenga LH:L, E:S2, *N* -/6 type of dance (women's)
machili LFL, B:S1, *N* -/6 soot
madudi LFL, B:S1, *N* -/6 day before yesterday; **madudidudi** LHH:L cl. -/6 some days ago
madudidudi LHH:L, B:S1, *N* -/6 some days ago; cf. **madudi** LFL cl. -/6 day before yesterday
madudu LRL, C1:SF, *N* -/6 type of dance (any celebration)
magombo LFL, B:S1, *N* -/6 banana sp. (big)
-mahikana -HHH:L, *V* be known
maika LRL, C1:SF, *I* since, because; cf. **ing'anya** cl.9/-, **liyongo/mayongo** cl.5/6 reason, cause
-maila -HH:L, *V* please, make beautiful, suit; cf. **-takata**
majojoli LHH:L, A:S1/SF, *N* -/6 saliva; also **mata** cl.6
makaka LFL, B:S1, *N* -/6 dried pieces of cassava
makana LFL, B:S1, *N* -/6 chaff
makolobeko LLLRL, C1:SF, *N* -/6 savannah
makwedo LFL, B:S1, *N* -/6 urine; cf. **lukwedo** LH:L cl.11/- pain while urinating
-mala -H:L, *V* know; cf. **-kameka**;
umale LRL (presentative) it is..., lit. you should know (2 SG Optative)
malale LFL, B:S1, *N* -/6 type of dance (esp. weddings)
malangwe LL:L, D1:no H, *N* -/6 initiation rites
-malila -HH:L, *V* finish (tr. and itr.), accomplish
malinga LH:L, A:S1/SF?, *I* as, like;

also **muchi** I

malombo LH:L, A:S1/SF, *N* -/6 bridewealth; cf. **nkaka** cl.3?/-;
kuhumya malombo LHH HH:L to pay bridewealth (lit. to make come out bridewealth)
malonda LH:L, A:S1/SF, *N* -/6 dialogue between the elders
mandale LH:L, E:S2, *N* -/6 potato sp. (round shape)
mangundula LHL:L, B:S1, *N* -/6 leprosy; cf. **mmangundula**/
vamangundula LLHL:L cl.1/2 leper
mapete LRL, C1:SF, *N* -/6 earrings (three in each ear, filled with coloured pieces of paper)
masiko LRL, C1:SF, *N* -/6 funeral; cf. Sw. *maziko*; nom. < **-sika** *V* bury
-mata -H:L, *V* plaster a wall
matama LRL, C1:SF, *N* -/6 jaw
-matika -HH:L, *V* put medicine (on wound)
matiyala LHFL, B:S1, *N* -/6 police (local, during colonial time)
mavele LH:L, A:S1/SF, *N* -/6 milk; see breast (female)
mavi H:L, A:S1/SF, *N* -/6 excrement; cf. **utohi** cl.14
mbalenga/mibalenga LLL:L, D1:no H, *N* 3/4 hole (in lobe of ear);
-ambalenga -LLL:L P con. pierced (ear)
mbeni FL, B:S1, *N* 9b/- type of dance (every celebration)
medi H:L, A:S1/SF, *N* -/6 water
-mela -H:L, *V* sprout, shoot up; also **-hipuka**
-meta -H:L, *V* sparkle, be bright (lightning, colours of flowers)
-meya -H:L, *V* break off a piece
mia/dimia H:L/LH:L, ?, *N* 9c/10c hundred; < Sw. *mia*; sg. also **imia** LH:L cl.9c; also **makumi likumi** LHH LRL N 6 + N 5
-mila -H:L, *V* swallow
-minya -H:L, *V* squeeze, milk; cf. **-kamila**, **-kada**, **-chukudula**
-misa -FL, *V caus.* shake off

mmahe/vamahe LH:L, A:S1/SF, *N* 1/2 woman; < Chimaraba; see **nkongwe/vakongwe** cl.1/2
mmakonde/vamakonde LHFL, D2:H.no H, *N* 1/2 Makonde person; cf. **makonde** LRL cl.6 desert areas (without water), **chimakonde** LHFL cl.7 Makonde language, nature
mmalaba/vamalaba LHFL, D2:H.no H, *N* 1/2 Maraba person; cf. **chimalaba** LHFL cl.7 Maraba dialect, nature
mmalala/mivalala LHFL, B:S1, *N* 3/4 tree sp.; **mwa-mmalala** H-HHFL not good not bad (as an answer to “how are you?”), lit. like a Mmalala tree; this tree is half dry, half wet
mmangundula/vamangundula LLHL:L, B:S1, *N* 1/2 leper; cf. **mangundula** LHL:L cl. -/6 leprosy
mmatambwe/vamatambwe LHFL, D2:H.no H, *N* 1/2 Matambwe person; cf. **chimatambwe** LHFL cl.7 Matambwe dialect, nature
mmbilwa/mimbilwa LL:L, D1:no H, *N* 3/4 tree sp.; **limbilwa/mambilwa** LL:L cl.5/6 its fruit (**imbilwa/dimbilwa** LL:L cl.9/10 kernel or stone)
mmbweha/mimbweha HRL, C2:H.SF, *N* 3/4 shadow (of things)
mmidi/vamidi HFL, D2:H.no H, *N* 1/2 people outside the family
mmilandi/vamilandi LHFL, D2:H.no H, *N* 1+/2+ traditional doctor; cf. **milandi** LFL cl.4 trees; also **mmitela/vamitela** cl.1+/2+
mmili/mimili LRL, C1:SF, *N* 3/4 body
mmili/mivili LFL, B:S1, *N* 3/4 plaited piece in mat where two lengths come together
mmitela/vamitela LHFL, D2:H.no H, *N* 1+/2+ traditional doctor; cf. **mitela** LH:L cl.4 medicines; also **mmilandi/vamilandi** cl.1+/2+
mmogo/myogo LFL/FL, B:S1, *N* 3/4 cassava
mmongo/avongo HRL, C2:H.SF, *N*

1/2A enemy; **mmongo**
mwangu/avongo mwangu HHH RL my enemy/enemies
mmula/miwula LH:L, A:S1/SF, *N* 3/4 tree sp.; **liwula/mawula** LH:L cl.5/6 its fruit (**imbula/dimbula** LH:L cl.9/10 kernel or stone)
mmutuka/miutuka LHFL, B:S1, *N* 3/4 car; **mmutuka ndyoko** LHLL LH:L car, lit. small car; **mmutuka nkulungwa** LHLL LHFL lorry, lit. big car
mmutukasikeni/miutukasikeni LLLLHFL, *N* 3/4 motorcycle; also **chitututu/vitututu** cl.7/8
mmuva/mivuva LRL, C1:SF, *N* 3/4 tong
mmwela/vamwela HFL, D2:H.no H, *N* 1/2 Mwera person; cf. **chimwela** HFL cl.7 Mwera language, nature
mmwindi/mihwindi LH:L, A:S1/SF, *N* 3/4 tree sp.
-mo RL, C1:SF, *P* one; a(n), some; tones including PPx; **yumo** RL cl.1, **umo** RL cl.3, **imo** RL cl.9; cf. **pamo (na)** RL (L) together (with); predicative: same tones
mongo/myongo RL, C1:SF, *N* 3/4 back (of body)
mooto/myooto LFL, E:S2, *N* 3/4 fire
-motoha -HFL, *V caus.* fell, knock down; also **-matoha** -HFL; cf. **-motoka** -HH:L fall
-motoka -HH:L, *V* fall; also **-matoka** -HH:L, **-uwa**, **-yanguka**; cf. **-motoha** -HFL fell; cf. **-pakatika**, **-palatuka**
-mowa -H:L, *V* shave, cut all hair of head; **kumowa imundu** LHH HH:L to get a clear head; cf. **-chengula**
mpaneka/mipanea LLL:L, D1:no H, *N* 3/4 type of hair dressing; cf. **-peneka** *V* put sideways
mpapa/mipapa LH:L, A:S1/SF, *N* 3/4 wind; also **lipungo** cl.5/-
mpatila/mipatila LHFL, B:S1, *N* 3/4 big bag
mpekeho/mipekeho LHH:L, A:S1/SF, *N* 3/4 sticks for making fire; nom. <

- pekeha** V make fire (by friction)
mpingo/mipingo LRL, C1:SF, *N* 3/4 taboo
mpingo/mipingo ?, *N* 3/4 ebony tree; cf. Sw. *mpingo/mipingo*
mpini/mipini LH:L, A:S1/SF, *N* 3/4 handle
mpunga/mipunga LRL, C1:SF, *N* 3/4 rice (the plant)
mputa LH:L, E:S2, *N* 3/- children's game (skip with a rope)
muchi L:L, D1:no H, *I* as, like; also **malinga** I; cf. -**chi** V say
muha RL, C1:SF, *N* 1/8 top, above, sky; **muha mwangu** L:H RL above me; **muha nnipyailika** RL LLHLRL clear sky, lit. above has been swept; cf. **pannima** cl.16 height, high, above
muhi H:L, A:S1/SF, *N* 3/- daytime
muhina LH:L, E:S2, *N* 1/8 below; cf. **nniungu** cl.16
muhu LH:L, A:S1/SF?, *I* real, right, ready; cf. **mwaha** I
mwake/achamukwe RL/LHRL, C1:SF, *N* 1/2A+ wife of mother's brother; pl. also **angaa mukwe** LH: RL
mumba/myumba H:L, A:S1/SF, *N* 3/4 arrow (with iron)
munda L:L, D1:no H, *N* 1/8 belly; fig. inside my heart, head
munda/myunda RL, C1:SF, *N* 3/4 field which has been cultivated once only
munima/vannima HHFL, D2:H.no H, *N* 1/2 Nnima person; cf. **chinnima** HHFL cl.7/- Nnima dialect, **pannima** LLRL cl.16 height, high, above
munu/vanu RL, C1:SF, *N* 1/2 person, pl. people
-munya -H:L, *V* mould, mix; cf. -**kamata**, -**umba**
munyu H:L, A:S1/SF, *N* 3/- salt
muto/myuto RL, C1:SF, *N* 3/4 well; cl.17: **kumuto** LRL well, place where there is water; cf. **chihima/vihima** cl.7/8
mutwe/myutwe RL, C1:SF, *N* 3/4 head
muundu/myuundu LFL, E:S2, *N* 3/4 chopper
muwa/miwa RL, C1:SF, *N* 3/4 sugar cane
muyo L:L, D1:no H, *N* 1/8 front, before; **muyo mwaangu** L:H RL in front of me; cf. **kumeho** cl.17+6
mwadachi LRL, C1:SF, *I* why; also **ing'anya ntwani** LLH HFL; cf. **dachi** L:L I; question phrase-finally: final FH: **mwadachi** LFH
-mwadila -HH:L, *V* pour out, spill; cf. -**yakanya**; cf. -**mwadilanya** -HHL:L scatter
-mwadilanya -HHL:L, *V caus.* scatter; cf. -**mwadila** -HH:L pour out, spill
mwaha H:L, A:S1/SF?, *I* right, correct; cf. **muhu** I
mwaka/myaka H:L, A:S1/SF, *N* 3/4 year; cf. Sw. *mwaka*; see **chaka/vyaka** H:L cl.7/8; cf. **namwaka** HFL cl.3a this year
mwalehu LFL, B:S1, *I* directly; cf. -**lehu** -H:L A long, tall, high, **kulehu** LH:L A far
mwali/vali H:L, A:S1/SF, *N* 1/2 girl (after initiation); cf. **namwali/nkanamwali** LH:L/LLLH:L cl.1a/? person(s) taking care of girl
mwana/vana FL, C2:H.SF, *N* 1/2 child; **mwangu** LH:L my child; **mwana** LH:L your (sg.) child; **mwana** LH:L his/her child; **mwana wetu** LH RL our child, etc.; **wana** FL cl.14 childhood
mwanda/myanda H:L, A:S1/SF, *N* 3/4 time, period, journey; **mwanda umo** HL RL once, **myanda mivili** HL LRL twice; **hweetu m-mwanda** FHL LH:L good-bye, lit. we in (on) journey; go on a journey: see -**pita** V
mwanelu/vanelu LH:L, A:S1/SF, *N* 1/2 younger sibling of the opposite sex; **mwanelu wangu** LHH RL my younger s., etc.
mwao/myao RL, C1:SF, *N* 3/4 calabash (for taking up liquids, esp. water)
mwavo/myavo RL, C1:SF, *N* 3/4 trial (by ordeal)
mwedi/myedi H:L, A:S1/SF, *N* 3/4

moon, month; **mwedi woneka** HL
LFL next month, lit. month which
appears
mweenu HRL, C2:H.SF, *P subst.* you
(pl.); **umwemwe** LFH (emphatic)
mwenedi/venedi LH:L, A:S1/SF, *N 1/2*
fellow person; also **mwenedi/vanedi**
LH:L cl.1/2
mwihhi/mihi RL, C1:SF, *N 3/4* pestle
mwikumba/anamikumba
HFL/LHHFL, B:S1, *N 3/2A* turkey sp.
mwipwangu/vipwangu HRL, C2:H.SF,
N 1/8? my nephew, niece
mwitepa LFL, E:S2?, *N 18* corner; cf.
-**tepa** V stoop, bend down
mwiva/miva H:L, A:S1/SF, *N 3/4* thorn
myadi H:L, A:S1/SF, *N -/4* blood; also
damu cl.9c/-

N

na- L, *I* and, with; followed by a word
or word form; **na-vino** L-RL and
now; **pamo na-vana vako** RL L-L:H
RL together with your children
naangu HRL, C2:H.SF, *P subst.* I;
unene LFH (emphatic)
nachihe LH:L, A:S1/SF, *N 9a/-* riddle;
said by s.o. who begins to ask riddles;
answer: **nachilawa** cl.9a/-
nachihungo/achanavihungo
LLRL/LHHRL, C1:SF, *N 1a/2A+*
snake sp. (big, very poisonous, black,
rising)
nachilawa LHFL, B:S1, *N 9a/-* answer
to riddle; answer to the call **nachihe**
of s.o. who begins to ask riddles
nachisuvele LHHRL, C2:H.SF, *N 3a/-*
grass sp.
nachitani LHFL, D2:H.no H, *N 3a/-*
weed sp.
nachitukana LHHL:L, D2:H.no H, *N*
3a/- grass sp.
nahaku/anamahaku HFL/LHHFL,
D2:H.no H, *N 1a/2A* girl (before
initiation)
nahembe LL:L, D1:no H, *N 9a/-* type of
food (meal of mixed potatoes); eaten
on the return of the elders who have

brought the boys to the bush for
initiation; also name for the dance
performed during this feast
nahoti LH:L, A:S1/SF?, *I* now
(immediate future); **ida nahoti** L:L
LH:L come first; **nahoti kadiki** LHL
LRL presently
nahuhwe LH:L, A:S1/SF, *N 3a/-* weed
sp.
nahundu HRL, C2:H.SF, *N 3a/-* grass
sp.
nakadimu/achanakadimu
LHRL/LHLHRL, C2:H.SF, *N 1a/2A+*
goblin, orgre
nakandunda LLRL, C1:SF, *N 9a/-* type
of drum (small)
namadi LRL, C1:SF, *I* on purpose
namahamba/achanamahamba
LHFL/LHHHFL, B:S1, *N 1a/2A+*
snake sp. (big, green); cf. **mahamba**
LRL cl.6 leaves
namahihi/anamahihi LLRL/LHHRL,
C1:SF, *N 1a/2A* owl
namalove LHRL, *N 9a/-* echo; cf.
malove LH:L cl.6 words
namalutu/achanamalutu
LHRL/LHHHRL, C2:H.SF, *N*
1a/2A+ snake sp. (small, black)
-**namata** -HH:L, *V* cohere; cf.
-**namatidya** -HHL:L compel
-**namatidya** -HHL:L, *V caus.* compel;
cf. -**namata** -HH:L cohere
nambeda/anambeda HFL/LHFL,
D2:H.no H, *N 1a/2A* insect sp. (living
in maize plants and damaging them)
nambole HRL, C2:H.SF, *N 3a/-* grass
sp.
namene HRL, C2:H.SF, *I* very; tones
also LH:L, meaning also ‘especially’;
also **sana** I
nammata HHL:L, D2:H.no H, *N 9a/-*
rash; cf. **chipele** cl.7/-
nampalangula LLLLRL, C1:SF, *N 1a/?*
locust; cf. -**palangula** V hop; also
lipalangula/mapalangula LLLRL
cl.5/6, **lihiye/mahiye** cl.5/6
namulya LFL, D2:H.no H, *N 1a/-*
glutton; cf. -**lya** V eat

- namwaka** HFL, D2:H.no H, *N 3a* this year; cf. **mwaka** H:L cl.3 year
- namwali/nkanamwali** LH:L/LLH:L, A:S1/SF, *N 1a*/? person(s) taking care of girl; cf. **mwali** H:L cl.1 girl (after initiation)
- namwana** LFL, C2:H.SF, *N 1a*/? mother; cf. **mwana** FL cl.1
- namweve/achanamweve** HL:L/LHHL:L, D2:H.no H, *N 1a/2A*+ hawk (Sw. *mwewe*)
- nancheta/anamicheta** LLRL/LHHRL, C1:SF, *N 1a/2A* jackal; millet sp.
- ntama wa-nancheta** LHL H-LRL
- nanchochi** LLRL, C1:SF, *N 3a*/- weed sp.
- nanga** L:L, D1:no H, *I* no!, there is no, Negative Particle; **nanga chinu** LL RL it doesn't matter
- nangahwa** LH:L, A:S1/SF, *N 3a*/- weed sp.
- nang'e** H:L, E:S2, *P subst.* he, she; **unang'e** LFH (emphatic)
- nang'o** -H:L, E:S2, *P* same, the very one; no cl.1 form, **unang'o** LH:L cl.3, **inang'o** LH:L cl.9; attributive tones: HFL; cf. **vanang'o** LH:L *P* subst. they; **panang'o pala** LHH L:H right there
- nangwao** LL:L, D1:no H, *N 9a*/- late rains; also **nangwau** LL:L
- nani** -RL, C1:SF, *A* who; 1SG/2SG/cl.1: **nnani** LRL, cl.2: **vanani** LRL; **-a-NPx-nani** *P* con. whom/whose; question phrase-finally: FH
- nankadindumba/achanankadindumba** LLLLFL/LHHHLLFL, E:S2, *N 1a/2A*+ lizard sp. (big, living in water)
- nankakatambwe/anamikakatambwe** LLLLL:L/LHHLLL:L, D1:no H, *N 1a/2A* spider
- nankalavanya/achanankalavanya** LLLLFL/LHLLLLFL, E:S2, *N 1a/2A*+ liar; cf. **-lavanya** V lie
- nankonda/anamikonda** HHRL/LHHRL, C2:H.SF, *N 1a/2A* crow
- nankope/anamikope** HHFL/LHHFL, D2:H.no H, *N 3a/2A* cucumber
- nannidi** HHL:L, D2:H.no H, *N 1a*/? bereaved person
- nannume** HHFL, D2:H.no H, *N 1a*/? full-grown man; cf. **nnume** LH:L cl.1 man
- nano** H:L, A:S1/SF?, *I* and so, accordingly, well, enough!, stop it!, be it so!; also **bahi** I
- nantikwi/achanantikwi** LLL:L/LHHLL:L, D1:no H, *N 1a/2A*+ chrysalis (stage between caterpillar and butterfly)
- nantitili/achanamititili** LLHFL/LHHHHFL, B:S1, *N 1a/2A*+ flea
- nanuha** -HFL, *V caus.* fry; also **-kalanga**
- napanang'o** LLH:L, E:S2?, *I* also, likewise, therefore; also **nakunang'o**, **namunang'o** LLH:L; cf. **-nang'o** -FL *P* the same, the very one
- nasi/dinasi** H:L/LH:L, ?, *N 9c/10c* coconut; cf. Sw. **nazi**; cf. **linadi/manadi** cl.5/6
- nchaketa/michaketa** LLL:L, D1:no H, *N 3/4* bead; cf. **chuma/vyuma** cl.7/8
- ncheche** LL:L, D1:no H, *N 3*/- four; **milandi ncheche** LFL LL:L four trees, **vinu ncheche** RL LL:L four things
- nchehe/michehe** LFL, B:S1, *N 3/4* hyena
- nchela/michela** LFL, B:S1, *N 3/4* harvest time; also **lichela/machela** LFL cl.5/6
- nchenga/michenga** LH:L, E:S2, *N 3/4* tree sp.
- nchenje** LL:L, D1:no H, *N 3*/? source of heat and light (sun, fire, torch)
- nchila/michila** LH:L, A:S1/SF, *N 3/4* tail
- nchinda/michinda** LFL, B:S1, *N 3/4* left; **kunchinda kwake** LLHH RL to his/her/its left; **nkono nchinda/mikono michinda** LHH HFL left

- hand(s)
nchinji/michinji LFL, B:S1, *N* 3/4 tree sp.; cf. **nchinyimala/michinyimala** LLLRL cl.3/4 rope made from this tree
nchinyimala/michinyimala LLLRL, C1:SF, *N* 3/4 type of rope; from the tree sp. **nchinji/michinji** LFL cl.3/4
nchiva/vachiva LFL, D2:H.no H, *N* 1/2 orphan; also **mwana nchiva** HH HFL; cf. **uchiva** LFL cl.14 solitariness, loneliness
nchonyo/michonyo LFL, B:S1, *N* 3/4 anus
ndengani LLRL, C1:SF, *N* 18 neighbour
ndidi/mididi LH:L, A:S1/SF, *N* 3/4 rope
ndimu/midimu LH:L, A:S1/SF, *N* 3/4 type of dance (esp. initiation); type: **ndimu wa-muha** LHL H-RL, lit. dance of top
nditi/miditi LH:L, A:S1/SF, *N* 3/4 turkey sp.
-ndonda -H:L, *V* torment, cause to feel pain
ndukulu/vadukulu LHFL, D2:H.no H, *N* 1/2 grandchild; sg. also **udukulu** LHFL cl.1A
ndule/midule LRL, C1:SF, *N* 3/4 hut (round); full name: **ing'ande ya-ndule** LHL H-LRL
ndulu L:L, D1:no H, *I* not yet, still
ndundo/midundo LRL, C1:SF, *N* 3/4 type of drum
nduvani LHRL, C2:H.SF, *I* when; < Chimaraba; see **chakani**
ndyoko/vadyoko LH:L, A:S1/SF, *N* 1/2 youth; cf. **-dyoko** -H:L A small
nelo RL, C1:SF, *I* today
-nema -H:L, *V* walk with swagger; also **-deka**
-neng'ena -HH:L, *V* cut (with hands); harvest (esp. millet); also **-nang'ena** -HH:L
-ng'ana -H:L, *V* play
-ngapi -FL, B:S1, *A* how many; cf. Sw. -ngapi; **mingapi** LFL cl.4, **dingapi** LFL cl.10; question phrase-finally: FH; see **-ninga** A; predicative: same tones
-ng'ola -H:L, *V* show fight, strike
-ngongomana -HHH:L, *V* be curved
ngongwe/migongwe LL:L, D1:no H, *N* 3/4 shed
ngoo FL, B:S1, *I* oh! (exclamation when sth. bad has happened)
ngwaa LH:, C1:SF?, *I* sound of stubbing, e.g. one's toe
-ninga ?, *A* how many; tones unknown; **mininga** cl.4, **dininga** cl.10; also **-ngapi** A
njagasi LHFL, B:S1, *N* 3/- banana sp. (small)
-nji FL, C2:H.SF, *P* other; tones including PPx; **yunji** FL cl.1, **unji** FL cl.3, **inji** FL cl.9; predicative: same tones
njomba/vajomba LFL, D2:H.no H, *N* 1/2 uncle (mother's brother); cf. Sw. mjomba/wajomba; see **anang'ala** cl.2A/-
njooni HRL, C2:H.SF, *I* so and so, such a one
njumbe/majumbe LFL, D2:H.no H, *N* 1/6 headman; < Sw. jumbe; cf. **amwenye/achamwenye** cl.2A/2A+
nkaka LFL, B:S1, *N* 3?/- bridewealth; belt; cf. **malombo** cl. -/6; **kuhumya nkaka** LHH HFL to pay bridewealth, lit. to make come out bridewealth
nkakahimba/mikakahimba LHHFL, D2:H.no H, *N* 3/4 calabash seed (edible); cf. **imukusa/dimukusa** cl.9/10
nkalang'ombe/mikalang'ombe LHHRL, C2:H.SF, *N* 3/4 tree sp.
nkambe/mikambe LH:L, E:S2, *N* 3/4 sweet potato
nkanga/vakanga LH:L, A:S1/SF, *N* 1/2 foolish man; cf. **ukanga** LH:L cl.14
nkang'a/mikang'a LFL, B:S1, *N* 3/4 huge, fat person or thing
nkangohu/mikangohu LLH:L, E:S2, *N* 3/4 gruel; also **litatoli/matatoli** cl.5/6
nkangojo/mikangojo LLRL, C1:SF, *N*

- 3/4 stick (to walk with); also **bakola/dibakola** cl.9c/10c
nkanunu/vakanunu LLRL, C1:SF, *N* 1/2 infant (younger than 2 months old)
nkati LRL, C1:SF, *N* 1/8 in the middle, within; **nkati-mo** LLL-H (+DEM, ref., short form) right in the middle; cf. **ching'ati** LH:L cl.7 middle, in the middle, **kukati** LRL cl.17 room
nkojo/mikojo LL:L, D1:no H, *N* 3/4 drink, not fermented (from millet, grain; Sw. togwa)
nkoko/mikoko LRL, C1:SF, *N* 3/4 tree sp. (growing near the coast)
nkoko/vakoko LFL/LH:L, B:S1/E:S2, *N* 1/2 animal
nkongwe/vakongwe LFL/LH:L, B:S1/E:S2, *N* 1/2 woman; also **mmahe/vamahe** cl.1/2 (< Chimaraba); cf. **-achikongwe** P con. female
nkono/mikono LH:L, A:S1/SF, *N* 3/4 hand, arm; also pl. **makono** LH:L cl.6
nkova/mikova LFL, B:S1, *N* 3/4 amulet (Sw. hirizi)
nkuchi/mikuchi LFL, B:S1, *N* 3/4 spear
nkuka/mikuka LFL, B:S1, *N* 3/4 boundary (e.g. between two fields)
nkule/makule LFL, B:S1, *N* 3/6 rat; sg. also **likule** LFL cl.5
nkulima/vakulima LHFL, D2:H.no H, *N* 1/2 farmer; nom. < **-lima** V cultivate
nkulo/mikulo LRL, C1:SF, *N* 3/4 type of ointment (perfumed)
nkulu/vakulu LFL, D2:H.no H, *N* 1/2 elder sibling of same sex; the eldest sibling irrespective of sex;
nkulwangu LHH:L my elder s.;
nkululo LHH:L your (sg.) elder s.;
nkuluwe LHH:L his/her elder s.
nkulungwa/vakulungwa LHFL, D2:H.no H, *N* 1/2 elder; cf. **-kulungwa** -HFL A big
nkumi/mikumi LFL, B:S1, *N* 3/4 group of people working together
nkungu/mikungu LFL, B:S1, *N* 3/4 bowl, deep dish
nkungusitili/vakungusitili LHHHL:L, D2:H.no H, *N* 1/2 patron
nkwaju/mikwaju LH:L, A:S1/SF, *N* 3/4 tree sp.; the same name for a stick made out of this tree; **likwaju/makwaju** LH:L its fruit (**ing'waju/ding'waju** LH:L kernel or stone)
nkwala/mikwala LRL, C1:SF, *N* 3/4 arrow (small, not being sharp pointed, for hitting birds)
nkweddu/mikweddu LH:L, A:S1/SF, *N* 3/4 tamarind tree
nnalu/achannalu LFL/LHHFL, B:S1, *N* 3/2A+ snake sp. (of medium size, brown, yellow)
nnamu/valamu LH:L, A:S1/SF, *N* 1/2 brother-in-law, sister-in-law
nnandi/milandi LFL, B:S1, *N* 3/4 tree; also medicine, **mmilandi/vamilandi** LHFL cl.1/2 local doctor; cf. **ntela/mitela** cl.3/4
nnanga/minanga LH:L, E:S2, *N* 3/4 vein
nnangelo/milangelo LHFL, B:S1, *N* 3/4 water pot (small); also **nnengelo/milengelo** LHFL cl.3/4
nnango/milango LRL, C1:SF, *N* 3/4 door; cf. Sw. mlango/milango; see **lwidi/dinjwidi** cl.11/10
ndanje/mindanje LFL, B:S1, *N* 3/4 type of dance (esp. weddings)
ndonde/vandonde HFL, D2:H.no H, *N* 1/2 Ndonde person; cf. **chindonde** HFL cl.7 Ndonde dialect, nature, **kundonde** LH:L lower parts of the Plateau; western direction
nnemba/vanemba LRL, C1:SF, *N* 1/2 boy (before initiation)
nneule/mileule LHRL, C2:H.SF, *N* 3/4 bean plant sp. (Sw. mfiwi)
ngaliba/vangaliba LLRL, C1:SF, *N* 1/2 s.o. who circumcises; cf. **-dobola** V, **-yaluka** V circumcise
nng'anda/vang'anda HRL, C2:H.SF, *N* 1/2 master, husband; **nng'anda mwangu** HHH H:L my master;
nng'anda mwalo HHH H:L your

- master; **nng'anda mwawe** HHH H:L
her master
- nnganga/minganga** LH:L, E:S2, *N 3/4*
musical instrument (tin can with stick)
- nng'ole/ang'ole** HL:L, D2:H.no H, *N 1/2A* musician
- nngoni/vangoni** LRL, C1:SF, *N 1/2*
Ngoni person; cf. **chingoni** LRL cl.7
Ngoni language, nature
- nngwangwalati/vangwangwalati**
LHHH:L, A:S1/SF, *N 1/2* killer,
savage person; cf. **ungwangwalati/**
angwangwalati LHHH:L cl.1A/2A,
ingwangwalati/dingwangwalati
LHHH:L cl.9/10 dog sp.; cf. **-walala**
HH:L V kill
- nngwee** LHR, C2:H.SF, *I* ideophone
expressing the sunrise; **ngwee**
ulyamba LFH HRL; cf. **pii** FH, **piu**
FH
- nnilo/mililo** LH:L, A:S1/SF, *N 3/4*
right; **kunnilo kwake** LLHH RL to
his/her/its right; **nkono nnilo/mikono**
mililo LHH HH:L right hand(s)
- nniungu** LLRL, C1:SF, *N 1/8* under,
below; cf. **muhina** cl.18
- nnonji/milonji** LH:L, E:S2, *N 3/4*
baobab tree; **lilonji/malonji** LH:L
cl.5/6 its fruit (**indonji/dindonji**
LH:L cl.9/10 kernel or stone)
- nnuhuko/valuhuko** LHFL, D2:H.no H,
N 1/2 mother (lying-in woman, i.e.
s.o. who has just given birth)
- numbu/valumbu** LRL, C1:SF, *N 1/2*
elder sibling of opposite sex;
numbwangu LHRL my elder s.;
numbuulo LHRL your (sg.) elder s.;
numbuwe LHRL his/her elder s.
- nume/valume** LH:L, A:S1/SF, *N 1/2*
man; **-achilume** P con. male; cf.
nannume HHFL cl.1a full grown man
- numilanga/valumilanga** LHHL:L,
D2:H.no H, *N 1/2* widow
- nnungu/amilungu** LRL/LHH:L, C1:SF,
N 1/2A God, god
- nnung'une/vanung'une** LHH:L,
A:S1/SF, *N 1/2* younger sibling of
same sex; **nnung'unwangu** LHHH:L
- my younger s.; **nnung'uno** LHH:L
your (sg.) younger s.; **nnung'unwe**
LHH:L his/her younger s.
- nnusu/milusu** LRL, C1:SF, *N 3/4*
calabash (for storing beer)
- nnuvavu** LLRL, C1:SF, *N 1/8* without
- nnwele/valwele** LH:L, A:S1/SF, *N 1/2*
sick person
- nnyadi/mihadi** LH:L, A:S1/SF, *N 3/4*
tree sp.
- nnyahamulilo/mihahamulilo**
LHHHH:L, A:S1/SF, *N 3/4* branch to
protect against becoming wet
- nnyaluke/vayaluke** LHFL, D2:H.no H,
N 1/2 boy (after initiation)
- nnyangi** HRL, C2:H.SF, *N 3/-* sand;
also **nsangi** HRL cl.3/-
- nnyangi/avangu** LH:L, A:S1/SF, *N 1/2*
my companion; **nnyako/avako** your
(sg.) c.; **nnyake/avake** his/her c.;
nnyetu/avetu our c.; **nnyenu/avenu**
your (pl.) c.; **nnyao/avao** their c.
- nnyano** LL:L, D1:no H, *N 3/-* five;
milandi nnyano LFL LL:L five trees,
vinu nnyano RL LL:L five things
- nnyano na -mo** LLL L RL, *N 3/- + P*
six; **vinu nnyano na chimo** RL LLL
L RL six things
- nnyau/vahau** HFL, D2:H.no H, *N 1/2*
Yao person; cf. **chihau** HFL cl.7 Yao
language, nature
- nnyavi/vahavi** LFL, D2:H.no H, *N 1/2*
sorcerer; cf. **uhavi** LFL cl.14
witchcraft
- nnyele/miyele** LFL, B:S1, *N 3/4* rice
(the husked grain)
- nnyeni/vayeni** LRL, C1:SF, *N 1/2*
guest, stranger; cf. **uyeni** LRL cl.14
state of being a guest/stranger
- nnyenje** LH:L, E:S2, *N 1/8* along; cf.
panyenje LH:L cl.16 beside, aside,
apart
- nnyenje/vayenje** LH:L, A:S1/SF, *N 1/2*
age-mate, friend; cf. **somo**=
cl.9b/10b
- nnyitu/mihitu** LH:L, A:S1/SF, *N 3/4*
dense thicket
- nnyivani/vahivani** LHFL, D2:H.no H,

- N* 1/2 cousin; **nniyivani mwangu** LHHH H:L my c.; **nniyivani mwalo** your (sg.) c.; **nniyivani mwawe** his/her c.; **nniyivani mwetu** our c., etc.
- nniyodi/mihodi** LH:L, A:S1/SF, *N* 3/4 tear
- nniyongo/mihongo** LRL, C1:SF, *N* 3/4 snake
- nniyuma** LRL, C1:SF, *N* 1/8 behind, after; **amuno nnyuma** LHH LRL meanwhile; also **pamongo** cl.16+3, **pachikohi** cl.16; cf. **panyuma** LRL cl.16 backwards
- nonoha** -HFL, *V caus.* exceed, excel; also **-nanoha** -HFL; cf. **-punda**
- nonopa** -HH:L, *V* be hard; also **-nanopa** HH:L, **-komodya** HFL
- nowa** -H:L, *V* be pleasant, be sweet, enjoy; cf. refl. **-linowa** -HRL be proud of oneself, boast
- npindo/mipindo** LL:L, D1:no H, *N* 3/4 piece of cloth (private parts); also **npindu/mipindu** LL:L cl.3/4
- nsangi** HRL, C2:H.SF, *N* 3/- sand; also **nnyangi** HRL cl.3
- nsapata/misapata** LLL:L, D1:no H, *N* 3/4 type of dance (and celebration)
- nsufi/misufi** ?, *N* 3/4 kapok tree; cf. Sw. msufi/misufi
- nsungu/vasungu** LRL, C1:SF, *N* 1/2 foolish woman; cf. **usungu** LRL cl.14
- nsungu/vasungu** LFL, D2:H.no H, *N* 1/2 European
- nswahili/vaswahili** LLRL, C1:SF, *N* 1/2 Swahili person; cf. **chiswahili** LLRL cl.7 Swahili language, nature
- ntama/mitama** LFL, B:S1, *N* 3/4 millet
- ntandasa nchinduli** LLLL LHRL, *N* 3/- type of food (porridge with vegetable of cassava leaves); cf. **ntandasa** LLL:L cl.3 stiff cassava porridge, **chinduli** HR cl.7 cassava vegetable
- ntandasa/matandasa** LLL:L, D1:no H, *N* 3/6 stiff cassava porridge; cf. **ntandasa nchinduli** LLLL LHRL type of food
- ntano/mitano** LRL, C1:SF, *N* 3/4 story; also **lutano/dinano** LRL cl.11/10; **kutana ntano** LHH HH:L to tell a story
- ntavala/matavala** LHFL, B:S1, *N* 3/6 marsh mangoose (Sw. nguchiro)
- ntela/mitela** LH:L, A:S1/SF, *N* 3/4 medicine; also used **nnandi/milandi** cl. 3/4 tree; cf. **mmitela/vamitela** LHFL cl.1+2+ local doctor; cf. **lipleleko/mapeleko** cl.5/6
- ntema/mitema** LH:L, A:S1/SF, *N* 3/4 field which has been cultivated three times in succession
- ntenga/mitenga** LRL, C1:SF, *N* 3/4 pole for two loads
- ntengo/mitengo** LRL, C1:SF, *N* 3/4 tree sp.; **litengo/matengo** LRL cl.5/6 its fruit (**inengo/dinengo** LRL cl.9/10 kernel or stone)
- ntengu/mitengu** LRL, C1:SF, *N* 3/4 hut for boys during initiation rites
- ntesa/mitesa** LL:L, D1:no H, *N* 3/4 peanut
- ntikulo/mitikulo** LHH:L, A:S1/SF, *N* 3/4 padlock
- ntima/mitima** LH:L, A:S1/SF, *N* 3/4 heart; cf. **pantima** LLH:L cl.16 abdomen
- ntinji/mitinji** HRL, C2:H.SF, *N* 3/4 pumpkin plant
- ntolilo/mitolilo** LLRL, C1:SF, *N* 3/4 leaves of sweet potato
- ntondo** LH:L, A:S1/SF, *N* 3/- third day after tomorrow
- ntonga/mitonga** LH:L, E:S2, *N* 1/2 barren woman; also **akaveleka/vakaveleka**, **akavaleka/vakavaleka** LHH:L lit. s.o. who does not give birth (Neg.Pres.)
- ntopwa** LH:L, E:S2, *N* 3/- banana sp. (rather big)
- ntota/mitota** LFL, B:S1, *N* 3/4 needle; nom. < **-tota** *V* sew; also **ntotelo/mitotelo** LHH:L cl.3/4
- ntotelo/mitotelo** LHH:L, A:S1/SF, *N* 3/4 needle; also **ntota/mitota** LFL cl.3/4; cf. **-tota** *V* sew
- ntuhi/mituhi** LRL, C1:SF, *N* 3/4 corpse

ntuli/mituli LFL, B:S1, *N* 3/4 mortar
ntumbwi/mitumbwi LH:L, E:S2, *N* 3/4 canoe
ntumwa/vatumwa LFL, D2:H.no H, *N* 1/2 slave
ntungulu/mitungulu LHRL, C2:H.SF, *N* 3/4 tree sp.
ntupa/mitupa LL:L, D1:no H, *N* 3/4 hole, hollow (small); **mitupa**
ya-imula LLL H-LRL nostrils
ntutu/mitutu LFL, B:S1, *N* 3/4 barrel (of gun)
ntwangu/achatwa vangu LFL/LHH RL, B:S1, *N* 1/2A+ my husband;
ntwalo LFL your husband; **ntwawe** LFL her husband; also used: see wife: my
ntwani HFL, D2:H.no H, *I* what kind of; **ing'anya ntwani** LLH HFL why, lit. what kind of reason; question phrase-finally: final FH **ntwani** HFH
-nung'a -H:L, *V* stink
-nung'unula -HHH:L, *V* twist with body during dance
-nusa FL, *V caus.* take a snuff (tobacco); also **-tona**
nuundu HRL, C2:H.SF, *I* tomorrow; also **luundu** HRL cl.11
-nya H:L, *V* defecate; tones with Infinitive marker
-nyakula -HH:L, *V* give birth; also **-yakula** -HH:L, **-veleka**; see carry
-nyakula -HH:L, *V* carry; also **-yakula** -HH:L; see birth: give
-nyala -H:L, *V* dry up; cf. **-yuma**, **-yanika**
-nyalala -HH:L, *V* be quiet, keep quiet
-nyanyula -HH:L, *V* lift
-nyata -H:L, *V* be bad, be dirty; also **-hakalanga**
-nyela -H:L, *V* eat too much
-nyeembuka -HHH:L, *V* melt; also **-tungunyuka**
-nyema -H:L, *V* avoid
-nyeta -HH:L, *V* be fat (esp. human beings); cf. **-tumbula**, **-tumbulanga**
-nyoka -H:L, *V* be straight; cf. **-udula**, **-kanda**

-nyokonya -HFL, *V caus.* scream, make noise; also **-nyakonya** -HFL; cf. **-lidila**
-nyoma -H:L, *V* be fertile
-nyonyomala -HHH:L, *V* squat; also **-nyanyamala** -HHH:L

O

-oda -H:L, *V* take care of
-ohe H:L, ?, *P* much, many; tones including PPx; **wohe** H:L cl.3, **yohe** H:L cl.9; no form for cl.1; **myanda yohe** HL H:L often; predicative: same tones
-ohe-ohe LLH:L, ?, *P* every, all; tones including PPx; **wohewohe** LLH:L cl.1, **wohewohe** LLH:L cl.3, **yoheyohe** LLH:L cl.9; also **-ahi-ohe** LLH:L; predicative: same tones
-olota -HH:L, *V* point (with finger); also **-alota** -HH:L
-omba -H:L, *V* beat a drum, fire a gun, blow a horn, flute; also **-womba** -H:L
-omi H:L, ?, *P/A* healthy, strong, whole; tones including prefix; also **-umi** H:L; NPx in cl.1: **mwomi** H:L, PPx in other classes: **womi** H:L cl.3, **yomi** H:L cl.4; how are you/they?: **umwomi/vomi** LFH/FH (question intonation); predicative: same tones
-ona -H:L, *V* sleep; infinitive: **kona** H:L; cf. **luwono** LRL cl.11/- sleep
-ona -H:L, *V* see, feel; infinitive: **kwona** H:L; preferred with OC; cf. neut. **-oneka** -HH:L appear, be visible
-onda -H:L, *V* check a trap (whether an animal is caught)
-ondonga -HH:L, *V* destroy; also **-andonga** -HH:L, **-timbangila**
-oneka -HH:L, *V* appear, be visible; neut. < **-ona** -H:L see; **mwedi woneka** HL LFL next month; cf. **-holoka**
-onga -H:L, *V* take a walk, stroll; cf. **-hwenahwena**
-ongolela -HHH:L, *V* set right, tend; cf. **-chungu**

P

- pa** H:L, *V* bear fruit, spring up; tones with Infinitive marker
- pachikohi** LLH:L, E:S2, *N* 16 behind, after; also **kuchikohi/nchikohi** LLH:L cl.17/18, **pamongo** cl.16, **nyuma** cl.18
- pachinu** LRL, C1:SF, *N* 16+7 place; also **pahali** cl.18; cf. **chinu** RL cl.7 thing
- pahali** LH:L, A:S1/SF, *N* 16 place; also **pachinu** cl.16
- pahi** RL, C1:SF, *N* 16 on the ground, down to the ground
- pakatika** -HHH:L, *V* fall bit by bit; cf. -**motoka**, -**uwa**, -**yanguka**, -**palatuka**
- pakula** -HH:L, *V* collect honey
- pala** -H:L, *V* scratch, peck; harvest groundnuts; cf. nom. **chipala/vipala** LRL cl.7/8 smithy
- palanga** -HH:L, *V* go up; cf. sep. -**palangula** -HHH:L hop
- palangula** -HHH:L, *V* hop; sep. < -**palanga** -HH:L go up; cf. nom. **lipalangula/mapalangula** LLLRL cl.5/6 locust, **nampalangula** LLLLRL cl.1a locust
- palasa** -HFL, *V caus.* grind (rice)
- palata** -HH:L, *V* clear, scrape away; cf. -**kwanga**, -**pukusula**
- palatuka** -HHH:L, *V* fall down; cf. -**pakatika**, -**motoka**, -**uwa**, -**yanguka**
- pali** -H:L, *V irr.* be; **akapali** LHFL (s)he is not here, **ikapali** LHFL there is/are not; only Present Negative verb forms in use; cf. -**va**, -**pawa**
- palila** -HH:L, *V* put above; e.g. put fire above a cooking pot in preparing **likulambila** LLLH:L
- palipanda** LLL:L, D1:no H, *N* 16 playing ground (celebrations)
- palitungulu** LLHRL, C2:H.SF, *N* 16 fireplace used during celebrations
- palula** -HH:L, *V* harvest maize
- palyamba** LH:L, E:S2, *N* 16 day after tomorrow; cf. **palyamba-po** LHF-H (+dem., ref., short form) second day after tomorrow; cf. **kulyamba** LH:L cl.17 dawn, **ulyamba** HRL morning cl.14
- palyambapo** LHFH, *N* 16 second day after tomorrow; < **palyamba** LH:L cl.16; cf. **kulyamba** LH:L cl.17 dawn, **ulyamba** HRL morning cl.14
- pamba** -H:L, *V* dip; also -**yomola**; app. > -**pambila** -HH:L dip into
- pambanya** -HFL, *V caus.* fasten together
- pambilila** -HHH:L, *V* fasten (with rope); cf. -**hunga**
- pambuto** LFL, B:S1, *N* 16 instead of
- pameho** LH:L, E:S2, *N* 16+6 publicly; cf. **kumeho** LH:L cl.17+6 face, front, before
- pamo** RL, C1:SF, *P* together; **pamo na** RL L together with; cf. -**mo** P one, a(n), some; also **chalumo** LRL
- pamongo** LRL, C1:SF, *N* 16+3 behind, after; also **kumongo** LRL cl.17+3, **nyuma** cl.18, **pachikohi** cl.16; cf. **mongo** RL cl.3 back of body
- panda** -H:L, *V* plant
- pandala** -HH:L, *V* kill insect with tip of finger, toe
- panji** FL, C2:H.SF, *P* perhaps; cf. -**nji** P other; also **panjika** LH:L I, **chipanji** HFL I; cf. **kwali** I
- panjika** LH:L, A:S1/SF, *I* perhaps; also **panji** FL, **chipanji** HFL; cf. **kwali** I
- pannima** LLRL, C1:SF, *N* 16 height, high, above; cf. **munnima/vannima** HHFL cl.1/2 Nnima person, **chinnima** HHFL cl.7/- Nnima dialect; cf. **muha** cl.18 top, above, sky
- pantima** LLH:L, A:S1/SF, *N* 16+3 abdomen; also **litumbo/matumbo** cl.5/6; cf. **ntima/mitima** LH:L cl.3/4 heart
- panya** -H:L, *V* beat, hit, slap; app.+ ass.> -**panyilana** -HHH:L beat each other with sth.; cf. ass. -**panyana** -HH:L fight
- panyana** -HH:L, *V* fight; ass. < -**panya** -H:L beat
- panyenje** LH:L, E:S2, *N* 16 beside,

- aside, apart; cf. **nyenje** LH:L cl.18
along
- panyuma** LRL, C1:SF, *N 16*
backwards, after; also **kunyuma** LRL
cl.17, **kunyuma kwake** LLH RL
hereafter; cf. **nyuma** LRL cl.18
behind, after
- papa** -H:L, *V* tap, knock, beat (of
heart); cf. Sw. -papa; see **-dukula**
- papata** -HH:L, *V* follow; also **-londola**
-HH:L
- papatula** -HHH:L, *V* knock off, break
off by hitting; also **-hapuka**, **-yamila**
- papula** -HH:L, *V* tear (tr., cloths, etc.);
cf. **-pwapula** -HH:L, **-valula**
- pasula** -HH:L, *V* split, cleave, burst; cf.
Sw. -pasua; see **-vanga**; also in use
-pasuka -HH:L be split (< Sw.
-pasuka)
- pata** -H:L, *V* get
- patana** -HH:L, *V* come to terms, be
reconciled, harmonize
- patanisa** -HH:L, *V caus.* command
- pati/dipati** H:L/LH:L, E:S2, *N 9c/10c*
type of clothing
- pawa** -FL, *V pas.* be somewhere; cf.
-va, **-pali**
- pawelu** LH:L, E:S2, *N 16+14* outside;
cf. **welu** H:L cl.14 field
- pekeha** -HFL, *V caus.* make fire (by
friction); cf. nom. **mpekeho/**
mipekeho LHH:L cl.3/4 firestick
- pela** -H:L, *V* come to an end; rape (a
woman)
- peleka** -HH:L, *V* practice witchcraft;
cf. nom. **lipeleko/mapeleko** LLH:L
cl.5/6 medicine; cf. **-lowa**,
-lokotanya
- pelekedy** -HHL:L, *V caus.* send,
cause to go; cf. **-tuma** send (person)
- pemba** -H:L, *V* spit out (small thing);
app. > **-pembela** -HH:L spit upon; cf.
-suna
- pembedya** -HFL, *V caus.* entice;
comfort
- penda** -H:L, *V* scorn, despise
- peneka** -HH:L, *V* put sideways; cf.
mpaneka/mipaneka LLL:L cl.3/4
type of hair dressing
- peng'a** -H:L, *V* blow the nose
- pepeka** -HH:L, *V* be light, be thin, be
transparent; see narrow: be
- pepeka** -HH:L, *V* be narrow; cf. ? app.
> **-pepekela** -HHH:L be near,
approach; see light:be, be thin,
transparent
- pepekela** -HHH:L, *V* be near,
approach; cf. **pepi** H:L I near; ? app.
< **-pepeka** -HH:L be narrow, be thin;
cf. **-hengelela**, **-vandikila**
- pepi** H:L, A:S1/SF?, *I* near; **pepi**
na-chiteng'u HL L-LFL lit. near
with-chair; cf. **-ipika** *V* be short; cf.
-pepekela *V* be near, approach
- peta** -H:L, *V* sift; cf. nom.
chipeto/vipeto LH:L cl.7/8 sifting
basket
- peya** -H:L, *V* walk quickly; cf. red.
-peyapeya -HHH:L; **peya tuhwene**
L:L LRL let's go quickly; cf. **upehi**
LFL I quickly
- peyapeya** -HHH:L, *V red.* be light
(weight); red. < **-peya** -H:L walk
quickly
- piha** -H:L, *V* hide sth.; cf. refl.
-litwaliha hide oneself
- pii** HR, C2:H.SF, *I* sunset (ideophone
expressing that the sun has
disappeared); **liduva pii** LHL FH; cf.
piu FH, **nngwee** LFH
- pikita** -HH:L, *V* try to tear loose
- pilikana** -HHH:L, *V* hear; attend; cf.
-pilikanila -HHHH:L listen;
lipilikanilo/mapilikanilo LHHHH:L
cl.5/6 ear, lit. thing to hear with
- pilikanila** -HHHH:L, *V* listen; cf.
-pilikana -HHH:L hear
- pilila** -HH:L, *V* endure
- pima** -H:L, *V* measure
- pinda** -H:L, *V* bend; cf. refl. **-lipinda**
-HRL crouch; cf. **-tepa**
- pindikula** -HHH:L, *V* overturn,
revenge; cf. **-pindikulanya** -HHLL:L
alter, turn round, stir
- pindikulanya** -HHLL:L, *V caus.* alter,
turn around, stir (e.g. in making

- cassava porridge); cf. **-kolowanya**, **-kolova**
- pinga** -H:L, *V* be obstinate, refuse to obey
- pi***si*/**di***pi**si* RL/LRL, C1:SF, *N* 9c/10c measure (for grains)
- pita** -H:L, *V* pass, go on; **kupita mwanda** LHH H:L to go on a journey; app. **-pitila** -HH:L pass by (away, from, to)
- piu** HR, C2:H.SF, *I* sunset (ideoph. expressing that the sun is about to disappear); **liduva litenda piu** LHL LHH FH the sun was sinking; cf. **pii** FH, **nngwee** LFH
- piyanidya** -HHL:L, *V caus.* cause haste; cf. **-yanguhana**
- poha** -FL, *V caus.* save, be saved
- poka** -H:L, *V* prosper, rejoice; cf. **-hangalala**, **-tamba**
- pola** -H:L, *V* cool down (itr.); cf. Sw. -poa; cf. **-didima**, **-itula**, **-tulila**
- ponda** -H:L, *V* smash, pound leaves; cf. **-twa**, **-twanga**, **-tipula** pound grains
- popota** -HH:L, *V* twist, twine; also **-pota** -H:L; cf. **-popotola** -HHH:L wring out; cf. **-luka**
- popotola** -HHH:L, *V* wring out; also **-papatola** -HHH:L; cf. **-pota** -H:L, **-popota** -HH:L twist, twine
- posa** -FL, *V caus.* propose marriage; **nposi/vaposi** LRL cl.1/2 person who proposes a marriage (an elder of the youngster who wants to marry)
- pota** -H:L, *V* twist, twine; also **-popota** -HH:L; cf. **-popotola** -HHH:L wring out; cf. **-luka**
- pukusula** -HHH:L, *V* peel off; cf. **-kwanga**, **-palata**
- pukuta** -HH:L, *V* wipe off
- pula** -H:L, *V* sift grain by shaking
- pulula** -HH:L, *V* strip off; harvest rice
- pulung'anya** -HHL:L, *V caus.* increase, become more and more
- pumula** -HH:L, *V* breath
- pumuna** -HH:L, *V* gnaw
- punda** -H:L, *V* surpass, exceed; cf. **-nonoha**
- punga** -H:L, *V* blow (of wind); cf. **lipungo** LRL cl.5/- wind
- pungula** -HH:L, *V* decrease, diminish
- pupa** -H:L, *V* crackle; turn restlessly (as in pain)
- puta** -H:L, *V* skip (with rope); **mputa** LH:L cl.3/- traditional game
- pwahika** -HH:L, *V* shout, talk much and lively
- pwapula** -HH:L, *V* tear (tr., twigs, etc.); cf. **-papula** -HH:L, **-valula**
- pwata** -H:L, *V* quarrel; ass. > **-pwatana** -HH:L
- pwatana** -HH:L, *V* quarrel with each other; ass. < **-pwata** -H:L quarrel
- pwechela** -HH:L, *V* receive; also **-pwachela** -HH:L
- pweteka** -HH:L, *V* wound, get hurt, be ill; also **-pwateka** -HH:L; cf. **-pwita** -H:L hurt
- pwita** -H:L, *V* hurt; cf. **-pweteka** -HH:L
- pya** H:L, *V* be scorched, be burnt; tones with Infinitive marker
- pyaila** -HH:L, *V* sweep; cf. **chipyai/vipyai** LRL broom
- S**
- samulila** -HHH:L, *V* comb; also **-hamulila** -HHH:L; cf. **chiamulo/vihamulo** LLL:L cl.7/8 comb
- sana** RL, C1:SF, *I* very; cf. Sw. sana; see **namene** I
- sika** -H:L, *V* bury; cf. Sw. -zika; see **-yaha**; **masiko** LRL cl. -/6 funeral
- sikitika** -HHH:L, *V* be sorry; cf. Sw. -sikitika; see **-hinginika**
- soma** -H:L, *V* read
- somo/=** RL, C1:SF, *N* 1b/2b friend; cf. **nnyenje/vayenje** cl.1/2
- sulula** -HH:L, *V* drip, leak; frequently used with Pre-Final **-ang-**; **-sululanga** -HHH:L
- sulupuka** -HHH:L, *V* come down
- suma** -H:L, *V* buy; cf. *caus.* **-sumisa** -HFL sell

-**sumisa** -HFL, *V caus.* sell; caus. <
 -**suma** -H:L buy
 -**suna** -H:L, *V spit*; cf. -**pemba**
 -**sunala** -HH:L, *V be vexed, be angry*;
 cf. -**visa**, -**viha**, -**chimwa**
 -**swa** H:L, *V set (of sun)*; tones with
 Infinitive marker; **liduva kuswa** LHL
 H:L all day long
 -**swelela** -HH:L, *V be white (rash)*; also
 -**swalela** -HH:L; cf. -**anape** P con.
 white; see clean: be
 -**swelela** -HH:L, *V be clean*; cf.
 -**hahula**, -**katapadya**; see white: be
 (rash)

T

-**taha** -FL, *V caus.* look for, search; also
 -**loleha**; cf. -**lembela**, -**lembelela**
 -**tahuka** -HH:L, *V disagree, rebel, be*
 perverse; cf. ass. -**tahukana** -HHH:L
 argue
 -**tahukana** -HHH:L, *V argue*; ass. <
 -**tahuka** -HH:L disagree
 -**taila** -HH:L, *V lay an egg*
 -**takata** -HH:L, *V be pleased, be*
 attractive; cf. -**maila**
 -**takatuka** -HHH:L, *V stand up, arise,*
 start; cf. -**uka**
 -**tama** -H:L, *V agree on marriage*
 between man and parents
tama RL, C1:SF, *N 9b/- desire*; < Sw.
 tamaa; see **ihikidi/dihikidi** cl.9/10; cf.
lukou cl.11/-
 -**tamba** -H:L, *V rejoice*; cf. -**hangalala**,
 -**poka**
 -**tambala** -HH:L, *V creep*
 -**tambula** -HH:L, *V mention, name*
 -**tamwa** -FL, *V pas.* love, like, desire,
 want, accept; cf. -**lembela**; cf. ass.
 -**tamwana** -HFL accept
 -**tamwana** -HFL, *V agree*; ass. <
 -**tamwa** -FL love, etc, accept; also
 -**yambukila**, -**itikila**
 -**tana** -H:L, *V tell a story*; **kutana**
ntano/lutano LHH HH:L/HH:L
 (ntano, lutano LRL, LRL cl.3,11
 story)
 -**tanda** -H:L, *V hang*

-**tandi** -FL, B:S1, *A first*; **matandi** LFL
 cl.4, **dinandi** LFL cl.10; tone also
 HL, i.e. no lengthening of
 penult.vowel; substractively derived
 from -**tandilika** *V begin*; predicative:
 same tones
 -**tandilika** -HHH:L, *V begin*; also
 -**tandalika** -HHH:L; cf. -**tandi** -FL A
 first; -**lindimuka**
tangu L:L, D1:no H, *I formerly, the*
 past; **ing'ande ya-tangu** LHL H-FL
 an old house; also **kala** I; cf. -**atangu**
 P con. old
 -**tang'una** -HH:L, *V chew*; cf. nom.
litang'unilo/matang'unilo LHHH:L
 cl.5/6
 -**tanjila** -HH:L, *V be noticeable, be*
 available; cf. -**injipika**
 -**tanuka** -HH:L, *V be expanded, be*
 widened; cf. Sw. -tanuka
 -**tapa** -H:L, *V boast*; also refl. -**litapa**
 -HRL
 -**tapika** -HH:L, *V vomit*; cf. Sw. -tapika;
 see -**kodyoka**
 -**tapuka** -HH:L, *V stick to, adhere*
tati H:L, ?, *N Ic/- father (informal,*
ironic); cf. **atata** LFL cl.2A
 -**tatu** -RL, C1:SF, *A three*; **mitatu** LRL
 cl.4, **dinatu** LRL cl.10; -**atatu** P con.
 third; predicative: same tones
 -**tava** -H:L, *V bind sth. with a rope, tie*
 rope around sth.
 -**taya** -H:L, *V put into*; **kutaya misa**
 LHH L:L sneeze, or in short
kuta-misa LH-FL; **kutaya chihonde**
 LHH HH:L participate in a discussion
 -**teka** -H:L, *V draw water*; **kuteka medi**
 LHH H:L
 -**teleka** -HH:L, *V cook*; also -**taleka**
 -HH:L
 -**tema** -H:L, *V sharpen*; cf.
 -**kwichakwicha**; see cut firewood
 -**tema** -H:L, *V cut firewood*; see sharpen
 -**tenda** -H:L, *V do*; cf. -**kola**; **kutenda**
madengo LHH HH:L to work;
unitenda LHRL thanks, lit. you have
 done it (Pres.Perf.)
 -**tepa** -H:L, *V stoop, bend down*; cf.

- mwitepa** LFL cl.18 corner
teso/diteso RL/LRL, C1:SF, *N 9c/10c* adze; sg. also **iteso** LRL cl.9c
-tetela -HH:L, *V* cackle (of chicken producing an egg)
-tetema -HH:L, *V* shiver, tremble; also **-tetemela** -HHH:L; cf. **chitete** LFL cl.7, **chitetemedi** LLLRL cl.7 the shivers
-teula -HH:L, *V* take off fire, serve food; cf. app. **-teulila** -HHH:L dish
-teulila -HHH:L, *V* dish; app. < **-teula** -HH:L take off fire, serve food
-tevedya -HFL, *V caus.* endanger; also **-tavedya** -HFL
-teya -H:L, *V* trap; **kuteya dihomba** LHH HFL fish, lit. trap fish; cf. **-inikila**
-tika -H:L, *V* cause to shake, move fro and to; put load on head with s.o.'s help; cf. **-tikinya** -HFL shake
-tikinya -HFL, *V caus.* shake (tr. and itr.); cf. **-tika** -H:L cause to shake, move fro and to
-tila -H:L, *V* run away; **ku-n-tila** H-H-RL (with OC of cl.1) to isolate s.o. socially; also **-tukuta**
-tima -H:L, *V* delay, linger
-timba -H:L, *V* loiter, hang about; frequently used with Pre-Final **-ang-**: **-timbanganga** -HH:L
-timbangila -HHH:L, *V* destroy; also **-ondonga**
-tindinga -HH:L, *V* bring to ruin
-tindivala -HHH:L, *V* kneel, worship; also **-yama**
-tiniha -HFL, *V caus.* bring to the boil (**nkojo**, first stage in the preparation of beer); cf. **-yaula**, **-yaukila**, **-yaukidya**, **-kodya**, **-chemusa**, **-tokota**
-tipula -HH:L, *V* pound (grains); also **-twa**, **-twanga**; cf. **-ponda**
-titimila -HHH:L, *V* sink; disappear, vanish
-tiva -H:L, *V* plait; **kutiva ulindo** LHH HFL plait hair
-toha -FL, *V caus.* touch, press; cf. **-kaba**, **-bana**
-tohoma -HH:L, *V* go up and down (e.g. fontanel on head of baby)
-tokota -HH:L, *V* become cooked, be boiled; also **-takota** -HH:L;
-tokotelana -HHHH:L become cooked for each other; have flavour; cf. **-yaula**, **-kodya**, **-chemusa**, **-tiniha**
-tolela -HH:L, *V* get satisfied
-tolola -HH:L, *V* bore a hole; also **-talola** -HH:L; cf. **-dovola**
-tona -H:L, *V* take a snuff (tobacco); also **-nusa**; cf. **liposa/maposa** LL:L cl.5/6 snuff of tobacco
-tondola -HH:L, *V* choose; also **-tandola** -HH:L, **-hapa**; **utondodi** LLRL cl.14 elections, **ntondodi/vatondodi** LLRL cl.1/2 voter
-tongodika -HHH:L, *V* grumble, speak to oneself; caus., neut. < **-tongola** -HH:L speak; also **-loloma**
-tongola -HH:L, *V* speak, say; also **-tangola** -HH:L; cf. **-tongodika** -HHH:L grumble; cf. **kutongo-viyoha** LHH-HFL abuse, insult, lit. to speak terms of abuse; cf. **-chi** say
-tongosa -HFL, *V caus.* seduce
-tonya -FL, *V caus.* rain
-tosa -FL, *V caus.* fine; cf. pas. **-toswa** -FL be fined
-tota -H:L, *V* sew; cf. nom. **ntota/mitota** LFL cl.3/4, **ntotelo/mitotelo** LHH:L cl.3/4 needle
-tubisa -HFL, *V caus.* punish
-tudya -FL, *V caus.* offer present for a special occasion, esp. initiation; caus. < **-tula** -H:L set down; cf. **inudyo/dinudyo** LL:L cl.9/10 present for a special occasion
-tukukula -HHH:L, *V* enlarge, make greater
-tukula -HH:L, *V* be very full (of food), belch; cf. **dihumi** LRL cl. -/10 belch
-tukuta -HH:L, *V* run away; also **-tila**
-tula -H:L, *V* set down (e.g. take load from head and put it on the ground); cf. **-tudya** -FL give present for a special occasion

-**tulila** -H:L, *V* get cool; cf. -**pola**, -**didima**, -**itula**
 -**tuma** -H:L, *V* send (person); cf. -**pelekedy**
 -**tumba** -H:L, *V* look up, observe; cf. -**lolehidya**
tumbaku LFL, E:S2, *N* 5b/- tobacco
 -**tumbuka** -HH:L, *V* break (itr., big things, e.g. tree); cf. -**tumbula** -HH:L, -**lumuka**
 -**tumbula** -HH:L, *V* be fat (esp. animals); be big; also used with Pre-Final -**ang-**: -**tumbulanga** -HHH:L; cf. -**nyeta**; see break (tr., big things)
 -**tumbula** -HH:L, *V* break (tr., big things); frequently used with Pre-Final -**ang-**: -**tumbulanga** -HHH:L; cf. -**tumbuka** -HH:L, -**lumula**; see fat: be, be big
 -**tumila** -HH:L, *V* use; **ngu-tumidile uvelu** L-LLLL HH:L I was stupid, lit. I have used stupidity
 -**tumula** -HH:L, *V* chase away; also -**vinganga**
 -**tunda** -H:L, *V* lack enough fire, get underdone (food); be unclear (words)
 -**tundula** -HH:L, *V* take off sth. (off body)
 -**tundunya** -HFL, *V caus.* throw down
 -**tunduwila** -HHH:L, *V* bring problems; cf. -**huva** have problems, -**banika** get problems
 -**tungunyuka** -HHH:L, *V* melt; also -**nyeembuka**
 -**tupa** -H:L, *V* bulge, swell out
 -**tupila** -HH:L, *V* have sexual intercourse; also -**yelana**
 -**tuva** -H:L, *V* scratch skin forcefully; remove weeds; cf. -**vava**
 -**twa** H:L, *V* pound (grains); tones with Infinitive marker; also -**twanga** -H:L, -**tipula**; cf. -**ponda**
 -**twala** -H:L, *V* take; -**twalidya** -HFL make a woman pregnant, **litwala** LH:L abduction of a woman; nowadays: name of the bride in first week, -**litwaliha** -HHL:L hide oneself

-**twalidya** -HFL, *V caus.* make (a woman) pregnant; cf. -**twala** -H:L take
 -**twanga** -H:L, *V* pound (grains); < -**twa** (+ Pre-Final -**ang-**); also -**tipula**; cf. -**ponda**
 -**twesa** -FL, *V caus.* pretend (to be good, nice, etc., in order to get sth.); cf. -**lilambila**
twiga /= RL, C1:SF, *N* 9b/10b giraffe

U

(**u**)-**o**- LFH, *P dem.* right this/that one;
uyoyu LFH cl.1, **uwowu** LFH cl.3, **uyoyi** LFH cl.9; attributive tones: (H)FH, the initial **u-** is optional
 (**u**)-**o-o** LFH, *P dem.* this, that (referential emphatic); **uyoyo** LFH cl.1, **uwowo** LFH cl.3, **uyoyo** LFH cl.9; attributive tones: (H)FH, the initial **u-** is optional; **mwanda uwowo** HH HFH right at that time, moment
u-la LFH, *P dem.* that (emphatic); **uyula** LFH cl.1, **uula** LFH cl.3, **uila** LFH cl.9; attributive tones: HFH
u-no LFH, *P dem.* this (emphatic); **uyuno** LFH cl.1, **uuno** LFH cl.3, **uino** LFH cl.9; attributive tones: HFH; cf. **uvino** LFL and now, therefore
ubila LFL, B:S1, *N* 14 semen
ucheche LRL, C1:SF, *N* 14 termite(s)
uchi H:L, A:S1/SF, *N* 14 honey
uchiva LFL, B:S1, *N* 14 solitariness, loneliness; cf. **nchiva/vachiva** LFL cl.1/2 orphan
 -**udula** -HH:L, *V* straighten; cf. -**nyoka**, -**kanda**
 -**udya** -FL, *V caus.* ask (question); red. > -**udyaudya** -HHL:L question
ugoni LRL, C1:SF, *N* 14 adultery
uhakwa LH:L, A:S1/SF, *N* 14 dirt (often: dirty food)
uhambachi LLRL, C1:SF, *N* 14 trade
uhato/ahato LH:L, A:S1/SF, *N* 1A/2A python; pl. also **vahato** LH:L cl.2; also **uhatu/ahatu** LH:L; species

- oriented: **ihatu/dihatu, ihato/dihato** LH:L cl.9/10
- uhavi** LFL, B:S1, *N 14* witchcraft; cf. **nnnyavi/vahavi** LFL cl.1/2 sorcerer
- uhiku** LH:L, A:S1/SF, *N 14* night; cf. Sw. usiku; see **chilo** cl.7/-; **uhiku ukacha** LHL LH:L until dawn, lit. if the night dawns
- uhimba/ahimba** LFL, B:S1, *N 1A/2A* lion; pl. also **vahimba** LFL cl.2; species oriented: **ihimba/dihimba** LFL cl.9/10
- uhinini** LHH:L, A:S1/SF, *N 14* gum (near teeth)
- uhomba/ahomba** LFL, B:S1, *N 1A/2A* fish; pl. also **vahomba** LFL cl.2; species oriented: **ihomba/dihomba** LFL cl.9/10
- uhong'o/ahong'o** LRL, C1:SF, *N 1A/2A* maggot; pl. also **vahong'o** LRL cl.2; species oriented: **ihong'o/dihong'o** LRL cl.9/10
- uhu** H:L, A:S1/SF, *N 14* flour
- uhuhi/ahuhi** LRL, C1:SF, *N 1A/2A* snake sp. (related to python); pl. also **vahuhi** LRL cl.2; species oriented: **ihuhi/dihuhi** LRL cl.9/10
- uhumbwe** LL:L, D1:no H, *N 14* milky juice got from grated coconut (Sw. tui)
- uhungo/ahungo** LH:L, E:S2, *N 1A/2A* genet; pl. also **vahungo** LHL cl.2; species oriented: **ihungo/dihungo** LH:L cl.9/10
- uhwehwe** LFH, *P subst.* we (emphatic); **hweetu** HRL (non-emphatic)
- uila** -HH:L, *V* repeat; also **-ila** -H:L
- uka** -H:L, *V* rise, come forward; cf. **-takatuka**; see go away
- uka** -H:L, *V* go away, come from; cf. **-holoka**; see rise, come forward; cf. **koka** H:L I then, finally, at the end; if
- ukanga** LH:L, A:S1/SF, *N 14* foolishness, ignorance (of man); cf. **nkanga/vakanga** LH:L cl.1/2, **uvelu** cl.14
- ukoti/mikoti** LRL, C1:SF, *N 14/4* neck
- ukoto** LRL, C1:SF, *N 14* speech, utterance
- ukuluha** LHFL, B:S1, *N 14* miscarriage; nom. < **-kuluha**; cf. **dinjahango** cl. -/10 miscarriage
- ula** -H:L, *V* ripen (itr.); cf. **-lapata, -huna**; see undress
- ula** -H:L, *V* undress; also **kudobola dinguo** LHHH HH:L; see ripen (itr.)
- ulama** LH:L, A:S1/SF, *N 14* life; nom. < **-lama** *V* recover; live/exist long; also **umi** cl.14
- ulame** LRL, C1:SF, *N 14* health, happiness, prosperity; nom. < **-lama** *V* be aged; heal
- ulemwa** LFL, B:S1, *N 14* idleness, laziness; nom. < **-lemwa** -FL A idle
- ulende** LFL, B:S1, *N 14* sesame
- ulindo** LH:L, A:S1/SF, *N 14* hair (of head)
- ulombi/malombi** LRL, C1:SF, *N 14/6* marriage; cf. **-lomba** *V* marry (of man); also **indowa/dindowa** cl.9/10
- uloongo** LLFL, E:S2, *N 14* soil (clay); cf. **utope** cl.14
- uluka** -HH:L, *V* jump (high); fly; cf. Sw. -ruka; cf. **-chinjila, -chitika, -dang'a**
- ululuha** -HHL:L, *V caus.* sift grain by trossing
- ulumuka** -HHH:L, *V* get to puberty (boys)
- ulwele/malwele** LH:L, A:S1/SF, *N 14/6* sickness
- ulyamba** HRL, C2:H.SF, *N 14* morning; cf. **kulyamba** LH:L dawn, **palyamba** LH:L day after tomorrow
- umaka/amaka** LRL, C1:SF, *N 1A/2A* cat; pl. also **vamaka** LRL cl.2; species oriented: **imaka/dimaka** LRL cl.9/10
- umamana/amamana** LHFL, B:S1, *N 1A/2A* ant sp. (small, red); pl. also **vamamana** LHFL cl.2; species oriented: **imamana/dimamana** LHFL cl.9/10
- umamba/amamba** LFL, B:S1, *N 1A/2A* crocodile; cf. Sw. mamba; pl. also **vamamba** LFL cl.2; species oriented:

- imamba/dimamba** LFL cl.9/10; see **umbulu/ambulu**
- umambumbu** LHFL, B:S1, *N 1A* early in the morning; also **mambumbu** HFL cl. -/6; cf. **-cha V**, **kulyamba** cl.17
- umande/amande** LH:L, E:S2, *N 1A/2A* grasshopper; pl. also **vamande** LH:L cl.2; species oriented: **imande/dimande** LH:L cl.9/10
- umba** -H:L, *V* shape, create; cf. **Sw.** -umba; cf. **-munya**, **-kamata**
- umbadya** -HFL, *V caus.* fill; caus. < **-umbala** -HH:L be full
- umbai/ambai** LH:L, A:S1/SF, *N 1A/2A* bee sp.; pl. also **vambai** LH:L cl.2; species oriented: **imbai/dimbai** LH:L cl.9/10
- umbala** -HH:L, *V* be full; caus. > **-umbadya** -HFL fill
- umbango/ambango** LH:L, A:S1/SF, *N 1A/2A* wild pig; pl. also **vambango** LH:L cl.2; species oriented: **imbango/dimbango** LH:L cl.9/10
- umboko/amboko** LH:L, A:S1/SF, *N 1A/2A* louse; pl. also **vamboko** LH:L cl.2; species oriented: **imboko/dimboko** LH:L cl.9/10
- umbudi/ambudi** LH:L, A:S1/SF, *N 1A/2A* goat; pl. also **vambudi** LH:L cl.2; species oriented: **imbudi/dimbudi** LH:L cl.9/10
- umbulu/ambulu** ?, *N 1A/2A* crocodile; tones unknown; pl. also **vambulu** cl.2; species oriented: **imbulu/dimbulu** cl.9/10; also **umamba/amamba**
- umbulukuta/ambulukuta** LLHRL, C2:H.SF, *N 1A/2A* butterfly; pl. also **vambulukuta** LLHRL cl.2; species oriented: **imbulukuta/dimbulukuta** LLHRL cl.9/10
- umbutuka/ambutuka** LLRL, C1:SF, *N 1A/2A* antelope sp. (klipspringer); pl. also **vambutuka** LLRL cl.2; species oriented: **imbutuka/dimbutuka** LLRL cl.9/10
- umbwilimbwindi/ambwilimbwindi** LLHRL, C2:H.SF, *N 1A/2A* termite sp. (small winged, not edible); pl. also **vambwilimbwindi** LLHRL cl.2; species oriented: **imbwilimbwindi/dimbwilimbwindi** LLHRL cl.9/10
- umembe/amembe** LH:L, E:S2, *N 1A/2A* fly; pl. also **vamembe** LH:L cl.2; species oriented: **imembe/dimembe** LH:L cl.9/10
- umi** H:L, A:S1/SF, *N 1A* life; also **ulama** cl.14
- umunda/amunda** LH:L, A:S1/SF, *N 1A/2A* dove; pl. also **vamunda** LH:L cl.2; species oriented: **imunda/dimunda** LH:L cl.9/10
- umwemwe** LFH, *P subst.* you (pl.) (emphatic); **mweenu** HRL (non-emphatic)
- umwenye** LRL, C1:SF, *N 1A* chieftaincy (traditional); cf. **amwenye/achamwenye** HRL/LHRL cl.2A/2A+ headman of village
- unambili/anambili** LHFL, B:S1, *N 1A/2A* partridge; pl. also **vanambili** LHFL; species oriented: **inambili/dinambili** LHFL cl.9/10
- unang'e** LFH, *P subst.* he, she (emphatic); **nang'e** H:L (non-emphatic)
- unembe/anembe** LRL, C1:SF, *N 1A/2A* calf; pl. also **vanembe** LRL cl.2; species oriented: **inembe/dinembe** LRL cl.9/10
- unembo/anembo** LFL, B:S1, *N 1A/2A* elephant; pl. also **vanembo** LFL cl.2; species oriented: **inembo/dinembo** LFL cl.9/10
- unene** LFH, *P subst.* I (emphatic); **naangu** HRL (non-emphatic)
- ung'ambe/ang'ambe** LFL, B:S1, *N 1A/2A* tortoise; pl. also **vang'ambe** LFL cl.2; species oriented: **ing'ambe/ding'ambe** LFL cl.9/10
- ung'anga/ang'anga** LH:L, A:S1/SF, *N 1A/2A* guinea-fowl; pl. also **vang'anga** LH:L cl.2; species oriented: **ing'anga/ding'anga** LH:L cl.9/10

- ung'avanga/ang'avanga** LHFL, B:S1, *N 1A/2A* dog; pl. also **vang'avanga** LHFL cl.2; species oriented: **ing'avanga/ding'avanga** LHFL cl.9/10
- ung'ombe/ang'ombe** LRL, C1:SF, *N 1A/2A* cow; pl. also **vang'ombe** LRL cl.2; species oriented: **ing'ombe/ding'ombe** LRL cl.9/10
- ung'ondo/ang'ondo** LH:L, A:S1/SF, *N 1A/2A* lizard sp. (big, living on land); pl. also **vang'ondo** LH:L cl.2; species oriented: **ing'ondo/ding'ondo** LH:L cl.9/10
- ungondolo/angondolo** LLRL, C1:SF, *N 1A/2A* sheep; pl. also **vangondolo** LLRL cl.2; species oriented: **ingondolo/dingondolo** LLRL cl.9/10
- ung'uku/ang'uku** LFL, B:S1, *N 1A/2A* chicken; pl. also **vang'uku** LFL cl.2; species oriented: **ing'uku/ding'uku** LFL cl.9/10
- unguluve/anguluve** LLRL, C1:SF, *N 1A/2A* pig; pl. also **vanguluve** LLRL cl.2; species oriented: **inguluve/dinguluve** LLRL cl.9/10
- ungumbi/angumbi** LFL, B:S1, *N 1A/2A* termite sp. (winged); pl. also **vangumbi** LFL cl.2; species oriented: **ingumbi/dingumbi** LFL cl.9/10
- ung'ung'uni/ang'ung'uni** LHH:L, A:S1/SF, *N 1A/2A* bedbug; pl. also **vang'ung'uni** LHH:L cl.2; species oriented: **ing'ung'uni/ding'ung'uni** LHH:L cl.9/10
- ungwangwalati/angwangwalati** LHHH:L, A:S1/SF, *N 1A/2A* dog sp. (digging up corpses); pl. also **vangwangwalati** LHHH:L cl.2; species oriented: **ingwangwalati/dingwangwalati** LHHH:L; **nngwangwalati/vangwangwalati** LHHH:L cl.1/2 killer
- unjalahu/anjalahu** LHH:L, A:S1/SF, *N 1A/2A* ant sp. (big, red); pl. also **vanjalahu** LHH:L cl.2; species oriented: **injalahu/dinjalahu** LHH:L cl.9/10
- unjenjema/anjenjema** LHRL, C2:H.SF, *N 1A/2A* mosquito; pl. also **vanjenjema** LHRL cl.2; species oriented: **injenjema/dinjenjema** LHRL cl.9/10
- unuta/anuta** LH:L, A:S1/SF, *N 1A/2A* ant sp. (red); pl. also **vanuta** LH:L cl.2; species oriented: **inuta/dinuta** LH:L cl.9/10
- unyanga/anyanga** LFL, B:S1, *N 1A/2A* hawk sp. (big, striking colours); pl. also **vanyanga** LFL cl.2; species oriented: **inyanga/dinyanga** LFL cl.9/10
- unyati/anyati** LH:L, A:S1/SF, *N 1A/2A* buffalo; pl. also **vanyati** LH:L cl.2; species oriented: **inyati/dinyati** LH:L cl.9/10
- unyedi/anyedi** LH:L, A:S1/SF, *N 1A/2A* snail; pl. also **vanyedi** LH:L cl.2; species oriented: **inyedi/dinyedi** LH:L cl.9/10
- unyima/anyima** LH:L, A:S1/SF, *N 1A/2A* monkey (Sw. kima); pl. also **vanyima** LH:L cl.2; species oriented: **inyima/dinyima** LH:L cl.9/10
- unyolo/dinyolo** LRL, C1:SF, *N 1A/10* sacrifice
- unyuchi/anyuchi** LH:L, A:S1/SF, *N 1A/2A* honey-bee; pl. also **vanyuchi** LH:L cl.2; species oriented: **inyuchi/dinyuchi** LH:L cl.9/10
- unyukudumba/anyukudumba** LLHRL, C2:H.SF, *N 1A/2A* soldier ant; pl. also **vanyukudumba** LLHRL cl.2; species oriented: **inyukudumba/dinyukudumba** LLHRL cl.9/10
- upehi** LFL, B:S1, *N 1A* quickly; cf. Sw. upesi; see **-peya** V; adjunct
- upinde/mapinde** LH:L, E:S2, *N 1A/6* bow; cf. Sw. upinde; see **lingungwe/mangungwe** cl.5/6
- upya** -H:L, *V* burn up; scoop water
- usa** -FL, *V caus.* give, display, show, take (out); cf. **-ing'a** give to, **-langudya** show
- usi/miusi** RL/LRL, C1:SF, *N 1A/4* spider web

usungu LRL, C1:SF, *N 14* foolishness, ignorance (of woman); cf. **nsungu/vasungu** LRL cl.1/2, **uvelu** cl.14
usungula/asungula LHRL, C2:H.SF, *N 1A/2A* hare; pl. also **vasungula** LHRL cl.2; species oriented:
isungula/disungula LHRL cl.9/10
usuvi/asuvi LFL, B:S1, *N 1A/2A* leopard; pl. also **vasuvi** LFL cl.2; species oriented: **isuvi/disuvi** LFL cl.9/10
-uta -H:L, *V* pull (firmly); cf. **-holola**
utani LH:L, E:S2, *N 14* millet sp. (Sw. ulezi)
utingo LH:L, A:S1/SF, *N 14* type of basket (small)
utohi LRL, C1:SF, *N 14* excrement of chicken; cf. **mavi** cl. -/6
utope LRL, C1:SF, *N 14* soil (clay); cf. **ulongo** cl.14
utotoli LHH:L, A:S1/SF, *N 14* brain; also **ututuli** LHH:L
utumbo LRL, C1:SF, *N 14* intestine
ututuli LHH:L, A:S1/SF, *N 14* brain; also **utotoli** LHH:L
-uudya -HFL, *V caus.* treat a sick person; caus. < **-uula** -HH:L fall ill
-uula -HH:L, *V* fall ill; caus. > **-uudya** -HFL treat a sick person
uvahe/dimbahe LRL, C1:SF, *N 14/10* mushroom; also **uvahi** LRL
uwanang'o LHFH, *P subst.* they (emphatic); **vanang'o** LH:L (non-emphatic)
uvelu LRL, C1:SF, *N 14* stupidity, foolishness; cf. **ukanga** cl.14;
kutumila uvelu LHHH HH:L to be stupid, lit. to use stupidity
uvila LFL, B:S1, *I* thus, so, as follows; cf. **kavila, kuvila** LH:L again
uvilo LH:L, A:S1/SF, *N 14* joking relationship (Sw. utani)
-uwa -H:L, *V* fall; also **-motoka, -yanguka**; cf. **-pakatika, -palatuka**
uwewe LFH, *P subst.* you (sg.) (emphatic); **waako** HRL (non-emphatic)
uwowa LRL, C1:SF, *N 14* mushroom

sp. (in the bush)
-uya -H:L, *V* return; app. > **-uyila** -HH:L return to
uyeni LRL, C1:SF, *N 14* state of being a guest/stranger; cf. **nnyeni/vayeni** LRL cl.1/2 guest, stranger

V

-va H:L, *V* be; tones with Infinitive marker; cf. **-pawa, -pali** be somewhere
-vala -H:L, *V* shine; cf. **-yaka**
-valanga -HH:L, *V* count
-valula -HH:L, *V* thunder; have a bad headache; cf. **-lindima**; see tear
-valula -HH:L, *V* tear; cf. **-papula, -pwapula**; see thunder
vanang'o LH:L, E:S2, *P subst.* they;
uwanang'o LHFH (emphatic); cf. **-nang'o** -H:L *P* the same, the very one
-vandika -HH:L, *V* concern
-vandikila -HHH:L, *V* approach, draw near; also **-hengelela**; cf. **-pepekela**
-vanga -H:L, *V* split, cleave; cf. **-pasula**
-vava -H:L, *V* scratch skin; also with Pre-Final **-ang-**: **-vavanga** -HH:L; cf. **-tuva**
-vayuka -HH:L, *V* get to puberty (girls)
-veda -H:L, *V* carve
-veha -FL, *V caus.* blow up; cf. sep.
-vehuka -HH:L become swollen
-vehuka -HH:L, *V* become swollen; sep. < **-veha** -FL blow up
-veleka -HH:L, *V* give birth; also **-valeka** -HH:L, **-nyakula, -yakula**; **kuvelekwako** LHFLH (Infinitive + dem., ref., short) that's life!
-velekwa -HFL, *V pas.* be born; pas. <
-veleka -HH:L bear children; also **-valekwa** -HFL
-venga -H:L, *V* damage, harm
-viha -FL, *V caus.* be angry; also **-visa** -FL; **-chimwa**; cf. **-sunala**
-vihi -H:L, A:S1/SF, *A* unripe; **mmihi/mivihi** LH:L cl.3/4, **imbihi/dimbihi** LH:L cl.9/10; predicative: same tones
-vika -H:L, *V* lay down, put, place; cf.

-ladya
-vili -RL, C1:SF, *A* two; **mivili** LRL cl.4, **dimbili** LRL cl.10; **-avili** P con. second; cf. **kavila** LH:L I again; predicative: same tones
vilyo RL, C1:SF, *N* -/8 food; cf. **-lya** V eat; also **chakulya/vyakulya** HL:L cl.7/8
-vimba -H:L, *V* thatch; swell; cf. refl.
-livimba -HRL wrap around; cf. sep.
-vimbula -HH:L unthatch
-vimbula -HH:L, *V* unthatch; sep. <
-vimba -H:L thatch, swell
-vina -H:L, *V* dance
-vinga -H:L, *V* chase away; also
-vinganga -HH:L, **-tumula**
-vinganga -HH:L, *V* chase away; <
-vinga -H:L (+ Pre-Final **-ang-**); also
-tumula
vino RL, C1:SF, *P dem.* now; cf. **-no** P dem.; **na-vino** L-RL and now, still;
heka vino L:H RL/L:L but, and now;
uvino LFL and now, therefore
-visa -FL, *V caus.* be angry; also **-viha**
-FL, **-chimwa**; cf. **-sunala**

W

waako HRL, C2:H.SF, *P subst.* you (sg.); **uwewe** LFH (emphatic)
-wadya -FL, *V caus.* dress (s.o.); caus. < **-wala** -H:L wear; cf. **-yalula**
wahi FL, C2:H.SF, *N* 14 grass
-wala -H:L, *V* wear; cf. **-wadya** -FL dress
wala L:H, C1:SF, *I* nor; cf. Sw. wala; see leave
wala/mawala H:L/LH:L, A:S1/SF, *N* 14/6+ beer
-walala -HH:L, *V* kill; refl. > **-liwalala** -HLRL kill oneself, hurt; cf. **-hiya**
-walawala -HHH:L, *V red.* become invisible (witchcraft), get lost; cf. **-yahika**
wana FL, C2:H.SF, *N* 14 childhood; cf. **mwana/vana** FL cl.1/2 child
wapiwapi LLFL, ?, *N* 14 business
-wauka -HH:L, *V* bruise; cf. **-waula** -HH:L skin

-waula -HH:L, *V* skin; cf. **-wauka** -HH:L bruise
-waya -H:L, *V* rustle (sheets of paper); cf. **-kachakacha**
weka RL, C1:SF, *I* alone, on one's own; attributive tones: FL
welu/mawelu H:L/LH:L, B:S1, *N* 14/6+ field
-widuha -HFL, *V caus.* sweat; refl. >
-liwiduha -HHL:L be very busy till sweat comes out; cf. nom. **chiwiduhu** LHFL cl.7/- sweat
-wila -H:L, *V* chew (e.g. tobacco)
-womba -H:L, *V* beat a drum, fire a gun, blow a horn, flute; also **-omba** -H:L
wondolo LRL, C1:SF, *N* 14 clay ground
wunu H:L, A:S1/SF, *N* 14 plaster (for making pots)

Y

-yadika -HH:L, *V* borrow
-yaha -H:L, *V* bury; also **-sika**; see throw away
-yaha -H:L, *V* throw away; lose; also caus. **-yahisa** HFL; cf. neut. **-yahika** be lost; see bury
-yahika -HH:L, *V* be lost; neut. < **-yaha** -H:L bury, throw away; cf. **-walawala**
-yahula -HH:L, *V* yawn
-yaka -H:L, *V* shine, burn (of fire), feel hot; cf. **-vala**
-yakanya -HFL, *V caus.* pour; cf. **-mwadila**
-yakula -HH:L, *V* carry; give birth; see **-nyakula** -HH:L
-yaluka -HH:L, *V* initiate, circumcise (in former days)
-yalula -HH:L, *V* clothe (buy clothes for s.o.); cf. **-wadya**
-yama -H:L, *V* kneel, worship; also **-tindivala**; see lie down
-yama -H:L, *V* lie down, go to bed; also **-lala**; see kneel
-yambukila -HHH:L, *V* reply, respond; cf. **-yang'ula**; see agree
-yambukila -HHH:L, *V* agree; also **-tamwana**, **-itikila**; see reply
-yambulila -HHH:L, *V* smell a scent of

- s.o. or sth.
-yamila -HH:L, *V* slap off (e.g., flies);
 also **-hapuka**, **-papatula**; cf.
-liyamilila -HHLRL defend oneself
-yanda -H:L, *V* be thin; cf. **-yandauka**
-HHH:L be wide
-yandauka -HHH:L, *V* be wide; cf.
-yanda -H:L be thin
-yangala -HH:L, *V* dance and jump of
 joy
-yangata -HH:L, *V* help, assist, support
-yanguhana -HHH:L, *V* hasten, do
 quickly (with negative result); also
 app. **-yanguhanila** -HHHH:L; cf.
-piyanidya
-yanguka -HH:L, *V* fall; cf. Sw.
-anguka; see **-motoka**, **-uwa**; cf.
-pakatika, **-palatuka**
-yang'ula -HH:L, *V* answer; cf.
-yambukila
-yanika -HH:L, *V* dry in the sun; cf.
-nyala, **-yuma**
-yaukidya -HHL:L, *V caus.* boil; also
-kodya, **-chemusa**; cf. **-yaula** -HH:L,
-yaukila -HHH:L, **-tokota**, **-tiniha**
-yaukila -HHH:L, *V* boil (itr.); also
-yaula -HH:L; cf. **-yaukidya**
-HHL:L, **-kodya**, **-chemusa**, **-tokota**,
-tiniha
-yaula -HH:L, *V* boil (itr.); also
-yaukila -HHL:L; cf. **-yaukidya**
-HHL:L, **-kodya**, **-chemusa**, **-tokota**,
-tiniha
-yava -H:L, *V* divide; also **-yavanya**
-HFL
-yavanya -HFL, *V caus.* divide; also
-yava -H:L
-yawela -HH:L, *V* alter plan, cancel
-yedya -FL, *V caus.* taste (food);
 imitate, mimic; refresh; cf. refl.
-liyedyā -HFL learn
-yela -H:L, *V* throw at; cf. ass. **-yelana**
-HH:L have sexual intercourse
-yelana -HH:L, *V* have sexual
 intercourse; ass. < **-yela** -H:L throw
 at; also **-tupila**
yembe/diyembe RL/LRL, C1:SF, *N*
9c/10c mango
- yocha** -FL, *V caus.* roast
-yoha -FL, *V caus.* abuse, insult;
 frighten; also **kutongo-viyoha**
 LHH-HFL lit. speak terms of abuse
-yola -H:L, *V* gather up; cf. **-heva**,
-hepa
-yomboka -HH:L, *V* cross over; also
-yamboka -HH:L
-yomola -HH:L, *V* dip; also **-yamola**
-HH:L, **-pamba**
-yong'a -H:L, *V* suck the breast
-yopa -H:L, *V* fear, be afraid
-yota -H:L, *V* bask in the sun, sit close
 to a fire
-yowela -HH:L, *V* rest; also **-yowelega**
-HHH:L, **-yowolela** -HHH:L,
-pumulila
-yowelega -HHH:L, *V* rest; also
-yowolela -HHH:L, **-yowela** -HH:L,
-pumulila
-yuma -H:L, *V* be dry, be thirsty; cf.
-nyala, **-yanika**; cf. **inyota** LRL cl.9/-
 thirst
-yupula -HH:L, *V* dig out; also **-dobola**
-yuvala -HH:L, *V* feel humiliated,
 uncomfortable
-yuwa -H:L, *V* ask for, pray

C.2 English – Chinnima

A

a(n), some → one**abdomen** *litumbo/matumbo* LRL, C1:SF, N 5/6**abdomen** *pantima* LLH:L, A:S1/SF, N 16+3**abduction** (of a woman) *litwala/matwala* LH:L, A:S1/SF, N 5/6**able: be;** defeat *-hulula* -HH:L, *V***above** → top**abuse**, insult; frighten *-yoha* -FL, *V caus.***abuse: term of** *chiyoha/viyoha* LH:L, E:S2, N 7/8**accept** → love**accompany** *-longana* -HH:L, *V***accomplish** → finish**add** → mix**adder** *lipili/mapili* LH:L, A:S1/SF, N 5/6**adultery** *ugoni* LRL, C1:SF, N 14**advise** → tell s.o.**adze** *iteso/diteso* LRL, C1:SF, N 9c/10c**adze** *teso/diteso* RL/LRL, C1:SF, N 9c/10c**afflict** *-lagasa* -HFL, *V caus.***afflict**, oppress *-bana* -H:L, *V***afflicted: be**, be discomforted *-laga* -H:L, *V***after** → behind; → backwards**afterbirth** *lipyanda/mapyanda* LFL, B:S1, N 5/6**afterwards**, later *lukoto* HFL, B:S1, N 11/-**again** *kavila* LH:L, A:S1/SF?, *I***again** *kuvila* LH:L, A:S1/SF?, *I***age-mate**, friend *nnyenje/vayenje* LH:L, A:S1/SF, N 1/2**age-mate ceremony** (of elders) *chikudi/vikudi* LRL, C1:SF, N 7/8**agree** *-tamwana* -HFL, *V***agree** *-yambukila* -HHH:L, *V***agree on marriage** between man and parents *-tama* -H:L, *V***aim** → hunt (with a sling)**air** (cold) *imepo* LH:L, A:S1/SF, N 9/-**alone**, on one's own *weka* RL, C1:SF, *I***along** *nnyenje* LH:L, E:S2, N 18**also**, likewise, therefore *napanang'o* LLH:L, E:S2?, *I***alter**, turn around, stir (e.g. in making cassava porridge) *-pindikulanya* -HHL:L, *V caus.***alter plan**, cancel *-yawela* -HH:L, *V***although** *ikanava* LLH:L, *V fin.***among** → middle**amulet** (Sw. hirizi) *nkova/mikova* LFL, B:S1, N 3/4**amulet** (Sw. talasimu) *lubadili/dibadili* LHRL, C2:H.SF, N 11/10c**ancestor** → grandparent**and**, with *na-* L, *I***and so**, accordingly, well, enough!, stop it!, be it so! *bahi* RL, C1:SF, *I***and so**, accordingly, well, enough!, stop it!, be it so! *nano* H:L, A:S1/SF?, *I***anger** *chitundwe* LL:L, D1:no H, N 7/-**angry: be** *-chimwa* -FL, *V pas.***angry: be** *-viha* -FL, *V caus.***angry: be** *-visa* -FL, *V caus.***animal** *nkoko/vakoko* LFL/LH:L, B:S1/E:S2, N 1/2**ankle** *inunda/dinunda* LH:L, E:S2, N 9/10**annoy** *-baniha* -HFL, *V caus.***answer** *-yang'ula* -HH:L, *V***ant** sp. (big, red) *injalahu/dinjalahu* LHH:L, A:S1/SF, N 9/10**ant** sp. (big, red) *unjalahu/anjalahu* LHH:L, A:S1/SF, N 1A/2A**ant** sp. (red) *inuta/dinuta* LH:L, A:S1/SF, N 9/10

ant sp. (red) *umuta/anuta* LH:L, A:S1/SF, N 1A/2A
ant sp. (small, red) *imamana/dimamana* LHFL, B:S1, N 9/10
ant sp. (small, red) *umamana/amamana* LHFL, B:S1, N 1A/2A
ant: soldier *inyukudumba/dinyukudumba* LLHRL, C2:H.SF, N 9/10
ant: soldier *unyukudumba/anyukudumba* LLHRL, C2:H.SF, N 1A/2A
ant-hill *lihonyo/mahonyo* LFL, B:S1, N 5/6
antelope sp. (klipspringer) *imbutuka/dimbutuka* LLRL, C1:SF, N 9/10
antelope sp. (klipspringer) *umbutuka/ambutuka* LLRL, C1:SF, N 1A/2A
anus *nchonyo/michonyo* LFL, B:S1, N 3/4
anvil *lihalawe/mahalawe* LLL:L, D1:no H, N 5/6
apart → beside
appear, be visible *-oneka* -HH:L, V
applaud, recommend sth. *-lombolela* -HHH:L, V
approach, draw near *-hengelela* -HHH:L, V
approach, draw near *-vandikila* -HHH:L, V
area → land
argue *-tahukana* -HHH:L, V
arm → hand
armpit *ing'wapa/ding'wapa* LH:L, E:S2, N 9/10
arrange → prepare
arrival: announce *-hodika* -HH:L, V
arrive *-hwika* -H:L, V
arrive *-komola* -HH:L, V
arrow (small, not being sharp pointed, for hitting birds) *nkwala/mikwala* LRL, C1:SF, N 3/4
arrow (with iron) *mumba/myumba* H:L, A:S1/SF, N 3/4
arrow barb *livanu/mavanu* LRL, C1:SF, N 5/6
arrow shaft *lihongo/mahongo* LH:L, E:S2, N 5/6

arrow: wooden *lihonga/mahonga* LH:L, E:S2, N 5/6
as, like *malinga* LH:L, A:S1/SF?, I
as, like *muchi* L:L, D1:no H, I
ascend → mount, climb
ashes *liu* RL, C1:SF, N 5/-
ask (question) *-udya* -FL, V *caus.*
ask for, pray *-yuwa* -H:L, V
assembly, court *lukumbi/ding'umbi* LL:L, D1:no H, N 11/10
assist → help
astonished: be, be surprised *-kangana* -HH:L, V
astonished: be, be surprised *-lapa* -H:L, V
at one's place *kwaki* -HH-, P
at the persons' place *kwanga* -HH-, P
attend → hear
aunt (father's sister) *amati* LRL, C1:SF, N 2A/-
available: be → noticeable: be, → sufficient: be
avaricious: be, give small things *-chida* -H:L, V
avoid *-nyema* -H:L, V
awake *-imula* -HH:L, V
axe *imbedo/dimbedo* LRL, C1:SF, N 9/10

B

back (of body) *mongo/myongo* RL, C1:SF, N 3/4
backwards, after *panyuma* LRL, C1:SF, N 16
bad: be, be dirty *-nyata* -H:L, V
bad: be, be dirty, be worn out *-hakalanga* -HHH:L, V
bag: big *mpatila/mipatila* LHFL, B:S1, N 3/4
bald patch on the head *imundu/dimundu* LH:L, A:S1/SF, N 9/10
bamboo *imbalu/dimbalu* LH:L, A:S1/SF, N 9/10
banana *ing'oo/ding'oo* LRL, C1:SF, N 9/10
banana sp. (big) *magombo* LFL, B:S1, N -/6
banana sp. (rather big) *ntopwa* LH:L,

- E:S2, N 3/-
banana sp. (small) *chisukali* LHFL, B:S1, N 7/-
banana sp. (small) *njagasi* LHFL, B:S1, N 3/-
banana bark *ligwambu/magwambu* LFL, B:S1, N 5/6
banana flower *litungutungu/matungutungu* LHHH:L, A:S1/SF, N 5/6
banana tree *lipinji/mapinji* LHL, A:S1/SF, N 5/6
bare, naked, useless *dahu* RL, C1:SF, I
bark → covering: outer
bark of Christmas tree *likambangohi/makambangohi* LLHRL, C2:H.SF, N 5/6
bark cloth *liwondo/mawondo* LRL, C1:SF, N 5/6
barrel (of gun) *ntutu/mitutu* LFL, B:S1, N 3/4
barren ground *chidwadwa* LH:L, A:S1/SF, N 7/-
bask in the sun, sit close to a fire *-yota* -H:L, V
basket *chikapu/vikapu* LFL, B:S1, N 7/8
basket: type of (big) *chihapo/vihapo* LH:L, A:S1/SF, N 7/8
basket: type of (huge, tall) *litenga/matenga* LRL, C1:SF, N 5/6
basket: type of (small) *utingo* LH:L, A:S1/SF, N 14
bat *lilema/malema* LH:L, A:S1/SF, N 5/6
bathe *-hinga* -H:L, V
bathe oneself *-lihinga* -HRL, V refl.
be *-pali* -H:L, V irr.
be *-va* H:L, V
be somewhere *-pawa* -FL, V pas.
bead *nchaketa/michaketa* LLL:L, D1:no H, N 3/4
bead, string of beads *chuma/vyuma* H:L, A:S1/SF, N 7/8
beak → sting
beam *ihomelo/dihomelo* LLRL, C1:SF, N 9/10
bean sp. *ing'unde/ding'unde* LH:L, A:S1/SF, N 9/10
bean sp. (big) *litamba/matamba* LFL, B:S1, N 5/6
bean plant sp. (Sw. mfiwi) *nneule/mileule* LHRL, C2:H.SF, N 3/4
bear fruit, spring up *-pa* H:L, V
beard *chileu/vileu* LRL, C1:SF, N 7/8
beat, hit, slap *-panya* -H:L, V
beat (with hand) *-guma* -H:L, V
beat a drum, fire a gun, blow a horn, flute *-omba* -H:L, V
beat a drum, fire a gun, blow a horn, flute *-womba* -H:L, V
beautiful: **be** → good: be
bed *chinanda/vinanda* HFL, D2:H.no H, N 7/8
bedbug *ing'ung'uni/ding'ung'uni* LHH:L, A:S1/SF, N 9/10
bedbug *ung'ung'uni/ang'ung'uni* LHH:L, A:S1/SF, N 1A/2A
bee sp. *imbai/dimbai* LH:L, A:S1/SF, N 9/10
bee sp. *litandehu/matandehu* LHFL, B:S1, N 5/6
bee sp. *umbai/ambai* LH:L, A:S1/SF, N 1A/2A
bee: **honey**- *inyuchi/dinyuchi* LH:L, A:S1/SF, N 9/10
bee: **honey**- *unyuchi/anyuchi* LH:L, A:S1/SF, N 1A/2A
bee poison *luvoo/dimboo(?)* LH:L, A:S1/SF, N 11/10
beehive *chipeda/vipeda* LRL, C1:SF, N 7/8
beer *wala/mawala* H:L/LH:L, A:S1/SF, N 14/6+
beer: **unfermented** (start of final stage in preparation of beer) *likando/makando* LRL, C1:SF, N 5/6
before → front; → face
begin *-tandilika* -HHH:L, V
begin, start *-lindimuka* -HHH:L, V
behind, after *nnyuma* LRL, C1:SF, N 18
behind, after *pamongo* LRL, C1:SF, N 16+3
behind, after *pachikohi* LLH:L, E:S2, N 16

- belch** *dihumi* LRL, C1:SF, *N* -/10
belch → full: be very (of food)
belly *munda* L:L, D1:no H, *N* 18
below *muhina* LH:L, E:S2, *N* 18
belt → bridewealth
bend *-pinda* -H:L, *V*
bereaved person *nannidi* HHL:L, D2:H.no H, *N* 1a/?
beside, aside, apart *panyenje* LH:L, E:S2, *N* 16
between → middle
bicycle *basikeli/dibasikeli* HHL:L/LHHL:L, B:S1, *N* 9c/10c
bicycle *injinga/dinjinga* LH:L, A:S1/SF, *N* 9/10
big *-kulungwa* -HFL, B:S1, *A*
big: be → fat: be (esp. animals)
bind sth. with a rope, tie rope around sth. *-tava* -H:L, *V*
bird *chuni/vyuni* RL, C1:SF, *N* 7/8
birds: flock of *inyehe/dinyehe* LFL, B:S1, *N* 9/10
birth: give *-nyakula* -HH:L, *V*
birth: give *-veleka* -HH:L, *V*
bite *-luma* -H:L, *V*
bite off *-badula* -HH:L, *V*
bite off *-bedula* -HH:L, *V*
bitter: be *-kalala* -HH:L, *P* con.
black *-anapi* HH:L, *P* con.
black: be, be dark, be dirty *-dimba* -H:L, *V*
bladder, bubble, lather *chihulu/vihulu* LH:L, A:S1/SF, *N* 7/8
blanket *libulangeti/mabulangeti* LLLH:L, E:S2, *N* 5/6
blind person *akalola/vakalola* LHFL, *V* fin.
blister *lituku/matuku* LRL, C1:SF, *N* 5/6
blood *damu* H:L, ?, *N* 9b/-
blood *myadi* H:L, A:S1/SF, *N* -/4
blood disease (visible by rash on skin) *hwadi* H:L, A:S1/SF, *N* 11/-
blow (of wind) *-punga* -H:L, *V*
blow a horn, flute → beat a drum; → horn, whistle; → flute
blow the nose *-peng'a* -H:L, *V*
blow up *-veha* -FL, *V* caus.
- blunt cutting tool** *lindunya/mandunya* LH:L, E:S2, *N* 5/6
boast *-litapa* -HRL, *V* refl.
boast *-tapa* -H:L, *V*
body *mmili/mimili* LRL, C1:SF, *N* 3/4
boil *-chemusa* -HFL, *V* caus.
boil *-yaukidya* -HHL:L, *V* caus.
boil, abscess *lipote/mapote* LFL, B:S1, *N* 5/6
boil (itr.) *-yaukila* -HHH:L, *V*
boil (itr.) *-yaula* -HH:L, *V*
boil, put on fire *-kodya* -FL, *V* caus.
boil: bring to the (*nkojo*, first stage in the preparation of beer) *-tiniha* -HFL, *V* caus.
boiled: be → cooked: become
bolt, bar; be end of sth. *-chidika* -HH:L, *V*
bone *liwangwa/mawangwa* LH:L, A:S1/SF, *N* 5/6
borderline: draw *-chika* -H:L, *V*
bore *-dovola* -HH:L, *V*
bore a hole *-tolola* -HH:L, *V*
born: be *-velekwa* -HFL, *V* pas.
borrow *-yadika* -HH:L, *V*
boundary (e.g. between two fields) *nkuka/mikuka* LFL, B:S1, *N* 3/4
bow *lungungwe/mangungwe* LH:L, A:S1/SF, *N* 5/6
bow *upinde/mapinde* LH:L, E:S2, *N* 14/6
bowl, deep dish *nkungu/mikungu* LFL, B:S1, *N* 3/4
boy (after initiation) *nnyaluke/vayaluke* LHFL, D2:H.no H, *N* 1/2
boy (before initiation) *nnemba/vanemba* LRL, C1:SF, *N* 1/2
bracelet *dinyoka* LH:L, A:S1/SF, *N* -/10
brain *utotoli* LHH:L, A:S1/SF, *N* 14
brain *ututuli* LHH:L, A:S1/SF, *N* 14
branch *lutavi/dinavi* LH:L, A:S1/SF, *N* 11/10
branch as protection against becoming wet *nnyahamulilo/mihahamulilo* LHHHH:L, A:S1/SF, *N* 3/4
break (itr., big things, e.g. tree) *-tumbuka* -HH:L, *V*

break (tr., big things) *-tumbula* -HH:L, *V*

break (itr., small things, e.g. utensils) *-lumuka* -HH:L, *V*

break (tr., small things, e.g. utensils) *-lumula* -HH:L, *V*

break off a piece *-meya* -H:L, *V*

break off, terminate *-hapuka* -HH:L, *V*

breast (female) *livele/mavele* LH:L, A:S1/SF, *N* 5/6

breath *-pumula* -HH:L, *V*

breed → rear

bribe *-honga* -H:L, *V*

bridewealth *malombo* LH:L, A:S1/SF, *N* -/6

bridewealth; belt *nkaka* LFL, B:S1, *N* 3?/-

bring *-ida na* -H:L, *V*

broken thing, potsherd *liyonjo/mayonjo* LH:L, E:S2, *N* 5/6

broom *chipyai/vipyai* LRL, C1:SF, *N* 7/8

brother → sibling

brother-in-law, sister-in-law *nnamu/valamu* LH:L, A:S1/SF, *N* 1/2

bruise *-wauka* -HH:L, *V*

buffalo *inyati/dinyati* LH:L, A:S1/SF, *N* 9/10

buffalo *unyati/anyati* LH:L, A:S1/SF, *N* 1A/2A

build *-denga* -H:L, *V*

build up (wall or hut, from the ground) *-chita* -H:L, *V*

bulge, swell out *-tupa* -H:L, *V*

bundle, bunch *lifungu/mafungu* LFL, B:S1, *N* 5/6

bundle (of things tied together with a cloth), load *chituvi/vituvi* LH:L, A:S1/SF, *N* 7/8

bundle of grass *chiha/viha* RL, C1:SF, *N* 7/8

burn (of fire) → shine

burn up; scoop water *-upya* -H:L, *V*

burnt: be → scorched: be

bury *-sika* -H:L, *V*

bury *-yaha* -H:L, *V*

business *wapiwapi* LLFL, ?, *N* 14

busy with affairs: be, act restlessly

-hakalika -HHH:L, *V*

but, to the contrary *heka* L:H, C1:SF, *I*

butterfly *imbulukuta/dimbulukuta* LLHRL, C2:H.SF, *N* 9/10

butterfly *umbulukuta/ambulukuta* LLHRL, C2:H.SF, *N* 1A/2A

buttocks *dinako* LRL, C1:SF, *N* -/10

buy *-suma* -H:L, *V*

C

cackle (of chicken producing an egg) *-tetela* -HH:L, *V*

calabash bottle (small, implement of divination) *indumba/dindumba* LFL, B:S1, *N* 9/10

calabash (for drinking beer, unfermented drink) *chinumba/vinumba* HFL, D2:H.no H, *N* 7/8

calabash (for eating) *lukasu/ding'asu* LFL, B:S1, *N* 11/10

calabash (for storing beer) *nnusu/milusu* LRL, C1:SF, *N* 3/4

calabash (for storing milk) *ihinga/dihinga* LRL, C1:SF, *N* 9/10

calabash (for taking up liquids, esp. water) *mwao/myao* RL, C1:SF, *N* 3/4

calabash, gourd *chitumba/vitumba* LFL, B:S1, *N* 7/8

calabash bottle *chingungwa/vingungwa* LH:L, E:S2, *N* 7/8

calabash bottle *litikiti/matikiti* LHFL, B:S1, *N* 5/6

calabash plant *lutikiti/dinikiti* LHFL, B:S1, *N* 11/10

calabash seed (edible) *imukusa/dimukusa* LHFL, B:S1, *N* 9/10

calabash seed (edible) *nkakahimba/mikakahimba* LHHFL, D2:H.no H, *N* 3/4

calabash: skin of *lingungwa/mangungwa* LH:L, E:S2, *N* 5/6

calf *inembe/dinembe* LRL, C1:SF, *N* 9/10

calf *unembe/anembe* LRL, C1:SF, *N* 1A/2A

call *-chema* -H:L, *V*

cancel → alter plan

canoe *ntumbwi/mitumbwi* LH:L, E:S2,

- N 3/4*
car *mmutuka/miutuka* LHFL, B:S1, *N 3/4*
care of: take -*oda* -H:L, *V*
carry -*nyakula* -HH:L, *V*
carry; give birth -*yakula* -HH:L, *V*
carry load on head without touching it -*dekedela* -HHH:L, *V*
carve -*veda* -H:L, *V*
case: court → cause
cashew apple *libibu/mabibu* LRL, C1:SF, *N 5/6*
cassava *mmogo/myogo* LFL/FL, B:S1, *N 3/4*
cassava: dried pieces of *makaka* LFL, B:S1, *N -/6*
cassava vegetable *chinduli/vinduli* HRL, C2:H.SF, *N 7/8*
cat *imaka/dimaka* LRL, C1:SF, *N 9/10*
cat *umaka/amaka* LRL, C1:SF, *N 1A/2A*
cataract (of the eye) *imbwe/dimbwe* L:L, D1:no H, *N 9/10*
caterpillar *livavi/mavavi* LH:L, A:S1/SF, *N 5/6*
cause, reason; court case, debt *ing'anya* LFL, B:S1, *N 9/-*
cease, finish -*hila* -H:L, *V*
ceiling *likangala/makangala* LLRL, C1:SF, *N 5/6*
centipede sp. *inde/achainde* H:L/LHH:L, ?, *N 9/2A+*
centipede sp. *lingupa/mangupa* LRL, C1:SF, *N 5/6*
chaff *makana* LFL, B:S1, *N -/6*
chair *chiteng'u/viteng'u* LFL, B:S1, *N 7/8*
change skin, peel -*liyuya* -HRL, *V refl.*
changed: be -*dyuka* -H:L, *V*
charcoal *likala/makala* LH:L, A:S1/SF, *N 5/6*
chase away -*tumula* -HH:L, *V*
chase away -*vinga* -H:L, *V*
chase away -*vinganga* -HH:L, *V*
cheat -*kumba* -H:L, *V*
cheek *libuda/mabuda* LFL, B:S1, *N 5/6*
chest *chihuva/vihuva* LH:L, A:S1/SF, *N 7/8*
chew -*tang'una* -HH:L, *V*
chew (e.g. tobacco) -*wila* -H:L, *V*
chicken *ing'uku/ding'uku* LFL, B:S1, *N 9/10*
chicken *ung'uku/ang'uku* LFL, B:S1, *N 1A/2A*
chicken: not yet full-grown *kahwivi/tuhwivi* LH:L, E:S2, *N 12/13*
chieftaincy (traditional) *umwenye* LRL, C1:SF, *N 14*
child *mwana/vana* FL, C2:H.SF, *N 1/2*
child: young *lichindachinda/machindachinda* LHHH:L, A:S1/SF, *N 5/6*
childhood *wana* FL, C2:H.SF, *N 14*
chin *chiyewe/viyewe* LL:L, D1:no H, *N 7/8*
choose -*hapa* -H:L, *V*
choose -*tondola* -HH:L, *V*
chopper *muundu/myuundu* LFL, E:S2, *N 3/4*
chrysalis (stage between caterpillar and butterfly) *nantikwi/achanantikwi* LLL:L/LHHLL:L, D1:no H, *N 1a/2A+*
circle around the sun, moon *chikuti/vikuti* LH:L, A:S1/SF, *N 7/8*
circumcise -*kodola* -HH:L, *V*
circumcises: s.o. who *nngaliba/vangaliba* LLRL, C1:SF, *N 1/2*
circumcision knife *chipula cha-mutwe* LHL H-RL, lit. knife of head
clan, ethnic group *litawa/matawa* LFL, B:S1, *N 5/6*
clap hands, catch -*dong'a* -H:L, *V*
clay ground *wondolo* LRL, C1:SF, *N 14*
clean -*hahula* -HH:L, *V*
clean → prepare
clean: be -*swelela* -HH:L, *V*
clear, scrape away -*palata* -HH:L, *V*
clear away → cultivation: make an area...
clear land for cultivation; forge -*hana* -H:L, *V*
clever: be, be cunning -*kalamuka* -HHH:L, *V*
climb, ascend -*kwela* -H:L, *V*
close loosely -*hika* -H:L, *V*

- cloth: head** *chindindi/vindindi* LRL, C1:SF, N 7/8
- cloth: piece of** (private parts) *npindo/mipindo* LL:L, D1:no H, N 3/4
- cloth: piece of** (worn by women) *kanga/dikanga* RL/LRL, C1:SF, N 9c/10c
- clothe** (buy clothes for s.o.) *-yalula* -HH:L, V
- clothing** *inguo/dinguo* LRL, C1:SF, N 9/10
- clothing:** type of *chechele/dichechele* LL:L/LLL:L, D1:no H, N 9c/10c
- clothing:** type of *japani/dijapani* HFL/LHFL, B:S1, N 9c/10c
- clothing:** type of *pati/dipati* H:L/LH:L, E:S2, N 9c/10c
- cloud** *lihunde/mahunde* LRL, C1:SF, N 5/6
- coast;** eastern direction *kumanga* LRL, C1:SF, N 17
- cockroach** *liplepende/mapepende* LHHH:L, A:S1/SF, N 5/6
- coconut** *nasi/dinasi* H:L/LH:L, ?, N 9c/10c
- coconut: skin of** *linadi/manadi* LH:L, E:S2, N 5/6
- cohere** *-namata* -HH:L, V
- coil** *-dingudika* -HHH:L, V
- cold** (in the chest) *chihuva* LH:L, A:S1/SF, N 7/-
- cold: be** → cool down
- collect,** gather together *-kunga* -H:L, V
- collect honey** *-pakula* -HH:L, V
- comb** *-hamulila* -HHH:L, V
- comb** *-samulila* -HHH:L, V
- comb** *chihamula/vihamula* LLL:L, D1:H.no H, N 7/8
- come** *-ida* -H:L, V
- come down** *-sulupuka* -HHH:L, V
- come forward** → rise
- come from** → go away
- come from,** come out, appear *-holoka* -HH:L, V
- come out** *-huma* -H:L, V
- comfort** → entice
- command** *-patanisa* -HH:L, V *caus.*
- companion:** my *nnyangu/avangu* LH:L, A:S1/SF, N 1/2
- compel** *-namatidya* -HHL:L, V *caus.*
- concern** *-vandika* -HH:L, V
- confused: be,** be anxious *-hang'a* -H:L, V
- congeal** *-lienga* -HRL, V *refl.*
- converse** → talk
- converse,** gossip *-chonga* -H:L, V
- cook** *-teleka* -HH:L, V
- cooked: become,** be boiled *-tokota* -HH:L, V
- cooking stone** *lihindili/mahindili* LHFL, B:S1, N 5/6
- cool down** (itr.) *-pola* -H:L, V
- cool down** (itr.), be cold *-didima* -HH:L, V
- cool down** (tr.) *-itula* -HH:L, V
- cool: get** *-tulila* -H:L, V
- corner** *mwitepa* LFL, E:S2?, N 18
- corpse** *ntuhi/mituhi* LRL, C1:SF, N 3/4
- cough** *-kohomola* -HHH:L, V
- cough** with force, groan *-kumula* -HH:L, V
- count** *-valanga* -HH:L, V
- country** → land
- cousin** *nnyivani/vahivani* LHFL, D2:H.no H, N 1/2
- cover** *-hinika* -HH:L, V
- cover** *-hunika* -HH:L, V
- cover** *lihuniko/mahuniko* LLRL, C1:SF, N 5/6
- cover with** (put a cover or lid on sth.) *-hinikila* -HHH:L, V
- covering: outer** (of trees (= bark), plants, animals) *likahi/makahi* LFL, B:S1, N 5/6
- cow** *ing'ombe/ding'ombe* LRL, C1:SF, N 9/10
- cow** *ung'ombe/ang'ombe* LRL, C1:SF, N 1A/2A
- crack** *luma/dinduma* RL/LRL, C1:SF, N 11/10+
- crackle;** turn restlessly (as in pain) *-pupa* -H:L, V
- creep** *-tambala* -HH:L, V
- crocodile** *imamba/dimamba* LFL, B:S1, N 9/10
- crocodile** *imbulu/dimbulu* ?, N 9/10

crocodile *umamba/amamba* LFL, B:S1, N 1A/2A

crocodile *umbulu/ambulu* ?, N 1A/2A

cross over *-yomboka* -HH:L, V

crouch *-lipinda* -HRL, V refl.

crow *nankonda/anamikonda*

HHRL/LHHRL, C2:H.SF, N 1a/2A

crow (cock) *-kongovela* -HHH:L, V

crowd, company, group *likundi/makundi* LH:L, A:S1/SF, N 5/6

crowd, company, group *likuwa/makuwa* LFL, B:S1, N 5/6

crowd of celebrating people

lihangawila LHHL:L, B:S1, N 5/?

cry *-kuta* -H:L, V

cucumber *nankope/anamikope*

HHFL/LHHFL, D2:H.no H, N 3a/2A

cultivate *-lima* -H:L, V

cultivating together (paid with food, beer, etc.) *chibalua* LLH:L, A:S1/SF, N 7/-

cunning; be → clever: be

curdle → tied: get

cure *-lamya* -FL, V caus.

curse *-lanika* -H:L, V

curved; be *-ngongomana* -HHH:L, V

cut, chop (e.g. branches); harvest bananas, millet sp. (Sw. ulezi)

-cheketa -HH:L, V

cut, chop (trees) *-chela* -H:L, V

cut (with hands); harvest (esp. millet)

-neng'ena -HH:L, V

cut down (millet) *-hanjila* -H:L, V

cut firewood *-tema* -H:L, V

cut grass *-ipa* -H:L, V

cut hair *-chengula* -HH:L, V

cut navel string; cry *-lila* -H:L, V

D

damage, harm *-venga* -H:L, V

dance *-vina* -H:L, V

dance *ing'ole/ding'ole* LRL, C1:SF, N 9/10

dance: type of (and celebration)

nsapata/misapata LLL:L, D1:no H, N 3/4

dance: type of (any celebration)

chingenge/vingenge LH:L, A:S1/SF,

N 7/8

dance: type of (any celebration)

madudu LRL, C1:SF, N -/6

dance: type of (esp. girls)

chidole/vidole LH:L, A:S1/SF, N 7/8

dance: type of (esp. initiation)

chingwalangwanja/vingwalangwanja LLLH:L, E:S2, N 7/8

dance: type of (esp. initiation)

lingwalangwanja/mangwalangwanja LLLH:L, E:S2, N 5/6

dance: type of (esp. initiation) *ndimu/*

midimu LH:L, A:S1/SF, N 3/4

dance: type of (esp. weddings)

chikocha/vikocha LL:L, D1:no H, N 7/8

dance: type of (esp. weddings) *malale* LFL, B:S1, N -/6

dance: type of (esp. weddings) *nddanje/*

mindanje LFL, B:S1, N 3/4

dance: type of (every celebration)

bakuli LFL, E:S2, N 9b/-

dance: type of (every celebration)

mbeni FL, B:S1, N 9b/-

dance: type of (*ndimu*) *lingoti/mangoti*

LH:L, A:S1/SF, N 5/6

dance: type of (*ndimu*) *lipiku/mapiku*

LRL, C1:SF, N 5/6

dance: type of (to remember the deceased) *chitipu/vitipu* LFL, B:S1, N 7/8

dance: type of (to remember the deceased) *litenge/matenge* LL:L, D1:no H, N 5/6

dance: type of (to remember the deceased) → drum: type of (big)

dance: type of (women's) *machenga* LH:L, E:S2, N -/6

dance and jump of joy *-yangala* -HH:L, V

dark; be → black: be

darkness *lupi* L:L, D1:no H, N 11/-

dawn *-cha* H:L, V

dawn *kulyamba* LH:L, E:S2, N 17

day (24 h) *lihiku/mahiku* LH:L, A:S1/SF, N 5/6

day (daytime) → sun

day after tomorrow *palyamba* LH:L,

- E:S2, N 16
day before yesterday *madudi* LFL, B:S1, N -/6
days ago: some *madudidudi* LHHLL:L, B:S1, N -/6
daytime *muhi* H:L, A:S1/SF, N 3/-
deaf person *akapilikana/vakapilikana* LHHLL:L, V *fin*.
death *chihwa/vihwa* H:L, A:S1/SF, N 7/8
debt → cause
deceive, lie *-lambila* -HH:L, V
decorate *-katapadya* -HHL:L, V *caus*.
decorate *-lemba* -H:L, V
decrease, diminish *-pungula* -HH:L, V
defeat → able: be
defecate *-nya* H:L, V
defend → guard
defend oneself *-liyamilila* -HHLRL, V *refl*.
delay, linger *-tima* -H:L, V
deny, refuse *-hita* -H:L, V
desert area (without water) *likonde/makonde* LRL, C1:SF, N 5/6
desire *tama* RL, C1:SF, N 9b/-
desire *ihikidi/dihikidi* LHFL, B:S1, N 9/10
desire → love, want
destroy *-ondonga* -HH:L, V
destroy *-timbangila* -HHH:L, V
destroy a house *-bomola* -HH:L, V
dew lime L:L, D1:no H, N 5/-
dialogue between the elders *malonda* LH:L, A:S1/SF, N -/6
diarrhoea: cause *-dolola* -HH:L, V
die *-hwa* H:L, V
different: be *-lekanila* -HHH:L, V
difficult: be → hard: be
dig; harvest peanuts, all sorts of potatoes, cassava *-himba* -H:L, V
dig out, uproot *-yupula* -HH:L, V
digging stick *ing'oha/ding'oha* LH:L, E:S2, N 9/10
diminish → decrease
dip *-pamba* -H:L, V
dip *-yomola* -HH:L, V
dip (in terrain) *likote/makote* LRL, C1:SF, N 5/6
directed towards: be, face *-lodya* -FL, V *caus*.
directly *mwalehu* LFL, B:S1, 1
dirt (often: dirty food) *uhakwa* LH:L, A:S1/SF, N 14
dirty: be → bad: be; → black: be
disagree, rebel, be perverse *-tahuka* -HH:L, V
disappear, vanish → sink
discussion *chihonde* LH:L, A:S1/SF, N 7/-
disengage a trap *-hatula* -HH:L, V
dish *-teulila* -HHH:L, V
dish out food (with ladle) *-kova* -H:L, V
display → give
ditch *lupolopondo/dimolopondo* LLLRL, C1:SF, N 11/10
divide *-yavanya* -HFL, V *caus*.
divide *-yava* -H:L, V
divine → divining board
divining board; incantation (spoken by sorcerer) *ihango/dihango* LRL, C1:SF, N 9/10
do *-tenda* -H:L, V
do, receive (sth. out of s.o.'s hand); be sharp *-kola* -H:L, V
doctor: traditional *mmilandi/vamilandi* LHFL, D2:H.no H, N 1+/2+
doctor: traditional *mmitela/vamitela* LHFL, D2:H.no H, N 1+/2+
doctor's place *kuchihanya* LLL:L, D1:no H, N 17
dog ing'avanga/ding'avanga LHFL, B:S1, N 9/10
dog ung'avanga/ang'avanga LHFL, B:S1, N 1A/2A
dog sp. (digging up corpses) *ingwangwalati/dingwangwalati* LHHH:L, A:S1/SF, N 9/10
dog sp. (digging up corpses) *ungwangwalati/angwangwalati* LHHH:L, A:S1/SF, N 1A/2A
door *nnango/milango* LRL, C1:SF, N 3/4
door (traditional, made from millet stalks) *hwidi/dinjwidi* RL/LRL, C1:SF, N 11/10+
door post *lipadango/mapadango*

LLRL, C1:SF, N 5/6
dorsal muscle *inono/dinono* LFL, B:S1, N 9/10
dots on cheeks and between the eyes (as decoration) *doda/=* RL, C1:SF, N 9b/10b
doubt → fear
dove *imunda/dimunda* LH:L, A:S1/SF, N 9/10
dove *umunda/amunda* LH:L, A:S1/SF, N 1A/2A
draw a line *-kuva* -H:L, V
draw out, take out, bring to light *-homola* -HH:L, V
draw water *-teka* -H:L, V
dream *-lota* -H:L, V
dream: cause to, talk while dreaming *-loha* -FL, V *caus.*
dress (s.o.) *-wadya* -FL, V *caus.*
drink *-kimbila* -HH:L, V
drink *-kumbila* -HH:L, V
drink, not fermented (from millet, grain; Sw. *togwa*) *nkojo/mikojo* LL:L, D1:no H, N 3/4
drip, leak *-sulula* -HH:L, V
drive in (e.g. a nail) *-komela* -HH:L, V
drop *litwene/matwene* LFL, B:S1, N 5/6
drought *chivanga* LRL, C1:SF, N 7/-
drum *ligoma/magoma* LRL, C1:SF, N 5/6
drum: type of *ndundo/midundo* LRL, C1:SF, N 3/4
drum: type of (big); dance (to remember the deceased) *likungwa/makungwa* LL:L, D1:no H, N 5/6
drum: type of (big, esp. used at boy's initiation) *likuti/makuti* LH:L, A:S1/SF, N 5/6
drum: type of (small) *nakandunda* LLRL, C1:SF, N 9a/-
drum: type of (small) *indunda/dindunda* LRL, C1:SF, N 9/10
drunk: get *-kalewa* -HFL, V *pas.*
drunk: get *-kelewa* -HFL, V *pas.*
dry: be, be thirsty *-yuma* -H:L, V
dry in the sun *-yanika* -HH:L, V
dry season *chambu/vyambu* FL, C2:H.SF, N 7/8

dry up *-nyala* -H:L, V
dumb person *akatongola/vakatongola* LHHL:L, V *fin.*
dust *litutunga* LLRL, C1:SF, N 5/-

E

ear *likutu/makutu* LRL, C1:SF, N 5/6
early in the morning *umambumbu* LHFL, B:S1, N 14
earrings (three in each ear, filled with coloured pieces of paper) *mapete* LRL, C1:SF, N -/6
earthworm *lilwedo/malwedo* LH:L, E:S2, N 5/6
eat *-hya* H:L, V
eat fish or meat *-kandila* -HH:L, V
eat fried fish or roasted meat without steaming (ugali/soup) *-lumila* -HH:L, V
eat first products of new crop *-lilaula* -HRL, V *refl.*
eat too much *-nyela* -H:L, V
echo *namalove* LHRL, N 9a/-
effective: be (medicine) → true: be
egg *liye/maye* RL, C1:SF, N 5/6
elbow → heel
elder *nkulungwa/vakulungwa* LHFL, D2:H.no H, N 1/2
elephant *inembo/dinembo* LFL, B:S1, N 9/10
elephant *unembo/anembo* LFL, B:S1, N 1A/2A
enclosure for keeping animals; grime, soot *chitundu/vitundu* LFL, B:S1, N 7/8
end: bring to an *-koma* -H:L, V
end: come to an; rape (a woman) *-pela* -H:L, V
end of sth.: be → bolt
endanger *-tevedya* -HFL, V *caus.*
endure *-pilila* -HH:L, V
enemy *mmongo/avongo* HRL, C2:H.SF, N 1/2A
enjoy → pleasant: be
enlarge, make greater *-tukukula* -HHH:L, V
enough: be, be sufficient *-kolodya* -HFL, V *caus.*

enter -enda -H:L, *V*
entice; comfort -pembedya -HFL, *V caus.*
erect: **be** -kwina -H:L, *V*
especially → very
establish sth. new -chila -H:L, *V*
European nsungu/vasungu LFL, D2:H.no H, *N 1/2*
evening lyulo/malyulo H:L/LH:L, A:S1/SF?, *N 5/6+*
every, all -ohe-ohe LLH:L, ?, *P*
exceed, excel -nonoha -HFL, *V caus.*
except ikave LHL, *V fin.*
excrement mavi H:L, A:S1/SF, *N -/6*
excrement of chicken utohi LRL, C1:SF, *N 14*
expanded: **be**, be widened -tanuka -HH:L, *V*
explain → tell s.o.
extend, abound -eneledya -HHL:L, *V caus.*
extinguish -dima -H:L, *V*
eye liho/meho H:L, A:S1/SF, *N 5/6*
eyebrow likwikwi/makwikwi LRL, C1:SF, *N 5/6*
eyelash lukope/ding'ope LH:L, A:S1/SF, *N 11/10*

F

face, front, before kumeho LH:L, E:S2, *N 17+6*
fail (after promise) -gulugusa -HHL:L, *V caus.*
fail, make mistake, miss -leva -H:L, *V*
faint, collapse -divika -HH:L, *V*
fall -motoka -HH:L, *V*
fall -uwa -H:L, *V*
fall -yanguka -HH:L, *V*
fall bit by bit -pakatika -HHH:L, *V*
fall down -palatuka -HHH:L, *V*
far kulehu LH:L, E:S2, *A*
farmer nkulima/yakulima LHFL, D2:H.no H, *N 1/2*
fasten → tie
fasten together -pambanya -HFL, *V caus.*
fasten (with rope) -pambilila -HHH:L, *V*

fat: **be** (esp. animals); be big -tumbula -HH:L, *V*
fat: **be** (esp. human beings) -nyeta -HH:L, *V*
father atata/achatata/angaa-tata LFL/LHRL/LH:-FL, D2:H.no H, *N 2A/2A+*
father (informal, ironic) tati H:L, ?, *N 1c/-*
fear, be afraid -yopa -H:L, *V*
fear, doubt lipamba/mapamba LH:L, E:S2, *N 5/6*
feather, hair (on legs) lileha/maleha LRL, C1:SF, *N 5/6*
feed, make eat -liha -FL, *V caus.*
feel → see
fell, knock down -motoha -HFL, *V caus.*
fellow person mwenedi/venedi LH:L, A:S1/SF, *N 1/2*
female -achikongwe HLFL, *P con.*
fence: type of injinji/dinjinji LL:L, D1:no H, *N 9/10*
fence: type of lingongo/mangongo LL:L, D1:no H, *N 5/6*
fence: type of lwani/dimbwani LH:L, A:S1/SF, *N 11/10*
ferment -haha -H:L, *V*
fermented: **be** -hahama -HH:L, *V*
fertile: **be** -nyoma -H:L, *V*
fever, influenza chidumba LRL, C1:SF, *N 7/-*
few, a bit kadiki LRL, C1:SF, *I*
field welu/mawelu H:L/LH:L, B:S1, *N 14/6+*
field (near a valley, where rice is planted) litimbe/matimbe LL:L, D1:no H, *N 5/6*
field which has been cultivated more than three times in succession likulukulu/makulukulu LHHH:L, A:S1/SF, *N 5/6*
field which has been cultivated once only munda/myunda RL, C1:SF, *N 3/4*
field which has been cultivated three times in succession ntema/mitema LH:L, A:S1/SF, *N 3/4*
field which has been cultivated twice in

- succession *lihala/mahala* LRL, C1:SF, N 5/6
- field** which has not been cultivated in the right way *liguma/maguma* LH:L, E:S2, N 5/6
- field** (without yield) *libuda/mabuda* LH:L, A:S1/SF, N 5/6
- field: remaining plot** *luwawa* LL:L, D1:no H, N 11/-
- fight** -*panyana* -HH:L, V
- fight: show**, strike -*ng'ola* -H:L, V
- fill** -*umbadya* -HFL, V *caus.*
- fill in** (holes) -*huhulila* -HHH:L, V
- filter**, strain -*hamata* -HH:L, V
- finally** → then
- find** -*kodidya* -HFL, V *caus.*
- fine** -*tosa* -FL, V *caus.*
- finger** *chala/vyala* H:L, A:S1/SF, N 7/8
- finger nail** *lukombe/ding'ombe* LFL, B:S1, N 11/10
- finish** (tr. and itr.), accomplish -*malila* -HH:L, V
- fire** *mooto/myooto* LFL, E:S2, N 3/4
- fire: lack enough**, get underdone (food); be unclear (words) -*tunda* -H:L, V
- fire: make** (by friction) -*pekeha* -HFL, V *caus.*
- fire: sticks for making** *mpekeho/mipekeho* LHH:L, A:S1/SF, N 3/4
- fireplace** *chiwuli/viwuli* LH:L, A:S1/SF, N 7/8
- fireplace** *lijiko/majiko* LRL, C1:SF, N 5/6
- fireplace** used during celebrations *palitungulu* LLHRL, C2:H.SF, N 16
- firewood** *lukuni/ding'uni* LH:L, A:S1/SF, N 11/10
- firewood: small piece of** *luwalahanji/dimbwalahanji* LHHL:L, B:S1, N 11/10
- first** -*tandi* -FL, B:S1, A
- fish** *ihomba/dihomba* LFL, B:S1, N 9/10
- fish** *uhomba/ahomba* LFL, B:S1, N 1A/2A
- fish** → trap
- five** *nnyano* LL:L, D1:no H, N 3/-
- fix** → tie
- flash** of light *imete/dimete* LRL, C1:SF, N 9/10
- flat: be** (of taste) -*laduka* -HH:L, V
- flea** *nantitili/achanamititili* LLHFL/LHHHHFL, B:S1, N 1a/2A+
- flour** *uhu* H:L, A:S1/SF, N 14
- flourish** -*konda* -H:L, V
- flower** *liuwa/mauwa* LRL, C1:SF, N 5/6
- flower**, blossom *induva/dinduva* LRL, C1:SF, N 9/10
- flute** *chimbeta/vimbeta* LL:L, D1:no H, N 7/8
- fly** *imembe/dimembe* LH:L, E:S2, N 9/10
- fly** *umembe/amembe* LH:L, E:S2, N 1A/2A
- fly** → jump (high)
- foetus** *libongo/mabongo* LH:L, A:S1/SF, N 5/6
- fog**, mist, haze *litambwe/matambwe* LL:L, D1:no H, N 5/6
- fold** -*kunja* -H:L, V
- follow** -*papata* -HH:L, V
- follow**; reap -*londola* -HH:L, V
- food** *chakulya/vyakulya* HL:L, D2:H.no H, P *nom.*
- food** *vilyo* RL, C1:SF, N -/8
- food**: type of (beans with millet or rice) *chipweng'e* LH:L, A:S1/SF, N 7/?
- food**: type of (meal of mixed potatoes) *nahembe* LL:L, D1:no H, N 9a/-
- food**: type of (porridge with vegetable of cassava leaves) *ntandasa nchinduli* LLLL LHRL, N 3/-
- food**: type of (rice with watery pumpkin sp.) *likulambila* LLLH:L, A:S1/SF, N 5/-
- food**: type of (with cassava) *chitunduni/vitunduni* LHRL, C2:H.SF, N 7/8
- fool**: make s.o. look a (by witchcraft) -*lokotanya* -HHL:L, V *caus.*
- foolish man** *nkanga/vakanga* LH:L, A:S1/SF, N 1/2
- foolish woman** *nsungu/vasungu* LRL, C1:SF, N 1/2
- foolishness**, ignorance (of man) *ukanga* LH:L, A:S1/SF, N 14

foolishness, ignorance (of woman)
usungu LRL, C1:SF, *N* 14
foot *likumbatu/makumbatu* LLRL,
 C1:SF, *N* 5/6
forbid, refuse s.o. *-limbidya* -HFL, *V*
caus.
force → strength
force: take by → rob
forehead *lyenye/malyenye* RL/LRL,
 C1:SF, *N* 5/6+
forest (area with many trees) *ingongo/*
dingongo LH:L, E:S2, *N* 9/10
forge → clear land for cultivation
forget *-luvala* -HH:L, *V*
forget sth. or s.o. *-livalila* -HHH:L, *V*
forget sth. or s.o. *-luvalila* -HHH:L, *V*
former days: of, old, of the past
-achinyakala HLHFL, *P con.*
formerly, the past *kala* RL, C1:SF, *I*
formerly, the past *tangu* L:L, D1:no H,
I
four *ncheche* LL:L, D1:no H, *N* 3/-
friend *somo*= RL, C1:SF, *N* 1b/2b
friendship *chinemba* LRL, C1:SF, *N* 7/-
frighten → abuse
frog *chitowe/vitowe* LH:L, A:S1/SF, *N*
 7/8
frog sp. (big, living in mud, edible)
liumi/maumi LRL, C1:SF, *N* 5/6
front, before *muyo* L:L, D1:no H, *N* 18
fruit *chihohi/vihohi* LH:L, E:S2, *N* 7/8
fry *-namuha* -HFL, *V caus.*
fry *-kalanga* -HH:L, *V*
full: be *-umbala* -HH:L, *V*
full: be very (of food), belch *-tukula*
 -HH:L, *V*
funeral *masiko* LRL, C1:SF, *N* -/6

G

gait *chihweni/vihweni* LRL, C1:SF, *N*
 7/8
galago, bushbaby (Sw. komba) *changa/*
vyanga L:L, D1:no H, *N* 7/8
game: children's (skip with a rope)
mputa LH:L, E:S2, *N* 3/-
gather *-heva* -H:L, *V*
gather (beans, fruit, wild greens) →
 pluck
gather up *-yola* -H:L, *V*
genet *ihungo/dihungo* LH:L, E:S2, *N*
 9/10
genet *uhungo/ahungo* LH:L, E:S2, *N*
 1A/2A
get *-pata* -H:L, *V*
get up early *-lilava* -HRL, *V refl.*
gift, present *liyeni/mayeni* LRL, C1:SF,
N 5/6
giraffe *twiga*= RL, C1:SF, *N* 9b/10b
girl (after initiation) *mwali/vali* H:L,
 A:S1/SF, *N* 1/2
girl (before initiation) *nahaku/*
anamahaku HFL/LHHFL, D2:H.no
 H, *N* 1a/2A
girl: person(s) taking care of *namwali/*
nkanamwali LH:L/LLH:L, A:S1/SF,
N 1a/?
give, display, show, take (out) *-usa* -FL,
V caus.
give (to s.o.) *-ing'a* -H:L, *V*
glass, eyeglasses → mirror
glide, trickle, slide along (esp. water
 through a channel) *-kuluva* -HH:L, *V*
glutton *namulya* LFL, D2:H.no H, *N*
 1a/-
gnaw *-pumuna* -HH:L, *V*
go *-hwena* -H:L, *V*
go away, come from *-uka* -H:L, *V*
go out, come out suddenly *-buhuka*
 -HH:L, *V*
go up *-palanga* -HH:L, *V*
goat *imbudi/dimbudi* LH:L, A:S1/SF, *N*
 9/10
goat *umbudi/ambudi* LH:L, A:S1/SF, *N*
 1A/2A
goblin, orgre *nakadimu/achanakadimu*
 LHRL/LHLHRL, C2:H.SF, *N* 1a/2A+
God, god *nmungu/amilungu*
 LRL/LHH:L, C1:SF, *N* 1/2A
good *-ambone* HH:L, *P con.*
good, beautiful, fine *chikatapele*
 LLHFL, *V fin.*
good: be, be beautiful *-katapala*
 -HHH:L, *V*
gossip → converse; → mock
grandchild *ndukulu/vadukulu* LHFL,
 D2:H.no H, *N* 1/2

grandfather; master *anambuye* LHFL, D2:H.no H, N 2A/-
grandparent, ancestor *avivi/angaa-vivi* LRL/LH:-H:L, C1:SF, N 2A+
grass *wahi* FL, C2:H.SF, N 14
grass sp. *inete/dinete* LL:L, D1:no H, N 9/10
grass sp. *chihanu/vihamu* LRL, C1:SF, N 7/8
grass sp. *liplepende/mapelepende* LHHH:L, A:S1/SF, N 5/6
grass sp. *nachisuvele* LHHRL, C2:H.SF, N 3a/-
grass sp. *nachitukana* LHHL:L, D2:H.no H, N 3a/-
grass sp. *nahundu* HRL, C2:H.SF, N 3a/-
grass sp. *nambole* HRL, C2:H.SF, N 3a/-
grasshopper *imande/dimande* LH:L, E:S2, N 9/10
grasshopper *umande/amande* LH:L, E:S2, N 1A/2A
grave *likabuli/makabuli* LHFL, B:S1, N 5/6
grave *litembe/matembe* LRL, C1:SF, N 5/6
gravel *dihakalawe* LHHL:L, B:S1, N -/10
graveyard *kumisati* LLL:L, D1:no H, N 17
greet -*kamasa* -HFL, *V caus.*
greetings *disalamu* LLRL, C1:SF, N -/10
grind -*haya* -H:L, *V*
grind (rice) -*palasa* -HFL, *V caus.*
groan -*gumila* -HH:L, *V*
groan because of pain -*dumila* -HH:L, *V*
grope about -*lopola* -HH:L, *V*
ground: on the, down to the ground *pahi* RL, C1:SF, N 16
groundnut *indu/dindu* L:L, D1:no H, N 9/10
group of people working together *nkumi/mikumi* LFL, B:S1, N 3/4
grow, grow up -*kula* -H:L, *V*
grow, grow up -*kulumuka* -HHH:L, *V*

gruel *litatoli/matatoli* LLFL, E:S2, N 5/6
gruel *nkangohu/mikangohu* LLH:L, E:S2, N 3/4
grumble, speak in oneself -*loloma* -HH:L, *V*
grumble, speak to oneself -*tongodika* -HHH:L, *V*
guard, defend -*hikalila* -HHH:L, *V*
guava *lipela/mapela* LFL, B:S1, N 5/6
guest, stranger *nnyeni/vayeni* LRL, C1:SF, N 1/2
guest/stranger: state of being a uyeni LRL, C1:SF, N 14
guide, go ahead -*longolela* -HHH:L, *V*
guinea-fowl *ing'anga/ding'anga* LH:L, A:S1/SF, N 9/10
guinea-fowl *ung'anga/ang'anga* LH:L, A:S1/SF, N 1A/2A
gum (near teeth) *uhinini* LHH:L, A:S1/SF, N 14
gun *ihuti/dihuti* LL:L, D1:no H, N 9/10

H

hair (e.g. on legs) → feather
hair (of back) *lihahamanga/mahahamanga* LLLRL, C1:SF, N 5/6
hair (of head) *ulindo* LH:L, A:S1/SF, N 14
hair dressing: type of *mpaneka/mipaneka* LLL:L, D1:no H, N 3/4
hair dressing: type of (with pigtail) *mabati* LFL, B:S1, N -/6
hair: grey (of age) *imbulisa/dimbulisa* LHFL, B:S1, N 9/10
hair: grey (of age) *dihuli* LH:L, A:S1/SF, N -/10
half, part, portion *lipinji* LRL, C1:SF, N 5/-
half-grown, not full-grown (e.g. tree, forest) *dimbelenje* LHFL, B:S1, N -/10
hammer -*doda* -H:L, *V*
hammer *inyundo/dinyundo* LRL, C1:SF, N 9/10
hammer *chidodelo/vidodelo* LLRL, C1:SF, N 7/8
hand, arm *nkono/mikono* LH:L,

- A:S1/SF, N 3/4
handicapped: be -*lamala* -HH:L, *V*
handle *mpini/mipini* LH:L, A:S1/SF, N 3/4
hang -*tanda* -H:L, *V*
hang (up) -*koveka* -HH:L, *V*
hard: be -*nonopa* -HH:L, *V*
hard: be, be difficult -*komodya* -HFL, *V caus.*
hare *isungula/disungula* LHRL, C2:H.SF, N 9/10
hare *usungula/asungula* LHRL, C2:H.SF, N 1A/2A
harvest, pumpkins, water lemons, cucumbers -*lokotanya* -HHL:L, *V caus.*
harvest (with hands, esp. millet) → cut (with hands)
harvest bananas, millet sp. (Sw. ulezi) → cut, chop (e.g. branches)
harvest cassava → slice; → dig
harvest groundnuts → scratch, peck
harvest maize -*pahula* -HH:L, *V*
harvest millet, peas → thresh
harvest millet sp. (Sw. ulezi) → cut, chop
harvest peanuts, all sorts of potatoes, cassava → dig
harvest rice → strip off
harvest time *lichela/machela* LFL, B:S1, N 5/6
harvest time *nchela/michela* LFL, B:S1, N 3/4
haste: cause -*piyanidya* -HHL:L, *V caus.*
hasten, do quickly (with negative result) -*yanguhana* -HHH:L, *V*
hate → shut
haunt (of animal) *chivava/vivava* LL:L, D1:no H, N 7/8
hawk sp. (big, striking colours) *inyanga/dinyanga* LFL, B:S1, N 9/10
hawk sp. (big, striking colours) *unyanga/anyanga* LFL, B:S1, N 1A/2A
hawk sp. (black, white, attacking chickens without taking them) *chisinja/visinja* HRL, C2:H.SF, N 7/8
hawk (Sw. mwewe) *namweve/achanamweve* HL:L/LHHL:L, D2:H.no H, N 1a/2A+
he, she *nang'e* H:L, E:S2, *P subst.*
he, she (emphatic) *unang'e* LFH, *P subst.*
head *mutwe/myutwe* RL, C1:SF, N 3/4
head (esp. of animals) *libadang'a/mabadang'a* LHFL, B:S1, N 5/6
headache: have a bad → thunder
headman *njumbe/majumbe* LFL, D2:H.no H, N 1/6
headman of village (traditional) *amwenye/achamwenye* HRL/LHRL, C2:H.SF, N 2A/2A+
health, happiness, prosperity *ulame* LRL, C1:SF, N 14
healthy, strong, whole -*omi* H:L, ?, *P/A*
hear; attend -*pilikana* -HHH:L, *V*
heart *ntima/mitima* LH:L, A:S1/SF, N 3/4
heat of body *litukuta/matukuta* LLRL, C1:SF, N 5/6
heavy: be -*idopa* -HH:L, *V*
heel, elbow *chihing'ino/vihing'ino* LHH:L, A:S1/SF, N 7/8
height, high, above *pannima* LLRL, C1:SF, N 16
help, assist, support -*yangata* -HH:L, *V*
herd → tend
herd, tend -*chunga* -H:L, *V*
hey, tell me!, what? *dachi* L:L, D1:no H, *I*
hide oneself -*litwaliha* -HHL:L, *V refl./caus.*
hide sth. -*piha* -H:L, *V*
hippopotamus *chiboko/viboko* LRL, C1:SF, N 7/8
his, her -*ake* RL, C1:SF, *P pos.*
hit → beat
hoe (a cleared area) -*kuluwanya* -HHL:L, *V caus.*
hoe (a field) -*kang'ana* -H:L, *V*
hoe (big) *ingwamba/dingwamba* LL:L, D1:no H, N 9/10
hoe (small) *liyembe/mayembe* LRL, C1:SF, N 5/6
hold of oneself: get -*likalanga* -HLRL,

V refl.
hole, hollow (small) *ntupa/mitupa*
 LL:L, D1:no H, *N 3/4*
hole (in lobe of ear) *mbalenga/*
mibalenga LLL:L, D1:no H, *N 3/4*
hole (in sth., e.g. in the ground) *lipondo/*
mapondo LRL, C1:SF, *N 5/6*
hole (through sth.) *imbelekeho/*
dimbelekeho LHH:L, B:S1, *N 9/10*
hole (through sth.) *imenya/dimenya*
 LL:L, D1:no H, *N 9/10*
hole: make a, break into *-holoha* -HFL,
V caus.
homestead, village *kaya/dikaya*
 H:L/LH:L, E:S2, *N 9c/10c*
homestead: abandoned *lihame/*
mahame LH:L, E:S2, *N 5/6*
honey *uchi* H:L, A:S1/SF, *N 14*
honey comb *lihinda/mahinda* LH:L,
 A:S1/SF, *N 5/6*
hop *-palangula* -HHH:L, *V*
hope → trust to
hopes: raise s.o.'s *-kulupidya* -HHL:L,
V caus.
horn *lupembe/dimembe* LFL, B:S1, *N*
11/10
horn, whistle *lipenga/mapenga* LH:L,
 E:S2, *N 5/6*
hot: feel → shine
house *ing'ande/ding'ande* LH:L, E:S2,
N 9/10
house *inyumba/dinyumba* LH:L, E:S2,
N 9/10
house (big, with square roof) *libanda/*
mabanda LRL, C1:SF, *N 5/6*
house post *luhichi/dihichi* LRL, C1:SF,
N 11/10
how many *-ngapi* -FL, B:S1, *A*
how many *-ninga* ?, *A*
huge, fat person or thing *nkang'a/*
mikang'a LFL, B:S1, *N 3/4*
huge object (person, animal, thing, etc.)
litupa/matupa LRL, C1:SF, *N 5/6*
humiliated: feel, uncomfortable *-yuvala*
 -HH:L, *V*
hundred *mia/dimia* H:L/LH:L, ?, *N*
9c/10c
hundred *imia/dimia* LH:L, ?, *N 9c/10c*

hunger *indala* LRL, C1:SF, *N 9/-*
hungry: be → tired: be
hunt *-haka* -H:L, *V*
hunt *chihako/vihako* LRL, C1:SF, *N 7/8*
hunt (with a sling), aim (with shooting,
 throwing) *-lumbata* -HH:L, *V*
hunt for *-hachila* -HH:L, *V*
hunt for *-hakila* -HH:L, *V*
hunting stick *indongo/dindongo* LFL,
 B:S1, *N 9/10*
hurt *-pwita* -H:L, *V*
hurt: get → wound
husband: my *ntwangu/achatwa vangu*
 LFL/LHH RL, B:S1, *N 1/2A+*
hut for boys during initiation rites
ntengu/mitengu LRL, C1:SF, *N 3/4*
hut (round) *ndule/midule* LRL, C1:SF,
N 3/4
hut for girls during initiation rites
litetele/matetele LHFL, B:S1, *N 5/6*
hyena *nchehe/michehe* LFL, B:S1, *N*
3/4

I

I *naangu* HRL, C2:H.SF, *P subst.*
I (emphatic) *unene* LFH, *P subst.*
idiocy *ding'opedi* LHFL, B:S1, *N -/10*
idle *-lemwa* -FL, B:S1, *A*
idle: remain *-lisinga* -HRL, *V refl.*
idleness, laziness *ulemwa* LFL, B:S1, *N*
14
if → then
ill: be → wound
ill: fall *-uula* -HH:L, *V*
imitate, mimic → taste (food)
incantation (spoken by sorcerer) →
 divining board
incise, cut to shape, trim *-cheha* -FL, *V*
caus.
incision mark *dinembo* LH:L, A:S1/SF,
N -/10
incite *-kumbanga* -HH:L, *V*
increase, become more and more
-pulung'anya -HHL:L, *V caus.*
infant (between 2 and 6 months old)
lunga/dinjunga RL/LRL, C1:SF, *N*
11/10
infant (younger than 2 months old)

nkanunu/vakanunu LLRL, C1:SF, N 1/2

infect (and destroy) fruit, trees *-humbwa* -FL, *V pas.*

inform → invite

initiate, circumcise (in former days) *-yahuka* -HH:L, *V*

initiates (returning from bush) *litewe* LH:L, E:S2, N 5/-

initiation place (bush) *kundagala* LLL:L, D1:no H, N 17

initiation rites *malangwe* LL:L, D1:no H, N -/6

initiation rites (boys) *likumbi/makumbi* LRL, C1:SF, N 5/6

initiation rites (girls) *chiputu* LRL, C1:SF, N 7/-

insect sp. (damaging produce of fields) *chabanda/vyabanda* HFL, B:S1, N 7/8

insect sp. (living in maize plants and damaging them) *nambeda/anambeda* HFL/LHFL, D2:H.no H, N 1a/2A

instead of *pambuto* LFL, B:S1, N 16

insult → abuse

intestine *utumbo* LRL, C1:SF, N 14

invisible: become (witchcraft), get lost *-walawala* -HHH:L, *V red.*

invite; inform *-kumbula* -HH:L, *V*

iron *chitale/vitale* LFL, B:S1, N 7/8

J

jack-fruit *lipenesi/mapenesi* LLH:L, A:S1/SF, N 5/6

jackal *nancheta/anamicheta* LLRL/LHHRL, C1:SF, N 1a/2A

jaw *matama* LRL, C1:SF, N -/6

joint (of body) *chingungunda/vingungunda* LLL:L, D1:no H, N 7/8

joking relationship (Sw. utani) *uvilo* LH:L, A:S1/SF, N 14

journey → time

joy *chimwemwe* LL:L, D1:no H, N 7/-

judge *luwali/maluwali* LFL/LLFL, E:S2, N 11/6+

jump (high); fly *-uluka* -HH:L, *V*

jump (long) *-chinjila* -HH:L, *V*

jump down *-chitika* -HH:L, *V*

K

kernel of pumpkin *inyomoko/*

dinyomoko LLRL, C1:SF, N 9/10

kidney *dihwiyo* LH:L, A:S1/SF, N -/10

kill *-walala* -HH:L, *V*

kill at a distance (witchcraft) *-lapilila* -HHH:L, *V*

kill, die *-hiya* -H:L, *V*

kill insect with tip of finger, toe *-pandala* -HH:L, *V*

killer, savage person *nngwangwalati/vangwangwalati* LHHH:L, A:S1/SF, N 1/2

kindle fire *-koledya* -HFL, *V caus.*

kindle fire *-kumbanya* -HFL, *V caus.*

knead → straight: make completely

knee *lihundi/malundi* LH:L, E:S2, N 5/6

kneel, worship *-tindivala* -HHH:L, *V*

kneel, worship *-yama* -H:L, *V*

knife *chipula/vipula* LH:L, E:S2, N 7/8

knock off, break off by hitting *-papatula* -HHH:L, *V*

knot *chihundo/vihundo* LH:L, A:S1/SF, N 7/8

know *-mala* -H:L, *V*

know, understand, recognize *-kameka* -HH:L, *V*

known: be *-mahikana* -HHH:L, *V*

L

lack, get lost *-hoya* -H:L, *V*

ladle (for gravy) *lupwawa/dimwawa* LFL, B:S1, N 11/10

ladle, spoon *luko/dinjuko* RL/LRL, C1:SF, N 11/10

lake, pool *litanda/matanda* LFL, B:S1, N 5/6

lame person *akahwena/vakahwena* LHFL, *V fin.*

lamp *kandili/dikandili* LFL/LLFL, E:S2, N 9c/10c

lamp (small) *chibatali/vibatali* LLH:L, A:S1/SF, N 7/8

land, area, country *chilambo/vilambo* LRL, C1:SF, N 7/8

land: cleared (before being cultivated) *chilimu/vilimu* LRL, C1:SF, N 7/8

language *chitongodi/vitongodi* LLRL, C1:SF, N 7/8

last -*achihwango* ?, *P con.*

later → afterwards

laugh -*heka* -H:L, *V*

laughter *chiheko* LRL, C1:SF, N 7/-

lay an egg -*taila* -HH:L, *V*

lay down, put, place -*vika* -H:L, *V*

leaf *lihamba/mahamba* LRL, C1:SF, N 5/6

leak → drip

leap -*dang'a* -H:L, *V*

leap (of joy, with celebrations, etc.) -*chiha* -FL, *V caus.*

learn -*liyedy* -HFL, *V refl./caus.*

learn -*lifundisa* -HHL:L, *V refl./caus.*

learn (to behave with respect and dignity) -*lihunda* -HRL, *V refl.*

leave, leave behind, stop doing sth. -*leka* -H:L, *V*

leave of: take, bid farewell -*laila* -HH:L, *V*

left *nchinda/michinda* LFL, B:S1, N 3/4

left: be, remain -*hiyala* -HH:L, *V*

leg *ludodo/madodo* LH:L, E:S2, N 11/6

leg: calf of; very short person *chingulimba/vingulimba* LHRL, C2:H.SF, N 7/8

lemon: water *likumbila/makumbila* LHFL, B:S1, N 5/6

leopard *isuvi/disuvi* LFL, B:S1, N 9/10

leopard *usuvi/asuvi* LFL, B:S1, N 1A/2A

leper *mmangundula/vamangundula* LLHL:L, B:S1, N 1/2

leprosy *mangundula* LHL:L, B:S1, N -/6

liar *nankalavanya/achanankalavanya* LLLLFL/LHLLLLFL, E:S2, N 1a/2A+

lick -*lamba* -H:L, *V*

lid (of pot) *litano/matano* LRL, C1:SF, N 5/6

lie -*lavanya* -HFL, *V caus.*

lie → deceive

lie down, go to bed -*lala* -H:L, *V*

lie down, go to bed -*yama* -H:L, *V*

life *ulama* LH:L, A:S1/SF, N 14

life *umi* H:L, A:S1/SF, N 14

lift -*nyanyula* -HH:L, *V*

light: be -*langala* -HH:L, *V*

light: be -*langula* -HH:L, *V*

light: be, be thin, be transparent -*pepeka* -HH:L, *V*

light: be (weight) -*peyapeya* -HHH:L, *V red.*

lightning *ing'uva/ding'uva* LFL, B:S1, N 9/10

like → love; → want

limp -*humbaila* -HHH:L, *V*

linger → delay

lion *ihimba/dihimba* LFL, B:S1, N 9/10

lion *uhimba/ahimba* LFL, B:S1, N 1A/2A

lip *huyeye/dinjeye* LFL, B:S1, N 11/10

lip-plug (in upper lip) *indonya/dindonya* LL:L, D1:no H, N 9/10

listen -*pilikanila* -HHHH:L, *V*

live → sit down

live/exist long → recover

liver *linoha/manoha* LFL, B:S1, N 5/6

lizard *lingwangula/mangwangula* LLFL, E:S2, N 5/6

lizard sp. (big, living in water) *nankadindumba/achanankadindumba* LLLLFL/LHHHLLFL, E:S2, N 1a/2A+

lizard sp. (big, living on land) *ing'ondo/ding'ondo* LH:L, A:S1/SF, N 9/10

lizard sp. (big, living on land) *ung'ondo/ang'ondo* LH:L, A:S1/SF, N 1A/2A

load → bundle

locust *lihiye/mahiye* LH:L, A:S1/SF, N 5/6

locust *lipalangula/mapalangula* LLLRL, C1:SF, N 5/6

locust *nampalangula* LLLLRL, C1:SF, N 1a/?

loin-cloth *lipindi/mapindi* LRL, C1:SF, N 5/6

loiter, hang about -*timba* -H:L, *V*

long, tall, high -*lehu* -H:L, E:S2, *A*

long: be -*lepa* -H:L, *V*

look at -*lola* -H:L, *V*

look for -*lembelela* -HHH:L, *V*
look for → want
look for, search -*loleha* -HFL, *V caus.*
look for, search -*taha* -FL, *V caus.*
look up, observe -*tumba* -H:L, *V*
loose: be -*lugusa* -HFL, *V caus.*
loose: be -*legeya* -HH:L, *V*
lose → throw away
lost: be -*yahika* -HH:L, *V*
lost: get → invisible: become
louse *imboko/dimboko* LH:L, A:S1/SF, *N 9/10*
louse *umboko/amboko* LH:L, A:S1/SF, *N 1A/2A*
love, like, desire, want, accept -*tamwa* -FL, *V pas.*
lower parts of Plateau; western direction (and land located there) *kundonde* LH:L, E:S2, *N 17*
lungs *lipahu/mapahu* LRL, C1:SF, *N 5/6*
lust, desire *lukou* LH:L, A:S1/SF, *N 11/-*

M

maggot *ihong'o/dihong'o* LRL, C1:SF, *N 9/10*
maggot *uhong'o/ahong'o* LRL, C1:SF, *N 1A/2A*
maize *lilombe/malombe* LH:L, E:S2, *N 5/6*
maize cob *injele/dinjele* LFL, B:S1, *N 9/10*
maize cob (empty) *chikokolowa/vikokolowa* LLLL:L, D1:no H, *N 7/8*
maize cob (empty) *chikokwa/vikokwa* LL:L, D1:no H, *N 7/8*
maize cob: leaves of *lihahi/mahahi* LRL, C1:SF, *N 5/6*
maize plant: knockly part of the stem of a *imindi/dimindi* LRL, C1:SF, *N 9/10*
maize plant: leaves of *likwati/makwati* LRL, C1:SF, *N 5/6*
maize plant: plume on top of *inyanja/dinyanja* LL:L, D1:no H, *N 9/10*
Makonde language, nature *chimakonde* LHFL, D2:H.no H, *N 7/-*
Makonde person *mmakonde/*

vamakonde LHFL, D2:H.no H, *N 1/2*
male -*achilume* HLH:L, *P con.*
man *nnume/valume* LH:L, A:S1/SF, *N 1/2*
man: full-grown *nannume* HHFL, D2:H.no H, *N 1a/?*
mango *yembe/diyembe* RL/LRL, C1:SF, *N 9c/10c*
Maraba dialect, nature *chimalaba* LHFL, D2:H.no H, *N 7/-*
Maraba person *mmalaba/vamalaba* LHFL, D2:H.no H, *N 1/2*
mark of a wound or injury *livanga/mavanga* LRL, C1:SF, *N 5/6*
marriage *indowa/dindowa* LRL, C1:SF, *N 9/10*
marriage *ulombi/malombi* LRL, C1:SF, *N 14/6*
marriage: propose -*posa* -FL, *V caus.*
marry (of man) -*lomba* -H:L, *V*
marry (of woman) -*lombwa* -FL, *V pas.*
marsh *mangoose* (Sw. nguchiro) *ntavala/matavala* LHFL, B:S1, *N 3/6*
mask *chihukuhuku/vihukuhuku* LHL:L, B:S1, *N 7/8*
master → grandfather
master, husband *nng'anda/vang'anda* HRL, C2:H.SF, *N 1/2*
mat (made of plants) *lyambi/malyambi* RL/LRL, C1:SF, *N 5/6+*
mat: sleeping *likande/makande* LH:L, A:S1/SF, *N 5/6*
Matambwe dialect, nature *chimatambwe* LHFL, D2:H.no H, *N 7/-*
Matambwe person *mmatambwe/vamatambwe* LHFL, D2:H.no H, *N 1/2*
meanwhile → behind
measles *lisuvele* LHFL, B:S1, *N 5/-*
measure -*pima* -H:L, *V*
measure (for grains) *pisi/dipisi* RL/LRL, C1:SF, *N 9c/10c*
meat *inyama/dinyama* LRL, C1:SF, *N 9/10*
medicine *lipeleko/mapeleko* LLH:L, A:S1/SF, *N 5/6*
medicine *ntela/mitela* LH:L, A:S1/SF,

- N 3/4*
medicine: put (on wound) -*matika* -HH:L, *V*
meet -*himana* -HH:L, *V*
meet, come across, find -*kodya* -FL, *V caus.*
meet each other -*kodyana* -HFL, *V*
melt -*nyelembuka* -HHH:L, *V*
melt -*tungunyuka* -HHH:L, *V*
menstruate → waist
mention, name -*tambula* -HH:L, *V*
mention name of the clan when hitting the animal (while hunting) -*lumba* -H:L, *V*
middle, in the middle, among, between *ching'ati* LH:L, E:S2, *N 7/-*
middle: in the, within *nkati* LRL, C1:SF, *N 18*
milk *mavele* LH:L, A:S1/SF, *N -/6*
milk → squeeze
milky juice got from grated coconut (Sw. *tui*) *uhumbwe* LL:L, D1:no H, *N 14*
millet *ntama/mitama* LFL, B:S1, *N 3/4*
millet sp. *lihonje* LH:L, A:S1/SF, *N 5/?*
millet sp. (Sw. *ulezi*) *utani* LH:L, E:S2, *N 14*
millet ear *lipuhi/mapuhi* LRL, C1:SF, *N 5/6*
millet stalk *lupambahi/dimambahi* LHFL, B:S1, *N 11/10*
millet stalk: sweet *chikota/vikota* LRL, C1:SF, *N 7/8*
millipede *changolo/vyangolo* HRL, C2:H.SF, *N 7/8*
mirror; pane of glass; pl. eyeglasses *chilolo/vilolo* HRL, C2:H.SF, *N 7/8*
mirror (implement of divination) *chilolo/vilolo* LL:L, D1:no H, *N 7/8*
miscarriage *ukuluha* LHFL, B:S1, *N 14*
miscarriage (stillborn child) *dinjahango* LLRL, C1:SF, *N -/10*
miscarriage: have -*kuluha* -HFL, *V caus.*
mischievous child *likutukutu/makutukutu* LLHFL, E:S2, *N 5/6*
mischievous child *livehu/mavehu* LRL, C1:SF, *N 5/6*
misfortune *chihakau* LHH:L, A:S1/SF, *N 7/-*
mix, collect together, add -*kundanya* -HFL, *V caus.*
mock, ridicule, gossip -*lembula* -HH:L, *V*
modesty → shame
money (formerly rupee) *lupia/dimia* LFL, B:S1, *N 11/10*
monkey (Sw. *kima*) *inyima/dinyima* LH:L, A:S1/SF, *N 9/10*
monkey (Sw. *kima*) *unyima/anyima* LH:L, A:S1/SF, *N 1A/2A*
monkey (Sw. *nyani*) *lingwele/mangwele* LH:L, E:S2, *N 5/6*
monkey (Sw. *tumbili*) *chitumbili/vitumbili* LHFL, B:S1, *N 7/8*
month → moon
moon, month *mwedi/myedi* H:L, A:S1/SF, *N 3/4*
morning *ulyamba* HRL, C2:H.SF, *N 14*
mortar *ntuli/mituli* LFL, B:S1, *N 3/4*
mosquito *injenjema/dinjenjema* LHRL, C2:H.SF, *N 9/10*
mosquito *unjenjema/anjenjema* LHRL, C2:H.SF, *N 1A/2A*
mother *amama/achamama/angaa-mama* HRL/LHRL/LH:-H:L, C2:H.SF, *N 2A/2A+*
mother *ayu/achayu* L:L/LH:L, D1:no H, *N 2A/2A+*
mother *anyokwe* HRL, C2:H.SF, *N 2A/-*
mother *namwana* LFL, C2:H.SF, *N 1a/?*
mother, i.e. having given birth (esp. animals) *likolo* LH:L, A:S1/SF, *N 5/?*
mother (lying-in woman, i.e. s.o. who has just given birth) *nnuhuko/valuhuko* LHFL, D2:H.no H, *N 1/2*
motorcycle *chitututu/vitututu* LHRL, C2:H.SF, *N 7/8*
motorcycle *mmutukasikeni/miutukasikeni* LLLLHFL, *N 3/4*
mould -*kamata* -HH:L, *V*
mould, mix -*munya* -H:L, *V*
mount, ascend -*damila* -HH:L, *V*
mountain *lichinga/machinga* LFL, B:S1, *N 5/6*

mouth *kanya/dikanya* L:L/LL:L, D1:no H, *N 9c/10c*

mouth *ikanya/dikanya* LL:L, D1:no H, *N 9c/10c*

move to and fro → shake: cause to move to and fro (of eyes) *-lolana* -HH:L, *V*

Mozambique → side: other

much, many *-ohe* H:L, *?, P*

mud *litope/matope* LRL, C1:SF, *N 5/6*

mushroom *uvahe/dimbahe* LRL, C1:SF, *N 14/10*

mushroom sp. (in the bush) *livanga/mavanga* LH:L, E:S2, *N 5/6*

mushroom sp. (in the bush) *uwowa* LRL, C1:SF, *N 14*

musical instrument (bells worn around the ankle as a chain) *dinjuga* LRL, C1:SF, *N -/10*

musical instrument (pieces of iron) *chuma* H:L, A:S1/SF, *N 7/-*

musical instrument (tin can with stick) *nnganga/minganga* LH:L, E:S2, *N 3/4*

musical instrument (tin with stone inside and stick pierced through) *lisanje/masanje* LRL, C1:SF, *N 5/6*

musician *nng'ole/ang'ole* HL:L, D2:H.no H, *N 1/2A*

Mwera language, nature *chimwela* HFL, D2:H.no H, *N 7/-*

Mwera person *mmwela/vamwela* HFL, D2:H.no H, *N 1/2*

my *-angu* RL, C1:SF, *P pos.*

N

name *lina/malina* H:L/LH:L, B:S1, *N 5/6+*

name → mention

narrow: be *-pepeka* -HH:L, *V*

navel *inungu/dinungu* LFL, B:S1, *N 9/10*

Ndonde dialect, nature *chindonde* HFL, D2:H.no H, *N 7/-*

Ndonde person *nndonde/vandonde* HFL, D2:H.no H, *N 1/2*

near *pepi* H:L, A:S1/SF?, *I*

near: be, approach *-pepekela* -HHH:L,

V

neck *ukoti/mikoti* LRL, C1:SF, *N 14/4*

needle *ntota/mitota* LFL, B:S1, *N 3/4*

needle *ntotelo/mitotelo* LHH:L, A:S1/SF, *N 3/4*

neglect → omit

neighbour *ndengani* LLRL, C1:SF, *N 18*

nephew, niece: my *mwipwangu/vipwangu* HRL, C2:H.SF, *N 1/8?*

nest (of bird) *chitehi/vitehi* LH:L, E:S2, *N 7/8*

net *hwau/dinjau* H:L/LH:L, A:S1/SF, *N 11/10*

new *-ahambi* HH:L, *P con.*

next (month, etc.) → appear

Ngoni language, nature *chingoni* LRL, C1:SF, *N 7/-*

Ngoni person *nngoni/vangoni* LRL, C1:SF, *N 1/2*

night *chilo* RL, C1:SF, *N 7/-*

night *uhiku* LH:L, A:S1/SF, *N 14*

Nnima dialect *chinnima* HHFL, D2:H.no H, *N 7/-*

Nnima person *munnima/vannima* HHFL, D2:H.no H, *N 1/2*

no!, there is no, Negative Particle *nanga* L:L, D1:no H, *I*

nod *-hindila* -HH:L, *V*

noise: make a loud; thunder *-lindima* -HH:L, *V*

nor *wala* L:H, C1:SF, *I*

nose *imula/dimula* LRL, C1:SF, *N 9/10*

nostrils → hole, hollow

not yet, still *ndulu* L:L, D1:no H, *I*

notch in face (as decoration) *lulembo/dinembo* LFL, B:S1, *N 11/10*

noticeable: be, be available *-tanjila* -HH:L, *V*

now *vino* RL, C1:SF, *P dem.*

now (immediate future) *nahoti* LH:L, A:S1/SF?, *I*

O

obedient: be *-leleka* -HH:L, *V*

obey → respect

observe, notice *-lolehidyha* -HHL:L, *V caus.*

obstinate: be, refuse to obey *-pinga*
-H:L, *V*
offer present for a special occasion,
esp. initiation *-tudyā* -FL, *V caus.*
often → much
oh! (exclamation when sth. bad has
happened) *ngoo* FL, B:S1, *I*
oil *lihuta/mahuta* LH:L, A:S1/SF, *N 5/6*
ointment (perfumed) *indau/dindau*
LRL, C1:SF, *N 9/10*
ointment (perfumed): type of
nkulo/mikulo LRL, C1:SF, *N 3/4*
okra *binda/dibinda* RL/LRL, C1:SF, *N 9c/10c*
old, of the past *-atangu* HFL, *P con.*
old, used (things) → worn out; → rag;
→ broken; → homestead: abandoned
old: be, healthy and strong *-komala*
-HH:L, *V*
old: be (of people) *-kongopala*
-HHH:L, *V*
omit, neglect, leave (in a certain
condition) *-lekelele* -HHH:L, *V*
one; a(n), some *-mo* RL, C1:SF, *P*
only, in vain, for free, no matter *chihi*
L:L, D1:no H, *N 7/-*
open, unfasten *-chimula* -HH:L, *V*
opportunity, space *litesa/matesa* LL:L,
D1:no H, *N 5/6*
or *ema* RL, C1:SF, *I*
orange *lichungwa/machungwa* LFL,
B:S1, *N 5/6*
orphan *nchiva/vachiva* LFL, D2:H.no
H, *N 1/2*
other *-nji* FL, C2:H.SF, *P*
our *-etu* RL, C1:SF, *P pos.*
outside *pawelu* LH:L, E:S2, *N 16+14*
overturn, revenge *-pindikula* -HHH:L,
V
owl *namahihi/anamahihi*
LLRL/LHHRL, C1:SF, *N 1a/2A*
owl sp. *liuku/mauku* LH:L, A:S1/SF, *N 5/6*

P

padlock *ntikulo/mitikulo* LHH:L,
A:S1/SF, *N 3/4*
palm (of hand) *liyanda/mayanda* LRL,

C1:SF, *N 5/6*
papaya *lipapai/mapapai* LHFL, B:S1,
N 5/6
part → half
partridge *inambili/dinambili* LHFL,
B:S1, *N 9/10*
partridge *unambili/anambili* LHFL,
B:S1, *N 1A/2A*
partridge sp. *likowe/makowe* LRL,
C1:SF, *N 5/6*
pass, go on *-pita* -H:L, *V*
pass, abate *-hapuka* -HH:L, *V*
passage (e.g. through a forest) *luhengo/*
dihengo LRL, C1:SF, *N 11/10*
past, of the past → formerly (former
days: of)
path, road *indila/dindila* LRL, C1:SF,
N 9/10
patron *nkungusitili/vakungusitili*
LHHHL:L, D2:H.no H, *N 1/2*
pay *-lipa* -H:L, *V*
pea *imwedo/dimwedo* LRL, C1:SF, *N 9/10*
peanut *ntesa/mitesa* LL:L, D1:no H, *N 3/4*
peel → scrape off
peel off *-pukusula* -HHH:L, *V*
penis *chitongo/vitongo* LRL, C1:SF, *N 7/8*
penis *chivolo/vivolo* LFL, B:S1, *N 7/8*
people outside the family *mmidi/*
vamidi HFL, D2:H.no H, *N 1/2*
pepper *imilipili/dimilipili* LHHL:L,
B:S1, *N 9/10*
perhaps *panji* FL, C2:H.SF, *P*
perhaps *chipanji* HFL, D2:H.no H?, *I*
perhaps *panjika* LH:L, A:S1/SF, *I*
perhaps, maybe, I don't know *kwali*
H:L, A:S1/SF?, *I*
period → time
person, pl. people *munu/vanu* RL,
C1:SF, *N 1/2*
perverse: be → disagree
pestle *mwihhi/mihi* RL, C1:SF, *N 3/4*
pierce *-homa* -H:L, *V*
pierced (ear) *-ambalenga* HLLL:L, *P con.*
pig *inguluve/dinguluve* LLRL, C1:SF, *N*

- 9/10
pig *unguluve/anguluve* LLRL, C1:SF, N 1A/2A
pig: wild *imbango/dimbango* LH:L, A:S1/SF, N 9/10
pig: wild *umbango/ambango* LH:L, A:S1/SF, N 1A/2A
pigeon-pea *imene/dimene* LRL, C1:SF, N 9/10
pile up *-lundanya* -HFL, *V caus.*
pile up things upside down *-bulika* -HH:L, *V*
pillar *chipanda/vipanda* LFL, B:S1, N 7/8
pin's head in left wing of the nose (as decoration) *chipini/vipini* LH:L, A:S1/SF, N 7/8
pineapple *chikoo/vikoo* LRL, C1:SF, N 7/8
pity *chididi* HFL, B:S1, N 7/-
place *pachinu* LRL, C1:SF, N 16+7
place *pahali* LH:L, A:S1/SF, N 16
plait *-tiva* -H:L, *V*
plait → twist
plaited piece in mat where two lengths come together *mmili/mivili* LFL, B:S1, N 3/4
plane *indege/dindege* LRL, C1:SF, N 9/10
plant *-panda* -H:L, *V*
plaster a wall *-mata* -H:L, *V*
plaster (for making pots) *wumu* H:L, A:S1/SF, N 14
play *-ng'ana* -H:L, *V*
playing ground (celebrations) *palipanda* LLL:L, D1:no H, N 16
pleasant: be, be sweet, enjoy *-nowa* -H:L, *V*
please, make beautiful, suit *-maila* -HH:L, *V*
please, make happy *-angala* -HH:L, *V*
pleased: be, be attractive *-takata* -HH:L, *V*
pleiades *chikuti* LH:L, A:S1/SF, N 7/-
pluck (fowl) *-kuwa* -H:L, *V*
pluck, gather (beans, fruit, wild greens) *-hepa* -H:L, *V*
plucked food, e.g. fruit *chihepo/vihepo* LRL, C1:SF, N 7/8
plug, cork *chidui/vidui* LRL, C1:SF, N 7/8
point (with finger) *-olota* -HH:L, *V*
poke into *-kocha* -H:L, *V*
poke up, put more wood on fire *-konyela* -HH:L, *V*
pole for two loads *ntenga/mitenga* LRL, C1:SF, N 3/4
poles *isungula/disungula* LHRL, C2:H.SF, N 9/10
police (local, during colonial time) *matiyala* LHFL, B:S1, N -/6
pool → lake; → rainy season
porridge: stiff cassava *ntandasa/matandasa* LLL:L, D1:no H, N 3/6
portion → half
position → size
possible: be → able: be
pot *chiloongo/viloongo* LLFL, E:S2, N 7/8
pot (for cooking) *chiteleko/viteleko* LLRL, C1:SF, N 7/8
pot (for cooking) *lihanja/mahanja* LL:L, D1:no H, N 5/6
pot for water (big) *litende/matende* LH:L, A:S1/SF, N 5/6
pot: water (small) *nnangelo/milangelo* LHFL, B:S1, N 3/4
potato sp. (round shape) *mandale* LH:L, E:S2, N -/6
potato: sweet *nkambe/mikambe* LH:L, E:S2, N 3/4
potato: sweet sp. (tall) *luvale/dimbale* LRL, C1:SF, N 11/10
potsherd *lipapa/mapapa* LH:L, A:S1/SF, N 5/6
pound (grains) *-tipula* -HH:L, *V*
pound (grains) *-twanga* -H:L, *V*
pound (grains) *-twa* H:L, *V*
pound (leaves) → smash
pour *-yakanya* -HFL, *V caus.*
pour out, spill *-mwadila* -HH:L, *V*
powder: traditional *inumbati* LHFL, B:S1, N 9/?
power → strength
pray → ask for
pre-marriage procedures *chitamo*

LRL, C1:SF, N 7/?
pregnancy, embryo *chitumbo/vitumbo*
 LRL, C1:SF, N 7/8
pregnant: be -*ikuta* -HH:L, *V*
pregnant: make (a woman) -*twalidya*
 -HFL, *V caus.*
prepare, arrange, put in order, clean
 -*katapadya* -HHL:L, *V caus.*
prepare oneself to do sth. which needs
 strength -*litumba* -HRL, *V refl.*
present for a special occasion (esp.
 initiation) *inudyo/dinudyo* LL:L,
 D1:no H, N 9/10
present for a special occasion (esp.
 initiation) *ding'ombe* LRL, C1:SF, N
 -/10
present: be → sufficient: be
presently → hereafter
press → touch
press tight, squeeze -*bana* -H:L, *V*
press tight, squeeze -*kaba* -H:L, *V*
pretend -*lilambila* -HLRL, *V refl.*
pretend (to be good, nice, etc., in order
 to get sth.) -*twesa* -FL, *V caus.*
prevent, hinder -*divila* -HH:L, *V*
prick, pierce -*chocha* -H:L, *V*
private part *lukundu/ding'undu* LFL,
 B:S1, N 11/10
problems: bring -*tunduwila* -HHH:L, *V*
problems: get, be afflicted -*banika*
 -HH:L, *V*
problems: have -*huva* -H:L, *V*
prosper, rejoice -*poka* -H:L, *V*
protect against evil -*lichilinganya*
 -HHLL:L, *V refl./caus.*
proud of oneself: be, boast -*linowa*
 -HRL, *V refl.*
puberty: get to (boys) -*ulumuka*
 -HHH:L, *V*
puberty: get to (girls) -*vayuka* -HH:L,
V
publicly *pameho* LH:L, E:S2, N 16+6
puff adder *chinyemavi/vinyemavi*
 LHRL, C2:H.SF, N 7/8
pull (firmly) -*uta* -H:L, *V*
pull (softly) -*holola* -HH:L, *V*
pull out, uproot -*dobola* -HH:L, *V*
pulverize -*dududa* -HH:L, *V*

pumpkin sp. (watery) *likong'we/*
makong'we LL:L, D1:no H, N 5/6
pumpkin fruit *litiinji/matinji* HRL,
 C2:H.SF, N 5/6
pumpkin plant *ntinji/mitinji* HRL,
 C2:H.SF, N 3/4
pumpkin seed *ininji/dininji* HRL,
 C2:H.SF, N 9/10
punish -*tubisa* -HFL, *V caus.*
purpose: on *namadi* LRL, C1:SF, *I*
push (once) -*gong'ola* -HH:L, *V*
push (over and over again) -*hingiliha*
 -HHL:L, *V caus.*
put, place → lay down
put a load on the head with the help of
 s.o. → shake: cause to
put above -*palila* -HH:L, *V*
put in order → prepare
put into -*taya* -H:L, *V*
put medicine on wound with finger
 -*lemba* -H:L, *V*
put on fire → boil
put sideways -*peneka* -HH:L, *V*
python *ihato/dihato* LH:L, A:S1/SF, N
 9/10
python *uhato/ahato* LH:L, A:S1/SF, N
 1A/2A

Q

quarrel -*pwata* -H:L, *V*
quarrel, war *ing'ondo/ding'ondo* LFL,
 B:S1, N 9/10
quarrel with each other -*pwatana*
 -HH:L, *V*
quarrelsome *chihongahonga* LHHH:L,
 A:S1/SF, N 7/-
quarter (of town or village) *luwungo/*
dimbungo LH:L, A:S1/SF, N 11/10
quickly *upehi* LFL, B:S1, N 14
quiet: be, keep quiet -*nyalala* -HH:L, *V*

R

rag *lihula/mahula* LH:L, E:S2, N 5/6
rain -*tonya* -FL, *V caus.*
rain *imbula/dimbula* LH:L, A:S1/SF, N
 9/10
rainbow *inyingamu/dinyingamu*
 LHH:L, A:S1/SF, N 9/10

rains: drizzling *chiumbi* LH:L, A:S1/SF, N 7/-
rains: early *imbuntu* LH:L, A:S1/SF, N 9/-
rains: late *ngwao* LL:L, D1:no H, N 9a/-
rainy season; pool, puddle *chihuko/vihuko* LRL, C1:SF, N 7/8
raise up (in order to prop) *-chikula* -HH:L, V
rape (a woman) → end: come to an
rash *nammata* HHL:L, D2:H.no H, N 9a/-
rash *chipele* LRL, C1:SF, N 7/-
rat *likule/makule* LFL, B:S1, N 5/6
rat *nkule/makule* LFL, B:S1, N 3/6
rat sp. *lilutu/malutu* LFL, B:S1, N 5/6
rave *-luba* -H:L, V
razor *chijembe/vijembe* LH:L, E:S2, N 7/8
reach *-hwikanila* -HHH:L, V
read *-soma* -H:L, V
ready → real
real, right, ready *muhiu* LH:L, A:S1/SF?, I
reap → follow
rear, breed, keep in confinement *-langa* -H:L, V
rear (child) *-lela* -H:L, V
reason, cause *liyongo/mayongo* LRL, C1:SF, N 5/6
rebuke → scold
receive *-pwechela* -HH:L, V
receive (sth. out of s.o.'s hand) → do
reclaim *-longana* -HH:L, V
recover; live/exist long *-lama* -H:L, V
red *-anahuvi* HLH:L, P con.
red: be *-huvilila* -HHH:L, V
redeem *-kombola* -HH:L, V
refresh → taste (food)
refuse → deny
refuse to give sth. to s.o. *-ima* -H:L, V
rejoice *-hangalala* -HHH:L, V
rejoice *-tamba* -H:L, V
rely on (fellows) *-dowela* -HH:L, V
remain *-isalila* -HHH:L, V
remember, think *-kumbukila* -HHH:L, V

remind *-kumbusa* -HFL, V caus.
remove weeds → scratch skin with force
repeat *-ila* -H:L, V
repeat *-uila* -HH:L, V
reply, respond *-yambukila* -HHH:L, V
respect, obey *-kungumika* -HHH:L, V
respect, dignity: behave with *-limuka* -HH:L, V
rest *-yowela* -HH:L, V
rest *-yowelesa* -HHH:L, V
restless: be, feel uncomfortable *-lipwelela* -HLRL, V refl.
return *-uya* -H:L, V
revenge → overturn
revive *-dyuha* -FL, V caus.
rib *luvau/dimbau* LRL, C1:SF, N 11/10
rice (the husked grain) *nnyele/miyele* LFL, B:S1, N 3/4
rice (the plant) *mpunga/mipunga* LRL, C1:SF, N 3/4
rice: cooked *imanda/dimanda* LH:L, A:S1/SF, N 9/10
riddle *nachihe* LH:L, A:S1/SF, N 9a/-
riddle: answer to *nachilawa* LHFL, B:S1, N 9a/-
ridicule → mock
right *nnilo/mililo* LH:L, A:S1/SF, N 3/4
right, correct *mwaha* H:L, A:S1/SF?, I
right, justice *lunda* RL, C1:SF, N 11/-
right: set, tend *-ongolela* -HHH:L, V
ripe badly *-huna* -H:L, V
ripen *-lapata* -HH:L, V
ripen (itr.) *-ula* -H:L, V
ripen (of papaya, mango, not of banana) *-lemba* -H:L, V
rise, come forward *-uka* -H:L, V
rise, get up *-imuka* -HH:L, V
river → valley
roast *-yocha* -FL, V caus.
rob, take by force *-dodoma* -HH:L, V
rob, take by force *-kutula* -HHH:L, V
roof: highest point of round *chisweswe/visweswe* LH:L, E:S2, N 7/8
room *kukati* LRL, C1:SF, N 17
root *luchiya/dinyiya* LH:L, A:S1/SF, N 11/10

root: dead (found when clearing a field) *litupa/matupa* LH:L, A:S1/SF, N 5/6
rope *ndidi/mididi* LH:L, A:S1/SF, N 3/4
rope for building *lidingilo/madingilo* LLRL, C1:SF, N 5/6
rope (to tie animals) *lutondolo/dinondolo* LLRL, C1:SF, N 11/10
rope: type of *nchinyimala/michinyimala* LLLRL, C1:SF, N 3/4
rope: twisted *luvoi/dimboi* LRL, C1:SF, N 11/10
rotten: be *-kandika* -HH:L, V
round: go *-dinguka* -HH:L, V
rubbish heap *chituta/vituta* LH:L, A:S1/SF, N 7/8
ruin: bring to *-tindinga* -HH:L, V
run away *-tila* -H:L, V
run away *-tukuta* -HH:L, V
rustle (in shrubs) *-kachakacha* -HHH:L, V *red*.
rustle (sheets of paper) *-waya* -H:L, V
Ruvuma *luuma* LFL, B:S1, N 11?/-

S

sacrifice *unyolo/dinyolo* LRL, C1:SF, N 14/10
saliva *majojoli* LHH:L, A:S1/SF, N -/6
salt *munyu* H:L, A:S1/SF, N 3/-
same, the very one *-nang'o* -H:L, E:S2, P
sand *nnyangi* HRL, C2:H.SF, N 3/-
sand *nsangi* HRL, C2:H.SF, N 3/-
sandy ground *litimbwisi* LLH:L, E:S2, N 5/-
satisfied: be (food) *-ikuta* -HH:L, V
satisfied: get *-tolela* -HH:L, V
savannah *makolobeko* LLLRL, C1:SF, N -/6
save, be saved *-poha* -FL, V *caus*.
say *-chi* H:L, V
saying *lilonjedi/malonjedi* LLRL, C1:SF, N 5/6
scar *likwanda/makwanda* LRL, C1:SF, N 5/6
scatter *-mwadilanya* -HHL:L, V *caus*.
scattered abroad: be *-kanga* -H:L, V

scold, rebuke *-duma* -H:L, V
scold, rebuke *-kalipa* -HH:L, V
scoop water → burn up
scorched: be, be burnt *-pya* H:L, V
scorn, despise *-penda* -H:L, V
scorpion *chivalavala/vivalavala* LHHH:L, A:S1/SF, N 7/8
scrape off, peel *-kwanga* -H:L, V
scratch, peck; harvest groundnuts *-pala* -H:L, V
scratch skin *-vava* -H:L, V
scratch skin forcefully; remove weeds *-tuva* -H:L, V
scream, make noise *-nyokonya* -HFL, V *caus*.
scream (shrill scream) *-luluta* -HH:L, V
scream (until exhaustion) *-lidila* -HRL, V *refl*.
screen (used in hunting) *chiumbi/viumbi* LRL, C1:SF, N 7/8
search → look for
second *-avili* HFL, P *con*.
second day after tomorrow *palyambapo* LHFH, N 16
seduce *-tongosa* -HFL, V *caus*.
see, feel *-ona* -H:L, V
seed *imbeyu/dimbeyu* LFL, B:S1, N 9/10
seize *-kamula* -HH:L, V
self *-ene* FL, ?, P/A
sell *-sumisa* -HFL, V *caus*.
semen *ubila* LFL, B:S1, N 14
send, cause to go *-pelekedy* -HHL:L, V *caus*.
send (person) *-tuma* -H:L, V
send on in advance, put forward *-longoledya* -HHL:L, V *caus*.
separate, divorce *-hapukana* -HHH:L, V
serve food → take off fire
sesame *ulende* LFL, B:S1, N 14
set (of sun) *-swa* H:L, V
set down (e.g. take load from head and put it on the ground) *-tula* -H:L, V
sew *-tota* -H:L, V
sexual intercourse: have *-tupila* -HH:L, V
sexual intercourse: have *-yelana*

- HH:L, *V*
shadow (of people) *chimbwahedi/vimbwahedi* HHH:L, A:S1/SF, *N* 7/8
shadow (of people) *chimbwehedi/vimbwehedi* HHH:L, A:S1/SF, *N* 7/8
shadow (of things) *mmbweha/mimbweha* HRL, C2:H.SF, *N* 3/4
shake (tr. and itr.) *-tikinya* -HFL, *V caus.*
shake: cause to, move fro and to; put load on head with s.o.'s help *-tika* -H:L, *V*
shake off *-misa* -FL, *V caus.*
shame, modesty *dihoni* LH:L, A:S1/SF, *N* -/10
shape, create *-umba* -H:L, *V*
share *-kundanila* -HHH:L, *V*
sharp: be → do
sharpen *-tema* -H:L, *V*
sharpen (knife) *-kwichakwicha* -HHH:L, *V red.*
sharpen teeth *-hangola* -HH:L, *V*
shave, cut all hair of head *-mowa* -H:L, *V*
shed *ngongwe/migongwe* LL:L, D1:no H, *N* 3/4
sheep *ingondolo/dingondolo* LLRL, C1:SF, *N* 9/10
sheep *ungondolo/angondolo* LLRL, C1:SF, *N* 1A/2A
shine *-vala* -H:L, *V*
shine, burn (of fire), feel hot *-yaka* -H:L, *V*
shiver, tremble *-tetema* -HH:L, *V*
shivers: the *chitete* LFL, B:S1, *N* 7/-
shoe, sandal *chilatu/vilatu* LRL, C1:SF, *N* 7/8
shoot (arrow, gun) *-boba* -H:L, *V*
short *-ananjipi* HHH:L, *P con.*
short: be *-injipala* -HHH:L, *V*
short: be *-ipika* -HH:L, *V*
short person: very → leg: calf of
shoulder *livala/mavala* LH:L, E:S2, *N* 5/6
shout, talk much and lively *-pwahika* -HH:L, *V*
show *-langudya* -HFL, *V caus.*
show a disapproving sign with mouth *-lungudula* -HHH:L, *V*
show oneself by a certain way of dancing *-dokadoka* -HHH:L, *V red.*
shut, fasten; hate *-chima* -H:L, *V*
shut eyes *-konidya* -HFL, *V caus.*
sibling of opposite sex: elder *nnumbu/valumbu* LRL, C1:SF, *N* 1/2
sibling of same sex: elder; the eldest sibling irrespective of sex *nkulu/vakulu* LFL, D2:H.no H, *N* 1/2
sibling of same sex: younger *nnung'une/vanung'une* LHH:L, A:S1/SF, *N* 1/2
sibling of the opposite sex: younger *mwanetu/vanetu* LH:L, A:S1/SF, *N* 1/2
sick person *nmwele/vahwele* LH:L, A:S1/SF, *N* 1/2
sickness *uhwele/mahwele* LH:L, A:S1/SF, *N* 14/6
side: other (e.g. of river, valley), beyond *ing'ambo/ding'ambo* LH:L, E:S2, *N* 9/10
sieve *chekecheke* LLRL, C1:SF, *N* 7/-
sift *-peta* -H:L, *V*
sift grain by shaking *-pula* -H:L, *V*
sift grain by tossing *-ululuha* -HHL:L, *V caus.*
sifting basket *chipeto/vipeto* LH:L, A:S1/SF, *N* 7/8
sifting basket (long) *likalala/makalala* LHFL, B:S1, *N* 5/6
sifting basket (round, small) *lijamanda/majamanda* LLFL, E:S2, *N* 5/6
since, because *maika* LRL, C1:SF, *I*
sing *-imba* -H:L, *V*
singe *-kupula* -HH:L, *V*
sink; disappear, vanish *-titimila* -HHH:L, *V*
sister → sibling
sit down, stay, live *-ikala* -HH:L, *V*
six *nnyano na -mo* LLL L RL, *N* 3/- + *P*
size, position *changa/vyanga* FL, C2:H.SF, *N* 7/8
skin *-waula* -HH:L, *V*
skin *limbende/mambende* LH:L, E:S2, *N* 5/6
skin of snake *liyuwu/mayuwu* LH:L,

- E:S2, N 5/6
skip (with rope) *-puta* -H:L, *V*
sky → top
slap → beat
slap off (e.g., flies) *-yamila* -HH:L, *V*
slave *ntumwa/vatumwa* LFL, D2:H.no
H, N 1/2
sleep *-ona* -H:L, *V*
sleep *luwono* LRL, C1:SF, N 11/-
slice; harvest (cassava) *-lenga* -H:L, *V*
small *-amwana* HFL, *P con.*
small *-dikidiki* -HHH:L, A:S1/SF, *A*
small *-dyoko* -H:L, A:S1/SF, *A*
small: become *-chakapala* -HHH:L, *V*
smallpox *chihoba* LRL, C1:SF, N 7/-
smash, pound leaves *-ponda* -H:L, *V*
smear *-lihwang'anidya* -HHLL:L, *V*
refl./caus.
smear *-lipakala* -HLRL, *V refl.*
smell a scent of s.o. or sth. *-yambulila*
-HHH:L, *V*
smithy *chipala/vipala* LRL, C1:SF, N
7/8
smoke *lyohi* H:L, A:S1/SF, N 5/-
snail *inyedi/dinyedi* LH:L, A:S1/SF, N
9/10
snail *unyedi/anyedi* LH:L, A:S1/SF, N
1A/2A
snake *nnyongo/mihongo* LRL, C1:SF, N
3/4
snake sp. (big, colours: brown, white,
black and yellow) *lipatela/mapatela*
LLFL, E:S2, N 5/6
snake sp. (big, green) *namahamba/*
achanamahamba LHFL/LHHHFL,
B:S1, N 1A/2A+
snake sp. (big, very fast, brown, white)
chisanga/visanga LFL, B:S1, N 7/8
snake sp. (big, very poisonous, black,
rising) *nachihungo/achanavihungo*
LLRL/LHHLRL, C1:SF, N 1A/2A+
snake sp. (long, brown) *lukukutu/*
ding'ukutu LHH:L, A:S1/SF, N 11/10
snake sp. (of medium size, brown,
yellow) *nnalu/achannalu*
LFL/LHHFL, B:S1, N 3/2A+
snake sp. (related to python) *ihuhi/*
dihuhi LRL, C1:SF, N 9/10
snake sp. (related to python) *uhuhi/*
ahuhi LRL, C1:SF, N 1A/2A
snake sp. (small, black) *namalutu/*
achanamalutu LHRL/LHHHRL,
C2:H.SF, N 1A/2A+
snake sp. (small, very poisonous,
making jumping movements)
chisumila/visumila LHFL, B:S1, N
7/8
sneeze → put into
snore *-koloma* -HH:L, *V*
snuff (of tobacco) *liposa/maposa* LL:L,
D1:no H, N 5/6
snuff: take a (tobacco) *-nusa* FL, *V*
caus.
snuff: take a (tobacco) *-tona* -H:L, *V*
so and so, such a one *njooni* HRL,
C2:H.SF, *I*
soil (clay) *uloongo* LLFL, E:S2, N 14
soil (clay) *utope* LRL, C1:SF, N 14
soil: red (used as building material)
ingunja/dingunja LFL, B:S1, N 9/10
soil: red (used as building material)
chikunda/vikunda LFL, B:S1, N 7/8
soil: white *lihangahi* LLRL, C1:SF, N
5/?
solitariness, loneliness *uchiva* LFL,
B:S1, N 14
song *luhimo/dihimo* LH:L, A:S1/SF, N
11/10
song *luhimu/dihimu* LH:L, A:S1/SF, N
11/10
soot *machili* LFL, B:S1, N -/6
sorcerer *nnyavi/vahavi* LFL, D2:H.no
H, N 1/2
sorrow → sorry: be
sorry: be *-hinginika* -HHH:L, *V*
sorry: be *-sikitika* -HHH:L, *V*
sour: taste, unripe *-chichima* -HH:L, *V*
source of heat and light (sun, fire,
torch) *nchenje* LL:L, D1:no H, N 3/?
sparkle, be bright (lightning, colours of
flowers) *-meta* -H:L, *V*
speak, say *-tongola* -HH:L, *V*
spear *nkuchi/mikuchi* LFL, B:S1, N 3/4
speech, utterance *ukoto* LRL, C1:SF, N
14
spider *nankakatambwe/*

- anamikakatambwe* LLLL:L/
LHLLL:L, D1:no H, N 1a/2A
- spider web** *usi/miusi* RL/LRL, C1:SF, N 14/4
- spike** (used with hoes to fix the blade to the handle) *lupipi/dimipi* LFL, B:S1, N 11/10
- spill** → pour out
- spirit** (ancestral) *lihoka/mahoka* LRL, C1:SF, N 5/6
- spirit**, heart, soul *isungu/disungu* LFL, B:S1, N 9/10
- spirit**, demon (Sw. jini) *imu/dimu* RL, C1:SF, N 9/10
- spit** -*sunu* -H:L, V
- spit out** (small thing) -*pemba* -H:L, V
- split**, cleave -*vanga* -H:L, V
- split**, cleave, burst -*pasula* -HH:L, V
- spread**, infect -*enelela* -HHH:L, V
- spread**, lay down -*ladya* -FL, V *caus.*
- spring up** → bear fruit
- sprout**, shoot up -*hipuka* -HH:L, V
- sprout**, shoot up -*mela* -H:L, V
- squat** -*nyonyomala* -HHH:L, V
- squeeze** -*kamila* -HH:L, V
- squeeze**, massage -*kada* -H:L, V
- squeeze**, milk -*minya* -H:L, V
- squeeze skin** -*chukudula* -HHH:L, V
- stalk** (of the smaller kind of grains) *luheche/dinyeche* LFL, B:S1, N 11/10
- stand** -*imila* -HH:L, V
- stand on toes** -*dadamila* -HHH:L, V
- stand up**, arise, start -*takatuka* -HHH:L, V
- star** *inondwa/dinondwa* LH:L, A:S1/SF, N 9/10
- stay** → sit down
- stay behind** -*isala* -HH:L, V
- steal** -*iva* -H:L, V
- stem** *lilenga/malenga* LRL, C1:SF, N 5/6
- step in** -*kadamba* -HH:L, V
- stick** (for beating) *chikongo/vikongo* LFL, B:S1, N 7/8
- stick** (for beating) *chikong'o/vikong'o* LFL, B:S1, N 7/8
- stick** (to walk with) *bakola/dibakola* LFL/LLFL, E:S2, N 9c/10c
- stick** (to walk with) *nkangojo/mikangojo* LLRL, C1:SF, N 3/4
- stick**: heavy, cudgel *indonga/dindonga* LFL, B:S1, N 9/10
- stick to**, adhere -*tapuka* -HH:L, V
- sticks**: kind of (long and thin) *hualavala/dimbalavala* LHHL:L, B:S1, N 11/10
- still** → now; not yet
- sting**, beak *lulomo/dindomo* LRL, C1:SF, N 11/10
- stink** -*nung'a* -H:L, V
- stir** -*kolova* -HH:L, V
- stomach** *lipitihu/mapitihu* LLH:L, A:S1/SF, N 5/6
- stone** *liyanga/mayanga* LFL, B:S1, N 5/6
- stone** of mango *ingokwa/dingokwa* LH:L, A:S1/SF, N 9/10
- stone** used with firesticks *ihondo/dihondo* LRL, C1:SF, N 9/10
- stone: round** (for smoothening surfaces, e.g. pots) *ing'ulungu/ding'ulungu* LLRL, C1:SF, N 9/10
- stool** *chigoda/vigoda* LFL, B:S1, N 7/8
- stoop**, bend down -*tepa* -H:L, V
- stop** (doing sth.) → leave
- storage** of produce *ing'okwe/ding'okwe* LL:L, D1:no H, N 9/10
- storage** of produce: type of (plaited of grass) *lichehe/machehe* LRL, C1:SF, N 5/6
- storage of produce**: type of *likungwi/makungwi* LRL, C1:SF, N 5/6
- story** *ntano/mitano* LRL, C1:SF, N 3/4
- story** *lutano/dinano* LRL, C1:SF, N 11/10
- straight: be** -*nyoka* -H:L, V
- straight: make completely**, knead -*kanda* -H:L, V
- straighten** -*udula* -HH:L, V
- stranger** → guest
- straw** (for drinking beer, unfermented drink) *lupehu/dimehu* LH:L, E:S2, N 11/10
- strength**, force, power *dimongo* LRL, C1:SF, N ~/10+3

strike, beat hard -*kong'ona* -HH:L, *V*
strip off; harvest rice -*pulula* -HH:L, *V*
strong → healthy
stub oneself (esp. toe) -*kuvala* -HH:L, *V*
stubbing: sound of, e.g. one's toe
ngwaa LH:, C1:SF?, *I*
stump, trunk of a fallen tree *lihichi/*
mahichi LRL, C1:SF, *N* 5/6
stupidity, foolishness *uvehu* LRL,
 C1:SF, *N* 14
suck -*honda* -H:L, *V*
suck the breast -*yong'a* -H:L, *V*
sue -*longa* -H:L, *V*
sufficient: be, be (with) many, be
 available -*injipika* -HHH:L, *V*
sugar cane *muwa/miwa* RL, C1:SF, *N*
 3/4
suger cane: knuckle of *iminda/diminda*
 LRL, C1:SF, *N* 9/10
sun, day (daytime) *liduva/maduva*
 LH:L, A:S1/SF, *N* 5/6
sunrise: ideophone expressing the
nngwee LHR, C2:H.SF, *I*
sunset (ideophone expressing that the
 sun has disappeared) *pii* HR,
 C2:H.SF, *I*
sunset (ideophone expressing that the
 sun is about to disappear) *piu* HR,
 C2:H.SF, *I*
support → help
surpass, exceed -*punda* -H:L, *V*
surprised: be → astonished: be
swagger: walk with -*deka* -H:L, *V*
swagger: walk with -*nema* -H:L, *V*
Swahili language, nature *chimanga*
 LRL, C1:SF, *N* 7/-
Swahili language, nature *chiswahili*
 LLRL, C1:SF, *N* 7/-
Swahili person *nswahili/vaswahili*
 LLRL, C1:SF, *N* 1/2
swallow -*kumila* -HH:L, *V*
swallow -*mila* -H:L, *V*
swampy soil *chimbwimbwi* HRL,
 C2:H.SF, *N* 7/-
swear an oath -*apila* -HH:L, *V*
sweat -*widuha* -HFL, *V caus.*
sweat *chiwiduhu* LHFL, B:S1, *N* 7/-

sweep -*pyaila* -HH:L, *V*
sweet: be (taste) -*laleha* -HFL, *V caus.*
sweet potato: leaves of *ntolilo/mitolilo*
 LLRL, C1:SF, *N* 3/4
swell → thatch
swell out → bulge
swollen: become -*vehuka* -HH:L, *V*
syphilis *inyambo* LH:L, E:S2, *N* 9/-

T

taboo *mpingo/mipingo* LRL, C1:SF, *N*
 3/4
tail *nchila/michila* LH:L, A:S1/SF, *N*
 3/4
tail (implement of divination) *inyumbu/*
dinyumbu LRL, C1:SF, *N* 9/10
take -*twala* -H:L, *V*
take (out) → give
take down sth. hanging (e.g. dried
 clothing) -*kovokola* -HHH:L, *V*
take off sth. (off body) -*tundula* -HH:L,
V
take off fire, serve food -*teula* -HH:L,
V
talk, converse -*kunguluka* -HHH:L, *V*
talk, converse -*lonjela* -HH:L, *V*
talk much and lively → shout
tall → long
tap, knock, beat (of heart) -*dukula*
 -HH:L, *V*
tap, knock, beat (of heart) -*papa* -H:L,
V
taste (food); imitate, mimic; refresh
 -*yedya* -FL, *V caus.*
teach -*fundisa* -HFL, *V caus.*
teach (to behave with respect and
 dignity) -*hunda* -H:L, *V*
tear *nnyodi/mihodi* LH:L, A:S1/SF, *N*
 3/4
tear -*valula* -HH:L, *V*
tear (tr., cloths, etc.) -*papula* -HH:L, *V*
tear (tr., twigs, etc.) -*pwapula* -HH:L, *V*
tear loose: try to -*pikita* -HH:L, *V*
teat *ihonga/dihonga* LRL, C1:SF, *N*
 9/10
tell, say, speak, explain -*haua* -HH:L, *V*
tell a story -*tana* -H:L, *V*
tell s.o., explain, advise -*haulila*

- HHH:L, *V*
ten *likumi/makumi* LRL, C1:SF, *N* 5/6
termite sp. (small winged, not edible)
imbwilimbwindi/dimbwilimbwindi
 LLHRL, C2:H.SF, *N* 9/10
termite sp. (small winged, not edible)
umbwilimbwindi/ambwilimbwindi
 LLHRL, C2:H.SF, *N* 1A/2A
termite sp. (winged) *ingumbi/dingumbi*
 LFL, B:S1, *N* 9/10
termite sp. (winged) *ungumbi/angumbi*
 LFL, B:S1, *N* 1A/2A
termite hill *chisulu/visulu* LFL, B:S1, *N* 7/8
termite(s) *ucheche* LRL, C1:SF, *N* 14
terms: come to, be reconciled,
 harmonize *-patana* -HH:L, *V*
testicle *inongo/dinongo* LRL, C1:SF, *N* 9/10
testicle *chitoko/vitoko* LFL, B:S1, *N* 7/8
testicle *litoko/matoko* LFL, B:S1, *N* 5/6
thanks → do
that (*a*)-*la* LL:H, *P dem.*
that (Compl.) *kuchidono* HHRL, *V fin.*
that (Compl.) *kuchi* H:H, *V fin.*
that (emphatic) *u-la* LFH, *P dem.*
that (short forms) (*a*)- L:H, *P dem.*
thatch; swell *-vimba* -H:L, *V*
their -*a(v)o* RL, C1:SF, *P pos.*
then, finally, at the end; if *koka* H:L,
 A:S1/SF?, *I*
therefore → also
they *vanang'o* LH:L, E:S2, *P subst.*
they (emphatic) *uvanang'o* LHFH, *P subst.*
thicket: cleared (before being
 cultivated) *luunji/dimunji* LH:L,
 E:S2, *N* 11/10
thicket: dense *nnyitu/mihitu* LH:L,
 A:S1/SF, *N* 3/4
thicket: thorny *chiholo/viholo* LRL,
 C1:SF, *N* 7/8
thin: be *-yanda* -H:L, *V*
thing *chinu/vinu* RL, C1:SF, *N* 7/8
thing, substance, what a thing is made
 of *chitukutuku/vitukutuku* LLHFL,
 E:S2, *N* 7/8
think → remember
third *-atatu* HFL, *P con.*
third day after tomorrow *ntondo*
 LH:L, A:S1/SF, *N* 3/-
thirst *inyota* LH:L, A:S1/SF, *N* 9/-
thirsty: be → dry: be
this (*a*)-*no* LRL, *P dem.*
this (emphatic) *u-no* LFH, *P dem.*
this (short forms) (*a*)- RL, *P dem.*
this, that (referential) (*a*)*ne-o* HFH, *P dem.*
this, that (referential emphatic) (*u*)-*o-o*
 LFH, *P dem.*
this, that (referential short forms) (*a*)-*o*
 L:H, *P dem.*
this/that one: right (*u*)-*o-* LFH, *P dem.*
thorn *mwiva/miva* H:L, A:S1/SF, *N* 3/4
three *-tatu* -RL, C1:SF, *A*
thresh; harvest millet, peas *-hola* -H:L,
V
thresh; harvest millet, peas *-hula* -H:L,
V
throat *lukalongo/ding'alongo* LLRL,
 C1:SF, *N* 11/10
throw at *-yela* -H:L, *V*
throw away; lose *-yaha* -H:L, *V*
throw down *-tundunya* -HFL, *V caus.*
thunder; have a bad headache *-valula*
 -HH:L, *V*
thus, so, as follows *uvila* LFL, B:S1, *I*
tickle *-dikadika* -HHH:L, *V red.*
tickle *-dukuladukula* -HHHHH:L, *V red.*
tie, fasten, fix *-hunga* -H:L, *V*
tied: get, curdle *-kama* -H:L, *V*
time, period, journey *mwanda/myanda*
 H:L, A:S1/SF, *N* 3/4
tired: be, be hungry *-doba* -H:L, *V*
tobacco *tumbaku* LFL, E:S2, *N* 5b/-
today *nelo* RL, C1:SF, *I*
together *pamo* RL, C1:SF, *P*
together *chalumo* LRL, C1:SF, *I*
tomato *linyindwa/manyindwa* HRL,
 C2:H.SF, *N* 5/6
tomorrow *luundu* HRL, C2:H.SF, *N* 11/-
tomorrow *nuundu* HRL, C2:H.SF, *I*
tong *mmuva/mivuva* LRL, C1:SF, *N* 3/4
tongue *lulimi/dindimi* LH:L, A:S1/SF,

- N 11/10*
tonsil *chilakali/vilakali* LHFL, B:S1, *N 7/8*
tooth *lino/meno* H:L, A:S1/SF, *N 5/6*
tooth: molar *litang'unilo/matang'unilo* LHHH:L, A:S1/SF, *N 5/6*
top, above, sky *muha* RL, C1:SF, *N 18*
torch *chihumbo/vihumbo* LRL, C1:SF, *N 7/8*
torment, cause to feel pain *-ndonda* -H:L, *V*
tortoise *ing'ambe/ding'ambe* LFL, B:S1, *N 9/10*
tortoise *ung'ambe/ang'ambe* LFL, B:S1, *N 1A/2A*
touch, press *-toha* -FL, *V caus.*
track *lwayo/dinjayo* RL/LRL, C1:SF, *N 11/10*
trade *uhambachi* LLRL, C1:SF, *N 14*
trap *-teya* -H:L, *V*
trap *lutambo/dinambo* LRL, C1:SF, *N 11/10*
trap: type of (rope, to trap bigger animals) *likocho/makocho* LH:L, A:S1/SF, *N 5/6*
trap: type of (rope, to trap birds) *chikungo/vikungo* LH:L, A:S1/SF, *N 7/8*
trap: type of (rope, to trap e.g. klipspringers) *lupupuso/dimupuso* LLL:L, D1:no H, *N 11/10*
trap: type of (rope, to trap small bush animals) *liputula/maputula* LLFL, E:S2, *N 5/6*
trap: check a (whether an animal is caught) *-onda* -H:L, *V*
trap: set a *-inikila* -HHH:L, *V*
tread *livata/mavata* LRL, C1:SF, *N 5/6*
tread on, put food on *-livata* -HH:L, *V*
tread on, put foot on *-luvata* -HH:L, *V*
treat a sick person *-uudya* -HFL, *V caus.*
tree *nnandi/milandi* LFL, B:S1, *N 3/4*
tree sp. *mmalala/mivalala* LHFL, B:S1, *N 3/4*
tree sp. *mmbilwa/mimbilwa* LL:L, D1:no H, *N 3/4*
tree sp. *mmula/miwula* LH:L, A:S1/SF, *N 3/4*
tree sp. *mmwindi/mihwindi* LH:L, A:S1/SF, *N 3/4*
tree sp. *nchenga/michenga* LH:L, E:S2, *N 3/4*
tree sp. *nchinji/michinji* LFL, B:S1, *N 3/4*
tree sp. *nkalang'ombe/mikalang'ombe* LHHRL, C2:H.SF, *N 3/4*
tree sp. *nkwayu/mikwayu* LH:L, A:S1/SF, *N 3/4*
tree sp. *nnyadi/mihadi* LH:L, A:S1/SF, *N 3/4*
tree sp. *ntengo/mitengo* LRL, C1:SF, *N 3/4*
tree sp. *ntungulu/mitungulu* LHRL, C2:H.SF, *N 3/4*
tree sp. (growing near the coast) *nkoko/mikoko* LRL, C1:SF, *N 3/4*
tree: baobab *nnonji/milonji* LH:L, E:S2, *N 3/4*
tree: ebony *mpingo/mipingo* ?, *N 3/4*
tree: kapok *nsufi/misufi* ?, *N 3/4*
tree: tamarind *nkwedu/mikwedu* LH:L, A:S1/SF, *N 3/4*
tree: wild date *lilala/malala* LRL, C1:SF, *N 5/6*
tremble → shiver
trial (by ordeal) *mwavo/myavo* RL, C1:SF, *N 3/4*
troubled: be *-kedekeda* -HHH:L, *V*
true: be, be effective (medicine) *-londa* -H:L, *V*
trunk *litepo/matepo* LH:L, A:S1/SF, *N 5/6*
trust, hope *-kulupila* -HHH:L, *V*
try, attempt *-linga* -H:L, *V*
tsetse fly *chipanga/vipanga* LFL, B:S1, *N 7/8*
turkey sp. *nditi/miditi* LH:L, A:S1/SF, *N 3/4*
turkey sp. *mwikumba/anamikumba* HFL/LHHFL, B:S1, *N 3/2A*
turn *-lauka* -HH:L, *V*
turn restlessly (as in pain) → crackle
turn round, stir (e.g. in making cassava porridge) *-kolowanya* -HHL:L, *V caus.*

twin *livila/mavila* LH:L, A:S1/SF, N 5/6

twine → twist

twist, plait *-luka* -H:L, V

twist, twine *-popota* -HH:L, V

twist, twine *-pota* -H:L, V

twist with body during dance

-nung'unula -HHH:L, V

two *-vili* -RL, C1:SF, A

U

uncle (mother's brother) *anang'ala* LHFL, D2:H.no H, N 2A/-

uncle (mother's brother) *njomba/vajomba* LFL, D2:H.no H, N 1/2

uncle: wife of (of mother's brother) *mukwe/achamukwe* RL/LHRL, C1:SF, N 1/2A+

unclear: be (words) → fire: lack enough

uncleared space in field *luhole/dihole* LRL, C1:SF, N 11/10

uncomfortable: feel → restless: be; → humiliated: feel

uncover, take off lid *-hunikula* -HHH:L, V

uncover, take off lid *-hunukula* -HHH:L, V

under, below *nniungu* LLRL, C1:SF, N 18

underdone: get (food) → fire: lack enough

undress *-ula* -H:L, V

unripe *-vihi* -H:L, A:S1/SF, A

unthatch *-vimbula* -HH:L, V

up and down: go (e.g. fontanel on head of baby) *-tohoma* -HH:L, V

uproot → pull out, dig out

urinate *-kwama* -H:L, V

urinating: pain while *lukwedo* LH:L, E:S2, N 11/-

urine *makwedo* LFL, B:S1, N -/6

use *-tumila* -HH:L, V

used to: be, get accustomed *-dyovelela* -HHH:L, V

useless → bare

V

valley *luhalelo/dihalelo* LLRL, C1:SF, N 11/10

valley, river *luhunde/dihunde* LRL, C1:SF, N 11/10

vegetable *imbowa/dimbowa* LRL, C1:SF, N 9/10

vein *nnanga/minanga* LH:L, E:S2, N 3/4

verandah, place before a house *lupenu/dimenu* LRL, C1:SF, N 11/10

very *namene* HRL, C2:H.SF, I

very *sana* RL, C1:SF, I

vexed: be, be angry *-sunala* -HH:L, V

village *kumayaya* LLL:L, D1:no H, N 17

village → homestead

visible: be → appear

voice *lidi/malidi* RL/LRL, C1:SF, N 5/6+

vomit *-kodyoka* -HH:L, V

vomit *-tapika* -HH:L, V

W

waist *chikundu/vikundu* LFL, B:S1, N 7/8

wait *-linda* -H:L, V

walk *-hwenahwena* -HHH:L, V *red.*

walk quickly *-peya* -H:L, V

walk: take a, stroll *-onga* -H:L, V

wall *libaka/mabaka* LRL, C1:SF, N 5/6

want, like, desire, wish, look for *-lembela* -HH:L, V

war → quarrel

wash (clothes) *-chapa* -H:L, V

wash (hands) *-kalava* -HH:L, V

wash private parts (women) *-likasaula* -HHLRL, V *refl.*

wasteland (grass, few trees) *lilanga/malanga* LRL, C1:SF, N 5/6

water *medi* H:L, A:S1/SF, N -/6

we *hweetu* HRL, C2:H.SF, P *subst.*

we (emphatic) *uhwehwe* LFH, P *subst.*

weak and slack: become *-dulumbuka* -HHH:L, V

wear *-wala* -H:L, V

weed *lukwekwe/ding'wekwe* LH:L,

E:S2, *N 11/10*
weed sp. *nachitani* LHFL, D2:H.no H, *N 3a/-*
weed sp. *nahuhwe* LH:L, A:S1/SF, *N 3a/-*
weed sp. *nanchochi* LLRL, C1:SF, *N 3a/-*
weed sp. *nangahwa* LH:L, A:S1/SF, *N 3a/-*
welcome → want; → tell s.o.
well *muto/myuto* RL, C1:SF, *N 3/4*
well (digged) *chihima/vihima* LFL, B:S1, *N 7/8*
wet: **get**, be soaked -*lova* -H:L, *V*
what *chamani* HRL, C2:H.SF, *I*
what kind of *ntwani* HFL, D2:H.no H, *I*
when *chakani* HRL, C2:H.SF, *I*
when *nduvani* LHRL, C2:H.SF, *I*
where *kwachi* RL, C1:SF, *I*
whether → or
which -*lida* -FL, B:S1, *P*
white -*anaswe* HH:L, *P con.*
white: **be** (rash) -*swelela* -HH:L, *V*
who -*nani* -RL, C1:SF, *A*
whole → healthy
whose -*a-nani* HLRL, *P con.*
why *mwadachi* LRL, C1:SF, *I*
wide: **be** -*yandauka* -HHH:L, *V*
widow *numilanga/valumilanga* LHH:L, D2:H.no H, *N 1/2*
wife: **my** *adyangu/achadya vangu* LFL/LHH RL, C2:H.SF, *N 2A/2A+*
wild-dog (Sw. *mbwamwitu*) *lihoho/mahoho* LFL, B:S1, *N 5/6*
wildcat sp. *lichelela/machelela* LLRL, C1:SF, *N 5/6*
wildcat sp. *liloda/maloda* LRL, C1:SF, *N 5/6*
wind *lipungo* LRL, C1:SF, *N 5/-*
wind *mpapa/mipapa* LH:L, A:S1/SF, *N 3/4*
window *chitonono/vitonono* LHH:L, A:S1/SF, *N 7/8*
winds: **rain** *bringing chibunga* LRL, C1:SF, *N 7/-*
wing *lupapa/dimapa* LRL, C1:SF, *N 11/10*

winnowing tray *chihelo/vihelo* LRL, C1:SF, *N 7/8*
wipe off -*pukuta* -HH:L, *V*
wisdom, intellect, understanding *ding'ano* LRL, C1:SF, *N -/10*
wish → want
witchcraft *uhavi* LFL, B:S1, *N 14*
witchcraft: **practice** -*peleka* -HH:L, *V*
witchcraft: **practice**, bewitch -*lowa* -H:L, *V*
wither -*lovela* -HH:L, *V*
without *nmuvalu* LLRL, C1:SF, *N 18*
woman *mmahe/vamahe* LH:L, A:S1/SF, *N 1/2*
woman *nkongwe/vakongwe* LFL/LH:L, B:S1/E:S2, *N 1/2*
woman: **barren** *ntonga/mitonga* LH:L, E:S2, *N 1/2*
word *lilove/malove* LH:L, A:S1/SF, *N 5/6*
work *lidengo/madengo* LRL, C1:SF, *N 5/6*
worn out: **be** -*lika* -H:L, *V*
worn piece of clothing *lidambi/madambi* LRL, C1:SF, *N 5/6*
wound *chilonda/vilonda* LRL, C1:SF, *N 7/8*
wound, get hurt, be ill -*pweteka* -HH:L, *V*
wrap around -*livimba* -HRL, *V refl.*
wring out -*popotola* -HHH:L, *V*
wrist *inyung'unyung'u* *dinyung'unyung'u* LHHH:L, A:S1/SF, *N 9/10*
write -*lemba* -H:L, *V*

Y

yam *chitundi/vitundi* LRL, C1:SF, *N 7/8*
Yao language, nature *chihau* HFL, D2:H.no H, *N 7/-*
Yao person *nnyau/vahau* HFL, D2:H.no H, *N 1/2*
yawn -*yahula* -HH:L, *V*
year *chaka/vyaka* H:L, A:S1/SF, *N 7/8*
year *mwaka/myaka* H:L, A:S1/SF, *N 3/4*
year: **last** *machedo* LH:L, A:S1/SF, *N*

-/6

year: this *namwaka* HFL, D2:H.no H,
N 3a

yes! *elo* RL, C1:SF, *I*

yesterday *lido* RL, C1:SF, *N 5/-*

you (pl.) *mweenu* HRL, C2:H.SF, *P*
subst.

you (pl.) (emphatic) *umwemwe* LFH, *P*
subst.

you (sg.) *waako* HRL, C2:H.SF, *P*
subst.

you (sg.) (emphatic) *uwewe* LFH, *P*
subst.

your (pl.) *-emu* RL, C1:SF, *P pos.*

your (sg.) *-ako* RL, C1:SF, *P pos.*

youth *ndyoko/vadyoko* LH:L, A:S1/SF,
N 1/2

C.3 Comparative wordlist of five dialects

We here present a short wordlist of the four dialects of Chimakonde (Tanzania) and of one dialect of Shimakonde (Mozambique) for comparison. The four dialects of Chimakonde are Chinnima (the main topic of this dissertation), Chindonde, Chimaraba and Chimatambwe. The dialect of Shimakonde is spoken on the central plateau of Mueda and Muidumbi (Benjamin Leach, p.c.).

We selected nouns, verb forms and tense markers from our word lists which we felt are most interesting for comparison. The glosses of these words are given below; their numbers correspond with the numbers in the word list. Six missing words are indicated by a question mark.

1. woman	12. ear	23. dance	34. cultivate	44. when we eat
2. women	13. foot	24. dances	35. give birth	(Indirect Relative Present)
3. elder	14. stones	25. fish	36. speak	
4. child	15. pot	26. fish (pl)	37. I	45. tense marker
5. person	16. maize cob	27. wing	38. you (sg)	Present Perfective
6. people	17. body	28. wings	39. (s)he	46. tense marker
7. head	18. chins	29. root	40. we	Conditional
8. skin	19. rain	30. roots	41. you (pl)	47. tense marker
9. word	20. feather	31. neck	42. they	Negative Present
10. clan	21. nose	32. hear	43. let us eat	
11. dew	22. house	33. eat	(Optative with object concord)	

The **h** in Chindonde words after the NPx of classes 9 and 10 represents the voiceless nasal (see 2.2). The tonal sequence **eēé** found in Shimakonde and Chindonde represents a phonetic mid or lowered H tone followed by a H tone. (Other accounts of Shimakonde (Liphola 2001, Manus 2003) describe this tonal sequence as LHL.) The **mbr** in the Chimaraba word for ‘rain’ represents the prenasalized consonant **mb** with a roll.

	Chimátáambwe	Chíndóonde	Chínííma	Chimáláaba	Shímákoonde
1.	?	mmááhe	nkóongwe	mmááhe	nkóongwe
2.	?	vamááhe	vakoóongwe	vamááhe	vakoóongwe
3.	nkúúlu	nkúluungwa	nkúluungwa	nkúluungwa	nángóólo
4.	mwáana	mwáana	mwáana	mwáana	mwáana
5.	muúnu	muúnu	muúnu	muúnu	muúnu
6.	vaánu	vaánu	vaánu	vaánu	vaánu

	Chimátáambwe	Chíndóonde	Chínfíma	Chimáláaba	Shímákoonde
7.	muútwe	muúti	muútwe	muútwe	muúti
8.	limbéénde	limbéénde	limbéénde	ngóózi	ligwóógwe
9.	lilóóve	lilóóve	lilóóve	linééno	lilóóve
10.	likóóla	litáawa	litáawa	litáawa	likóóla
11.	lingaame	liime	liime	liime	liimi
12.	lyaátu	likuútu	likuútu	likuútu	lyáátu
13.	lidoódo	lidóódo	likumbaátu/ ludóódo	kuúlu	likambaāātu
14.	mayáanga	mayáanga	mayáanga	mayáanga	májáanga
15.	chilóóngo	chilóóngo	chiloóongo	chilóóngo	shiloóongo
16.	chikwaakwa	?	chikookwa	chikoókwa	?
17.	chivúimba	mmiili	mmiili	mmiili	ligwúmbu
18.	viyeewe	viyeu	viyeewe	viyeewe	vijeegwe
19.	mbúúla	imbuula	imbúúla	mbrúúla	imbúúla
20.	njúúya	lileéha	lileéha	lileéha	lunduúúja
21.	muúla	ihmuúla	imuúla	muúla	imuúla
22.	ng'áánde	ihnyúumba	ing'áánde	nyúumba	ing'aāánde
23.	ng'óóle	ihng'oóle	ing'oóle	ngóóma	ing'óóma
24.	ding'óóle	jihng'oóle	ding'oóle	jingóóma	ding'óóma
25.	hóomba	ihóomba	ihóomba	yóomba	?
26.	dihóomba	jihóomba	dihóomba	jiyóomba	dyoomba
27.	lupaápa	lupaápa	lupaápa	lupaápa	lupaápa
28.	dimaápa	jihmaápa	dimaápa	jimaápa	dimaápa
29.	luchííya	luchííya	luchííya	nzíízi	lúshííja
30.	dinyííya	jihnyííya	dinyííya	?	dínyííja
31.	ukoóti	ukoóti	ukoóti	ukoóti	ukoóti
32.	ulíinda	ulíinda	ulíindo	uwiímbo	ugwúmbu
33.	kúúlya	kuúúlya	kúúlya	kuúlya	kúúlya
34.	kulííma	kulííma	kulííma	kulííma	kulííma
35.	kuvélééka	kuválééka	kuvélééka	kuvélééka	kúválééka
36.	kutóngóóla	kutángóóla	kutóngóóla	kutóngóóla	kútángóóla
37.	nnéey(ya)	náaángu	náaángu	míípa	naāángu
38.	uwéey(ya)	wáaáko	wáaáko	wéépo	waāáko
39.	wénéeyo/ nááhe	naāáng'e	nááng'e	nááng'e	náae
40.	uhwéey(ya)	hwéecétu	hwéecétu	wéépa	weēétu
41.	mmwéey(ya)	mwéecénu	mwéecénu	mwéépo	mweēénu
42.	véney(vo)	vanááng'o	vanááng'o	vanááng'o	vanaāáo
43.	tuulyé	tuulyé	tuulyé	tuulyé	tuulyé
44.	pútúulya	patúulya	patúulya	pátúulya	pátúulya
45.	-ndi-	-ni-	-ni-	-ni-	-ndi-
46.	-ka-	-ka-	-ka-	-ka-	-ka-
47.	-ká-	-ká-	-ká-	-ká-	-ká-

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Samenvatting (Summary in Dutch)

Deze studie behelst een synchrone beschrijving van de Tanzaniaanse Bantu-taal het Makonde, met name van de noordwestelijke variant ervan, het Chinnima. Voorafgegaan door kaarten van het onderzoeksgebied en de dialectsituatie in Zuid-Tanzania en Noord-Mozambique, wordt in hoofdstuk 1 een kort overzicht gegeven van de geografische en socio-linguistische situatie van de taal, de classificatie, het veldwerk en de onderzoeksgeschiedenis. Het hoofdstuk wordt afgesloten door een korte inleiding op de grammatica waarin een onderscheid gemaakt wordt tussen lexicale en post-lexicale processen die elk hun eigen condities en (geordende) regels hebben.

In hoofdstuk 2 wordt de fonologie behandeld, met daarin de inventaris van de klanken, de lettergreepstructuur en de klankregels. Het Chinnima heeft 21 consonanten en 5 vocalen. De typische lettergreep is open, d.w.z. eindigt op een klinker, maar ook de syllabische nasaal geldt als een lettergreep. Het gedrag van de nasaal is interessant, zowel het gedrag van de syllabische nasaal als ook die van de stemloze nasaal waar allerlei morfofonologische processen (zoals prenasalisatie) een rol spelen.

In hoofdstuk 3 beschrijven we prosodie, met name het verschijnsel toon. Makonde is een toontaal van het type “voorspelbare” toontalen (Odden 1988): er zijn geen lexicale tooncontrasten in verbal stammen, en waar de hoge tonen worden toegekend hangt af van de morfologische (*tense-aspect*) categorie van verbale vorm. Lage tonen worden laat in de derivatie per default toegekend. In onze analyse zijn er 5 verschillende tonale profielen voor stammen, en die profielen gelden voor stammen van alle woordcategorieën. Omdat ook prefixen een (hoge) toon kunnen hebben, resulteert de combinatie van de toon van de prefixen en de tonale profielen van de stammen in 7 verschillende toongroepen. Verder komt in het hoofdstuk aan de orde dat zinnen in het Makonde op twee manieren geordend worden: op een syntactische manier (met syntactische groepen) en op een prosodische manier (met fonologische groepen, *phonological phrases*). De fonologische groep is het basisdomein in de prosodische structuur. Een fonologische groep kan uit één tot vier woorden bestaan, en de voorlaatste syllabe van z'n laatste woord wordt automatisch verlengd (*penultimate lengthening*). Een fonologische groep kan uit één woord bestaan, en dat woord wordt dan uitgesproken in citatievorm. De tonale processen die van toepassing zijn op fonologische groepen die uit één woord bestaan worden beschreven in hoofdstuk 3, langere fonologische groepen (zoals zelfstandig naamwoord plus demonstratief, en werkwoord plus complement) worden beschreven in hoofdstuk 8. Aan het eind van hoofdstuk 3 worden de grotere prosodische domeinen beschreven: een of meerdere fonologische groepen bij elkaar vormen een intonatiegroep, en een of meerdere intonatiegroepen vormen een zinsuitspraak (*utterance*).

Interessant is verder de status van monosyllabische stammen; zij worden gebouwd naar het voorbeeld van disyllabische klinker-initiële stammen. Hun laatste lettergreep is complex, d.w.z. het bestaat onderliggend uit twee klinkers, net als de laatste syllabe

van causatieven en passieven. De laatste syllabe van gelexicaliseerde passieven en die van disyllabische imperatieven worden gebouwd naar het voorbeeld van monosyllabische stammen, causatieven en passieven. Finale lettergrepen zijn in het algemeen niet extraprosodisch; ze kunnen dus een (onderliggende) hoge toon hebben, maar alleen de laatste lettergreep van het laatste woord van een fonologische groep mag geen hoge toon aan de oppervlakte hebben. Verder komt Meeussens Regel aan de orde. Dit is een regel die beperkingen oplegt aan de mate van nabijheid van twee hoge tonen. Als twee hoge tonen naast elkaar verschijnen, d.w.z. op twee adjacenten morae, dan verdwijnt de tweede hoge toon. De mora is de toondragende eenheid in het Chinnima. Er zijn verschillende tonale domeinen waarop de tonale regels werken: de syllabe (bijv. toonassimilatie), de stam (bijv. hoge toonbrug), de macrostam (bijv. hoge toonsprong), het woord (bijv. hoge toondubbeling) en de frase (bijv. regressieve hoge toondissimilatie, hetgeen behandeld wordt in hoofdstuk 8). Wanneer het domein de (macro)stam is, moeten regels ook rekening houden met de syllabeverdeling. Andere prosodische processen zoals *penultimate lengthening* werken op de (voorlaatste) syllabe.

In de hoofdstukken 4 tot 6 worden de zelfstandige naamwoorden, de pronominale vormen, de invariabele vormen en de werkwoorden beschreven. Hun structuur wordt onder de loep genomen en hun tonale eigenschappen besproken. Bij de zelfstandige naamwoorden in hoofdstuk 4 komt het befaamde naamwoordklassesysteem aan de orde. Zelfstandige naamwoorden, alsook pronominale vormen, bestaan uit een naamwoordprefix en een stam. Het naamwoordprefix verradert tot welke klasse het woord behoort. De meeste zelfstandig naamwoorden behoren tot twee van de 16 verschillende klassen, waarvan de één het enkelvoud aangeeft en de andere het meervoud. Zo'n klassenpaar wordt ook wel *gender* genoemd. Het zelfstandig naamwoord speelt een voorname rol in het systeem van concordantie, d.w.z. woorden die afhankelijk zijn van het zelfstandig naamwoord nemen een prefix dat tot dezelfde klasse behoort als het naamwoord. Deze woorden betreffen nominale vormen, pronominale vormen en werkwoorden. Verder wordt veel aandacht besteed aan nominale derivatie, met name aan de extra nominale prefixen die voor de eigenlijke prefixen kunnen komen, zoals de locatieve prefixen. Hun tonale gedrag toont de fonologische status van het hele woord en de volgorde van aanhechting in het lexicon. In hoofdstuk 5 vinden we de pronominale vormen zoals de aanwijzende voornaamwoorden, de bezittelijke voornaamwoorden en andere specificieerders die een zelfde soort prefix nemen, alsook de invariabelen die onveranderlijk zijn. Bij de werkwoorden in hoofdstuk 6 beschrijven we eerst hoe een werkwoordsvorm er doorgaans uitziet: een stam, bestaande uit een wortel, derivationele suffixen en een finaal, wordt voorafgegaan door een object prefix, een tijdsmarkeerder en een subject prefix. Elke werkwoordsvorm behoort tot een bepaalde vervoegingsklasse die we *tense* noemen. Veel aandacht wordt besteed aan de verbale extensies en suffixen die zich als extensies gedragen en hun ordening ten opzichte van elkaar.

Hoofdstuk 7 laat de meer dan 40 verschillende *tenses* zien, tot welke toongroepen ze behoren, en hun verdeling in *conjoint*, *disjoint* en *conjoint-disjoint*. Dit laatste

onderscheid is nauw verweven met de prosodische structuur van de taal waarin fonologische groepen een hoofdrol spelen: bij conjoint *tenses* verschijnen het werkwoord en het daaropvolgende woord in één en dezelfde fonologische groep, bij disjoint *tenses* niet, en bij conjoint-disjoint *tenses* bepalen de syntactische omgeving of gewoon pragmatische overwegingen of woorden in één en dezelfde fonologische groep verschijnen of niet. De informatiestructuur (focus, nieuwe informatie, enz.) speelt een sleutelrol in het onderscheid conjoint/disjoint. Ook is er aandacht voor complexe *tenses* en samengestelde *tenses*; een complexe *tense* is één werkwoordsvorm die opgebouwd is uit verschillende (delen) van werkwoorden, een samengestelde *tense* is opgebouwd uit een hulpwerkwoord en een hoofdwerkwoord.

De tonologie van groepen woorden wordt besproken in hoofdstuk 8, d.w.z. de tonale processen van langere fonologische groepen zoals zelfstandig naamwoord plus bezittelijk voornaamwoord en werkwoord plus complement. Het blijkt dat ook specificieerders op een zelfde manier kunnen worden ingedeeld als *tenses*, namelijk in conjoint, disjoint and conjoint-disjoint specificieerders. Omdat syntaxis en prosodie in het Makonde niet op dezelfde manier gestructureerd zijn, werpen de resultaten van de beschrijving in dit hoofdstuk een interessant licht op de relatie fonologie-syntaxis.

De appendices bevatten de paradigma's van de *tenses* (appendix A), teksten over bijvoorbeeld de ontstaansgeschiedenis en recepten, alsook spreekwoorden, raadsels en liederen (appendix B), een woordenboekje Chinnima-English en English-Chinnima (appendices C1 and C2) met daarbij een korte dialectvergelijking (appendix C3). Het werk wordt afgesloten met een geselecteerde boekenlijst op het gebied van taalkunde en Makonde cultuur.

Curriculum vitae

Peter Kraal was born on 15 February 1963 in Papendrecht, the Netherlands. In 1981, he completed high school (*atheneum*) at the *CSG De Lage Waard* in Papendrecht. He joined Leiden University in 1984 and received his *propedeuse* certificates Classical Languages in 1985 and African Linguistics in 1986. He continued to study General Linguistics as well, and in 1990 he received the MA degree in African Linguistics with a thesis about Shingazidja, the language of Grand Comore, the largest island of the Comoro archipelago where he had done fieldwork in summer 1988. Between April 1991 and October 1995, he was a Ph.D candidate (*aio*) of the CNWS research school of Leiden University, and started to work on Makonde, in the south of Tanzania where fieldwork was carried out in two periods between 1991 and 1994. He taught African Linguistic courses in Leiden University between August 1998 and February 1999, and Swahili courses in Leiden University (1992), Dordrecht (1998) as well as in a language school in Rotterdam (2000). Since April 2001, he has a position as a teacher Dutch as a second language (*NT2*) at the *Da Vinci College* in Dordrecht and Papendrecht where he is involved in teaching people from all over the world.