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ABBREVIATIONS

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

Situation in Mozambique based on Mpuuma and Mandumbwe (1991:25).
Map 2: The Makonde-speaking area in Mtwara Region, Tanzania, including a selected list of towns and villages
<table>
<thead>
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<th>Masasi District:</th>
<th>Newala District:</th>
<th>Mtwara District:</th>
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<tbody>
<tr>
<td>L Chikundi Division</td>
<td>G Liteho Division</td>
<td>A Mpapura Division</td>
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<td>M Lisekese Division</td>
<td>H Namikupa Division</td>
<td>1 Mgao</td>
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<td>31 Masasi</td>
<td>17 Kwanyama</td>
<td>B Mayanga Division</td>
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<td>N Lulindi Division</td>
<td>I Mahuta Division</td>
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<td>32 Majembe</td>
<td>18 Namahonga</td>
<td>3 Naumbu</td>
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<td>33 Malatu</td>
<td>19 Mahuta</td>
<td>4 Mikindani</td>
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<td>O Chiungutwa Division</td>
<td>J Kitangari Division</td>
<td>5 Msangamkuu</td>
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<td>34 Mpete</td>
<td>20 Nkudumba</td>
<td>6 Likonde</td>
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<td>23 Mnyambe</td>
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<td>15 Dihimba</td>
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<td>16 Miuta</td>
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<td>F Nanyamba Division</td>
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1. INTRODUCTION

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. 900 m. 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 *mwipwewe*. 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 Mafitu, 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 Chinonda, 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 Kimgao, 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 Kimgao. We had hoped to find traces of Kimgao, but during our short visits to the village of Mgao, we concluded that Kimgao has completely been replaced by Kiunguja, as has occurred elsewhere. The only trace may be in the name: people speak of Kimgao 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 *MJWALU*.

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 Ndonde people to the southern part of the plateau; they speak the Chindonde 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 Ndonde 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 Mbenkuru 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 Mtwarra 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.

<table>
<thead>
<tr>
<th>Makonde</th>
<th>Shimakonde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chimakonde</td>
<td>Shimakonde</td>
</tr>
<tr>
<td>Chinnima</td>
<td>Shimakonde do Planalto</td>
</tr>
<tr>
<td>Chindonde</td>
<td>Shindonde</td>
</tr>
<tr>
<td>Chimaraba</td>
<td>Shiyanga</td>
</tr>
<tr>
<td>Kimakwe</td>
<td>Shimwalu</td>
</tr>
<tr>
<td>Chimatambwe</td>
<td>Shimwambe</td>
</tr>
<tr>
<td>Chimachinga?</td>
<td>Simakonde</td>
</tr>
<tr>
<td>Kimwani?</td>
<td></td>
</tr>
</tbody>
</table>

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, Mtwaru 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 Ntondo, 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.

<table>
<thead>
<tr>
<th>tone group</th>
<th>Prefix H</th>
<th>tonal stem profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF-H</td>
<td>H H CV-CVCVCV</td>
</tr>
<tr>
<td>B</td>
<td>S1-H</td>
<td>H CV-CVCVCV</td>
</tr>
<tr>
<td>C1</td>
<td>SF-H</td>
<td>H CV-CVCVCV</td>
</tr>
<tr>
<td>C2</td>
<td>H</td>
<td>SF-H HCV-CVCVCV</td>
</tr>
<tr>
<td>D1</td>
<td>no H</td>
<td>CV-CVCVCV</td>
</tr>
<tr>
<td>D2</td>
<td>H</td>
<td>no H HCV-CVCVCV</td>
</tr>
<tr>
<td>E</td>
<td>S2-H</td>
<td>H CV-CVCVCV</td>
</tr>
</tbody>
</table>

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.

```
OC    root    extension    Final
  -va-  -himb -il-  -a
```

verbal base

```
|            |
```

verbal stem

```
|            |
```

macrostem

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).

```
H    H    H
|    |    |
```

ku-va-himbila

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 chimákóonde | we spoke Makonde
tu-tongwele chimákóonde | we have spoken Makonde
tú-ná-tongóla | chimákóonde | we spoke Makonde
tu-ni-tóngóola | chimákóonde | we have spoken Makonde
```
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 NounSpecifier 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-tóngóla  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

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

<table>
<thead>
<tr>
<th>labial</th>
<th>labio-dental</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>p [p]</td>
<td>t [t]</td>
<td>ch [tʃ]</td>
<td>k [k]</td>
<td></td>
</tr>
<tr>
<td>s [s]</td>
<td>s [s]</td>
<td></td>
<td>h [h]</td>
<td></td>
</tr>
<tr>
<td>b [b]</td>
<td>d [d]</td>
<td>l [l]</td>
<td>g [g]</td>
<td></td>
</tr>
<tr>
<td>m [m]</td>
<td>n [n]</td>
<td>ny [ŋ]</td>
<td>ng [ŋ]</td>
<td></td>
</tr>
<tr>
<td>mb [mb]</td>
<td>nd [nd]</td>
<td>nj [ŋj]</td>
<td>ng [ŋg]</td>
<td></td>
</tr>
</tbody>
</table>

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., **kuviha/kufusa** ‘to be angry’ and the Causative extensions -ih/-is-. In Swahili loans, z and sh become s, e.g., **nsungu** ‘European’ (SW *mzungu*), and **kufundiisa** ‘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., **kubadula** ‘to bite off’ and **kugongiola** ‘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-yéeye/di-njéeye 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., luchiya – lusija 11 root, kuyànda – kujànda 15 be thin, kuyúuma – 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-aáu/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, 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 – ugwoóga 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 Z (‘be trapped’), but there are no such syllables where the Z 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., kuvinya ‘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., kuliwa ‘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: [mb].

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:

\[ v \rightarrow m \]
\[ l \rightarrow n \]
\[ h,y \rightarrow ny \]
\[ hw,w \rightarrow mw \]

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):

<table>
<thead>
<tr>
<th>Prefix Type</th>
<th>Section Numbers</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPx: cl.1/3, 18</td>
<td>(4.1, 4.2)</td>
<td>n-nyáavi/va-háavi (sorcerer cl.1/2)</td>
</tr>
<tr>
<td>PPx: cl.18</td>
<td>(5.1)</td>
<td>n-niida/ku-liida (which cl.18/17)</td>
</tr>
<tr>
<td>SC: cl.18, 2PL</td>
<td>(6.2.1)</td>
<td>m-miine/va-viine (you/they should dance)</td>
</tr>
<tr>
<td>OC: cl.1, 2PL</td>
<td>(6.2.1)</td>
<td>m-mwiile/tu-hwiile (die for her/us)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Prefix Type</th>
<th>Section Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPx: cl.9/10</td>
<td>(4.1)</td>
</tr>
<tr>
<td>SC/OC: 1SG</td>
<td>(6.2.2)</td>
</tr>
</tbody>
</table>

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.

\[ m < 'p \quad lu-paápa/di-maápa \quad \text{wing} \]
\[ n < 't \quad i-néembo \quad \text{elephant} \]
\[ ny < 'ch \quad lu-chiýa/di-nyíya \quad \text{root} \]
\[ ng’ < 'k \quad i-ng’aánga \quad \text{guinea fowl} \]
\[ hw < 'hw \quad va-ngu-hwikile/va-hwikile \quad \text{they should come to me} \]
\[ s < 's \quad ngu-suúme/suúme \quad \text{I should buy} \]
Lorenz (1914:48) notes the existence of “eın nasales” - [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 nhnya ‘Yoao 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’.

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.

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

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>h &lt; 'h</td>
<td>lu-húmo/di-húmo</td>
</tr>
<tr>
<td>mbw &lt; 'w</td>
<td>lu-wáání/di-mbwáání</td>
</tr>
<tr>
<td>ku-púhmúóla</td>
<td>to breath</td>
</tr>
<tr>
<td>m-hmuunga</td>
<td>wind</td>
</tr>
<tr>
<td>m-hmuúnda/ji-hmuúnda</td>
<td>bundle of firewood</td>
</tr>
<tr>
<td>n-hnéémba/va-hnéémba</td>
<td>boy (before initiation)</td>
</tr>
<tr>
<td>i-hnyúúmba</td>
<td>house</td>
</tr>
<tr>
<td>ku-núúhng’a</td>
<td>to stink</td>
</tr>
<tr>
<td>ku-yáhng’aanya</td>
<td>to pour</td>
</tr>
<tr>
<td>ku-gáhng’óóla</td>
<td>to push (once)</td>
</tr>
<tr>
<td>i-hng’óóle/ji-hng’óóle</td>
<td>dance</td>
</tr>
<tr>
<td>i-hng’ávaanga/ji-hng’ávaanga</td>
<td>dog</td>
</tr>
<tr>
<td>n-hng’wáápa/ji-hng’wáápa</td>
<td>armpit</td>
</tr>
<tr>
<td>n-hnyáavi/va-háavi</td>
<td>sorcerer</td>
</tr>
<tr>
<td>n-hnyoóngo/va-hoóngo</td>
<td>snake</td>
</tr>
<tr>
<td>ş-hnyaangi</td>
<td>sand</td>
</tr>
<tr>
<td>m-hwikiile/tu-hwikiile</td>
<td>come to her/us</td>
</tr>
<tr>
<td>lu-páápa/ji-hmaápa</td>
<td>wing</td>
</tr>
<tr>
<td>i-hnéémbo</td>
<td>elephant</td>
</tr>
<tr>
<td>lu-chúya/ji-hnyíya</td>
<td>root</td>
</tr>
</tbody>
</table>
20

i-hng’áanga  guinea fowl
lu-hímu/ji-hímu  song

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

- lu-pámbaahi/ji-mámboaahí  bamboo
- lu-táambó/ji-náámbo  trap
- lu-kaloóngó/ji-ng’alóóngó  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’iino/vi-h’ing’iino  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.

- ipya  make cut grass  (cf. -ipa cut grass)
- lehya  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.

1  + ’i → dy
n  + ’i → ny
ng’  + ’i → ny
- wadya  dress  (cf. -wala put on clothes)
- ng’anya  make play  (cf. -ng’ana steal)
- penyá  make blow one’s nose  (cf. -pen’á 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. -kochea poke)
yocheha: make roast (cf. -yochea roast)
toheha: make touch (cf. -toheha touch)
visiha: be made angry (cf. -visiha be angry)
moweha: make cut hair (cf. -moweha cut hair)
panyihha: make beat (cf. -panyihha beat)
kunjihha: make fold (cf. -kunjihha fold)
lingihha: make try (cf. -lingiha try)
tonyeha: make rain (cf. -tonyeha rain)
tamwihha: make love (cf. -tamwihha 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.

-pwetakeha: make hurt (cf. -pwetakea hurt)
velekeha: make give birth (cf. -velekeha give birth)
pepkekeha: be made narrow (cf. -pepkekeha be narrow)
motokeha: make fall (cf. -motokeha fall)
hipukiha: make sprout (cf. -hipukiha 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/-penakeha and -telekya/-telekehya. Stems with the final consonant (non-causative) y appear with the following extension(s):

-haiha: make grind (cf. -haiha grind)
tadyaiha: make put into (cf. -tadyaiha put into)
tedai/teyeha: make trap (cf. -tedayeha trap)
meyeha: make break off a piece (cf. -meyeha break off a piece)
wiha: make return (cf. -wiha 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 d after the addition of the Perfective Final -ile (but not before -ite; see 7.1.4), e.g., -tidile-/tilite (cf. -tile ‘run away’) and before the final -i with manner nouns (see 4.5.2), e.g., chi-cheédi ‘way of cutting’ (cf. -cheha ‘cut’). The l does not change to d 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 I of the Perfective Final (which become -idy-e). Some examples are the following.

- ipidy-e (cf. -ipy-a make cut grass, -ipa cut grass)
- lekidy-e (cf. -lekya make leave, -leka leave)
- ividy-e (cf. -ivy-a make steal, -iva steal)
- ng'aniyide (cf. -ng'anya make play, -ng'ana play)

There is one exception: the original l is not restored with depalatalization, e.g., -chedidy-e (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., -chedyedy-a.

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. -udy-a 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.

- \( i [\text{i}] \)  
- \( e [\text{e}] \)  
- \( a [\text{a}] \)  
- \( o [\text{o}] \)  
- \( u [\text{u}] \)

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 \( H \) or \( R \).

- \( \text{-minya} \) squeeze:  
  - \( \text{-hepa} \) gather (fruit):
- \( \text{-minyila} \)  
- \( \text{-minyihä} \)  
- \( \text{-minyisa} \)  
- \( \text{-minyi} \)  
- \( \text{-twalala} \) seize:
- \( \text{-twalila} \)  
- \( \text{-twaliha} \)  
- \( \text{-twalisa} \)  
- \( \text{-twalika} \)  
- \( \text{-twaliwa} \)  

- \( \text{-nowa} \) be sweet:  
  - \( \text{-tang'unä} \) chew:
- \( \text{-nowela} \)  
- \( \text{-noweha} \)  
- \( \text{-nowesa} \)  
- \( \text{-noweka} \)  
- \( \text{-nowewa} \)  

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

- \( \text{-chima} \) shut, fasten:  
  - \( \text{-tpea} \) stoop, bend down:
- \( \text{-chimula} \)  
- \( \text{-chimuka} \)  
- \( \text{-tepula} \)  
- \( \text{-tepuka} \)
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).

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.

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.
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 D; with four-syllable verb stems, the first two vowels change to D. The verb stems contain an expansion or a lexicalized extension.

-teleka < -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.

chipwächêléêlo/chipwêchêléêlo 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’óówu < ing’őówo banana
-mu < -mo a(n), one
-nu < -no this

With some forms, the raising is found in non-final position.
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 *muútwē* 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):

<table>
<thead>
<tr>
<th>V1 V2</th>
<th>Examples (no tones indicated in underlying forms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i + i → i</td>
<td>miíhi &lt; 'mi-ihi' pestles</td>
</tr>
<tr>
<td>i + e → ye</td>
<td>myéédi &lt; 'mi-edi' months</td>
</tr>
<tr>
<td>i + a → ya</td>
<td>vyáála &lt; 'vi-al' fingers</td>
</tr>
<tr>
<td>i + o → yo</td>
<td>myoóngo &lt; 'mi-ongo' backs</td>
</tr>
<tr>
<td>i + u → yu</td>
<td>lyúúlo &lt; 'li-ul' evening</td>
</tr>
<tr>
<td>a + i → i</td>
<td>kiíhi &lt; 'ka-ihi' little pestle</td>
</tr>
<tr>
<td>a + e → e</td>
<td>kéélu &lt; 'ka-el' little field</td>
</tr>
<tr>
<td>a + a → a</td>
<td>káála &lt; 'ka-la' little finger</td>
</tr>
<tr>
<td>a + o → o</td>
<td>koóngo &lt; 'ka-ongo' little back</td>
</tr>
<tr>
<td>a + u → u</td>
<td>kúúmba &lt; 'ka-umba' little arrow</td>
</tr>
<tr>
<td>u + i → wi</td>
<td>lwíídi &lt; 'lu-id' door</td>
</tr>
<tr>
<td>u + e → we</td>
<td>wéélu &lt; 'u-el' field</td>
</tr>
<tr>
<td>u + a → wa</td>
<td>lwááu &lt; 'lu-au' net</td>
</tr>
<tr>
<td>u + o → wo</td>
<td>lwóógo &lt; 'lu-o' cassava</td>
</tr>
<tr>
<td>u + u → u</td>
<td>múúmba &lt; 'mu-umba' arrow</td>
</tr>
</tbody>
</table>

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-idí 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 an 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. unuííve / unáuííve < 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-i-íva when you steal it (cl.9)

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-yändá úúka to be wide
- u-pyá ííla to sweep
- ku- 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: *kutéwúla, kuyándáwúúka, kupyáyílla* and *kuwuwuúla*; 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).

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.)

In other cases, VC/GF is obligatory.

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., \( \text{lw-ááu/di-njááu} \) ‘net’. \( \text{ku-yándíika/kwándíika} \) ‘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 \( -\text{a} \)-
- between a tense marker and an object concord with monosyllabic stems

\[
\begin{align*}
\text{a-i-loli\text{"e}} & \quad (s)\text{he who has seen it/them (cl.9/4)} \\
\text{tw-i-loli\text{"e}} & \quad \text{they who have seen it/them} \\
\text{tu-ka-i-\text{"i}ya} & \quad \text{if we eat it/them} \\
\text{tu-na-\text{"u}-\text{"i}ya} & \quad \text{(will) eat it (cl.3 or cl.14)} \\
\text{tu-chi-\text{"u}-\text{"i}ya} & \quad \text{we were eating it}
\end{align*}
\]

But there is always VC/GF in verbal forms between a subject concord and the following Far Past tense marker \( -\text{a} \)-.

\[
\begin{align*}
\text{tw-\text{"a}-n\text{"i}-liima} & \quad < \text{`tu-\text{"a}-n\text{"i}-liima} \text{ we had cultivated (long ago)} \\
\text{tw-\text{"a}-n\text{"a}-liima} & \quad < \text{`tu-\text{"a}-n\text{"a}-liima} \text{ we cultivated (long ago)}
\end{align*}
\]

VC/GF is optional in other positions within verbal forms, except in case of a vowel-initial stem preceded by the object concord ‘-\text{\text{"m}}\text{- of class 1, which becomes -mw-}’.

\[
\begin{align*}
\text{ku-\text{\text{"u}}dya/ku-\text{\text{"u}}dya} & \quad \text{to ask} \\
\text{ku-ik\text{"a}la/kw\text{"i}k\text{"a}la} & \quad \text{to live} \\
\text{tu-i\text{"i}ve/tw-i\text{"i}ve} & \quad \text{we should steal} \\
\text{tu-ni-\text{"i}mba/tu-ni-\text{"i}mba} & \quad \text{we sang} \\
\text{u-na-\text{"i}ve/u-\text{"i}ve} & \quad \text{you should not steal} \\
\text{tu-ka-l\text{"o}\text{"o}la/tu-ki-l\text{"o}\text{"o}la} & \quad \text{if we look at it (cl.9)} \\
\text{tu-na-chi-i\text{"i}va/tu-na-chi\text{"i}va} & \quad \text{(will) steal it} \\
\text{va-ka-t\text{"u}-u\text{\text{"u}}dya/va-ka-tu\text{\text{"u}}dya} & \quad \text{they do not ask us} \\
\text{tu-mw-\text{"i}ve} & \quad \text{we should steal it (e.g. a cow)}
\end{align*}
\]

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 \( \text{ya} \).

\[
\begin{align*}
\text{V1} & \quad \text{V2} & \quad \text{V1} & \quad \text{V2} \\
\text{e + i} & \rightarrow \text{i} & \quad \text{o + i} & \rightarrow \text{wi} \\
\text{e + e} & \rightarrow \text{e} & \quad \text{o + e} & \rightarrow \text{we} \\
\text{e + a} & \rightarrow \text{(ya)} & \quad \text{o + a} & \rightarrow \text{wa} \\
\text{e + o} & \rightarrow \text{o} & \quad \text{o + o} & \rightarrow \text{o} \\
\text{e + u} & \rightarrow \text{u} & \quad \text{o + u} & \rightarrow \text{u}
\end{align*}
\]
Liaison mainly occurs between a verb and a following (object) noun or (head-less) specifier.

- **ndolit'ing’áande**  <  **ndolite ing’áande**  I looked at the house
- **vannolit’ééme**  <  **vannolite ééme**  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’iima**  <  **vanno(la) iima**  they look at Ima
- **vannw’chéeme**  <  **vanno(la) ééme**  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):

<table>
<thead>
<tr>
<th>V</th>
<th>VV</th>
<th>GV</th>
<th>GVV</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>CVV</td>
<td>CGV</td>
<td>CGVV</td>
<td></td>
</tr>
<tr>
<td>NCV</td>
<td>NCVV</td>
<td>NCGV</td>
<td>NCGVV</td>
<td></td>
</tr>
</tbody>
</table>

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.ií.la**  to sweep
- **i-nóó.ndwa**  star
- **tu-ká-ya.ngé.te**  we have not helped
- **lu-wáá.ni**  fence
- **tu-na-lyaा.nga**  we (will) eat a lot
- **li-ngwéé.le**  baboon
- **n-nóó.me**  man, husband
- **ń-ndoó.o.de**  Ndonde person
Rarely also occur syllables with three TBU’s.

- VVV \(\rightarrow\) GVVV
- CVVV \(\rightarrow\) CGVVV
- NCVVV \(\rightarrow\) 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-ii.iVa \(\rightarrow\) (s)he who steals
- ndiima \(\rightarrow\) I who cultivate
- tu-wée.ete \(\rightarrow\) we who have put on clothes
- mbwáa.la \(\rightarrow\) I who put on clothes
- chi-loó.o.ego \(\rightarrow\) pot
- mwéée.nu \(\rightarrow\) 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 \(\rightarrow\) boy (before initiation)
- m-piini \(\rightarrow\) handle
- n-chiloó.o.ongo \(\rightarrow\) in the pot
- tu-u-táamwe \(\rightarrow\) we should like you (2PL)
- muú-nu \(\rightarrow\) person
- tu-múú-lye \(\rightarrow\) 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., prenasalisation of the following consonant occurs, followed by cluster reduction in most cases (see 6.2.2).

- va-ngu-táamwe/va-náamwe \(\rightarrow\) 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-nápp-táamwa \(\rightarrow\) we (will) like him (object concord cl.1)
- va-mwoná ŋ-νúume \(\rightarrow\) 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-veé-fí.kúlima; this form is derived from va-velé-fí.kúlima ‘they are cultivating’, where the 1 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 ‘]’.

\[tu\text{u}a\text{a} \text{v}a\text{u}û\text{m}e[ \text{û}lû\text{á}m\text{b}á \text{ch}i\text{h}i\text{h}i]\]
we see the men only in the morning
\[tu\text{u}a\text{a} \text{v}a\text{a}k\text{u}a\text{n}u\text{û}nû[ \text{û}lû\text{á}m\text{b}á \text{ch}i\text{h}i\text{h}i]\]
we see the young children only in the morning

The underlying forms of the forms with PUL in the first phrase are "valûmê" and "vakanunû". These forms appear when they occur as non-final words in phrases.

| valûmê vááno | these men |
| vakanunû veétu | our young children |

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

\[R \quad \text{PUL} \quad \text{valûmê} \quad < \quad \text{valûumê} \quad \text{vakanunû} \quad < \quad \text{vakanunû} \]

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.

\[tu\text{u}a\text{a} \text{v}a\text{u}û\text{m}e[ \text{û}lû\text{á}m\text{b}á \text{ch}i\text{h}i\text{h}i]\]
we see the men only in the morning
\[tu\text{u}a\text{a} \text{v}a\text{a}k\text{u}a\text{n}u\text{û}nû[ \text{û}lû\text{á}m\text{b}á \text{ch}i\text{h}i\text{h}i]\]
we see the young children only in the morning

The forms valûmê and vakanunû 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
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   3.4.1 Tonal profiles for stems
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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 Matumbi (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.

• underlingly, 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 kú-téléléela ‘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.

\[
\begin{array}{c}
H & H \\
\end{array}
\]
\[
\text{kutelekela} \\
\text{underlying}
\]

\[
\begin{array}{c}
H & H \\
\end{array}
\]
\[
\text{kuteleleela} \\
\text{Stress Length}
\]

\[
\begin{array}{c}
H & H \\
\mid & \mid \\
\end{array}
\]
\[
\text{kutelekela} \\
\text{Stem Initial Docking, Default Docking}
\]

\[
\begin{array}{c}
H & H \\
\backslash & \backslash \\
\end{array}
\]
\[
\text{kutelekela} \\
\text{Rightward Spreading}
\]

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-la-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.

\[
\begin{array}{c}
H & H \\
ku-la-liima & \text{underlying} \\
H & H \\
ku-la-liima & \text{Stress Length} \\
H & H \\
\mid & \mid \\
ku-la-liima & \text{Stem Initial Docking, Default Docking} \\
H & H \\
\mid & \mid \\
ku-la-liima & \text{Meeussen’s Rule} \\
\end{array}
\]

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.

\[
\begin{array}{c}
\text{underlying} \\
H \ H \\
| | \\
\text{Tone Assignment} \\
H \ H \\
| | \\
\text{Penultimate Lengthening} \\
H \ H \\
| / \\
\text{Retraction of the final H tone} \\
H \ H \\
\wedge | \\
\text{H Tone Bridge} \\
\end{array}
\]

The Chinnima infinitive form ku-lá-liüma ‘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.

\[
\begin{align*}
\text{H H H} \\
\text{ku-la-lima} & \quad \text{underlying} \\
\text{H HH} \\
\text{ku-la-lima} & \quad \text{Tone Assignment} \\
\text{H H} \\
\text{ku-la-lima} & \quad \text{Meeussen’s Rule} \\
\text{H H} \\
\text{ku-la-liima} & \quad \text{Penultimate Lengthening} \\
\text{H H} \\
\text{ku-la-liima} & \quad \text{Retraction of the final H tone}
\end{align*}
\]

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.

\[
\begin{align*}
\text{vachoná chiyewé chaángu} \\
\text{they see my chin}
\end{align*}
\]

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 Kissebírth 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 Makonde       | pvf |
| tu-ná-tóngólá chímákóonde | we spoke Makonde   | vf  |
| tu-tóngwele chímákóonde   | we have spoken Makonde | pvf |
| tu-ni-tóngólá chímákóonde | we have spoken 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 véétu       | our 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).

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.

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 ‘˘’.)

<table>
<thead>
<tr>
<th>tones</th>
<th>name</th>
<th>liimè</th>
<th>dew</th>
</tr>
</thead>
<tbody>
<tr>
<td>liinà</td>
<td>name</td>
<td>liimè</td>
<td>dew</td>
</tr>
<tr>
<td>chihúúvà</td>
<td>chest</td>
<td>mitùùpà</td>
<td>holes</td>
</tr>
<tr>
<td>kútóngóólà</td>
<td>to speak</td>
<td>lùwáláhàanjì</td>
<td>firewood</td>
</tr>
<tr>
<td>pányëéñjè</td>
<td>beside, aside</td>
<td>chiíhi</td>
<td>only</td>
</tr>
<tr>
<td>tükáályà</td>
<td>if we eat</td>
<td>ng’áánà</td>
<td>play!</td>
</tr>
</tbody>
</table>

If we eat firewood, only if we eat firewood.
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.

<table>
<thead>
<tr>
<th>müünü</th>
<th>person</th>
<th>mwäänä</th>
<th>child</th>
</tr>
</thead>
<tbody>
<tr>
<td>indiilä</td>
<td>path</td>
<td>litääwâ</td>
<td>clan</td>
</tr>
<tr>
<td>ünjenjëémâ</td>
<td>mosquito</td>
<td>chimákóöndè</td>
<td>Makonde language</td>
</tr>
<tr>
<td>kâdilkî</td>
<td>a bit</td>
<td>üpéêhi</td>
<td>quickly</td>
</tr>
<tr>
<td>tung'âánè</td>
<td>we should play</td>
<td>tükââlyà</td>
<td>we do not eat</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>mwééenü</th>
<th>you (pl.)</th>
<th>möóótō</th>
<th>fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>lûùündû</td>
<td>tomorrow</td>
<td>müûùndû</td>
<td>chopper</td>
</tr>
<tr>
<td>tûpáännà</td>
<td>we who beat</td>
<td>chilôóôngò</td>
<td>pot</td>
</tr>
</tbody>
</table>

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 liïmë ‘dew’ are hard to distinguish from words like liïnà ‘name’ (and also from words like mwäänä ‘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 onsets 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.
<table>
<thead>
<tr>
<th>word</th>
<th>addition</th>
<th>process</th>
<th>HTA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>noun</strong></td>
<td>-inner NPx to stem</td>
<td>prenasalization, homorganicity</td>
<td>before</td>
</tr>
<tr>
<td></td>
<td>-outer NPx to stem</td>
<td></td>
<td>before</td>
</tr>
<tr>
<td></td>
<td>-na-</td>
<td></td>
<td>before</td>
</tr>
<tr>
<td></td>
<td>-locative NPx</td>
<td></td>
<td>after</td>
</tr>
<tr>
<td></td>
<td>-pluralizing NPx</td>
<td></td>
<td>after</td>
</tr>
<tr>
<td></td>
<td>-chi/-mu/-va-</td>
<td>tone rule ‘delete all H’s’</td>
<td>after</td>
</tr>
<tr>
<td>instrument/ manner noun</td>
<td>NPx, Final to verbal base</td>
<td>vowel anticipation, vowel dissimilation, final vowel raising, l → d</td>
<td>before</td>
</tr>
<tr>
<td>augmentative/ diminutive noun</td>
<td>cl. 5/6, 12/13 NPx’s to stem</td>
<td>prenasalization, homorganicity</td>
<td>before</td>
</tr>
<tr>
<td>reduplicated noun</td>
<td>stem to stem</td>
<td>tone rule ‘delete all H’s’</td>
<td>after</td>
</tr>
<tr>
<td>agent noun</td>
<td>mu/-va- to Infinitive</td>
<td>vowel anticipation, vowel dissimilation, tone rule ‘delete all H’s’</td>
<td>after</td>
</tr>
<tr>
<td>verbal base</td>
<td>expansions, extensions to root</td>
<td>(de)palatalization, labio-velarization, vowel harmony</td>
<td>before</td>
</tr>
<tr>
<td>minisyllabic vs verb stem (vs)</td>
<td>Final to root</td>
<td>-create S1-position, copy preceding vowel -onset-syllabification</td>
<td>before</td>
</tr>
<tr>
<td></td>
<td>-Final to verbal base</td>
<td>l → d, vowel harmony, imbrication, vowel dissimilation, create complex final syllable</td>
<td>before (stage1) before (stage2)</td>
</tr>
<tr>
<td></td>
<td>-reciprocal, Pre-Final to stem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reduplicated vs verbal form</td>
<td>stem to stem</td>
<td>prenasalization, homorganicity, Meeussen’s rule</td>
<td>before</td>
</tr>
<tr>
<td>pronominal form</td>
<td>PPx to stem</td>
<td>prenasalization, homorganicity</td>
<td>before</td>
</tr>
</tbody>
</table>
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).

<table>
<thead>
<tr>
<th>NPx</th>
<th>-nominal stem</th>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF</td>
<td>'li</td>
<td>-pélépendé</td>
<td>'ku</td>
<td>-pilikana</td>
</tr>
<tr>
<td>B</td>
<td>S1</td>
<td>'va</td>
<td>-lúmilanga</td>
<td>'va</td>
<td>-li</td>
</tr>
<tr>
<td>C</td>
<td>SF</td>
<td>'ma</td>
<td>-kolobékó</td>
<td>'tu</td>
<td>-na</td>
</tr>
<tr>
<td>D</td>
<td>no H</td>
<td>'vi</td>
<td>-kókolowa</td>
<td></td>
<td>-li</td>
</tr>
<tr>
<td>E</td>
<td>S2</td>
<td>'vi</td>
<td>-tukútuku</td>
<td></td>
<td>-li</td>
</tr>
</tbody>
</table>

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  lí-pélépendé lyááké  its cockroach
B  vá-lúmilangá vááńji  other widows
C  má-kôlôbékó lyááké  its savannah
D  vi-kôkolôwà vińji  other empty maize cobs
E  vi-tukútuku vińji  other things, substances, ingredients

A  kú-pilikànà liímó  to hear one (e.g. lí-lóóvé ‘word’)
B  vá-li-pilikànè liímó  they should hear the one
C  tú-nà-pilikànà liímó  we (will) hear one
D  lí-pilikànè liímó  hear the one!
E  vá-li-pilikànè liímó  they who hear the one

We continue with the five tonal profiles as they occur with nouns and verbs having trisyllabic stems.
We now show the five tonal profiles of words having disyllabic nominal and verbal stems.

<table>
<thead>
<tr>
<th>NPx</th>
<th>nominal stem</th>
<th>SC</th>
<th>TM</th>
<th>OC-verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A S1/SF</td>
<td>&quot;u -tûtuli&quot;</td>
<td>'ku</td>
<td>-tóngolá</td>
<td></td>
</tr>
<tr>
<td>B S1</td>
<td>&quot;li -híndili&quot;</td>
<td>'va</td>
<td>-li -tóngole</td>
<td></td>
</tr>
<tr>
<td>C SF</td>
<td>&quot;li -kumbátu&quot;</td>
<td>'tu</td>
<td>-na -tóngolá</td>
<td></td>
</tr>
<tr>
<td>D no H</td>
<td>&quot;n -tándasa&quot;</td>
<td>li</td>
<td>-tóngole</td>
<td></td>
</tr>
<tr>
<td>E S2</td>
<td>&quot;li -putila&quot;</td>
<td>'va</td>
<td>-li -tóngolá</td>
<td></td>
</tr>
</tbody>
</table>

Surface forms:

A ù-tûtuli wàángù my brain
B li-híndili línji other cooking stone
C li-kumbátu lyáángù my foot
D 'n-tándásà únji other cassava porridge
E li-pútilá línji other trap
A kú-tóngolá liímò to speak one
B và-li-tóngólé liímò they should speak the one
C tú-ná-tóngolá liímò we (will) speak one
D li-tóngólé liímò speak the one!
E và-li-tóngólá liímò they who speak the one

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).

<table>
<thead>
<tr>
<th>NPx</th>
<th>nominal stem</th>
<th>SC</th>
<th>TM</th>
<th>OC-verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A S1/SF</td>
<td>&quot;ma -kálá&quot;</td>
<td>'ku</td>
<td>-lólá</td>
<td></td>
</tr>
<tr>
<td>B S1</td>
<td>&quot;a -himba&quot;</td>
<td>'va</td>
<td>-li -lóle</td>
<td></td>
</tr>
<tr>
<td>C SF</td>
<td>&quot;ma -halá&quot;</td>
<td>'tu</td>
<td>-na -lólá</td>
<td></td>
</tr>
<tr>
<td>D no H</td>
<td>&quot;vi -yewe&quot;</td>
<td>li</td>
<td>-lóle</td>
<td></td>
</tr>
<tr>
<td>E S2</td>
<td>&quot;ma -vaála&quot;</td>
<td>'va</td>
<td>-li -lóóla</td>
<td></td>
</tr>
</tbody>
</table>

A má-kálá làángù my charcoal
B á-himbà váanzi other lions
C má-hálá làángù my fields
D vi-yewe vúnnji other chins
E má-válá lànnji other shoulders
A kú-lólá liímò to look at 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 vááké his lions
E má-valá lááké his shoulders

B vá-li-löölë they should look at it
E vá-li-löölà 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. ˈudía ‘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 ˈva -li -udía
vá-li-údyà liímò 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.

<table>
<thead>
<tr>
<th>NPx</th>
<th>-nominal stem</th>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A S1/SF ? ˈu -ú.chí</td>
<td>ˈku</td>
<td>-ú.liá</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B S1 ? ˈva</td>
<td>-li</td>
<td>-i.lié</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C SF ˈvi -i.nú</td>
<td>ˈtu</td>
<td>-na</td>
<td>-a.liá</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D no H ˈmu -u.yo</td>
<td>ˈli</td>
<td>-i.lié</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E S2 ? ˈva</td>
<td>-li</td>
<td>-i.liá</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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* ('*udía*') 'ask' and the nominal stems below.

<table>
<thead>
<tr>
<th>NPx</th>
<th>-nominal stem</th>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF</td>
<td>`u</td>
<td>-ûnû</td>
<td></td>
<td>-ûdiá</td>
</tr>
<tr>
<td>B</td>
<td>S1</td>
<td>`vô</td>
<td>-li</td>
<td>-ûdie</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>SF</td>
<td>`mi</td>
<td>-ihí</td>
<td></td>
<td>-udiá</td>
</tr>
<tr>
<td>D</td>
<td>no H</td>
<td>`chi</td>
<td>-anga</td>
<td></td>
<td>-udié</td>
</tr>
<tr>
<td>E</td>
<td>S2</td>
<td>?</td>
<td></td>
<td></td>
<td>`-ûdia</td>
</tr>
</tbody>
</table>

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 ? `úchi `únnô  this honey
B ?
C chînû châángû my thing
D múûyô múûnji other front
E ?

A kûûlyá lîmô to eat one (e.g. lî-tînji 'pumpkin')
B vâ-lîlyê lîmô they should eat the one
C tû-nûlyâ lîmô we (will) eat one
D liîlyê lîmô eat the one!
E vâ-lîlyâ lîmô they who eat the one

Disyllabic vowel-initial stems:

A ? `ûûnu `ûnnô this plaster
B ?
C miîhi yaângû my pestles
D chângâ chûnji another galago
E ?

A kûûdyá lîmô to ask one
B vâ-lyûdyê lîmô they should ask the one
C tû-nûdyâ lîmô we (will) ask one
D lyûudyê lîmô ask the one!
E vâ-lyûdyâ lîmô 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.
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/-ie  `va/-li/-ie

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-tónglátónglá liímò to keep on speaking one
B và-li-tónglétónglé liímò they should keep on speaking the one
C tú-ná-tónglátónglá liímò we (will) keep on speaking one
D li-tónglétónglé liímò keep on speaking the one!
E và-li-tónglátónglá liímò 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.

<table>
<thead>
<tr>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-stem-reduplicated stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF</td>
<td>'ku</td>
<td>-úlia-ulía</td>
</tr>
<tr>
<td>B</td>
<td>S1</td>
<td>'va</td>
<td>-ilie-ilie</td>
</tr>
<tr>
<td>C</td>
<td>SF</td>
<td>'tu</td>
<td>-a lia-aliá</td>
</tr>
<tr>
<td>D</td>
<td>no H</td>
<td>'li</td>
<td>-ilie-ilie</td>
</tr>
<tr>
<td>E</td>
<td>S2</td>
<td>'va</td>
<td>-iliá-iliá</td>
</tr>
</tbody>
</table>

A kúlyáúlyá liímóò to keep on eating one
B và-lílyélyé liímóò they should keep on eating the one
C tú-nálálálá liímóò we (will) keep on eating one
D lílyélélé liímóò keep on eating the one!
E và-lílyálálá liímóò 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.

<table>
<thead>
<tr>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-stem-reduplicated stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF</td>
<td>'ku</td>
<td>-údia-udiá</td>
</tr>
<tr>
<td>B</td>
<td>S1</td>
<td>'va</td>
<td>-udi-udeie</td>
</tr>
<tr>
<td>C</td>
<td>SF</td>
<td>'tu</td>
<td>-udi-udiá</td>
</tr>
<tr>
<td>D</td>
<td>no H</td>
<td>'li</td>
<td>-udi-udeie</td>
</tr>
<tr>
<td>E</td>
<td>S2</td>
<td>'va</td>
<td>-udiá-udia</td>
</tr>
</tbody>
</table>

A kúdyuúdyuú liímóò to keep on asking one
B và-lyúdyéuyéyé liímóò they should keep on asking the one
C tú-núdyuúdyuú liímóò we (will) keep on asking one
D lyúdyéuyéyé liímóò keep on asking the one!
E và-lyúdyuúdyuú liímóò they who keep on asking the one

Without vowel coalescence, the verbal forms are as follows:

<table>
<thead>
<tr>
<th>SC</th>
<th>-TM</th>
<th>-OC</th>
<th>-stem-reduplicated stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S1/SF</td>
<td>'ku</td>
<td>-údia-udiá</td>
</tr>
<tr>
<td>B</td>
<td>S1</td>
<td>'li</td>
<td>-udi-udeie</td>
</tr>
<tr>
<td>C</td>
<td>SF</td>
<td>'na</td>
<td>-udi-udiá</td>
</tr>
<tr>
<td>D</td>
<td>li</td>
<td>'li</td>
<td>-udi-udeie</td>
</tr>
<tr>
<td>E</td>
<td>S2</td>
<td>'li</td>
<td>-udiá-udia</td>
</tr>
</tbody>
</table>

A kú-údyuúdyuú liímóò to keep on asking one
B và-lí-údyéuyéyé liímóò they should keep on asking the one
C tú-ná-údyuúdyuú liímóò we (will) keep on asking one
D lí-údyéuyéyé liímóò keep on asking the one!
E và-li-údyuúdyuú liímóò 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).

<table>
<thead>
<tr>
<th>NPx -nominal stem</th>
<th>SC -TM -verbal stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>C SF ?</td>
<td>'tú -ni -pilikáná</td>
</tr>
<tr>
<td></td>
<td>'tú -ni -tongolá</td>
</tr>
<tr>
<td></td>
<td>'tú -ni -lóíá</td>
</tr>
<tr>
<td></td>
<td>'tú -ni -udiá</td>
</tr>
<tr>
<td></td>
<td>'tú -ni -i lié</td>
</tr>
<tr>
<td>D no H ?</td>
<td>'tú -na -pilikane</td>
</tr>
<tr>
<td></td>
<td>'tú -na -tongole</td>
</tr>
<tr>
<td></td>
<td>'tú -na -lóle</td>
</tr>
<tr>
<td></td>
<td>'tú -na -udie</td>
</tr>
<tr>
<td></td>
<td>'tú -na -a lié</td>
</tr>
</tbody>
</table>

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 ?             | its mosquito         |
|                 | li-tinji lyáangú     |

| C               | we have heard one    |
|                 | we have spoken one   |
|                 | we have looked at one|
|                 | we have asked one    |
|                 | we have eaten one    |

| D               | we should not hear one|
|                 | we should not speak one|
|                 | we should not look at one|
|                 | we should not ask one |
|                 | we should not eat one |

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).
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 tū-nī-ūdyā līmō, D tū-nā-ūdyē līmō.

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 ‘tū-chī-tōngolá > ‘tū-chī-tongolá
   ‘ku-vá-lóla > ‘ku-vá-lolá
B S1 ‘tū-kā-lóla > ‘tū-kā-lo lá

A tū-chī-tōngolá kādiiki we were speaking a bit
   kū-vá-lóla kādiiki to look at them (cl.2) a bit
B tū-kā-lóla kādiiki 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 ‘tū-chī-li-tōngolá
   ‘ku-lólá
B S1 ‘tū-kā-li-lóla
we were speaking the one

tu-chi-li-tongola limo
to look at one

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   'tu-ka-tongwelé   > 'tu-ka-tongwelé  > 'tu-ka-tongwelé  > 
   'tu-ka-pilikéné   > 'tu-ka-pilikéné   > 'tu-ka-pilikéné   > 

A tu-ka-tongwelé kadiiki  we have spoken a bit
   tu-ka-pilikéné kadiiki  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   'tu-ka-li-tongwelé   > 'tu-ka-li-tongwelé 
   'tu-ka-li-pilikéné   > 'tu-ka-li-pilikéné 

A tu-ka-li-tongwelé limo  we have spoken the one
   tu-ka-li-pilikéné limo  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-lolá ‘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-leedye ‘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-lolá   <  'ku-vá-loolá   <  'ku-vá-lolá   <  'ku-vá-lollá 
tu-ká-leedye <  'tu-ká-leedyé <  'tu-ka-leedie <  'tu-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: 'tú-ka-pilikëné ‘we have not heard’ and 'tú-käm'-pêlekîidiê ‘we have not sent him’. The lexical forms after H tone assignment are resp. ‘tú-ka-pilikëné’ and ‘tú-ka-m-pêlekîidiê’. 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-pêlekîidiê’ 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.
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:

<table>
<thead>
<tr>
<th>lexical form</th>
<th>PUL</th>
<th>next rules</th>
<th>surface forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A S1/SF</td>
<td>'li-pélepéndé</td>
<td>R,TB,DI</td>
<td>li-pélepééndé</td>
</tr>
<tr>
<td></td>
<td>'u-tútúuli</td>
<td>R,TB,DI</td>
<td>ú-tútúúli</td>
</tr>
<tr>
<td></td>
<td>ma-káalá</td>
<td>R,DI</td>
<td>má-káálá</td>
</tr>
<tr>
<td></td>
<td>'u-únu</td>
<td>R,CDI</td>
<td>úunu</td>
</tr>
<tr>
<td></td>
<td>'u-úchh</td>
<td>R,CDI</td>
<td>úúchh</td>
</tr>
</tbody>
</table>

B S1

<table>
<thead>
<tr>
<th>lexical form</th>
<th>next rules</th>
<th>surface forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>'va-lúmilanga</td>
<td>TD,DI</td>
<td>vá-lúmiláángá</td>
</tr>
<tr>
<td>'li-híndíli</td>
<td>TD,DI</td>
<td>li-híndílí</td>
</tr>
<tr>
<td>'á-hímba</td>
<td>DI</td>
<td>á-hímbá</td>
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</table>

C SF

<table>
<thead>
<tr>
<th>lexical form</th>
<th>next rules</th>
<th>surface forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>'ma-kolobékó</td>
<td>R,DI</td>
<td>má-kólóbékó</td>
</tr>
<tr>
<td>'li-kumbatú</td>
<td>R,DI</td>
<td>li-kúmbábátú</td>
</tr>
<tr>
<td>'ma-hálá</td>
<td>R,DI</td>
<td>má-háálá</td>
</tr>
<tr>
<td>'mi-ihi</td>
<td>R,CDI</td>
<td>miííi</td>
</tr>
<tr>
<td>'vi-inú</td>
<td>R,CDI</td>
<td>viííí</td>
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</tbody>
</table>

D no H

<table>
<thead>
<tr>
<th>lexical form</th>
<th>next rules</th>
<th>surface forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>'vi-kokołowa</td>
<td>DI</td>
<td>vi-kokołóowá</td>
</tr>
<tr>
<td>'n-tandaasa</td>
<td>DI</td>
<td>'n-tándáásá</td>
</tr>
<tr>
<td>'vi-yewe</td>
<td>DI</td>
<td>vi-ýéëëë</td>
</tr>
<tr>
<td>'chi-anga</td>
<td>C,DI</td>
<td>châängá</td>
</tr>
<tr>
<td>'mu-uyo</td>
<td>C,DI</td>
<td>mûuyó</td>
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E S2

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<thead>
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<th>lexical form</th>
<th>next rules</th>
<th>surface forms</th>
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</thead>
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<tr>
<td>'vi-tukútuuko</td>
<td>TD,DI</td>
<td>vi-tukútuúkú</td>
</tr>
<tr>
<td>'li-pútila</td>
<td>DI</td>
<td>li-pútíllá</td>
</tr>
<tr>
<td>'chi-loóongo</td>
<td>DI,TA</td>
<td>chi-loóóôngó</td>
</tr>
<tr>
<td>'ma-vaála</td>
<td>S,DI</td>
<td>má-vaáálá</td>
</tr>
</tbody>
</table>

Verbal forms:

<table>
<thead>
<tr>
<th>lexical form</th>
<th>PUL</th>
<th>next rules</th>
<th>surface forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ku-pilikaná</td>
<td>'ku-pilikanaá</td>
<td>R,TB,DI</td>
<td>kú-pilikááná</td>
</tr>
<tr>
<td>ku-tóngolá</td>
<td>'ku-tóngoolá</td>
<td>R,TB,DI</td>
<td>kú-tóngóólá</td>
</tr>
<tr>
<td>ku-lólá</td>
<td>'ku-lóolá</td>
<td>R,DI</td>
<td>kú-lóólá</td>
</tr>
<tr>
<td>'ku-údíá</td>
<td>'ku-údziá</td>
<td>R,C,F,DI</td>
<td>kúúuyá</td>
</tr>
<tr>
<td>'ku-úlíá</td>
<td>'ku-úlúía</td>
<td>R,C,F,DI</td>
<td>kúúlyá</td>
</tr>
</tbody>
</table>

B va-li-pilikane | 'va-li-pilikaane | TD,DI | vá-li-pilikááné |
| va-li-tóngole  | 'va-li-tóngole | TD,DI | vá-li-tóngóólé |
| va-li-lóle     | 'va-li-lóole | DI    | vá-li-lóólé |
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., ute-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, ’-limic 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 ’-pelekedia (-pelekedyá ‘send’), ’-kundania (-kundanya ‘mix’) and ’-limia (-limya ‘make cultivate’); the following examples are used:

surface forms

A S1/SF
‘ku-pélékediá kú-pélékéédyá to send
‘ku-kündaniá kú-kúndáányá to mix
‘ku-limía kú-límyá to make cultivate

C SF
‘tu-na-pélékediá tū-ná-pélékéédyá we (will) send
‘tu-na-kundaniá tū-ná-kúndáányá we (will) mix
‘tu-na-limía tū-ná-límyá we (will) make cultivate
‘tū-ni-pélékediá tū-ní-pélékéédyá we have sent
‘tū-ni-kundaniá tū-ní-kúndáányá we have mixed
‘tū-ni-limía tū-ní-límyá 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 di-nóóndwá stars
C ‘mi-utwé myúútwé heads

We now demonstrate the retraction process:
Nouns:

<table>
<thead>
<tr>
<th>previous rule</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUL R</td>
<td></td>
</tr>
<tr>
<td>'li-pélepeedé &gt; 'li-péleénde</td>
<td>TB,DI</td>
</tr>
<tr>
<td>'ú-tútuuli &gt; 'ú-tútuüli</td>
<td>TB,DI</td>
</tr>
<tr>
<td>'ma-kääla &gt; ma-kääla</td>
<td>DI</td>
</tr>
<tr>
<td>'di-nööndwa &gt; di-nööndwa</td>
<td>DI</td>
</tr>
<tr>
<td>? 'u-únu &gt; u-únu</td>
<td>C,DI</td>
</tr>
<tr>
<td>? 'u-úuchi &gt; u-úuchi</td>
<td>C,DI</td>
</tr>
<tr>
<td>C 'ma-kolobeékó &gt; ma-koloobécko</td>
<td>DI</td>
</tr>
<tr>
<td>'li-kumbaatú &gt; 'li-kumbaatú</td>
<td>DI</td>
</tr>
<tr>
<td>ma-haalá &gt; ma-haalá</td>
<td>DI</td>
</tr>
<tr>
<td>'mi-uutwe &gt; mi-uútwe</td>
<td>C,DI</td>
</tr>
<tr>
<td>'mi-ihi &gt; mi-ihi</td>
<td>C,DI</td>
</tr>
<tr>
<td>'vi-iinnú &gt; vi-iinnu</td>
<td>C,DI</td>
</tr>
<tr>
<td>'ú-njenjeemá &gt; ú-njenjeemá</td>
<td>PS,DI</td>
</tr>
<tr>
<td>'li-tiinji &lt; 'li-tiinji</td>
<td>DI</td>
</tr>
</tbody>
</table>

Verbal forms:

<table>
<thead>
<tr>
<th>previous rule</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUL R</td>
<td></td>
</tr>
<tr>
<td>A 'ku-pílikaaná &gt; 'ku-pílikaána</td>
<td>TB,DI</td>
</tr>
<tr>
<td>'ku-pélekeediá &gt; 'ku-pélekeedía</td>
<td>C,TD,F,DI</td>
</tr>
<tr>
<td>'ku-töngoolá &gt; 'ku-töngoolá</td>
<td>TB,DI</td>
</tr>
<tr>
<td>'ku-kündaaniá &gt; 'ku-kündaanía</td>
<td>C,TD,F,DI</td>
</tr>
<tr>
<td>'ku-lóolá &gt; 'ku-lóóla</td>
<td>DI</td>
</tr>
<tr>
<td>'ku-líimiá &gt; 'ku-líimíá</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'ku-úudiá &gt; 'ku-úudía</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'ku-úuliá &gt; 'ku-úuliá</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>C 'tu-na-pílikaaná &gt; 'tu-na-pílikaána</td>
<td>DI</td>
</tr>
<tr>
<td>'tu-na-pelekeediá &gt; 'tu-na-pelekeedia</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'tu-na-töngoolá &gt; 'tu-na-töngoolá</td>
<td>DI</td>
</tr>
<tr>
<td>'tu-na-kündaaniá &gt; 'tu-na-kündaanía</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'tu-na-lóolá &gt; 'tu-na-lóóla</td>
<td>DI</td>
</tr>
<tr>
<td>'tu-na-líimiá &gt; 'tu-na-líimíá</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'tu-na-úudiá &gt; 'tu-na-úudía</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'tu-na-aaliá &gt; 'tu-na-aaliá</td>
<td>C,F,DI</td>
</tr>
<tr>
<td>'tú-ni-pílikaaná &gt; 'tú-ni-pílikaána</td>
<td>PS,DI</td>
</tr>
<tr>
<td>'tú-ni-pelekeediá &gt; 'tú-ni-pelekeedia</td>
<td>PS,C,TD,F,DI</td>
</tr>
<tr>
<td>'tú-ni-töngoolá &gt; 'tú-ni-töngoolá</td>
<td>PS,DI</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>previous rule</th>
<th>next rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>TB</td>
</tr>
<tr>
<td>A S₁/SF</td>
<td>li-pélepéénde &gt; li-pélepéénde</td>
</tr>
<tr>
<td></td>
<td>'u-tútuúli &gt; 'u-tútuúli</td>
</tr>
</tbody>
</table>

Verbal forms:

<table>
<thead>
<tr>
<th>previous rule</th>
<th>next rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>TB</td>
</tr>
<tr>
<td>A</td>
<td>'ku-pilikaána &gt; 'ku-pilikáána</td>
</tr>
<tr>
<td></td>
<td>'ku-tóngóóla &gt; 'ku-tóngóóla</td>
</tr>
</tbody>
</table>

cf. 'ku-pélekeedía
cf. 'ku-kündaaáníá
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.

\[
\text{surface form} \\
A \quad \text{ku-li-tôngolà} \quad \text{kù-li-tôngóólà} \\
\text{MR} \quad \text{PUL, R} \\
A \quad \text{ku-li-tongolà} \quad \text{ku-li-tongoólà}
\]

### 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:

\[
\begin{array}{ccc}
\text{previous rule} & \text{next rule} \\
C \quad \text{R} & \text{PS} & \text{ú-njenjeéma} \quad \text{u-njenjeéma} \\
D & \text{no H} & \text{DI} \\
\end{array}
\]

Verbal forms:

\[
\begin{array}{ccc}
\text{previous rule} & \text{next rules} \\
C \quad \text{R} & \text{PS} & \text{tu-ni-pilikáána} \quad \text{tu-ni-pilikáána} \\
& & \text{DI} \\
& & \text{tu-ni-pelekedid} \quad \text{tu-ni-pelekedid} \\
& & \text{C,TD,F,DI} \\
& & \text{tu-ni-tôngolá} \quad \text{tu-ni-tôngolá} \\
& & \text{DI} \\
& & \text{tu-ni-kundaanía} \quad \text{tu-ni-kundaanía} \\
& & \text{C,TD,F,DI} \\
& & \text{tu-ni-loólá} \quad \text{tu-ni-loólá} \\
& & \text{DI} \\
& & \text{tu-ni-liímía} \quad \text{tu-ni-liímía} \\
& & \text{C,F,DI}
\end{array}
\]
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.

<table>
<thead>
<tr>
<th>surface forms</th>
<th>previous rules</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-pilikānā' &gt; 'tu-ni-li-pilikānā'</td>
<td>we have heard it</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-pelekediá' &gt; 'tu-ni-li-pelekediá'</td>
<td>we have sent it</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-tongolā' &gt; 'tu-ni-li-tongolā'</td>
<td>we have spoken it</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-kundañiá' &gt; 'tu-ni-li-kundañiá'</td>
<td>we have mixed it</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-loťá' &gt; 'tu-ni-li-loťá'</td>
<td>we have looked at it</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-limia' &gt; 'tu-ni-li-limia'</td>
<td>we have made it cultivate</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-udia' &gt; 'tu-ni-li-udia'</td>
<td>we have asked (cl.5)</td>
<td></td>
</tr>
<tr>
<td>'tũ-ni-li-iliá' &gt; 'tu-ni-li-iliá'</td>
<td>we have eaten it</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tũ-na-li-pilikānwe' &gt; 'tu-na-li-pilikānwe'</td>
<td>we shouldn’t hear it</td>
<td></td>
</tr>
<tr>
<td>'tũ-na-m-pilikānwe' &gt; 'tu-na-m-pilikānwe'</td>
<td>we shouldn’t hear it</td>
<td></td>
</tr>
<tr>
<td>'tũ-na-li-tongole' &gt; 'tu-na-li-tongole'</td>
<td>we shouldn’t speak it</td>
<td></td>
</tr>
<tr>
<td>'tũ-na-li-loľe' &gt; 'tu-na-li-loľe'</td>
<td>we shouldn’t look at it</td>
<td></td>
</tr>
<tr>
<td>'tũ-na-li-udie' &gt; 'tu-na-li-udie'</td>
<td>we shouldn’t ask (cl.5)</td>
<td></td>
</tr>
<tr>
<td>'tũ-na-li-ilie' &gt; 'tu-na-li-ilie'</td>
<td>we shouldn’t eat it</td>
<td></td>
</tr>
</tbody>
</table>
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):

\[
\begin{array}{ll}
\text{surface forms} & \\
\text{tú-na-pilikaná} & \text{tú-ná-piliikáná} \quad \text{we (will) hear} \\
\text{tú-na-pelekedianá} & \text{tú-ná-pelékeédya} \quad \text{we (will) send} \\
\text{tú-na-tongolá} & \text{tú-ná-tóngólá} \quad \text{we (will) speak} \\
\text{tú-na-kundaniá} & \text{tú-ná-kündáanyá} \quad \text{we (will) mix} \\
\text{tú-na-lólo} & \text{tú-ná-loólá} \quad \text{we (will) look} \\
\text{tú-na-límiá} & \text{tú-ná-liimyá} \quad \text{we (will) make cultivate} \\
\text{tú-na-udiá} & \text{tú-ná-úúdyá/tú-núúdı́yá} \quad \text{we (will) ask} \\
\text{tú-na-alíá} & \text{tú-náályá} \quad \text{we (will) eat} \\
\end{array}
\]

Classes (H-toned):

\[
\begin{array}{ll}
\text{surface forms} & \\
\text{vá-na-pilikaná} & \text{vá-ná-piliikáná} \quad \text{they (will) hear} \\
\text{vá-na-pelekedianá} & \text{vá-ná-pelékeédya} \quad \text{they (will) send} \\
\text{vá-na-tongolá} & \text{vá-ná-tóngólá} \quad \text{they (will) speak} \\
\text{vá-na-kundaniá} & \text{vá-ná-kündáanyá} \quad \text{they (will) mix} \\
\text{vá-na-lólo} & \text{vá-ná-loólá} \quad \text{they (will) look} \\
\text{vá-na-límiá} & \text{vá-ná-liimyá} \quad \text{they (will) make cultivate} \\
\text{vá-na-udiá} & \text{vá-ná-úúdyá/vá-núúdı́yá} \quad \text{they (will) ask} \\
\text{vá-na-alíá} & \text{vá-náályá} \quad \text{they (will) eat} \\
\end{array}
\]
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 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 'ili '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).

<table>
<thead>
<tr>
<th>previous rule</th>
<th>C</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>A S1/SF</td>
<td>?'u-úunu &gt; 'úunu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?'u-úuchi &gt; 'úuchi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'ku-pékeedía &gt; 'ku-pékeedyá</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'ku-kúndaanía &gt; 'ku-kúndaanyá</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'ku-liímía &gt; 'ku-liímyá</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'ku-úúdia &gt; 'ku-úúdyá/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kúúdyá</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'ku-úúlia &gt; 'kúúlyá</td>
</tr>
</tbody>
</table>

B S1

<table>
<thead>
<tr>
<th>previous rule</th>
<th>C</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'va-li-úúdie &gt; 'va-lyúudyé</td>
<td>DI</td>
</tr>
<tr>
<td></td>
<td>'va-li-ilíle &gt; 'va-liílye</td>
<td>DI</td>
</tr>
</tbody>
</table>

C SF

<table>
<thead>
<tr>
<th>previous rule</th>
<th>C</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'mi-iíhti &gt; 'míihi</td>
<td>DI</td>
</tr>
<tr>
<td></td>
<td>'miuñu &gt; 'viúnu</td>
<td>DI</td>
</tr>
<tr>
<td></td>
<td>'tu-na-pelekedía &gt; 'tu-na-pelekeedyá</td>
<td>F,DI</td>
</tr>
<tr>
<td></td>
<td>'tu-na-kundanía &gt; 'tu-na-kundaanyá</td>
<td>F,DI</td>
</tr>
<tr>
<td></td>
<td>'tu-na-liímía &gt; 'tu-na-liímyá</td>
<td>F,DI</td>
</tr>
<tr>
<td></td>
<td>'tu-na-úúdie &gt; 'tu-na-úúdyá/</td>
<td>F,DI</td>
</tr>
<tr>
<td></td>
<td>'tu-na-áalía &gt; 'tu-naáalyá</td>
<td>F,DI</td>
</tr>
</tbody>
</table>
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-úodia  >  'ku-úudyá, 'kúúdyá
'va-li-úudie >  va-li-úudye, va-lyúúdye
'tu-na-úudia >  tu-na-úudyá, tu-nuudyá
'tu-ni-úudia >  tu-ni-úudyá, tu-nyúúdyá
'tu-ní-iíliia >  tu-ní-li-úudyá, tu-ní-lyuudyá
'li-úudie  >  'li-úudyé, 'lyuudyé
'tu-na-úudie >  tu-na-úudyé, tu-núúdyé
'tu-na-li-úudie >  tu-na-li-úudyé, tu-ná-lyuudyé
'va-li-úudia  >  'va-li-úudyá, 'va-lyuudyá
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:

   \[ \text{HH} \rightarrow \text{H} \]

   'pa-vá-ú-lóola \rightarrow pà-vú-lóólà when they look at it (cl.3)

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

   \[ \text{H zero} \rightarrow \text{H} \]

   'tu-chi-olóota \rightarrow tù-chólóótà 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-lóilíte \rightarrow tû-kí-lólítë 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).

   \[ \text{H zero H} \rightarrow \text{H zero} \]

   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.

   'li-aángu \rightarrow lì-yàąngà mine (cl.5)
   'mú-aá naï \rightarrow mwàáñà 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):

   \[ \text{zero H} \rightarrow \text{H.H} \]
   \[ \text{zero H} \rightarrow \text{HH} \]

   'la-na-éneleedyà \rightarrow là-nénéléeëdyà it extends
   'tu-na-iive \rightarrow tû-nilëvé 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.

\[
\text{H.zero } \rightarrow \text{H.zero}
\]

\[
\text{ ‘tu-chi-va-údídyà } \rightarrow \text{ tú-chi-vúdídyà } \quad \text{we were asking for them}
\]

\[
\text{ ‘tu-chi-va-úudyà } \rightarrow \text{ tú-chi-vúudyà } \quad \text{we were asking them}
\]

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.

\[
\text{C } \quad \text{‘tu-ni-li-úudìa } \rightarrow \text{ ‘tu-ni-lyuudyà}
\]

\[
\text{D } \quad \text{‘tu-na-li-úudìe } \rightarrow \text{ ‘tu-ná-lyuudyè}
\]

This coalescence is optional, the non-contracted forms ‘tu-ni-li-úudìa and ‘tu-na-li-úudìe 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.

<table>
<thead>
<tr>
<th>previous rule</th>
<th>TD</th>
<th>F</th>
<th>next rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>A  ‘ku-pélèkeedyà</td>
<td>&gt;  ‘ku-pélèkeedyà</td>
<td>‘ku-pélèkeedyà</td>
<td>DI</td>
</tr>
<tr>
<td>A  ‘ku-kúndaanyà</td>
<td>&gt;  ‘ku-kúndaanyà</td>
<td>‘ku-kúndaanyà</td>
<td>DI</td>
</tr>
<tr>
<td>A  ‘ku-liimyà</td>
<td>&gt;  ‘ku-liimyà</td>
<td>‘ku-liimyà</td>
<td>DI</td>
</tr>
<tr>
<td>A  ‘ku-úudyà/</td>
<td>&gt;  ‘ku-úudyà/</td>
<td>‘ku-úudyà/</td>
<td>DI</td>
</tr>
<tr>
<td>Language</td>
<td>Proximal</td>
<td>Distal</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>'kúûdyá</td>
<td>&gt;</td>
<td>'kúûdyá</td>
<td>DI</td>
</tr>
<tr>
<td>kúûlyá</td>
<td>&gt;</td>
<td>kúûlyá</td>
<td>DI</td>
</tr>
<tr>
<td>PUL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'va-lúmilaanga &gt; 'va-lúmilaanga</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>li-hindiili &gt; li-hindiili</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>va-li-pilikaane &gt; va-li-pilikaane</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>va-li-tóngoole &gt; va-li-tóngoole</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 'tu-ni-li-pilikaána &gt; 'tu-ni-li-pilikaána</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>'tu-na-pelekeedyá &gt; 'tu-na-pelekeedyá</td>
<td>DI</td>
<td></td>
</tr>
<tr>
<td>'tu-na-kundaanyá &gt; 'tu-na-kundaanyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-liimyá &gt; 'tu-na-liimyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-udyá &gt; 'tu-na-udyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-nuudyá &gt; 'tu-nuudyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-naalýá &gt; 'tu-naalýá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-pelekeedyá &gt; 'tu-ni-pelekeedyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-li-pelekeedyá &gt; 'tu-ni-li-pelekeedyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-kúndaanyá &gt; 'tu-ni-kúndaanyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-li-kúndaanyá &gt; 'tu-ni-li-kúndaanyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-liimyá &gt; 'tu-ni-liimyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-li-liimyá &gt; 'tu-ni-li-liimyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-úudyá &gt; 'tu-ni-úudyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-nyúudyá &gt; 'tu-nyúudyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-li-udyá &gt; 'tu-ni-li-udyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-lyudyá &gt; 'tu-ni-lyudyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-níillyá &gt; 'tu-níillyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ni-liillyá &gt; 'tu-ni-liillyá</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D 'tu-na-pilikaane &gt; 'tu-na-pilikaane</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-li-pilikaane &gt; 'tu-na-li-pilikaane</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-tóngoole &gt; 'tu-na-tóngoole</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-li-tóngoole &gt; 'tu-na-li-tóngoole</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-na-li-loole &gt; 'tu-na-li-loole</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>'tu-nam'-pilikaane &gt; 'tu-nam'-pilikaane</td>
<td>DI,TA</td>
<td></td>
</tr>
<tr>
<td>'tu-na-li-udyé &gt; 'tu-na-li-udyé</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ná-lyudyé &gt; 'tu-ná-lyudyé</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'tu-ná-liillye &gt; 'tu-ná-liillye</td>
<td>DI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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):

<table>
<thead>
<tr>
<th>Surface Form</th>
<th>Tonal Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ûnëëné</td>
<td>I (emphatic)</td>
</tr>
<tr>
<td>ñuylé</td>
<td>we should eat</td>
</tr>
<tr>
<td>n-ûlúdya</td>
<td>we should ask</td>
</tr>
<tr>
<td>tû-ûlúdya</td>
<td>we should make cultivate</td>
</tr>
<tr>
<td>tû-kiûdàûnëyë</td>
<td>we should mix</td>
</tr>
<tr>
<td>tû-pëlëkëëdyë</td>
<td>we should send</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Surface Form</th>
<th>Tonal Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>và-nà-tû-liólà</td>
<td>they (will) look at us</td>
</tr>
<tr>
<td>và-kà-tû-liólà</td>
<td>they do not look at us</td>
</tr>
</tbody>
</table>

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

**tóngolá chihi** 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.

\[
\begin{align*}
&\text{tú-chí-yàngáätà} & \text{we were helping} \\
&\text{tú-chí-và-yàngáätà} & \text{we were helping them} \\
&\text{tú-chí-kündăányà/tú-chí-kündáányà} & \text{we were mixing} \\
&\text{tú-chí-vi-kündáányà/tú-chí-ví-kündáányà} & \text{we were mixing them} \\
&\text{tú-ká-yángéétè/tú-ká-yángéétè} & \text{we hadn’t helped} \\
&\text{tú-ká-vá-yángéétè/tú-ká-vá-yángéétè} & \text{we hadn’t helped them}
\end{align*}
\]

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.

\[
\begin{align*}
&\text{kú-vá-kündániidyà/kú-vá-kündániidyà} & \text{to mix for them} \\
&\text{kú-vá-pélékéedyà/kú-vá-pélékéedyà} & \text{to send them} \\
&\text{cf. kú-vá-pílikaníilà} & \text{to listen to them} \\
&\text{tú-ní-kátápáadyà/tú-ní-kátápáadyà} & \text{we had cleaned} \\
&\text{cf. tú-ní-pílikaníilà} & \text{we had listened} \\
&\text{tú-ná-kátápáadyà/tú-ná-kátápáadyà} & \text{we cleaned} \\
&\text{cf. tú-ná-pílikaníilà} & \text{we listened}
\end{align*}
\]

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

\[
\begin{align*}
&\text{pá-tú-vá-yángáätà} & \text{when we help them} \\
&\text{pá-tú-vá-pílikaníilà} & \text{when we listen to them} \\
&\text{pá-tú-vá-yángéétè} & \text{when we have helped them} \\
&\text{pá-tú-vá-pílikaníilè} & \text{when we have listened to them} \\
&\text{cf. pá-tú-yángáätà} & \text{when we help} \\
&\text{cf. pá-tú-pílikaníilà} & \text{when we listen} \\
&\text{cf. pá-tú-yángéétè} & \text{when we have helped} \\
&\text{cf. pá-tú-pílikaníilè} & \text{when we have listened}
\end{align*}
\]
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.

<table>
<thead>
<tr>
<th>previous rule</th>
<th>DI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB</td>
<td></td>
</tr>
<tr>
<td>A S1/SF</td>
<td></td>
</tr>
<tr>
<td>‘li-pélpééndë</td>
<td>&gt;  li-pélpééndë</td>
</tr>
<tr>
<td>‘ku-pilikáána</td>
<td>&gt;  kú-pilikáánà</td>
</tr>
<tr>
<td>‘u-tútúúli</td>
<td>&gt;  ú-tútúúli</td>
</tr>
<tr>
<td>‘ku-tóngóóla</td>
<td>&gt;  kú-tóngóólà</td>
</tr>
<tr>
<td>‘ku-li-tongoóla</td>
<td>&gt;  kú-li-tóngóólà</td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>‘ma-káála</td>
<td>&gt;  mà-káálà</td>
</tr>
<tr>
<td>‘di-nóóndwa</td>
<td>&gt;  di-nóóndwà</td>
</tr>
<tr>
<td>‘ku-lóóla</td>
<td>&gt;  kú-lóólà</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>‘úúnu</td>
<td>&gt;  úúnù</td>
</tr>
<tr>
<td>‘úúchi</td>
<td>&gt;  úúchi</td>
</tr>
<tr>
<td>TD,F</td>
<td></td>
</tr>
<tr>
<td>‘ku-pélékeedyà</td>
<td>&gt;  kú-pélékéédyà</td>
</tr>
<tr>
<td>‘ku-kúndáánya</td>
<td>&gt;  kú-kúndáányà</td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>‘ku-liimya</td>
<td>&gt;  kú-liimyà</td>
</tr>
<tr>
<td>‘ku-úudyà/</td>
<td>&gt;  kú-úudyà/</td>
</tr>
<tr>
<td>‘kuúdyà</td>
<td>&gt;  kúúdyà</td>
</tr>
<tr>
<td>‘kuúlyà</td>
<td>&gt;  kúúlyà</td>
</tr>
<tr>
<td>PUL</td>
<td></td>
</tr>
<tr>
<td>B S1</td>
<td></td>
</tr>
<tr>
<td>‘a-hümmbà</td>
<td>&gt;  à-hümmbà</td>
</tr>
<tr>
<td>‘va-li-lóóle</td>
<td>&gt;  vá-li-lóóle</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>‘va-li-úudyè</td>
<td>&gt;  vá-li-úudyè</td>
</tr>
<tr>
<td>‘va-lyúudyè</td>
<td>&gt;  vá-lyúudyè</td>
</tr>
<tr>
<td>‘va-liiýye</td>
<td>&gt;  vá-liiýye</td>
</tr>
<tr>
<td>TD</td>
<td></td>
</tr>
<tr>
<td>‘va-lúmiláangà</td>
<td>&gt;  vá-lúmiláangà</td>
</tr>
<tr>
<td>‘li-híndüüli</td>
<td>&gt;  lí-híndüüli</td>
</tr>
<tr>
<td>‘va-li-pilikàane</td>
<td>&gt;  vá-li-pilikàane</td>
</tr>
<tr>
<td>‘va-li-tóngóólè</td>
<td>&gt;  vá-li-tóngóólè</td>
</tr>
</tbody>
</table>
R
C SF
'ìa-kolobecko > mà-kòlòbèèkò
lì-kumbååtu > lì-kumbààtù
mà-hàlå > mà-hàalå
lì-tiùnji > lì-tiùnji
tu-na-piìkaàna > tù-nà-pìlikàànà
tu-na-tòngòòla > tù-nà-tòngòòlà
tu-na-loòlà > tù-nà-loòlà

PS
'u-njènjeema > ù-ñènjeèèmà
tu-nì-piìkaàna > tù-nì-pìlikàànà
tu-nì-tòngòòla > tù-nì-tòngòòlà
tu-nì-li-tòngòòla > tù-nì-li-tòngòòlà
tu-nì-loòlà > tù-nì-loòlà
tu-nì-li-loòlà > tù-nì-li-loòlà

C
'myuútwe > myùútwè
mììhi > mììhi
'viìnu > viïìnu

TD
tu-nì-li-piìkaàna > tù-nì-li-pìlikàànà

TD,F
tu-nì-pèlékeedyà > tù-nì-pèlékèèdyà
tu-nì-li-pèlékeedyà > tù-nì-li-pèlékèèdyà
tu-nì-kùndàànya > tù-nì-kùndàànyà
tu-nì-li-kùndaanya > tù-nì-li-kùndàànyà
tu-nì-li-liìmyà > tù-nì-li-liìmyà
tu-nì-li-ùudya > tù-nì-li-ùùdya
tu-nì-liyùudya > tù-nì-lyùùdya
tu-nì-liìlya > tù-nì-liìlyà

F
tu-na-pèlékeedyà > tù-nà-pèlékèèdyà
tu-na-kùndaanya > tù-nà-kùndàànyà
tu-na-liìmyà > tù-nà-liìmyà
tu-na-ùudya > tù-nà-ùùdya
tu-ùudya > tù-ùùdya
tu-naalìya > tù-nààlyà
tu-nì-liìmyà > tù-nì-liìmyà
tu-nì-ùudya > tù-nì-ùùdya
tu-nyùùdya > tù-nyùùdya
tu-nììlyà > tù-nììlyà
<table>
<thead>
<tr>
<th>PUL</th>
<th>PS</th>
<th>TD</th>
<th>E  S2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>D no H</td>
<td>tu-na-lóole</td>
<td>tu-na-ányye</td>
<td>li-putüla</td>
<td>ma-váála</td>
</tr>
<tr>
<td>vi-kokoowa</td>
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<tr>
<td>n-tandaasa</td>
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<tr>
<td>vi-yeeewe</td>
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<tr>
<td>li-pilikaa</td>
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<tr>
<td>li-tongoole</td>
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<tr>
<td>li-loole</td>
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<tr>
<td>chaangga</td>
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<tr>
<td>muuyo</td>
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<tr>
<td>li-uudyé</td>
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<tr>
<td>liuudyé</td>
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<tr>
<td>liiye</td>
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<td>tu-na-uudyé</td>
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<td>tu-nuudye</td>
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<td>tu-náálye</td>
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<tr>
<td>tu-na-pilikaa</td>
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<td>tu-na-lí-pilikaa</td>
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<tr>
<td>tu-nam'-pilikaa</td>
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<tr>
<td>tu-na-tongoole</td>
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<tr>
<td>tu-na-lí-tongoole</td>
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<td>tu-na-lí-loole</td>
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<tr>
<td>tu-na-lí-uudyé</td>
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<td>tu-ná-lyuudyé</td>
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<td>tu-ná-líiye</td>
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<td>PUL</td>
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<tr>
<td>li-putüla</td>
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<tr>
<td>che-loóongo</td>
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<tr>
<td>va-li-tongóola</td>
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<tr>
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</tr>
<tr>
<td>ma-váála</td>
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<tr>
<td>va-li-lóóla</td>
<td></td>
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<tr>
<td>va-li-uúdyá</td>
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<td></td>
</tr>
<tr>
<td>va-lyúuudyá</td>
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<td></td>
</tr>
<tr>
<td>va-liiya</td>
<td></td>
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</tr>
</tbody>
</table>
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.

### 3.5.8 Tone assimilation

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.

- ˚kṳ̊-pāpāt̤a > kṳ̄-pāpāt̤a to follow her/him
- ˚kū-vá-pāpāt̤a
cf.
- ˚tū-ni̱-pāpāt̤a > tū-ni̱-pāpāt̤a we have followed her/him
- ˚tū-ni̱-vá-pāpāt̤a
cf.
- ˚pām̄-pāpāt̤a > pām̄-pāpāt̤a when you (pl.) follow
- ˚pā-tū-pāpāt̤a
cf.

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-lō̤ngō soil
- mṳ́ō̤t̤ō fire
- mṳ́ṳ̈ūn̄dū chopper

và-veb̤-kṳ̄li̤m̄a they are cultivating

The verbal form above is a complex tense, the Present Progressive (see 7.4). It is derived from và-veb̤-kṳ̄li̤m̄a ‘they are cultivating’, where the L of -veb̤- 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):

<table>
<thead>
<tr>
<th>Chindonde</th>
<th>Chinnima</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>kūū́lyà</td>
<td>kū́lyà</td>
<td>to eat</td>
</tr>
<tr>
<td>mā-vāáálá</td>
<td>mā-vāáálá</td>
<td>shoulders</td>
</tr>
</tbody>
</table>

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.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>lūū́ndù</td>
<td>tomorrow</td>
<td></td>
</tr>
<tr>
<td>hwééétù</td>
<td>we</td>
<td></td>
</tr>
<tr>
<td>ā-iiìvà</td>
<td>(s)he who steals</td>
<td></td>
</tr>
<tr>
<td>ndiìmà</td>
<td>I who cultivate</td>
<td></td>
</tr>
<tr>
<td>tũ-wééétè</td>
<td>we who have put on clothes</td>
<td></td>
</tr>
</tbody>
</table>

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 -cétu 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.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>vålúúmé vāvìlli</td>
<td>two men</td>
<td></td>
</tr>
<tr>
<td>vålúúmé vákúlúungwà</td>
<td>big men</td>
<td></td>
</tr>
</tbody>
</table>

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

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 vålúmë vááno ‘these men’. The first word in this p-phrase without PUL can directly be derived from its underlying form válúmë (tonal profile A: S1/SF). Compare this example with the example of the two concatenated p-phrases used above válúmë váálii ‘two men’ and its short variant vålúmë váálii. 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:

\[
\begin{align*}
\text{vålúmë} & \rightarrow \text{vålúmë} & : HH & \rightarrow H \\
\text{váválii} & \rightarrow \text{váválii} & : \text{zero H} & \rightarrow H.H \\
\text{vániváaiing’a} & \rightarrow \text{vániváaiing’a} & : H.\text{zero H} & \rightarrow H.\text{zero (default L)} \ (MR) \\
\text{vákúlúungwà} & \rightarrow \text{vákúlúungwà} & : H.\text{H zero} & \rightarrow H.\text{H zero (default L)} \ (MR) \\
\text{áng’úukù} & \rightarrow \text{áng’úukù} & : H \text{ zero} & \rightarrow H
\end{align*}
\]

Other examples of PUS are the following:

\[
\begin{align*}
\text{múúndú} & \rightarrow \text{múúndú} & : \text{zero H} \text{ zero} & \rightarrow HH \\
\text{hwéétú} & \rightarrow \text{hwéétú} & : H \text{ zero H} & \rightarrow H \text{ zero (F after DI)} \ (MR)
\end{align*}
\]

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).
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 Post-lexical processes with i-phrases and utterances

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  | → meédi,     | water |
| 'úuhu  | → úuhú,     | flour |
| 'apaánó | → apaánó,  | here then |
| 'likoong’we | → likóong’wé, | pumpkin sp. |
| 'livákwángíle | → livákwángílé, | which has been scraped off |

'nkúvíká méédi, úlápáátá móótó. ...and take water, getting it on fire.
you start to pound flour, and take it.
now here then, I tell you...
...you take a pumpkin, and scrape it off.
...take the pumpkin which has been 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:

máchédó pàálá, pávélé múúnú nà-’ndyáawè
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., máchédó pálá, ... 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-chinduúli                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 nuyaano ‘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 nuyaanó / nyanó na-maviíli      seven (five and two) words
malóóve nuyaano / nyanano na-maviíli    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 máchédó pàálá, LHH LL.H, the next form with register lowering occurs:

máchédó pàálá, 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.L.   líñá, name
LH.L. → LH.L.   múñnú, person
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.

liwáángwá. bone LHL.L
cf. chitúúvi. load LHH.L
cf. áhümá. 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.

váyéni áává. those guests LHH LL.H
tíiítulo. let’s eat LL.H

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 vingáápti ‘how many’; in the second example, this
final word is váłüümé ‘men’.

viinü vingáápti, how many things? LHL.L LHL.H
viinü vingáápti vyá-váluüme. LHL.L LHL.L H-LHL.H
how many things of the men?

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:

lümé. dew L.L. Lítüüptá. holes LLL.L
líná. name HH.L Kwíkáála. to sit HHH.L
mwiáná. child HL.L MwiikÜümá. 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: $H \rightarrow \text{H}, \text{H} \rightarrow \text{L}$ and $\text{L} \rightarrow \text{L}$;
a lowered $\text{L}$ can not be distinguished from a $\text{L}$. These results are given in parentheses
below.

Optional U-final register lowering of last two syllables:

våtwålå vîtéêngû.  they take chairs  LLL  HHL.L  \(\text{(HHL.L)}\)

tççhônå chïyêwê.  we see the chin  LLL  LL.L  \(\text{(LL.L)}\)

wåtêndå mádêêngô.  they work  LLL  HHHL.L  \(\text{(HHL.L)}\)

tûlimå lîhââlå.  we till a field  LLL  LL.H.L  \(\text{(LL.L)}\)

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

våtwålå vîtéêngû.  they take chairs  LLL  HHL.L  \(\text{(HHL.L)}\)

tççhônå chïyêwê.  we see the chin  LLL  LL.L  \(\text{(LL.L)}\)

wåtêndå mádêêngô.  they work  LLL  HHHL.L  \(\text{(HHL.L)}\)

tûlimå lîhââlå.  we till a field  LLL  LL.H.L  \(\text{(LL.L)}\)

Optional U-final register lowering of final two words:

chîtéêngû çhînji.  other chair  L.H.L.H.L  \(\text{(LHL.L)}\)

ikâànyâ yá-châângà.  mouth of Gal.  L.L.L.H.H.L.  \(\text{(LHL.H.H.L)}\)

måliînå lôôhê.  many names  L.H.H.L.H.L  \(\text{(LHL.H.L)}\)

tûnåliîmå måhââlå.  we till fields  L.L.L.H.L.L.H.L  \(\text{(LHL.L.L.L)}\)

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,
påwêêlû) the first optional instance of register lowering.

...âôngê kàdîiki pâwêêlû.  LL.H.L.L.L.H.L.L.L.L  \(\text{(LL.L.L)}\)

...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 móóóó in the following example, where the second optional instance of U-final register lowering occurs.

...úlááta móóóó. LHLL 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.

\[
\begin{align*}
\text{Rise (LH):} & & \text{Fall (HL):} \\
\text{LH} & & \text{HL} \\
\text{LH} & & \text{HL}
\end{align*}
\]

\[
\begin{align*}
mùùùù. & & \text{person} & & \text{LH}L \\
mùùùù wòhèwòhè. & & \text{every person} & & \text{LH}L \text{LH}HLL \\
mwáááá. & & \text{child} & & \text{HL}L \\
mwáááá ñèpùlèkèdyà. & & \text{child who sends} & & \text{HL}L \text{LH}HLLL
\end{align*}
\]

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

\[
\begin{align*}
vàchïkààlà. & & \text{they were staying} & & \text{LHLLHLL} \\
vïïùù vëngààpì. & & \text{how many things?} & & \text{LH}L \text{LHLH}
\end{align*}
\]

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.

\[
\begin{align*}
\text{Fall (from HH, LL):} \\
\text{HH} & \\
\text{LL}
\end{align*}
\]

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):

<table>
<thead>
<tr>
<th>LH</th>
<th>HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH</td>
<td>HL</td>
</tr>
</tbody>
</table>

váánù. persons LH

túvóná váánù. we see the persons LI L LI LL

váánù váánì. other persons LH LI LI LL

váánù vóóhè. many persons LI LI LI LL

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.

<table>
<thead>
<tr>
<th>HHL</th>
<th>HHL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHL</td>
<td>HHL</td>
</tr>
</tbody>
</table>

móóótò. fire HHL L

móóótò ūunjì. another fire HHL L HL L

hwééétù. we HHL L

hwééétù tú-vámákóóndè. we are Makonde HHL LI L HHL L

As noted earlier, penultimate syllables with three TBU’s tend to loose 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
4.3 Genders
4.4 Nominal tone: tone groups and tone patterns
  4.4.1 Nouns with four-syllable stems, trisyllabic stems and disyllabic
       C-initial stems
  4.4.2 Nouns with disyllabic V-initial stems and minisyllabic stems
  4.4.3 Distribution of nouns over tone groups
  4.4.4 Nouns with an outer NPx
4.5 Nominal derivation
  4.5.1 Augmentatives and Reduplication
  4.5.2 Agent nouns, Instrument nouns and Manner nouns
4.6 Adjectives
4.7 Numerals
4.8 Other nominal forms

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 lexic. 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).

<table>
<thead>
<tr>
<th>Cl.</th>
<th>Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl.1</td>
<td>mu-</td>
</tr>
<tr>
<td>cl.1A</td>
<td>u-</td>
</tr>
<tr>
<td>cl.3</td>
<td>mu-</td>
</tr>
<tr>
<td>cl.5</td>
<td>li-</td>
</tr>
<tr>
<td>cl.7</td>
<td>chi-</td>
</tr>
<tr>
<td>cl.9</td>
<td>iN-</td>
</tr>
<tr>
<td>cl.11</td>
<td>lu-</td>
</tr>
<tr>
<td>cl.12</td>
<td>ka-</td>
</tr>
<tr>
<td>cl.14</td>
<td>u-</td>
</tr>
<tr>
<td>cl.15</td>
<td>ku-</td>
</tr>
<tr>
<td>cl.16</td>
<td>pa-</td>
</tr>
<tr>
<td>cl.17</td>
<td>ku-</td>
</tr>
<tr>
<td>cl.18</td>
<td>mu-</td>
</tr>
</tbody>
</table>

Examples of noun classes (L tones are not marked in the remainder of this grammar):
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 C\i; the glide y is suppressed after ch.

- miíhi 4 pestles
- myéédi 4 months
- myááka 4 years
- myóóngó 4 backs of bodies
- myuuúnda 4 fields
- chiílo/viílo 7/8 night
- cháála/yáála 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.

- váána 2 children
méédi 6/- water
méého 6 eyes cf. liiho 5 eye
mééno 6 teeth cf. liino 5 tooth
kiíhi 12 little pestle cf. mwíihi 3 pestle
kéélu 12 little field cf. wéélu 14 field
káála 12 little finger cf. cháála 7 finger
koéngo 12 little back cf. moóngo 3 back of body
kúúumba 12 little arrow cf. múúumba 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.

| mwíihi 3 | pestle |
| mwéédi 3 | moon, month |
| mwááka 3 | year |
| moóngo 3 | back of body |
| moóoto 3 | fire |
| múúnda 3 | field |

lwíídi 11 door
lwááu 11 net
lwóógo 11 cassava
luúnga 11 very young child
twiíhi 13 little pestles cf. miíhi 4 pestles
tvéélu 13 little fields cf. wéélu 14 field
twáála 13 little fingers cf. vyáála 8 fingers
twoóóngo 13 little backs cf. myóóngo 4 backs of bodies
túúumba 13 little arrows cf. myúúumba 4 arrows
wááahi 14 grass
wéélu 14 field
úúchi 14 honey
kwiíva 15 to steal cf. iíva steal!
kweénda 15 to enter cf. eenda enter!
kwoómba 15 to beat a drum cf. oomba beat a drum!
kúúuya 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
- **muówa** 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:

- \(v\) \(\rightarrow\) \(m\)
- \(l\) \(\rightarrow\) \(n\)
- \(h\) and \(y\) \(\rightarrow\) \(ny\)
- \(hw\) and \(w\) \(\rightarrow\) \(mw\)

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**.

<table>
<thead>
<tr>
<th>NPx</th>
<th>Meaning</th>
<th>Optional Meaning</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>m-pííni</strong></td>
<td>handle</td>
<td>cf. <strong>mipííni</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-téëla</strong></td>
<td>medicine</td>
<td>cf. <strong>mitéëla</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-chíïla</strong></td>
<td>tail</td>
<td>cf. <strong>míchíïla</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-kanuúnu</strong></td>
<td>baby</td>
<td>cf. <strong>vakamuúnu</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-kúuka</strong></td>
<td>boundary</td>
<td>cf. <strong>mikúuka</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-baleenga</strong></td>
<td>hole (in lobe of ear)</td>
<td>cf. <strong>mibaleenga</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-diídi</strong></td>
<td>rope</td>
<td>cf. <strong>midiídi</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-goongwe</strong></td>
<td>shed</td>
<td>cf. <strong>migoongwe</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-mááhe</strong></td>
<td>woman</td>
<td>cf. <strong>vamááhe</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-miíli</strong></td>
<td>body</td>
<td>cf. <strong>mimiíli</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-neémba</strong></td>
<td>boy (before initiation)</td>
<td>cf. <strong>vaneemba</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m’-mbweéha</strong></td>
<td>shadow (of things)</td>
<td>cf. <strong>mimbweéha</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-máálala</strong></td>
<td>tree (species)</td>
<td>cf. <strong>miváálala</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-núúme</strong></td>
<td>man</td>
<td>cf. <strong>valúúme</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-nyáavi</strong></td>
<td>sorcerer</td>
<td>cf. <strong>vaháavi</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>n-nyééni</strong></td>
<td>guest</td>
<td>cf. <strong>vayeéni</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-mwiíndi</strong></td>
<td>tree (species)</td>
<td>cf. <strong>miwiíndi</strong></td>
<td><strong>m</strong></td>
</tr>
<tr>
<td><strong>m-múúla</strong></td>
<td>tree (species)</td>
<td>cf. <strong>miwúúla</strong></td>
<td><strong>m</strong></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>NPx</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>m</strong></td>
<td><strong>n</strong></td>
<td><strong>ny</strong></td>
<td><strong>ng</strong>’</td>
</tr>
<tr>
<td><strong>mb</strong></td>
<td><strong>nd</strong></td>
<td><strong>nj</strong></td>
<td><strong>ng</strong></td>
</tr>
<tr>
<td><strong>mbw</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hw</strong></td>
<td><strong>s</strong></td>
<td></td>
<td><strong>h</strong></td>
</tr>
</tbody>
</table>
The result is a reduced system where different underlying consonants merge into the same prenasalized consonants.

\[
\begin{align*}
m &< \text{p } \text{or } \text{m}'? \\
n &< \text{t } \text{or } \text{n}'? \\
\text{ny} &< \text{ch } \text{or } \text{ny}'? \\
\text{ng} &< \text{k } \text{or } \text{ng}'? \\
\text{mb} &< \text{b } \text{or } \text{v } \text{or zero} \\
\text{nd} &< \text{d } \text{or } \text{1 } \text{or zero?} \\
\text{nj} &< \text{y } \text{or zero?} \\
\text{ng} &< \text{g}' \text{ or zero?} \\
\text{mbw} &< \text{w} \\
\text{hw} &< \text{hw} \\
\text{s} &< \text{s} \\
\text{h} &< \text{h}
\end{align*}
\]

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. Kamamáana 12 (dim.) |
| Inéembe 9 | Calf | Cf. Lineéembe 5 (aug.) |
| Inyúuchi 9 | Honey bee | Cf. Kanyúuchi 12 (dim.) |
| Ing'oóme 9 | Cow | Cf. Ling'oóme 5 (aug.) |
| Imbéeu 9 | Seed | Cf. Kambéeu 12 (dim.) |
| Induúva 9 | Blossom | Cf. Induúva 5 (aug.) |
| Injenjeema 9 | Mosquito | Cf. Kanjénjeema 12 (dim.) |
| Inguluüve 9 | Pig | Cf. Linguluüve 5 (aug.) |
| Indiila 9 | Path | Cf. Kadiila/tudiila 12/13 (dim.) |

But: Lindiila/mandiila 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'úlúngwa/ding'úlúngwa | Big | Cf. Vakúlúngwa |
| Imbihi/dimbibi | Unripe | Cf. Vavihi |
| Indikiidiki/dindikiidiki | Small | Cf. Vadiikiidiki |
| Indééhu/dindééhu | Long, tall, high | Cf. Valééhu |
| Indéémwa/dindéemwa | Idle | Cf. Valéémwa |
but: inyóóko/dinyóóko  small  cf. vadyóóko

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

<table>
<thead>
<tr>
<th>Noun</th>
<th>Class</th>
<th>Columbia</th>
<th>Spanish</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>inéengo/dineéengo</td>
<td>9/10</td>
<td>cf. nteéengo/mitééngo 3/4</td>
<td>tree sp.</td>
<td></td>
</tr>
<tr>
<td>ing'wááju/ding'wááju</td>
<td>9/10</td>
<td>cf. nkwaáju/mikwaáju 3/4</td>
<td>tree sp.</td>
<td></td>
</tr>
<tr>
<td>imbúléwa/dimbúléwa</td>
<td>9/10</td>
<td>cf. mmbúléwa/mimbúléwa 3/4</td>
<td>tree sp.</td>
<td></td>
</tr>
<tr>
<td>imbúúla/dimbúúla</td>
<td>9/10</td>
<td>cf. mmúúla/miwúúla 3/4</td>
<td>tree sp.</td>
<td></td>
</tr>
</tbody>
</table>

but: inónjí/dinóónjí 9/10  cf. nnónjí/milóónjí 3/4  baobab

Nouns of class 11/10:

<table>
<thead>
<tr>
<th>Noun</th>
<th>Class</th>
<th>Columbia</th>
<th>Spanish</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimaápa 10</td>
<td>wings</td>
<td>cf. lupaápa 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinaáno 10</td>
<td>tales</td>
<td>cf. lutaáno 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinyíya 10</td>
<td>roots</td>
<td>cf. luchiíya 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ding’ombe 10</td>
<td>finger nails</td>
<td>cf. lukáriobe 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dimbaáu 10</td>
<td>ribs</td>
<td>cf. luvaáu 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dindíümi 10</td>
<td>tongues</td>
<td>cf. luluími 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dínjéeye 10</td>
<td>lips</td>
<td>cf. luyéeye 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dimbwááni 10</td>
<td>fence</td>
<td>cf. luwááni 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dihuúnde 10</td>
<td>valleys</td>
<td>cf. luhuúnde 11 (sg.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Noun</th>
<th>Class</th>
<th>Columbia</th>
<th>Spanish</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimboóí 10</td>
<td>twisted ropes</td>
<td>cf. luwoóí 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dimbuúngo 10</td>
<td>quarters of houses</td>
<td>cf. luwuúngo 11 (sg.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Underlying ‘b remains unchanged after prenasalization; there are also nouns of class 9/10 with initial ‘b, e.g., ihúombe/dihúombe ‘fish’. Parallel examples with two other initial consonants, hw and s, suggest that these consonants remain unchanged after prenasalization as well.

<table>
<thead>
<tr>
<th>Noun</th>
<th>Class</th>
<th>Columbia</th>
<th>Spanish</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>dihwííyo 10/-</td>
<td>kidney</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>isúuvi/disúuvi 9/10</td>
<td>leopard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Noun</th>
<th>Class</th>
<th>Columbia</th>
<th>Spanish</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>dinjwiidi 10</td>
<td>doors</td>
<td>cf. lwíidi 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinjááu 10</td>
<td>nets</td>
<td>cf. lwááu 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinjááyo 10</td>
<td>spores</td>
<td>cf. lwaáyo 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>injóógo 9</td>
<td>very small cassava</td>
<td>cf. lwóógo 11 cassava</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinjuúko 10</td>
<td>ladles, spoons</td>
<td>cf. luúko 11 (sg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinjuúnga 10</td>
<td>very young children</td>
<td>cf. luúnga 11 (sg.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is one exception: the noun dimúúnjí 10 ‘cleared thickets’ forms a pair with the singular luúúnjí 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).

<table>
<thead>
<tr>
<th>Class 9/10:</th>
<th>Class 1A/2A:</th>
</tr>
</thead>
<tbody>
<tr>
<td>iméémbe/diméémbe</td>
<td>uméémbe/améémbe fly</td>
</tr>
<tr>
<td>incéémbe/dineéémbe</td>
<td>uncéémbe/aneéémbe calf</td>
</tr>
<tr>
<td>inyúúchi/dinyúúchi</td>
<td>unyúúchi/anyúúchihoney bee</td>
</tr>
<tr>
<td>ing’oóbme/ding’oómbe</td>
<td>ung’oômbe/ding’oómbe cow</td>
</tr>
<tr>
<td>imbúúdi/dimbúúdi</td>
<td>umbúúdi/ambúúdi goat</td>
</tr>
<tr>
<td>injénjeéma/dinjénjeéma</td>
<td>unjénjeéma/anjénjeéma mosquito</td>
</tr>
<tr>
<td>inguluúvé/dinguluúvé</td>
<td>unguluúvé/anguluúvé pig</td>
</tr>
<tr>
<td>isúuví/disúuví</td>
<td>usúuví/asúuví leopard</td>
</tr>
<tr>
<td>ihóóomba/dihóóomba</td>
<td>uhóóomba/ahóóomba fish</td>
</tr>
<tr>
<td>ihíímba/dihíímba</td>
<td>uhíímba/ahíímba lion</td>
</tr>
</tbody>
</table>

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-/di-, preceded by the NPx of class 1/2A i-/a-.

| nyáángu/aváángu 1/2A | my companion/companions |
| alongá vaángu 2A | my relatives (in a broad sense) |

Next to the noun ndyáángu ‘my wife’, the class 2A noun adyáángu 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+”.

| ámáama/achááamaa 2A/2A+ | mother |
| atáata/achátaata 2A/2A+ | father |
| adyáángu/acháádyá vaángu 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-víví** grandparents, ancestors  cf. avíví 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.

- **ahímba** - vahímba 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:

<table>
<thead>
<tr>
<th>Noun</th>
<th>Plural NPx</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>maliidi</td>
<td>voices</td>
<td>6+</td>
</tr>
<tr>
<td>maliína</td>
<td>names</td>
<td>6+</td>
</tr>
<tr>
<td>malyénýe</td>
<td>foreheads</td>
<td>6+</td>
</tr>
<tr>
<td>malyáámbi</td>
<td>mats</td>
<td>6+</td>
</tr>
<tr>
<td>malyúúlo</td>
<td>evenings</td>
<td>6+</td>
</tr>
<tr>
<td>mawéelu</td>
<td>fields</td>
<td>6+</td>
</tr>
<tr>
<td>mawáála</td>
<td>beer</td>
<td>6+</td>
</tr>
<tr>
<td>diinduúma</td>
<td>cracks</td>
<td>10+</td>
</tr>
<tr>
<td>liidi</td>
<td>cf. liína  5 (sg.)</td>
<td></td>
</tr>
<tr>
<td>liína</td>
<td>cf. liína  5 (sg.)</td>
<td></td>
</tr>
<tr>
<td>lyéénýe</td>
<td>cf. lyáámbi 5 (sg.)</td>
<td></td>
</tr>
<tr>
<td>lyúúlo</td>
<td>cf. lyúúlo 5 (sg.)</td>
<td></td>
</tr>
<tr>
<td>wéelu</td>
<td>cf. wéelu 14 (sg.)</td>
<td></td>
</tr>
<tr>
<td>wáála</td>
<td>cf. wáála 14 (sg.)</td>
<td></td>
</tr>
<tr>
<td>luúma</td>
<td>cf. luúma  11 (sg.)</td>
<td></td>
</tr>
</tbody>
</table>

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.)

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
- **má-kóonde/va-má-kóonde** Makonde person
- **ma-kóonde** dry areas
- **mi-téela/va-mi-téela** local docter
- **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.

- chi-háau: Yao language and nature
- ñá-háau: Yao person
- chí-ndoonde: Ndonde dialect and nature
- ñándoonde/ñá-ndoonde: Ndonde person
- lí-nyíndwa/má-nyíndwa: tomato
- chí-nduúi: 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.

- likúútu 5 ear
- úlyaambá 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.
- nakádiimu 1a goblin, orgre
- nangááhwa 3a weed sp.
- nahúúhwe 3a weed sp.
nachifhe 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:

- lukwekwe 11 weed - nachitani 3a weed sp.
- waahi 14 grass - nachitukaana 3a grass sp.
- imbuala 9 rain - nangwao 9a late rains

tu-wene lukwekwe lwana-nachitani
we have seen the weed sp.
tu-u-wene waa hi wa-nachitukaana
we have seen the grass sp.
tu-i-wene imbuala lyana-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.

- na háaku/anámaháaku 1a/2A girl (before initiation)
- nankakataambwe/anámikakataambwe 1a/2A spider
- námbeeda/anámbéeda 1a/2A insect sp.
- nakádiimu/áchánakádiimu 1a/2A+ goblin, orgre
- nachihuungo/áchánávihuungo 1a/2A+ snake sp.
- nankadindúumba/áchánánankadindúumba 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:

- sómó/= 1b/2b friend
- twíiga/= 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
piísi/dipiísi 9c/10c  measure for grain
(i)teéso/diteéso 9c/10c  adze
kandíí/dikandíí 9c/10c  lamp
básíkeelí/dibásíkeelí 9c/10c  bicycle
bakóola/dibakóola 9c/10c  stick
biínda/dibiínda 9c/10c  okra
(i)miía/dimíía 9c/10c  hundred
yeémebe/diyéembe 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-váana 1d/2d  child  cf. mwáana/váana  child
chá-kuulya/vyá-kuulya 7d/8d  food  cf. kúulya to eat
?chá-báanda/vyá-báanda 7d/8d  insect sp.
?chá-ngóóló/vyá-ngóóló 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/vánu 1/2  person
mwáana/váana 1/2  child
nkóoko/vakóoko 1/2  animal
múñííma/váñííma 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/ míchéche 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.
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 mitóonga 4 ‘barren women’.

mavélu: SC: a-vele; OC: va-m-wene; POS: w-angu; CONN: wa-a; DEM: a-yu-no; ADJ: n-kulungwa; NUM: yu-no; other specifiers: yu-nji, w-ohe, a-lida

mitóonga: SC: i-vele; OC: va-i-wene; POS: y-angu; CONN: ya-a; DEM: a-yu-no; ADJ: n-kulungwa; NUM: yu-no; other specifiers: yu-nji, w-ohe, i-lida

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.

livélu: SC: a-vele; OC: va-m-wene; POS: w-angu; CONN: wa-a; DEM: a-yu-no; ADJ: n-kulungwa; NUM: yu-no; other specifiers: yu-nji, w-ohe, a-lida

luúnga: SC: a-vele; NUM: yu-no; yu-nji; a-lida;

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:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>vitúúvi</td>
<td>bundles</td>
<td>SD at the bundles</td>
</tr>
<tr>
<td>nkúungu</td>
<td>pot</td>
<td>SD at the pot</td>
</tr>
<tr>
<td>inóóndwa</td>
<td>star</td>
<td>SD at the star</td>
</tr>
<tr>
<td>uliindo</td>
<td>hair (of head)</td>
<td>SD at the star</td>
</tr>
<tr>
<td>anámikakataambwe</td>
<td>spiders</td>
<td>SD at the spiders</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>pavitúúvi</td>
<td>at the bundles</td>
<td>SD at the bundles</td>
</tr>
<tr>
<td>pankúungu</td>
<td>at the pot</td>
<td>SD at the pot</td>
</tr>
<tr>
<td>painóóndwa</td>
<td>at the star</td>
<td>SD at the star</td>
</tr>
<tr>
<td>paaliindo</td>
<td>at the hair</td>
<td>SD at the hair</td>
</tr>
<tr>
<td>paanámikakataambwe</td>
<td>at the spiders</td>
<td>SD at the spiders</td>
</tr>
<tr>
<td>kuvitúúvi</td>
<td>to the bundles</td>
<td>SD at the bundles</td>
</tr>
<tr>
<td>kunkúungu</td>
<td>to the pot</td>
<td>SD at the pot</td>
</tr>
<tr>
<td>kuinóóndwa</td>
<td>to the star</td>
<td>SD at the star</td>
</tr>
<tr>
<td>kuuliindo</td>
<td>to the hair</td>
<td>SD at the hair</td>
</tr>
<tr>
<td>kuanámikakataambwe</td>
<td>to the spiders</td>
<td>SD at the spiders</td>
</tr>
<tr>
<td>mnitúúvi</td>
<td>in the bundles</td>
<td>SD at the bundles</td>
</tr>
<tr>
<td>mnukúungu</td>
<td>in the pot</td>
<td>SD at the pot</td>
</tr>
<tr>
<td>muninóóndwa</td>
<td>in the star</td>
<td>SD at the star</td>
</tr>
<tr>
<td>muniindo</td>
<td>in the hair</td>
<td>SD at the hair</td>
</tr>
<tr>
<td>?muanámikakataambwe</td>
<td>in the spiders</td>
<td>SD at the spiders</td>
</tr>
</tbody>
</table>
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
- nchíini/mmiiniu 18 in the thing/s cf. chiini/viiniu 7/8 thing
- nding’áande 18 in the houses cf. ding’áande 10 houses
- nniye/mmaaye 18 in the egg/s cf. liiye/maaye 5/6 egg
- mmwéelu 18 in the field cf. wéelu 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:

- pavítúvi vyeétu at our bundles
- kunkúungu úúmo to one pot
- nding’ándé diíno 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 lyáangu my name welú waáangu my field
- malíná laáangu my names mawelú laáangu my fields
- palíná laáangu at my name kuwelú waáangu 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 -ki-; 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-ki-mariáamu at Mariamu’s
- kwá-ki-nkúłúngwa at the elder’s
- kw-ángáánya zakia na-wi-mariáamu, or
- kw-ángáá-zakia na-wi-mariáamu at Zakia and Mariamu’s
- kwá-vmákóonde 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
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.

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:

These locative nouns always demand locative agreement. Some examples:

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:

These locative nouns always demand locative agreement. Some examples:

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:
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:

<table>
<thead>
<tr>
<th>Class</th>
<th>Gender 1</th>
<th>Gender 2</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>nnuúme</td>
<td>valuúme</td>
<td>man</td>
</tr>
<tr>
<td>3/4</td>
<td>nnándi</td>
<td>milándi</td>
<td>tree</td>
</tr>
<tr>
<td>5/6</td>
<td>liváala</td>
<td>maváala</td>
<td>shoulder</td>
</tr>
<tr>
<td>7/8</td>
<td>chipúula</td>
<td>sipúula</td>
<td>knife</td>
</tr>
<tr>
<td>9/10</td>
<td>ing’óombe</td>
<td>ding’óombe</td>
<td>cow</td>
</tr>
<tr>
<td>11/10</td>
<td>lutáávi</td>
<td>dináávi</td>
<td>branch</td>
</tr>
<tr>
<td>12/13</td>
<td>katáávi</td>
<td>tutáávi</td>
<td>little branch</td>
</tr>
</tbody>
</table>

The gender of class 1/2 almost exclusively contains nouns indicating human beings; one noun is found in this gender indicating ‘animal’: nkóoko/vakóoko, 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.

<table>
<thead>
<tr>
<th>Gender 1</th>
<th>Gender 2</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>uhóomba</td>
<td>ahóomba</td>
<td>1A/2A</td>
</tr>
<tr>
<td>ihóomba</td>
<td>dihóomba</td>
<td>9/10</td>
</tr>
<tr>
<td>uhimbha</td>
<td>ahimbha</td>
<td>1A/2A</td>
</tr>
<tr>
<td>ihimbha</td>
<td>dihimbha</td>
<td>9/10</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>liidi</td>
<td>5/6+</td>
</tr>
<tr>
<td>wéelu</td>
<td>14/6+</td>
</tr>
<tr>
<td>luúma</td>
<td>11/10+</td>
</tr>
</tbody>
</table>
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)
- nachihuúng/achánávihuúng 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-vaaña 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 upiínde/mapiínde bow
  ulóómbi/maloómbi marriage
  úlyaámba/mályaámba morning
  ulwééle/malwééle sickness
- class 14/4 ukoóti/mikoóti neck
  uúsí/miÚúúí spider web

The major one class genders are:

- class 14 ulíindo hair (of head)
- class 15 kung’áána to play
- class 16 pahááli place
- class 17 kukaáti room
- class 18 muuyó 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-.
nabúúbwe 3a/- weed sp.
nachíhe 9a/- riddle

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

tumbááku 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
liwu 5/- ashes
liime 5/- dew
lyóóhi 5/- smoke
lipuúngo 5/- wind
litutuúnga 5/- dust
maáta -6 saliva
maviila -6 twins
makweedo -6 urine
mahúúta -6 oil
méedi -6 water
chitéete 7/- trembling from anxiety
chidiidi 7/- pity
viíyo -8 food
indaálá 9/- hunger
inyótá 9/- thirst
dimoóono -10 force, strength, power
dihóóni -10 shame
dihwiíyo -10 kidney
luupi 11/- darkness
luwoóono 11/- sleep
kuméecho 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):

<table>
<thead>
<tr>
<th>TG</th>
<th>NPx</th>
<th>noun stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>L</td>
<td>S1/SF</td>
</tr>
<tr>
<td>B</td>
<td>L</td>
<td>S1</td>
</tr>
<tr>
<td>C1</td>
<td>L</td>
<td>SF</td>
</tr>
<tr>
<td>C2</td>
<td>H</td>
<td>SF</td>
</tr>
<tr>
<td>D1</td>
<td>L</td>
<td>no H tones</td>
</tr>
<tr>
<td>D2</td>
<td>H</td>
<td>no H tones</td>
</tr>
<tr>
<td>E</td>
<td>L</td>
<td>S2</td>
</tr>
</tbody>
</table>

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 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 ‘-ójé ‘many’, with which they do not occur in the same p-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.)

<table>
<thead>
<tr>
<th>Nouns</th>
<th>trisyllabic stems</th>
<th>four-syllable stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>NPx.stem</td>
<td>TP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TP</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>L.HH:L / L.HHL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>L.HFL / L.HLL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
<td>L.LRL / L.LHH</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
<td>L.HRL / L.HLL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H</td>
<td>L.LL:L / L.LLLL</td>
</tr>
<tr>
<td>E</td>
<td>L.S2</td>
<td>L.LFL / L.LHL</td>
</tr>
</tbody>
</table>

Some examples:

A  u-tútúlí / u-tútúlí wójé  much brain  
  ma-täng’úniló / ma-täng’úniló lójé  many molarss
  ma-hin.dilí / ma-hindii lójé  many cooking stones
B  va-lúmilanga / va-lúmilanga wójé  many widows, bachelors
  ma-kumbáatu / ma-kumbástu lójé  many feet
  di-molopoándo / di-molopóndo dyójé  many ditches
C1  di-súnguálu / di-súngulu dyójé  many ridgepoles
  mi-chaketa / mi-chakete yójé  many beads
D1  vi-kokolówa / vi-kokolówa yójé  many empty maize cobs
E  ma-putii / ma-putila lójé  many traps (type)
  vi-tukútúku / vi-tukútuku vyójé  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.

<table>
<thead>
<tr>
<th>Nouns</th>
<th>disyllabic C-stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>NPx.stem TP</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF L.H:L / L.HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1 L.FL / L.HL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF L.RL / L.HH</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF H.RL / H.LL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H L.L: / L.LL</td>
</tr>
<tr>
<td>E</td>
<td>L.S2 L.H.L / L.HL</td>
</tr>
</tbody>
</table>

Some examples:

A  ma-káála / ma-kála lóóhe  many charcoal
B  a-híimba / a-himba vóóhe  many lions
C1 di-muúla / di-múlú dyóóhe  many noses
C2 má-tínji / má-tinji lóóhe  many pumpkins
D1 vi-yeeve / vi-yewé výóóhe  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: L.H:L / L.HL. 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.H.H, while nouns of TG E have tone pattern L.L.H (for an explanation of this difference, see 8.2.2).

valawene mákáála  they have seen the charcoal
valawene máváála  they have seen the shoulders
makalá láángu   my charcoal
mavalá láángu   my shoulders

There are four nouns without a NPx (one can also occur with NPx, míáa ~ ímííša, 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)míía/dímíía ‘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/vakóóngwe 1/2 woman
nkóoko/vakóóko 1/2 animal

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

vavawene vákoongwe they have seen the woman
vakongwé véeitu our women
cf. vanwené ŋkoongwe they have seen the woman
cf. nkónwé véeitu our woman
vavawene vákoóko they have seen the animals
vakokó véeitu our animals
cf. vanwené ŋkoóko they have seen the animal
cf. nkóko véeitu 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-ôhe ‘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. úuchí / úchí wohewóôhe all the honey
mwááka / mwáka wohewóôhe every year
FL. -
 mwáana / mwána wohewóôhe every child
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 *wéélù* ‘field’ belongs to this TG. Underlyingly, this would be ‘u-élù. Vowel coalescence/glide formation gives uc > we (see 2.9) and tonal coalescence of LHL results in a level H sequence (see 3.5.5); *wéélù. The noun *wéélù* 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-élù. The form after penultimate lengthening is ‘u-éélù. There is vowel coalescence/glide formation between the NPx and the stem: *wéélù*, 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, *muúndu* ‘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.

<table>
<thead>
<tr>
<th>TG</th>
<th>Noun</th>
<th>Meaning</th>
<th>Tonal Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>lwááu/dinjááu</td>
<td>net</td>
<td>H.H:L</td>
</tr>
<tr>
<td></td>
<td>wáála/mawáála</td>
<td>beer</td>
<td>H.H:L</td>
</tr>
<tr>
<td></td>
<td>vadiwene dinjááu</td>
<td>they have seen the nets</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>dinjááu dyáángu</td>
<td>my nets</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>valakimbidile máwáála</td>
<td>they have drunk the beers</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>mawáála laángu</td>
<td>my beers</td>
<td>H.FL</td>
</tr>
<tr>
<td>B</td>
<td>liina/máliina</td>
<td>name</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>wéélú/mawéélú</td>
<td>field</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>valapilikene máliina</td>
<td>they have heard the names</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>maliná laángu</td>
<td>my names</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>valawene mawéélú</td>
<td>they have seen the fields</td>
<td>H.FL</td>
</tr>
<tr>
<td></td>
<td>mawélú laángu</td>
<td>my fields</td>
<td>H.FL</td>
</tr>
</tbody>
</table>

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/matlúúlo 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: ōnde/achánde 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.)
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<table>
<thead>
<tr>
<th>Nouns</th>
<th>disyllabic V-stems, minisyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>NPx.stem</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H</td>
</tr>
<tr>
<td>E</td>
<td>L.S2</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>TG</th>
<th>TP 1/2v</th>
<th>TP 2c</th>
<th>TP 3c/v</th>
<th>TP 4+c/v</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>H:L 1/2</td>
<td>L.H:L 131</td>
<td>(L)HHH:L 15/</td>
<td>(L)HHH:L 10/1</td>
<td>172</td>
</tr>
<tr>
<td>B</td>
<td>H:L 1/3</td>
<td>L.FL 124</td>
<td>(L)HF 35/15</td>
<td>(L)HHL 12/-</td>
<td>201</td>
</tr>
<tr>
<td>C1</td>
<td>RL 14/17</td>
<td>L.RL 204</td>
<td>(L)LRL 25/1</td>
<td>(L)LRL 5/1</td>
<td>267</td>
</tr>
<tr>
<td>C2</td>
<td>FL 1/5</td>
<td>H.RL 15</td>
<td>(L)HR 9/2</td>
<td>(L)HHL 1/-</td>
<td>32</td>
</tr>
<tr>
<td>D1</td>
<td>L.L 7/1</td>
<td>L.LL 40</td>
<td>(L)L.L 7/3</td>
<td>(L)L.L 2/-</td>
<td>60</td>
</tr>
<tr>
<td>E</td>
<td>L.FL -/-</td>
<td>L.H:L 67</td>
<td>(L)LFL 10/1</td>
<td>(L)LFL 2/-</td>
<td>82</td>
</tr>
<tr>
<td>Total</td>
<td>29/47</td>
<td>581</td>
<td>101/22</td>
<td>32/2</td>
<td>814</td>
</tr>
</tbody>
</table>

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 vakóongwe and vakóóko 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. básíkeeli/dibásíkeeli  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)miía/dimiía  ‘hundred’, náási/dináási  ‘coconut’, ñāámu  ‘blood’ and tááti  ‘father’.

Some compound nouns are included, e.g., adýáangu  ‘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. maáíma, 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.

<table>
<thead>
<tr>
<th>pa-malóvé</th>
<th>at words</th>
<th>cf. malóvé</th>
<th>words</th>
</tr>
</thead>
<tbody>
<tr>
<td>pa-niláandi</td>
<td>at trees</td>
<td>cf. niláandi</td>
<td>trees</td>
</tr>
<tr>
<td>pa-lwááu</td>
<td>at the net</td>
<td>cf. lwááu</td>
<td>net</td>
</tr>
<tr>
<td>pa-wéelu</td>
<td>outside</td>
<td>cf. wéelu</td>
<td>field</td>
</tr>
<tr>
<td>pa-chiínu</td>
<td>place</td>
<td>cf. chiínu</td>
<td>thing</td>
</tr>
<tr>
<td>pa-moóngo</td>
<td>behind, after</td>
<td>cf. moóngo</td>
<td>back (of body)</td>
</tr>
<tr>
<td>pa-ntíima</td>
<td>abdomen</td>
<td>cf. ntíima</td>
<td>heart</td>
</tr>
<tr>
<td>pa-méého/ku-méého</td>
<td>publicly/face</td>
<td>cf. méého</td>
<td>eyes</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>TG</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A L.S1/SF</td>
<td>'pa.-hálí L.-H.L / L.-HL</td>
</tr>
<tr>
<td>B L.S1</td>
<td>'pa.-mbúto L.-FL / L.-HL</td>
</tr>
<tr>
<td>C1 L.SF</td>
<td>'pa.-nnímá L.-L.RL / L.-L.HH</td>
</tr>
<tr>
<td></td>
<td>'n-nuvaáú L.-L.RL / L.-L.HH</td>
</tr>
<tr>
<td></td>
<td>'n-niíngú L.-L.RL / L.-L.HH</td>
</tr>
<tr>
<td></td>
<td>'pa.-hí RL / HH</td>
</tr>
<tr>
<td></td>
<td>'pa.-nyumá L.-RL / L.-HH</td>
</tr>
<tr>
<td></td>
<td>'ku.-kátí L.-RL / L.-HH</td>
</tr>
<tr>
<td></td>
<td>'ku.-mangaá L.-RL / L.-HH</td>
</tr>
<tr>
<td></td>
<td>'n.-denganí L.-LRL / L.-LHH</td>
</tr>
<tr>
<td></td>
<td>'mu.-há RL / HH</td>
</tr>
<tr>
<td>C2 H.SF</td>
<td>'pa-litungulú L.-L.HRL / L.-L.HLL</td>
</tr>
<tr>
<td>D1 L.no H</td>
<td>'pa-lipanda L.-L.LL / L.-L.LL</td>
</tr>
<tr>
<td></td>
<td>'ku.-misati L.-L.LL / L.-L.LL</td>
</tr>
<tr>
<td></td>
<td>'ku.-mayaayá L.-L.LL / L.-L.LL</td>
</tr>
<tr>
<td></td>
<td>'ku.-chihanyá L.-L.LL / L.-L.LL</td>
</tr>
</tbody>
</table>
With TG C2, the H tone of the inherent NPx 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 NPx’s are also prefixed to words to which H Tone Assignment has applied. There are two sub-types of pluralizing NPx’s. The first one consists of NPx’s which are prefixed to nouns of classes 5, 11 and 14 with vowel-initial disyllabic stems, where the inherent NPx is merged with the stem. Examples are mawáála ‘beers’, maliína ‘names’ and mawéélú ‘fields’. The second sub-type is represented by the class 10 NPx 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 liína/maliína name/s
wáála/mawáála beer/s wéélú/mawéélú field/s

The difference between locative NPx’s and pluralizing NPx’s is that pluralizing NPx’s become fully integrated into the word as soon as they are adjoined, whereas locative NPx’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 NPx’s have agreement with the pluralized noun, not with the singular form. Some examples:

ku-wélú 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 2v-nouns. These nouns all have a LH tone pattern before a pronominal possessive, regardless of the TG to which they belong. A locative NPx before such a noun of any TG has no influence on the tone pattern. Compare this to what happens when any other outer NPx is added to such a noun, for example one of the pluralizing NPx’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 litíáwa ‘clan’ (TG B).
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).

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

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 mwiíhi ‘pestle’.

vauwene mwiíhi they have seen the pestle
vapawene pá-mwiíhi 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/vaánu ‘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 múúnu 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 mwáali ‘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 chinánda ‘bed’ and chinúumba ‘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  nantítííli flea
C1 nkanuúnu baby
    chiswahíili/nswahíili Swahili language/person
C2 namwáána mother cf. mwáana child
    m’mbweéha shadow (things)
    úlyaáamba morning
    chínduúlí cassava vegetable
    ámweénue headman
    umbwilimbwiíndi termite sp.
    umbulúkuúta butterfly
    unyukúuúmba soldier ant
    likambángoóhi tool for making pots
D2 chinánda bed
    chinúumba calabash
E  nkangóóhu gruel
    nankalaváanya liar cf. -laváanya lie
    nankadindúumba 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): chinduílé, chináanda, m’bweëba and chinúumba. With others, it is clear that the outer NPx has a H tone: úlyaambá and amweénye; 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 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*  lipeléeko  medicine
    lipenéesi  jack-fruit
    lipitiíhu  stomach
    chibatááli  lamp
    chibalúuí  work
    likulambíía  type of food

E*  litimbíisi  sandy ground
    libulangééeti  blanket
    chingwalangwáánja  type of dance

Some examples in the environments mentioned above:

A*  vachiwene chibatááli  they have seen the lamp
    chibatálí cheétu  our lamp
    valiwene likulambilíla  they have seen the food
    likulambilí lyeétu  our food

E*  valiwene litimbwiísi  they have seen the sandy ground
    litimbíisi lyeétu  our sandy ground
    valiwene libulangéeti  they have seen the blanket
    libulangetí 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
    mwanéédí  neighbour
vamwene mwánéétu  they have seen the younger sister
mwanétú 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/vááana  child  cf. mwáana/vááana  child
    chákuulya/vyákuulya  food  cf. kúulya  to eat
    ? cháábánda  insect sp.

All nouns above are counted in the table at the end of this section, except for namwáálí 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  nkúlíima/vakúlíima  farmer/s  cf. kúlíima  to cultivate
    mmitéela/vamitéela  local doctor  cf. mitéela  medicine
    mmíláandi/vamíláandi  local doctor  cf. míláandi  trees
    ūng’oolé/váng’oolé  musician/s  cf. ing’oolé  dance
    múntáanda/váójtáanda  person/people of the Ntanda clan  cf. ntaánda  Ntanda clan
    chimákóonde/mmákóonde/  Makonde language, nature/person/
vamákóonde  people  cf. makoónde  desert area
    chújníima/mújníima/vájníima  Njina dialect, nature/person/people  cf. pansiíima  height
    chindóonde/ǐndóonde/  Ndónde dialect, nature/person/
vándóonde  people  cf. kundóónde  lower parts of the Plateau
There are also some examples of which we do not know the inherent noun nor a related noun.

- **m’müidi/vámiidi**: people outside the family
- **chiháau/ínyáau/váháau**: Yao language, nature/person/people
- **chimwéela/ m’mwéela/vámwéela**: Mweru 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 NPs’ 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 namálové** echo cf. malóvé words (TG A)
- **D2 námwáaka** this year cf. mwááka year (TG A?)
- **nánúume** full grown man cf. nnúume man (TG A)
- **namáháamba** snake sp. cf. mahaamba 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
- **namahihi** owl
- **nachihuúngó** snake sp.
- **nampalanguúla** locust
- **C2 náhuúndo** grass sp.
- **námboóle** grass sp.
- **náŋkoónda** crow
- **namáluútú** snake sp.
- **nakádíímu** goblin
- **náchisúvécéle** grass sp.
- **nkáláng’óómbé** tree sp.
- **D1 naheembe** type of food
- **nangwaau** late rains
- **nantiikwi** chrysalis
- **nankakataambwe** spider
- **D2 náháaku** girl (before initiation)
- **námweeeve** hawk
- **nármbéeda** insect sp.
- **náŋkóope** cucumber
ná́niidi  bereaved person
ná m’máata  rash
nachiláawa  answer to riddle
nachitáani  weed sp.
nachítukaana  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.

<table>
<thead>
<tr>
<th></th>
<th>1. loc. NPx’s</th>
<th>2. plur. NPx’s</th>
<th>3. chi-, mu-/va-</th>
<th>4. na-</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>L-H:L 1</td>
<td>LH:L 3</td>
<td>(LL)H:L 8</td>
<td>(LL)LLRL 4</td>
<td>4</td>
</tr>
<tr>
<td>A*</td>
<td>L-FL 1</td>
<td>LLHFL 1</td>
<td>LLRL 2</td>
<td>(LH)HRL 8</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>(L-L)RL 9</td>
<td>(LL)HRL 9</td>
<td>HRL 1</td>
<td>(L)HFL 11</td>
<td>15</td>
</tr>
<tr>
<td>C1</td>
<td>(L-L)L:L 7</td>
<td>HFL 2</td>
<td>HFL 3</td>
<td>(L)LH,(F)L 3</td>
<td>4</td>
</tr>
<tr>
<td>C2*</td>
<td>L-(L)H:L 5</td>
<td>(L)LH:L 3</td>
<td>(L)LLHFL 3</td>
<td>(L)HFL 14</td>
<td>11</td>
</tr>
</tbody>
</table>

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 mmutúuka ‘car’.

wapiwáapi  business
mmutukasikéni  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.)

<table>
<thead>
<tr>
<th>Augmentative</th>
<th>Inherent</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>lipińi/mapińi</td>
<td>big handle/s</td>
<td>cf. mpińi/mipińi 3/4 handle/s</td>
</tr>
<tr>
<td>lichīlā/machīlā</td>
<td>big tail/s</td>
<td>cf. nchīlā/michīlā 3/4 tail/s</td>
</tr>
<tr>
<td>lipūlā/mapūlā</td>
<td>big knife/s</td>
<td>cf. chipūlā/vipūlā 7/8 knife/s</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Augmentative</th>
<th>Inherent</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>liválāala/maválāala</td>
<td>cf. mmálāala/miválāala 3/4 tree/s</td>
<td></td>
</tr>
<tr>
<td>lilóńji/malóńji</td>
<td>cf. nnóńji/valóńji 3/4 baobab/s</td>
<td></td>
</tr>
<tr>
<td>lihoóngi/mahoóngi</td>
<td>cf. nnyóóngi/vañoong 1/2 snake/s</td>
<td></td>
</tr>
</tbody>
</table>
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.

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

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. liina/maliina 5/6+ ‘name/s’, wéelu/mawéelu 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.

litáambo/matáambo 11/10 trap/s
liliími/maliími 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.

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cf. muútwe/myuútwe 3/4 head/s

lyúútu/- 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. miúúmba/myúúmba 3/4 arrow/s

Note that there are no diminutive singular forms *kamoúngo and *kamuúnwe nor the plural form *tumyuúto, and that the plural augmentative forms *malyúúmba and *malyúúmba are not used, nor *mamyúúto, contrary to manyúúmba. 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.

linjwiíd/manjwiíd 5+6+ big door/s
kanjwiíd/tunjwiíd 12+/13+ little door/s
cf. lwííd/dinjwiíd 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
luúnga/malyúúnga 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 lidééngo/madééngo ‘work’, are followed by the word litúúpa/matuúpa ‘huge object/s’ to indicate bigness (or, of course, by the adjectives likúúlungwa/makúúlungwa, 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
incééngo/dineéengo 9/10 seed/s
limbiilwa/mambíilwa 3/4 tree sp.
limbiilwa/mambíilwa 5/6 fruit
The inherent first consonant of the stem may be restored in the reduplicated stem, but such forms are not always possible, e.g. *nyeniyeeni (from nayečeni/vayečeni 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 following forms:

- lutavitaavi/dinavinaavi 11/10+ big branch/es
cf. lutaávi/dinaávi 11/10+ branch/es
- lunjwidinjwiidi/dinjwidinjwiidi 11/10+ door/s
cf. lwidi/dinwiidi 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:

- achánánkakatambwetaambwe, anamikakatambwetaambwe spiders
cf. nankakataambwe/acháñánkakataambwe, anámikakataambwe spider/s
- achánánbedanambeeda insects
cf. námbeeda/achánámbeeda insect/s

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

- lituvituvi/matuvituvi 5/6 very big bundle/s
cf. litúúvi/matúúvi 5/6 big bundle/s, chitúúvi/vitúúvi 7/8 bundle/s
- lilonjiloonjii/malonjiloonjii 5/6 very big baobab/s
cf. lilónjii/malónjii 5/6 big baobab/s, nnóónjii/milóónjii 3/4 baobab/s
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).

\[
\begin{align*}
nkúulya/vakúulya & \quad \text{eater/s} \quad \text{cf. küúlya to eat} \\
nkúlliíma/vakúlliíma & \quad \text{farmer/s} \quad \text{cf. kulííma to cultivate} \\
nkú térëeka/vákú térëeka & \quad \text{cook/s} \quad \text{cf. kutééeka to cook} \\
nkú pélekeddyə/vákú pélekeddyə & \quad \text{sender/s} \quad \text{cf. kúpélekeddyə to send}
\end{align*}
\]

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.

\[
\begin{align*}
nkú pócheela/vakú pócheela & \quad \text{receiver/s} \\
\text{cf. kupóchëéla to receive} \\
nkú vápocheela/vakú vápocheela & \quad \text{receiver/s of them} \\
\text{cf. kuvápocheela to receive them} \\
nkú téeya/vakú téeya & \quad \text{person/s who trap} \\
\text{cf. kutééya to trap} \\
nkútéeya dihómba/vakútéeya dihómba & \quad \text{fisherman/-men} \\
\text{cf. dihómba fish}
\end{align*}
\]

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 \text{L} or \text{R}. 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:

\[
\begin{align*}
\text{Instrument nouns:} & \quad \text{chi-/vi-verbal base-o,} & \quad \text{TG A (L.S1/SF)} \\
\text{Manner nouns:} & \quad 1. \quad \text{ma-verbal base-o,} & \quad \text{TG A (L.S1/SF)} \\
& \quad 2. \quad \text{chi-/vi-/ma-verbal base-i,} & \quad \text{TG C1 (L.SF)}
\end{align*}
\]

Instrument nouns often contain a verbal base with an applicative extension. The first example is a form without an applicative: –pyaila `sweep’ (applicative –pyaililä).

\[
\begin{align*}
\text{chipyáíilo/vi-} & \quad \text{thing/s to sweep with} \quad \text{cf. -pyaila sweep} \\
\text{chilimiílo/vi-} & \quad \text{thing/s to cultivate with} \quad \text{cf. -limila cultivate with} \\
\text{chitwáíilo/vi-} & \quad \text{thing/s to seize with} \quad \text{cf. -twaila seize with} \\
\text{chipimíilo/vi-} & \quad \text{thing/s to measure with} \quad \text{cf. -pimila measure with} \\
\text{chipiniíilo/vi-} & \quad \text{cover/s} \quad \text{cf. -hinikiila cover with} \\
\text{chipwíchëčeelo/vi-} & \quad \text{thing/s to receive with} \quad \text{cf. -pwichëčeela receive with} \\
\text{chipélëkedidyəo/vi-} & \quad \text{thing/s to send with} \quad \text{cf. -pelekedidyə send with}
\end{align*}
\]

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: mapyáiilo `way of sweeping’, malimiilo `way of cultivating’, matwáíilo `way of seizing’, mapimiilo `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.

chipyaidi/vi-/ma- way/s of sweeping
cihimidi/vi-/ma- way/s of cultivating
chitimidi/vi-/ma- way/s of cultivating cf. -lima cultivate
chitwallidi/vi-/ma- way/s of seizing
chitwaádi/vi-/ma- way/s of seizing cf. -twala seize
chipimidi/vi-/ma- way/s of measuring
chipiimi/vi-/ma- way/s of measuring cf. -pima measure
chihinikiidi/vi-/ma- way/s of covering cf. -hinika cover
chihiniiki/vi-/ma- way/s of covering
chipwechëeédi/vi-/ma- way/s of receiving
chipwecheédi/vi-/ma way/s of receiving cf. -pwechela receive
chipелеkeédi/vi-/ma way/s of sending
chipелеkedeédi/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.

<table>
<thead>
<tr>
<th>TG</th>
<th>NPx.stem</th>
<th>Adjectives</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>-dyókó small</td>
<td>L.H:L / L.HL</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>-vihi unripe</td>
<td>L.H:L / L.HL</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>-didikí small</td>
<td>L.HHH:L / L.HHHL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>-lémwa idle, lazy</td>
<td>L.FL / L.HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>-kúlungwa big</td>
<td>L.HFL / L.HLL</td>
</tr>
<tr>
<td>E</td>
<td>L.S2</td>
<td>-leéhu long, tall, high</td>
<td>L.H:L / L.HL</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cl.3/4</th>
<th>Cl.9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>nkülúngwa/mikülúngwa</td>
<td>ing’ülúngwa/ding’ülúungwa</td>
</tr>
<tr>
<td>ndikidiki/midikidiki</td>
<td>indikidiki/dindikidiki</td>
</tr>
<tr>
<td>ndyóóko/midyóóko</td>
<td>inyóóko/dinyóóko (NB: no -d-)</td>
</tr>
<tr>
<td>nnééhu/milééhu</td>
<td>indééhu/dindééhu</td>
</tr>
<tr>
<td>nnéemwa/miléemwa</td>
<td>indéemwa/dindéemwa</td>
</tr>
<tr>
<td>mmiihi/miviihi</td>
<td>imbihi/dimbihi</td>
</tr>
</tbody>
</table>

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).

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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.

<table>
<thead>
<tr>
<th>Cl.3/4</th>
<th>Cl.9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>chitúúvi / chitúvi chikülúngwa</td>
<td>big bundle</td>
</tr>
<tr>
<td>chiveewe / chiyewe chidi kidiki</td>
<td>small chin</td>
</tr>
<tr>
<td>lutáávi / lutávi ludyóóko</td>
<td>small branch</td>
</tr>
<tr>
<td>miläändi / milängd mi lééhu</td>
<td>high trees</td>
</tr>
<tr>
<td>nähääaku / nähaku nnéemwa</td>
<td>idle girl</td>
</tr>
<tr>
<td>litínji / litinji liviihi</td>
<td>unripe pumpkin</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
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<th>Cl.9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>chikutúvi chikülúngwa</td>
<td>big bundle</td>
</tr>
<tr>
<td>chitúúvi chiimo chikülúngwa</td>
<td>one big bundle, one bundle is big</td>
</tr>
</tbody>
</table>

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.)
Adjectives with disyllabic stems with the tone pattern L.H: L (lúdyóóko, liviíhi and mîlêchu) 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, liviíhi) while the TP of TG E changes to H.FL after TB (mîlêchu).

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-víli two
'NPx:-tatú three

'ncheche 3? four
'nyano 3? five
'likumi/makumí 5/6 ten
'(i)miía/dimíía 9/10 hundred

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

cl.3 úúmo cl.4 miviíli/mitáátu
cl.9 íimo cl.10 dimbiíli/dinaátu

ncheche
nyanaño
likuúmi/makuúmi
(i)miía/dimíía

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.
THE NOUN

6 = 5(+)1 anyná na- -.mo
7 = 5(+2) anyná na- -viílí
8 = 5(+3) anyná na- -taátu
9 = 5(+4) anyná na-ncheche

váána anyná na-yuúmo six children
malóóve anyná na-maviílí seven words
dinóóndwa anyná na-dinaátu eight stars
vyáála anyná na-ncheche nine fingers

11 = 10(+1) likúmí na- -.mo
12 = 10(+2) likúmí na- -viílí
13 = 10(+3) likúmí na- -taátu
14 = 10(+4) likúmí na-ncheche
16 = 10(+5(+1) likúmí na-anyná na- -.mo
20 = 10(x)2 makúmí maviílí
30 = 10(x)3 makúmí mataátu
40 = 10(x)4 makúmí ncheche
50 = 10(x)5 makúmí nyaanao
60 = 10(x)5(+1) makúmí nynáná na-liímo
61 = 10(x)5(+1)(+)1 makúmí nynáná na-liímo na- -.mo
70 = 10(x)5(+2) makúmí nynáná na-maviílí
71 = 10(x)5(+2)(+)1 makúmí nynáná na-maviílí na- -.mo
80 = 10(x)5(+3) makúmí nynáná na-mataátu
82 = 10(x)5(+3)(+)2 makúmí nynáná na-mataátu na- -viílí
90 = 10(x)5(+4) makúmí nynáná na-ncheche
93 = 10(x)5(+4)(+)3 makúmí nynáná na-ncheche na- -taátu
100= 10(x)10 makúmí likúmí - (i)mía iimo
200= 10(x)10(x)2 makúmí likúmí maviílí - dimía dimbiílí

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

NPx-tá(a)ndi: ntándí kuveléekwa, or ntándí kuveléekwa the first to be born
mahaámha matándi, or mahaámha matáándi the first leaves
mwáana ntándi, or mwáana ntáandi the first child

PPx-a-Num: wá-vílí kuveléekwa the second to be born
lá-ncheche the fourth (e.g. leaf)
mwáana wá-chihiwaango the last child
The nouns mwáánda/myáánda 3/4 ‘time, period, journey’, followed by a numeral, serve as multiplicatives.

mwáánda uúmo once
myáánda mivili twice

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

kávíla ~ kúvíla 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.

nyaano / nnyano dinóóndwa five stars

Numerals fall into the following tone groups:

<table>
<thead>
<tr>
<th>TG</th>
<th>Px.stem</th>
<th>Numerals</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>‘(i)miá/dimíá</td>
<td>L.H:L / L.HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>-tándí</td>
<td>(L.FL) / L.HL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
<td>‘-mó’</td>
<td>RL / HH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘-vili’</td>
<td>L.RL / L.HH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘-tatú’</td>
<td>L.RL / L.HH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>likumí/makumí</td>
<td>L.RL / L.HH</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H</td>
<td>ncheche</td>
<td>L.L:L / L.LL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘nyaano’</td>
<td>L.L:L / L.LL</td>
</tr>
</tbody>
</table>

4.8 Other nominal forms

‘-ngápi ‘how many’

Examples of this interrogative in some classes:

c.l.2 vangáapi
c.l.4 mingáapi
c.l.6 mangáapi
c.l.8 vingáapi
c.l.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 mangápi  (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 valúume and vakanaunúu in the examples below.

viinu vingáapi vyà-valúumé  how many things of the men?
viinu vingáapi vyà-vakanànunú  how many things of the babies?

The interrogative as well as the preceding noun may have penultimate shortening in this environment.

vinú vingápi vyà-valúumé
vinú vingápi vyà-vakanànunú

The tone group and the corresponding tone patterns relevant for this nominal form are given in the table below.

<table>
<thead>
<tr>
<th>TG</th>
<th>NPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>L.S1</td>
<td>‘-ngápi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.FL / L.HL</td>
</tr>
</tbody>
</table>

‘-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
`-nání `who’

The only NPx’s that precede this stem are of class 1 and 2.

| cl.1  | nnaáni  |
| cl.2  | vanaáni |

Alternatively, these forms can be considered to be nouns, they only occur in non-attributive position.

When the interrogative `-nání` is the final word in a question, it has the question melody penultimate F and final H.

- vayééni vanáání the guests are who?
- vayééni vakúlungwa vanáání the big guests are who?
- avawéé vanáání (s)he has seen who?

When the interrogative `-nání` 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 vayééni in the example below (without and with penultimate shortening).

- vanáání vayééni who are the guests?
- vanání vayééni

Finally, the nominal possessive construction is used to indicate `whom/whose’.

- vayééni va-vanáání 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.

<table>
<thead>
<tr>
<th>TG</th>
<th>NPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>L.SF</td>
<td><code>-nání</code></td>
</tr>
</tbody>
</table>
5. PRONOMINAL FORMS AND INVARIABLES

5.1 Pronominal prefixes

Pronominal forms consist of a pronominal prefix (PPx) and a stem. The chart below lists the pronominal prefixes.

<table>
<thead>
<tr>
<th>Cl.</th>
<th>PPx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(y)u-</td>
</tr>
<tr>
<td>2</td>
<td>va-</td>
</tr>
<tr>
<td>3</td>
<td>u-</td>
</tr>
<tr>
<td>4</td>
<td>i-</td>
</tr>
<tr>
<td>5</td>
<td>li-</td>
</tr>
<tr>
<td>6</td>
<td>la-</td>
</tr>
<tr>
<td>7</td>
<td>chi-</td>
</tr>
<tr>
<td>8</td>
<td>vi-</td>
</tr>
<tr>
<td>9</td>
<td>i-</td>
</tr>
<tr>
<td>10</td>
<td>di-</td>
</tr>
<tr>
<td>11</td>
<td>lu-</td>
</tr>
<tr>
<td>12</td>
<td>ka-</td>
</tr>
<tr>
<td>13</td>
<td>tu-</td>
</tr>
<tr>
<td>14</td>
<td>u-</td>
</tr>
<tr>
<td>15</td>
<td>ku-</td>
</tr>
<tr>
<td>16</td>
<td>pa-</td>
</tr>
<tr>
<td>17</td>
<td>ku-</td>
</tr>
<tr>
<td>18</td>
<td>mu-</td>
</tr>
</tbody>
</table>

The PPx of class 1 is (y)u- before consonant-initial stems and w- (from y) 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).

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 \(-\mathbf{e}\). The forms of the classes are built from the PPx followed by \(-\mathbf{0}\).

\[
\begin{array}{ll}
1\text{SG} & \text{-né} \\
2\text{SG} & \text{-wé} \\
\text{cl.1} & \text{-yó} \\
\text{cl.5} & \text{-lyó} \\
\end{array}
\]

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 \(-\mathbf{wi}\) intervenes (as it does between na- and any noun, demonstrative and substitutive of class 1), but a form identical with 2SG is also used.

\[
\begin{array}{ll}
1\text{SG} & \text{naa-né} \\
2\text{SG} & \text{naa-wé} \\
\text{cl.1} & \text{naa-wii-yó} \\
\text{cl.5} & \text{naa-lyó} \\
\end{array}
\]

Between the connexive PPx-á and the forms of the participants and class 1, the elements \(-\mathbf{ng'\text{u}}\) (1SG), \(-\mathbf{ku}\) (2SG), \(-\mathbf{tu}\) (1PL), \(-\mathbf{nu}\) (2PL), \(-\mathbf{kí}\) (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 \textit{ing'\text{ánde}} 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.

\[
\begin{array}{ll}
1\text{SG} & \text{yá-ng'\text{úu}-né} \\
2\text{SG} & \text{yá-kúu-wé} \\
\text{cl.1} & \text{yá-kúu-yó} \\
\text{cl.5} & \text{yáa-lyó} \\
\end{array}
\]

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 \textit{u} (tone pattern LFH).
I II  I II
1SG náaángu unéené 1PL (u)hwéétu uhwéehwé
2SG wááako uwéewé 2PL mwééenu umwéemwé

uwéewé nncémba iida na-hójóti hey you there boy, come first!
wááako nncémba iida na-hójóti you boy, come first!

For 2SG, u may be used to attract someone’s attention.

u nncémba iida na-hójóti hey boy, come first!

There are also two forms for classes 1 and 2; the second form, which is more emphatic in meaning, differs form 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 unáang’è  cl.2 vanááng’o uvánáang’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 náang’e they have seen him
vavawene vánáang’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 vánáang’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 uvánáang’ó).

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 náaángu my own knife
chipulá chaako wááako your own knife
chipulá chaake náang’e his/her own knife
vipulá vyeetu hwéétu our own knives
vipulá vyenu mwééenu your own knives
vipulá vyaaao vánáang’ó their own knives

atáta náaángu or atáta vaángu or atáata my father
mwanétu náaángu or mwanétú waángu 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-náang’e ~ cl.2 na-vanaáng’o ~
     na-wi-naang’e
     na-vanaang’o
Series II: 1SG na-unéené 1PL na-uhweehwé
2SG na-uwéewé 2PL na-unwéemwé
cl.1 na-wi-unáang’é cl.2 na-uvanaang’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-náaangú 1PL yá-tú-hweeétu
2SG yá-kú-wáaako 2PL yá-nú-mweéenu
cl.1 yá-kí-náang’e cl.2 yá-vanaáng’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-úvánaang’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 ‘(a)-ne-PPx-ó. The demonstratives below are given as they occur in attributive position.

I. the near demonstrative ‘(a)-PPx-.nó:

<table>
<thead>
<tr>
<th>cl.1</th>
<th>cl.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(á)yúúno</td>
<td>(á)vááno</td>
</tr>
<tr>
<td>(á)úúno</td>
<td>(á)ííno</td>
</tr>
<tr>
<td>(á)lííno</td>
<td>(á)lááno</td>
</tr>
<tr>
<td>(á)chiíno</td>
<td>(á)vííno</td>
</tr>
<tr>
<td>(á)ííno</td>
<td>(á)dííno</td>
</tr>
<tr>
<td>(á)lúúno</td>
<td></td>
</tr>
<tr>
<td>(á)kááno</td>
<td>(á)túúno</td>
</tr>
<tr>
<td>(á)úúno</td>
<td></td>
</tr>
<tr>
<td>(á)kúúno</td>
<td></td>
</tr>
</tbody>
</table>
cl.16 (á)pááno
cl.17 (á)kóúno
cl.18 (á)múúno

II. the far demonstrative ˈ(a)-PPx-á:

cl.1 (a)yulá cl.2 (a)vaalá
cl.3 (a)yulá cl.4 (a)iilá
cl.5 (a)iilá 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)kualá
cl.18 (a)mualá

III. the referential demonstrative ˈ(á)-ne-PPx-ó:

cl.1 (á)néeyo cl.2 (á)néeyó
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)néepó
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).

| ndidi | (á)uulá/(á)néewó | cf. ndidi | rope |
| chiténg’ú | (á)chiilá/(á)néechó | cf. chitéeng’u | chair |
| nnyéní | (á)yulá/(á)néeyó | cf. nnyéní | guest |
| chiyevé | (á)chiilá/(á)néechó | cf. chiyeewe | chin |
| litinji | (á)iilá/(á)néelyó | cf. litinji | pumpkin |

There is a short form for each series of demonstratives: I. ˈ(a)-PPx. II. ˈ(a)-PPxH (= H-toned PPx) and III. ˈ(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 elicitize 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:

<table>
<thead>
<tr>
<th>Cl. 1</th>
<th>cl. 2</th>
<th>cl. 3</th>
<th>cl. 4</th>
<th>cl. 5</th>
<th>cl. 6</th>
<th>cl. 7</th>
<th>cl. 8</th>
<th>cl. 9</th>
<th>cl. 10</th>
<th>cl. 11</th>
<th>cl. 12</th>
<th>cl. 13</th>
<th>cl. 14</th>
<th>cl. 15</th>
<th>cl. 16</th>
<th>cl. 17</th>
<th>cl. 18</th>
<th>cl. 19</th>
<th>cl. 20</th>
<th>cl. 21</th>
<th>cl. 22</th>
<th>cl. 23</th>
<th>cl. 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>nyenéni aayu</td>
<td>vayéni aava</td>
<td>ndidí aau</td>
<td>ndidí-i</td>
<td>likútú aalí</td>
<td>makútú aala</td>
<td>chiténg’ú aachi</td>
<td>viténg’ú aavi</td>
<td>imbédó aai</td>
<td>dimbédó aadi</td>
<td>lutámbo aalu</td>
<td>tutámbo aaku</td>
<td>ulindó aau</td>
<td>kulimá aaku</td>
<td>pachinú aapa</td>
<td>kukátí aaku</td>
<td>nnyénjé aamu</td>
<td>nyénjé-mu</td>
<td>that/those guest/s</td>
<td>that/those guest/s</td>
<td>that/those rope/s</td>
<td>that/those ear/s</td>
<td>that/those chair/s</td>
<td>that/those axe/s</td>
</tr>
</tbody>
</table>
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...
(chitūvi/vitūvi 7/8 bundle) are not due to cliticization but are regular changes due to the following word.)

- vivilī-vi/vivilī-vi/vivilī-vyó  
  these/those two

- vitūvi vivilī-vi  
  these two bundles

- cf. vitūvi vivilī  
  two bundles

- chāngū-chi/chāngū-chi/chāngū-chó  
  this/that my one

- chitūvi chāngū-chi  
  this my bundle

- cf. chitūvi chaṅgu  
  my bundle

- ŋtwānī-chi/-chó (all classes)  
  what kind of this/that?

- chituvī ŋtwānī-chi  
  what kind of this bundle?

- cf. chituvī ŋtwānī  
  what kind of bundle?

- chāa-va/chāa-va/chāa-vó (all classes)  
  of these/those (cl.2)

- chitūvi chāa-va  
  bundle of these (cl.2)

- cf. chitūvi chā-vaanā'ō  
  bundle of them

- naa-chi/naa-chi/naa-chó (all classes)  
  and, with this/that

- cf. na-chitūvi  
  and, with the bundle

- utulaa-chi/utulaa-chi/utulaa-chó  
  you set down this/that one

- cf. utula chitūvi  
  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).

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>NAP</td>
<td>AP</td>
<td>NAP</td>
</tr>
<tr>
<td>cl.1</td>
<td>(á)yúuno</td>
<td>ayyuno</td>
<td>(á)yulá</td>
</tr>
<tr>
<td></td>
<td>(aa)yu</td>
<td>aáyu</td>
<td>(aa)yú</td>
</tr>
<tr>
<td>cl.2</td>
<td>(á)váano</td>
<td>aavaano</td>
<td>(á)vaalá</td>
</tr>
<tr>
<td></td>
<td>(aa)va</td>
<td>aáva</td>
<td>(aa)vá</td>
</tr>
</tbody>
</table>

etc.

Some examples of demonstratives of series I in AP:
uhimbá (á)yúúno  this lion
uhimbá (aa)yů  id.

Some examples of demonstratives of series I in NAP:

- ayúúno  (it is) this one
- aáyu  id.
- amwené ayúúno  (s)he has seen him/her
- amwené aáyu  id.
- uhimba nkuluungwa ayúúno  the big lion is this one
- uhimba nkuluungwa aáyu  id.
- ayúúno uhimba  this (is the) lion
- ayúúno uhimba  id. (Penultimate Shortening)
- aáyu uhimba  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
- ánéepó viíno  now then
- viíno apaáno  now (then) here
- ánéepó, ánéekó  here, there, then
- amúúno nuyúúma  meanwhile  cf. nuyúúma  behind, after
- palyámbáá-pó  2nd day after tomorrow  cf. palyámba day after tomorrow
- machéóo paalá  year before last year, some time ago  cf. machéóo 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 ú- 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 'u-PPx-nó:

cl.1 úyúunó
cl.2 úváanó
cl.3 úuunó
cl.4 úíínó
cl.5 úlíínó
cl.6 úláánó
cl.7 úchíínó
cl.8 úvúínó
cl.9 úíínó
cl.10 údíínó
cl.11 úlíúnó
cl.12 úkáánó
cl.13 útíunó
cl.14 úuúnó
cl.15 úkúunó
cl.16 úpáanó
cl.17 úkúunó
cl.18 úmúunó

II. emphatic far demonstratives 'u-PPx-lá:

cl.1 úyúulá
cl.2 úváalá
cl.3 úuulá
cl.4 úíilá
cl.5 úliilá
cl.6 úláalá
cl.7 úchíilá
cl.8 úvúilá
cl.9 úíilá
cl.10 údíilá
cl.11 úlíulá
cl.12 úkáulá
cl.13 útíulá
cl.14 úuulá
cl.15 úkúulá
cl.16 úpáalá
cl.17 úkúulá
cl.18 úmúulá

III. emphatic referential demonstratives '(u)-PPx-o-PPx-ó:

cl.1 (ú)yóoyó
cl.2 (ú)vóovó
cl.3 (ú)wóowó
cl.4 (ú)yóoyó
cl.5 (ú)yóoló
cl.6 (ú)líoló
cl.7 (ú)chóochó
cl.8 (ú)vyóovyó
cl.9 (ú)yóoyó
cl.10 (ú)dyóodyó
cl.11 (ú)wóolwó
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  (ū)chóochó aáchi  (ū)chóoch’ aáchi
II (ū)chóochó aachí  (ū)chóoch’ aachí

There is another form which may have both meanings ‘right that one here’ and ‘right that one there’; its structure is (~)PPx-oo-PPx (second PPx is H-toned). The demonstratives below are given as in AP.

cl.1 (ū)yóoyú cl.2 (ū)yóová
cl.3 (ū)wóowú cl.4 (ū)yóoyí
cl.5 (ū)lyóolí cl.6 (ū)lóolá
cl.7 (ū)chóochí cl.8 (ū)yóoví
cl.9 (ū)yóoyí cl.10 (ū)yóoodí
cl.11 (ū)wóolú cl.12 (ū)kóoká cl.13 (ū)tóótú
cl.14 (ū)wóowú cl.15 (ū)kwóokú
cl.16 (ū)póópá cl.17 (ū)kwóokú
cl.18 (ū)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:

FKL\pZp ~FKtLQy / ~FKtLOi /

When the emphatic demonstratives appear in NAP, there is always an initial u- with a L tone.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>NAP</td>
<td>AP</td>
<td>NAP</td>
</tr>
<tr>
<td>cl.1</td>
<td>ūyúnó</td>
<td>uyúnó</td>
<td>ūyúulá</td>
</tr>
<tr>
<td></td>
<td>(ū)yóoyú</td>
<td>uyóoyú</td>
<td>(ū)yóoyó</td>
</tr>
<tr>
<td>cl.2</td>
<td>ūvánó</td>
<td>uvánó</td>
<td>ūváalá</td>
</tr>
<tr>
<td></td>
<td>(ū)vóovú</td>
<td>uvóovú</td>
<td>(ū)vóovó</td>
</tr>
</tbody>
</table>

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
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 \textit{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 \textit{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.

<table>
<thead>
<tr>
<th>cl.1</th>
<th>wá-</th>
<th>cl.2</th>
<th>vá-</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl.3</td>
<td>wá-</td>
<td>cl.4</td>
<td>yá-</td>
</tr>
<tr>
<td>cl.5</td>
<td>lyá-</td>
<td>cl.6</td>
<td>lá-</td>
</tr>
<tr>
<td>cl.7</td>
<td>chá-</td>
<td>cl.8</td>
<td>vyá-</td>
</tr>
<tr>
<td>cl.9</td>
<td>yá-</td>
<td>cl.10</td>
<td>dyá-</td>
</tr>
<tr>
<td>cl.11</td>
<td>lwá-</td>
<td>cl.13</td>
<td>twá-</td>
</tr>
<tr>
<td>cl.12</td>
<td>ká-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.14</td>
<td>wá-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.15</td>
<td>kwá-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.16</td>
<td>pá-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.17</td>
<td>kwá-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.18</td>
<td>mwá-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. \textit{mahaámba}. With nouns of other tone groups, there is no final H tone after PS, e.g. \textit{dináávi}, tone group A.

| mahaámba lá-nnáandi | leaves of the tree |
| mahámbá la-nnáandi  | id. (PS)          |
| dináávi dyá-miláandi | branches of trees |
| dináávi 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).

makumbáátu lá-náháaku  feet of the girl
makumbáátu la-náháaku  id. (PS)

makumbáátu lá-nánjüipí  short feet  cf. PPx-á-nánjüipí 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-nááangu  field of me  cf. nááangu  1SG.Free Subst.
muúnda wá-ng'ú-u-né  id.  cf. -F-né  1SG.Bound Subst.
muúnda wá-kú-wáááko  field of you  cf. wáááko  2SG.Free Subst.
muúnda wá-kú-ú-wé  id.  cf. -F-wé  2SG.Bound Subst.
muúnda wá-tú-hwéeétu  field of us  cf. hwéeétu  1PL.Free Subst.
muúnda wá-tú-ú-hwé  id.  cf. -F-hwé  1PL.Bound Subst.
muúnda wá-nú-mwéeénu  field of you  cf. mwéeénu  2PL.Free Subst.
muúnda wá-nú-ú-mvé  id.  cf. -F-mvé  2PL.Bound Subst.
muúnda wá-ki-nááng'e  field of him  cf. nááng'e  1.Free Subst.
muúnda wá-ki-núúmé  field of man  cf. núúmé  1.man
ntánó wa-ng’ú-nááangu  tale of mine
ntánó wa-ki-nááng’e  tale of him/her
ntánó wa-ki-núúmé  tale of man

These intervening elements are derived from (or are a part of?) the pronominal possessive stems.

<table>
<thead>
<tr>
<th>elements</th>
<th>pron. possessive stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-ng’ú-</td>
</tr>
<tr>
<td>2SG</td>
<td>-ku-</td>
</tr>
<tr>
<td>cl.1</td>
<td>-ki-</td>
</tr>
</tbody>
</table>

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-zakiá field of Zakia
lihálá ly-angáānya zakía na-wi-mariáamu, or
lihálá ly-angáá zakía na-wi-mariáamu, or
lihálá lya vangáānya zakía na-wi-mariáamu field of Z. and Mariamu
vitúvi vy-ángáānya zakía na-wi-mariáamu, or
vitúvi vy-ángáá zakía na-wi-mariáamu, or
vitúvi vyá vangáānya zakía na-wi-mariáamu 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(-ki)-likutúkútu knife of the troublesome child

Fixed nominal possessive constructions exist which express certain qualities.

| PPx-á-náápi | black          | cf. kudúmba 15 to be black |
| PPx-á-nááswe | white         | cf. kuswéléélá 15 to be white |
| PPx-á-nahúüvi | red           | cf. kuhůviliila 15 to be red |
| PPx-á-mbóone | good          |                           |
| PPx-á-táangu | old, former   |                           |
| PPx-á-háambi | new           |                           |
| PPx-á-náníjípi | short        | cf. kwínjipáála 15 to be short |
| PPx-á-mwâana | small         | cf. nwâana/váana 1/2 child |
| PPx-á-chilúúme | male        | cf. nnůúme/valúúme 1/2 man |
| PPx-á-chikóngwe | female    | cf. nkóongwe/vakóongwe 1/2 woman |
| PPx-á-mbañénga | pierced     | cf. mbánínga/mbañénga 3/4 hole in ear lobe |
| PPx-á-vílli | second        | cf. -vílli two          |
| PPx-á-táatú | third         | cf. -táatú three        |
| PPx-á-chihwaango (tones unknown) | last | cf. kúðhwa 15 to die |
| PPx-á-NPx-náání | 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 vínji vya-ku-wááako other knives of you (sg.)
chikápú chaangu cha-nahúüvi 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 útwani vyá-valúúmé what kind of knives of the men?
PRONOMINAL FORMS AND INVARIABLES

vikápu vingápi vyá-kú-wákó how many baskets of you (sg.)?
chikápu chilída chá-nahúuví which red basket?
vípula vyóóhe vyá-valúumé many knives of the men?
vípula vínjí vyá-ku-wákó other knives of you (sg.)?
chikápu 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:

<table>
<thead>
<tr>
<th>Class</th>
<th>1SG</th>
<th>1PL</th>
<th>2SG</th>
<th>2PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl.1</td>
<td>-ngú</td>
<td>-itú</td>
<td>-kó</td>
<td>-inú</td>
</tr>
<tr>
<td>cl.2</td>
<td>-ké</td>
<td>-(v)ó</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>chiyewé chaángu</td>
<td>my chin</td>
<td>cf. chiyëwe 7 chin</td>
</tr>
<tr>
<td>malóvé laáko</td>
<td>your words</td>
<td>cf. malóvé 6 words</td>
</tr>
<tr>
<td>lutambó lwaáke</td>
<td>his trap</td>
<td>cf. lutaámbó 11 trap</td>
</tr>
<tr>
<td>víténg’ú vyeétu</td>
<td>our chairs</td>
<td>cf. vítëng’u 8 chairs</td>
</tr>
<tr>
<td>vípula vyéénu</td>
<td>your knives</td>
<td>cf. vípúula 8 knives</td>
</tr>
<tr>
<td>mátiñji laá(v)o</td>
<td>their pumpkins</td>
<td>cf. mátiñji 6 pumpkins</td>
</tr>
<tr>
<td>nnáandi na-dináví dyááke</td>
<td>the tree and its branches</td>
<td></td>
</tr>
</tbody>
</table>

In non-attributive position, the tones of the pronominal possessive are FL.

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>avawene váangu</td>
<td>(s)he has seen mine (cl.2)</td>
<td></td>
</tr>
<tr>
<td>vayeéni vavíli váangu</td>
<td>two guests are mine (cl.2)</td>
<td></td>
</tr>
<tr>
<td>váangu vayeéni</td>
<td>my guests, mine are the guests</td>
<td></td>
</tr>
<tr>
<td>vángu yayeéni</td>
<td>id. (Penultimate Shortening)</td>
<td></td>
</tr>
</tbody>
</table>

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).

\[
\begin{align*}
nkūl\,wā\,ά\,ngu & \quad nkūl\,wé\,é\,tu & \quad nkūl\,u\, wā\,ángu & \quad nkūl\,u\, wé\,é\,tu & \quad nkūl\,u\, wā\,á\,áo & \quad nkūl\,u\, wé\,é\,n\,u \\
nkūl\,wé\,é\,n\,u & \quad nkūl\,wā\,á\,áo & \quad nkūl\,u\, wé\,é\,n\,u & \quad nkūl\,u\, wā\,á\,áo
\end{align*}
\]

Cf. nkulu/vakulu 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).

\[
\begin{align*}
n\,nù\,mb\,wā\,á\,ngu & \quad n\,nù\,mb\,wé\,é\,tu & \quad n\,nù\,mb\,u\, wā\,ángu & \quad n\,nù\,mb\,u\, wé\,é\,tu & \quad n\,nù\,mb\,u\, wā\,á\,áo & \quad n\,nù\,mb\,u\, wé\,é\,n\,u \\
n\,nù\,mb\,wé\,é\,n\,u & \quad n\,nù\,mb\,wā\,á\,áo & \quad n\,nù\,mb\,u\, wé\,é\,n\,u & \quad n\,nù\,mb\,u\, wā\,á\,áo
\end{align*}
\]

Cf. nnuumbu/valuumbu 1/2 elder sibling (of opposite sex)

The final H tone of the noun shifts back to the preceding syllable with contraction.

\[
\begin{align*}
n\,nù\,ng\,’ù\,n\,w\,á\,ángu & \quad n\,nù\,ng\,’ùn\,w\,é\,é\,tu & \quad n\,nù\,ng\,’ùn\,w\,é\,é\,n\,u & \quad n\,nù\,ng\,’ùn\,w\,á\,á\,áo \\
\quad or & \quad n\,nù\,ng\,’ùn\,ê\, w\,á\,ángu & \quad n\,nù\,ng\,’ùn\,ê\, w\,é\,é\,tu & \quad n\,nù\,ng\,’ùn\,ê\, w\,é\,é\,n\,u & \quad n\,nù\,ng\,’ùn\,ê\, wā\,á\,áo
\end{align*}
\]

Cf. nnung’ùné/valung’ùné 1/2 younger sibling (of same sex)

There are more examples of contractions.

atátaáko your father
atátaáke his father  

  cf. atáta father, my father; atátá veétu our father  

  ntwáangu my husband  
  ndyáangu/adyáangu my wife  
  mwáangu my child  

  cf. mwáana/váana 1/2 child; mwaaná weétu our child  

  cf. mwánéétu/vanéétu 1/2 younger sibling (of opposite sex);  
    mwanétu waángu 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-.  

<table>
<thead>
<tr>
<th>companion</th>
<th>companions</th>
</tr>
</thead>
<tbody>
<tr>
<td>nnyáangu nnyéetu</td>
<td>aváangu avéetu</td>
</tr>
<tr>
<td>nnyááko nnyéénu</td>
<td>avááko avéénu</td>
</tr>
<tr>
<td>nnyááke nnyááo</td>
<td>avááke avááo</td>
</tr>
</tbody>
</table>

Another kinship term where contraction has taken place is:\n
| mwpwaángu/vipwaángu 1/2  | nephews/nieces |

Special pronominal possessive stems exist for the participant 2SG and cl.1., occurring  
with certain kinship terms.  

  2SG -I-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).  

| nkülúulo                 | your elder sibling (of same sex) |
| nkülúówe                 | his/her elder sibling           |
| cf. nkúlwáangu           | my elder sibling               |

| nnúmbuúlo                | your elder sibling (of opposite sex) |
| nnúmbuúwe                | his/her elder sibling           |
| cf. nnúmbwaángu          | my elder sibling               |

| nnung’úuno               | your younger sibling (of same sex) |
| nnung’úunwe              | his/her younger sibling         |
| cf. nnung’únwáángu       | 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

mwanáálo your child
mwanááwe his/her child
cf. mwanáángu my child

There are two words for ‘mother’, ámaáma and aayu. Both words have special forms for 2SG and class 1.

amámááyó your mother
amámááyé his/her mother
cf. ámaáma mother, my mother; ámámá veétu our mother
ánýóóko your mother
ánýóókwe 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.

vahivání mwáángu my cousins vahivání mwéétu our cousins
mwáálo mwéénu
mwááwe mwáávo
cf. nnyíváani/vahiváani 1/2 cousin

íng’ándá mwáángu my husband íng’ándá mwéétu our husband
mwáálo mwéénu
mwááwe mwáávo
cf. íng’aánda/váng’aánda 1/2 husband

nnembá-mwááwe his fellow boyfriend cf.nneémá 1 boy
amwánda-mwááwe his fellow travellers 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 nkúlwángu nááángu my own elder sibling
ndýawé waáke or ndýawé nááng’e his own wife
The intervening elements -\textit{ki/-wi}- between the connexive/\textit{na}- and a following word of class 1 do not appear in class 1 contracted forms and forms with special pronominal possessive stems.

\begin{itemize}
  \item \textit{chitúúvi chá-adyááwe} the bundle of his wife
  \item \textit{nnúúme na-adyááwe} the man and his wife
\end{itemize}

### 5.6 Other pronominal forms

\textit{\textasciitilde{m}ó} ‘one’, ‘a(n), some’

This pronominal stem is a minisyllabic stem which has a first TBU indicated by the sign ‘\textasciitilde{\textprime}’ (see 3.4.1 and 6.3.1).

\begin{itemize}
  \item cl.1 \textit{yuúmo}
  \item cl.2 \textit{vaámo}
  \item cl.3 \textit{úúmo}
  \item cl.4 \textit{iímo}
  \item cl.5 \textit{liímo}
  \item cl.6 \textit{laámo}
  \item cl.7 \textit{chiímo}
  \item cl.8 \textit{viímo}
  \item cl.9 \textit{iímo}
  \item cl.10 \textit{díímo}
  \item cl.11 \textit{luúmo}
  \item cl.12 \textit{kaámo}
  \item cl.13 \textit{tuúmo}
  \item cl.14 \textit{úúmo}
  \item cl.15 \textit{kuúmo}
  \item cl.16 \textit{paámo}
  \item cl.17 \textit{kuúmo}
  \item cl.18 \textit{muúmo}
\end{itemize}

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).

\begin{itemize}
  \item \textit{lutaávi luúmo} one/a branch
  \item \textit{lutávi luúmo} id.
  \item \textit{aluwené luúmo} (s)he has seen the one
  \item \textit{lutaávi lukúlungwa luúmo} one big branch
  \item \textit{luúmo lutaávi} one branch
  \item \textit{lúmó lutaávi} id.
\end{itemize}

The penultimate R tone is a clear indication that this pronominal form has a (final) ‘\textprime{H} (‘\textasciitilde{m}ó), belonging to TG C1.
<table>
<thead>
<tr>
<th>TG</th>
<th>PPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>L.SF</td>
<td>&quot;..mó&quot; RL / HH</td>
</tr>
</tbody>
</table>

'-óhe 'much, many'

This stem is not used in class 1.

<table>
<thead>
<tr>
<th>cl.2</th>
<th>vóóhe</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl.3</td>
<td>wóóhe</td>
</tr>
<tr>
<td>cl.4</td>
<td>yóóhe</td>
</tr>
<tr>
<td>cl.5</td>
<td>lyóóhe</td>
</tr>
<tr>
<td>cl.6</td>
<td>lóóhe</td>
</tr>
<tr>
<td>cl.7</td>
<td>chóóhe</td>
</tr>
<tr>
<td>cl.8</td>
<td>vyóóhe</td>
</tr>
<tr>
<td>cl.9</td>
<td>yóóhe</td>
</tr>
<tr>
<td>cl.10</td>
<td>dyóóhe</td>
</tr>
<tr>
<td>cl.12</td>
<td>twóóhe</td>
</tr>
<tr>
<td>cl.13</td>
<td>twóóhe</td>
</tr>
<tr>
<td>cl.14</td>
<td>wóóhe</td>
</tr>
<tr>
<td>cl.15</td>
<td>kwóóhe</td>
</tr>
<tr>
<td>cl.16</td>
<td>póóhe</td>
</tr>
<tr>
<td>cl.17</td>
<td>kwóóhe</td>
</tr>
<tr>
<td>cl.18</td>
<td>mwóóhe</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>lyóóhi lyóóhe</th>
<th>much smoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>malóôve lóóhe</td>
<td>many words</td>
</tr>
<tr>
<td>malóôve lóóhe</td>
<td>id. (Penultimate Shortening)</td>
</tr>
<tr>
<td>ding’aánde dyóóhe</td>
<td>many houses</td>
</tr>
<tr>
<td>ding’áände dyóóhe</td>
<td>id. (Penultimate Shortening)</td>
</tr>
<tr>
<td>alawene lóóhe</td>
<td>(s)he has seen many (cl.6)</td>
</tr>
<tr>
<td>vikáapu vyá-nahúvi vyóóhe</td>
<td>many red baskets/red baskets are many</td>
</tr>
<tr>
<td>lóóhe maháänmba</td>
<td>many (are the) leaves</td>
</tr>
</tbody>
</table>

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.'
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.

\[
\begin{align*}
\text{liina } & \text{ lyohelyóóhe} & \text{every name} \\
\text{dinaávi } & \text{ dyohedyóóhe} & \text{all branches} \\
\text{dinávi } & \text{ dyohedyóóhe} & \text{id. (Penultimate Shortening)} \\
\text{avawené } & \text{ vohevyóóhe} & \text{(s)he has seen all (cl.2)} \\
\text{vikáápu } & \text{ vyá-nahúví vyohyvóóhe} & \text{all red baskets} \\
\text{vohevyóóhe } & \text{ vaánu} & \text{all people} \\
\text{vohevóóhe } & \text{ vaánu} & \text{id. (Penultimate Shortening)}
\end{align*}
\]

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.

\text{H-.njí '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 “H” indicates that the pronominal stem imposes a H tone on the preceding PPx.

\[
\begin{align*}
\text{cl.1 } & \text{ yúunjí} & \text{cl.2 } & \text{ váanjí} \\
\text{cl.3 } & \text{ úunjí} & \text{cl.4 } & \text{ ìnjí} \\
\text{cl.5 } & \text{ línjí} & \text{cl.6 } & \text{ láanjí} \\
\text{cl.7 } & \text{ chínjí} & \text{cl.8 } & \text{ vínjí} \\
\text{cl.9 } & \text{ ìnjí} & \text{cl.10 } & \text{ dínjí} \\
\text{cl.11 } & \text{ lúunjí} & \text{cl.12 } & \text{ kánjí} & \text{cl.13 } & \text{ túunjí} \\
\text{cl.14 } & \text{ úunjí} & \text{cl.15 } & \text{ kúunjí}
\end{align*}
\]
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 liinji other charcoal
likáála liinji id. (Penultimate Shortening)

avawene váanji (s)he has seen the other ones
valúúme vakúulungwa 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 yúúnjí (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.

<table>
<thead>
<tr>
<th>TG</th>
<th>PPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>H.SF</td>
<td>^i.-nji</td>
</tr>
</tbody>
</table>

^-lida ‘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-.

c.l.1 aliída cl.2 valiída
cl.3 uliída cl.4 iliída
cl.5 liliída cl.6 laliída
cl.7 chiliída cl.8 viliída
cl.9 iliída cl.10 diliiída
cl.11 luliída
cl.12 kaliída cl.13 tuliída
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 iliída which holes?
mitupa iliída id. (Penultimate Shortening)
amwené aliída (s)he has seen which one (cl.1)?
nnúume nkúlungwa aliída 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 iliída (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.

viínu viiída vyá-valúumé which things of the men?
viínu viiída 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.

<table>
<thead>
<tr>
<th>TG</th>
<th>PPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>L.S1</td>
<td><code>-ída</code></td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.FL / L.HL</td>
</tr>
</tbody>
</table>

`-ómi/-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
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.

\[\text{vakóóngwe vúúmi} \quad \text{healthy women}\]
\[\text{vakóóngwe vúúmi} \quad \text{id. (Penultimate Shortening)}\]
\[\text{ing’ânde yúúmi} \quad \text{whole house}\]
\[\text{ing’ânde yúúmi} \quad \text{id. (Penultimate Shortening)}\]
\[\text{avawene vúúmi} \quad (s)he has seen the healthy ones (cl.2)\]
\[\text{vaanà vaangu vúúmi} \quad \text{my healthy children}\]
\[\text{vúúmi váana} \quad \text{healthy (are) the children}\]

The forms of classes 1 and 2 as well as the forms of the participants are used as greetings.

\[\text{umúúmi} \quad \text{how are you? (lit.: are you healthy?)}\]
\[\text{nimúúmi} \quad \text{I am fine (lit.: I am healthy)}\]

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.

\[\text{cl.1 mwéene} \quad \text{cl.2 véene}\]
\[\text{cl.3 wéene} \quad \text{cl.4 yéene}\]
\[\text{cl.5 lyéene} \quad \text{cl.6 léeene}\]
\[\text{cl.7 chéene} \quad \text{cl.8 vyéene}\]
\[\text{cl.9 yéene} \quad \text{cl.10 dyéene}\]
\[\text{cl.11 lwéene} \quad \text{cl.12 kéene} \quad \text{cl.13 twéene}\]
\[\text{cl.14 wéene} \quad \text{cl.15 kwéene} \quad \text{cl.16 péene}\]
\[\text{cl.17 kwéene} \quad \text{cl.18 mwéene}\]
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).

- **nankakatåmbwë mwëné** the spider itself cf. **nankakataambwe** spider
- **paháli péene** the place itself cf. **pahááli** place

- **avawene véene** (s)he has seen they themselves (cl.2)

A different tone pattern, H:L, occurs in the following expression.

**nåang'e mwëéne** (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** nimwëéne
- **2SG** umwëéne
- **1PL** tuvééne
- **2PL** mmééne

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.

- `-naang’o` ‘the same, the very one’

The class 1 form is not used.

<table>
<thead>
<tr>
<th>Cl</th>
<th>Form</th>
<th>cl.2</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl.3</td>
<td>únåang’o</td>
<td>cl.4</td>
<td>inåang’o</td>
</tr>
<tr>
<td>cl.5</td>
<td>limåang’o</td>
<td>cl.6</td>
<td>ánåang’o</td>
</tr>
<tr>
<td>cl.7</td>
<td>chånåang’o</td>
<td>cl.8</td>
<td>vinåangó</td>
</tr>
<tr>
<td>cl.9</td>
<td>inåang’o</td>
<td>cl.10</td>
<td>dinåang’o</td>
</tr>
<tr>
<td>cl.11</td>
<td>lånåang’o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.12</td>
<td>känaang’o</td>
<td>cl.13</td>
<td>tünåang’o</td>
</tr>
<tr>
<td>cl.14</td>
<td>únåang’o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.15</td>
<td>künåang’o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.16</td>
<td>pánaang’o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.17</td>
<td>kúnaang’ó</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl.18</td>
<td>ñnaang’o</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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).

\[
\begin{align*}
\text{lidúvá lináang’o} & \quad \text{the very day} \\
\text{ing’ándé ináang’o} & \quad \text{the same house} \\
\text{lináang’o lidúúva} & \quad \text{that very day} \quad \text{or: lináang’o lidúúva} \text{ (with PUS)}
\end{align*}
\]

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.

\[
\begin{align*}
\text{vanáang’o vaânu} & \quad \text{the same people} \\
\text{vanáang’o} & \quad \text{they}
\end{align*}
\]

Preceded by na- ‘and, with’, the meaning is ‘likewise, as well’. The tone pattern can alternatively be all-L.

\[
\begin{align*}
\text{na-chinduúli na-chináang’o taaya múnkúungu úunji} & \quad \text{or} \\
\text{na-chinduúli na-chinaang’o taaya múnkúungu úunji}
\end{align*}
\]

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 ‘naáang’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.

<table>
<thead>
<tr>
<th>TG</th>
<th>PPx.stem</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>L.S2</td>
<td>-naang’o</td>
</tr>
</tbody>
</table>

### 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:

- **panjíka**, perhaps cf. `-njí` other
- **chipáanji**
- **napanáang’o**
- **nakunáang’o**
- **namunáang’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:

- **mwalécehu** directly cf. `'-léchu` tall
- **kadiíki** a bit cf. `'-díkidiíki` small
- **kaviíla** again, 
- **kuviíla** again, 
- **uvííla** thus, so, as follows cf. `'-víí` two

Invariables which are probably derived from verbs are:

- **péepti** near cf. `-ipika` be short, -a-nanjipi (nominal connexive) short
- **kwàáli** perhaps, maybe, I don’t know cf. `-pali` be
- **kóóka** then, finally, at the end; if cf. `-uka` go away
- **kwaáchi** where, 
- **muuchí** as, like, 
- **daáchi** 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!, stoop it!, be it so! (< Sw. basí)
- **daáhu** bare, naked, useless
- **célo** yes!
- **céma** or
- **heeká** but, to the contrary
- **kaála** formerly, the past (cf. Sw. kale)
- **malíka** since, because
- **maliínga** as, like
muhuu  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
nduvaání  when (Chimaraba)
neélo  today (cf. chiilo cl.7 night)
ngóoo  oh no! (something bad happened)
ngwaáá  sound of stubbing, e.g. one’s toe
ngééé  sound expressing the sunrise
njóóóni  so and so, such a one
ńtwaáni  what kind of
núuúndu  tomorrow (also lóóndu cl.11)
píií  sound expressing that the sun has disappeared
piúú  sound expressing that the sun is about to disappear
saána  very (< Sw. sana)
tangu  formerly, the past (< Sw. tangu)
waálá  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 penultimte level H.

<table>
<thead>
<tr>
<th>TG</th>
<th>Px-stem</th>
<th>? Invariables</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A / E</td>
<td>L-S1/SF / L-S2</td>
<td>napanááng'o</td>
<td>LL.H.L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>nakunááng'o</td>
<td>LL.H.L</td>
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<tr>
<td></td>
<td></td>
<td>namunááng'o</td>
<td>LL.H.L</td>
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<td></td>
<td></td>
<td>panjiikáa</td>
<td>L.H.L</td>
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<td></td>
<td></td>
<td>kaviíla</td>
<td>L.H.L</td>
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<td></td>
<td></td>
<td>kuviláa</td>
<td>L.H.L</td>
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<td></td>
<td></td>
<td>péépi</td>
<td>H.L</td>
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<td></td>
<td></td>
<td>kwááli</td>
<td>H.L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kóóka</td>
<td>H.L</td>
</tr>
<tr>
<td>B / D2</td>
<td>L-S1 / H-no H</td>
<td>?</td>
<td>'chipanji</td>
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<td></td>
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<td>?</td>
<td>'mwaléchu</td>
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<td>?</td>
<td>'uvila</td>
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<td>'ngóo</td>
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<td>?</td>
<td>'?twani</td>
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<tr>
<td>C1</td>
<td>L-SF</td>
<td></td>
<td>'chalamó</td>
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<td></td>
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<td>kadikí</td>
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<td>kwachí</td>
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<td>mwadachi</td>
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<td></td>
<td>'bahí</td>
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<td>namadi</td>
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<td>neló</td>
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<td>?</td>
<td>'ngwaá</td>
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<td>saná</td>
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<td>'walá</td>
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<td>'weká</td>
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<td>C2</td>
<td>H-SF</td>
<td></td>
<td>'chákani</td>
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<td>'chárani</td>
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<td>'námené</td>
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<td>'ndůvaní</td>
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<td>'núundú</td>
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<td>piíí</td>
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<td>piúú</td>
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<td>njóoni</td>
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<td></td>
<td></td>
<td>'ngéééé</td>
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<tr>
<td>D1</td>
<td>L-noH</td>
<td></td>
<td>'muchí</td>
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<td>'dáchí</td>
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<td></td>
<td></td>
<td>nanga</td>
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<td></td>
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<td>ndulu</td>
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<td></td>
<td></td>
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<td>tangu</td>
</tr>
</tbody>
</table>
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 yúúují** together with another person
- **váníkaála na-vyááka vyóóhe** they lived during many years
- **vadikidiiki na-vakúúungwa** the small ones and the big ones
- **kulééhu na-kúúno kuntuwáála** far from this (place) Mtwara
- **nkuwhéná unáháula nding’ándé dyaaó paámo na-kulámumya mávéélú 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 unaliímwa 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): **avelé dimóóngo** (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
   6.3.4 Separative stems and Neuter/Impositive stems
   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:

<table>
<thead>
<tr>
<th></th>
<th>PreIn</th>
<th>In</th>
<th>PoIn/Fo</th>
<th>Fo2</th>
<th>PreRa</th>
<th>Ra</th>
<th>PoRa</th>
<th>PreFi</th>
<th>Fi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Initial</td>
<td>= Indirect Relative Initial: PPx, pa- when, mu- as, u- while, chi- how; Sequential n-</td>
<td></td>
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<tr>
<td>2</td>
<td>Initial</td>
<td>= Subject Concord, Infinitive ku-</td>
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<tr>
<td>3</td>
<td>Post-Initial/ Formative</td>
<td>= Negative marker: -ká-, in Neg. Optative: -na-</td>
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<td>4</td>
<td>Formative 2</td>
<td>= Tense (= Time/Aspect/Mood) marker</td>
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<td>5</td>
<td>Pre-Radical</td>
<td>= Object Concord; Reflexive -li-</td>
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<tr>
<td>6</td>
<td>Radical</td>
<td>= Verbal Radical or Root</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>Post-Radical</td>
<td>= Expansion(s) and/or Extension(s)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Pre-Final</td>
<td>= Tense (= Time/Aspect/Mood) marker -ang-</td>
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<thead>
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<th></th>
<th>VB</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>MS</td>
</tr>
</tbody>
</table>
The minimal verbal form consists of a Verbal Base and a Final (= Verb Stem). The minimal verbal form occurs as the Imperative:

\[
\text{iiid-a} \quad \text{come!}
\]
\[
\text{hween-a} \quad \text{go!}
\]

In the maximal verbal form, the positions 1 to 9 are filled. One example is the Indirect Relative Far Past Perfective.

\[
\text{pa-} \quad \text{tw-} \quad \text{á-} \quad \text{ná-} \quad \text{vá-} \quad \text{süm-} \quad \text{is-} \quad \text{idy-} \quad \text{aang-} \quad \text{a}
\]

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 Concor ds
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.

<table>
<thead>
<tr>
<th>SC</th>
<th>OC</th>
<th>SC</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>ngu-/ni-</td>
<td>-ngu-</td>
<td>1PL</td>
</tr>
<tr>
<td>2SG</td>
<td>u-</td>
<td>-ku-</td>
<td>2PL</td>
</tr>
<tr>
<td>cl.1</td>
<td>á-</td>
<td>-mu-</td>
<td>cl.2</td>
</tr>
<tr>
<td>cl.3</td>
<td>ú-</td>
<td>-u-</td>
<td>cl.4</td>
</tr>
<tr>
<td>cl.5</td>
<td>li-</td>
<td>-li-</td>
<td>cl.6</td>
</tr>
<tr>
<td>cl.7</td>
<td>chí-</td>
<td>-chi-</td>
<td>cl.8</td>
</tr>
<tr>
<td>cl.9</td>
<td>i-</td>
<td>-i-</td>
<td>cl.10</td>
</tr>
<tr>
<td>cl.11</td>
<td>lú-</td>
<td>-lu-</td>
<td>cl.12</td>
</tr>
<tr>
<td>cl.13</td>
<td>tû-</td>
<td>-tu-</td>
<td></td>
</tr>
<tr>
<td>cl.14</td>
<td>ú-</td>
<td>-u-</td>
<td></td>
</tr>
<tr>
<td>cl.15</td>
<td>kú-</td>
<td>-ku-</td>
<td></td>
</tr>
<tr>
<td>cl.16</td>
<td>pá-</td>
<td>-pa-</td>
<td></td>
</tr>
</tbody>
</table>
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).

<table>
<thead>
<tr>
<th>Subject concord</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>tw-oná miláandi</td>
<td>we see trees</td>
</tr>
<tr>
<td>vona miláandi</td>
<td>they (cl.2) see trees</td>
</tr>
<tr>
<td>va-ch-oná chínú</td>
<td>they see it the (cl.7) thing</td>
</tr>
<tr>
<td>tw-a-lólá viínú</td>
<td>we looked at things</td>
</tr>
<tr>
<td>va-lólá viínú</td>
<td>(Far Past -a-)</td>
</tr>
<tr>
<td>dy-a-vélé paweélú</td>
<td>outside</td>
</tr>
<tr>
<td></td>
<td>id.</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Subject concord</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-pwechela vayeéni</td>
<td>you (pl.) receive guests</td>
</tr>
<tr>
<td>n-toha limbéénde</td>
<td>you touch skin</td>
</tr>
<tr>
<td>n-komola kúkááya</td>
<td>you arrive home</td>
</tr>
<tr>
<td>n-chima lwiídi</td>
<td>you shut a door</td>
</tr>
<tr>
<td>m-minganga ung’áváanga</td>
<td>you chase a dog</td>
</tr>
<tr>
<td>n-nambela chínú</td>
<td>you want something</td>
</tr>
<tr>
<td>n-nyedya viýlo</td>
<td>you taste food</td>
</tr>
<tr>
<td>m-mwadýa mwaaná waángú</td>
<td>you dress my child</td>
</tr>
<tr>
<td>m-mwika kúkááya</td>
<td>you arrive home</td>
</tr>
</tbody>
</table>

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.

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).
n-nyinika chiloóongo you cover a pot cf. -hinika
m-badula chiinu you bite off something
n-gong’ola liyáanga you push a stone
n-suma chiinu you buy something
n-ng’ana pawéélú you play outside

No syllabic nasal is formed before vowel-initial stems and minisyllabic stems.

mu-uya kukááya 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-katápéélé 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-lime lihaála you (pl.) should not cultivate a field
m-pa-lola pang’ámbo you (pl.) look at the other side
n-tu-lola tumóóndwa you (pl.) look at the small stars
n-chi-lola chitóóvi you (pl.) look at the bundle
n-ka-lola kanóóndwa you (pl.) look at the small star
n-di-lola pawéélú you (pl.) look at them outside
n-ngú-lola ng’áánde you (pl.) look at me inside the house
mu-va-lola pawéélú 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 mwééénu/náang’e we receive you (pl./him
tu-m-minganga mwééénu/náang’e we chase you (pl./him
tu-n-nambela mwééénu/náang’e we like you (pl./him
tu-n-nyakula mwééénu/náang’e we carry you (pl./him cf. -yakula
tu-m-mwadya mwééénu/náang’e we dress you (pl./him
nu-m-mwikila mwééénu/náang’e we reach you (pl./him cf. -hwikila
nu-n-nyinika mwééénu/náang’e we cover you (pl./him
The object concord of class 18 before consonant-initial stems is not -mu- rather than a homorganic syllabic nasal.

The syllable preceding a syllabic nasal with a H tone becomes also H-toned (see 3.5.8).

### 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.

<table>
<thead>
<tr>
<th>Ngu-form</th>
<th>Meaning</th>
<th>NGu-form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngu-pwechela</td>
<td>I receive guests</td>
<td>ngu-toha</td>
<td>I touch skin</td>
</tr>
<tr>
<td>ngu-comola</td>
<td>I arrive home</td>
<td>ngu-chima</td>
<td>I shut a door</td>
</tr>
<tr>
<td>ngu-linganga</td>
<td>I chase a dog</td>
<td>ngu-lambela</td>
<td>I want something</td>
</tr>
<tr>
<td>ngu-yedya</td>
<td>I taste food</td>
<td>ngu-wadya</td>
<td>I dress my child</td>
</tr>
<tr>
<td>ngu-badula</td>
<td>I bite off something</td>
<td>ngu-gong’ola</td>
<td>I push a stone</td>
</tr>
<tr>
<td>ngu-hwika</td>
<td>I arrive home</td>
<td>ngu-suma</td>
<td>I buy something</td>
</tr>
</tbody>
</table>
ngu-hinika chiloóngo I cover a pot
ngu-ng’ana pawéélù 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 malóombé I pound maize
nguu-lya ing’óówo I eat a banana
ngu-ve / mbe kukááya I am home cf. -véle. 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 -chi- (Past Progressive) and preferably ngu- before -chi- (‘say’) of the (compound) Future.

ngu-chí-líima / ni-chí-líima liháála I was cultivating a field
nguu-chí-ngu-líime liháála I will cultivate a field
? ní-chí-ngu-líime liháála id.

b) The SC is ni- before any marker -ka-.

ni-ka-liíima liháála if I cultivate a field (Conditonal)
ni-kání-liíima liháála if I would cultivate a field (Suppositional Condit.)
ni-kana-liíima liháála although I cultivate a field (Concessive)
ni-ka-liíme liháála I should cultivate a field (Subsecutive Optative)
ni-ka-líimite liháála if I would have cultivated a field (Suppos.Cond. Pf.)
ni-ká-liíma liháála I don’t cultivate a field (Negative Present)
ni-kánáa-líimá liháála 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 chitéúnduúnì I (will) taste chitunduni (= type of food)
nachi-yéedýa chitéúnduúnì 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-.

ní-ní-yeedya ntandaasa I tasted cassava porridge (Past Perfective)
ní-ní-yeedýa ntandaasa I have tasted cassava porridge (Present Perfective)
The object concord of 1SG is -ngu-; it has an optional variant N- (prenasalization) in the same environments as the subject concord for 1SG.

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-.

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 substitutives, as shown in the first example.

Nominals (cf. 4.6 - 4.8 for other nominals than nouns):

múñìníma/váñìníma 1/2 Nnima person

u-ná-lyóóne you should not see it  cf. u-na-li-óóne
u-ná-ndóóle you should not look at me  cf. u-na-ngú-lóóle
1SG  (nááŋgu) ni-múŋniŋma I am a Nnima
2SG  (wááko) u-múŋniŋma
1PL  (hwéee tu) tu-váŋniŋma
2PL  (mwééenu) m-máŋniŋma

mmákóonde/vamákóonde 1/2 Makonde person

1SG  ni-mmákóonde I am a Makonde
2SG  u-mmákóonde
1PL  tu-vamákóonde
2PL  m-mamákóonde

nkwiíva/vakwiíva 1/2 thief

1SG  ni-nkwiíva I am a thief 1PL  tu-vakwiíva
2SG  u-nkwiíva 2PL  m-makwiíva

muúnu/vaánu 1/2 person; ñtwáani (I, interrogative) what kind of

The SC of the participant 2PL is also used for the participant 1PL before vaánu.

1SGni-munú ñtwáani what kind of person am I
2SGu-munú ñtwáani
1PL/2PL  m-manú ñtwáani

'-kulungwa (A) big; nkulungwa/vakulungwa cl.1/2

1SG  ni-nkulungwa I am big 1PL  tu-vakulungwa
2SG  u-nkulungwa 2PL  m-makulungwa

'-leéhu (A) long, tall, high; nnééhu/valééhu cl.1/2

1SG  ni-nnééhu I am tall 1PL  tu-valééhu
2SG  u-nnééhu 2PL  m-malééhu

'-vili (NUM) two; vaviíli cl.2

1PL  tu-vaviíli we are two
2PL  m-maviíli

'-nani (nominal interrogative) who; nnaání/vanaání 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-naání who am I/are you?
1PL  tu-vanaání
2PL  m-manaání

'-ngápi (nominal interrogative) how many; vangáapi cl.2

1PL  tu-vangáapi how many are we?
2PL  m-mangáapi
Pronominals (cf. 5.6):

`-nji` other; yúünjí/váänjí cl.1/2

This pronominal has FL tones in attributive position.

1SG ni-yúünjí I am the other one 1PL tu-váänjí
2SG u-yúünjí 2PL m-máänjí

`-ómi, `-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

`-ída` which; alída/valída 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-nda which one am I? 1PL tu-valída
2SG u-nda 2PL m-málda

`-óhe` much, many; vôóhe cl.2

1PL tu-vóóhe we are many
2PL m-móóhe

`-mó` one (minisyllabic stem); yúúmo cl.1

1SG ni-yúúmo I am the one
2SG u-yúúmo

With two stems, `-éné` `self` and `-óhe-óhe` `every, all`, the subject concord can also be used in a non-copulative sense.

`-éné` 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

`-óhe-óhe, `-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).

ú-ni-ngu-hauliila you told me (addressing an elder)
vá-ni-ngu-hauliila (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 withmacrostems.

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
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-naalyl  | we (will) eat   |
| tu-naav  | we (will) be   |
| tu-naali  | we (will) cultivate    |
| tu-naalimya  | we (will) make cultivate   |
| tuulyé  | we should eat  |
| tuuvé  | we should be  |
| tu-liime  | we should cultivate |
| tu-liimé  | 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-kátapáala  | to be beautiful (< `ku-kátapáala`)  |
| 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:

<table>
<thead>
<tr>
<th>Imperative</th>
<th>Stem</th>
<th>CF.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii'pa</td>
<td>bear fruit!</td>
<td>(cf. -pa bear fruit)</td>
<td></td>
</tr>
<tr>
<td>i'lya</td>
<td>eat!</td>
<td>(cf. -lya eat)</td>
<td></td>
</tr>
<tr>
<td>i'va</td>
<td>steal!</td>
<td>(cf. -iva steal)</td>
<td></td>
</tr>
<tr>
<td>i'yva</td>
<td>make steal!</td>
<td>(cf. -iya make steal)</td>
<td></td>
</tr>
<tr>
<td>li'ima</td>
<td>cultivate!</td>
<td>(cf. -ima cultivate)</td>
<td></td>
</tr>
<tr>
<td>li'mya</td>
<td>make cultivate!</td>
<td>(cf. -imya make cultivate)</td>
<td></td>
</tr>
<tr>
<td>cf. yanga'ata</td>
<td>help!</td>
<td>(cf. -yangata help)</td>
<td></td>
</tr>
<tr>
<td>yangaaty'a</td>
<td>make help!</td>
<td>(cf. -yangatya make help)</td>
<td></td>
</tr>
</tbody>
</table>

We know that all Imperatives forms have SF-H tone because this tone appears on the Final when followed by a word like kadi'iki ‘a bit’.

<table>
<thead>
<tr>
<th>Imperative</th>
<th>Stem</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ilyá kadi'iki</td>
<td>eat a bit!</td>
<td></td>
</tr>
<tr>
<td>ivá kadi'iki</td>
<td>steal a bit!</td>
<td></td>
</tr>
<tr>
<td>ivyá kadi'iki</td>
<td>make steal a bit!</td>
<td></td>
</tr>
<tr>
<td>limá kadi'iki</td>
<td>cultivate a bit!</td>
<td></td>
</tr>
</tbody>
</table>

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 \( \text{i} \) appears as the first TBU of the stem.

\[ \text{iipa} \quad \text{bear fruit!} \]
\[ \text{iilya} \quad \text{eat!} \]

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 ‘-\( \text{li} \)\-'eat’, would be ‘\( \text{k}u\-\text{li}\-\text{a} \). The verb stem has one syllable because penultimate lengthening lengthens the preceding syllable: ‘\( \text{kuu}\-\text{li}\-\text{a} \). 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 ‘\( \text{k}u\-\text{li}\-\text{ya} \). We then would need another rule to derive the correct surface form \( \text{k}\-\text{ulya} \), 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): ‘\( \text{tu}\-\text{nii}\-\text{li}\-\text{a} \). The form would be ‘\( \text{tu-nii-li}\-\text{a} \) after penultimate lengthening, and the SF retracts to the root vowel being the S1-position: ‘\( \text{tu-nii-li} \). 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 ‘\( \text{tu-nii-lya} \) appears instead of the correct form ‘\( \text{tu-nii-lya} \). If the shifting process precedes VC/GF, the H tone on the root vowel would appear on the Final, and the wrong form ‘\( \text{tu-nii-lya} \) appears. Another example is the Conditional (\( \text{tu-ka-li} \)) which has S2-H tone. But to which position should we assign a S2-H tone? And how to derive the surface form ‘\( \text{tu-ka\-ly} \)?

It should be noted that when monomoraic vowel-final roots and the Perfective Final -\( \text{ile} \) 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 -\( \text{VC} \) are added. Below, we give examples of the applicative extension, the long passive extension and the Perfective Final.

\[ \begin{align*}
\text{-liil} & \quad < \cdot\text{-il-a} \quad \text{eat for} \\
\text{-liiv} & \quad < \cdot\text{-iv-a} \quad \text{be eaten} \\
\text{-lile} & \quad < \cdot\text{-il-e} \quad \text{have eaten}
\end{align*} \]

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-liila  we do not eat for them (< 'tu-ká-va-liila)
- va-na-liiwe  they should not be eaten (< 'vá-na-liiwe)
- 'tu-ká-va-liilé  we have not eaten them (< 'tu-ká-va-liilé)

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-liila  we (will) eat for them (< 'tu-na-va-lilá)

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  < ' -tepí-a  < ' -tepí-  make bow down (cf. -tẹpa  bow down)
- ' -kutia  < ' -kuti-a  < ' -kuti-  make cry (cf. -kụta  cry)
- ' -lamia  < ' -lami-a  < ' -lami-  cure (cf. -lụma  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-tepia  < 'tu-na-tepiá  (cf. tu-na-teépa  < 'tu-na-tepá)
- 'tu-na-kutia  < 'tu-na-kutía  (cf. tu-na-kúta  < 'tu-na-kutá)
- 'tu-na-lamia  < 'tu-na-lamía  (cf. tu-na-laáma  < 'tu-na-lamá)
- 'tu-na-yedía  < 'tu-na-yedíá
- 'tu-na-wadia  < 'tu-na-wadía  (cf. tu-na-wála  < '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-teeyya**  we (will) make bow down
- **tu-na-kuuteya**  we (will) make cry
- **tu-na-laamya**  we (will) cure
- **tu-na-peedya**  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 I 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
- **-kutidiya**  < `'-kutidia`  < `'-kutidi-a`  < `'-kut-il-i`  make cry for
- **-lamidiya**  < `'-lamidia`  < `'-lamidi-a`  < `'-lam-il-i`  cure for

- **tu-na-val-tepeeyda**  we (will) make bow down for them
- **tu-na-val-kuttiidiya**  we (will) make cry for them
- **tu-na-val-laamidiya**  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 I 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).

- **-yedeyda**  < `'-yediedia`  < `'-yediedi-a`  < `'-yedi-el-i`  < `'-yedi-el`
- **-wadiiida**  < `'-wadiidi-a`  < `'-wadi-il-i`  < `'-wadi-il`

- **tu-na-val-yedeydea**  we (will) taste for them
- **tu-na-val-wadiidiya**  we (will) dress for them

Next to **-yedeyda**, a form without the first glide is also possible, **-yededyda**, 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 **-waliidiya** (via **-waliidi-a** < `'-wali-id-i` < `'-wali-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.

- **-loejhdia/-loesia**  < `'-loejhi/-loesi-a`  < `'-loel-chi/-lol-esi`
- make look at (cf. -lola look at)
After penultimate lengthening, the SF-H tone retracts to the final vowel of these extensions.

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\[
\begin{align*}
\text{\-'vihi-/viisi} & < \text{\-'vihi-a-/viisi-a} < \text{\-'vihi-/viisi-} \quad \text{be angry} \\
\end{align*}
\]

cf. \quad \text{tu-na-lolechía} < \text{\-'tu-na-lolehiá} \\
\text{tu-na-loleesía} < \text{\-'tu-na-lolesiá} \\
\text{tu-na-vá-loleela} < \text{\-'tu-na-vá-lolelá} \quad \text{we (will) watch for them} \\
\text{tu-na-vihiá} < \text{\-'tu-na-vihiá} \\
\text{tu-na-viisiá} < \text{\-'tu-na-viisiá}
\]

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-.

\[
\begin{align*}
\text{tu-na-lolecha} & \quad \text{we (will) make look at} \\
\text{tu-na-loleesa} & \quad \text{id.} \\
\text{tu-na-vihi} & \quad \text{we (will) be angry} \\
\text{tu-na-viisa} & \quad \text{id.}
\end{align*}
\]

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 I of the applicative into d). When the Final is added, the final syllable becomes complex. Lexicalized causatives have the same form.

\[
\begin{align*}
\text{-lølehidya} & < \text{\-'lølehidia} < \text{\-'lølehidí-a} < \text{\-'løl-eh-il-i-} \quad \text{observe, notice} \\
\text{tu-na-lølehidida} & \quad \text{we (will) notice}
\end{align*}
\]

With lexicalized causatives, the applicative is added after the extension. And the causative vowel is copied to the position after the applicative, changing the I of the applicative into d.

\[
\begin{align*}
\text{-visidiya} & < \text{\-'visiidi} < \text{\-'visiidi-a} < \text{\-'visi-il-i} < \text{\-'visi-il-} \quad \text{be angry for} \\
\text{tu-na-va-visiidyya} & \quad \text{we (will) be angry for them}
\end{align*}
\]

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.

\[
\begin{align*}
\text{lexicalized causatives:} & \quad \text{non-causatives:} \\
\text{tu-na-tooha} & \quad \text{we touch} \quad \text{tu-na-piíha} \quad \text{we hide} \\
\text{tu-na-taaha} & \quad \text{we look for} \quad \text{tu-na-yaáha} \quad \text{we throw away} \\
\text{-tohedyá} & \quad \text{touch for} \quad \text{-piíila} \quad \text{hide for} \\
\text{-tahidyá} & \quad \text{search for} \quad \text{-yáhila} \quad \text{throw away for}
\end{align*}
\]

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-usua** we (will) take off
- **visiday** be angry for
- **usiday** 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-kwichakwíicha** we sharpen
- **yochedy** roast for
  - **kochela** poke for
  - **kwichakwíichila** 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-páánya** we beat
  - **tu-na-míínya** we squeeze
- **-tonedya** rain for
  - **-panyila** beat for
  - **-minyila** squeeze for
- **-kundanidya** mix 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** < `tep-u-` be bowed down (cf. **-tepa** bow down)
- **-kutua** < `kut-u-` be cried (cf. **-kuta** cry)
- **-lamua** < `lam-u-` be healed (cf. **-lama** heal)

**Lexicalized passives:**
- **-tamua** < `-tam-u-` like, love
- **-humbua** < `-humu-u-` infect
After penultimate lengthening, the SF-H tone retracts to the vowel of the extension, not to the penultimate syllable.

\[
\begin{align*}
\text{tu-na-teepúá} & < \text{tu-na-tepuá} \\
\text{li-na-kúutuá} & < \text{li-na-kutuá} \\
\text{tu-na-lamúá} & < \text{tu-na-lamuá} \\
\text{tu-na-taamúá} & < \text{tu-na-tamuá} \\
\text{va-na-huumbúá} & < \text{va-na-humbuá}
\end{align*}
\]

The retracted H tone disappears with Final H Deletion, a process which occurs after VC/GF when the extension becomes w.

\[
\begin{align*}
\text{tu-na-teepwa} & \quad \text{we will be bowed down} \\
\text{li-na-kúutwa} & \quad \text{it will be cried} \\
\text{tu-na-laamwa} & \quad \text{we will be healed} \\
\text{tu-na-taamwa} & \quad \text{we will like} \\
\text{va-na-huumbwa} & \quad \text{they will infect}
\end{align*}
\]

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.

\[
\begin{align*}
\text{-tepelwa} & < \text{-tepelua} < \text{-tepel-a} < \text{-tep-el-u} \quad \text{be bowed down for} \\
\text{-kutilwa} & < \text{-kutilua} < \text{-kutil-a} < \text{-kut-il-u} \quad \text{be cried for} \\
\text{-lamilwa} & < \text{-lamilua} < \text{-lamil-a} < \text{-lam-il-u} \quad \text{be healed for}
\end{align*}
\]

\[
\begin{align*}
\text{tu-na-va-tepeelwa} & \quad \text{we will be bowed down for them} \\
\text{li-na-vá-kútilwa} & \quad \text{it will be cried for them} \\
\text{tu-na-va-lamiilwa} & \quad \text{we will be healed for them}
\end{align*}
\]

With lexicalized passives, the applicative follows the passive extension. A vowel appears in the position after the applicative, changing the i of the applicative into i. It appears that the final syllable is shaped by analogy with the final syllable of causatives.

\[
\begin{align*}
\text{-tamwidya} & < \text{-tamuidia} < \text{-tamuidi-a} < \text{-tam-ill-i} \\
\text{-humbwidiya} & < \text{-humbuidia} < \text{-humbuidi-a} < \text{-humbu-ill-i}
\end{align*}
\]

\[
\begin{align*}
\text{tu-na-va-tamwiidya} & \quad \text{we (will) like for them} \\
\text{va-na-vá-hümwiidiya} & \quad \text{they (will) infect for them}
\end{align*}
\]

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 (ū).

<table>
<thead>
<tr>
<th>Lexicalized Passives</th>
<th>Non-passives</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-na-paawa</td>
<td>tu-na-moówa</td>
</tr>
<tr>
<td>tu-na-chimwa</td>
<td>tu-na-loówa</td>
</tr>
<tr>
<td>-pawidya</td>
<td>-mowela</td>
</tr>
<tr>
<td>-tamwiday</td>
<td>-lowela</td>
</tr>
<tr>
<td>We are somewhere</td>
<td>We cut hair</td>
</tr>
<tr>
<td>We are angry</td>
<td>We do witchcraft</td>
</tr>
<tr>
<td>Be somewhere for</td>
<td>Cut hair for</td>
</tr>
<tr>
<td>Like for</td>
<td>Do witchcraft for</td>
</tr>
</tbody>
</table>

## 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-himbila** 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-ile have dug for**

**tu-himbidile** 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.
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

\[li-pilikenwe \] it (e.g. the word) that has been heard
\[li-limitwe \] it (e.g. the field) that has been cultivated
\[li-himbilwe \] 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

\[li-limwidye \] it (e.g. the field) that has been cultivated
\[li-himbwidye \] 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).

\[-udidy \] ask for (cf. -udy ask (a question))
\[-udidy \] have asked
\[-lombwedeya \] be married for (cf. -lombwa be married)
\[-lombwedye \] have been married

\[tu-na-va-udidya \] we ask for them
\[tu-va-úididy \] we who have asked them
\[tu-na-va-lombweeda \] we are married for them
\[tu-va-lombwidye \] 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. \(-a\) 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 - nyele  
- 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-tu-hwiila they have died for us  
a-tu-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 < '-tepeelue < '-tepe-e-lu-e < '-tepelu- be stooped  
- hipwike < '-hipuik < '-hipu-i-k-e < '-hipuk- sprout  
- olwete < '-oloet < '-olo-e-t-e < '-olot- point  
- katapedye < '-katapaid < '-katapa-i-di-e < '-katapadi- clean

tu-o-bweete we who have pointed  
tu-katappeedye 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-chimuula we unfasten it
   chi-ni-maliliika 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).

   -tahua  < -tahi-uk-a disagree, deny  (cf. -taha search)
   -sumisiika < -sumisi-ik-a (can) be sold  (cf. -sumisa sell)
   -kaleweka < -kaleu-ek-a become drunk  (cf. -kalewa be drunk)

   tu-na-tahuuka we (will) disagree, deny
   tu-na-sumisiika we are/can be sold
   tu-na-kaleweeka 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 -a- 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-lolana we look at each other
   tu-na-lolanga 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. '-li-a ‘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 < 'ili-a 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-a keep on eating!  (stem: '-li-ang-a)
   ilyaana  < 'ili-an-a 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-kutyanga we are constantly made to cry
   tu-na-wadyana we dress each other
   tu-na-lolwanga 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.

\[
\begin{align*}
\text{va-nályä} & < \text{va-na-áliä} & < \text{vá-na-aliä} & \text{they eat} \\
\text{va-nálýáanga} & < \text{va-na-áli-ang-á} & < \text{vá-na-ali-ang-á} & \text{they keep eating}
\end{align*}
\]

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-iwa"), 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.

\[
\begin{align*}
\text{va-na-liiwa} & & \text{they are eaten} \\
\text{va-na-liwáanga} & & \text{they are continuously eaten}
\end{align*}
\]

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).

\[
\begin{align*}
\text{-lølene} & < \text{-lølana} & \text{have looked at each other} \\
\text{-lølengë} & < \text{-lølanga} & \text{have intensively looked} \\
\text{-kutyenge} & < \text{-kutyanga} & \text{have made constantly cry} \\
\text{-tamwene} & < \text{-tamwana} & \text{have loved each other}
\end{align*}
\]
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 `-li' `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-lileenge` we who have kept on eating

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)
`-himbilehimble` cf. `-himble (Perfective)
`-tongolatongola` cf. `-tongola speak
`-tongoletongole` cf. `-tongole (Optative)
`-tongweletongwele` cf. `-tongwele (Perfective)
In 7.1.7, we describe how final syllables beginning with I and its complex variant dy may be omitted in verbal forms, and this can be seen with reduplication, too. Some examples follow.

- tohatoha cf. -toha touch
- tohetohe cf. -tohe (Optative)
- tohidyetohidye 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)

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. ‘-limité ‘have cultivated’, ‘-limitélimité ‘have kept on cultivating’) and after penultimate lengthening and retraction, a H Tone Bridge occurs (‘-limiite, -limitélimité). 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.

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- tongwetongwe, -tongwetongwele cf. -tongweletongwele
- tohitoхи, -tohitohidye cf. -tohidyetohidye

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
- tepytepya cf. -tepya make bow down; -tepa bow down
- kutwakutwa cf. -kutwa be cried; -kuta cry
- chimalachimula cf. -chimula unfasten; -chima fasten
- malilikamalilika cf. -malilika be completed; -malilla finish
- lolanololana 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. ‘-limité ‘have cultivated’, ‘-limitélimité ‘have kept on cultivating’) and after penultimate lengthening and retraction, a H Tone Bridge occurs (‘-limiite, -limitélimité). 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-limiite we have not cultivated them
- tu-ká-limiite we have not cultivated
- tu-ká-la-limiitelimiite we have not kept on cultivating them
- tu-ká-limiitelimiite 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. ëliima); the tonal structure of the first syllable becomes level H after the processes penultimate lengthening (ëliima) and structure simplification including tonal coalescence (ëliima, see 3.5.6).

\begin{verbatim}
  tu-ka-liima if we cultivate
  tu-ka-la-liima if we cultivate them
  tu-ka-limáliima if we keep on cultivating
  tu-ka-la-limáliima if we keep on cultivating them
\end{verbatim}

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).

\begin{verbatim}
  pa-tú-úlya-úlya matandaasa when we keep on eating cassava porridge
  pa-tú-la-úlya-úlya matandaasa when they keep on eating the cassava porr.
  tu-ní-ílyá-ílya matandaasa we have kept on eating cassava porridge
\end{verbatim}

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.

\begin{verbatim}
  tu-na-li-óone, tu-ná-ly-óone we should not see it (cl.5)
\end{verbatim}
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-li-oña, kú-ly-oña** 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-ngů-páanye, u-ná-máanye** you should not beat me
- **ku-ngú-páányà, kú-máányà** 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** we should not eat them
- **kú-láalya** to eat them

6.4 **Verbs ‘to be’ and ‘to say’**

The verb **kúúva** ‘to be’:

The verb **-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).

- **tuuvu kukååya** we are (generally) at home
- **vaava kükååya** they are (generally) at home
- **tuuvu na-vikåapu vitaåtu** we have three baskets
- **vaavå na-vikåapu vitaåtu** they have three baskets

The verb **kupåawa** ‘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 -**i**-**dye**). 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 dji (*ánápawa).

**Negative Present:**

- **akåpåawa** (s)he is not here/there
- **akåpåawa kukååya** (s)he is not at home

**Present Perfective:**

- **apawidye na-vikåapu vitaåtu** (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.

- **akåpaali** (s)he is not there
- **akåpaali kukååya** (s)he is not at home

- **akåpaali na-vikåapu vitaåtu** (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 -**kée** with a short fall from H to a lowered H (H).

- **akée/nikée náaångu** it is not me
The verb *kúuchi* ‘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 *dji* (*tuníichi*). Some examples:

**Present:**
- *tuuchi malóóve lóóhe* we say many words
- *vaachi malóóve lóóhe* they say many words

**Direct Relative:**
- *tuuchi malóóve* we who say words
- *vááchi malóóve* they who say words

**Conditional:**
- *tukááchi malóóve* if we say words

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 kúuchi(doóno)*... I tell them that...
- *nááng’e nkúuchi(doóno)*... and he said...
- *nkúuchi(doóno)*... saying...
7. **TENSES**

7.1 **The tense system**
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   7.1.2 Relative tenses and negation
   7.1.3 The Finals
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   7.1.5 The tense markers in Formative positions
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   7.2.1 Verbal forms with four-syllable stems, trisyllabic stems and disyllabic stems
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7.3 **The conjoint/disjoint system**
   7.3.1 A brief history
   7.3.2 Conjoint, disjoint and conjoint-disjoint tenses

7.4 **Complex tenses**

7.5 **Compound 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 *dj* 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 *cj* 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 dīt
22. Optative with OC dīt
23. Imperative with OC dīt
24. Imperative

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 kuvaŋga르타 ‘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, P-H Tone Shift which is worked out in 3.5.4, shifts the

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H tone of the SC to the first TBU of the stem (the S1-position) if there is no OC (e.g. tuniyángaata ‘we have helped’, Present Perfective \(dj\)); if there is a OC, the H tone of the SC shifts to the OC (e.g. tunivángaata ‘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. tuniýangaata ‘we had helped’, Past Perfective \(dj\)) 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 \(cej\) / 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. kunávángaata).

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

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<td>NEG</td>
<td>TM</td>
<td>S1</td>
<td>S2</td>
</tr>
<tr>
<td>Tone:</td>
<td>SC</td>
<td>NEG</td>
<td>TM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>a</td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>1.</td>
<td>ka</td>
<td></td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>2.</td>
<td>nga</td>
<td></td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>3.</td>
<td>kã</td>
<td></td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>4.</td>
<td>ka</td>
<td></td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>5.</td>
<td>ka</td>
<td>na</td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>6.</td>
<td>na</td>
<td></td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>7.</td>
<td>ka</td>
<td>na</td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
<tr>
<td>8.</td>
<td>ka</td>
<td>na</td>
<td>H</td>
<td>a</td>
<td>B</td>
</tr>
</tbody>
</table>

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: tunávángaata ‘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: tunávángaata ‘we do not help’ (and the H tone of the TM doubles to the right, the
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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. tukáplilikééne ‘we have not heard’, tukálapilikééne ‘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 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: tukálíile ‘we have not eaten’, tukáyangete ‘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: nga).

- nanga kúúlya no eating
- nanga kuyáangááta/nanga uyáangááta/nang ’uyáangááta 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.

- nga naunahwéene kukáaya 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

<table>
<thead>
<tr>
<th>Slot:</th>
<th>2 TM: SC</th>
<th>3 TM: TM</th>
<th>4 TM: TM</th>
<th>S1</th>
<th>S2</th>
<th>9 F</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>F</td>
<td>F</td>
<td>TG</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>H</td>
<td>L</td>
<td>H</td>
<td>á</td>
<td>C2</td>
<td>Cuyángatá #</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>H</td>
<td>L</td>
<td>H</td>
<td>a</td>
<td>E</td>
<td>Cuyángata #</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>L</td>
<td>na</td>
<td>H</td>
<td>iel</td>
<td>C2</td>
<td>Cuyángeté #</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>L</td>
<td>a na</td>
<td>H</td>
<td>ilé</td>
<td>E</td>
<td>Cuyángete #</td>
<td></td>
</tr>
</tbody>
</table>

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
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. *patúváýángaata* ‘when we help them’, Indirect Relative Present; *patúváýángete* ‘when we have helped them’, Indirect Relative Present Perfective). There is one exception: with the Indirect Relative Non-Past, there is no second doubling: *patúnúváyángáta* ‘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

When the Negative particle *naanga* precedes an Indirect Relative starting with *pa*-‘when’, its meaning is the same as its Negative non-relative variant.

*naanga patúlíima* - *tukáliima* we do not cultivate
*naanga patúváýángete* - *tukáyangéete* we have not helped

A Negative verb form followed by *naanga* makes the negation stronger.

*naanga patúkáŋg’áana* when we absolutely do not play
7.1.3 The Finals

The following types of Finals occur:

- a, -à  - 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 -à 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, -à/-ile, -ilé. The Imperative uses two Finals: -a (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
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, 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 -idy_e. 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: -idy_e. With the examples below, the verbal base with final -a is given for comparison.

<table>
<thead>
<tr>
<th>Perf. -ile/-ite:</th>
<th>Perf. -idy_e (with lexicalized causatives and lexicalized passives):</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ipa cut grass</td>
<td>-ipile</td>
</tr>
<tr>
<td>-pwata quarrel</td>
<td>-pwatile</td>
</tr>
<tr>
<td>-kocha poke</td>
<td>-kochile</td>
</tr>
<tr>
<td>-leka leave</td>
<td>-lekile</td>
</tr>
<tr>
<td>-piha hide</td>
<td>-pihite</td>
</tr>
<tr>
<td>-doba be tired</td>
<td>-dobile</td>
</tr>
<tr>
<td>-ida come</td>
<td>-idile</td>
</tr>
<tr>
<td>-tuva rem. weeds</td>
<td>-tuvite</td>
</tr>
<tr>
<td>-taya put</td>
<td>-taite</td>
</tr>
<tr>
<td>-mowa shave</td>
<td>-mowite</td>
</tr>
<tr>
<td>-mila swallow</td>
<td>-midile</td>
</tr>
<tr>
<td>-lima cultivate</td>
<td>-limite</td>
</tr>
<tr>
<td>-hwenena go</td>
<td>-hwenite</td>
</tr>
<tr>
<td>-panya beat</td>
<td>-panyite</td>
</tr>
<tr>
<td>-ing’a give</td>
<td>-ing’ile</td>
</tr>
<tr>
<td>-himba dig</td>
<td>-himbile</td>
</tr>
<tr>
<td>-tenda do, make</td>
<td>-tendile</td>
</tr>
<tr>
<td>-kunja bend</td>
<td>-kunjite</td>
</tr>
<tr>
<td>-linga try</td>
<td>-lingile</td>
</tr>
</tbody>
</table>

| Perf. -idy_e (with causatives): | make cut | -ipy_a     | -ipidy_e  |
|                                | make cult. | -limya    | -limidy_e |
|                                | make dig | -himbya   | -himbidy_e |
|                                | make poke | -kocheha  | -kochehidy_e |
|                                | /-kochesa | -kochesidye |
|                                | make shave | -moweha | -mowehidy_e |
|                                | /-mowesa | -mowesidye |
|                                | make try | -lingiha  | -lingihidy_e |
|                                | /-lingisa | -lingisidye |

With -lola ‘look at’, -lolite is preferred; with -mala ‘know’, the form is -mait_e (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
-tuya  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 i. With such bases, the Perfective final is -ile, and the i 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

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
-haula  tell  —  -hawile

When all vowels are a, imbrication may continue up to the first syllable (see also 2.5).
Imbrication also occurs when the final syllable is complex (as with causatives).

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).

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 -velle 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 -velle 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 Imperial
   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)  |L
d)  L||, H||

Tenses which belong to the first type (L) are:

<table>
<thead>
<tr>
<th>Tense</th>
<th>Formative</th>
<th>Infinitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Far Past cjt</td>
<td>-a-</td>
<td></td>
</tr>
<tr>
<td>Far Past Perfective cjt</td>
<td>-a-</td>
<td></td>
</tr>
<tr>
<td>B Indirect Relative Non-Past djt</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td>C1 Non-Past with SC participants djt</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td>C2 Non-Past with SC classes djt</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td>D1 Suppositional Conditional Perfective djt</td>
<td>-ka-</td>
<td></td>
</tr>
<tr>
<td>D2 Present Perfective djt</td>
<td>-ni-</td>
<td></td>
</tr>
</tbody>
</table>
D2 Subsecutive Optative \(dj \tilde{t}\) \(-\text{ka}-\)
Negative Optative \(dj \tilde{t}\) \(-\text{na}-\)
E Conditional \(dj \tilde{t}\) \(-\text{ka}-\)
Direct Relative Past Perfective \(-\text{na}-\)

Tenses which belong to the second type (H) are:

B Negative Present \(dj \tilde{t}\) \(-\text{ká}-\)
B Negative Indirect Relative Present \(dj \tilde{t}\) \(-\text{ká}-\)
D2 Negative Infinitive \(-\text{ngá}-\)
Subsecutive Infinitive \(dj \tilde{t}\) \(-\text{ná}-\)
Indirect Relative Past Perfective \(dj \tilde{t}\) \(-\text{ná}-\)

The H tone of the TM \(-\text{ká}-\) of the Negative Present \(dj \tilde{t}\) and the Negative Indirect Relative Present \(dj \tilde{t}\) 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:

C2 Past \(dj \tilde{t}\) \(-\text{na}-\)
Past Perfective \(dj \tilde{t}\) \(-\text{ni}-\)

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.

\(\text{tú-ná}-\text{yangaáta}\) we helped
\(\text{tú-ná}-\text{va}-\text{yangaáta}\) we helped them
\(\text{tú-ni}-\text{yangaáta}\) we had helped
\(\text{tú-ni}-\text{va}-\text{yangaáta}\) 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:

A Negative Present Perfective 1 \(dj \tilde{t}\) \(-\text{ka}||\text{-}\)
Negative Indirect Relative Perfective \(dj \tilde{t}\) \(-\text{ká}||\text{-}\)
D1 Negative Past Perfective \(dj \tilde{t}\) \(-\text{ká}||\text{-}\)

The shifted H tone on the Negative marker of the Negative Present Perfective 1 \(dj \tilde{t}\) and the H tone of the Negative marker of the Negative Indirect Relative Present Perfective \(dj \tilde{t}\) 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.

\(\text{tu-ká-líile}\) we have not eaten
cf. \(\text{tu-ká-vi-líile}\) 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 dij 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 H
c) H L

d) H L

The following tenses belong to the first type (L L):

<table>
<thead>
<tr>
<th>slot 3</th>
<th>slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Negative Conditional/Concessive dij</td>
</tr>
<tr>
<td>E</td>
<td>Concessive dij</td>
</tr>
<tr>
<td></td>
<td>Direct Relative Far Past Perfective</td>
</tr>
</tbody>
</table>

The following tenses belong to the second type (L IL):

<table>
<thead>
<tr>
<th>slot 3</th>
<th>slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>Far Past dij</td>
</tr>
<tr>
<td></td>
<td>Far Past Perfective dij</td>
</tr>
<tr>
<td></td>
<td>Suppositional Conditional dij</td>
</tr>
</tbody>
</table>

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-yangaáta we 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 dij.

<table>
<thead>
<tr>
<th>slot 3</th>
<th>slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>Indirect Relative Far Past Perfective</td>
</tr>
</tbody>
</table>

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-yángaata when we had helped
pa-tw-á-ná-va-yángaata when we had helped them
Two tenses belong to the fourth type (H L):

D1  Negative Present Perfective 2 \(djt\)  \(\text{-ká-} \text{-na-}\)
    Negative Suppositional Conditional  \(\text{-ká-} \text{-na-}\)

The H tone of the first TM doubles to the second TM.

\[
\begin{array}{ll}
\text{tu-ká-ná-yangeete} & \text{we have not helped} \\
\text{tu-ká-ná-va-yangeete} & \text{we have not helped them} \\
\text{tu-ká-ná-yangaate} & \text{we would not help} \\
\text{tu-ká-ná-va-yangaate} & \text{we would not help them}
\end{array}
\]

### 7.1.6 The Pre-Final tense marker \(-\text{ang-}\)

The Pre-Final \(-\text{ang-}\) 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 \(-\text{kalewa}\) ‘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 \(\text{cjt}\):**

\[
\begin{array}{ll}
\text{tu-lim-ang-a mahaála} & \text{we habitually cultivate fields} \\
\text{va-lim-ang-a máháála} & \text{they habitually cultivate fields}
\end{array}
\]

**Non-Past \(\text{djt}\):**

\[
\begin{array}{ll}
\text{tu-na-lim-aáng-a} & \text{we cultivate intensively/repeatedly} \\
\text{tu-na-kalew-aang-a} & \text{we are totally drunk/the whole time} \\
\text{va-na-lim-aáng-a} & \text{they cultivate intensively/repeatedly} \\
\text{va-na-káléw-aang-a} & \text{they are totally drunk/the whole time}
\end{array}
\]

**Direct Relative Present:**

\[
\begin{array}{ll}
\text{tu-lim-aáng-a} & \text{we who cultivate intensively/repeatedly} \\
\text{tu-káléw-aang-a} & \text{we who are totally drunk/the whole time} \\
\text{va-lim-aáng-a} & \text{they who cultivate intensively/repeatedly} \\
\text{va-káléw-aang-a} & \text{they who are totally drunk/the whole time}
\end{array}
\]

**Indirect Relative Present \(\text{djt}\):**

\[
\begin{array}{ll}
\text{pa-tú-lim-aang-a} & \text{when we cultivate intensively/repeatedly} \\
\text{pa-tú-káléw-aang-a} & \text{when we are totally drunk/the whole time}
\end{array}
\]
Conditional *dit*:

- *tu-ka-lím-áang-a* if we cultivate intensively/repeatedly
- *tu-ka-kálew-áang-a* if we are totally drunk/the whole time

Optative (without OC):

- *tu-lím-ááng-e* we should cultivate intensively/repeatedly
- *tu-kálew-aang-e* we should be totally drunk/the whole time

Negative Optative *dit*:

- *tu-na-lím-áang-e* we shouldn’t cultivate intensively/repeatedly
- *tu-na-kálew-aang-e* we shouldn’t be totally drunk/the whole time

Imperative:

- *lim-ááng-a* cultivate! (addressing several persons)
- *kálew-aang-a* be drunk! (addressing several persons)

Imperative with OC *dit*:

- *la-lím-aange* cultivate them (cl.6)! (addressing several persons)

There are verbs where the complex plural addressee marker -ang’än- is possible as well; for *-tuka* ‘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-aäng-a/hwen-ang’aän-a* go! (addressing several persons)
- *id-aäng-a/id-ang’aän-a* come! (addressing several persons)
- *uy-aänga/uy-ang’aän-a* return! (addressing several persons)
- *uk-aäng’aän-a* go away, arise! (addressing several persons)

The Pre-Final behaves like an extension, especially like the Reciprocal extension -än- (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 *-lileng* without complex final syllable. We think that the form is built via the Applicative -lile, 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-il-eéng-e* we who have eaten the whole time/?
- *ni-ká-il-eéng-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  
- tu-tongo(la) kadiiki  
- ku-vá-pélékedii(dya) vayeéni  
- tu-pweche(le) vayeéni  
- tu-péleke(dye) vayeéni  
- tu-va-pwechedi(le) vayeéni  
- tu-la-limi(te) máháála  
- tu-va-pélékedii(dye) vayeéni

we receive the guests  
we talk a bit  
to send them guests  
we should receive guests  
we should send guests  
we have received the guests  
we have cultivated the fields  
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. -kundanyu ‘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-limi(ie) lihaála  
- tu-na-va-limi(la) lihaála  
- tu-ká-limi(ite) lihaála  
- va-pweche(ele) vayeéni  
- va-vél-úkúlíma  
- va-vé-úkúlíma

they who have cultivated a field  
we cultivate a field for them  
we have not cultivated a field  
receive the guests!  
(va-velé-úkúlíma) we are cultivating  
(va-velé-úkúlíma) we were cultivating

cf.

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-pwéhé(la) vayeéni  
- ku-vá-hángalali kadiiki  
- ku-vá-hángalalilá kadiiki

to receive guests  
to make them happy a bit  
to make them happy a bit

cf.

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
TENSES

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
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 penultim ate 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 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.

<table>
<thead>
<tr>
<th>Verbs disjoint</th>
<th>four-syllable stems</th>
<th>trisyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
<td>TP</td>
</tr>
<tr>
<td>A</td>
<td>L,S1/SF</td>
<td>.HHH:L / .HHHL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.HHL:L / .HHLL</td>
</tr>
<tr>
<td>B</td>
<td>L,S1</td>
<td>.HHL:L / .HHLL</td>
</tr>
<tr>
<td>C1</td>
<td>L,SF</td>
<td>.LLRL / LHHH, LLLH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.LLL:L / LLLL</td>
</tr>
<tr>
<td>C2</td>
<td>H,SF</td>
<td>.HLRL / HLLHH, HHLH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.HHL:L / .HHL</td>
</tr>
<tr>
<td>D1</td>
<td>L,no H</td>
<td>.LLL:L / LLLL</td>
</tr>
<tr>
<td>D2</td>
<td>H,no H</td>
<td>.HHL:L / .HHL</td>
</tr>
<tr>
<td>E</td>
<td>L,S2</td>
<td>.LHFL / LHLL</td>
</tr>
</tbody>
</table>

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 ...IH 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 djit
B  Optative with OC djit
C1 Non-Past with participants as SC djit
C2 Non-Past with classes as SC djit
D1 Imperative with OC djit
D2 Negative Optative djit
E  Conditional djit

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-pilikéne / tu-ká-la-pilikéne maliidi
  we haven’t heard the voices
tu-ká-di-kátápédye / tu-ká-di-kátápédye ding’áände
  we haven’t cleaned the houses
tu-ká-va-pwéchéléle / tu-ká-va-pwéchéle vayeéni
  we haven’t received the guests
tu-ká-vi-kündéenyé / tu-ká-vi-kündéenyé vikuúndi
  we haven’t mixed the yams

B  tu-la-pilikane / tu-la-pilikane maliidi
  we should hear the voices
tu-di-kátápadye / tu-di-kátápadye ding’áände
  we should clean the houses
tu-va-pwéchéele / tu-va-pwéchéle vayeéni
  we should receive the guests
tu-vi-kündányé / tu-vi-kündányé vikuúndi
  we should mix the yams

C1 tu-na-la-pilikáña / tu-na-la-pilikáná, tu-na-la-pilikáná maliidi
  we (will) hear the voices
tu-na-di-katapadya / tu-na-di-katapadya ding’áände
  we (will) clean the houses
tu-na-va-pwchééla / tu-na-va-pwchééla, tu-na-va-pwchééla vayeéni
  we (will) receive the guests
tu-na-vi-kundaanya / tu-na-vi-kundaanya vikuúndi
  we (will) mix the yams
C2 va-na-pilikaña / va-na-pilikáná, va-na-pilikáná maliídi
they (will) hear voices
va-na-kátápaadya / va-na-kátápaadya ding’áándé
they (will) clean houses
va-na-pwéchéela / va-na-pwéchela, va-na-pwéchela 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-katapadye / di-katapadye ding’áándé
clean the houses!
va-pwecheele / va-pwechele vayeéni
receive the guests!
vi-kundaanye / vi-kundanye vituúndi
mix the yams!

D2 va-na-pilikiíane / va-na-pilikane maliídi
they should not hear voices
va-na-kátápaadye / va-na-kátápaadye ding’áándé
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-pilikáana / tu-ka-la-pilikana maliídi
if we hear the voices
tu-ka-di-katapadya / tu-ka-di-katapadya ding’áándé
if we clean the houses
tu-ka-va-pwechéela / tu-ka-va-pwéchela vayeéni
if we receive the guests
tu-ka-vi-kundáanya / tu-ka-vi-kundáanya 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).
<table>
<thead>
<tr>
<th>Verbs disjoint</th>
<th>disyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem TP</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF .H:.L / .HL</td>
</tr>
<tr>
<td></td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1 .FL / .HL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF .RL / .HH / .L.L</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF H.RL / H.LL, H.LH</td>
</tr>
<tr>
<td></td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H .L.L / .L.L</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H .FL / .HL</td>
</tr>
<tr>
<td>E</td>
<td>L.S2 .H.L / .HL</td>
</tr>
</tbody>
</table>

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-lii̯e / tu-ká-vi-lii̯e vii̯yo**  
we haven’t eaten the food  
**tu-ká-vi-léedye / tu-ká-vi-léedye vii̯nu**  
we haven’t laid down the things

B  **tu-la-lii̯me / tu-la-liime mahaala**  
we should cultivate the fields  
**tu-ví-láadye / tu-vi-ládye vii̯nu**  
we should lay down the things

C1  **tu-na-la-lii̯ma / tu-na-la-limá, tu-na-la-limá mahaala**  
we (will) cultivate the fields  
**tu-na-ví-laadya / tu-na-vi-ládyay vii̯nu**  
we (will) lay down the things

C2  **va-ná-lii̯ma / va-ná-limá, va-ná-limá mahaala**  
they (will) cultivate fields  
**va-na-láadya / va-na-ládyay vii̯nu**  
they (will) lay down things

D1  **la-lii̯me / la-lime mahaala**  
cultivate the fields!  
**vi-láadye / vi-ládyey vii̯nu**  
lay down the things!

D2  **va-na-lii̯me / va-na-lime mahaala**  
they should not cultivate fields  
**va-na-láadye / va-na-ládyey vii̯nu**
they should not lay down things

E  tu-ka-la-liima / tu-ka-la-liima mahaála
if we cultivate the fields
tu-ka-vi-láádyá / tu-ka-vi-láádyá 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).

<table>
<thead>
<tr>
<th>Verbs</th>
<th>disyllabic stems with a</th>
<th>complex final syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
<td>TP</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF</td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
<td>.L:L / .LL</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H</td>
<td>.L:L / .LL</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
<td>.FL / .HL</td>
</tr>
<tr>
<td>E</td>
<td>L.S2</td>
<td>.H:L / .HL</td>
</tr>
</tbody>
</table>

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-úudyá
   to ask
B  tu-la-úudyé / tu-la-údyé malóóvé
   we should ask the words
C1  tu-na-la-úudyá / tu-na-la-udyá malóóvé
   we (will) ask the words
C2  va-na-úudyá / va-na-údyá malóóvé
   they (will) ask words
D1  la-úudyé / la-udyé malóóvé
   ask the words!
D2  va-na-úudyé / va-na-údyé malóóvé
   they should not ask words
E  tu-ka-la-úudyá / tu-ka-la-údyá malóóvé
   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.

<table>
<thead>
<tr>
<th>Verbs disjoint</th>
<th>disyllabic stems with a complex final syllable (after VC/GF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>A</td>
<td>L,S1/SF</td>
</tr>
<tr>
<td>B</td>
<td>L,S1</td>
</tr>
<tr>
<td>C1</td>
<td>L,SF</td>
</tr>
<tr>
<td>C2</td>
<td>H,SF</td>
</tr>
<tr>
<td>D1</td>
<td>L,no H</td>
</tr>
<tr>
<td>D2</td>
<td>H,no H</td>
</tr>
<tr>
<td>E</td>
<td>L,S2</td>
</tr>
</tbody>
</table>

A  kuúdyá
   to ask
B  tu-lúudyé / tu-lúdyé malóóvé
   we should ask the words
C1  tu-na-ludyá / tu-na-ludyá malóóvé
   we (will) 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’, -vla 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.

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).
### 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 *čit* and the Non-Past *djit*. 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 *čit* belongs to TG D (D1/D2), the Non-Past *djt*, which we use as example below, belongs to TG C (C1/C2).

<table>
<thead>
<tr>
<th>Verbs disjoint</th>
<th>minisyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
</tr>
<tr>
<td>E</td>
<td>L.S2</td>
</tr>
</tbody>
</table>

#### Examples

A  **kúlya**
   to eat

B  **tu-láálye / tu-lálye mátiňji**
   we should eat the pumpkins

C1 **tu-na-viîlya / tu-na-vîlya vituûndi**
   we (will) eat the potatoes

C2 **va-náálye / va-nálye mátiňji**
   they (will) eat pumpkins

D1 **lałye / lalye mátiňji**
   eat the pumpkins!

D2 **va-náálye / va-nálye mátiňji**
   they should not eat pumpkins

E  **tu-ka-vîîlya / tu-ka-vîîyâ vituûndi**
   if we eat the yams
L-toned SC (participants):

C1  
- **u-na-pwécheéla** you (will) receive  
- **u-na-va-pwécheéla** you (will) receive them  
- **tu-na-pwécheéla** we (will) receive  
- **tu-na-va-pwécheéla** 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-va-pwécheéla** (s)he (will) receive(s) them  
- **va-na-pwécheéla** they (will) receive  
- **va-na-va-pwécheéla** they (will) receive them  
- **a-na-kundáanya** (s)he (will) mix(es)  
- **a-na-vi-kundáanya** (s)he (will) mix(es) them  
- **va-na-kundáanya** they (will) mix  
- **va-na-vi-kundáanya** 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**

<table>
<thead>
<tr>
<th>C2</th>
<th>D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Perfective <strong>djt</strong></td>
<td>Present Perfective <strong>cjt</strong></td>
</tr>
<tr>
<td>Past Perfective <strong>djt</strong></td>
<td>Subsecutive Optative <strong>djt</strong></td>
</tr>
<tr>
<td>Far Past Perfective <strong>djt</strong></td>
<td>Negative Optative <strong>djt</strong></td>
</tr>
<tr>
<td>Suppositional Conditional <strong>djt</strong></td>
<td></td>
</tr>
<tr>
<td>Past <strong>djt</strong></td>
<td></td>
</tr>
<tr>
<td>Far past <strong>djt</strong></td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present (with SC participants and cl.1)</td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present Perfective (with SC participants and cl.1)</td>
<td></td>
</tr>
</tbody>
</table>

Examples from the Present Perfective **djt** and Negative Optative **djt**:

C2  
- **tu-ni-pwécheéla** we have received
we have received them
they have received
we have received them
we have mixed
we have mixed them
they have mixed
they have mixed them
we should not receive
we should not receive them
we should not receive
we should not mix
we should not mix them
we should not mix
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 $cjr$; 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):

<table>
<thead>
<tr>
<th>Tense</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-pwécheéla</td>
<td>we who receive</td>
</tr>
<tr>
<td>tu-vá-pwécheéla</td>
<td>we who receive them</td>
</tr>
<tr>
<td>tu-pílikaána</td>
<td>we who hear</td>
</tr>
<tr>
<td>tu-vá-pílikaána</td>
<td>we who hear them</td>
</tr>
<tr>
<td>a-pwécheéla</td>
<td>(s)he who receives</td>
</tr>
<tr>
<td>a-vá-pwécheéla</td>
<td>(s)he who receives them</td>
</tr>
<tr>
<td>a-pílikaána</td>
<td>(s)he who hears</td>
</tr>
<tr>
<td>a-vá-pílikaána</td>
<td>(s)he who hears them</td>
</tr>
<tr>
<td>tu-kúndaanya</td>
<td>we who mix</td>
</tr>
</tbody>
</table>
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.

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-ni-liima* 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).
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).

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.

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.

We should not eat

\textbf{a-liíma} (s)he who cultivates
\textbf{a-ōá-liíma} (s)he who cultivates them
\textbf{tu-āiíle} we who have eaten
\textbf{tu-Ĉiíle} we who have eaten them
\textbf{a-āiíle} (s)he who has eaten
\textbf{a-Ĉiíle} (s)he who has eaten them

\textbf{tu-āiíma máháála} we who cultivate fields
\textbf{tu-Ĉiími kadiíki} we who cultivate a bit
\textbf{tu-Ĉá-liíma máháála} we who cultivate the fields
\textbf{tu-Ĉá-liími kadiíki} we who cultivate them a bit
\textbf{tu-Ĉáadya víínu} we who spread out things
\textbf{tu-Ĉáadyá kadiíki} we who spread out a bit
\textbf{tu-Ĉí-ladya víínu} we who spread out the things
\textbf{tu-Ĉíladyá kadiíki} we who spread them out a bit
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.

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.

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-viilya would have surfaced.)

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.
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-lii̇ma / pa-tú-lí̇ma mahaála
when we cultivate fields
pa-tú-lá-lii̇ma / pa-tú-lá̄-lí̇ma mahaála
when we cultivate the fields
pa-tú-ládya / pa-tú-lá̄-dí̄ya vii̇nu
when we lay down things
pa-tú-vi-ládya / pa-tú-vī-lí̄da vii̇nu
when we lay down the things
pa-vá-pvécheela / pa-vá-pvé̆chela vayeë̆ni
when they receive guests
pa-vá-vá-pvécheela / pa-vá-vá-pvé̆chela vayeë̆ni
when they receive the guests
pa-vá-kúndaan̄ya / pa-vá-kúndanya vituúndi
when they mix yams
pa-vá-ví-kúndaan̄ya / pa-vá-ví-kúndanya vituúndi
when they mix the yams
pa-tú-pilikaana / pa-tú-pili̇kana maló̄ove
when we hear words
pa-tú-lá-pili̇kaana / pa-tú-lá̄-pili̇kana maló̄ove
when we hear the words
pa-tú-pélekedȳa / pa-tú-pélekedya vaánu
when we send people
pa-tú-vá-pélekedȳa / 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-pvécheela / ku-ná-pvé̆chela vayeë̆ni
to go and receive guests
ku-ná-vá-pvécheela / ku-ná-vá-pvé̆chela vayeë̆ni
to go and receive the guests
ku-ná-kúndaan̄ya / ku-ná-kúndanya vituúndi
to go and mix yams
ku-ná-ví-kúndaan̄ya / ku-ná-ví-kúndanya vituúndi
to go and mix the yams
The Indirect Relative Non-Past *djif* 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-liíma / pa-tú-na-liíma mahaála
when we (will) cultivate fields
pa-tú-ná-la-liíma / pa-tú-ná-la-liíma mahaála
when we (will) cultivate the fields
pa-tú-na-láadya / pa-tú-na-láadya viínu
when we (will) lay down things
pa-tú-ná-vi-láadya / pa-tú-ná-vi-láadya viínu
when we (will) lay down the things
pa-vá-na-pwéchéela / pa-vá-na-pwéchéela vayeéini
when they (will) receive guests
pa-vá-ná-va-pwéchéela / pa-vá-ná-va-pwéchéela vayeéini
when they (will) receive the guests
pa-vá-na-kúndáanya / pa-vá-na-kúndáanya vituúndi
when they (will) mix yams
pa-vá-ná-vi-kúndáanya / pa-vá-ná-vi-kúndáanya vituúndi
when they (will) mix the yams
pa-tú-na-pilikaana / pa-tú-na-pilikaana malóóve
when we (will) hear words
pa-tú-ná-la-pilikaana / pa-tú-ná-la-pilikaana malóóve
when we (will) hear the words
pa-tú-na-pélékedyá / pa-tú-na-pélékedyá vaánu
when we (will) send people
pa-tú-ná-va-pélékedyá / pa-tú-ná-va-pélékedyá vaánu
when we (will) send the people

The Negative Indirect Relative Present *djif* has the same tones as the Negative Present *djif*, except for the H-toned SC. The same is true for the Negative Indirect Relative Present Perfective *djif* when compared to the Negative Present Perfective 1 *djif*.

Tenses were 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):

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past <em>cjif</em></td>
<td>Optative with OC <em>djif</em></td>
<td>Optative (without OC)</td>
</tr>
<tr>
<td>Far Past <em>cjif</em></td>
<td>Negative Present <em>djif</em></td>
<td></td>
</tr>
<tr>
<td>Past Perfective <em>cjif</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far Past Perfective <em>cjif</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Present Perfective 1 <em>djif</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The examples below are from the Negative Present Perfective 1 $dji$, Optative with OC $dji$, Optative (without OC), Situative Perfective $dji$ and the Conditional $dji$:

A  
\[\text{tu-ká-pwéchééile}\] we have not received  
\[\text{tu-ká-va-pwéchééile}\] we have not received them  
\[\text{va-ká-pwéchééile}\] they have not received  
\[\text{va-ká-va-pwéchééile}\] they have not received them  
\[\text{tu-ká-kündéenye}\] we have not mixed  
\[\text{tu-ká-ki-kündéenye}\] we have not mixed them  
\[\text{va-ká-kündéenye}\] they have not mixed  
\[\text{va-ká-ki-kündéenye}\] they have not mixed them

B  
\[\text{tu-va-pwéchééle}\] we should receive them  
\[\text{va-va-pwéchééle}\] they should receive them  
\[\text{tu-ki-kündóanyé}\] we should mix them  
\[\text{va-ki-kündóanyé}\] they should mix them

C  
\[\text{tu-pwéchééle}\] we should receive  
\[\text{va-pwéchééle}\] they should receive  
\[\text{tu-kündóanyé}\] we should mix  
\[\text{va-kündóanyé}\] they should mix

D  
\[\text{tu-pwéchééle}\] while (we) having received  
\[\text{tu-va-pwéchééle}\] while (we) having received them  
\[\text{va-pwéchééle}\] while (they) having received  
\[\text{va-va-pwéchééle}\] while (they) having received them  
\[\text{tu-kündéenye}\] while (we) having mixed  
\[\text{tu-ki-kündéenye}\] while (we) having mixed them  
\[\text{va-kündéenye}\] while (they) having mixed  
\[\text{va-ki-kündéenye}\] while (they) having mixed them

E  
\[\text{tu-ká-pwéchééle}\] if we receive  
\[\text{tu-ká-va-pwéchééle}\] if we receive them  
\[\text{va-ká-pwéchééle}\] if they receive  
\[\text{va-ká-va-pwéchééle}\] if they receive them  
\[\text{tu-ká-kündáanyá}\] if we mix  
\[\text{tu-ká-ki-kündáanyá}\] if we mix them  
\[\text{va-ká-kündáanyá}\] if they mix  
\[\text{va-ká-ki-kündáanyá}\] if they mix them
Finally, there are two tenses which do not have a SC at all: the Imperative and the Imperative with OC *djī*. 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  *pwečēlā*  receive!
    *kundaanya*  mix!
D1  *va-pwečēle*  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-liima*  to cultivate
    *ku-láadya*  to lay down
    *ku-pwéchéla*  to receive
    *ku-kündáanya*  to mix
    *ku-pilikáana*  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-liima*  to cultivate them
    *ku-ví-láadya*  to lay them down
    *ku-vá-pwečēla*  to receive them
    *ku-ví-kündáanya*  to mix them
    *ku-lá-pilikáana*  to hear them
    *ku-vá-pélékeedya*  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 H.HL:L, H.HLLH instead of H.HLH, H.HL:L instead of H.FL, H.LRL instead of H.RL, H.LL instead of H.LH, and H.LHH instead of H.HL 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.

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>four-syllable stems</th>
<th>trisyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
<td>TP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H.HLL:L / H.HLLL</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
<td>H.HLL:L / H.HLLL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>disyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
</tr>
</tbody>
</table>

C2  **va-na-lá-pílkaána / va-na-lá-pílikáná, va-na-lá-pílikaná maliidi**
they (will) hear the voices
***va-na-di-kátapaadya / va-na-di-kátapadya ding’áande***
they (will) clean the houses
***va-na-va-pwecheela / va-na-vá-pwechelá, va-na-vá-pwéchelá  vayeéni***
they (will) receive the guests
***va-na-ví-kúndaanya / va-na-ví-kúndanya vitúñdi***
they (will) mix the yams
***va-na-lá-liíma / va-na-lá-líma, 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-pilikane maliidi**
they should not hear the voices
***va-na-di-kátapaadye / va-na-di-kátapadye ding’áande***

*Note: The above text contains Krika language examples and their English translations.*
they should not clean the houses
*va-na-vá-pwéchele / va-na-vá-pwéchele vayeéni*
they should not receive the guests
*va-na-vi-kúndaanye / va-na-vi-kúndaanye vituúndi*
they should not mix the yams
*va-na-lá-lüme / va-na-lá-lüme mahaálá*
they should not cultivate the fields
*va-na-vi-láadye / va-na-vi-láadye viínú*
they should not lay down the things

The forms with disyllabic vowel-initial stems with a complex final syllable with OC are as follows:

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>disyllabic stems with a complex final syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
</tr>
</tbody>
</table>

The forms with 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).

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>disyllabic stems with a complex final syllable (after VC/GF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
</tr>
</tbody>
</table>

The forms with disyllabic vowel-initial stems with a complex final syllable with OC are as follows:

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>disyllabic stems with a complex final syllable (after VC/GF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
</tr>
</tbody>
</table>

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).
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.

\[
\begin{array}{ll}
A & \text{kú-lá-ůudyá} \quad \text{ku-lá-iiva} \\
& \text{to ask them} \\
& \text{to steal them} \\
C2 & \text{va-ní-tú-éneleedyá} \quad \text{va-ní-twéneleedyá} \\
& \text{they have dispersed us}
\end{array}
\]

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.

\[
\begin{array}{ll}
C2 & \text{'va-na-lá-aalya} \quad (<\text{vá-na-la-aalya}) \\
& \text{they (will) eat them} \\
D2 & \text{'va-na-lá-aalye} \quad (<\text{vá-na-la-aalye}) \\
& \text{they should not eat them}
\end{array}
\]

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).

<table>
<thead>
<tr>
<th>Verbs disjoint + OC</th>
<th>minisyllabic stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem TP</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF H.FL / H.LL</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H H.FL / H.LL</td>
</tr>
</tbody>
</table>

\[
\begin{array}{ll}
C2 & \text{va-ná-láalya / va-ná-láalya mátíinji} \quad \text{they (will) eat the pumpkins} \\
D2 & \text{va-ná-láalye / va-ná-láalye mátíinji} \quad \text{they should not eat the pumpkins}
\end{array}
\]

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).
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-lii  = we should cultivate them
    tu-va-pwéchééle  = we should receive them
    tu-va-pwéchééle  = we should mix them
    tu-la-pilikaane  = we should hear them
    tu-va-pélékeedye  = we should send them

C1 tu-lii  = we should cultivate
             tu-kaadyé  = we should lay down
             tu-pwechééle  = we should receive
             tu-kundaanyé  = we should mix
             tu-pilikaáne  = we should hear
             tu-pélékeedyé  = we should send

C1 liima  = cultivate!
           laadya  = lay down!
           pwechééla  = receive!
           kundaanyal  = mix!
           pilikaána  = hear!
           pélékeedyal  = send!

D1 la-lii  = cultivate them!
           vi-laady  = lay them down!
           va-pwechééle  = receive them!
           vi-kundaanyé  = mix them!
           la-pilikaáne  = hear them!
           va-pélékeedyé  = 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 \textit{djt} (and Negative Indirect Relative Present \textit{djt}, 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**

<table>
<thead>
<tr>
<th>B</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-káalya</td>
<td>we do not eat</td>
</tr>
<tr>
<td>tu-ká-liima</td>
<td>we do not cultivate</td>
</tr>
<tr>
<td>tu-ká-yángaata</td>
<td>we do not help</td>
</tr>
<tr>
<td>tu-ká-pilikaana</td>
<td>we do not hear</td>
</tr>
<tr>
<td>tu-ká-pilikaniila</td>
<td>we do not listen</td>
</tr>
<tr>
<td>tu-ká-viilya</td>
<td>we do not eat it</td>
</tr>
<tr>
<td>tu-ká-la-liima</td>
<td>we do not cultivate them</td>
</tr>
<tr>
<td>tu-ká-va-yángáata</td>
<td>we do not help them</td>
</tr>
<tr>
<td>tu-ká-la-pilikaana</td>
<td>we do not hear them</td>
</tr>
<tr>
<td>tu-ká-la-pilikaniila</td>
<td>we do not listen to them</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>A</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ká-liile</td>
<td>we have not eaten</td>
</tr>
<tr>
<td>tu-ká-leedye</td>
<td>we have not laid down</td>
</tr>
<tr>
<td>tu-ká-yangéete</td>
<td>we have not helped</td>
</tr>
<tr>
<td>tu-ká-kundeenye</td>
<td>we have not mixed</td>
</tr>
<tr>
<td>tu-ká-pilikéene</td>
<td>we have not heard</td>
</tr>
<tr>
<td>tu-ká-katapeedye</td>
<td>we have not cleaned</td>
</tr>
<tr>
<td>tu-ká-pilikániile</td>
<td>we have not listened</td>
</tr>
<tr>
<td>tu-ká-pelekedidiyde</td>
<td>we have not sent</td>
</tr>
<tr>
<td>tu-ká-vi-liile</td>
<td>we have not eaten it</td>
</tr>
<tr>
<td>tu-ká-vi-leedye</td>
<td>we have not laid them down</td>
</tr>
<tr>
<td>tu-ká-va-yangéete</td>
<td>we have not helped them</td>
</tr>
<tr>
<td>tu-ká-vi-kündeenye</td>
<td>we have not mixed them</td>
</tr>
<tr>
<td>tu-ká-la-pilikéene</td>
<td>we have not heard them</td>
</tr>
<tr>
<td>tu-ká-di-katapeedye</td>
<td>we have not cleaned them</td>
</tr>
<tr>
<td>tu-ká-la-pilikániile</td>
<td>we have not listened to them</td>
</tr>
<tr>
<td>tu-ká-va-pelekedidiyde</td>
<td>we have not sent them</td>
</tr>
</tbody>
</table>

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:
7.3 **The conjoint/disjoint system**

Makonde has conjoint, disjoint and conjoint-disjoint verbal forms. Conjunct 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*, *m*, *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 conservation 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’. Meuussen
(1959) names the distinction in Rundi ‘disjunct’ / ‘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 \textit{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 \textit{fjt}); 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 \textit{djt}
- Past \textit{djt}
- Far Past \textit{djt}
- Present Perfective \textit{djt}
- Past Perfective \textit{djt}
- Far Past Perfective \textit{djt}
- Imperative (with OC) \textit{djt}
- Optative (with OC) \textit{djt}
- Direct Relative Present (with SC cl.2f.) \textit{djt}
- Direct Relative Present Perfective (with SC cl.2f.) \textit{djt}
- Suppositional Conditional \textit{djt}
- Conditional \textit{djt}
- Concessive \textit{djt}
- Subsecutive Infinitive \textit{djt}
- Situative Perfective \textit{djt}
- Suppositional Conditional Perfective \textit{djt}
- Subsecutive Optative \textit{djt}
- Direct Relative Past Perfective \textit{djt}
- Direct Relative Far Past Perfective \textit{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-)yángáata (vayeéni)** if we help them/the guests

**Indirect Relative Present** *djt*:

- **pa-tú-(va-)yángaata (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.

<table>
<thead>
<tr>
<th>Present cjt</th>
<th>Present/Non-Past <em>djt</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Past cjt</td>
<td>Past <em>djt</em></td>
</tr>
<tr>
<td>Far Past cjt</td>
<td>Far Past <em>djt</em></td>
</tr>
<tr>
<td>Present Perfective cjt</td>
<td>Present Perfective <em>djt</em></td>
</tr>
<tr>
<td>Past Perfective cjt</td>
<td>Past Perfective <em>djt</em></td>
</tr>
<tr>
<td>Far Past Perfective cjt</td>
<td>Far Past Perfective <em>djt</em></td>
</tr>
</tbody>
</table>

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 cj† – Present/Non-Past dj†:**
- **tu-(va-)yangata vayeéni** we help (THE) GUESTS
- **tu-na-(va-)yangara (vayeéni)** we (will) help them/the guests

**Past cj† – Past dj†:**
- **tu-(va-)yangatá vayeéni** we helped (THE) GUESTS
- **tú-ná-(va-)yangara (vayeéni)** we helped them/the guests

**Far Past cj† – Far Past dj†:**
- **tw-a-(va-)yangatá vayeéni** we helped (THE) GUESTS
- **tw-á-ná-(va-)yangara (vayeéni)** we helped them/the guests

**Present Perfective cj† – Present Perfective dj†:**
- **tu-(va-)yangete vayeéni** we have helped (THE) GUESTS
- **tu-ní-(va-)yangara (vayeéni)** we have helped them/the guests

**Past Perfective cj† – Past Perfective dj†:**
- **tu-(va-)yangétá vayeéni** we had helped (THE) GUESTS
- **tú-ní-(va-)yangara (vayeéni)** we had helped them/the guests

**Far Past Perfective cj† – Far Past Perfective dj†:**
- **tw-a-(va-)yangétá vayeéni** we had helped (THE) GUESTS
- **tw-á-ní-(va-)yangara (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.

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Imperative (without OC) dj†</th>
<th>Imperative (with OC) dj†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optative (without OC)</td>
<td>Optative (with OC) dj†</td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present dj‖</td>
<td>Direct Relative Present dj‖ (with SC participants + cl.1)</td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present Perfective dj‖</td>
<td>Direct Relative Present Perfective dj‖ (with SC cl.2ff.)</td>
<td></td>
</tr>
</tbody>
</table>

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-yangááta to help them
- ku-yángááta váyééni to help guests
- ku-vá-yangááta váyééni to help the guests

Imperative (without OC) – Imperative (with OC) dit:

- yangaáta help!
- yangaáta váyééni help the guests!
- va-yangááte (vayeéni) help them/the guests!

Optative (without OC) – Optative (with OC) dit:

- tu-yangááte we should help
- tu-yangááte váyééni we should help guests
- tu-vá-yangááte (vayeéni) we should help them/the guests

Direct Relative Present (with SC participants + cl.1) – Direct Relative Present (with SC cl.2ff.) dit:

- a-(vá-)yangááta (s)he who helps (them)
- a-(vá-)yangááta váyééni (s)he who helps (the) guests
- va-(vá-)yangááta (vayeéni) they who help them/the guests

Direct Relative Present Perfective (with SC participants + cl.1) – Direct Relative Present Perfective (with SC cl.2ff.) dit:

- a-(vá-)yangééte (s)he who have helped (them)
- a-(vá-)yangééte váyééni (s)he who have helped (the) guests
- va-(vá-)yangééte (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. Conjont 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- ("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 -lambilala ‘want’ or part of it, -(le)mbel(a), 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 \(-\text{va}\) ‘be’; these complex tenses designate general Progressive tenses.

2b) a verbal form with the Perfective of \(-\text{va}\) or part of it, \(-\text{ve(le)}\); 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 \(-\text{va}\) ‘be’ followed by \(-\text{chi}\); these complex tenses designate Non-Past Progressive.

3b) a verbal form with the Perfective of \(-\text{va}\) or part of it, \(-\text{ve(le)}\) followed by \(-\text{chi}\); 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 \(-\text{chi}\) and \(-\text{nachi}\) followed by complex tenses with \(-\text{lembe}\) and \(-\text{va}\); these tenses designate Past Intentional Progressive, Past Progressive and Non-Past Progressive.

4b) the initials \(-\text{nu-}\) 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 \(-\text{ve}\); its meaning is still unclear.
Structural descriptions of the complex tenses (without tonal description):

<table>
<thead>
<tr>
<th>TENSES</th>
<th>verb/TM</th>
<th>Sit. Seq.</th>
<th>Infinitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a)</td>
<td>SC</td>
<td>-lembe-</td>
<td>((k)u)-</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-mbe-</td>
<td>(u)-</td>
</tr>
<tr>
<td>1b)</td>
<td>SC</td>
<td>-kanaa-</td>
<td>((k)u)-</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-kanavaa-</td>
<td>(k)u-</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-kanaamba-</td>
<td>(k)u-</td>
</tr>
<tr>
<td>1c)</td>
<td>SC</td>
<td>-chi-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-na-chi-</td>
<td></td>
</tr>
<tr>
<td>2a)</td>
<td>SC</td>
<td>-.va-</td>
<td>n-</td>
</tr>
<tr>
<td>2b)</td>
<td>SC</td>
<td>-ve-</td>
<td>n-</td>
</tr>
<tr>
<td>3a)</td>
<td>SC</td>
<td>-na.va-chi</td>
<td>u-</td>
</tr>
<tr>
<td>3b)</td>
<td>SC</td>
<td>-ve-chi-</td>
<td>u-</td>
</tr>
<tr>
<td>4a)</td>
<td>SC</td>
<td>-chi-lembe-</td>
<td>((k)u)-</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-chi-.va-</td>
<td>n-</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>-na-chi-.va</td>
<td>u-</td>
</tr>
<tr>
<td>4b)</td>
<td>n-ku</td>
<td>-lembe-</td>
<td>((k)u)-</td>
</tr>
<tr>
<td></td>
<td>n-ku</td>
<td>-lembe-chi</td>
<td>u-</td>
</tr>
<tr>
<td></td>
<td>n-ku</td>
<td>-.va-</td>
<td>n-</td>
</tr>
<tr>
<td></td>
<td>n-ku</td>
<td>-na-chi-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n-ku</td>
<td>-chi-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n-ku</td>
<td>-chi-.va-</td>
<td>n-</td>
</tr>
<tr>
<td>4c)</td>
<td>SC-ve-</td>
<td>n-ku</td>
<td>-.va-</td>
</tr>
</tbody>
</table>

We now work out the different types in more detail.

Type 1a):

Present tense verb forms and Past tense verb forms with -lembe(1a), and its variant -lambe(1a), followed by an Infinitive designate various kinds of Future and of Past Intentional. The following tenses exist:

-lembe(1a) in the:

<table>
<thead>
<tr>
<th>Type</th>
<th>Designates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>Future</td>
</tr>
<tr>
<td>Negative Present</td>
<td>Negative Future</td>
</tr>
<tr>
<td>Direct Relative Present</td>
<td>Direct Relative Future</td>
</tr>
<tr>
<td>Indirect Relative Present</td>
<td>Indirect Relative Future</td>
</tr>
<tr>
<td>Negative Indirect Relative Present</td>
<td>Negative Indirect Relative Future</td>
</tr>
<tr>
<td>Past</td>
<td>Past Intentional</td>
</tr>
<tr>
<td>Far Past</td>
<td>Far Past Intentional</td>
</tr>
</tbody>
</table>

Although the full form -lembela/-lambe 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-lemb[e]-kulíma/ngu-lemb[e]-líma/ngu-lemb[e]-uliíma*
I will cultivate

*ngu-lemb[e]-kúliíma/ngu-lemb[e]-láliíma/ngu-lemb[e]-uláliíma*
I will cultivate them (cl.6)

*ngu-lemb[e]-kúlyla*
I will eat

*ngu-lemb[e]-díiýa/ngu-lemb[e]-kú-diýa*
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-lemb[e]-kulíma/va-lemb[e]-líma/va-lemb[e]-uliíma*
they will cultivate

*va-lemb[e]-kúliíma/va-lemb[e]-láliíma/va-lemb[e]-uláliíma*
they will cultivate them (cl.6)

*va-lemb[e]-kúlyla*
they will eat

*va-lemb[e]-díiýa/va-lemb[e]-kú-diýa*
they will eat them (cl.10)

The shorter form -mbe- of -lemb[e]lamb[e] 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 -lemb[e] but the SC is not ngo- (or ni-) but the variant Prenasalization of the initial C of -lemb[e].

*tu-mbe-liíma/tu-mbe-uliíma*
we will cultivate

*tu-mbe-kúlyla*
we will eat

*ndembe-liíma/ndembe-uliíma*
I will cultivate

NEGATIVE FUTURE:

The first part consists of the Negative Present of -(le)mbe--(la)mbe--; the second part is the Infinitive.
DIRECTIONS

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.

we will not cultivate

we who will cultivate

they who will cultivate

(NEGATIVE) INDIRECT RELATIVE FUTURE:

These tenses have as first part the (Negative) Indirect Relative of -(le)mbe- -(la)mbe-

we would cultivate (we had the intention to cultivate)

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). -amba of the third form in fact is the Subsecutive Infinitive of the ancient verb -amba ‘get light’, -náamba (where the initial of the Infinitive is omitted), and is used as such only in the following construction: ku-náamba kuócha ‘and it goes on with dawning’. Also the negative form is used with this Infinitive: ku-ká-náamba kuócha ‘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).

\[
\begin{align*}
tu-kánáamba-kulíima/tu-kánáamba-ulíima \\
tu-kánáava-kulíima/tu-kánáava-ulíima \\
tu-kánáa-kulíima/tu-kánáa-ulíima/tu-kánáa-liíima \\
\text{we have not yet cultivated} \\
tu-kánáamba-kuláliíima/tu-kánáamba-uláliíima \text{etc.} \\
\text{we have not yet cultivated them (cl.6)}
\end{align*}
\]

There is also a Indirect Relative with all forms:

\[
\begin{align*}
u-tů-kánáamba-kulíima \text{ etc.} \\
\text{while we have not yet cultivated}
\end{align*}
\]

“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’).

\[
\begin{align*}
tu-kanáamba-kulíima/tu-kanáamba-ulíima \\
tu-kanáava-kulíima/tu-kanáava-ulíima \\
tu-kanáa-kulíima/tu-kanáa-ulíima/tu-kanáa-liíima \\
\text{before we cultivate (or: when we not yet cultivate)} \\
tu-kanáamba-kuláliíima/tu-kanáamba-uláliíima \text{ etc.} \\
\text{before we cultivate them (cl.6) (or: when we not yet cultivate them)}
\end{align*}
\]

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-liíma  we are cultivating
tu-nachi-la-liíma  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, Meesuus’ Rule applies, so the S1-H tone is deleted, and there is no H Tone Bridge.

va-nachi-liíma  they are cultivating
va-nachi-la-liíma  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-nachi-tooha/va-nachi-tóoha  we are touching

INDIRECT RELATIVE NON-PAST PROGRESSIVE:

pa-tú-ná-chi-liíma  when we are cultivating
pa-tú-ná-chi-la-liíma  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-chi-liíma/va-chi-liíma  we/they were cultivating
tu-chi-liíma/va-chi-liíma  we/they were cultivating it
tu-chi-tooha/va-chi-tóoha  we were touching

The TM -a- may appear between the SC and the TM -chi- designating Far Past Progressive.

tw-a-chi-liíma  we were cultivating (long ago)

NEGATIVE PAST PROGRESSIVE:

The Negative marker -ká- appears between the SC and the TM -chi-.

tu-ká-chi-liíma  we were not cultivating
tu-ká-chi-la-liíma  we were not cultivating them (cl.6)

(NEGATIVE) INDIRECT RELATIVE (FAR) PAST PROGRESSIVE:

pa-tú-chi-liíma  when we were cultivating
pa-tw-á-chi-liíma  id. long ago
pa-tú-chi-la-liíma  when we were cultivating them (cl.6)
pa-tw-á-chi-la-liíma  id. long ago

pa-tú-ká-chi-liíma  when we were not cultivating
pa-tú-ká-chi-la-liíma  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 -\textit{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:
- \textit{tuuva-nkuliima} we are (generally) cultivating
- \textit{vaavá-\text{\aa}kuliima} they are (generally) cultivating

Negative Present:
- \textit{tukáava-nkuliima} we are not cultivating

Direct Relative:
- \textit{túuvá-\text{\aa}kuliima} we who are not cultivating
- \textit{váva-nkuliima} they who are not cultivating

Indirect Relative:
- \textit{patúuva-nkuliima} when we are cultivating

Negative Indirect Relative:
- \textit{patúkáava-nkuliima} when we are not cultivating

Optative:
- \textit{tuuvé-\text{\aa}kuliima} we should be cultivating

Negative Optative:
- \textit{tunáave-nkuliima} we should not be cultivating

Suppositional Conditional:
- \textit{tukáníva-nkuliima} we would be cultivating

Negative Suppositional Conditional:
- \textit{tukánáave-nkuliima} 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 -\textit{va}, viz. -\textit{ve}, or its part -\textit{ve} (often pronounced as -\textit{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-nkuliima we are cultivating
- vavee-ŋkuliima they are cultivating

Past Perfective:
- tuvē-ŋkuliima we were cultivating

Negative Past Perfective:
- tukave-nkuliima we were not cultivating

Direct Relative Perfective:
- tuvee-nkuliima we who are cultivating
- vavee-ŋkuliima they who are cultivating

Indirect Relative Perfective:
- patuvee-nkuliima when we are cultivating

Suppositional Conditional:
- tukave-nkuliima 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-ŋkuliima we are/will be cultivating
- va-naavá-chi-ŋkuliima 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-vee-chi-ŋkuliima 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-vē-chi-ŋkuliima we were cultivating
- tw-a-vē-chi-ŋkuliima 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-chi-lembe-kúlíma we had the intention to cultivate
NEGATIVE PAST INTENTIONAL PROGRESSIVE:
   tu-ká-chi-lémbé-kúlíma we did not have the intention to cultivate
INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:
   pa-tú-chi-lembe-kúlíma when we had the intention to cultivate
NEGATIVE INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:
   pa-tú-ká-chi-lémbé-kúlíma 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-chiivájkúlíma we were in the process of cultivating
NEGATIVE PAST PROGRESSIVE:
   tu-ká-chiivájkúlíma we were not in the process of cultivating
INDIRECT RELATIVE PAST PROGRESSIVE:
   pa-tú-chiivájkúlíma when we were in the process of cultivating
NEGATIVE INDIRECT RELATIVE PAST PROGRESSIVE:
   pa-tú-ká-chiivájkúlíma 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-nachiiivájkúlíma we will be cultivating
INDIRECT RELATIVE NON-PAST PROGRESSIVE:
   pa-tú-ná-chiivájkúlíma 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-úlíma and will cultivate
SEQUENTIAL FUTURE PROGRESSIVE:
   nku-lémbé-chi-ukúlíma and will be cultivating
SEQUENTIAL PRESENT PROGRESSIVE:

nkūu-váŋkúliima and are cultivating

SEQUENTIAL NON-PAST PROGRESSIVE:

nkú-náchi-liíma and will be cultivating

SEQUENTIAL PAST PROGRESSIVE:

nkú-chí-liíma and was cultivating

SEQUENTIAL PAST PROGRESSIVE:

nkú-chiváŋkúliima 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-nkūu-váŋkúliima

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-chi (Present of -chi 'say'), the second part is an Optative; this tense designates Future.

1b) the first part is SC-chi-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(\textit{le}).

3a) the first part is the (Far) Past with -ve(\textit{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):

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a)</td>
<td>SC-.\textit{chi} SC- \textit{(OC)-Verbal Base-e}</td>
</tr>
<tr>
<td>1b)</td>
<td>SC-\textit{chi}-\textit{chi} SC- \textit{(OC)-Verbal Base-a/-e/-ile}</td>
</tr>
<tr>
<td>2a)</td>
<td>SC-\textit{na-va} SC- \textit{(OC)-Verbal Base-ile}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{na-va} SC-kanaa-\textit{(k)u} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{na-va} SC-kanaa-\textit{va-\textit{(k)u}} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{na-va} SC-kanaa-\textit{bma-\textit{(k)u}} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{na-va} u- SC- \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td>2b)</td>
<td>n-\textit{ku}-\textit{va} u- SC- \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>n-\textit{kuna.-vachi} u- SC- \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td>3a)</td>
<td>SC-\textit{ve} SC- \textit{(OC)-Verbal Base-ile}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{ve} SC-kanaa-\textit{(k)u} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{ve} SC-kanaa-\textit{va-\textit{(k)u}} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{ve} SC-kanaa-\textit{bma-\textit{(k)u}} \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td></td>
<td>SC-\textit{ve} u- SC- \textit{(OC)-Verbal Base-a}</td>
</tr>
<tr>
<td>3b)</td>
<td>SC-\textit{ka-ve} SC-\textit{ve-n-ku-} \textit{(OC)-Verbal Base-a}</td>
</tr>
</tbody>
</table>

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 -\textit{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).

- \textit{tuuchi tu-lii\textit{me}} \textit{tuuchi tu-la-lii\textit{me}} we will cultivate we will cultivate them (cl.6)

**NEGATIVE FUTURE:**

- \textit{tu-k\textit{aachi tu-lii\textit{me}}} \textit{tu-k\textit{aachi tu-la-lii\textit{me}}} we will not cultivate we will not cultivate them (cl.6)

**INDIRECT RELATIVE FUTURE:**

- \textit{pa-t\textit{uuchi tu-lii\textit{me}}} \textit{pa-t\textit{uuchi tu-la-lii\textit{me}}} when we will cultivate when we will cultivate them (cl.6)
NEGATIVE INDIRECT RELATIVE FUTURE:

- **pa-tú-káachi tu-liime**: when we will not cultivate
- **pa-tú-káachi tu-la-liime**: 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’.

**tuuchi tuu-vé-ţkúlúima**: 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-chiichi tu-liime**: lit.: we were saying we should cultivate
  - **tu-ká-chiichi tu-liime**: Negation
  - **pa-tú-chiichi tu-liime**: Indirect Relative
  - **pa-tú-ká-chiichi tu-liime**: Negation

+ **Negative Optative:**
  - **tu-chiichi tu-na-liime**

+ **Non-Past:**
  - **tu-chiichi tu-na-liima**
  - **va-chiichi va-na-liima**

+ **Present Progressive:**
  - **tu-chiichi tu-ve-nkulúima**

The second part may also be formed by the compound tense of 1a), the Future:

- **tu-chiichi tuuchi tu-liime**

**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-lime liháála**: we will have cultivated a field
- **va-naava va-lime liháála**: 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-kánáamba-kulúima/tu-kánáamba-ullúima/**
  - **tu-kánáava-kulúima/tu-kánáava-ullúima/**
tu-kánáa-kuliíma/tu-kánáa-uliíma/tu-kánáa-liíma
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-liíma while we will cultivate
  va-náava u-vá-liíma 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-liíma and while (we) being cultivating

SUBSECUTIVE SITUATIVE PROGRESSIVE:
  nku-náavachi u-tú-liíma 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-límite liháála we had been cultivating a field
  tw-a-vé(lé) tu-límite liháála 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-kuliíma/... we had not cultivated yet
  tw-a-vé(lé) tu-kánáamba-kuliíma/... id. long ago

(FAR) PAST SITUATIVE PERFECTIVE:

  tu-vé(lé) u-tú-liíma while we had been cultivating
  tw-a-vé(lé) u-tú-liíma id. long ago

With the short -vé, the initial u- of the Situative may be omitted.

  tufé tú-liíma 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-nkúliíma
8. **PHRASAL TONOLOGY**

8.1 P-phrases consisting of more than one word

8.2 The Noun Phrase (NP) and p-phrases
  8.2.1 Conjoint, disjoint and conjoint-disjoint specifiers
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    two words
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    • P x-H Tone Retraction
    • Regressive H Tone Dissimilation
    • Structure Simplification
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8.3 The Verb Phrase (VP) and p-phrases
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    words
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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 $\text{GMW}$). Conjoint verbal forms constitute a p-phrase with a following noun (i.e., post verbal focus tenses, marked $\text{FMW}$). 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 $\text{ýtwáani}$ ‘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’, -nj (P) ‘other’, -óhe (P) ‘many’, -óhe-óhe (P) ‘all’, -ómi (P) ‘healthy, strong, whole’, -lida (P) ‘which’ and -ngápi (N) ‘how many’. They form phonological phrases on their own, and this is shown by the penultimate length of the noun.

<table>
<thead>
<tr>
<th>Example</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>lipoóndo liímo</td>
<td>one hole</td>
</tr>
<tr>
<td>mapoóndo maviíli</td>
<td>two holes</td>
</tr>
<tr>
<td>lipoóndo lidikidiíkí</td>
<td>small hole</td>
</tr>
<tr>
<td>valúume vá-pantwáala</td>
<td>men of Mtwara</td>
</tr>
<tr>
<td>valúume na-váana</td>
<td>men with children</td>
</tr>
<tr>
<td>vitéeng’u viinji</td>
<td>other chairs</td>
</tr>
<tr>
<td>ding’ände dyóóhe</td>
<td>many houses</td>
</tr>
<tr>
<td>chiitaámbo chohechóóhe</td>
<td>every country</td>
</tr>
<tr>
<td>vaánvu voómi</td>
<td>healthy people</td>
</tr>
<tr>
<td>llióée lliída</td>
<td>which word?</td>
</tr>
<tr>
<td>malóée mangáapi</td>
<td>how many words?</td>
</tr>
</tbody>
</table>
Remarkably, when the interrogatives ‘-lida 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 weéka (I) ‘on one’s own’, ‘-éne (P) ‘self’, chiíhi (N) ‘only’ and ŋtwáani (I) ‘what kind of?’.

valúmé weéka  men on their own
vavawene véene  they have seen themselves
valúmé chiíhi  only men
avanó ŋtwáani  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 ‘-naång’o (P) ‘the same, the very one’.

cháangu  mine (cl.7)
chiténg’ú chaángu  my chair
áchííno  this one (cl.7)
chiténg’ú ááchííno  this chair
chináang’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 (weéka ‘on one’s own’, -éne ‘self’ and chiíhi ‘only’), and there is one specifier which lowers all H tones of the preceding noun (jìwàani ‘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 nankakatámbe wéeka the spider on its own nankakatámbe mwéene the spider itself nankakatámbe chiíhi 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.

<table>
<thead>
<tr>
<th>Surface Form (in isolation)</th>
<th>A</th>
<th>B</th>
<th>C1</th>
<th>C2</th>
<th>D1</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>chitúvi</code></td>
<td><code>litawá</code></td>
<td><code>lutaví</code></td>
<td><code>lukalóngó</code></td>
<td><code>litinjí</code></td>
<td><code>chiyewé</code></td>
<td><code>limbén</code></td>
</tr>
<tr>
<td><code>utútuli</code></td>
<td><code>lihindíli</code></td>
<td><code>lutaví</code></td>
<td><code>lukalóngó</code></td>
<td><code>litinjí</code></td>
<td><code>ntandasa</code></td>
<td><code>limbén</code></td>
</tr>
<tr>
<td><code>utútúli</code></td>
<td><code>lihindíli</code></td>
<td><code>lutaví</code></td>
<td><code>lukalóngó</code></td>
<td><code>litinjí</code></td>
<td><code>ntandasa</code></td>
<td><code>limbén</code></td>
</tr>
<tr>
<td><code>QW D QG D V D</code></td>
<td><code>O L W i Z i L O t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
</tr>
</tbody>
</table>

These nouns are followed by the specifier -éne ‘self’:

<table>
<thead>
<tr>
<th>Surface Form (in isolation)</th>
<th>A</th>
<th>B</th>
<th>C1</th>
<th>C2</th>
<th>D1</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>chitúvi chéene</code></td>
<td><code>litawai lyéene</code></td>
<td><code>lutaví lwéene</code></td>
<td><code>litinjí lyéene</code></td>
<td><code>chiyewé chéene</code></td>
<td><code>limbéné lyéene</code></td>
<td><code>liputila lyéene</code></td>
</tr>
<tr>
<td><code>utútuli wéene</code></td>
<td><code>lihindíli lyéene</code></td>
<td><code>lukalóngó lwéene</code></td>
<td><code>unjénjemá mwéene</code></td>
<td><code>chiyewé chéene</code></td>
<td><code>limbéné lyéene</code></td>
<td><code>liputila lyéene</code></td>
</tr>
<tr>
<td><code>utútúli wéene</code></td>
<td><code>lihindíli lyéene</code></td>
<td><code>lukalóngó lwéene</code></td>
<td><code>unjénjemá mwéene</code></td>
<td><code>chiyewé chéene</code></td>
<td><code>limbéné lyéene</code></td>
<td><code>liputila lyéene</code></td>
</tr>
<tr>
<td><code>QW D QG D V D</code></td>
<td><code>O L W i Z i L O t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
<td><code>O t W t Q M t</code></td>
</tr>
</tbody>
</table>

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 'lihindili) and the HTB is then from this preceding H (to the first H of the specifier). The examples below represent TG C1 ('lutavi) and TG B ('lihindili).

post-lex. concat. | PUL | NSTR 1 and MR | HTB
---|---|---|---
'lutavi luéene > | 'lutavi luéene > | 'lutavi luéene > | 'lutavi luéene

post-lex. concat. | PUL | NSTR 1
---|---|---
'lihindili liéene > | 'lihindili liéene > | 'lihindili liéene >
'lihindili liéene | HTB

The surface form is reached after Glide Formation. The FL melody of wééka 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 wééka ‘they have seen it on its own’. The invariable chihi 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 ‘-lida ‘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 mátni ngáapi (what?) how many pumpkins?
cf. mátni ngáapi how many pumpkins?
yé chiiévé chiliià (what?) which chin?
cf. chiieewe chiliià 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  chituvi ńtwáani what kind of bundle?
    ututuli ńtwáani what kind of brain?
B  litawá ńtwáani what kind of clan?
    lihindili ńtwáani what kind of cooking stone?
C1 lutavi ńtwáani what kind of branch?
    lukalongo ńtwáani what kind of throat?
C2 litinja ńtwáani what kind of pumpkin?
    unjenjemá ńtwáani what kind of mosquito?
D1 chiyewë 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 ‘-naang’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 ‘-naang’o; this influence is best shown with nouns of TG D1: all L tones.

D1 chiyewë áchíno this chin
    ntandasá unáang’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. achiño this one, cl.7).

A  chitúvi áchíno this bundle
    utútuli álúúno this brain
B  litawá álííno this clan
    lihindili álííno this cooking stone
C1 lutavi álúúno this branch
    lukalongó álúúno this throat
C2 litinja álííno this pumpkin
    unjenjemá áyúúno this mosquito
D1  chiyévé áchíño  this chin  
          ntandásá àúúno  this porridge  
E  limbendé álíño  this skin  
          liputilá álíño  this trap  

Px-H TONE RETRACTION

Pronominal Possessives which occur on their own have a FL tone pattern, e.g., chaángu '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

carángu < 'cháángu < 'chíaángu < 'chángu

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

tandásá weétu <  'ntandasa ucétu <  'ntandasa úctú

Examples with nouns of all TG’s are the following:

A  chitúvi chaángu  my bundle  
          utútúli waángu  my brain  
B  litáwá lyeétu  our clan  
          lihíndílí lyeétu  our cooking stone  
C1  lutaví lwaáke  his branch  
          lukalongó lwaángu  my throat  
C2  litinjí lyeétu  our pumpkin  
          unjénjémá waáke  his mosquito  
D1  chiyévé chaángu  my chin  
          ntandásá weétu  our porridge  
E  limbendé lyaángu  my skin  
          liputilá 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 litawá), 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 Dissimulation: 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.

<table>
<thead>
<tr>
<th>Surface Form (in isolation)</th>
<th>Post-lex. Concatenation</th>
<th>PUL and Retraction</th>
<th>VC/GF and Px-Retraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  lwáuí lweétu  our net  lwáuí net sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B  liiá ályaángu  my name  liiá name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1 mongó waángu  my back  moóngo back (of body)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tesó yaángu  my adze  teésó adze</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2 mwaná waángu  my child  mwáana child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1 muuyó mweétu  before us  muuyo front</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kanyá yaángu  my mouth  kááya mouth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E  muunúdú waángu  my chopper  muunúdú chopper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kaayá yeétu  our homestead  kááya homestead</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. ́limeénde  ‘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).

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.
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 ‘liiná’ 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  ‘lwaũ lweětu
B  ‘liiná lyaāngu
C2  ‘mwaná waāngu
E  ‘muundu waāngu
   ‘kaayá yeětu

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 >  ‘limbééndé lyéene

Noun-Specifier Tone Rule 2 and Tone Assimilation:
NSTR 2  TA          SS
‘limbeende ŋtwaani >  ‘limbeendé ŋtwaani >  ‘limbendé ŋtwaani

 Px-H Tone Retraction and Regressive H Tone Dissimilation:
VC/GF and Px-Retraction  RHTD          SS
‘limbééndé lyāngu >  ‘limbééndé lyāngu >  ‘limbendé lyāngu

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.

<table>
<thead>
<tr>
<th>specifiers</th>
<th>tonal influence on noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>disjoint:</td>
<td></td>
</tr>
<tr>
<td>numerals (N, P)</td>
<td>-</td>
</tr>
<tr>
<td>adjectives (N)</td>
<td>-</td>
</tr>
<tr>
<td>connexives (P)</td>
<td>-</td>
</tr>
<tr>
<td>na- (I) ‘with’</td>
<td>-</td>
</tr>
<tr>
<td>‘H- njii (P) ‘other’</td>
<td>-</td>
</tr>
<tr>
<td>‘-őhe (P) ‘many’</td>
<td>-</td>
</tr>
<tr>
<td>‘-ohe-őhe (P) ‘all’</td>
<td>-</td>
</tr>
<tr>
<td>‘-ómi (P) ‘healthy, strong, whole’</td>
<td>- / penult. H</td>
</tr>
<tr>
<td>‘-lída (P) / yē...’-lída (P) ‘which’</td>
<td>- / penult. H</td>
</tr>
<tr>
<td>‘-ngápi (N) / yē...’-ngápi (N) ‘how many’</td>
<td>- / penult. H</td>
</tr>
<tr>
<td>conjoint:</td>
<td></td>
</tr>
<tr>
<td>weēka (I) ‘on one’s own’</td>
<td>penult. H</td>
</tr>
<tr>
<td>‘-éene (P) ‘self’</td>
<td>penult. H</td>
</tr>
<tr>
<td>chiīhi (N) ‘only’</td>
<td>penult. H</td>
</tr>
<tr>
<td>ētwaani (I) ‘what kind of?’</td>
<td>delete all H’s</td>
</tr>
<tr>
<td>conjoint-disjoint:</td>
<td></td>
</tr>
<tr>
<td>pronominal possessives</td>
<td>final H</td>
</tr>
<tr>
<td>demonstratives</td>
<td>penult. H</td>
</tr>
<tr>
<td>‘-naáng’o (P) ‘the same, the very one’</td>
<td>penult. H</td>
</tr>
</tbody>
</table>

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.

ntandaasá uńnji ańńo   this other porridge  
nntandaasá ańńo uńnji   id.                                    
nntandaasá-u uńnji      id. (clitic demonstrative)         
nntandaasá ańńo wáavo   this their porridge               
nntandaasá wáavo ańńo   id.                                    
nntandaasá-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).
There are specifiers which do have tonal influence on the preceding specifier: when ŋtwáani is the second specifier, the specifier preceding it gets all (default) L tones. This is the NSTR 2 rule described in the previous section.

**ntandásá aunó ŋtwáani** what kind of this porridge?
**ntandásá wavo ŋtwáani** 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.

**ntandásá wávó áúúno** this their porridge

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.

**ntandásá wávó áúúno** this their porridge?

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 unjí ŋtwáani** what kind of other porridge?
**ntandaasa unjíi-u** this other porridge
**ntandaasa unjí 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).

**vayééní v’ákúúno** guests of this (place) (connexive vá-)
**vayéni v’akuúno** id. (connexive va-)
**vayéni va-ukúunó** id. (connexive va-)
**vayééní vá-ukúunó** id. (connexive vá-)
**vayééní v’ukúunó** id. (connexive vá-)

The specifiers ‘-énc and wečča 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 ŋtwáani. 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 valúume other men
- chá-ki-mariáámu / chá-ki-mariámu chitéeng’u Mariamu’s chair
- vaviílí / vaviílí valúume two men
- vangápi / vangápi valúume how many men?
- avááno / avánó valúume these men
- váangu / váangu vayeéni 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 ŋtwáani 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 maviílí makáála these two pieces of charcoal
- vahívohé véene valúume all men themselves
- vaviílí weéka valúume two men on their own
- vaviílí avááno valúume these two men
- vaviílí ávááno valúume 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 L1H1 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.

\[
\begin{array}{lll}
A & L.S1/SF & \text{Past } cjt \\
   &       & \text{Far Past } cjt \\
   &       & \text{Past Perfective } cjt \\
D1 & L.no H & \text{Present with participants as SC } cjt \\
D2 & H.no H & \text{Present with classes as SC } cjt \\
   &       & \text{Present Perfective } cjt
\end{array}
\]

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. maliidi ‘voices’, vayeéni ‘guests’, mahaála ‘fields’, malóove ‘words’ and viýyo ‘food’. The forms given in second place are followed by a non-nominal (adjunct), kadiíki ‘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.

\[
\begin{array}{lll}
A & L.S1/SF & \text{tu-(la)-pilikáná maliidi, tu-(la)-pilikáná kadiíki} \\
   &       & \text{we heard (the) voices, we heard (them) a bit} \\
   &       & \text{tu-(va)-jyangá váyéni, tu-(va)-jyangá kadiíki} \\
   &       & \text{we helped (the) guests, we helped (them) a bit} \\
   &       & \text{tu-(la)-limá máháála, tu-(la)-limá kadiíki}
\end{array}
\]
we cultivated (the) fields, we cultivated (them) a bit
tū́uyá́ máló́vé, tū́uyá́ kadílki
tu-lúdyá máló́vé, tu-lúdyá kadílki
we asked (the) words, we asked (them) a bit
tū́uyá́ vī́lyo, tū́uyá́ kadílki
tu-vī́lyá vī́lyo, tu-vī́lyá kadílki
we ate (the) food, we ate (it) a bit
D1  L.no H  tu-(la)-pilikana málídlí, tu-(la)-pilikán (k)adí́lki
we hear (the) voices, we hear (them) a bit
tu-(va-)yangata vayéní, tu-(va-)yangata kadílki
we help (the) guests, we help (them) a bit
tu-(la)-lima máháála, tu-(la)-lima kadílki
we cultivate (the) fields, we cultivated (them) a bit
tuudyá máló́vé, tuudyá kadílki
tu-ludya máló́vé, tu-ludya kadílki
we ask (the) words, we ask (them) a bit
tuulyá vī́lyo, tuulyá kadílki
tu-vī́lyá vī́lyo, tu-vī́lyá kadílki
we eat (the) food, we eat (it) a bit
D2  H.no H  va-(la)-pilikana málídlí, va-(la)-pilikán (k)adí́lki
they hear (the) voices, they hear (them) a bit
va-(va-)yangata váyéní, va-(va-)yangatá kadílki
they help (the) guests, they help (them) a bit
va-(la)-lima máháála, va-(la)-limá kadílki
they cultivate (the) fields, they cultivated (them) a bit
vuudyá máló́vé, vuudyá kadílki
va-ludya máló́vé, va-ludya kadílki
they ask (the) words, they ask (them) a bit
vaalyá vī́lyo, vaalyá kadílki
va-vī́lyá vī́lyo, va-vī́lyá kadílki
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.

<table>
<thead>
<tr>
<th>Verbs conjoint</th>
<th>four-syllable stems</th>
<th>trisyllabic stems</th>
<th>disyllabic C stems</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>TP</td>
<td>TP</td>
<td>TP</td>
</tr>
<tr>
<td>A</td>
<td>L.HHHH-h, L.HHHH</td>
<td>L.HHH-h, L.HHHH</td>
<td>L.HH-h, L.HH</td>
</tr>
<tr>
<td>D1</td>
<td>L.LLLL, L.LLLL</td>
<td>L.LLL, L.LLL</td>
<td>L.LL, L.LL</td>
</tr>
<tr>
<td>D2</td>
<td>L.LLLL-h, L.LLLL</td>
<td>L.LLL-h, L.LLH</td>
<td>L.LL-h, L.LLH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbs conjoint</th>
<th>disyllabic V-stems and minisyllabic stems</th>
<th>with OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>TP</td>
<td>TP</td>
</tr>
<tr>
<td>A</td>
<td>H.H-h, H:H</td>
<td>L.HH-h, L.HH</td>
</tr>
<tr>
<td>D1</td>
<td>L.L, L.L</td>
<td>L.LL, L.LL</td>
</tr>
<tr>
<td>D2</td>
<td>L.L-h, L:H</td>
<td>L.LL-h, L.LL</td>
</tr>
</tbody>
</table>

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 malidi ‘voices’, ding’áande ‘houses’, vayeéni ‘guests’, vitumíndi ‘yams’, mahaála ‘fields’, viínu ‘things’, malóóve ‘words’ and viílyo ‘food’. The adjunct used below is kadiíki ‘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).

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-pilikáána, ku-pilikáná málíidi, ku-pilikáná kadiíki
ku-lá-pilikaána, ku-lá-pilkana málíidi, ku-lá-pilkáná kadiíki
ku-lá-pilikaána, ku-lá-pilkana málíidi, ku-lá-pilkáná kadiíki
to hear (them), to hear (the) voices, to hear (them) a bit

ku-katópaadya, ku-katópádyá ding’áande, ku-katópádyá kadiíki
ku-di-katópaadya, ku-di-katópadyá ding’áande, ku-di-katópadyá kadiíki
to clean (them), to clean (the) houses, to clean (them) a bit

ku-yángááta, ku-yángatá váyééni, ku-yángatá kadiíki
ku-vá-yangááta, ku-vá-yángata váyééni, ku-vá-yángatá kadiíki
to help (them), to help (the) guests, to help (them) a bit

ku-kündáanya, ku-kündányá vitúúndí, ku-kündányá kadiíki
ku-ví-kündáanya, ku-ví-kündanya vitúúndí, ku-ví-kündányá kadiíki
to mix (them), to mix (the) yams, to mix (them) a bit

ku-liíma, ku-liíma máháála, ku-liíma kadiíki
ku-lá-liíma, ku-lá-liíma máháála, ku-lá-liíma kadiíki
to cultivate (them), to cultivate (the) fields, to cultivate (them) a bit

ku-láadya, ku-ládyá viínu, ku-ládyá kadiíki
ku-ví-láadya, ku-ví-ládyá viínu, ku-ví-ládyá kadiíki
to spread (them) out, to spread out (the) things, to spread (them) out a bit

ku-úúdya, ku-úúdyá málóóve, ku-úúdyá kadiíki
ku-úúdya, ku-úúdyá viílyo, ku-úúdyá kadiíki
to ask (them), to ask (the) words, to ask (them) a bit

ku-úúlyá, ku-úúlyá viílyo, ku-úúlyá kadiíki
ku-úúlyá, ku-úúlyá viílyo, ku-úúlyá kadiíki
to eat (it), to eat (the) food, to eat (it) a bit

**C1**
tu-pilikàane, tu-pilikàne máliidi, tu-pilikàne kadiiki
we should hear, we should hear voices, we should hear a bit
tu-katapadyé, tu-katapadye ding’âande, tu-katapadyé kadiiki
we should clean, we should clean houses, we should clean a bit
tu-yangàate, tu-yangate váyééni, tu-yangaté kadiiki
we should help, we should help guests, we should help a bit
tu-kundaanyé, tu-kundanye vitúundi, tu-kundanye kadiiki
we should mix, we should mix yams, we should mix a bit
tu-liïme, tu-lique màhââla, tu-limi kadiiki
we should cultivate, we should cultivate fields, we should cultivate a bit
tu-laadyé, tu-ladye vínu, tu-laadyé kadiiki
we should spread out, we should spread things out, we should spread out a bit
tuudyé, tuudyé mâlôvé, tuudyé kadiiki
we should ask, we should ask words, we should ask a bit
tuulyé, tuulye vílyo, tuulyé kadiiki
we should eat, we should eat food, we should eat a bit

**C2**
tu-pilikàana, tu-pilikàne máliidi, tu-pilikàne kadiiki
tu-là-pilikàana, tu-la-pilikàne máliidi, tu-la-pilikàne kadiiki
we who hear (them), we who hear (the) voices, we who hear (them) a bit
tu-kâtâpaadya, tu-katapadya ding’âande, tu-katapadyá kadiiki
tu-dí-kâtâpaadya, tu-dí-katapadya ding’âande, tu-dí-katapadyá kadiiki
we who clean (them), we who clean (the) houses, we who clean (them) a bit
tu-yângàata, tu-yângata váyééni, tu-yângaté kadiiki
tu-và-yângàata, tu-và-yângata váyééni, tu-và-yângatá kadiiki
we who receive (them), we who receive (the) guests, we who receive (them) a bit
tu-kùndânya, tu-kùndanya vitúundi, tu-kùndanyá kadiiki
tu-ví-kùndânya, tu-vi-kùndanya vitúundi, tu-vi-kùndanyá kadiiki
we who mix (them), we who mix (the) yams, we should mix (them) a bit
tu-liïma, tu-liïma màhââla, tu-liïma kadiiki
tu-là-liïma, tu-la-liïma màhââla, tu-la-liïma kadiiki
we who cultivate (them), … (the) fields, … (them) a bit
tu-laadya, tu-ladya vínu, tu-ladyá kadiiki
tu-ví-laadya, tu-ví-ladya vínu, tu-ví-ladyá kadiiki
we who spread (them) out, … (the) things out, … (them) out a bit
tuûdyà, tuûdyà mâlôvé, tuûdyá kadiiki
tûûdyà, tûûdyà mâlôvé, tûûdyá kadiiki
we who ask (them), we who ask (the) words, we who ask (them) a bit
tûulyà, tûulya vílyo, tûulyá kadiiki
tû-vílyà, tû-vílyà vílyo, tû-vílyá 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   |  | four-syllable stems | with OC |
|---------|  | L.HHH.L, L.HHHH-h, L.HHHH | LH.HLRL, LH.HLLL-h, L.HHLLH |
|         |  | L.HHHL.L, L.HHHHL-h, L.HHHH | LH.HLRL, LH.HLLL-h, L.HHLLH |
| A       | | LH.HLRL, L.HHLLL-h, L.HHLLH | LH.HLRL, L.HHLLL-h, L.HHLLH |
| C1      | | L.HHLRL, L.HHHL-h, L.HHLH | LH.HLRL, L.HHLLL-h, L.HHLLH |
| C2      | | L.HHLRL, L.HHHL-h, L.HHLH | LH.HLRL, L.HHLLL-h, L.HHLLH |
|         | | L.HHHL.L, L.HHHLL-h, L.HHHLH | LH.HHHL.L, L.HHLLL-h, L.HHLLH |

| Verbs   |  | trisyllabic stems | with OC |
|---------|  | L.HH.L, L.HHH-h, L.HHH | LH.LRL, L.HLLL-h, L.HLH |
|         |  | L.HHL, L.HHH-h, L.HHH | LH.HRL, L.HLLL-h, L.HLH |
| A       | | LH.RL, L.HLL-h, L.LLH | LH.HRL, L.HLLL-h, L.HLH |
| C1      | | L.RL, L.LLL-h, L.LLH | LH.HRL, L.HLLL-h, L.HLH |
| C2      | | L.HRL, L.HLL-h, L.HLLH | LH.HRL, L.HLLL-h, L.HLH |
|         | | L.HFL, L.HLL-h, L.HLLH | LH.HRL, L.HLLL-h, L.HLH |

| Verbs   |  | disyllabic stems | with OC |
|---------|  | L.H:LL, L.HH-h, L.HH | LH.RL, L.HLLL-h, L.HLH |
|         |  | L.FL, L.HH-h, L.HH | LH.RL, L.HLLL-h, L.HLH |
| A       | | L.RL, L.LL-h, L.LLH | LH.FL, L.HLLL-h, L.HLH |
| C1      | | L.HHL, L.FL-h, L.FH | LH.RL, L.HLLL-h, L.HLH |
| C2      | | L.HHL, L.FL-h, L.FH | LH.RL, L.HLLL-h, L.HLH |
|         | | L.FL, L.FL-h, L.FH | LH.FL, L.HLLL-h, L.HLH |
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):

<table>
<thead>
<tr>
<th>Verbs</th>
<th>disyllabic V-stems with complex final syllable and minisyllabic stems</th>
<th>with OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>cjt-djt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TG</td>
<td>TP</td>
<td>TP</td>
</tr>
<tr>
<td>C1</td>
<td>$L.H$, $L.L-h$, $L.H$</td>
<td></td>
</tr>
</tbody>
</table>
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.

The same melodies appear with the Imperative (without OC), which also has a final H tone.
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. ‘ìviá ‘make steal’. This third TBU is filled with a copy of the final vowel, indicated by a smaller letter: ‘ìlsá. 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: ‘ìooljá (cf. ‘ìiví ‘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: ‘ìoolá ‘watch!’, ‘ìivýa ‘make steal!’; cf. ‘tongóólá ‘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): ‘ìlólá... (cf. ‘ìvýá...).

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 njt of TG D2 (‘váchona, ‘váwona ‘they see...’, etc.) is used in the examples below.

| vachona chítúúvi | they see the bundle |
| vawona útúúvi | they see the brain |
| valyona lítáawa | they see the clan |
| valyona lóhindíli | they see the cooking stone |
| valwona lútáávi | they see the branch |
| valwona lúkálóóngó | they see the throat |
| valyona litiíji | they see the pumpkin |
| vawona únjénjeéma | they see the mosquito |
| vachona chiyeeewe | they see the chin |
| valoná matandaasa | they see the porridges |
| valyona límbéende | they see the skin |
| valyona líptúíla | 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.

<table>
<thead>
<tr>
<th>Post-lex. concatenation</th>
<th>PUL, Retraction</th>
<th>PHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>vá-chi-oná chiturúvi</code></td>
<td><code>vá-chi-oná chitúúvi</code></td>
<td><code>va-chi-oná chitúúvi</code></td>
</tr>
</tbody>
</table>

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 \( \text{nankakataambwe} \) ‘spider’ is used. (The H tone of the following syllabic nasal is due to Tone Assimilation, see 3.5.8.)

\[ \text{vamwoná nákakataambwe} \] 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).

\[ \text{vamwoná ñyeéni} \] they see the guest

\[ \text{vavona vayééni} \] they see the guests

\[ \text{vawóna jítandaasa} \] they saw the cassava porridge

\[ \text{valóna matandaasa} \] they saw the cassava porridge

Second, the first L in a L.H.H or L.H.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 L.H.H sequence (TG A) and the L.H.L sequence (TG C2) appear. The first example below consists of the Infinitive of TG A with the minisyllabic stem `-\( jí́a \) ’to eat’. The second example consists of the Relative Present with the disyllabic stem `-\( ðí̄dīa \) ’to ask’.

<table>
<thead>
<tr>
<th>Post-lex. concat.</th>
<th>PUL and Retraction</th>
<th>VC/GF and HTB</th>
<th>DI and TA</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ku-úlíá vi-ílyó</code></td>
<td><code>ku-úlíá vi-ílyó</code></td>
<td><code>kuúlyá viýýó</code></td>
<td><code>kuúlyá viýýó</code></td>
</tr>
</tbody>
</table>
Post-lex. concat. PUL and Retraction Px-H Tone Shift, RHTD VC/GF and HTB

\[ \text{'tú-diá vi-ínu} > \text{'tú-diá vi-ínu} > \text{'tuúdyá viínu} > \text{'tuúdyá viínu} \]

DI and TA
\[ \text{túúdyá viínu} \]

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 L.H.L sequence is very common with words of TG C1 p-phrase-finally, but no TA applies. A L.H.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 NounSpecifier 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.H.L.L tonal sequence after HTB. One set of examples:
A  chihůndu knot  E  chipůula knife

\textit{tu-chi-wéné chihůndu}  \hspace{1cm}  \textit{tu-chi-wéné chipůula}

we had seen the knot  \hspace{1cm}  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 (\textit{chipůula}).

Post-lexical concatenation  \hspace{1cm}  PUL and Retraction

\textit{tu-chi-wéné chihůndu} >  \hspace{1cm}  \textit{tu-chi-wéné chihůndu} >  \hspace{1cm}  \textit{tu-chi-wéné chipůula} >  \\
\textit{tu-chi-wéné chipůula} >

HTB  \hspace{1cm}  SS

\textit{tu-chi-wéné chihůndu}  \hspace{1cm}  \textit{tu-chi-wéné chipůula}

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 p-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. kwívilá má-hínílí lečetu  \hspace{1cm}  to steal our cooking stones for someone or for some purpose
2. kú-vivilá ţtándásá źwsu  \hspace{1cm}  to steal for them this cassava porridge
3. va-vívá ţ-ťinjí ţtwâání  \hspace{1cm}  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:

<table>
<thead>
<tr>
<th>Process</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeussen’s Rule</td>
<td></td>
</tr>
<tr>
<td>1. —</td>
<td></td>
</tr>
<tr>
<td>2. ‘ku-ivilá</td>
<td></td>
</tr>
<tr>
<td>3. —</td>
<td></td>
</tr>
</tbody>
</table>

POST-LEXICAL PROCESSES:

<table>
<thead>
<tr>
<th>Process</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-lexical concatenation</td>
<td></td>
</tr>
<tr>
<td>1. ‘ku-ivilá má-hindili lá-etú</td>
<td></td>
</tr>
<tr>
<td>2. ‘ku-vá-ivilá ntandasa u-unó</td>
<td></td>
</tr>
<tr>
<td>3. ‘vá-va-ivia lí-tinji ātwani</td>
<td></td>
</tr>
<tr>
<td>Penultimate lengthening</td>
<td></td>
</tr>
<tr>
<td>1. ‘ku-ivilá má-hindili lá-eeú</td>
<td></td>
</tr>
<tr>
<td>2. ‘ku-vá-ivilá ntandasa u-unó</td>
<td></td>
</tr>
<tr>
<td>3. ‘vá-va-ivia lí-tinji ātwani</td>
<td></td>
</tr>
<tr>
<td>Retraction of the final H tone</td>
<td></td>
</tr>
<tr>
<td>1. ‘ku-ivilá má-hindili lá-eeú</td>
<td></td>
</tr>
<tr>
<td>2. ‘ku-vá-ivilá ntandasa u-unó</td>
<td></td>
</tr>
<tr>
<td>3. —</td>
<td></td>
</tr>
<tr>
<td>H tone bridge (between S1 and SF in stems)</td>
<td></td>
</tr>
<tr>
<td>1. ‘ku-ivilá má-hindili lá-eeú</td>
<td></td>
</tr>
<tr>
<td>2. —</td>
<td></td>
</tr>
<tr>
<td>3. —</td>
<td></td>
</tr>
<tr>
<td>Prefix-H tone shift</td>
<td></td>
</tr>
<tr>
<td>1. ‘ma-hindili</td>
<td></td>
</tr>
<tr>
<td>2. —</td>
<td></td>
</tr>
<tr>
<td>3. ‘va-va-ivia lí-tinji ātwani</td>
<td></td>
</tr>
<tr>
<td>Coalescence, Prefix-H tone retraction (and resyllabification, not indicated in the examples)</td>
<td></td>
</tr>
<tr>
<td>1. ‘kwivilá má-hindili leéú</td>
<td></td>
</tr>
<tr>
<td>2. ‘kú-vivilá ntandasa u-unó</td>
<td></td>
</tr>
<tr>
<td>3. ‘va-vivyá lí-tinji ātwani</td>
<td></td>
</tr>
<tr>
<td>Noun-specifier tone rules</td>
<td></td>
</tr>
<tr>
<td>1. —</td>
<td></td>
</tr>
<tr>
<td>2. ‘kú-vivilá ntandásá u-unó</td>
<td></td>
</tr>
<tr>
<td>3. ‘va-vivyá lí-tinji ātwani</td>
<td></td>
</tr>
<tr>
<td>H tone bridge</td>
<td></td>
</tr>
<tr>
<td>1. ‘kwivilá má-hindili leéú, and</td>
<td></td>
</tr>
<tr>
<td>‘kwivilá má-hindili leéú</td>
<td></td>
</tr>
<tr>
<td>2. ‘kú-vivilá ntandásá u-unó, and</td>
<td></td>
</tr>
<tr>
<td>‘kú-vivilá ětándásá u-unó</td>
<td></td>
</tr>
<tr>
<td>3. —</td>
<td></td>
</tr>
<tr>
<td>Regressive H tone dissimilation</td>
<td></td>
</tr>
<tr>
<td>1. —</td>
<td></td>
</tr>
<tr>
<td>2. ‘kú-vivila ětándásá u-unó</td>
<td></td>
</tr>
<tr>
<td>3. —</td>
<td></td>
</tr>
</tbody>
</table>
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 verbs (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) cji is used; these verb forms belong to TG D1 which has no H tones and hence no HTB can occur.
<table>
<thead>
<tr>
<th>category</th>
<th>syntactic phrase</th>
<th>word</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-lima mahaála</td>
<td>NP</td>
<td>N</td>
</tr>
<tr>
<td>we cultivate fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima mahaála madyóóko</td>
<td>NP</td>
<td>N+N/A</td>
</tr>
<tr>
<td>we cultivate small fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima mahaála mavííli</td>
<td>NP</td>
<td>N+N[NUM]</td>
</tr>
<tr>
<td>we cultivate two fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima lihaála liímo</td>
<td>NP[N+PP]</td>
<td>N+P[NUM]</td>
</tr>
<tr>
<td>we cultivate one field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima mahaála lohelóóhe</td>
<td>NP[N+PP]</td>
<td>N+P</td>
</tr>
<tr>
<td>we cultivate all fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima madyóóko</td>
<td>NP</td>
<td>N/A</td>
</tr>
<tr>
<td>we cultivate small ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima mavííli</td>
<td>NP</td>
<td>N[NUM]</td>
</tr>
<tr>
<td>we cultivate two (of them)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima liímo</td>
<td>NP[N+PP]</td>
<td>P[NUM]</td>
</tr>
<tr>
<td>we cultivate one (of them)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-lima lohelóóhe</td>
<td>NP[N+PP]</td>
<td>P</td>
</tr>
<tr>
<td>we cultivate all (of them)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-n-chimulila nááng’e</td>
<td>PP</td>
<td>P/IPP</td>
</tr>
<tr>
<td>we release him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-n-chimulila ayuúño</td>
<td>NP[N+PP]</td>
<td>P/DEM</td>
</tr>
<tr>
<td>we release this one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-n-chimulila aoóng</td>
<td>S[VP]</td>
<td>V</td>
</tr>
<tr>
<td>we release him so that he may take a walk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-n-chimulila aongé kadiíki</td>
<td>S[VP[V+IP]]</td>
<td>V+I</td>
</tr>
<tr>
<td>we release him so that he may take a short walk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tu-n-chimulila kadiíki</td>
<td>IP</td>
<td>I</td>
</tr>
<tr>
<td>we release him a bit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:
who do we release?

**tu-n-chimulila upéchi**
we release him quickly

**tu-n-chimulila pawéelu**
we release him outside

**tu-n-chimulila chiilo**
we release him at night

**tu-n-chimulila viino**
we release him now

**tu-n-chimulila paámo**
we release him together

The example below shows that words in a p-phrase can also be VP-external (postposed) subjects. The example is from the Present (with classes SC) *ej* with final H tone (which has been shifted from the SC).

**a-li-chimulilá nájakakataambwe**
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 postverbal 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 maviíli | N |
| they cultivate two fields |
| + va-lima liháála liímo | N |
| they cultivate one field |
| + va-lima máháála lohelóóhe | N |
| they cultivate all fields |
| + va-lima mádyóóko | N/A |
| they cultivate small ones |
| va-limá maviíli | N/NUM |
| they cultivate two (of them) |
| va-limá liímo | P/NUM |
| they cultivate one (of them) |
va-limá lohelóóhe
they cultivate all (of them)

+ va-n-chimulíla nnaang’e
they release him

+ va-n-chimulíla áyúúno
they release this one

va-n-chimulíla aoóngë
they release him so that he may take a walk

va-n-chimulíla aongé kadiikí
they release him so that he may take a short walk

va-n-chimulíla kadiikí
they release him a bit

va-n-chimulíla chakaání
when do they release him?

va-n-chimulíla kwaáchi
where do they release him?

va-n-chimulíla mwadaáchi
why do they release him?

va-chimulíla chamaáni
what do they release?

va-n-chimulíla nnaáni
who do they release?

+ va-n-chimulíla úpéēhi
they release him quickly

+ va-n-chimulíla pávéélú
they release him outside

+ va-n-chimulíla chiílo
they release him at night

va-n-chimulíla viíno
they release him now

va-n-chimulíla paámo
they release him together

a-li-chimulíla nápákakataambwe
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-chimulíla yuulá
they release that one

va-n-chimulíla 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) nnaáíni ‘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., kadiíki, chakaáíni), there is no application of HTB, although both adjectives 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’.

<table>
<thead>
<tr>
<th>A</th>
<th>B/D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>vachona</td>
<td>chítúví chéene</td>
</tr>
<tr>
<td>vachona</td>
<td>chítúví áčhiíño</td>
</tr>
<tr>
<td>vawona</td>
<td>útíútíli wéene</td>
</tr>
<tr>
<td>vawona</td>
<td>útíútíli áùúño</td>
</tr>
<tr>
<td>valyona</td>
<td>lítáwá lyéene</td>
</tr>
</tbody>
</table>
valyona lítáwá álúño  they see this clan
valyona línhíndí lỳéene  they see the cooking stone itself
valyona línhíndí álúño  they see this cooking stone
C1
valwona lítáví lwéene  they see the branch itself
valwona lítáví álúño  they see this branch
valwona lükálóngó lwéene  they see the throat itself
valwona lükálóngó álúño  they see this throat
C2
valyona lítinji lỳéene  they see the pumpkin itself
valyona lítinji álúño  they see this pumpkin
vawona únjênjémá wéene  they see the mosquito itself
vawona únjênjémá álúño  they see this mosquito
D1
vachona chiyéwé chéene  they see the chin itself
vachona chiyéwé áchiúno  they see this chin
vawoná ţándásá wéene  they see the porridge itself
vawoná ţándásá álúño  they see this porridge
E
valyona limbéndé lỳéene  they see the skin itself
valyona limbéndé álúño  they see this skin
valyona lìpùtilá lỳéene  they see the trap itself
valyona lìpùtilá álúño  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. **chiyéwé chaàngu** ‘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 chaàngu  they see my bundle
vawona útútílí waàngu  they see my brain
B/D2
valyona lítáwá lỳéétu  they see our clan
valyona línhíndí lyaàngu  they see my cooking stone
C1
valwona lítáví lwaaké  they see its branch
valwona lükálóngó lwaàngu  they see my throat
C2
valyona lítinji lyaaké  they see its pumpkin
YDZRQi YDFKRD FKt\pZpFKDiQJX D1
YDZRQi YDFKRD FKt\pZpFKDiQJX ~QMpQMpPiZDiNH
YDZRQi YDFKRD FKt\pZpFKDiQJX

They see my chin
They see my mosquito

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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 vavona ŋtandásá we étu is due to the H-toned syllabic nasal of the noun; the H tone of the syllabic nasal of the noun in vavona ŋtandásá we étu is due to the H-toned final syllable of the verbal form.

With the specifier ŋtwáani ‘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
vachona chitúvی ŋtwáani
vavona ututuli ŋtwáani
B/D2
valyona litawá ŋtwáani
valyona lihindíli ŋtwáani
C1
valwona lutavi ŋtwáani
valwona lukalongó ŋtwáani
C2
valyona litinjí ŋtwáani
vavona unjenjémá ŋtwáani
D1
vachona chiyewé ŋtwáani
vavona ŋtandásá ŋtwáani
E
valyona limbendé ŋtwáani
valyona lipútilá lyáangu

They see what kind of bundle?
They see what kind of brain?

They see what kind of clan?
They see what kind of cooking stone?

They see what kind of branch?
They see what kind of throat?

They see what kind of pumpkin?
They see what kind of mosquito?

They see what kind of chin?
They see what kind of porridge?

They see what kind of skin?
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 (vachona
conjoint-disjoint verbal form followed by a noun and two specifiers. Some examples:

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:

\[
\text{vawoná ŋtándásá aunó ŋtwáani} \quad \text{they see what kind of this porridge?}
\]

\[
\text{vawoná ntandasá wavó ŋtwáani} / \text{vawoná ŋtándásá wavó ŋtwáani}
\]

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 ntandasá 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 uyavó to the final syllable of the preceding noun ntandasá (by Px-H Tone Retraction) before ŋtwáani (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 ŋtwáani). 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.

\[
\text{vawona vádyóóko} \quad \text{they see the small ones}
\]

\[
\text{vawona vádyóóko avaáno} \quad \text{they see these small ones}
\]

\[
\text{vawona vádyóóko váana} \quad \text{they see the small children}
\]

\[
\text{vawona vádyóóko avaáno váana} \quad \text{they see these small children}
\]

\[
\text{vawona vádyóóko véene} \quad \text{they see the small ones themselves}
\]

\[
\text{vawona vádyóóko véene váana} \quad \text{they see the small children themselves}
\]

\[
\text{vawoná vádyóóko ŋtwáani} \quad \text{they see what kind of small ones?}
\]

\[
\text{vawoná vavilli} \quad \text{they see two (of them)}
\]
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.

- **valúume vahwena kúkáaaya**
  - men go home
- **valúume vahwena kúkáaaya**
  - id.
- **valúme ávááno vahwena kúkáaaya**
  - these men go home
- **valúme ávááno vahwena kúkáaaya**
  - id.
- **vahwena kúkáaaya valúme ávááno**
  - they go home, these men
- **valúme ávááno tuwavene kúkáaaya**
  - these men have we seen at home
- **valúme ávááno tuwavene kúkáaaya**
  - id.
- **tuvawene kúkáaaya valúme ávááno**
  - we have seen them at home these men
- **kukááya tuwavene válúme ávááno**
  - at home we have seen these men
- **kukááya tuwavene válúme ávááno**
  - id.
- **valúme vatúwene kúkáaaya**
  - the men who have seen us at home
- **valúme vatúwene kúkáaaya**
  - id.
- **valúme vatúvwéene kukááya**
  - the men who we have seen at home
- **valúme vatúvwéene kukááya**
  - id.
- **kukááya kutúditéenga ding’aánde**
  - at home where we build the houses
- **kukááya kutúditéenga ding’aánde**
  - 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> <vá-kūhúvá> <vánítwivyà> <máhindili> <máviíli>})
iH PUS PUS

People in trouble had made us steal two cooking stones,
```

```
PP-adjunct VP NP-object VP  
[ [ ] [ ] ] [ ]
({<viínó> <vátwivyà vángondólò váánó> <nkúvákámúlúà>})
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 djit
28. Subsecutive Optative djit
29. Negative Present djit
30. Negative Infinitive djit
31. Negative Present Perfective 1 djit
32. Negative Past Perfective djit
33. Negative Present Perfective 2 djit
34. Negative Optative djit
35. Negative Conditional/Concessive djit
36. Negative Suppositional Conditional djit
37. Direct Relative Past Perfective djit
38. Direct Relative Far Past Perfective djit
39. Indirect Relative Present djit
40. Indirect Relative Non-Past djit
41. Indirect Relative Present Perfective djit
42. Indirect Relative Past Perfective djit
43. Indirect Relative Far Past Perfective djit
44. Negative Indirect Relative Present djit
45. Negative Indirect Relative Present Perfective djit

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):

<table>
<thead>
<tr>
<th>tone group</th>
<th>tone of the SC</th>
<th>tonal profile of the stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>A:</td>
<td>L</td>
<td>S1/SF</td>
</tr>
<tr>
<td>B:</td>
<td>L</td>
<td>S1</td>
</tr>
<tr>
<td>C1:</td>
<td>L</td>
<td>SF</td>
</tr>
<tr>
<td>C2:</td>
<td>H</td>
<td>SF</td>
</tr>
<tr>
<td>D1:</td>
<td>L</td>
<td>no H</td>
</tr>
<tr>
<td>D2:</td>
<td>H</td>
<td>no H</td>
</tr>
<tr>
<td>E:</td>
<td>L</td>
<td>S2</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>simple final syllable</th>
<th>OC</th>
<th>complex final syllable</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>-lima</td>
<td>-la-</td>
<td>-toha</td>
<td>-li-</td>
</tr>
<tr>
<td>-yangata</td>
<td>-va-</td>
<td>-kundanya</td>
<td>-vi-</td>
</tr>
<tr>
<td>-pilikana</td>
<td>-la-</td>
<td>-pelekedya</td>
<td>-va-</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>simple final syllable</th>
<th>complex final syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>-lile</td>
<td>have eaten</td>
</tr>
<tr>
<td>-lime</td>
<td>have cultivated</td>
</tr>
<tr>
<td>-pilikene</td>
<td>have heard</td>
</tr>
</tbody>
</table>

The nouns used in the paradigms and in the examples are:

<table>
<thead>
<tr>
<th>viilyo</th>
<th>food</th>
</tr>
</thead>
<tbody>
<tr>
<td>mahaála</td>
<td>fields</td>
</tr>
<tr>
<td>vayééni</td>
<td>guests</td>
</tr>
<tr>
<td>malóóve</td>
<td>words</td>
</tr>
</tbody>
</table>

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/L\ - (OC) - VB - a

SC: L (participants): tone group: D1.

- tu-lima mahaala tu-toha limbebende
- tu-yangata vayeeni tu-kundanya vituundi
- tu-pilikana maloove tu-pelekedya valuume


- va-lima mahahala va-toha limbende
- va-yangata vayeeni va-kundanya vituundi
- va-pilikana maloove va-pelekedya valuume

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-lya kadiiki va-tohá kadiiki
- va-yangatá kadiiki va-kundanyá kadiiki
- va-pilikana kadiiki va-pelekedýá 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-lima mahahala tu-tóhá limbéende
- tu-yangata vayeeni tu-kundanyá vituundi
- tu-pilikana malóóve tu-pelekedýá valuume

FAR PAST cjt:

- tw-a-lima mahahala tw-a-tóhá limbéende
- tw-a-yangata vayeeni tw-a-kundanyá vituundi
- tw-a-pilikana malóóve tw-a-pelekedýá valuume
4. PRESENT PERFECTIVE cjt: SC/ğ - (OC) - VB - ñle

Tone group: D2.

- tu-lile víllyo
- tu-limité máháála
- tu-pilikéné málóóve

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 káiikí
- tu-limité káiikí
- tu-pilikéné káiikí

5./6. (FAR) PAST PERFECTIVE cjt: SC/ğ - (a) - (OC) - VB/ñ1 - ñle

Tone group: A. (All SC’s have a L tone.)

PAST PERFECTIVE cjt:

- tu-lile víllyo
- tu-limité máháála
- tu-pilikéné málóóve

FAR PAST PERFECTIVE cjt:

- tw-a-lile víllyo
- tw-a-limité máháála
- tw-a-pilikéné málóóve

A.2 Conjoint-Disjoint tenses

7. INFINITIVE: (k)u - (OC/ğ) - VB/ñ1 - á

Tone group: A.

+ object:

- ku-lijá máháála
- ku-yángátá váyééni
- ku-pilikáná málóóve

| ku-lijá máháála | ku-tóhá limbèénde |
| ku-yángátá váyééni | ku-kúndányá vitúúndi |
| ku-pilikáná málóóve | ku-pélikédyá válúúme |
The tone patterns of forms with a complex final syllable are the same as those of tone group B.

+ OC:

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.

p-phrase-finally:

<table>
<thead>
<tr>
<th>Tone Pattern</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ku-lá-liima máháälä</td>
<td>kú-vílya vályo</td>
</tr>
<tr>
<td>ku-vá-yángata váyéëni</td>
<td>ku-ví-kúndaanyá vitúünde</td>
</tr>
<tr>
<td>ku-lá-pilikana málóövé</td>
<td>ku-vá-pélekedýa váluüme</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Tone Pattern</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lima máháälä</td>
<td>ìlyá vályo</td>
</tr>
<tr>
<td>Yángata váyéëni</td>
<td>toha limbéende</td>
</tr>
<tr>
<td>Pilikana málóövé</td>
<td>kúndaanyá vitúünde</td>
</tr>
</tbody>
</table>

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.
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.

There are verbs where also the longer plural addressee marker -ang'än- is possible; for -uuka '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.

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/ - VB - é

Tone group: C1.

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.

\[
\begin{array}{ll}
\text{tu-} & \text{tuulyé kadiiki} \\
tu-\text{limé kadiiki} & \text{tu-tohé kadiiki} \\
tu-\text{yangaté kadiiki} & \text{tu-kundanyé kadiiki} \\
tu-\text{pi} \text{likané kadiiki} & \text{tu-pélékedýé kadiiki} \\
\end{array}
\]

p-phrase-finally:

\[
\begin{array}{ll}
\text{tu-} & \text{tuulyé} \\
tu-\text{liíme} & \text{tu-toohé} \\
tu-\text{yangaa} \text{áte} & \text{tu-kundaanyé} \\
tu-\text{pi} \text{lika} \text{áne} & \text{tu-pélékeedyé} \\
\end{array}
\]

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:

\[
\text{SC/}h - (\text{OC}) - \text{VB} - \ddot{á}
\]

Tone group: C2.

The final H tone is probably a copy of the H tone of the SC.

+ object:

\[
\begin{array}{ll}
\text{tu-} & \text{tuulya vílyo} \\
tu-\text{liíma máhá} \text{ála} & \text{tu-tóoha limbéende} \\
tu-\text{yangata váyé} \text{é} \text{ni} & \text{tu-kündanyá vitúúndi} \\
tu-\text{pi} \text{li} \text{kana má} \text{ló} \text{o} \text{vé} & \text{tu-pélékedýa vállúúme} \\
\end{array}
\]

p-phrase-finally:

\[
\begin{array}{ll}
\text{tu-} & \text{tuulya} \\
tu-\text{liíma} & \text{tu-tóoha} \\
tu-\text{yangaa} \text{áta} & \text{tu-kündaa} \text{nya} \\
tu-\text{pi} \text{lika} \text{ána} & \text{tu-pélékeedyá} \\
\end{array}
\]

Phrase-finally, forms with disyllabic stems and a simple final syllable have a HLH tonal sequence on their penultimate syllables.

+ OC:

\[
\begin{array}{ll}
\text{tu-} & \text{tú-vílya vílyo} \\
tu-\text{lá-} \text{lima máhá} \text{ála} & \text{tu-li-toha limbéende} \\
tu-\text{vá-} \text{yangata váyé} \text{é} \text{ni} & \text{tu-vi-kündanyá vitúúndi} \\
tu-\text{lá-} \text{pi} \text{li} \text{kana má} \text{ló} \text{o} \text{vé} & \text{tu-vá-pélékedýa vállúúme} \\
\end{array}
\]

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.
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/it - (OC) - VB - ilé


The final H tone is probably a copy of the H tone of the SC.

+ object:

<table>
<thead>
<tr>
<th>SPO</th>
<th>SC</th>
<th>H</th>
<th>(OC)</th>
<th>VB</th>
<th>TBU 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>tvíłę</td>
<td>2.0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>tvímé</td>
<td>1.2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
| tvilíkéné

The final H tone is probably a copy of the H tone of the SC.

+ OC:

<table>
<thead>
<tr>
<th>SPO</th>
<th>SC</th>
<th>H</th>
<th>(OC)</th>
<th>VB</th>
<th>TBU 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>tvílélélé</td>
<td>2.0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>tvílimé</td>
<td>1.2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
| tvilíkénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénénény

When followed by an adjunct, the final H tone is realized on the final TBU of the verbal form.
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 dfc: 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-na-liíma (mahaála) |
| tu-na-yangátä vayeéni | tu-na-yangátä vayeéni |
| tu-na-pilikáná malóöve | tu-na-pilikáná malóöve |

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

| tu-na-liíma mahaála | tu-na-liíma mahaála |
| tu-na-yangátä vayeéni | tu-na-yangátä vayeéni |
| tu-na-pilikáná malóöve | tu-na-pilikáná malóöve |

The forms with Penultimate Shortening:

| tu-na-liíma mahaála | tu-na-liíma mahaála |
| tu-na-yangátä vayeéni | tu-na-yangátä vayeéni |
| tu-na-pilikáná malóöve | tu-na-pilikáná malóöve |

The tone patterns of forms with a complex final syllable are the same as those of tone group D1.


With and without a following object (or adjunct):

| va-náliíma (mahaála) | va-náliíma (mahaála) |
| va-na-tooha (limbéénde) | va-na-tooha (limbéénde) |
When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

va-ná-líma mahaála  va-na-li-toha limbénde
va-na-vá-yangatá vayeéni  va-na-ví-kündanya vituündi
va-na-pilikaná malóóve  va-na-vá-pélekedya valúume

+ OC:

va-ná-líma mahaála  va-na-li-toha limbénde
va-na-vá-yangatá vayeéni  va-na-ví-kündanya vituündi
va-na-pilikaná malóóve  va-na-vá-pélekedya valúume

The forms with Penultimate Shortening are the following:

va-ná-líma mahaála  va-na-tóha limbénde
va-na-vá-yangata vayeéni  va-na-ví-kundanya vituündi
va-na-pilikaná malóóve  va-na-pélekedya valúume

+ OC:

va-ná-líma mahaála  va-na-tóha limbénde
va-na-vá-yangata vayeéni  va-na-ví-kundanya vituündi
va-na-pilikaná malóóve  va-na-pélekedya valúume

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

13./14. (FAR) PAST djj:  SC/it - (a) - lna - (OC) - VB - á

Tone group: C2.
PAST 

With and without a following object (or adjunct):

<table>
<thead>
<tr>
<th>GMW:</th>
<th>With and without a following object (or adjunct):</th>
</tr>
</thead>
<tbody>
<tr>
<td>tú-ná-liîma (mahaála)</td>
<td>tú-ná-liîma (mahaála)</td>
</tr>
<tr>
<td>tú-ná-yangáata (vayeéni)</td>
<td>tú-ná-yangáata (vayeéni)</td>
</tr>
<tr>
<td>tú-ná-pilikâana (malóóve)</td>
<td>tú-ná-pilikâana (malóóve)</td>
</tr>
<tr>
<td>+ OC:</td>
<td></td>
</tr>
<tr>
<td>tú-ná-la-liîma (mahaála)</td>
<td>tú-ná-la-liîma (mahaála)</td>
</tr>
<tr>
<td>tú-ná-va-yangáata (vayeéni)</td>
<td>tú-ná-va-yangáata (vayeéni)</td>
</tr>
<tr>
<td>tú-ná-la-pilikâana (malóóve)</td>
<td>tú-ná-la-pilikâana (malóóve)</td>
</tr>
</tbody>
</table>

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

<table>
<thead>
<tr>
<th>GMW:</th>
<th>When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>tú-ná-líma mahaála</td>
<td>tú-ná-líma mahaála</td>
</tr>
<tr>
<td>tú-ná-yangatá vayeéni</td>
<td>tú-ná-yangatá vayeéni</td>
</tr>
<tr>
<td>tú-ná-pilikâná malóóve</td>
<td>tú-ná-pilikâná malóóve</td>
</tr>
<tr>
<td>+ OC:</td>
<td></td>
</tr>
<tr>
<td>tú-ná-la-líma mahaála</td>
<td>tú-ná-la-líma mahaála</td>
</tr>
<tr>
<td>tú-ná-va-yangatá vayeéni</td>
<td>tú-ná-va-yangatá vayeéni</td>
</tr>
<tr>
<td>tú-ná-la-pilikâná malóóve</td>
<td>tú-ná-la-pilikâná malóóve</td>
</tr>
</tbody>
</table>

The forms with Penultimate Shortening:

<table>
<thead>
<tr>
<th>GMW:</th>
<th>The forms with Penultimate Shortening:</th>
</tr>
</thead>
<tbody>
<tr>
<td>tú-ná-liîma mahaála</td>
<td>tú-ná-liîma mahaála</td>
</tr>
<tr>
<td>tú-ná-yangatá vayeéni</td>
<td>tú-ná-yangatá vayeéni</td>
</tr>
<tr>
<td>tú-ná-pilikâná malóóve</td>
<td>tú-ná-pilikâná malóóve</td>
</tr>
<tr>
<td>+ OC:</td>
<td></td>
</tr>
<tr>
<td>tú-ná-la-liîma mahaála</td>
<td>tú-ná-la-liîma mahaála</td>
</tr>
<tr>
<td>tú-ná-va-yangatá vayeéni</td>
<td>tú-ná-va-yangatá vayeéni</td>
</tr>
<tr>
<td>tú-ná-la-pilikâná malóóve</td>
<td>tú-ná-la-pilikâná malóóve</td>
</tr>
</tbody>
</table>

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

FAR PAST 

The TM -a- intervenes between the SC and the TM -maa-. 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.

\[
\begin{align*}
tw-á-ná-liña (mahaála) & \quad tw-á-ná-yangaáta (vayeéni) & \quad tw-á-ná-pilikáána (malóóve) \\
tw-á-ná-tooha (limbéénde) & \quad tw-á-ná-kundaanya (vituúndi) & \quad tw-á-ná-pelekedya (valúúme)
\end{align*}
\]

15. PRESENT PERFECTIVE djt: \( SC/í - ni - (OC) - VB - á \)

Tone group: C2.

\[
\begin{align*}
tu-ni-liña (mahaála) & \quad tu-ni-tóoha (limbéénde) & \quad tu-ni-péliüla (viilly) \\
tu-ni-yangata (vayeéni) & \quad tu-ni-kundanya (vituúndi) & \quad tu-ni-péliüla (viilly)
\end{align*}
\]

+ OC:

\[
\begin{align*}
tu-ni-lá-liña (mahaála) & \quad tu-ni-lí-tóoha (limbéénde) & \quad tu-ni-víliüla (viilly) \\
tu-ni-vá-yangata (vayeéni) & \quad tu-ni-ví-kundanya (vituúndi) & \quad tu-ni-víliüla (viilly)
\end{align*}
\]

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

\[
\begin{align*}
tu-ni-liña mahaála & \quad tu-ni-tóoha limbéénde \\
tu-ni-yangata vayeéni & \quad tu-ni-kundanya vitùúndi \\
tu-ni-péliüla malóóve & \quad tu-ni-péliüla valúúme \\
\end{align*}
\]

+ OC:

\[
\begin{align*}
tu-ni-lá-liña mahaála & \quad tu-ni-lí-toha limbéénde \\
tu-ni-vá-yangata vayeéni & \quad tu-ni-ví-kundanya vitùúndi \\
tu-ni-lá-péliüla malóóve & \quad tu-ni-ví-péliüla valúúme
\end{align*}
\]

The forms with Penultimate Shortening are the following:

\[
\begin{align*}
tu-ní-líma mahaála & \quad tu-ní-tóoha limbéénde \\
tu-ní-yängata vayeéni & \quad tu-ní-kündanya vitúúndi \\
tu-ní-péliüna malóóve & \quad tu-ní-péliüla valúúme
\end{align*}
\]
The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

16/17. (FAR) PAST PERFECTIVE $dit$: $\text{SC/hi} - \text{(a)} - l\text{ni} - \text{(OC)} - \text{VB} - \text{á}$

Tone group: C2.

**PAST PERFECTIVE $dit$:**

With and without a following object (or adjunct):

<table>
<thead>
<tr>
<th>Without Adjunct</th>
<th>With Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ni-li-la (mahaάla)</td>
<td>tu-ni-li-toha (limbeέnde)</td>
</tr>
<tr>
<td>tu-ni-ya-gaάta (vayeéni)</td>
<td>tu-ni-vi-kundaanya (vituúndi)</td>
</tr>
<tr>
<td>tu-ni-pli-kaάna (malóóve)</td>
<td>tu-ni-pelekeeda (valúúme)</td>
</tr>
</tbody>
</table>

+ OC:

<table>
<thead>
<tr>
<th>Without Adjunct</th>
<th>With Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ni-li-la (mahaάla)</td>
<td>tu-ni-li-toha (limbeέnde)</td>
</tr>
<tr>
<td>tu-ni-va-ya-gaάta (vayeéni)</td>
<td>tu-ni-vi-kundaanya (vituúndi)</td>
</tr>
<tr>
<td>tu-ni-la-pli-kaάna (malóóve)</td>
<td>tu-ni-va-pelekeeda (valúúme)</td>
</tr>
</tbody>
</table>

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

<table>
<thead>
<tr>
<th>Without Adjunct</th>
<th>With Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ni-li-ma (mahaάla)</td>
<td>tu-ni-toha (limbeέnde)</td>
</tr>
<tr>
<td>tu-ni-ya-gata (vayeéni)</td>
<td>tu-ni-kundaanya (vituúndi)</td>
</tr>
<tr>
<td>tu-ni-pli-kana (malóóve)</td>
<td>tu-ni-pelekeeda (valúúme)</td>
</tr>
</tbody>
</table>

+ OC:

<table>
<thead>
<tr>
<th>Without Adjunct</th>
<th>With Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ni-li-la (mahaάla)</td>
<td>tu-ni-li-toha (limbeέnde)</td>
</tr>
<tr>
<td>tu-ni-va-ya-gaάta (vayeéni)</td>
<td>tu-ni-vi-kundaanya (vituúndi)</td>
</tr>
<tr>
<td>tu-ni-la-pli-kaάna (malóóve)</td>
<td>tu-ni-va-pelekeeda (valúúme)</td>
</tr>
</tbody>
</table>

The forms with Penultimate Shortening:

<table>
<thead>
<tr>
<th>Without Adjunct</th>
<th>With Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ni-li-ma (mahaάla)</td>
<td>tu-ni-toha (limbeέnde)</td>
</tr>
<tr>
<td>tu-ni-ya-gata (vayeéni)</td>
<td>tu-ni-kundaanya (vituúndi)</td>
</tr>
<tr>
<td>tu-ni-pli-kana (malóóve)</td>
<td>tu-ni-pelekeeda (valúúme)</td>
</tr>
</tbody>
</table>
The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

**FAR PAST PERFECTIVE** 

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 *djít*. Below, we give the forms with and without a following object or adjunct.

<table>
<thead>
<tr>
<th>Form</th>
<th>Tone Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>tú-ní-la-límá mahaála</td>
<td>tú-ní-li-toha lëmbëénde</td>
</tr>
<tr>
<td>tú-ní-va-yangátá vayeéni</td>
<td>tú-ní-vi-kundaanya vituúndi</td>
</tr>
<tr>
<td>tú-ní-la-pilikáná malóóvé</td>
<td>tú-ní-va-pelekedya valúúme</td>
</tr>
</tbody>
</table>

**18. IMPERATIVE** with OC *djít*: OC - VB - e

Tone group: D1.

With and without a following object (or adjunct):

<table>
<thead>
<tr>
<th>Form</th>
<th>Tone Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>la-liima (mahaála)</td>
<td>li-toohe (lëmbëénde)</td>
</tr>
<tr>
<td>va-yangaáta (vayeéni)</td>
<td>vi-kundaanye (vituúndi)</td>
</tr>
<tr>
<td>la-pilikána (malóóvé)</td>
<td>va-pelekedye (valúúme)</td>
</tr>
</tbody>
</table>

The forms with Penultimate Shortening (not common with minisyllabic stems) are the following:

<table>
<thead>
<tr>
<th>Form</th>
<th>Tone Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>la-lime mahaála</td>
<td>li-tohe lëmbëénde</td>
</tr>
<tr>
<td>va-yangate vayeéni</td>
<td>vi-kundaanye vituúndi</td>
</tr>
<tr>
<td>la-pilikane malóóvé</td>
<td>va-pelekedye valúúme</td>
</tr>
</tbody>
</table>

Imperatives of verbs with an indirect object are Imperatives with OC. Remarkably, the final may be either -e or -a.

<table>
<thead>
<tr>
<th>Form</th>
<th>Tone Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>ni-ing’e/ni-ing’a</td>
<td>give me!</td>
</tr>
<tr>
<td>mw-ing’e/mw-ing’a</td>
<td>give him/her!</td>
</tr>
<tr>
<td>tw-ing’e/tw-ing’a</td>
<td>give us!</td>
</tr>
<tr>
<td>ngu-tendeel/ngu-tendeela</td>
<td>do for me!</td>
</tr>
<tr>
<td>ngu-telekeel/ngu-telekeela</td>
<td>cook for me!</td>
</tr>
<tr>
<td>tu-telekeel/tu-telekeela</td>
<td>cook for us!</td>
</tr>
</tbody>
</table>
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-liime (mahaála) → tu-vi³lye (vi³lyo)
- tu-va-yangáate (vayeéni) → tu-vi-kúndaanye (vituúndi)
- tu-la-pilikaane (malóóve) → tu-va-pélédëdye (valúúme)

The forms with Penultimate Shortening:

- tu-la-liime mahaála → tu-vi³lye vi³lyo
- tu-va-yangáate vayeéni → tu-vi-kúndaanye vituúndi
- tu-la-pilikaane malóóve → tu-va-pélédëdye 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-liima (mahaála) → váálya (vi³lyo)
- va-yangáata (vayeéni) → va-kúndaanye (vituúndi)
- va-pilikaana (malóóve) → va-pélédëdyé (valúúme)

The forms with Penultimate Shortening:

- va-liima mahaála → váálya vi³lyo
- va-yangáata vayeéni → va-kúndaanye vituúndi
- va-pilikaana malóóve → va-pélédëdyé valúúme

The form with OC with minisyllabic stems is va-ví³lya. 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.
TENSE PARADIGMS 303

With and without a following object (or adjunct):

va-lile (viïyo)  
va-limite (mahaâla)  
va-pilikene (malôóve)  

va-tohîidye (limbêênde)  
va-pelêkêidiye (valûûme)

The forms with Penultimate Shortening:

va-lile viïyo 
va-limite mahaâla  
va-pilikene malôóve 

va-tohîidye limbêênde  
va-pelêkêidiye valûûme

The Direct Relative Perfective with SC participants + cl.1 is a conjoint-disjoint tense (number 11 in this appendix).

22. SUPPOSITIONAL CONDITIONAL dji:

SC/i - (a) - ka - [nî - (OC) - VB - á

Tone group: C2.

With and without a following object (or adjunct):

tu-ká-nî-liima (mahaâla) 
tu-ká-nî-yangaâta (vayeéni) 
tu-ká-nî-pilikiána (malôóve) 

Tu-ká-nî-lii mt (viïyo)  
Tu-ká-nî-tooha (limbêênde)  
Tu-ká-nî-kundaanya (vituûndi)  

Tu-ká-nî-pelekeedyâ (valûûme)

+ OC:

Tu-ká-nî-lii mahaâla  
Tu-ká-nî-yangaâta (vayeéni)  
Tu-ká-nî-pilikiána (malôóve) 

Tu-ká-nî-lii mt (viïyo)  
Tu-ká-nî-lii tooha (limbêênde)  
Tu-ká-nî-vi-kundaanya (vituûndi)  

Tu-ká-nî-vi-pelekeedyâ (valûûme)

When followed by an object or adjunct, forms with a simple final syllable are also attested with a final H tone:

Tu-ká-nî-liima mahaâla 
Tu-ká-nî-yangaâta (vayeéni) 
Tu-ká-nî-pilikiána (malôóve) 

Tu-ká-nî-lii mt (viïyo)  
Tu-ká-nî-tooha limbêênde  
Tu-ká-nî-kundaanya vituûndi  

Tu-ká-nî-pelekeedyâ valûûme

+ OC:

Tu-ká-nî-lii mahaâla  
Tu-ká-nî-vi-kundaanya (vituûndi)  
Tu-ká-nî-lii mt (viïyo)  

Tu-ká-nî-vi-pelekeedyâ valûûme
The forms with Penultimate Shortening:

- tu-ká-ní-lima mahaála: tu-ká-ní-nya viñiya
- tu-ká-ní-yangáta vayeéni: tu-ká-ní-kundanya vituúndi
- tu-ká-ní-pilikána malóiwe: tu-ká-ní-pelekédya valúume

+ OC:

- tu-ká-ní-la-lima mahaála: tu-ká-ní-li-toha limbéende
- tu-ká-ní-va-yangáta vayeéni: tu-ká-ní-vi-kundanya vituúndi
- tu-ká-ní-la-pilikána malóiwe: tu-ká-ní-va-pelekédya valúume

The tone patterns of forms with a complex final syllable are the same as those of tone group D2.

23. CONDITIONAL dft: SC/t. - ka - (OC) - VB/s2 - a

Tone group: E.

With and without a following object (or adjunct):

- tu-ka-liíma (mahaál) tu-ka-toóha (limbéende)
- tu-ka-yangáata (vayeéni) tu-ka-kundanya (vituúndi)
- tu-ka-pilikáana (malóiwe) tu-ka-pelékédya (valúume)

The form with OC with minisyllabic stems is tu-ka-viñiya.

The forms with Penultimate Shortening:

- tu-ka-líma mahaála: tu-ka-líma viñiya
- tu-ka-yangáta vayeéni: tu-ka-kundanya vituúndi
- tu-ka-pilikána malóiwe: tu-ka-pelékédya valúume

24. CONCESSIVE dft: SC/t. - ka - na - (OC) - VB/s2 - a

Tone group: E.

With and without a following object (or adjunct):

- tu-ka-náláya (viñiya)
- tu-ka-nálla (mahaál) tu-ka-ná-tóóha (limbéende)
- tu-ka-na-yangáata (vayeéni) tu-ka-na-kundanya (vituúndi)
- tu-ka-na-pilikáana (malóiwe) tu-ka-na-pelékédya valúume

The form with OC with minisyllabic stems is tu-ka-na-viñiya ‘although we eat it (food), …’.
The forms with Penultimate Shortening:

\[
\begin{align*}
\text{tu-ka-na-lima mahaála} & \quad \text{tu-ka-nálya viílyo} \\
\text{tu-ka-na-yángáta vayeéni} & \quad \text{tu-ka-na-kündánya vituúndi} \\
\text{tu-ka-na-pilíkana malóóve} & \quad \text{tu-ka-na-pelékedya valúúme}
\end{align*}
\]

25. SUBSECUTIVE INFINITIVE \textit{dit}: \begin{align*}
(k)u \cdot ná \cdot (OC/\iota) \cdot VB \cdot a
\end{align*}

Tone group: D1.

With and without a following object (or adjunct):

\[
\begin{align*}
\text{kú-ná-liíma (mahaála)} & \quad \text{kú-náálya (viílyo)} \\
\text{kú-ná-yángáta (vayeéni)} & \quad \text{kú-ná-kündánya (vituúndi)} \\
\text{kú-ná-pilíkana (malóóve)} & \quad \text{kú-ná-pelékedya (valúúme)}
\end{align*}
\]

+ OC:

\[
\begin{align*}
\text{kú-ná-lá-liíma (mahaála)} & \quad \text{kú-ná-viílyo (viílyo)} \\
\text{kú-ná-vá-yángáta (vayeéni)} & \quad \text{kú-ná-vi-kündánya (vituúndi)} \\
\text{kú-ná-lá-pilíkana (malóóve)} & \quad \text{kú-ná-vá-pelékedya (valúúme)}
\end{align*}
\]

The tone patterns found with this tense occur with most Indirect Relatives. The forms with Penultimate Shortening are the following:

\[
\begin{align*}
\text{kú-ná-liíma mahaála} & \quad \text{kú-náálya viílyo} \\
\text{kú-ná-yángáta vayeéni} & \quad \text{kú-ná-kündánya vituúndi} \\
\text{kú-ná-pilíkana malóóve} & \quad \text{kú-ná-pelékedya valúúme}
\end{align*}
\]

+ OC:

\[
\begin{align*}
\text{kú-ná-lá-liíma mahaála} & \quad \text{kú-ná-viílyo viílyo} \\
\text{kú-ná-vá-yángáta vayeéni} & \quad \text{kú-ná-vi-kündánya vituúndi} \\
\text{kú-ná-lá-pilíkana malóóve} & \quad \text{kú-ná-vá-pelékedya valúúme}
\end{align*}
\]

26. SITUATIVE PERFECTIVE \textit{dit}: \begin{align*}
\text{SC/}/ \cdot (OC) \cdot VB \cdot ɨle
\end{align*}

Tone group: D1.

With and without a following object or adjunct:

\[
\begin{align*}
\text{tu-liíle (viílyo)} \\
\text{tu-liímite (mahaála)} & \quad \text{tu-tohiidye (limbédénde)} \\
\text{tu-pilíkeene (malóóve)} & \quad \text{tu-pelékedidýye (valúúme)}
\end{align*}
\]
The forms with Penultimate Shortening:

<table>
<thead>
<tr>
<th>tu-ilie viiyo</th>
<th>tu-tohidye limbéénde</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-limite mahaála</td>
<td>tu-tohidye limbéénde</td>
</tr>
<tr>
<td>tu-pilikene malóóve</td>
<td>tu-pelekedidye valúúme</td>
</tr>
</tbody>
</table>

27. **SUPPOSITIONAL CONDITIONAL PERFECTIVE dji:**

SC/i. - ka - (OC) - VB - ile

Tone group: D1.

With and without a following object (or adjunct):

| tu-ka-liile (viiyo) | tu-ka-tohidye (limbéénde) |
| tu-ka-limite (mahaála) | tu-ka-tohidye (limbéénde) |
| tu-ka-pilikene (malóóve) | tu-ka-pelekedidye (valúúme) |

The forms with Penultimate Shortening:

<table>
<thead>
<tr>
<th>tu-ka-ilie viiyo</th>
<th>tu-ka-tohidye limbéénde</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ka-limite mahaála</td>
<td>tu-ka-tohidye limbéénde</td>
</tr>
<tr>
<td>tu-ka-pilikene malóóve</td>
<td>tu-ka-pelekedidye valúúme</td>
</tr>
</tbody>
</table>

28. **SUBEXECUTIVE OPTATIVE dji:**

SC/i. - ka - (OC) - VB - e

Tone group: D2.

With and without a following object (or adjunct):

| tu-ka-liime (mahaála)  | tu-káálye (viiyo) |
| tu-ka-yángáate (vayeéni) | tu-ka-tóóhe (limbéénde) |
| tu-ka-pilikae (malóóve) | tu-ka-pélékeedye (valúúme) |

+ OC:

| tu-ka-lá-liime (mahaála) | tu-ká-viiyöe (viiyo) |
| tu-ka-vá-yángáate (vayeéni) | tu-ka-ví-kündáanye (vituúndi) |
| tu-ka-lá-pilikae (malóóve) | tu-ka-vá-pélékeedye (valúúme) |

The forms with Penultimate Shortening:

| tu-ka-lime mahaála | tu-káálye viiyo |
| tu-ka-yángate vayeéni | tu-ka-kündáanye vitúúndi |
| tu-ka-pilikane malóóve | tu-ka-pélékeedye valúúme |
29. NEGATIVE PRESENT djt: SC/- ká - (OC) - VB/S1 - a

Tone group: B.

With and without a following object (or adjunct):

<table>
<thead>
<tr>
<th>Without OC</th>
<th>With OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ká-liima (mahaála)</td>
<td>tu-ká-liima (mahaála)</td>
</tr>
<tr>
<td>tu-ká-yangata (vayeéni)</td>
<td>tu-ká-yangata (vayeéni)</td>
</tr>
<tr>
<td>tu-ká-pilikaana (malóóve)</td>
<td>tu-ká-pilikaana (malóóve)</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Without OC</th>
<th>With OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ká-liima mahaála</td>
<td>tu-ká-liima mahaála</td>
</tr>
<tr>
<td>tu-ká-yangata vayeéni</td>
<td>tu-ká-yangata vayeéni</td>
</tr>
<tr>
<td>tu-ká-pilikaana malóóve</td>
<td>tu-ká-pilikaana malóóve</td>
</tr>
</tbody>
</table>

30. NEGATIVE INFINITIVE djt: u - ngá - VB - a

Tone group: D1.

With and without a following object (or adjunct):

<table>
<thead>
<tr>
<th>Without OC</th>
<th>With OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-ngá-liima (mahaála)</td>
<td>u-ngá-liima (mahaála)</td>
</tr>
<tr>
<td>u-ngá-yangata (vayeéni)</td>
<td>u-ngá-yangata (vayeéni)</td>
</tr>
<tr>
<td>u-ngá-pilikaana (malóóve)</td>
<td>u-ngá-pilikaana (malóóve)</td>
</tr>
</tbody>
</table>
The Negative Infinitive may not occur with OC. The forms with Penultimate Shortening are the following:

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-ngá-léma mahaála</td>
<td>u-ngá-tohá limbéénde</td>
</tr>
<tr>
<td>u-ngá-yángata vayeéni</td>
<td>u-ngá-kúndanya vituúndí</td>
</tr>
<tr>
<td>u-ngá-piikana malóóve</td>
<td>u-ngá-pélekedya valúúme</td>
</tr>
</tbody>
</table>

### 31. NEGATIVE PRESENT PERFECTIVE 1 (dift)

**SC/lit:** káll - (OC) - VB/s1 - ílé

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-liimité (mahaála)**
- **Tu-ká-pilikéene (malóóve)**

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-limité (mahaála)**
- **Tu-ká-la-pilikéene (malóóve)**

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-liile viilyo**
- **Tu-ká-liimité mahaála**
- **Tu-ká-pilikéene malóóve**

+ OC:

- **Tu-ká-vi-liile viilyo**
- **Tu-ká-la-limité mahaála**
- **Tu-ká-la-pilikéene malóóve**

### 32. NEGATIVE PAST PERFECTIVE (dift)

**SC/lit:** káll - (OC) - VB - íle

Tone group: D1.

With and without a following object (or adjunct):

- **Tu-ká-liile (viilyo)**
- **Tu-ká-liimité (mahaála)**
- **Tu-ká-pilikéene (malóóve)**
The forms with Penultimate Shortening are the following:

- tu-ká-vi-liıle (viilyo)
- tu-ká-la-limiiite (mahaálá)
- tu-ká-la-pilikeene (malóőve)

The forms with Penultimate Shortening are the following:

- tu-ká-vi-liıle viilyo
- tu-ká-la-limiiite mahaálá
- tu-ká-la-pilikeene malóőve

33. NEGATIVE PRESENT PERFECTIVE 2
SC/l - ká - na - (OC) - VB - ile

Tone group: D1.

With and without a following object (or adjunct):

- tu-ká-ná-liıle (viilyo)
- tu-ká-ná-limiiite (mahaálá)
- tu-ká-ná-pilikeene (malóőve)

The forms with Penultimate Shortening:

- tu-ká-ná-liıle viilyo
- tu-ká-ná-limiiite mahaálá
- tu-ká-ná-pilikeene malóőve

34. NEGATIVE OPTATIVE
SC/ht - na - (OC) - VB - e

Tone group: D2.

With and without a following object (or adjunct):

- tu-na-liıme (mahaálá)
- tu-na-yángaate (vayeéni)
- tu-na-pilikaane (malóőve)

+ OC:

- tu-na-liıme (mahaálá)
- tu-na-vá-yángaate (vayeéni)
- tu-na-lá-pilikaane (malóőve)
The forms with Penultimate Shortening are the following:

- **tu-na-lime mahaála**: tu-nálye viílyo
- **tu-na-yángate vayeéni**: tu-na-kúndanye vútiúndi
- **tu-na-pilikane malóóve**: tu-na-pélékedye valúúme

+ **OC**:

- **tu-na-lá-lime(mahaála)**: tu-ná-vílye viílyo
- **tu-na-vá-yángate vayeéni**: tu-na-ví-kúndanye vútiúndi
- **tu-na-lá-pilikane malóóve**: tu-na-vá-pélékedye valúúme

**35. NEGATIVE CONDITIONAL/CONCESSIVE dít:**

SC/n. - ka - na - (OC) - VB - e

Tone group: D1.

With and without a following object (or adjunct):

- **tu-ka-na-liime (mahaála)**: tu-ka-naalýe (viílyo)
- **tu-ka-na-yangaate (vayeéni)**: tu-ka-na-kundaany (vútiúndi)
- **tu-ka-na-pilikaane (malóóve)**: tu-ka-na-pélékedye (valúúme)

The forms with Penultimate Shortening are the following:

- **tu-ka-na-lime mahaála**: tu-ka-nálye viílyo
- **tu-ka-na-yángate vayeéni**: tu-ka-na-kúndanye vútiúndi
- **tu-ka-na-pilikane malóóve**: tu-ka-na-pélékedye valúúme

**36. NEGATIVE SUPPOSITIONAL CONDITIONAL dít:**

SC/n. - ká - na - (OC) - VB - e

Tone group: D1.

With and without a following object (or adjunct):

- **tu-ká-ná-liime (mahaála)**: tu-ká-náalýe (viílyo)
- **tu-ká-ná-yangaate (vayeéni)**: tu-ká-ná-kundaany (vútiúndi)
- **tu-ká-ná-pilikaane (malóóve)**: tu-ká-ná-pélékedye (valúúme)
The forms with Penultimate Shortening are the following:

\[
\begin{align*}
\text{tu-ká-nálime mahaála} & \phantom{=} \text{tu-ká-nálye viíyo} \\
\text{tu-ká-ná-yangate vayeéni} & \phantom{=} \text{tu-ká-ná-kundanye vitiúndi} \\
\text{tu-ká-ná-pilíkane malóóve} & \phantom{=} \text{tu-ká-ná-pelekedye valúume}
\end{align*}
\]

37./38. DIRECT RELATIVE (FAR) PAST PERFECTIVE \textit{djt}:

SCh. - (a) - na - (OC) - VB/s2 - ile

Tone group: E.

DIRECT RELATIVE PAST PERFECTIVE \textit{djt}:

With and without a following object (or adjunct):

\[
\begin{align*}
\text{tu-na-líile (viíyo)} & \phantom{=} \text{tu-na-tohiidaye (limbéénde)} \\
\text{tu-na-líime (mahaála)} & \phantom{=} \text{tu-na-tohiidaye (limbéénde)} \\
\text{tu-na-pilíkene (malóóve)} & \phantom{=} \text{tu-na-pelekedidiye (valúume)}
\end{align*}
\]

The forms with Penultimate Shortening:

\[
\begin{align*}
\text{tu-na-líile viíyo} & \phantom{=} \text{tu-na-tohiidaye limbéénde} \\
\text{tu-na-líime mahaála} & \phantom{=} \text{tu-na-tohiidaye limbéénde} \\
\text{tu-na-pilíkene malóóve} & \phantom{=} \text{tu-na-pelekedidiye valúume}
\end{align*}
\]

DIRECT RELATIVE FAR PAST PERFECTIVE \textit{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 \textit{djt}. Some examples:

\[
\begin{align*}
\text{tw-a-na-líile (viíyo)} & \phantom{=} \text{tu-na-tohiidaye (limbéénde)} \\
\text{tw-a-na-líime (mahaála)} & \phantom{=} \text{tu-na-tohiidaye (limbéénde)} \\
\text{tw-a-na-pilíkene (malóóve)} & \phantom{=} \text{tu-na-pelekedidiye (valúume)}
\end{align*}
\]

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:

\[
\begin{align*}
\text{tú-ná-líile (viíyo)} & \phantom{=} \text{tú-ná-tohiidaye (limbéénde)} \\
\text{tú-ná-líime (mahaála)} & \phantom{=} \text{tú-ná-tohiidaye (limbéénde)} \\
\text{tú-ná-pilíkeene (malóóve)} & \phantom{=} \text{tú-ná-pelekedidiye (valúume)}
\end{align*}
\]

+ OC:

\[
\begin{align*}
\text{tú-ná-ví-liíle (viíyo)} & \phantom{=} \text{tú-ná-li-tohiidaye (limbéénde)} \\
\text{tú-ná-lá-líime (mahaála)} & \phantom{=} \text{tú-ná-li-tohiidaye (limbéénde)} \\
\text{tú-ná-lá-pilíkeene (malóóve)} & \phantom{=} \text{tú-ná-vá-pelekedidiye (valúume)}
\end{align*}
\]
39. INDIRECT RELATIVE PRESENT djt: PI/л - SC/н - (OC/н) - VB - а

Tone group: D2.

With and without a following object (or adjunct):

- pa-tú-liima (mahaála) → pa-túulya (viílyo)
- pa-tú-yángaata (vayeéni) → pa-tú-kúndaanya (vituúndi)
- pa-tú-piliki ana (malóóve) → pa-tú-pélekeedy (valúume)

+ OC:
- pa-tú-lá-liima (mahaála) → pa-tú-vílya (viílyo)
- pa-tú-vá-yángaata (vayeéni) → pa-tú-vi-kúndaanya (vituúndi)
- pa-tú-lá-piliki ana (malóóve) → pa-tú-vá-pélekeedy (valúume)

The forms with Penultimate Shortening are the following:

- pa-tú-lima mahaála
- pa-tú-yángata vayeéni
- pa-tú-piliki ana malóóve

+ OC:
- pa-tú-lá-liima mahaála
- pa-tú-vá-yángata vayeéni
- pa-tú-lá-piliki ana malóóve

40. INDIRECT RELATIVE NON-PAST djt:

PI/л - SC/н - na - (OC) - VB/sí - а

Tonal Profile: B.

With and without a following object (or adjunct):

- pa-tú-na-liima (mahaála) → pa-tú-náalya (viílyo)
- pa-tú-na-yángáta (vayeéni) → pa-tú-na-kúndaanya (vituúndi)
- pa-tú-na-piliki ana (malóóve) → pa-tú-na-pélekeedy (valúume)

+ OC:
- pa-tú-ná-la-liima (mahaála)
- pa-tú-ná-vá-yángáta (vayeéni)
- pa-tú-ná-la-piliki ana (malóóve)
The forms with Penultimate Shortening:

- pa-tú-na-lima mahaála
  - pa-tú-na-tóha limbéénde
- pa-tú-na-yángata vayeéni
  - pa-tú-na-kúndanya vitiúndi
- pa-tú-na-pílikana malóóve
  - pa-tú-na-pélékedyá valúúme

+ OC:

- pa-tú-ná-la-lima mahaála
  - pa-tú-ná-li-tóha limbéénde
- pa-tú-ná-va-yángata vayeéni
  - pa-tú-ná-vi-kúndanya vitiúndi
- pa-tú-ná-la-pílikana malóóve
  - pa-tú-ná-va-pélékedyá valúúme

41. INDIRECT RELATIVE PRESENT PERFECTIVE dzit:

- PI/ - SC/ - (OC/) - VB - ile

Tone group: D2.

With and without a following object (or adjunct):

- pa-tú-liile (viiltyo)
- pa-tú-limíite (mahaálá)
- pa-tú-pílikene (malóóve)

+ OC:

- pa-tú-ví-liile (viiltyo)
- pa-tú-lá-limíite (mahaálá)
- pa-tú-lá-pílikene (malóóve)

- pa-tú-liile viiltyo
- pa-tú-limíite mahaálá
- pa-tú-pílikene malóóve

+ OC:

- pa-tú-ví-liile viiltyo
- pa-tú-lá-limíite mahaálá
- pa-tú-lá-pílikene malóóve

42./43. INDIRECT RELATIVE (FAR) PAST PERFECTIVE dzit:

- PI/ - SC/ - (a) - ná - (OC/) - VB - ile

Tone group: D2.
INDIRECT RELATIVE PAST PERFECTIVE \textit{djt}:

With and without a following object (or adjunct):

\begin{verbatim}
  pa-tú-ná-líile (viiłyo)
  pa-tú-ná-limíite (mahaála)
  pa-tú-ná-pílíkeene (malóóve)
  + OC:
  pa-tú-ná-ví-líile (viiłyo)
  pa-tú-ná-lá-limíite (mahaála)
  pa-tú-ná-lá-pílíkeene (malóóve)
\end{verbatim}

The forms with Penultimate Shortening:

\begin{verbatim}
  pa-tú-ná-líile viłyo
  pa-tú-ná-limíite mahaála
  pa-tú-ná-pílíkeene malóóve
  + OC:
  pa-tú-ná-ví-líile viłyo
  pa-tú-ná-lá-limíite mahaála
  pa-tú-ná-lá-pílíkeene malóóve
\end{verbatim}

INDIRECT RELATIVE FAR PAST PERFECTIVE \textit{djt}:

The TM -\textit{a}- intervenes between the SC and the TM -\textit{ina}-. When glide formation affects the SC, the H tone of the SC appears on the -\textit{a}-. For the rest, the forms are the same as those of the Indirect Relative Past Perfective \textit{djt}. Some examples:

\begin{verbatim}
  pa-tw-á-ná-líile (viiłyo)
  pa-tw-á-ná-limíite (mahaála)
  pa-tw-á-ná-pílíkeene (malóóve)
  + OC:
  pa-tw-á-ná-ví-líile (viiłyo)
  pa-tw-á-ná-lá-limíite (mahaála)
  pa-tw-á-ná-lá-pílíkeene (malóóve)
\end{verbatim}

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:

\begin{verbatim}
  pa-tu-na-líile (viiłyo)
  pa-tu-na-limíite (mahaála)
  pa-tu-na-pílíkeene (malóóve)
  + OC:
  pa-tu-na-ví-líile (viiłyo)
  pa-tu-na-lá-limíite (mahaála)
  pa-tu-na-lá-pílíkeene (malóóve)
\end{verbatim}
44. NEGATIVE INDIRECT RELATIVE PRESENT dft:
PI/št. - SC/št - ká - (OC) - VB/št - a
Tonal Profile: B.

With and without a following object (or adjunct):

- pa-tú-ká-liima (mahaála)
- pa-tú-ká-yángaata (vayeéni)
- pa-tú-ká-piilikana (malóöve)

- pa-tú-ká-alıya (viílyo)
- pa-tú-ká-tooha (limbéénde)
- pa-tú-ká-kúndaanya (vituúndi)
- pa-tú-ká-pélekeedy (valúúme)

+ OC:

- pa-tú-ká-la-liima (mahaála)
- pa-tú-ká-va-yángaata (vayeéni)
- pa-tú-ká-la-piilikana (malóöve)

- pa-tú-ká-la-liima (mahaála)
- pa-tú-ká-va-yángaata (vayeéni)
- pa-tú-ká-la-piilikana (malóöve)

The forms with Penultimate Shortening:

- pa-tú-ká-líima (mahaála)
- pa-tú-ká-yángaata (vayeéni)
- pa-tú-ká-piilikana (malóöve)

- pa-tú-ká-liima (mahaála)
- pa-tú-ká-yángaata (vayeéni)
- pa-tú-ká-piilikana (malóöve)

+ OC:

The tone patterns of forms with a complex final syllable resemble those of tone group E.

45. NEGATIVE INDIRECT RELATIVE PRESENT PERFECTIVE dft:
PI/št. - SC/št - káll - (OC) - VB/št - ìlé
Tone group: A.

With and without a following object (or adjunct):

- pa-tú-ká-liiïle (viílyo)
- pa-tú-ká-liiïte (mahaála)
- pa-tú-ká-piilikéene (malóöve)

- pa-tú-ká-tohídy (limbéénde)
- pa-tú-ká-tohídy (limbéénde)
- pa-tú-ká-pélekiidy (valúúme)

The tone patterns of forms with a complex final syllable resemble those of tone group E.
The tone patterns of forms with a complex final syllable resemble those of tone group B. The forms with Penultimate Shortening are the following:

+ OC:  

<table>
<thead>
<tr>
<th>Pa-tú-ká-va-lí-le (viílyo)</th>
<th>Pa-tú-ká-li-tóhídie (limbéénde)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pa-tú-ká-la-lí-míte (mahaála)</td>
<td>Pa-tú-ká-li-tóhídie (limbéénde)</td>
</tr>
<tr>
<td>Pa-tú-ká-la-pílíkéne (malóóve)</td>
<td>Pa-tú-ká-va-pélékéidiye (valúume)</td>
</tr>
<tr>
<td>Pa-tú-ká-lí-míte mahaála</td>
<td>Pa-tú-ká-tohídie limbéénde</td>
</tr>
<tr>
<td>Pa-tú-ká-pílíkéne malóóve</td>
<td>Pa-tú-ká-pelékéidiye valúume</td>
</tr>
</tbody>
</table>

+ OC:  

<table>
<thead>
<tr>
<th>Pa-tú-ká-va-lí-le viílyo</th>
<th>Pa-tú-ká-li-tóhídie limbéénde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pa-tú-ká-la-lí-míte mahaála</td>
<td>Pa-tú-ká-li-tóhídie limbéénde</td>
</tr>
<tr>
<td>Pa-tú-ká-la-pílíkéne malóóve</td>
<td>Pa-tú-ká-va-pélékéidiye valúume</td>
</tr>
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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 (\(l_r\) 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 $djt$
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 $djt$
NPPROG Non-Past Progressive (complex tense 1c)
NPPROG.REL2 Indirect Relative Non-Past Progressive (complex tense 1c)
OPT Optative (without OC)
PAPF1 Past Perfective $djt$
PAPF2 Past Perfective $djt$
PAPF.REL2 Indirect Relative Past Perfective $djt$
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 $djt$
PRPROG1 Present Progressive 1 (complex tense 3b)
PRPROG2 Present Progressive 2 (complex tense 2a)
PR.REL1 Direct Relative Present
PR.REL2 Indirect Relative Present $djt$
PRPF1 Present Perfective $djt$
PRPF2 Present Perfective $djt$
PRPF.REL1 Direct Relative Present Perfective
PRPF.REL2 Indirect Relative Present Perfective $djt$
QUES question word with question intonation
RED reduplication
REFL reflexive
SEC Subsecutive Infinitive $djt$
SEQ Sequential Infinitive (complex tense)
1SG  1st person singular  
1SGTM  1st person singular incorporated in tense marker  
2SG  2nd person singular  
SITPF  Situative Perfective \textit{djt}  
SUPCOND  Suppositional Conditional \textit{djt}  
SUPCONDPF  Suppositional Conditional Perfective \textit{djt}  
TM  tense marker

Tone labels above words:

\begin{itemize}
  \item \textit{H} above a sound with a H tone indicates an intonational H tone without which the sound should have a L tone.
  \item \textit{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).
  \item \textit{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.
  \item \textit{Hr} above a sound indicates intonational lengthening of the preceding sound with a H tone; the lengthening also has a H tone.
  \item \textit{Ht} 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).
  \item \textit{Lr} above a sound indicates intonational lengthening of the preceding sound with a H tone; the lengthening has a L tone.
  \item \textit{Lr} 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.
  \item \textit{HLH} indicates question intonation: a final HLH tonal sequence occurs instead of the original (L)RL tonal sequence.
\end{itemize}
B.1 The Makonde people

The Makonde people come from a country far away, farther than Mozambique. It was where they started to live themselves, the first Makonde people of the past.

When they went away from there, they started to live as Meto people in Mozambique. There, they were known as Meto people, and they lived in the corner of Mozambique with Tanzania. There

because of the haze, which was there
When the second world war had started there, 

They went away from Mozambique and ran to the corner of Tanzania to the mountains and hid themselves. When they had lived in the mountains, they went to a high area, and they left while calling themselves:

Hc

We are Nnima people, and our Makonde-Ndonde companions.

Hn

They call them Ndonde people. They got their name because of the name
Ndonde. This is what they call Ndonde:

\[\text{mée} \text{~paláumbala} \quad \text{n-nuhúndé} \quad \text{lwa-luúuma,} \quad \text{nkupúúng’anya}\]

when the river Ruvuma is full of water, it becomes more and more

\[\text{nkuhwiká} \quad \text{kúválimite} \quad \text{mawéelu,} \quad \text{nkwikálá}\]

and it reaches where they have cultivated the fields, and it stays there

\[\text{ápúúva} \quad \text{kadiiki,} \quad \text{nkulék’} \quad \text{úláuuya.} \quad \text{na-upóópó} \quad \text{tuvelé}\]

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

\[\text{na-avéétu} \quad \text{váanji} \quad \text{vá-chimákóonde,} \quad \text{vavachema} \quad \text{vámááaba}\]

withcompanions.POSS1PL other CONN-Makonde 2.2.call.PR Maraba

our other Makonde companions, they are called Maraba people.

\[\text{vaikalá} \quad \text{ú-nyenje} \quad \text{mwé-médi} \quad \text{makúúungwa,} \quad \text{kumangá} \quad \text{kweétu.}\]

They live along the ocean, along our coast.

\[\text{matangódi} \quad \text{lávo} \quad \text{lanilékánila} \quad \text{na-lá-chimákonde}\]

Their speech is different from the Makonde-

\[\text{cha-chijnúma} \quad \text{na-lá-chimákonde} \quad \text{cha-chiúdóonde.}\]

Nnimia speech and from the Makonde-Ndonde speech.

\[\text{vanáng’o,} \quad \text{malóvé} \quad \text{lóóhe} \quad \text{vakundanidýé} \quad \text{na-chiswahili.}\]

They, they mix many 2.mix.APP.PRPF1 withSwahili

They, they mix many words with Swahili.

\[\text{matangoódi} \quad \text{lá-vándóonde} \quad \text{lakálekánile} \quad \text{námeéne}\]

The speech of the Ndonde people is not very different

\[\text{na-lá-chimákonde} \quad \text{cha-chijnúima.} \quad \text{tulekanii’-chi} \quad \text{lilóvé}\]

with-Makonde-Makonde nature CONN-Nnimia nature 1PL.differ.APP.PR-onlyword from the Makonde-Nnimia speech. We only differ in
B.2  Story of reclaiming the monkey

Some time ago, there was a man and his wife, and they kept in confinement a monkey which had two tails. During the night,

a man went on a long, strolling journey. Meanwhile the woman said: I want to try to give the monkey some freedom,

he may take a short walk outside. That is to say, the monkey gets lost.
Hi

1. TM.1.open.APP.COND monkey

DEM1 tree

Hi

if she releases the monkey; he has left from tree

Hi

au nnándi lingwéele nkuwálwáála, mwaánda wá-m’mihiíítu.

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-mihiíítu kwáápiíité, ahimé né 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.

Hi

aáyu mmááhe, aveéýikútahá lingwéele, akámwoona.

DEM1 woman 1.be.18.15.look for.PRROG1 monkey 1.NEG.1 see.PR
This woman is looking for the monkey, but she doesn’t see him.

Hi

na-nnúúme mwandá waáke wáápiíte, anííúya, akahwééna

and-man journey POSS1 3.1.TM.PAPF.REL2 1.TM.return.PRPF21.TM.go.COND
And the man has returned from his journey which he had made. When he goes

Li

ku-chitúúndu chá-lingwéele, lingwé’ lyááke 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

Hí-Lí-Hí

n’dyáawe n’dyáangu lingwelé lyáangu livé’ kwááchi.

wife.POSS1 wife.POSS1SG monkey POSS1SG 5.be.PRPF1 where.QUES
his wife: my wife, where is my monkey?

Hí

mmááhe nkúché ndyaangu nááangu, ngutúmidilé

woman 18.15.say.SEQ husband.POSS1SG I 1SG.use.PRPF1
The woman said: my dear husband, I was

Hí

úvéelu, ŋuílínga kulíchimulilá 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,

Hí

viínó, nikámwóona. nnúúme nkúché litaahe lingwéele,

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,
uloone, tuuchi-tupatane ulombi weetu.
2SG.5.see.OPT 1PL.TM-1PL.come to terms. FUT 2 marriage POSS 1PL
you should find him, then we will come to terms in our marriage.

ukanampaate, na-waaako unawalawaala, chilwelewele
2SG.TM.NEG.1.get.COND and-you 2SG.TM.get lost.NP 7 5.get lost.PRPF.REL.
If you don’t get him, yeah you, you will get lost like my monkey has got lost.

lingwelenyaa nguunkuka, mwando kujitaha
monkey POSS 1SG woman 18.15.go away.SEQ journey 15.1.look for INF
The woman went away on a journey to look for

lingwele lyamichila mivili anihwena mwando nnehu,
monkey CONN tails two 1.TM.go.PRPF journey long
the monkey with two tails. She went on a long journey,

nkukimana na-likundidi lyamangwele. mmimhe nkumba lumumu
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:

lingwele liva taati
lingwele liva taati
monkey 5 be.PR father
Monkey of father

michila mivili taati
tails two father
two tails father

nchila umo taati
tail one father
one tail father

nkukikila:
18.15.answer.SEQ
and the monkeys answered:

loola nchila umo loola
loola nchila umo loola
look.IMP tail one look.IMP
look one tail, look!

lingwele liva taati
lingwele liva taati
When the woman saw the group, there was no monkey with two tails,

and she arose and went forward. She has gone on a long journey,

and she met another group of monkeys. And the woman

sang again:

And the monkey with two tails came out, and she seized him,
nkú m’pelekedidýá ñdyáawé, ulóómbí vińo mmuíhi.
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

chivátélëka ntandasa ñ-chündülí.
7.2.cook.PR.REFL porridge LOC-vegetable
How to (they) cook porridge (cassava flour) with vegetable (cassava leaves).

ánée póo unatandiliká utwalá chündülí, 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

nahóítí nkuviká’ pa, vińo unakumbanya móóto pa-chińuíí,
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,

nkuviká méedi, ulápata mooto. ánée póo vińo,
18.15.put.SEQ water 3.6.get.PR.REFL fire DEM3 now
and put water there while getting fire. Now then,

uponde máháám’ lá, lá-chündülí. lakpondéeka,
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-méedi, l’uvikí’ pa-chińuíí. ánée póó
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,

laikalá kadiíí, ánée póó kóka utay’ ūhuumbwe 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.

vinó chileecke kadiíí k-chündülí, chitokóté kadiíí.
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.
Then you should take it off the fire, now then the vegetable’s
boiling is completed. And then it is ready to be eaten with porridge.

Now I will cook porridge, the things which are necessary to do that.

The first thing, you begin to pound flour and put it there.

And you kindle a fire at the fireplace, and put water on it. That water,
wait a bit, it should boil, then you should diminish the amount of water,
you should leave it there for a while. Now then, put flour in the water. You should
take a spoon, you should stir it up. Now if you stir it up, you see

Serve it in a deep dish. And the vegetable likewise,
B.4 Preparation of Likulambila

chivátéleka likulambíla.
7.2.cook.PR.REL2 Likulambila
How to cook Likulambila (rice with watery pumpkin).

vinó apánó nikuhaulila chivátéleeka chinú chünji,
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 likulambiíla. vateleka véene, angáá-víívi,
2.call.PR Likulambila 2.cook.PR themselves folk-ancestor
called Likulambila. They themselves already cooked it,

vá-chimákonde chá-chiáníima. likulambíla utwala
CONN-Makonde nature CONN-Nnima nature Likulambila 2SG.take.PR
the Makonde-Nnima ancestors. As for the Likulambila, you take

likong’wé ńkukwáánga. 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

móóto nkutwalá nkuviká pá-chiúúli, likáavankutókoóta,
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,

utwala nnyéle wá-m’punga nkutááya. pa-chiúúli
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,

linji likoóng’we, utaya muúha mwá-jñyéele 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,
B.5 Ten proverbs with short explanations

malonjeédi. proverbs.

1. kupaswük’ ing’uúva. 17.be burst.PRPF.REL1 lightning
    Where the lightning has burst.
Where God speaks rain will fall, you should know there is the rainy season.

Where a thorn tree stands.

People are one, some are mischievous, others behave with respect.

If the sun shines, bask in it!

When walking here in the country, if you carry something, you should not neglect it, otherwise the work gets lost.

A person who does not recognize his elders, when having to face big problems, you will see him getting into trouble.

Which is omitted by the rain can not be done by the dew.
muúnú wahiwóhe akápilikana malówe lá-vakúlúngwá vaáke, 
person every 1.NEG.hear.PR words CONN-elders POSS1
Whatever person does not hear the words of his elders,

nanga yűunjí ambéényuluúła.
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!

chií núchochóhe chicákuvándüke, chilele chihi
thing every 7.NEG.2SG.concern.PRPF1 7.look.APP.IMP only
Everything which does not concern you, look at it only from

kuleéhu. nkóoko ayohé ámwalála ñkokó muúnú.
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.
ona mwá-weeka alinowel’ útükúúta.
stroll.IMP CONN-alone 1.REFL.be.proud.APP.PR 15.run.away.INF
Stroll alone, he is proud to run away.
p'úwónga 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-atátáako. linowele ding’ánó dyáako,
POSS2SG and-father.POSS2SG REF.L.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.
ñaínúume mpíni w’imbeedo p’ülúmuuka,
full grown man handle CONN-axe 16.1.break.PR.REL2
When a full grown man breaks the handle of an axe,
mpaváyáaha, náníuume mu nú 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.

numé wohewóóhe avé na-madeéngo, na-madéngó nííma,
person every 1.be.PRPF1 with-work and-work heart
Everyone has work, and work is heart,

ukánáave na-nííma, madéngó ukálahúúula,
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 muchi mpini upasuíke, 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-imbédo 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, tukániíépá.
7.TM.bear fruit.SUPCONDPF LOC-wasteland 1PL.TM.TM.pluck.SUPCOND
If it would bear fruit in the wasteland, we would pluck it.

chìnú chohechóóhe chá-mw-ilaánga ukáyúuwa,
thing every CONN-LOC-wasteland 2SG.NEG.ask for.PR
Anything of the wasteland you do not ask for,

chìvèle pa-kááya unayúuwa. 7.be.PRPF.REL1 LOC-homestead 2SG.TM.ask for.NP
you will ask for what is at home.

10.

akáplikana unáííduma mpátiila.
1.NEG.hear.PR 2SG.TM.1.rebuke.NP big bag
You rebuke a deaf person for being a big bag.

mwána wá-chimááhe akáplikana malonjéédí lá-vákuúungwá vaáke
child CONN-female 1.NEG.hear.PR sayings CONN-elders POSS1
A girl does not hear the sayings of her elders,
B.6 Twelve riddles with short explanations

nachīhe. (I ask) a riddle! nachiláawa. (I give) the solution!

1. immūka tumwálóote nnuúngu. kutipúula.
   awake.IMP 1PL.1.point.OPT god 15.pound.INF
   Wake up, let us point at God. To pound.

uhíku ukááchạ, vá-pa-chimááhe madéngó makúłúungwa
   night 14.TM.dawn.COND CONN-LOC-female work big
   At dawn, the big work for the women is

kutipúula, vá-váana vaalyé ntandaasa. patútipuula
   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,

mwihi tulodya muúha.
   pestle 1PL.be directed towards above
   we direct the pestle towards the sky.

2. nnyumbaila nkáliwéléle. uitoóhi.
   2PL.limp.PR 2PL.NEG.REFL.kill.PRPF1 chicken droppings
   You limp, you have not hurt yourself. Chicken droppings.

ukályóona wááako uvelé na-chiinu, unalééke
   2SG.TM.5 see.COND you 2SG.PRPF1 with-thing 2SG.NEG.leave.OPT
   If you see you have something, you should not leave

chihwéné ch’úvélekwídye, nkúvá muchi ukadembe
   gait 7.2SG.be born.PRPF.REL2 18.15.beSEQ like 2SG.step in.PRPF1
   the gait with which you were born, to be as if you had stepped into

máávi, aváako vaáchí-vakutilé.
   excrements companions.POSS2SG 2.TM-2.SG.run away.FUT2
   excrements, your companions will run away from you.
3. Hn
ngwá’ ñkulüloóla. lihíchi.
(sound of) stubbing 18.15.REFL.look at.SEQ
Stub, and look at oneself. Stump.

Hí
p’útëenda chiínu chohechóóhe apánó pa-chilaámbo,
16.2SG.do.PR.REL2 thing every DEM1 LOC-land
When you do anything here in the country,
unalüálliëe n-nyúma m’úhéeleke,
2SG.NEG.forget.OPT LOC-back 18.2SG.come from.PR.REL2
you should not forget where you have come from,
unalóole chihi mèhó 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.
muínu wohewóóhe unachi p’ákülóola, akulalá
person every 2SG.TM.say.NP16.1.2SG.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.PRF1 with-POSS2SG inside
nicely, he hides something.

5. chivákáhinikíila. chitheëma.
7.2.NEG.cover.APP.PR.REL2 well
What they do not cover. Well.
mécho naanga chikáloola 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,
mécho kulóóla.
eyes 15.look.INF
the eyes only look.
6. padéenge wá-nanjipí pa-nnaángo. atikúulo.  
padenge CONN-short LOC-door padlock  
The short Padenge at the door. Padlock.  

ukaikódyá 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,  

íkalá ŋ-núpéénu, uvaliínde 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,  

kóka vakuháulíle idá’ ng’áande.  
then 2SG.tell.APP.OPT come.IMP house  
then they should tell you: come in.  

7. váán’ ámbáango vakimbila chihúko chiímo. dihomeélo.  
children wild pigs 2.drink.PR pool one beams  
The young wild pigs drink from one pool. Roof beams.  

angáá-vííví vá-chíínuíma vavélé na-káya itumbwíile,  
folk-ancestor CONN-Nnima nature 2.be.PAPF1 with-homestead 9.be big.PRPF.REL1  
The Nnima ancestors had a big homestead,  

vaánu vaava vôhe, angáá-táata, angáá-mááma na-udúkúulu.  
population 2.be.PR many folk-father folk-mother and-grandchild  
the people are many, fathers, mothers and grandchildren.  
pavátéléka chákuulya, vá-chimááhe vanachémana vahívóóhe,  
16.2.cook.PR.REL2 food CONN-female 2.TM.call.ASS.NPall  
When they cook food, the women call everybody together,  

nkúlyá pámoo 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

**mwaná waángu**  p’àvélekwidýé  **npindo**  **nnéhu.**  

child  POSS1SG  16.1.be born.PRF.REL2  piece of cloth long

When my child was born, a long cloth for private parts

**atóota na-ndüdí.**

needle and rope

**Needle and thread.**

**mwána woheööhe**  p’àvéleekeka,  **mwing’a máándi**

child  every  16.1.be born.PRF.REL2  1.give.IMP

Give every child when it is born loin clothes

**Hi**

**nkúmwaadya, akakulümúuka, atenda mwéene madeéengo.**

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’ükú wangu ataidí’ pá-müva.**

chicken  POSS1SG  1.lay egg.PRSF1  LOC-thorns

My chicken has laid an egg in the thorns.

**chikoówo./lulimi na-meéno.**

pineapple / tongue and teeth

Pineapple / Tongue and teeth.

**Hi**

**muúnú nkũwía aavá na-mavaánga muchí p’uchéketa**

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, mííva 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

**wóónga, akáveele wa-ku-’wé, unámwúwíwe.**

15.stroll.INF  1.NEG.be.PRSF1  CONN-2SG.you2SG.NEG.1.steal.OPT

strolling, and it is not yours, you should not steal it.

10. **Hi  **

**lihahamaánga l’-íngulúvé likápya moóoto. indííla.**

hair on back  CONN-pig  5.NEG.be burnt.PR fire  path

The hair on the back of a pig is not burnt.  Path.
When there was a big person, everybody who was born last year is intelligent in the way the animals walk on the path.

When there was a big person, everybody who was born last year is intelligent in the way the animals walk on the path.

A vegetable without being spilled; a person passing while strolling meets many animals, the animals themselves, while being spilled; they tell us we should fear them, the ancestors themselves tell us we should fear God, what He has created
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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,

muchi pa-nniímá nási na-n-kaáti náási, nnuúngu tunnyóope.

B.7 Eleven songs

dihímu.

Songs.

dihímu aadi div’ímba pa-lihángáwila lyohelyóóhe,

These songs people sing when they are together for any celebration,

lyá-ulóómbi naméne lyá-malaangwe (kuyálúká vana vá-chilúme

of marriage and especially of initiation rites (to initiate boys

na-vá-chimááhe).

and-CONN-female

Dance: chingéénge.

1. unááche kunówá chingéénge ching’áti chiilo.

It should not become light to enjoy the Chingenge in the middle of the night.

2. apaánó p’ánáikele ntwáalo, ntúmé w’-álláahi

Here where your husband had lived, Prophet of Allah (oath)!

napambanya dikaänga dyá-namwááka, nayavaanya.

I will fasten together the cloths of this year and divide them.
I will fasten together pieces of the field of this year and divide them.

The thicket which is not full grown you should not cultivate it this year.

I fear the words, hee, ruin it! To leave it is bad.

If you go to the place of working together, my husband you should not linger,

What are you doing to me my husband?

On the baby’s head, the fontanel goes up and down.

I go to bed, I go to bed, I should get some sleep.

The leaves of the Ntungulu fall bit by bit at night,
companions. POSS1PL 2. lie down. SITPF

our companions are asleep.

songs DEM1 2. sing. PR 16.2. go. REL2 children CONN-LOC-male LOC-thicket

These songs the boys sing when they go into the thicket

ku-makuümbe.

LOC-initiation rites
to the initiation rites.

Dance: ing’oóle yá-vangaliiba ‘dance of the ones who circumcise’.

[No instruments, hand clapping.]

6.

hassání 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, kutánükíila. 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 túbubu

7. TM. be. SUPCONDPF 7. break. SITPF-DEM3

it would have broken that thing, broken that thing, broke,

kutúmbúkíila

15. break. APP. INF
to break it to pieces.

hassání nakatapadya vannyawile

kwííva wee kwííva wee ee kwííva wee ee ee.

7.

nchenje, (7x)

source of heat and fire

The sun,

kupwétéká m’-mátiúmbó nkanamwáli, lipwáelele.

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.  namahamba mválápéelele, tumpiinde dachi.
Namahamba snake 1.be long.APP.PRF.REL 1PL.1.bend.OPT how
The Namahamba, as he is very long, how should we bend him?

9.  váná’ mbango vachumulile v’ende véene u-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.

luhimú aalu luv’imba pavúya váana vápa-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-nyítu ku-makuúmbi.
LOC-thicket LOC-initiation rites
from the thicket from the initiation rites.

10. [No drum, hand clapping.]
litéwe litéwe kuúuya litéwe kuúuya kundagaala. (3x)
initiates 15.return.INF initiation place
The initiates return, the initiates return from the initiation place.

muunda kwángala kwángálílá vána,
inside 15.rejoice.INF 15.rejoice.APP.INF children
Inside to rejoice, to rejoice for the children,

namwáli kwángala kwángálílá vána. (3x)
caretaker of girl
caretaker of a girl, to rejoice, to rejoice for the children.

litéwe litéwe kuúuya litéwe kuúuya kundagaala (2x)

luhimú aalu luv’imba pa-lihángáwila lyá-ulóómbi.
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.]
ayuíno mwána daudi mwachichi akálóombwa,
DEM1 child Daudi 1.NEG.marry.PAS.PR
This child Daudi was saying she will not been married,
Hi-Li-Hi  Hi-Li-Hi  Hi-Li-Hi
nkembeéyu  nnáani  náani,  nkembeéyu  nnáani. (3x)
now he  who, QUES
now who is he, who?

He
kùndékelá  luwaawa  (wa.) (4x)
15.1SG. leave.APP.INF remaining 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)L:H, the initial a- is optional; vino RL I now; vino
apano RL LRL now then here
(a)-o L:H, P dem. this (referential short forms); ayo L:H cl.1, awo L:H cl.3, ayo L:H cl.9; attributive
tones: (L):L, 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)yO RL, C1:SF, P pos. their; tones including PPX: wa(y)O RL cl.1,
w(a)yO RL cl.3, ya(yO) 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
-achhwango ?, 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/LH
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 LHHL: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-
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 LHHL:L your (sg.) fa-si;
amatiye LHHL:L his/her fa-si

-ambalenga HLL: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, chikatapale 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 chieftood; cf. njumbe/ majumbe cl.3/6

-anahuvi HLH:L, P con. red; tones including PPx; cf. -huvilla 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

-ananji HHH:L, P con. short; tones including PPx; cf. -ipika V be short

-anapi HHH:L, P con. black; tones including PPx; cf. -damba V be black

-anaswe HHH:L, P con. white; tones including PPx; cf. -swelela V be white

-angala -HHH: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

-apilá -HHH:L, V swear an oath

-atangá HFL, P con. old, of the past; tones including PPx; cf.
-achinyakala. -komala V,
-kongopal V

atata/achatata/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 LHHL 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 LHHL RL our m.’s;
achayu venu LHHL RL your (pl.) m.’s; achayu vao LHHL RL their m.’s;

-cf. anyokwe cl.2A

B

-badula -HHH:L, V bite off; also -bedula -HHH:L

-bahi RL, C1:SF, I and so, accordingly, well, enough!, stop it!, be it so!; < Sw.
basi; see nano I

bakola/dihakola LFL/LHFL, E:S2, N 9c/10c stick (to walk with); also
nkangojo/mikangojo cl.3/4

bakuli LFL, E:S2, N 9h/- 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 -HHH:L be afflicted, caus.
-baniha -HFL annoy, -lagasa; see press tight

-baniha -HFL, V caus. annoy; caus. < -bana -H:L afflict

-banika -HHH:L, V get problems, be afflicted; neut. < -bana -H:L afflict;
cf. -huva, -tunduwa, -laga
basikeli/dibasikeli HH:l/L:HH/l: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

-chaba H:L, V dawn; tones with Infinitive marker; uhiku ukacha lIHL LL:L
until dawn, lit. if the night dawns; cf.
kulyamba cl.17, unambumbu 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 LL:L, D1:no H, N 7/8
galago, bushbaby (Sw. komba)

changa/vyanga FL, C2:H:SF, N 7/8
size, position
changle/vyango HRL, C2:H:SF, N 7/8 millipede; grammar: N or P nom.?
-chapa -H:L, V wash (clothes)
chechele/dichechele LL:L:L:LL,
D1:no H, N 9c/10c type of clothing
-cheha -FL, V caus. incise, cut to shape, trim; kucheha dinembo LHH HH:l:L
to make incision mark(s)
chechekele LRL, C1:SF, N 7/- sieve
-cheketa -HH:L, V cut, chop (e.g. branches); harvest bananas, millet sp. (Sw. ulezi); also -chaketa -HH:l:L
-chela -H:L, V cut, chop (trees)
-chema -H:L, V call
-chemusa -HFL, V caus. boil; cf. Sw.
  chemsha; see -yaukidi, -kodya; cf.
  -yaula, -yaukila, -tokota, -tinia
-chengula -HH:L, V cut hair; cf. -mwowa
-chi H:L, V say; tones with Infinitive marker; kuch(dono)/kuch(doni)
HH(RL)/HH(RL) that (Compl.); cf.
-tongola; in greetings: uchi/vachi
  dachi... L:L:H LL how are
  you/they? (today, etc.)
chibalua LL:H:L, A:S1/SF, N 7/-
cultivating together (paid with food, beer, etc.); < Sw. kibarua
chibatali/vibatali LL:HL, A:S1/SF, N 7/- 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 -HHH:L, V bolt, bar; be end of
  sth.
chidii/vidii LRL, C1:SF, N 7/8 plug, cork
chidodo/vidodo LLLRL, C1:SF, N 7/8 hammer; nom. < -doda V
  hammer; also inyudo/dinyundo
cl.9/10
chidole/vidole LHL: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. > -chiahachiha
-HHL:L jump about

chiha/viha RL, C1:SF, N 7/8 bundle of grass; cf. lifungu/mafungu cl.5/6,
chitui/vitui cl.7/8

chihakau LH:H:L, A:S1/SF, N 7/-
misfortune

chihako/vihako LRL, C1:SF, N 7/8
hunt; nom. < -haka V hunt

chihamula/vihamula 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 LFL, A:S1/SF, N 7/8
type of basket (big)

chihau HFL, D2:H:no H, N 7/-
yao language, nature; cf. nnyau/vahau
HFL cl.1/2 Yao person

chihéko LRL, C1:SF, N 7/-
laugher; nom. < -heka V laugh

chihélo/vihelo LRL, C1:SF, N 7/8
winnowing tray

chihépo/vihépo 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; chibi
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 LH:H: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 LRL, E:S2, N 7/8
fruit

chiholo/viholo LRL, C1:SF, N 7/8
thorny thicket

chihonde LHL, A:S1/SF, N 7/-
discussion; kutaya chihonde LH
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

chihuku/vihuku 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 chihundu/vihundu
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

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. < -hvina V walk

chijembre/vijembre LH:H:L, E:S2, N 7/8
razor

-chika -H:L, V draw borderline

chikapu/vikapu LFL, B:S1, N 7/8
basket

chikatape 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

chokokwa/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 LFL:L, A:S1/SF, N 7/8 type of trap (rope, to trap birds)  
chikuti/vikutu LH:L, A:S1/SF, N 7/8 pleiades  
chikuti/vikutu LH:L, A:S1/SF, N 7/8 circle around the sun, moon  
-chila -HH:L, V establish sth. new  
chilakali/vilakali LHFL, B:S1, N 7/8 tonsil  
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 7/8 night; also uhuiku cl.14  
chilolo/vilolo HRL, C2:H:SF, N 7/8 mirror; pane of glass; pl. eyeglasses; nom. -<jola 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. -<jola 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 -HH: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/vammatambwe 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 chimbwahedi/vimbwahedi HHH:L cl.7/8  
chimbwahedi/vimbwahedi HHH:L, A:S1/SF, N 7/8 shadow (of people); also chimbwahedi/vimbwahedi HHH:L cl.7/8  
chimbwimbi HRL, C2:H:SF, N 7/- swampy soil  
-chimula -HH:L, V open, unfasten; sep. < -chima -HH: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/- Mwerwa language, nature; cf. mmwela/vamwela HFL cl.1/2 Mwerwa person
chimwemwe L:LL., D1:no H, N 7/- joy
chinanda/vinanda HFL, D2:H.no H, N 7/8 bed
chindimi/vindimi LRL, C1:SF, N 7/8 head cloth
chindonde HFL, D2:H.no H, N 7/- Nondo dialect, nature; cf. ndonde/ vandonde HFL cl.1/2 Nondo person, kundonde L:HL 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 L:HL, 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/vengege L:HL, A:S1/SF, N 7/8 type of dance (any celebration)
chingoni LRL, C1:SF, N 7/- Ngoni language, nature; cf. nongoi/vongoi 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 LHRL, E:S2, N 7/8 calabash bottle; cf. lingungwa/ mangungwa L:HL cl.5/6 skin of calabash; cf. litikiti/matikiti cl.5/6; cf. indumba/dindumba cl.9/10
chingwalangwanga/vingwalangwanga LLLH:HL, E:S2, N 7/8 type of dance (esp. initiation); also lingwalangwanga/ mangwalangwanga LLLH:HL cl.5/6
-chinjila -HH:HL, V jump (long); cf. -uluka, -chitika, -dang’a
chinnima HHFL, D2:H.no H, N 7/- Nnima dialect; cf. munima/ vannima HHFL cl.1/2 Nnima person, pannima LRL cl.16 height, high, above
china/vinu RL, C1:SF, N 7/8 thing; cf. chitukutuku/vikutukutu cl.7/8
chinumba/vinumba HFL, D2:H.no H, N 7/8 calabash (for drinking beer, unfermented drink); cf. chitumbu/ vitumba LFL cl.7/8 gourd, calabash chinyemawi/vinyemawi 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
chipansi HFL, D2:H.no H?, I perhaps; also panji FL P. panjika LH:HL 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:HL, A:S1/SF, N 7/8 sifting basket; nom. < -peta V sift
chipini/vipini LHRL, A:S1/SF, N 7/8 pin’s head in left wing of the nose (as decoration)
chipula/vipula LH:HL, E:S2, N 7/8 knife; chipula cha-nutwe LH:HL-RL circumcision knife, lit. knife of head
chiputu LRL, C1:SF, N 7/- initiation rites (girls)
chipweng’e LH:HL, 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)
chisanga/vinjina 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)
chisula/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/vswahili LLRL
APPENDIX C: VOCABULARY

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, F' build up (wall or hut, from the ground); cf. chitali/vitali LH:L cl.7/8
chitale/vitale LFL, B:S1, N 7/8 iron; also chitale/vitale LH:L cl.7/8
chitamo LRL, C1:SF, N 7/8 pre-marriage procedures
chitehi/vitehi LH:L, E:S2, N 7/8 nest (of bird)
chiteko/viteko 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 7/8 the shivers; also chitetemedi/vitetemedi LLRL cl.7/8; cf. -tetema V, -tetemela V shiver, tremble
-chitika -H:H: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
chifongo/vitifongo 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 LHHL:L, A:S1/SF, N 7/8 window; also chitanono/vitanono LHHL:L
chitowe/vitowe LH:L, A:S1/SF, N 7/8 frog
chitukutuku/vitukutuku LLHL:, 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 LH:L, H-LLLRL; cf. chinumba/vinumba HFL cl.7/8
chitumbi/vitumbi 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 LHHL L-LLLHL 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
chitunguni/vitunguni LHRL, C2:H:SF, N 7/8 type of food (with cassava)
chitundwe LL:L, D1:no H, N 7/8 anger; also chitundi LL:L cl.7/8
chituta/vituta LH:L, A:S1/SF, N 7/8 rubbish heap
chitututu/vitututu LHRL, C2:H:SF, N 7/8 motorcycle; also mmnutukasikeni/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 7/8 drizzling rains
chiumbi/viumbi LRL, C1:SF, N 7/8 screen (used in hunting)
chivalavala/vivalavala LHHL:L, A:S1/SF, N 7/8 scorpion
chivanga LRL, C1:SF, N 7/8 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
chwiduhi LHFL, B:S1, N 7/8 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. nchakra/ 
michakra cl.3/4
-chunga -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 umom H:L HRL LFH 
how are you?, vachi dachi avana 
L:H L:L HFH how are the children?
dadimila -HHH:L, V stand on toes 
dahu RL, C1:SF, I bare, naked, useless 
damila -HH:H, V mount, ascend; cf. 
-kwela
damul 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 
dekedel -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. < -dim -H:L extinguish; 
cf. -pol; cf. -itula, -tulula
dihakalawe LHHH:L, B:S1, N -/10 
gravel
dihoni L:H:L, A:S1/SF, N -/10 shame, 
modesty; kwona dihoni HH HH:L be 
as ashamed 
dilih L:H:L, A:S1/SF, N -/10 grey hair 
(of age); also imbulisa/dimbula 
cl.9/10 
dihumi LRL, C1:SF, N -/10 belch; 
kutaya dihumi LHH HHL to belch; 
cf. -tukula V belch 
dihwiyala L:H:L, A:S1/SF, N -/10 kidney 
dikadika -HHH:L, V red. tickle; also 
dukuladuka -HHHHL 
dikidi -HHH:L, A:S1/SF, A small; 
ndikidi/ndikidi LHHH:L cl.3/4, 
-indi/ndi/indi/indi LHHH:L 
cl.9/10; also -dyoko A, -amwana P 
con.; cf. kadi LRL I; predicative: 
same tones 
dima -H:L, V extinguish; cf. red. 
didima -HHL cool down, be cold 
dimba -H:L, V be black, be dark, be 
dirty; cf. -anapi P con. black 
dimbelenje LHLF, B:S1, N -/10 
half-grown, not full-grown (e.g. tree, 
forest); nnyitu wa-dimbelenje LHL 
H-HHL thicket which has stopped 
growing before reaching maturity; 
also dimba LHLF cl. -/10 
dimongo LRL, C1:SF, N -/10+3 
strength, force, power; cf. mongo RL 
cl.3 back (of body)
dinako LRL, C1:SF, N -/10 butocks 
dinembo LHHL, 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 inudo/inudo cl.9/10 
ding’opedi LHLF, B:S1, N -/10 idiocy; 
also ding’opedi LHLF cl. -/10 
dingudika -HHH:L, V coil 
dinguka -HHH: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. ukulula cl.14 miscarriage 
dinjuga LRL, C1:SF, N -/10 music 
instrument (bells worn around the 
ankle as a chain) 
dinyoka LHL, A:S1/SF, N -/10 bracelet 
disalamu LLRL, C1:SF, N -/10 
greetings; < Sw. salamu; greet 
him/her: nnyaulile/mwing’o 
disalamu dyake LLLLL/L:L LLLH
APPENDIX C: VOCABULARY

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 -HH: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 -HH: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
-dodomia -HH:L, V rob, take by force;
also -dodomia -HH:L, -kutula,
-pokonyola, -pokanyola
-dokadoka -HHH:L, V red. show
oneself by a certain way of dancing
-dolona -HH:L, V cause diarrhoea
-dong'a -HH:L, V clap hands, catch
-dovola -HHH:L, V bore; also -davola
-HH:L; cf. -tolola
-dowela -HH:L, V rely on (fellows)
-dududa -HH:L, V pulverize
-dukula -HHH:L, V tap, knock, beat (of
heart); also -papa; cf. red.
-dukuladukula HHHHHH:L tickle
-dukuladukula -HHHHH:L, V red.
tickle; also -dikadika -HHH:L
-dulumbuka -HHH:L, V become weak
and slack; cf. -divika
-duma -HH:L, V scold, rebuke; cf.
-dumila -HHH:L, groan because of
pain; also -kalipa
-dumila -HHH:L, V groan because of
pain; cf. -duma -HH:L scold; cf.
-gumila -HHH:L
-dyoko -HH:L, A:SF, A small;
ndyoko/vadyoko LLH: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
-dyolela -HHH:L, V be used to, get
accustomed; also -dyolela -HHH:L
-dyuhu -FL, V caus. revive; cf. -dyuka
-HH:L be changed
-dyuka -HH:L, V be changed; cf. -dyuhu
-FL revive

E
clo RL, C1:SF, I yes!
ema RL, C1:SF, I or; whether...or
-eka...ema H:L...RL, lit. to be...or
-endia -HH:L, V enter; also -ynjila
-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
-eneleya -HHH:L, V caus. extend,
abound; caus. < -enelela -HHH:L
spread
-enelela -HHH:L, V spread, infect; cf.
caus. -eneleya -HHH: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. -ifundisa -HHH:L
learn; cf. -bunda

G
-gong'ola -HHH:L, V push (once); also
-gang'ola -HHH:L, cf. -hingiliha
-gulugusa -HHH:L, V caus. fail (after
promise); cf. -lugusa -HFL be loose
-guma -HH:H, V beat (with hand); cf.?
app. > -gumila -HHH:L, groan
-gumila -HHH:L, V groan; ?app. < -guma
-HH:L beat (with hand); cf. -dumila
-HH:L

H
-hachila -HHH:L, V hunt for; also -hakila
-HH:L
-haha -H:L, V ferment; cf. -hahama
-HH:L be fermented
-hahama -HHH:L, V be fermented; cf.
-haha -H:L ferment
-hahula -HHH:L, V clean; cf.
-katapadya, -swelela
-haka -H:L, V hunt; cf. app. -hakila/
-hachila -HHH: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 -HHH:L, V hunt for; app. < -haka
-H:L hunt; also -hachila -HHH:L
-hamata -HHH:L, V filter, strain
-hamulila -HHH:L, V comb; also
-samulila -HHH:L; cf. chihamula/
vihamula LLLL cl.7/8 comb
-hana -H:L, V clear land for cultivation;
forge; frequently used with Pre-Final
-ang-: -hananga -HHH:L; cf.
-kang'ana, -kuluwanya, -lima
-hang'a -H:L, V be confused, be anxious
-hangalala -HHH:L, V rejoice; cf.
-tamba, -poka
-hangola -HHH:L, V sharpen teeth;
kughanola meno LHHH:H:L
-hanjila -H:L, V cut down (millet)
-hapa -H:L, V choose; also -tondola
-hapuka -HHH:L, V break off, terminate;
also -yamila, -papatula; see pass,
abate
-hapuka -HHH:L, V pass, abate; cf. ass.
-hapukanu -HHH:L separate,
divorce; see break off
-hapukanu -HHH:L, V separate,
divorce; ass. < -hapuka -HHH:L pass,
abate; break off
-hatula -HHH:L, V disengaged a trap
-haula -HHH:L, V tell, say, speak,
explain; cf. app. -haulila -HHH:H:L tell
s.o.
-haulila -HHH:H:L, V tell s.o., explain,
advice; app. < -haulu -HHH:L tell; say;
to welcome: ku-n-nyaaulila ida

ing’ande/kukaya H-H-HLHH H:L HFL/HFL lit. to tell him/her come
house/home(stead)
-haya -H:L, V grind
-heka -H:L, V; cf. chiheko LRL
cl.7/- laugh(ter)
-heka L:H, C1:SF, \ but, to the contrary;
heka vino L:H RL but, and now
-hengelela -HHH:L, V approach, draw
near; also -vandikila; cf. -pepekelia
-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 -HHH:L, V meet; tunahimana
LLRLLRL goodbye, we’ll meet again;
cf. -kodyana
-himba -H:L, V dig; harvest peanuts, all
sorts of potatoes, cassava
-hindila -HHH:L, V nod
-hinga -H:L, V bathe; cf. refl. -lihinga
-HRL bathe oneself
-hingilaha -HHH:L, V caus. push (over
and over again); cf. -gong’ola
-hinginika -HHH:L, V be sorry; also
-sikikita
-hinika -HHH:L, V cover; -hinikila
-HHH:L cover with (put a cover or lid
on sth.); also -hinika HHH:L; cf.
-hunukula -HHH:L uncover
-hinikila -HHH:L, V cover with (put a
cover or lid on sth.); cf. -hinika
-HHH:L cover; cf. -hunukula -HHH:L
uncover
-hipuka -HHH: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 -HHH:L, V be left, remain
-hodiaka -HHH: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:LL, V come from, come out, appear; also -haloka -HH:LL; cf. -uka, -huma, -oneka
-holola -HH:LL, V pull (softly); also -hola -HH:LL; cf. -uta
-homa -H:L, V pierce; kuhoma nkuchi LHH HFL to spear
-homola -HH:LL, V draw out, take out, bring to light; also -hamola -HH:LL; cf. -kohomola -HH:LL cough
-honda -H:L, V suck
-honga -H:L, V breathe; cf. chihongahonga LHH:LL I quarrelsome
-hova -H:L, V lack, get lost
-huhulila -HH:LL, V fill in (holes)
-hula -H:L, V thresh; harvest millet, peas; also -hola
-hulula -HH:LL, V be able; defeat; neut. > -hululika -HH:LL, inahululika LLLHLRL it is possible (Non-Past, SC cl.9)
-huma -H:L, V come out; cf. -holoka
-humbaila -HH:LL, V limp
-humbwa -FL, V pus. 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. -ihunda -HRL learn; cf. -fundisa teach
-hunga -H:L, V tie, fasten, fix; cf. -pambilila
-hunika -HH:LL, V cover; also -hinika -HH:LL; cf. hunukula -HH:LL uncover; cf. nom. lihuniko/ mahuniko LLRL cl.5/6 cover
-hunikula -HH:LL, V uncover, take off lid; also -hunukula -HH:LL; sep. < -hunika -HH:LL, -hinika -HH:LL cover; cf. -hunikila -HH:LL cover with
-hunukula -HH:LL, V uncover, take off lid; also -hunukula -HH:LL
-huva -H:L, V have problems; cf. -banika, -tunduwila
-huvilila -HH:LL, 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 LHH:LL L HRL his mother died; cf. -hapuka; cf. -achihwango P con.
hwee uHRL, C2:HF, P subst. we; uhwee wHFL (emphatic)
-hwena -H:L, V go; cf. red.
-hwenahwena -HH:LL walk; cf. nom. chihwene/vihwene LRL cl.7/8 gait
-hwenahwena -HH:LL, V red. walk; red. < -hwena -H:L go; cf. -kwonga
-hwika -H:L, V arrive; also -komola; cf. -hwikanila -HH:LL reach
-hwikanila -HH:LL, V reach; cf. -hwika -H:L arrive; -hwikanilana -HH:LL reach one another

I

-hogo -H:L, V come; -da nahoti L:L LHH:LL come first
-hiwa -H:L, V bring; lit. come with -idopa -HH:LL, V be heavy
-ihango/dihango LRL, C1:SF, N 9/10 divining board; incantation (spoken by sorcerer); kulola/ku-la-uda
ihango LHH:LL-H:LL HH:LL to divine, lit. to look at/to ask them (cf.6, probably referring to 'words') the divining board
ihato/dihato LHL, A:S1:SF, N 9/10 python; species oriented; also ihatu/dihatu LHL cl.9/10; individualized: uhatu/ahatu, uhatu/ahato LH:L cl.1A/2A
ihikidi/dihikidi LHL, B:S1, N 9/10 desire; also tama cl.9c-; cf. lukou cl.11-
himba/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 LRL, 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
ikana va LL: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)
ikiya/dikinya LL:L, D1: no H, N 9c/10c mouth; sg. also kanyi 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 -I 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/dimbulu 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
imbeleko/dimbeleko 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
imbulu/dimbulu 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
imbutuka/dimbutuka LLRL, C1:SF, N 9/10 antelope spe. (klipspringer); species oriented; individualized:
  umbutuka/ambutuka LLRL cl.1A/2A
imbwe/dimbwe LL:L, D1:no H, N 9/10 cataract (of the eye)
imbwilimbwindi/dimbwilimbwindi LLHRL, C2:H, SF, N 9/10 termite spe. (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)
inete/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 LH:LL N6 + N5
  -imila -HH:L, V stand
imiliili/dimiliili LHHL:L, B:S1, N 9/10 pepper
iminda/diminda LRL, C1:SF, N 9/10 knob of suger cane
imindii/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)
  -imu -HH:L; morning greeting:
  uvenkwimuka LLLLHFH; greet them:
vaudye chivainwike nelo LLL
LHILL 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
imunda LH:HH:L to get a clear head
imwedo/dimwedo LRL, C1:SF, N 9/10 pea
inamibili/dinamibili LHFL, B:S1, N 9/10 partridge; species oriented; individualized:
  unamibili/anamibili 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/LHHL:L, N 9/2A+ centipede sp.
indege/dingege 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. litikititi/matikititi cl.5/6, chingungwa/ingungwa 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, liuwa/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
ineti/dineti L:J, 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 L:J, L:J, E:S2, N 9/10 other side (e.g. of river, valley), beyond; pang’ambo L:J, cl.16
Mozambique
ing’ande/ding’ande L:J, L:J, E:S2, N 9/10 house; augm.: likande/makande L:J, cl.5/6; also inyumba/dinyumba cl.9/10; cf. libanda/mabanda cl.5/6
ing’anga/ding’anga L:J, A:S1/SF, N 9/10 guinea-fowl; species oriented; individualized: ung’anga/ang’anga L:J, 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 L:J HFL why, lit. what kind of reason; cf. maika i, liyongo/mayongo cl.5/6
ing’avanga/ding’avanga L:J, L:J, B:S1, N 9/10 dog; species oriented; individualized: ung’avanga/ang’avanga L:J, cl.1A/2A
ing’oha/ding’oha L:J, L:J, E:S2, N 9/10 digging stick
ingokwa/dingokwa L:J, A:S1/SF, N 9/10 stone of mango
ing’okwe/ding’okwe L:J, L:J, 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’onbe/ding’onbe LRL, C1:SF, N 9/10 cow; species oriented; individualized: ung’onbe/ang’onbe LRL cl.1A/2A
ing’ondo/ding’ondo LFL, B:S1, N 9/10 quarrel, war
ing’ondo/ding’ondo L:J, L:J, A:S1/SF, N 9/10 lizard sp. (big, living on land); species oriented; individualized: ung’ondo/ang’ondo L:J, cl.1A/2A
ingondolo/gingondolo L:J, L:J, L:J, E:S2, N 9/10 forest (area with many trees)
ing’oo/ding’oo LFL, C1:SF, N 9/10 banana; often heard as ing’owo/ ding’owo LFL; 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 L:J, L:J, L:J, cl.1S, N 9/10 round stone (for smoothening surfaces, e.g. pots)
inguluve/dinguluve L:J, L:J, L:J, C1:SF, N 9/10 pig; species oriented; individualized: unguluve/anguluve L:J, 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 L:J, L:J, A:S1/SF, N 9/10 bean sp.; ing’unde ya-chimahe/ding’unde dyu-chimahe L:J, H-L:J the small species, lit. female bean(s)
ing’ung’uni/ding’ung’uni L:J, L:J,
APPENDIX C: VOCABULARY

A:S1/SF, N 9/10: bed bug; species oriented; individualized: ung’ung’uni/ung’ung’uni LHH:L cl.1A/2A

ingunya/dingunya 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 LHH:L cl.1A/2A; ungwangwalati/vangwangwalati LHH:L cl.1/2

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

injalalu/dinjalalu LHH:L, A:S1/SF, N 9/10: ant sp. (big, red); species oriented; individualized: unjalalu/anjalalu 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

injunga/dinjunga LH:L, A:S1/SF, N 9/10: bicycle; also basikeli/dibasikeli cl.9c/10c

ininji/dininji LL:L, D1:no H, N 9/10: type of fence

-injipala -HHH:L, V be short; also -ipika: cf. -nananiphi P con. short

-injipika -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

inudo/dinudo 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 HFL, 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 LHL, 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 LHHL, 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 H H:HL lit. feel thirst, -ve na-inyota -H L:HL:HL lit. be with thirst (Pres.Perf. of -va be); cf. -yuma V be thirsty
inyuchi/dinyuchi L:HL, A:S1/SF, N 9/10 honey-bee; species oriented; individualized: unyuchi/anyuchi L:HL 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 tail (implement of divination)
inyundo/dinyundo LRL, C1:SF, N 9/10 hammer; cf. Sw. nyumba; see chidolo/vidolo cl.7/8
-IPA -H:L, V cut grass
-IPIKA -HH:L, V be short; also -INJIPALA; cf. -ANANJJIPI 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/ISUNGU LFL, B:S1, N 9/10 spirit, heart, soul
ISUNGULA/ISUNGULA LHLR, C2:H:SF, N 9/10 hare; species oriented; individualized: usungula/asungula LHRL cl.1A/2A
ISUNGULA/ISUNGULA LHLR, C2:H:SF, N 9/10 poles
ISUVI/DISUVI LFL, B:S1, N 9/10 leopard; species oriented; individualized: usuvu/asuvu 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 LHL, E:S2, N 12/13 not yet full-grown chicken
kala RL, C1:SF, I formerly, the past; also TANGU I
-kalala -HHH:L, V be bitter; KUKALALA
ISUNGU LIHHH HFL cruel spirit (reply to question “how are you”; reply in Sw.: mambo mabaya)
-kalumuka -HHH:L, V be clever, be cunning
-kalanga -HH:L, V fry; cf. Sw. kaanga; see -KALUMA: refl. > -UKALANGA
-kalava -HHH:L, V wash (hands); KUKALAVA MUKAKO HHH HHH:L lit. wash in hands
-kalewa -HFL, V pas. get drunk; also -KELEWA -HFL
-kalipa -HH:H, V scold, rebuke; also -DUMA
-kama -HL, V get tied, curdle; cf. -KAMATA -HHH:L mould, -KAMULA -HHH:L seize, -KAMILA -HHH:L squeeze
-kamasana -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 -HHH:L, V mould; cont. < -KAMA -HL get tied; cf. -UMBA, -MUNYA
-kameka -HHH:L, V know, understand,
recognize; nikakameka -HH: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/LLLFL, E:S2, N 9c/10c lamp
-kanga -H:L, V be scattered abroad
kanga/dikanga RL/LRL, Cl: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’an -H:L, V hoe (a field); cf. -kuluwanya, -hana, -lima
kanya/dikanya L:L/LLL:L, D1:mo H, N 9c/10c mouth; sg. also ikanya LL:L cl.9c
-katapadya -HHH:L, V caus. prepare, arrange, put in order, clean; caus. < -katapala -HHH:L be good, beautiful
-katapadya -HHH:L, V caus. decorate; also -lemba; see prepare
-katapala -HHH:L, V be good, be beautiful; cf. -ambone P con. good; cf. caus. > -katapadya -HHH:L, prepare, arrange, put in order, clean; cf. chikatapele LHLHFL, V fin. good, fine, beautiful
kavila LHL: A:S1/SF?, I again; also kuvila LHL: cf. -vili -RL A two; cf. uvila LFL thus, so, as follows
kaya/dikaya H:L/LHL:L, E:S2, N 9c/10c homestead, village; cf. kumayaya LLLL:L cl.17
-kedekeda -HHH:L, V be troubled
-kelewia -HFL, V pas. get drunk; also -kalewa -HFL
-kimbila -HH:L, V drink; also -kumbila -HH:L
-kocha -H:L, V poke into
-kodidiyana -HFL, V caus. find; app. < -kodya -FL meet, come across, find
-kodola -HH:L, V circumcise; also -kadola -HH:L; cf. -yaluka, ngaliba/vangaliba cl.1/2 s.o. who circumcises
-kodya -FL, V caus. boil, put on fire; also -yaukidiyana, -chemusa boil; cf. -yaula, -yaukila, -tokota, -tiniha; see meet
-kodyana -HFL, V meet, come across, find; ass.> -kodyana -HFL meet each other; app.> -kodidiyana -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
-koleda -HFL, V caus. kindle fire; also -kumbanya
-kolodya -HFL, V caus. be enough, be sufficient; also -kalodya -HFL; cf. -injipika
-koloma -HHH:L, V snore
-kolovolta -HHL: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 -HHH:L, V be old, healthy and strong; also -kamala -HHH:L; cf. -lama, -jongopala, -atanga P con. old, -achinyakala -LHLHFL 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. -koma:la; cf. -atangu P con. old, -achinyakala P con. old, of past
-kongovela -HHH:L, V crow (cock); also -kangovela -HHH:L
-konidiya -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 H: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 LHL, 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: kuvelaka

-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/mikutungwa LHFL cl.3/4, ing’ulungwa/ding’ulungwa LHFL cl.9/10; cf. -tumbula V be big, be fat; predicative: same tones

-kulupidiya -HHH:L, V caus. raise s.o.’s hopes; caus. < -kulupila -HHH:L trust s.o., hope
-kulupila -HHH:L, V trust, hope; also -kulupiliila -HHH:L; cf. caus.

-kulupidiya -HHH:L raise s.o.’s hopes
-kuluvu -HH:L, V glide, trickle, slide along (esp. water through a channel)
-kuluwanya -HHH: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,

-unambambu 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 -HHH:L, V incite
-kumbanya -HFL, V caus. kindle fire; also -koleda

-kumbila -HH:L, V drink; also -kimbila

-kumbukila -HHH:L, V remember, think

-kumbula -HHH: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 L(L):L, E:S2, N 17 lower parts of Plateau; western direction (and land located there); cf. ndondonde/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 -HHH:L, V stub oneself (esp. toe)
kuvila L(L):L, A:S1/SF?, I again; also kavila L(L):L; 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 LLL: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- H-, P at the persons’ place; followed by names of persons, titles or kinship terms (of more than one person): kwanga vantanda HH HHL 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 discomfotred; 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 L LL:L not being able to speak, lit. the voice which lies down
-laleba -HFL, V caus. be sweet (taste)
-lama -H:L, V recover; live/exist long; cf. caus. -lamya -FL cure; cf. nom. ulama LLL: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 -HHH:L, V deceive, lie; cf. refl. -lilambila -HHL RL 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
-langudy -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)
-launka -HH:L, V turn
-lavanyu -HFL, V caus. lie; cf.
nankalavany/achadankalavany LLLLL/LHLLLLFL cl.1a/2A+ liar
-legeya -HH:L, V be loose; cf. Sw.

-lugusa

-levu -H:L, E:S2, A long, tall, high;
nnehu/milehu LH:L cl.3/4, indehu/
dindehu LH: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. -lekelele -HHH:L omit, neglect, -lekanila -HHH:L be different

-lekanila -HHH:L, V be different; cf.
-leka -H:L leave, -lekelele -HHH:L omit, neglect

-lekelele -HHH:L, V omit, neglect.
leave (in a certain condition); app. +

-selaka -H:L leave; cf. -lekanila

-selela -H:L, V rear (a child)
-selaka -HH:L, V be obedient
-selma -H:L, V decorate; also

-katapadya; see get ripe, put medicine..., write

-selma -H:L, V ripen (of papaya, mango, not of banana); see put medicine..., decorate, write

-selma -H:L, V write; also -yandika;
see get ripe, put medicine..., decorate

-selma -H:L, V put medicine on wound with finger; see get ripe, decorate, write

-selma -HH:L, V want, like, desire,
wish, look for; also -lembela -HHH:L;
cf. -tamwa; app. -lembela -HHH:L
look for; welcome: nakulembela
uide kukaya LLLLL LLL HFL lit. I wish you to come home

-lembela -HHH:L, V look for; also

-lambelela -HHH:L; app. < -lembela

-HH:L want, like, etc., look for; cf.

taha, -lolea

-lembula -HHH:L, V mock, ridicule, gossip

-lemwa -FL, B:S1, A idle; nnemwa/
milemwa LFL cl.3/4, indemwa/
dinemwa LFL cl.9/10; cf. nom.
ulemwa LFL cl.14 idleness, laziness;
cf. -lisinga V be idle; predicative:
same tones

-linga -H:L, V slice; harvest (cassava)

-lepto -H:L, V be long; also -lepela

-HH:L; cf. -lehu

-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 LLLLH:L,
E:S2, N 5/6 blanket

-lichehe/michehe LRL, C1:SF, N 5/6
type of storage of produce (plaited of grass)

-licha/michela LHFL, B:S1, N 5/6
harvest time; also nchela/michela
LFL cl.3/4

-licha/michela LLRL, C1:SF, N 5/6
wildcat sp.

-lchililinya -HHH: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
licingilo/madingilo LRL, C1:SF, N 5/6 rope for building
lido RL, C1:SF, N 5/- yesterday
liduva/maduva LHL, A:S1/SF, N 5/6 sun, day (daytime); liduva kuswa LHL H:L all day long
-lieuga -HRL, V refl. congeal
-lifundisa -HHHL,L, V refl./caus. learn; < Sw. -jifundisha; refl. <-fundisa -HFL teach; see -liyedya; cf. -liunda
 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. <-iya 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
lihala/mahala LLL:L, D1:no H, N 5/6 anvil
lihamba/mahamba LRL, C1:SF, N 5/6 leaf; cf. namahamba LHL cl.1a snake sp. (big, green)
lihame/mahame LHL, E:S2, N 5/6 abandoned homestead
lihanga LLRL, C1:SF, N 5/7 white soil
lihanga LHHHL:L, B:S1, N 5/7 crowd of celebrating people; palihanga LHHHL:L cl.16+5 place of gathering during celebrations
lihanja/mahanja LLL:L, D1:no H, N 5/6 pot (for cooking); also chiteleko/ viteleko, chiteleko/viteleko cl.7/8
lihichi/mahichi LRL, C1:SF, N 5/6 stump, trunk of a fallen tree
lihiku/mahiku LHL, A:S1/SF, N 5/6 day (24 h); also lisiku/masiku LH:L cl.5/6
lihinda/mahinda LHL, A:S1/SF, N 5/6 honey comb
lihindili/mahindili LHLF, B:S1, N 5/6 cooking stone
-lihinga -HRL, V refl. bathe oneself; refl. <-hinga -H:L bathe
lihiye/mahiye LHL, A:S1/SF, N 5/6 locust; also lipalangula/mapalangula cl.5/6, nampalangula cl.1a
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 5/7 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. < -hunik V cover
lihuta/mahuta LH:L, A:S1/SF, N 5/6 oil; sg. used for oil from animals
-lihwang’anidya -HHL:L, V refl. caus. smear; also -lipakala
lijamanda/majamanda LLFL, E:S2, N 5/6 sifting basket (round, small)
lijkiko/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 LHL 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 -HHL:RL, 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
liking’we/making’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
likukulu/makukulu 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 LLL: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
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>likutu</em></td>
<td>type of drum (big, esp. used at boy’s initiation)</td>
</tr>
<tr>
<td><em>likutukutu</em></td>
<td>type of drum (big, esp. used at boy’s initiation)</td>
</tr>
<tr>
<td><em>livelu</em></td>
<td>type of drum (big, esp. used at boy’s initiation)</td>
</tr>
<tr>
<td><em>likuwa</em></td>
<td>type of drum (big, esp. used at boy’s initiation)</td>
</tr>
<tr>
<td><em>likwanda</em></td>
<td>leaves of maize plant</td>
</tr>
<tr>
<td><em>likwilwi</em></td>
<td>leaves of maize plant</td>
</tr>
<tr>
<td>-lila</td>
<td>-H:L, V cut navel string; cry</td>
</tr>
<tr>
<td>-lilambila</td>
<td>-H:LRL, V refl. pretend; refl. &lt; -lambila -HH:L, deceive; cf. -twesa</td>
</tr>
<tr>
<td>-lilaude</td>
<td>-HRL, V refl. eat first products of new crop</td>
</tr>
<tr>
<td>-lilava</td>
<td>-HRL, V refl. get up early</td>
</tr>
<tr>
<td>-lileha</td>
<td>-HRL, V refl. get up early</td>
</tr>
<tr>
<td>-lima</td>
<td>-H:L, V cultivate; cf. nom.</td>
</tr>
<tr>
<td>-nkulima</td>
<td>farmer; cf. -kang’ana, -hana,</td>
</tr>
<tr>
<td>-nunthu</td>
<td>may be used at boy’s initiation; cf. -nunthu</td>
</tr>
<tr>
<td>-limbendye</td>
<td>-HFL, V caus. forbid, refuse s.o.</td>
</tr>
<tr>
<td>-limbende</td>
<td>-HFL, V caus. forbid, refuse s.o.</td>
</tr>
<tr>
<td><em>lime</em></td>
<td>-H:L, D1:no H, N 5/- dew</td>
</tr>
<tr>
<td><em>limuka</em></td>
<td>-HH:L, V behave with respect, dignity; cf. -kungumika</td>
</tr>
<tr>
<td><em>lina</em></td>
<td>-H:L, B:S1, N 5/6+ name</td>
</tr>
<tr>
<td><em>linadi</em></td>
<td>-E:S2, N 5/6 skin of coconut</td>
</tr>
<tr>
<td><em>linadi</em></td>
<td>-E:S2, N 5/6 skin of coconut</td>
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<td><em>linadi</em></td>
<td>-E:S2, N 5/6 skin of coconut</td>
</tr>
<tr>
<td><em>linaya</em></td>
<td>-H:L, V wait</td>
</tr>
<tr>
<td><em>linda</em></td>
<td>-H:L, V wait</td>
</tr>
<tr>
<td><em>lindima</em></td>
<td>-HH:L, V make a loud noise; thunder; cf. -valula</td>
</tr>
<tr>
<td><em>lindimuka</em></td>
<td>-HHH:L, V begin, start; cf. -tandilika</td>
</tr>
<tr>
<td><em>lindunya</em></td>
<td>-E:S2, N 5/6 blunt cutting tool</td>
</tr>
<tr>
<td><em>linga</em></td>
<td>-H:L, V try, attempt</td>
</tr>
<tr>
<td><em>lingong</em></td>
<td>-H:L, D1:no H, N 5/6 type of fence</td>
</tr>
<tr>
<td><em>lingoto</em></td>
<td>-E:S2, N 5/6 type of ndimu dance</td>
</tr>
<tr>
<td><em>lingungwa</em></td>
<td>-H:L, E:S2, N 5/6 skin of calabash; cf. chingungwa/vingungwa</td>
</tr>
<tr>
<td><em>lingungwe</em></td>
<td>-H:L, A:S1/SF, N 5/6 bow; also upinde/mapinde</td>
</tr>
<tr>
<td><em>lingupa</em></td>
<td>-H:L, C1:SF, N 5/6 centipede sp.</td>
</tr>
<tr>
<td><em>lingwango</em></td>
<td>-H:L, E:S2, N 5/6 type of dance (esp. initiation); also chingwango/vingwango</td>
</tr>
<tr>
<td><em>lingwangula</em></td>
<td>-LHL, E:S2, N 5/6 type of dance (esp. initiation); also chingwango/vingwango</td>
</tr>
<tr>
<td><em>lingwele</em></td>
<td>-H:L, E:S2, N 5/6 monkey (Sw. nyani)</td>
</tr>
<tr>
<td><em>lino</em></td>
<td>-H:L, A:S1/SF, N 5/6 tooth</td>
</tr>
<tr>
<td><em>linoha</em></td>
<td>-H:L, B:S1, N 5/6 liver</td>
</tr>
<tr>
<td>-linowa</td>
<td>-HRL, V refl. be proud of oneself, boast; refl. &lt; -nowa -H:L, be sweet, pleasant</td>
</tr>
<tr>
<td>-lisyindwa</td>
<td>-HRL, C2:H.SF, N 5/6 tomato</td>
</tr>
</tbody>
</table>
-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 -H:LRL, V refl. smear; also
-­lihwang’anidya
lipalangula/mapalangula LLLRL, C1:SF, N 5/6 locust; nom. <
-palangula V hop; also
nampalangula LLLRL 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 LLLRL, E:S2, N 5/6 brown snake sp. (big, colours white, black and yellow)
lipela/mapela LFL, B:S1, N 5/6 guava
lipaleko/mapaleko LLH:L, A:S1/SF, N 5/6 medicine; nom. < -peleka V do witchcraft; cf. etela/mitela cl.3/4
liplepenpe/mapelepenpe LHHH,L, A:S1/SF, N 5/6 grass sp.
liplepenpe/mapelepenpe LHHH:L, A:S1/SF, N 5/6 cockroach
lipenesi/mapenesi LLLRL, 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 -H:LRL, V refl. crouch; refl. < -pinda -H:L bend
lipindi/mapindi LRL, C1:SF, N 5/6 loin-cloth
lipinji/mapinji LHL, C1:SF, N 5/6 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
liputila/maputila LLLRL, E:S2, N 5/6 type of trap (rope, to trap small bush animals)
-lipwelela -H:LRL, V refl. be restless, feel uncomfortable; also -lipwalela -H:LRL
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
lisuvela 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’unu A chew
litano/matano LRL, C1:SF, N 5/6 lid (of pot)
-litapa -HRL, V refl. boast; also -tapa -H:L
litatoli/matatoli LLLFL, 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 LHL, 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
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/matoke LFL, B:S1, N 5/6
testicle; also chitoko/vitoko LFL
cl.7/8, inongo/dinongo cl.9/10
litope/matego 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
-litwala -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/mauini 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 liuwa/
mauwa LRL; see induva/dinduva
cl.9/10
livala/mava LHL, 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 -HHH:L, V tread on, put food on;
also -luvata -HHH:L; cf. livata/
mavata LRL cl.5/6 tread
livata/mavata LRL, C1:SF, N 5/6 tread;
also -livata V tread on
livavi/mavavi LH:L, A:S1/SF, N 5/6
caterpillar
livele/mavle 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
-liyamilita -HH:L, 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
-liyedya -HFL, V refl. caus. learn; refl. < -yeda -FL taste; imitate; refresh; also -ifundisa; cf. -ihunda
liyembe/mayembe LRL, C1:SF, N 5/6 hoe (small)
liyeni/mayeni LRL, C1:SF, N 5/6 gift, present; cf. nyeni/vayeni LRL cl.1/2 guest, stranger
liyongo/mayongo LRL, C1:SF, N 5/6 reason, cause; cf. ing’anya cl.9/-
-maika 1
liyonjio/mayonjo LH:L, E:S2, N 5/6 broken thing, potsherd
-liyuva -HRL, V refl. change skin, peel
liyuuwu/mayuuwu 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, -lolanah -HH:L move fro and to (eyes); cf. chilolo/vilolo HRL/LL:L cl.7/8 mirror
-lolanah -HH:L, V move to and fro (of eyes); ass. < -lola -H:L look at
-loleha -HHL:L, V caus. look for, search; caus. < -lola -H:L look at; also -taha; cf.-lolehidya -HH:L observe, notice; cf. -lembela, -lembelela
-lolehidya -HHL:L, V caus. observe, notice; appl. < -loleha -HFL look for, search; cf. -tumba
-loloha -HH:L, V grumble, speak in oneself; also -tongidika
-lomba -H:L, V marry (of man); cf. -lombwa -FL marry of woman;
-nkulomba/vakulomba LHFL cl.1/2 bridegroo
-lombolela -HHHL:L, V applaud, recommend sth.
-lombwa -FL, V pas. marry (of woman); pas. < -lomba -H:L marry of man;
-nkulomba/vakulomba LHFL cl.1/2 bride
-londa -H:L, V be true, be effective (medicine)
-londola -HHHL:L, V follow; reap; also -landola -HHHL:L; cf. -papata
-longa -H:L, V sue; cf. ass. -longana -HHHL:L reclaim
-longana -HHHL:L, V reclaim; ass. < -longa -H:L sue; see accompany
-longana -HHHL:L, V accompany; see reclaim
-longoleida -HHHL:L, V caus. send on in advance, put forward; caus. < -longolela -HHHL:L guide
-longolela -HHHL:L, V guide, go ahead; cf. caus. -longoleida -HHHL:L put forward
-lonjela -HHHL:L, V talk, converse; cf. Sw. -ongea; cf.nom. > lilonjedi/ malonjedi LLRL cl.5/6 saying; see
-kunguluka
-lopola -HHHL:L, V grope about; also -lapola -HHHL
-lota -H:L, V dream
-lova -H:L, V get wet, be soaked
-lovela -HHHL: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)
-lucheche/dinyeche LFL, B:S1, N 11/10 stalk (of the smaller kind of grains)
luchiya/dinyyiya LH:L, A:S1/SF, N
The text is a vocabulary list with entries such as:

- **root**
- **OXGRGRPDGRGR**
- **LH:L, E:S2,**
- **1 leg**
- **OXJXVD-HFL,**
- **9FDXV be loose; also**
- **OHJH\D,**
- **ODJH\D,**
- **\HJH\D; cf.**
- **JXOXJXVD-HHL:L fail (after promise)**
- **OXKDOHORGLKDOHOR LLRL,**
- **C1:SF,**
- **1 valley; cf.**
- **OXKXQGHGLKXQGH cl.11/10**
- **OXKHQJRGLKHQJR LRL,**
- **C1:SF,**
- **1 passage (e.g. through a forest)**
- **OXKLFKLGLKLFKL LRL,**
- **C1:SF,**
- **1 house post**
- **OXKLPRGLKLPR LH:L, A:S1/SF,**
- **1 song; also**
- **OXKLPXGLKLPX LH:L cl.11/10**
- **OXKROHGLKROH LRL,**
- **C1:SF,**
- **1 uncleared space in field**
- **OXKXQGHGLKXQGH LRL,**
- **C1:SF,**
- **1 valley, river; cf.**
- **OXKDOHORGLKDOHOR cl.11/10**
- **OXND-H:L,**
- **9 twist, plait; cf.**
- **SRWD,**
- **SRSRWD**
- **OXNDORQJRGLQJ¶DORQJR LLRL,**
- **C1:SF,**
- **1 throat**
- **OXNDVXGLQJ¶DVX LFL,**
- **B:S1,**
- **1 calabash (for eating)**
- **OXNRGLQMXNR RL/LRL,**
- **C1:SF,**
- **1 ladle, spoon**
- **OXNRPEHGLQJ¶RPEH LFL,**
- **B:S1,**
- **1 fingernail**
- **OXNRSHGLQJ¶RSH LH:L, A:S1/SF,**
- **1 eyelash**
- **OXNRWR HFL,**
- **B:S1,**
- **1 afterwards, later**
- **OXNRX LH:L, A:S1/SF,**
- **1 lust,**
- **cf.**
- **LKLNLGLGLKLNLGL cl.9/10,**
- **WDPD cl.9c/-**
- **OXNXNXWXGLQJ¶XNXWX LHH:L,**
- **A:S1/SF,**
- **1 snake sp. (long, brown)**
- **OXNXPELGLQJ¶XPEL LL:L,**
- **D1:no H,**
- **1 assembly, court;**
- **kupelekedya**
- **malove kulukumbi LHHLL HHLL**
- **LLL:L to accuse, lit. to send words to**
- **the assembly, court**
- **lukundu/ding’undu LFL,**
- **B:S1,**
- **1 private part**
- **lukuni/ding’uni LH:L,**
- **A:S1/SF,**
- **1 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/dinombo 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 (shriill scream)**
- **-luma -HL, V bite; cf.**
- **lumila -HH:L eat fryed fish or roasted meat...**
- **luma/dinduma RL/LRL,**
- **C1:SF,**
- **N 11/10+ crack**
- **-lumba -HL, 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 -HL, -lumbila -HH:L**
- **-lumila -HH:L, V eat fryed fish or roasted meat without steaming (ugali/soup); cf.**
- **-luma -HL 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 -HH:H: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)
lupolondo/dimolondo 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. klipspingsers)
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 LH HH 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 LLLRL, 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
luunjii/dimunjii LH:L, E:S2, N 11/10 cleared thicket (before being cultivated)
-luvala -HH-L, V forget; app. > -luvalala -HHHL: L forget sth. or s.o.
lualvalala/dimalvalala LLLHHL, B:S1, N 11/10 kind of sticks (long and thin)
luvale/dimbale LRL, C1:SF, N 11/10 sweet sp. potato (tall)
-luvalila -HHHL: L you should not forget me; also -livalila -HHHL:
luvata -HH-L, V tread on, put foot on;
also -livata -HHHL:
luvau/dimbau LRL, C1:SF, N 11/10 rib
luvoo/dimboo(?) LH:L, A:S1/SF, N 11/10 bee poison
luwalahanjii/dimbwalahanjii LHHL:L, B:S1, N 11/10 small piece of firewood; cf. lukuni/ding’uni cl.11/10
luwali/maluwali LFL/LFL, 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/dimungo 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/LHL, A:S1/SF, N 11/10 net
lwayo/dinjayo RL/LRL, C1:SF, N 11/10 track
lwidii/dinjwidi RL/LRL, C1:SF, N 11/10+ door (traditional, made from millet stalks); cf. nnanco/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/malymbi RL/LRL, C1:SF, N 5/6+ mat (made of plants); also likande/makande cl.5/6
lyenyi/malenyi RL/LRL, C1:SF, N 5/6+ forehead
lyohi H:L, A:S1/SF, N 5/- smoke
Mabatí LFL, B:S1, N ~6 type of hair dressing (with pigtail)
machëdo LHL, A:S1/SF, N ~6 last year; machëdo pala LHH LH:L year before last year, some time past
machënga LH:L, E:S2, N ~6 type of dance (women’s)
machili LFL, B:S1, N ~6 soot
madüdi LFL, B:S1, N ~6 day before yesterday; madüdidüdi LHHL:L cl. -/6 some days ago
madüdidùi LHHL:L, B:S1, N ~6 some days ago; cf. madüdi LFL cl. -/6 day before yesterday
madudu LRL, C1:SF, N ~6 type of dance (any celebration)
magómbó LFL, B:S1, N ~6 banana sp. (big)
-mahikàna -HHH:L, V’ be known
maiaka LRL, C1:SF, / since, because; cf. ing’anya cl.9/-, iyongo/mayongo cl.5/6 reason, cause
-maila -HH:L, V please, make beautiful, suit; cf. -takàta
majojoli LHHL:L, A:S1/SF, N ~6 saliva; also mata cl.6
makàka LFL, B:S1, N ~6 dried pieces of cassava
makàna LFL, B:S1, N ~6 chaff
makólbêko LLLLRL, C1:SF, N ~6 savannah
makwêdo LFL, B:S1, N ~6 urine; cf. lukwêdo LH:L cl.11/- pain while urinating
-mala -H:L, V know; cf. -kameka:
úmale LRL (presentative) it is... lit. you should know (2 SG Optative)
malàle LFL, B:S1, N ~6 type of dance (esp. weddings)
malàngwe LLL:L, D1:no H, N ~6 initiation rites
-maila -HHH:L, V finish (tr. and itr.), accomplish
malingà LH:L, A:S1/SF?, I as, like;
also muci le
malomò LH:L, A:S1/SF, N ~6
bridewealth; cf. nkaka cl.3/-;
kùmúma malomò 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)
mangëndúla LHL:L, B:S1, N ~6 leprosy; cf. mmangëndúla/
vamangëndúla LHHL:L cl.1/2 leper
mapète 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
matàma LRL, C1:SF, N ~6 jaw
-mâtika -HH:L, V put medicine (on wound)
màtiyàala LHFL, B:S1, N ~6 police
(local, during colonial time)
mavele LH:L, A:S1/SF, N ~6 milk; see breast (female)
màvi H:L, A:S1/SF, N ~6 excrement; cf. utóhi cl.14
mbàle ngà/mbàlengà LLLL:L, D1:no H, N 3/4 hole (in lobe of ear);
-ambàlengà -LLL:L P con. pierced (ear)
mbénì 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
-méta -H:L, V sparkle, be bright
(lightning, colours of flowers)
-mèya -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 makumì likumì LHH LRL N 6 + N 5
-míla -H:L, V swallow
-mínya -H:L, V squeeze, milk; cf.
-kamila, -kàda, -chùkudùla
-misa -FL, V ‘caus. shake off
mmahle/vamahe LH:L, A:S1/SF, N 1/2
woman; < Chimaraba; see nkongwe/
vakongwe cl.1/2.

vvmakonde/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

vvmalaba/vamalaba LHFL, D2:H:no
H, N 1/2 Maraba person; cf.
chimalaba LHFL cl.7 Maraba
dialect, nature

vvmalala/vimalala LHFL, B:S1, N 3/4
tree sp.; mwa-mmala 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

vvmangundula/vamangundula
LLHL:L, B:S1, N 1/2 leper; cf.
mangundula LHFL.L cl.-6 leprosy

vvmatambwe/vamatambwe LHFL,
D2:H:no H, N 1/2 Matambwe person;
cf. chimatambwe LHFL cl.7
Matambwe dialect, nature

vvmbiwla/vimbilwa LL:L, D1:no H, N
3/4 tree sp.; limbilwa/vambilwa
LL:L cl.5/6 its fruit
(imbilwa/dimbilwa LL:L cl.9/10
kernel or stone)

vvmbweha/vimbweha HRL, C2:H, SF,
N 3/4 shadow (of things)

vvmidi/vamidi HFL, D2:H:no H, N 1/2
people outside the family

vmilandi/vamilandi LHFL, D2:H:no
H, N 1/2 traditional doctor; cf.
milandi LHFL cl.4 trees; also
vmilitela/vamilitela cl.1/2+

vmili/vimili LRL, C1:SF, N 3/4 body

vmili/vimili LHFL, B:S1, N 3/4 plaited
piece in mat where two lengths come
together

vmilitela/vamilitela LHFL, D2:H:no H, N
1/2+ traditional doctor; cf. mitela
LH:L cl.4 medicines; also vmilandi/
vamilandi cl.1/2+

mmogo/mymogo LHFL/LF, B:S1, N 3/4
cassava

mmongo/avongo HRL, C2:H, SF, N
1/2 enemy; mmongo

mwangu/avongo mwangu HHRL
my enemy/enemies

mmula/miwula LH:L, A:S1/SF, N 3/4
tree sp.; liwula/mawula LH:L cl.5/6
its fruit (imbusa/dimbusa 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
LLHLFL, N 3/4 motorcycle; also
chitutu/vitutu cl.7/8

mmuwu/miuvu 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

mungo/myongo RL, C1:SF, N 3/4 back
(of body)

mooto/myooto LF, E:S2, N 3/4 fire

-moto /-HFL, V caus. fell, knock
down; also -matoha -HFL; cf.

-motoka -HHFL, fall

-motoka -HHFL, V fall; also -matoka

-motoka -HHFL, -uwa, -yunguca; cf. -motoha

-mato /-HFL fell; cf. -patika, -patuka

-mowa -HFL, V shave, cut all hair of
head; kumowa imundu LHHL HHFL
to get a clear head; cf. -chengula

mpaneka/mipaneka LLL:L, D1:no H,
N 3/4 type of hair dressing; cf.
-pene 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 LHHL, A:S1/SF,
N 3/4 sticks for making fire; nom. <
SHNKD: make fire (by friction)

PSLQJRPLSLQJR: taboo

taboo

PSLQJRPLSLQJR: ?, N 3/4 ebony tree;
cf. Sw. mpingo/mipingo

mpini/mipini: LRL, 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 18 top, above, sky;

muha mwangu: L:H RL above me;

muha nnipyailika: LLHLRL clear sky, lit. above has been swept; cf.

pannima: cl.16 height, high, above

muhina: LH:L, E:S2, N 18 below; cf.

nniuingu: cl.16

muhiu: LH:L, A:S1/SF?, I real, right, ready; cf. mwaha

mukwe/achamukwe: RL/LHRL, C1:SF, N 1/2+ 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 18 belly; fig. inside my heart, head

munda/myunda: RL, C1:SF, N 3/4 field which has been cultivated once only

munnimava: NNimava 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: -HL, V mould, mix; cf.

-kamata, -umba

munyu: LH, 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

mutve/myutwe: RL, C1:SF, N 3/4 head

muuandu/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 18 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 LHHFL; 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. muhiu

mwaka/myaka: H:L, A:S1/SF, N 3/4 year; cf. Sw. mwaka; see

chaka/yaka: H:L cl.7/8;

cl.16 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: LHHFL/LHFL cl.1a/7 person(s) taking care of girl

mwana/vana: FL, C2:H:SF, N 1/2 child;
mwanangu: LH:L my child; mwanalo

LH:L your (sg.) child; mwanawe

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

HFL twice; hweetu m-mwanda FHL

LH:L good-bye, lit. we in (on)

journey; go on a journey; see -pita V

mwanetuvanetu: VANetu LH:L, A:S1/SF, N 1/2

younger sibling of the opposite sex;
mwanetu wangu LHH RL my

younger s., etc.

mwao/myao: RL, C1:SF, N 3/4 calabash

(för 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; **mwedí woneka** HL. LFL next month, lit. month which appears

**mweenu** HRL, C2:H.SF, *P subst.* you (pl.); **umwemwe** LFLH (emphatic)

**mwenedi/vanedi** LHL, A:S1/SF, N 1/2 fellow person; also **mwanedi/vanedi** LHL cl.1/2

**mihi/mihí RL, C1:SF, N 3/4 pestle

**mwikumba/ananikumba** HFL/LHHFL, B:S1, N 3/2A turkey sp.

**miwpwangu/vipwangu** HRL, C2:H.SF, N 1/8? my nephew, niece

**mwiwepaleka** 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.9cl-

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

**naangú HRL, C2:H.SF, P subst.** V; **unene** LFLH (emphatic)

**nachihe** LHL, A:S1/SF, N 9a- riddle; said by s.o. who begins to ask riddles; answer: **nachiwala** cl.9a-

**nachihuqo/achanavihungo** LHL/LHHHLRL, C1:SF, N 1a 2A+ snake sp. (big, very poisonous, black, rising)

**nachiwala** LHLFL, B:S1, N 9a- answer to riddle; answer to the call **nachihe** of s.o. who begins to ask riddles

**nachiswele** LHHHLRL, C2:H.SF, N 3a- grass sp.

**nachitani** LHLFL, D2:H.no H, N 3a- weed sp.

**nachitukana** LHHLHHLRL, D2:H.no H, N 3a- grass sp.

**nahaku/anamahaku** HFL/LHHFL, D2:H.no H, N 1a 2A girl (before initiation)

**nahembe** L-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

**nahotí** LHL, A:S1/SF?, I now (immediate future); **ida nahotí** L:L LH: come first; **nahotí kadíki** LHL LRL presently

**nahuhwe** LHL, A:S1/SF, N 3a- weed sp.

**nahuńdu HRL, C2:H.SF, N 3a- grass sp.

**nakadimu/achanakadimu** LHL/LHHHLRL, C2:H.SF, N 1a 2A+ goblin, orgre

**nakandunda** L-L, C1:SF, N 9a- type of drum (small)

**namádi** LRL, C1:SF, I on purpose

**namahamba/achanamahamba** LHL/LHHHLFL, B:S1, N 1a 2A+ snake sp. (big, green); cf. **mahamba** LRL cl.6 leaves

**namahí/ananahíhi** L-LHLRL, C1:SF, N 1a 2A owl

**namalove** LHLRL, N 9a- echo; cf. **malove** LHL cl.6 words

**namalutu/achanamalutu** LHL/LHHHLRL, C2:H.SF, N 1a 2A+ snake sp. (small, black)

- **namata** -HH:L, V cohere; cf. -**namatidya** -HHHL:L compel
- **namatidya** -HHHL:L, V caus. compel; cf. -**namata** -HHHL: cohere

**nambeda/ananbeda** HFL/LHLFL, 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 LHL, meaning also "especially"; also **sana** I

**nammata** HHL:L, D2:H.no H, N 9a- rash; cf. **chipéle** cl.7-

**nampalangula** L-L-H-HHLRL, C1:SF, N 1a? locust; cf. -**palangula** V hop; also **lipalangula**/mapalangula L-LHLRL cl.5/6, **líiže/máhíye** cl.5/6

**namulya** LFL, D2:H.no H, N 1a- glutton; cf. -**lyá** V eat
namwaka HFL, D2:H.no H, N 3a+ this year; cf. mwaka H:L cl.3 year
namwali/kanamwali LH:L/LLLLH: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/LHHRLL, C1:SF, N 1a+2A+ jackal; millet sp.
nataka 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 LHHL 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

nankadinumba/
achanakadinumba
LLLLLFL/LHHLHLFL, E:S2, N 1a+2A+ lizard sp. (big, living in water)
nankakatambwe/anamikakatambwe
LLLLL:LLHHLHL:L, D1:no H, N 1a+2A+ spider
nankalavanya/achanankalavanya
LLLLFL/LHHLHLFL, E:S2, N 1a+2A+ liar; cf. -lavanya V lie
nankonda/anamikonda

HHHL/LHHHL, C2:H.SF, N 1a+2A crow
nankope/anamikope HHHFL/LHHLFL, D2:H.no H, N 3a+2A cucumber
nannidi HHHL:L, D2:H.no H, N 1a+ bereaved person
nannume HHFL, D2:H.no H, N 1a+ full-grown man; cf. nnuume 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
LLLLLFL/LHHLHL:L, D1:no H, N 1a+2A+ chrysalis (stage between caterpillar and butterfly)
nantitili/achanantitili LLHHLFL/
LHHHHLFL, 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 LHHL:L; cf. -nang’o -FL P the same, the very one
nasi/dinasi H:L/LHHL, ?, N 9c/10c coconut; cf. Sw. nazi; cf.
linadi/manadi cl.5/6

nehaketa/michaketa LL:L, D1:no H, N 3/4 bead; cf. chuma/yuma 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; alsolichela/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 LLHHL RL to his/her/its left; nkono nchinda/
mikono michinda LHHL 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 LRL, C1:SF, N 18 neighbour

ndidi/mididi LHL, 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


-ndonda -HL, 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-nndule 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 -HL A small

nelo RL, C1:SF, I today

-nema -HL, V walk with swagger; also -deka

-neng’ena -HH:L, V cut (with hands); harvest (esp. millet); also -nang’ena -HH:L

-ng’ana -HL, 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 -HL, 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; yenji 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; kahumya

nkaka LHFL to pay bridewealth, lit. to make come out bridewealth

nakahamba/mikakahamba LHFL, D2:H.no H, N 3/4 calabash seed (edible); cf. imukusa/dimukusa cl.9/10


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

nkango/mikango LH:L, E:S2, N 3/4 gruel; also litatoli/matatoli cl.5/6

nkangojo/mikangojo LRL, C1:SF, N
3/4 stick (to walk with); also bakola/dibakola cl.9c/10c

nkanunu/vakanunu LRL, 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’atì L:H:L cl.7 middle, in the middle, kukatì LRL cl.17 room

nkojo/mikojo LRL, D1:no H, N 3/4 drink, not fermented (from millet, grain; Sw. togwá)
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. hurizi)
nkuchi/mikuchi LFL, B:S1, N 3/4 spear

nklu/mikuku 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;
nkulwango LHHL:my elder s.;
nkululo LHHL:your (sg.) elder s.;
nkuluwé LHHL:his/her elder s.
nkulungwa/vakulungwa LHHL, 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 LHHL:HL,
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)

nkwedu/mikwedu LH:L, A:S1/SF, N 3/4 tamarind tree

nnalu/achannalu LFL/LHHL, B:S1, N 3/4 snake sp. (of medium size, brown, yellow)
nnamu/valamu LH:L, A:S1/SF, N 1/2 brother-in-law, sister-in-law

nnandi/milandí LFL, B:S1, N 3/4 tree; also medicine, mmilandí/vamilandi LHFL cl.1/2 local doctor; cf.
nntela/mitela cl.3/4

nnanga/minanga LH:L, E:S2, N 3/4

nnangelo/milangelo LHFL, B:S1, N 3/4 water pot (small); also

nnengelo/milenelo LHFL cl.3/4

nnango/milango LRL, C1:SF, N 3/4 door; cf. Sw. mlango/milango; see lwidi/dinjwidi cl.11/10

ndanje/mindaanje LFL, B:S1, N 3/4 type of dance (esp. weddings)
nndonde/vandonde HFL, D2:H:no H, N 1/2 Ndonde person; cf. chinonde HFL cl.7 Ndonde dialect, nature,
kundoonde LH:Llower parts of the Plateau; western direction

nnemba/vanemba LRL, C1:SF, N 1/2 boy (before initiation)
nneule/mileule LHHL, C2:H:SF, N 3/4 bean plant sp. (Sw. mfiwi)
nngaliba/vangaliba LRL, C1:SF, N 1/2 s.o. who circumcises; cf. -dobola V, -yaluka V circumcise

ng’a/nda/v’anda HRL, C2:H:SF, N 1/2 master, husband; ng’a/nda

mwungu HHHL my master;

ng’a/nda mwalo HHHL your
master; nng‘anda mwa we 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
ngoni/vangoni LRL, C1:SF, N 1/2
Ngoni person; cf. chingoni LRL cl.7
Ngoni language, nature
ngwangwalati/vangwangwalati
LHHH:L, A:S1/SF, N 1/2 killer,
savage person; cf. angwangwalati/
angwangwalati LHHH:L cl.1A/2A,
ingwangwalati/dingwangwalati
LHHH:L cl.9/10 dog sp.; cf. -walala
HHH V kill
ngwee LHR, C2:H:SF, / ideophone
expressing the sunrise;
ngwee
ulyamba LFH HRL; cf. piu FH, piu
FH
nnilo/mililo LH:L, A:S1/SF, N 3/4
right; kunnilo kwake LH:H HL to
his/her/its right; nkono nnilo/mikono
mililo LHHH HH:L right hand(s)
nniungu LLRL, C1:SF, N 18 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 (ndonji/dindonji
LH:L cl.9/10 kernel or stone)
nnhuko/valuhuko LHFL, D2:H:no H,
N 1/2 mother (lying-in woman, i.e.
s.o. who has just given birth)
nnumbu/valumbu LRL, C1:SF, N 1/2
elder sibling of opposite sex;
nnumbwangu LHRL my elder s.;
nnumbuulo LHRL your (sg.) elder s.;
nnumbuwe LHRL his/her elder s.
nnuye/valume LH:L, A:S1/SF, N 1/2
man; -achilume P con. male; cf.
nnanume HHHFL cl.1a full grown man
numulanga/valumulanga LHHH:L,
D2:H:no H, N 1/2 widow
nngu/amulungu LRL/LHHH:L, C1:SF,
N 1/2 God, god
nng‘une/vanung‘une LH:L,
A:S1/SF, N 1/2 younger sibling of
same sex; nng‘unwangu LHHH:L
my younger s.; nnung‘uno LH:L.
your (sg.) younger s.; nnung‘unwe
LHHH:L his/her younger s.
nusu/milusu LRL, C1:SF, N 3/4
calabash (for storing beer)
nnuvuLLRL, C1:SF, N 18 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/mihamulilo
LHHHHL, 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/-
nnyangu/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.; nnyafo/avao their c.
nnyano LL:L, D1:no H, N 3/- five;
milandi nnyano LFL LL:L five trees,
vnu nnyano RL LL:L five things
nnyano na -no LL L RL, N 3/- + P
six; vinu nnyano na chimo RL LL:
L RL six things
nnyau/vahu LHFL, D2:H:no H, N 1/2
Yao person; cf. chihu LFH cl.7 Yao
language, nature
nnyavi/vahavi LFL, D2:H:no H, N 1/2
sorcerer; cf. uhabi 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 18 along; cf.
panyenje LH:L cl.16 beside, aside,
apart
nnyenje/vayenje LH:L, A:S1/SF, N 1/2
age-mate, friend; cf. soma/= cl.9b/10b
nnyitu/mihitu LH:L, A:S1/SF, N 3/4
dense thicket
nnyivani/vahivani LHFL, D2:H:no H,


APPENDIX C: VOCABULARY

N 1/2 cousin; nyivani mwangu LHHH H:L my c.; nyivani mwalo your (sg.) c.; nyivani mwawe his/her c.; nyivani mwetu our c., etc.

nyodi/mihodi LHL, A:S1/SF, N 3/4 tear

nyongo/mihongo LRL, C1:SF, N 3/4 snake

nyuma LRL, C1:SF, N 18 behind, after; amuno nyuma LHH LRL meanwhile; also pamongo cl.16+3, pachikhi cl.16; cf. panyuma LRL cl.16 backwards

-nonha -HFL, V caus. exceed, excel; also -nanoha -HFL; cf. -punda

-nonopa -HH:L, V be hard; also -nanopa HH:H, -komodya HFL

-nowa -H:L, V be pleasant, be sweet, enjoy; cf. refl. -liowa -HRL be proud of oneself, boast

npindo/mipindo LLL: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 nyangi HRL cl.3

nsapata/misapata LLLL:L, D1:no H, N 3/- 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

nsawahili/vasawahili LLL:L, C1:SF, N 1/2 Swahili person; cf. chisawahili LLL:L cl.7 Swahili language, nature

ntama/mitama LFL, B:S1, N 3/4 millet

ntandasa achinduli 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 LLLL:L, D1:no H, N 3/6 stiff cassava porridge; cf. ntandasa achinduli LLLL LHRL type of food

ntano/mitano LRL, C1:SF, N 3/4 story; also lutano/dinano LRL cl.11/10; kutana ntano LHH H:L to tell a story

ntavala/matavala LHFL, B:S1, N 3/6 marsh mangoose (Sw. nguchiyo)

ntela/mitela LHL, A:S1/SF, N 3/4 medicine; also used nnandi/milandi cl. 3/4 tree; cf. mmiteka/vamitela LHFL cl.1+2+ local doctor; cf. lipeleko/mapeleko cl.5/6

ntema/mitema LHL, 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.19/10 kernel or stone)

ntengu/mitengu LRL, C1:SF, N 3/4 hut for boys during initiation rites

ntesa/mitesa LLL:L, D1:no H, N 3/4 peanut

ntikulo/mitikulo LHH:L, A:S1/SF, N 3/4 padlock

ntima/mitima LHL, A:S1/SF, N 3/4 heart; cf. pantima LLL:L cl.16 abdomen

ntiini/mitiini HRL, C2:H:SF, N 3/4 pumpkin plant

ntililo/mitililo LLL:L, 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 LHHL: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 ntoto/ mitotelo LHHL:L cl.3/4

ntotelo/mitotelo LHHL: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
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)
twangu/achawu 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 ntwan HFL
-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
nuuudo - HRL, C2:H:SF, I tomorrow; also luundo - HRL cl.11
-nya - H:L, V defecate; tones with Infinitive marker
-nyakula - HH:H:L, V give birth; also -yakula - HH:H:L, -veleka; see carry
-nyakula - HH:H:L, V carry; also -yakula - HH:H:L; see birth: give
-nyala - H:L, V dry up; cf. -yuma, -yanika
-nyalala - HH:H:L, V be quiet, keep quiet
-nyanyula - HH:H:L, V lift
-nyata - H:L, V be bad, be dirty; also -hakalanga
-nyela - H:L, V eat too much
-nyelembuka - HHH:H:L, V melt; also -tungunyuka
-nyema - H:L, V avoid
-nyeta - HH:H: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 -yakonya - HFL; cf. -lidila
-nyoma - H:L, V be fertile
-nyonyomula - HHH:H:L, V squat; also -nyanyomula - HHH:H:L

-oda - H:L, V take care of
-ohi - 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 - H:L often; predicative: same tones
-ohi-ohi - 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-ohi - LLH:L; predicative: same tones
-olota - HHH:L, V point (with finger); also -alota - HH:H: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/yomi - LFH/FH (question intonation); predicative: same tones
-ono - H:L, V sleep; infinitive: kona - H:L; cf. luwono - LRL cl.11/- sleep
-onono - H:L, V see, feel; infinitive: kwona - H:L; preferred with OC; cf. neut. -oneka - HH:H:L appear, be visible
-onda - H:L, V check a trap (whether an animal is caught)
ondonga - HH:H:L, V destroy; also -andonga - HH:H:L, -timbangila
-oneka - HH:H:L, V appear, be visible; neut. < -ona - H:L see; mvedi - HFL next month; cf. -holoka
-onga - H:L, V take a walk, stroll; cf. -hwenahwena
-ongolela - HHH:H:L, V set right, tend; cf. -chunga
-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, nnyuma cl.18
pachinu LRL, C1:SF, N 16+7 place; also pahali cl.18; cf. chinu RL cl.17
thing
pahali LHL, 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:H, V collect honey
-pala -HH:L, V scratch, peck; harvest groundnuts; cf. nom. chipala/vipala
LRL cl.7/8 smithy
-palanga -HHH:L, V go up; cf. sep. -palangula -HHH:L hop
-palangula -HHH:L, V‘ hop; sep. < -palanga -HHH: L go up; cf. nom.
lipalangula/mapalangula LLRL cl.5/6 locust, nampalangula
LLRL RL cl.1a locust
-palasa -HFL, V caus. grind (rice)
-palata -HHH:L, V clear, scrape away; cf. -kwanga, -pukuusa
-palatuka -HHH:L, V fall down; cf. -pakatika, -motoka, -uwa, -yanguka
-pali -H:L, V irr. be; aka pali LHFL. (s)he is not here, ikapali LHFL there
is/are not; only Present Negative verb forms in use; cf. -va, -pawa
-palila -HHH:L, V put above; e.g. put fire above a cooking pot in preparing
likulambila LLLH: L
palipanda LLL:L, D:1:no H, N 16 playing ground (celebrations)
palitungulu LLHRL, C2:H:SF, N 16 fireplace used during celebrations
-palula -HHH:L, V harvest maize
palyamba LHL, 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
palyambap0 LHFH, N 16 second day after tomorrow; cf. < 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 -HHH: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 LHL, 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 chalimo LRL
pamongo LRL, C1:SF, N 16+3 behind, after; also kumongo LRL cl.17+3,
nnyuma cl.18, pachikohi cl.16; cf. mongo RL cl.3 back of body
-panda -H:L, V plant
-pandala -HH:H, V kill insect with tip of finger, toe
panji FL, C2:H:SF, P perhaps; cf. -aji P other; also panjika LH:L I, chipanjhi
HFL I; cf. kwali I
panjika LH:L, A:S1/SF, I perhaps; also panji FL, chipanjhi HFL: cf. kwali I
pannima LLRL, C1:SF, N 16 height, high, above; cf. munirna/vannima
HFL cl.1/2 Nnima person, chinamia HHFL cl.7/- Nnima dialect; cf.
muhia cl.18 top, above, sky
pantima LLHL, 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.>= -panyila -HHH:L beat each other
with sth.; cf. ass. -panyana -HHL fight
-panyana -HHL, V fight; ass. < -panya -H:L beat
panyenje LH:L, E:S2, N 16 beside,
aside, apart; cf. *nyenje* L.H.L cl.18

*panyuma* L.R.L, Cl:SF, N 16

backwards, after; also *kunyuma* L.R.L cl.17, *kunyuma kwave* L.H.L R.L hereafter; cf. *nyyuma* L.R.L 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. -*wpapula* -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/H.L, E:S2, N 9c:10c type of clothing

-pawa -FL, *V* pas. be somewhere; cf. -va, -pali

-pawel u H:L, E:S2, N 16c14 outside; cf. *welu* H:L cl.14 field

-pekeha -HFL, *V* caus. make fire (by friction); cf. nom. *mpekeho/

-mpekeho L.H.L cl.3:4 firestick

-pela -H:L, *V* come to an end; rape (a woman)

-peleka -HH:L, *V* practice witchcraft; cf. nom. *liepleko/mapeleko* L.H.L cl.5:6 medicine; cf. -lowa, -lokotanya

-pelekeda -HHL:L, *V* caus. send, cause to go; cf. -tuma send (person)

-pemb -H:L, *V* spit out (small thing); app. > -*pembela* -HH:H:L spit upon; cf. -suna

-pembeya -HFL, *V* caus. entice; comfort

-penda -H:L, *V* scorn, despise

-peneke -HH:L, *V* put sideways; cf. *mpaneka/mipaneka* L.L.L:L cl.3/4

-type of hair dressing

-peng’a -H:L, *V* blow the nose

-pepeka -HHH:L, *V* be light, be thin, be transparent; see narrow: be

-pepeka -HH:H:L be near, approach; see light:be, be thin, transparent

-pepekala -HHH:L, *V* be near, approach; cf. pepi H:L I near; ? app.

-na-chiteng’u HL L.LFL lit. near with-chair; cf. -ipika *V* be short; cf.

-pepekela *V* be near, approach


-chipeto/vipeto L.H:L cl.7 8 sifting basket

-peya -H:L, *V* walk quickly; cf. red.

-peyerpeya -HHH:L, *V* caus. command

-L.H.L let’ s go quickly; cf. *XSHKL* L.FH I quickly

-peyerpeya -HHH:L, *V* red. be light (weight); red. < -pepeka -H:L walk quickly


-pii HR, C2:HSF, I sunset (ideophone expressing that the sun has disappeared); *liduva* pii L.H.L FH; cf. pii FH, ngwee L.FH

-pikita -HHH:L, *V* try to tear loose

-piliaka -HHH:L, *V* hear; attend; cf.

-piliakanila -HHHH:H:L listen;

- pillikanilo/mapiliakanilo L.H.H.H:H:L cl.5:6 ear, lit. thing to hear with


-piliakanila -HHH:H:L hear

-pilila -HHH:L, *V* endure

-pima -H:L, *V* measure

-pinda -H:L, *V* bend; cf. refl. -lipinda -HRL crouch; cf. -tepa

-pindika -HHH:L, *V* overturn, revenge; cf. -*pindikulanya* -HHH:L alter, turn round, stir

-pindikulanya -HHH:L, *V* caus. alter, turn around, stir (e.g. in making
cassava porridge); cf. -kolowanya, -kolov
-pinga -H:L, V be obstinate, refuse to obey
pisi/dipisi RL/RLR, 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. -pita -HH:L pass by (away, from, to)
piu HR, C2:HSF, | 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
-piyaniya -HHL:L, V caus. cause haste; cf. -yanguna
-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. -poo; 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 -HHHL:L, V wring out; also -papotola -HHH:L; cf. -pota -H:L, -popota -HHL 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 -HHL; cf. -popotola -HHH:L wring out; cf. -luka
-pukusula -HHHL:L, V peel off; cf. -kwanga, -palata
-pukuta -HHH:L, V wipe off
-pula -H:L, V sift grain by shaking
-pulula -HHH:L, V strip off; harvest rice
-pulung'anya -HHHL:L, V caus. increase, become more and more
-pumula -HHHL:L, V breath
-pumuna -HHH:L, V gnaw
-punda -H:L, V surpass, exceed; cf. -nonoka
-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 -HHH:L, V shout, talk much and lively
-pwapula -HHH:L, V tear (tr., twigs, etc.); cf. -papula -HHH:L, -valula
-pwata -H:L, V quarrel; ass. >
-pwatana -HHH:L
-pwetana -HHH:L, V quarrel with each other; ass. < -pwata -H:L quarrel
-pwechela -HHH:L, V receive; also -pwachela -HHH:L
-pweteka -HHH:L, V wound, get hurt, be ill; also -pwateka -HHH:L; cf. -pwita
H:L hurt
-pwita -H:L, V hurt; cf. -pweteka
-HHH:L
-pya H:L, V be scorched, be burnt; tones with Infinitive marker
-pyaila -HHH:L, V sweep; cf. chipyai/vipaii LRL broom

S
-samulila -HHH:L, V comb; also -hamulila -HHH:H; cf. chihamulo/vihamulo LLLL: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 -HHH: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
-sunal -H:H:L, V be vexed, be angry;
   cf. -vista, -viha, -chimwa
-swa H:L, V set (of sun); tones with
   Infinitive marker; liduva kuswa LHL
   H:L all day long
-s웨에라 -H:H:L, V be white (rash); also
-s웨에라 -H:H:L; cf. -ajaran P con.
   white; see clean: be
-s웨에라 -H:H:L, V be clean; cf.
   -hahula, -katapadya; see white: be
   (rash)

T
-taha -FL, V caus. look for, search; also
-loleha; cf. -lembela, -lembelal
-tahuva -H:H:L, V disagree, rebel, be
   perversive; cf. ass. -tahukena -HHH:L
   argue
-tahukena -HHH:L, V argue; ass. <
-tahuva -H:H:L disagree
-tail -H:H:L, V lay an egg
-takata -H:H:L, V be pleased, be
   attractive; cf. -maila
-taktukena -HHH:L, V stand up, arise,
   start; cf. -uka
-tama -H:L, V agree on marriage
   between man and parents
   tamay RL, Cl:SF, N 9b/- desire; < Sw.
   tamiaa; see ihkidi/ihihki; cl.9/10; cf.
   lukou cl.11-
-tamba -H:L, V rejoice; cf. -hangalala,
   -poka
-tambala -H:H:L, V creep
-tambula -H:H: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
-yambukula, -itikila
-tana -H:L, V tell a story; kutana
   ntano/ltano LHH H:HL/L:HHL
   (ntano, ltano 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; substructively derived
   from -tandi -HFL, V begin; predicative:
   same tones
-tandi -H:HL, V begin; also
-tandala -H:HL; cf. -tandi -FL A
   first; -lindimuka
-tango L:L, D1:no H, 1 formerly, the
   past; ing’ande ya-tango LHL H:FL
   an old house; also kala I; cf. -atangu
   P con. old
-tang’una -H:HL, V chew; cf. nom.
   litang’unilo/matang’unilo LHHH:L
   cl.5/6
-tangila -H:HL, V be noticeable, be
   available; cf. -injipika
-tanuka -H:HL, V be expanded, be
   widened; cf. Sw. -tanuka
-tapa -H:L, V boast; also refl. -litapa
   -HRL
-tapika -H:HL, V vomit; cf. Sw. -tapika;
   see -kodyoka
-tapuka -H:HL, V stick to, adhere
-tati H:L, ?, N 1c/- father (informal,
   ironic); cf. atata LFL cl.2A
-tatu -RL, Cl: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 LFL; kutaya chihonde
   LHH H:HL participate in a discussion
-teka -H:L, V draw water; kuteka medi
   LHH H:L
-teleka -H:HL, V cook; also -taleka
   -HH:L
-teka -H:L, V sharpen; cf.
   -kwichakwicha; see cut firewood
-teka -H:L, V cut firewood; see sharpen
-tenda -H:L, V do; cf. -kala; kutenda
   madengo LHH H:HL to work;
   unitenda LHRLL thanks, lit. you have
do’t (Pres.Perf.)
-tupa -H:L, V stoop, bend down; cf.
mwitepa LFL cl.18 corner
teso/diteso RL/LRL, Cl.1, SF, N 9c/10c
adze; sg. also iteso LRL cl.9c
-tetela -HH:L, V cacke (of chicken
producing an egg)
-tetema -HH:L, V shiver, tremble; also
-tetemela -HHH:L; cf. chite LFL
cl.7, chitemedi LLLRL cl.7 the
shivers
-teula -HH:L, V take off fire, serve
food; cf. app. -teulia -HHH:L dish
-teulila -HHH:L, V dish; app. < -teula
-HHH:L take off fire, serve food
-tevedya -HFL, V caus. endanger; also
-tavedya -HFL
-teya -HFL, V trap; kuteya dihomba
LHH HFL fish, lit. trap fish; cf.
-inikila
-tika -HFL, V cause to shake, move fro
and to; put load on head with s.o.’s
help; cf. -tikina -HFL shake
-tikinya -HFL, V caus. shake (tr. and
itr.); cf. -tika -HFL cause to shake,
move fro and to
-tila -HFL, V run away; ku-n-tila
H-H-RL (with OC of cl.1) to isolate
s.o. socially; also -tukuta
-tima -HFL, V delay, linger
-timba -HFL, V loiter, hang about;
frequently used with Pre-Final -ang-:
-timbanga -HHH:L
-timbangila -HHH:L, V destroy; also
-ondonga
-tindinga -HHH:L, V bring to ruin
-tindivala -HHH:L, V kneel, worship;
also -yama
-tinhi -HFL, V caus. bring to the boil
(nkojo, first stage in the preparation
of beer); cf. -yaula, -yaulka.
-tau, -yaukida, -koda, -chemusa,
-tokota
-tipula -HHH:L, V pound (grains); also
-.tw, -twanga; cf. -ponda
-titimila -HHH:L, V sink; disappear,
vanish
-tiva -HFL, V plait; kutiwa ulindo LHH
HFL plait hair
-toha -FL, V caus. touch, press; cf.
-kaba, -bana
-tohoma -HHH:L, V go up and down (e.g.
fontanel on head of baby)
-tokota -HHH:L, V become cooked, be
boiled; also -takota -HHH:L
-tokotela -HHHHH:L become
cooked for each other; have flavour;
cf. -yaula, -koda, -chemusa, -tiniha
tolela -HHH:L, V get satisfied
tolola -HHH:L, V bore a hole; also
-talola -HHH:L; cf. -dovola
tona -HFL, V take a snuff (tobacco);
also -nusa; cf. liposa/maposa LLL
cl.5/6 snuff of tobacco
tondola -HHH:L, V choose; also
-tandola -HHH:L, -hapa; utondodi
LLRL cl.14 elections, ntondodi/
vatondodi LLRL cl.1/2 voter
tongdika -HHHHH:L, V grumble, speak
to oneself; caus., neut. < -tongola
-HHH:L speak; also -loloma
-tongola -HHH:L, V speak, say; also
-tangola -HHH:L; cf. -tongdika
-HHH:L grumble; cf. kutongo-
vioha 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 -HFL, V sew; cf. nom. ntota/
motola LFL cl.3/4, ntotelo/mitotelo
LHHH:L cl.3/4 needle
-tubisa -HFL, V caus. punish
-tudya -FL, V caus. offer present for a
special occasion, esp. initiation; caus.
< -tula -HFL set down; cf.
inudyo/dinudyo LL.L cl.9/10 present
for a special occasion
-tukukula -HHHHH:L, V enlarge, make
greater
-tukula -HHH:L, V be very full (of food),
belch; cf. dihumi LRL cl. -10 belch
-tukuta -HHH:L, V run away; also -tula
-tula -HFL, V set down (e.g. take load
from head and put it on the ground); cf. -tudy -FL give present for a
special occasion
-tulila -H:L, V get cool; cf. -pola,
- didima, -itula
- tuma -H:L, V send (person); cf.
- pelekedyaa
- tumba -H:L, V look up, observe; cf.
- lolehidiya
tumbaku LFL, E:S2, N 5b/- tobacco
- tumbuka -H:H:L, V break (itr., big things, e.g. tree); cf. -tumbula -H:H:L,
- lumuka
- tumula -H:H:L, V be fat (esp. animals); be big; also used with Pre-Final -ang:-
   -tumblinga
   -HHH:L; cf. -nyeta; see break (tr., big things)
- tumbula -H:H:L, V break (tr., big things); frequently used with Pre-Final -ang:-
   -tumblinga
   -HHH:L; cf. -tumuka -H:H:L,
   - lumula; see fat: be, be big
- tumila -H:H:L, V use; ngu-tumidile
   uvelu L-LLLL HH:L I was stupid, lit. I have used stupidity
- tumula -H:H:L, V chase away; also
   - vinga, -vinganga
- tunda -H:L, V lack enough fire, get underdone (food); be unclear (words)
- tundula -H:H:L, V take off sth. (off body)
- tunduuya -HFL, V caus. throw down
- tunduwila -H:H:H:L, V bring problems;
   cf. -huva have problems, -banika get problems
- tungunyuuka -H:H:H:L, V melt; also
- nyembuka
- tupa -H:L, V bulge, swell out
- tupila -H:H: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; -twalida -HFL, V caus. make a woman pregnant; cf.
   -twala -H:L take
- twa -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;
   uyooy LFH cl.1, uwoowu LFH cl.3,
   uyooy LFH cl.9; attributive tones:
   (H)FH, the initial u- is optional
(u)-o-o LFH, P dem. this, that
   (referential emphatic); uyooy LFH
   cl.1, uwoow LFH cl.3, uyooy LFH
   cl.9; attributive tones: (H)FH, the
   initial u- is optional; mwanda
   uwoowu HH FH 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 LFH and now, therefore
ubila LFH, B:S1, N 14 semen
uchech LRL, C1:SF, N 14 termite(s)
uchi H:L, A:S1/SF, N 14 honey
uchiva LFH, B:S1, N 14 solitariness,
   loneliness; cf. nhivat/vachiva LFH
   cl.1/2 orphan
-udula -H:H:L, V straighten; cf. -nyoka,
- kanda
- urya -FL, V caus. ask (question); red.
   > -udyaudya -HHL:L question
ugoni LRL, C1:SF, N 14 adultery
uhakwa LHL, A:S1/SF, N 14 dirt
   (often: dirty food)
uhambachi LLRL, C1:SF, N 14 trade
uhato/ahato LHL, A:S1/SF, N 1A/2A
   python; pl. also vahato LHL cl.2;
   also vahato/ahato LHL: species
oriented: ihatu/dihatu, ihato/dihato
LH:L cl.9/10
uhavi LFL, B:S1, N 14/4 witchcraft; cf. nnuyavi/vahavi LFL cl.1/2 sorcerer
uhiku LH:L, A:S1/SF, N 14 night; cf. Sw. usiku; see chilo cl.7/-; uhiku
ukacha LH:L 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 LH:H: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
uhuhu/ahuhu LRL, C1:SF, N 1A/2A snake sp. (related to python); pl. also
vuhuhu LRL cl.2; species oriented:
iuhuhu/dihuhu LRL cl.9/10
uhumbwe LL:L, D1:10 H, N 14 milky juice got from grated coconut (Sw. tui)
uhungu/ahungu LH:L, E:S2, N 1A/2A genet; pl. also vahungu LH:L cl.2;
species oriented: ihungu/dihungo
LH:L cl.9/10
uhwechwe LFH, P subst. we (emphatic);
hweetu HRL (non-emphatic)
-uula -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
ukulula LHFL, B:S1, N 14
miscarriage; nom. < -kulula; cf. dinjahango cl. -/10 miscarriage
-ulula -H:L, V ripen (itr.); cf. -lapata,
-huna; see undress
-ulula -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 uni 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
uulongo LLFL, E:S2, N 14 soil (clay); cf. uoto cl.14
-uluka -HH:L, V jump (high); fly; cf.
Sw. -ruka; cf. -chinjila, -chitika,
-dang’ a
-ululuba -HHH:L, V caus. sift grain by
-trossing
-ulumuka -HHH:L, V get to puberty
(boys)
uulwele/malwele LH:L, A:S1/SF, N 14/6 sickness
ulyamba HRL, C2:HSF, 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 2A 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.1.2; 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 -HHL be full
umbai/ambai LH:L, A:S1/SF, N 1A 2A bee sp.; pl. also vamboi LH:L cl.1.2; species oriented: imbai/dimbai LH:L cl.9/10
-umbala -HHL be full; caus. >
-umbadya -HFL fill
umbango/ambango LH:L, A:S1/SF, N 1A 2A wild pig; pl. also vambango LH:L cl.1.2; 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.1.2; 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.1.2; species oriented: imbudi/
dimbudi LH:L cl.9/10
umbulu/ambulu ?, N 1A 2A crocodile; tones unknown; pl. also vambulu cl.1.2; species oriented: imbula/
dimbula cl.9/10; also umamba/amamba
umbulukuta/ambulukuta LLHRL, C2:H, SF, N 1A 2A butterfly; pl. also vambulukuta LLHRL cl.1.2; species oriented: imbulukuta/dimbulukuta LLHRL cl.9/10
umbutuka/ambutuka LLRL, C1:SF, N 1A 2A antelope sp. (klipspringer); pl. also vambutuka LLRL cl.1.2; species oriented: imbukuta/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.1;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.1.2; species oriented: inembe/dimembe
LH:L cl.9/10
umi H:L, A:S1/SF, N 1A 2A life; also ulama cl.1.4
umunda/amunda LH:L, A:S1/SF, N 1A 2A dove; pl. also vamunda LH:L cl.1.2; species oriented: inemba/
dinunda LH:L cl.9/10
umwemwe LFH, P subst. you (pl.) (emphatic); mweenwe HRL (non-emphatic)
umwene y LRL, C1:SF, N 1A 2A chieftaincy (traditional); cf.
amwene y/achamwene y HRL/LHRL cl.2A/2A+ headman of village
unambili/anambili LHFL, B:S1, N 1A 2A partridge; pl. also yanambili 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 vamembe LRL cl.1.2; species oriented: inembe/dinembe
LRL cl.9/10
unembo/anembo LFL, B:S1, N 1A 2A elephant; pl. also vamembo LFL cl.1.2; 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.1.2; 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.1.2; species oriented: ing’anga/ding’anga LH:L cl.9/10
ung’ avanga/ang’ avanga LHFL, B:S1, N IA/2A dog; pl. also vang’ avanga LHFL cl.2; species oriented: ing’ avanga/ding’ avanga LHFL cl.9/10
un’ ombe/ang’ ombe LRL, C1:SF, N IA/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 IA/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
ungondu/angodondu LLRL, C1:SF, N IA/2A sheep; pl. also vangondu LLRL cl.2; species oriented: ingondu/dingondu LLRL cl.9/10
unguluve/anguluve LLRL, C1:SF, N IA/2A pig; pl. also vanguluve LLRL cl.2; species oriented: inguluve/dinguluve LLRL cl.9/10
ungumbi/angumbi LFL, B:S1, N IA/2A termite sp. (winged); pl. also vangumbi LFL cl.2; species oriented: ingumbi/dingumbi LFL cl.9/10
ungung’ unu/angung’ unu LHHL, A:S1/SF, N IA/2A bedbug; pl. also vangung’ unu LHHL cl.2; species oriented: ingung’ unu/dingung’ unu LHHL cl.9/10
ungwangwalati/angwangwalati LHHLH, A:S1/SF, N IA/2A dog sp. (digging up corpses); pl. also vangwangwalati LHHLH cl.2; species oriented: ingwangwalati/dingwangwalati LHHLH cl.9/10
unjalau/anjalalu LHHL, A:S1/SF, N IA/2A ant sp. (big, red); pl. also vanjalalu LHHL cl.2; species oriented: injalalu/dinjalalu LHHL cl.9/10
unjemjema/anjenjema LHRL, C2:H:SF, N IA/2A mosquito; pl. also vanjemjema LHRL cl.2; species oriented: injemjema/dinjemjema LHRL cl.9/10
unuta/anuta LH:L, A:S1/SF, N IA/2A ant sp. (red); pl. also vanuta LH:L cl.2; species oriented: inuta/dinuta LH:L cl.9/10
unyanga/anyanganga LF:L, B:S1, N IA/2A hawk sp. (big, striking colours); pl. also vanyanga LF:L cl.2; species oriented: inyanga/dinnyanga LF:L cl.9/10
unyati/anayati LH:L, A:S1/SF, N IA/2A buffalo; pl. also vanyati LH:L cl.2; species oriented: inyati/dinyati LH:L cl.9/10
unyedi/anayedi LH:L, A:S1/SF, N IA/2A snail; pl. also vanyedi LH:L cl.2; species oriented: inyedi/dinyedi LH:L cl.9/10
unyima/anymama LH:L, A:S1/SF, N IA/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 14/10 sacrifice
unyuchi/anuchy LH:L, A:S1/SF, N IA/2A honey-bee; pl. also vunyuchi LH:L cl.2; species oriented: inyuchi/dinyuchi LH:L cl.9/10
unyukdumbu/anuyukdumbu LLHRL, C2:H:SF, N IA/2A soldier ant; pl. also vanyukdumbu LLHRL cl.2; species oriented: inyukdumbu/dinyukdumbu LLHRL cl.9/10
upeni mapinde LH:L, E:S2, N 14/6 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/musi RL/LRL, C1:SF, N 14/4 spider web
usungu LRL, C1:SF, N i4 foolishness, ignorance (of woman); cf. nsungu/
vusungu LRL cl.1/4
usungula/asungula LHRL, C2:H:SF, N iA/2A hare; pl. also vasungula LHRL cl.2; species oriented:
isungula/disungula LHRL cl.9/10
usuvi/asuvi LFL, B:S1, N iA/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 i4 millet sp. (Sw. ulezi)
utoing LRL, C1:SF, N i4 type of basket (small)
utohi LRL, C1:SF, N i4 excrement of chicken; cf. mavi cl. -/6
utope LRL, C1:SF, N i4 soil (clay); cf. ulongo cl.14
utoitori LH:L, A:S1/SF, N i4 brain; also ututuli LH:L
utumbo LRL, C1:SF, N i4 intestine
ututuli LH:L, A:S1/SF, N i4 brain; also utotoli LH:L
-uudya -HFL, V caus. treat a sick person; caus. < -uula -HH:H fall ill
-uula -HH:L, V fall ill; caus. > -uudya -HFL treat a sick person
uvahe/dimbahe LRL, C1:SF, N i4/10 mushroom; also uvahi LRL
uwanang'o LHFL, P subst. they (emphatic); vanang'o LH:L (non-emphatic)
(uvelu LRL, C1:SF, N i4 foolishness, foolishness; cf. ukanga cl.14;
kutumila uvelu LHHL HH:L to be stupid, lit. to use stupidity
uvila LFL, A:S1, I thus, so, as follows; cf. kavila, kuvila LH:L again
uvilo LH:L, A:S1/SF, N i4 joking relationship (Sw. utani)
-una -H:L, V fall; also -motoka, -yanguka; cf. -pakatika, -palatuka
uwewe LH:F, P subst. you (sg.) (emphatic); waako HRL (non-emphatic)
uwowa LRL, C1:SF, N i4 mushroom sp. (in the bush)
-uya -H:L, V return; app. > -uyila -HH:L return to
uyeni LRL, C1:SF, N i4 state of being a guest/stranger; cf. nuyeni/vayeni LH:L 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 LHFL (emphatic); cf. -nang'o -H:L P the same, the very one

-vandika -HH:L, V concern
-vandikila -HH:H, 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: -avanga -HH:L; cf. -twua
-vayuka -HH:L, V get to puberty (girls)
-veda -H:L, V carve
-veha -FL, V caus. blow up; cf. sep.
-vehuka -HH:H 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;
kuvelekwa 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; -chinwa; cf. -sunala
-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 HL:L I again; predicative: same tones
vilyo RL., C1:SF, N -8 food; cf. -lya V eat; also chakulya/yyakulya HL:L cl.1 cl.7/8
-vimba -HL:, V thatch; swell; cf. refl. -livimba -HRL wrap around; cf. sep. -vimbula -HH:L unthatch -vimbula -HH:L, V unthatch; sep. < -vimba -HL: thatch, swell -vina -HL:, V dance -vinga -HL:, V chase away; also -vinganga -HH:L, -tumula -vinganga -HH:L, V chase away; < -vinga -HL: (+ 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
-wau-la -HH:L, V skin; cf. -wauka -HH:L bruise -waya -HL:, 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 I4/6+ field -widualu -HFL, V caus. sweat; refl. > -liwidualu -HHFL be very busy till sweat comes out; cf. nom. chiwidualu LHFL cl.7/- sweat -wila -HL:, V chew (e.g. tobacco) -womba -HL:, V beat a drum, fire a gun, blow a horn, flute; also -omba -HL:wondolo LRL., C1:SF, N I4 clay ground wunu H:L, A:S1/SF, N I4 plaster (for making pots)

Y
-yadika -HH:L, V borrow -ya ha -HL:, V bury; also -sika; see throw away -yaha -HL:, V throw away; lose; also caus. -yahisa HL:; cf. neut. -yahika be lost; see bury -yahi -HH:L, V be lost; neut. < -yaha -HL: bury, throw away; cf. -walawala -yahula -HH:L, V yawn -yaka -HL:, V shine, burn (of fire), feel hot; cf. -vula -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 -HL:, V kneel, worship; also -tindivala; see lie down -yama -HL:, 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 -HHL:V slap off (e.g., flies); also -hapuka, -papatula; cf.
-liyamila -HHL:L defend oneself
-yanda -HHL:V be thin; cf. -yandauka -HHL:L be wide
-yandauka -HHL:L be wide; cf.
-yanda -HHL:V be thin
-yangala -HHL:L dance and jump of joy
-yangata -HHL:L help, assist, support
-yanguhana -HHL:L hasten, do quickly (with negative result); also
app. -yanguhanila -HHL:L; cf.
-pyanidyiya
-yanguka -HHL:L fall; cf. Sw.
-angula see -motoka, -uwa; cf.
-pakatika, -palatuka
-yang’ula -HHL:L answer; cf.
-yambukila
-yanika -HHL:L dry in the sun; cf.
-nya1a, -yuma
-yaukidya -HHL:L, V caus. boil; also
-kodya, -chemusa; cf. -yaula -HHL:L,
-yaukila -HHL:L, -tokota, -tiniha
-yaukila -HHL:L, V boil (itr.); also
-yaula -HHL:L, V boil (itr.); cf. -yaukidya
-HHL:L, -kodya, -chemusa, -tokota, -tiniha

-yaula -HHL:L, V boil (itr.); also
-yaukila -HHL:L, V boil (itr.); cf. -yaukidya
-HHL:L, -kodya, -chemusa, -tokota, -tiniha

-yavala -HHL:L, V divide; also -yavanya -HFL
-yavanya -HFL, V caus. divide; also
-yava -HHL
-yawala -HHL:L, V alter plan, cancel
-yedya -FL, V caus. taste (food); imitate, mimic; refresh; cf. refl.
-liyedya -HFL learn
-yela -HHL:L, V throw at; cf. ass. -yelana
-HHL:L have sexual intercourse
-yelana -HHL:L, V have sexual intercourse; ass. < -yela -HHL:L throw at; also -tupila

yembe/diyembe RL/LRL, Cl: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 -HHL:L gather up; cf. -heva,
-hepa
-yomboka -HHL:L, V cross over; also
-yamboka -HHL:L
-yomola -HHL:L, V dip; also -yamola
-HHL:L, -pamba
-yong’a -HHL:L suck the breast
-yopa -HHL:L fear, be afraid
-yota -HHL:L bask in the sun, sit close to a fire
-yowela -HHL:L rest; also -yowelela
-HHL:L, -yowelela -HHL:L,
-pumulila
-yowelela -HHL:L, V rest; also
-yowelela -HHL:L, -yowelela -HHL:L,
-pumulila
-yowela -HHL:L, -yowela -HHL:L,
-pumulila
-yuma -HHL:L be dry, be thirsty; cf.
-nya1a, -yana1ka; cf. inyota LRL cl.9/-thirst
-yupala -HHL:L, V dig out; also -dobola
-yuvala -HHL:L, V feel humiliated, uncomfortable
-yuwa -HHL:L ask for, pray
## C.2 English – Chinnima

| A |  
|---|---|
| *a(n)*, *some* | → *one* |
| *abdomen* | *litumbo/matumbo* |
| *LRL*, C1:SF, N 5/6 |  
| *abdomen* | *pantina* |
| LLH:L, A:S1/SF, N 16/3 |  
| *abduction* | (of a woman) *litvala/matvala* |
| LLH: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* | LLH:L, E:S2, N 7/8 |
| accept | → *love* |
| accompany | - *longana* |
| -HH:L, V |  
| accomplish | → *finish* |
| add | → *mix* |
| adder *lipili/mapili* | LLH:L, A:S1/SF, N 5/6 |
| adultery | *ugoni* |
| LRL, C1:SF, N 14 |  
| advise | → *tell s.o.* |
| adze *iteso/diteso* | LLH:L, C1:SF, N 9c/10c |
| adze *teso/dteso* | RL/LRL, C1:SF, N 9c/10c |
| afflict | - *lagasa* |
| -HHFL, V caus. |  
| afflict, oppress | - *bana* |
| -HH:L, V |  
| afflicted: *be* | be discomforted - *laga* |
| -HH:L, V |  
| after | → *behind;* → backwards |
| afterbirth | *lipyanda/mapyanda* |
| LFL, B:S1, N 5/6 |  
| afterwards, later | *lukoto* |
| HFL, B:S1, N 11/2 |  
| again | *kavila* |
| LLH:L, A:S1/SF, I |  
| again | *kavila* |
| LLH:L, A:S1/SF, I |  
| age-mate, friend | *myenje/voyenje* |
| LLH:L, A:S1/SF, N 1/2 |  
| age-mate ceremony | (of elders) *chikudi/vikudi* |
| LRL, C1:SF, N 7/8 |  
| agree | - *tamwana* |
| -HHFL, V |  
| agree - *yambukila* | -HHH:L, V |
| agree on marriage | between man and parents - *tama* |
| -HH:L, V |  
| aim | → *hunt* (with a sling) |
| air (cold) | *imepo* |
| LLH:L, A:S1/SF, N 9/4 |  
| alone, on one’s own | *weka* |
| RL, C1:SF, I |  
| along | *myenje* |
| LLH: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* |
| -HHH:L, V caus. |  
| alter plan, cancel | *yavela* |
| -HHH: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-* | LLH: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* |
| LLH:L, D1:no H, N 7/2 |  
| angry: *be-* *chimwa* | -FL, V pas. |
| angry: *be-* *viha* | -FL, V caus. |
| angry: *be-* *visa* | -FL, V caus. |
| animal | *nkoko/yakoko* |
| LFL/LHL, B:S1/E:S2, N 1/2 |  
| ankle | *imunda/dimunda* |
| LLH:L, E:S2, N 9/10 |  
| annoy | - *baniha* |
| -HHFL, V caus. |  
| answer | - *yang‘ula* |
| -HHH:L, V |  
| ant | sp. (big, red) |
| *unjala*/hnjala* | *LHH:*LL, A:S1/SF, N 9/10 |
| ant | sp. (big, red) |
| *unjala*/anjala* | *LHH:*LL, A:S1/SF, N 1A2A |
| ant | sp. (red) |
| *inuta/dimuta* |
| LLH:L, A:S1/SF, N 9/10 |  

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ant sp. (red) umuta/amuta LH:L,
A:S1/SF, N 1/2A
ant sp. (small, red) imamana/dimamana
LHFL, B:S1, N 9/10
ant sp. (small, red) umamana/amamama
LHFL, B:S1, N 1/2A
ant: soldier inyukudumba/
dinyukudumba LLHRL, C2:H:SF, N 9/10
ant: soldier anyukudumba/
anyukudumba LLHRL, C2:H:SF, N 1/2A
ant-hill lhonyo/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 1/2A
anus nhonyo/michonyo LFL, B:S1, N 3/4
anvil lhatalwe/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 -talukana -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 -bhika -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 livamu/mavamu LRL,
C1:SF, N 5/6
arrow shaft lhongo/mahongo LH:L, E:S2, N 5/6
arrow: wooden lhonga/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 5/6
ask (question) -uuya -FL, V caus.
ask for, pray -yusa -H:L, V
assembly, court lukumi/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 -nyama -H:L, V
awake -imu -HH:L, V
axe inbedo/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 imbali/dimbalu LH:L,
A:S1/SF, N 9/10
banana ing’oo/ding’oo RL, C1:SF, N 9/10
banana sp. (big) magombo LFL, B:S1,
N 6
banana sp. (rather big) ntapwa LH:L,
E:S2, N 3/-
banana sp. (small) chisukali LHFL, B:S1, N 7/6
banana sp. (small) njagasi LHFL, B:S1, N 3/-
banner bark ligwambu/magwambu LHFL, B:S1, N 7/6
banana flower litungutungu/mattungutungu LHHL, A:S1/SF, N 5/6
banana tree lipinji mapinji LHHL, A:S1/SF, N 5/6
bare, naked, useless dahu RL, C1:SF, I
bark → covering: outer
bark of Christmas tree likambangohi/makambangohi LHHL, C2:H, SF, N 5/6
bark cloth lwando/mawondo LRL, C1:SF, N 5/6
barrel (of gun) ntutu/mitutu LFL, B:S1, N 3/4
barren ground chidwadwa LHHL, A:S1/SF, N 7/6
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) chihapvo/vihapo LHHL, A:S1/SF, N 7/8
basket: type of (huge, tall) litenga/matenga LRL, C1:SF, N 5/6
basket: type of (small) utingo LHHL, A:S1/SF, N 14
bat llema malema LHHL, A:S1/SF, N 5/6
bathe -hinga -H:L, V
bathe oneself -lithinga -HRL, V refl.
be -pali -H:L, V irr.
be -wa H:L, V
be somewhere -pawo -FL, V pas.
bead nchaketa/nchaketa 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 LRL, C1:SF, N 9/10
bean sp. ing ‘unde/ding ‘unde LHHL,
A:S1/SF, N 9/10
bean sp. (big) litamba/matamba LFL, B:S1, N 5/6
bean plant sp. (Sw. mfiwi) mneule/mileule LHHL, 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 LHHL, A:S1/SF, N 9/10
bedbug ung ‘ung ‘uni/aung ‘ung ‘uni LHHL, A:S1/SF, N 1A:2A
bee sp. imbei/dimbai LHHL, A:S1/SF, N 9/10
bee sp. litandehu/matandehu LHHL, B:S1, N 5/6
bee sp. umbai/ambai LHHL, A:S1/SF, N 1A:2A
bee: honey- inyuchi/dinyuchi LHHL, A:S1/SF, N 9/10
bee: honey- inyuchi/anyuchi LHHL, A:S1/SF, N 1A:2A
bee poison lawoo/dimboo (?) LHHL, A:S1/SF, N 11/10
beehive chipeda/vipeda LRL, C1:SF, N 7/8
beer wala/mawala H:LHHL, 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 -tandikita -HHHL, V
begin, start -lindimuka -HHHL, V
behind, after nyuma LRL, C1:SF, N 18
behind, after pamongo LRL, C1:SF, N 16+3
behind, after pachikohi LHHL, E:S2, N 16
belch *dihumi* L.H.L., C:1/SF, N -10
belch ↔ full: be very (of food)
belly *munda* L.L., D:1:no H, N 18
below *muhina* L.H.L., E:S:2, N 18
belt ↔ bridewealth
bend -*pinda* -H:L, V
bereaved person *nannidi* HH:L-L, D:2:H:no H, N 1a?
beside, aside, apart *panyenje* L.H.L., E:S:2, N 16
between ↔ middle
bicycle *basikeli/dibasikeli* HH:L-L.HH:L-L, B:S:1, N 9c/10c
bicycle *inninga/dinninga* L.H.L., A:S:1/SF, N 9/10
big -*kulungwa* -HFL, B:S:1, A
big: be ↔ fat: be (esp. animals)
bind sth. with a rope, tie rope around sth. -*tava* -H:L, V
bird *chuni/yvani* RL, C:1/SF, N 7/8
birds: *flock of inyeye/dinyeye* LFL, E:S:1, 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, V
black -*anapi* HH:L, P con.
black: be, be dark, be dirty -*dimba* -H:L, V
bladder, bubble, lather *chihulu/vihulu* L.H.L, A:S:1/SF, N 7/8
blanket *libulangeti/mabulangeti* L.LH:L-L, E:S:2, N 5/6
blind person *akalola/vakalola* LHFL, V
fin
blister *lituku/matuku* LRL, C:1/SF, N 5/6
blood *dumu* H:L, ?, N 9b/-
blood *myadi* H.L., A:S:1/SF, N -4
blood disease (visible by rash on skin) *lwadi* H:L, A:S:1/SF, N 11/-
blood (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* L.H.L, E:S:2, N 5/6
**boast** -*litapa* -HRL, V refl.
**boast** -*tapa* -H:L, V
**body** *mmili/mmili* LRL, C:1/SF, N 3/4
**boil** -*chemusa* -HFL, V caus.
**boil** -*yaukidy* -HH:L-L, V caus.
**boil** abscess lipote/mapote LFL, B:S:1, 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:S:1/SF, N 3/6
**borderline**: draw -*chika* -H:L, V
**bore** -*dovola* -HH:L, V
**bore** a hole -*tofola* -HH:L, V
**born**: be -*velekwa* -HFL, V pas.
**borrow** -*yadika* -HH:L, V
**boundary**: (e.g. between two fields) *nkuka/mikuka* LFL, B:S:1, N 3/4
**bow** *linguungwe/mangungwe* LH:L, A:S:1/SF, N 5/6
**bow upinde/mapinde** LH:L, E:S:2, N 14/6
**bowl**, deep dish *nkungu/mikungu* LFL, B:S:1, N 3/4
**boy** (after initiation) *mnyaluke/vayalu* LHFL, D:2:H:no H, N 1/2
**boy** (before initiation) *memba/vanemba* LRL, C:1/SF, N 1/2
**bracelet** *dinyoka* LH:L, A:S:1/SF, N -10
**brain** *utotoli* LHHL:L, A:S:1/SF, N 14
**brain** *ututuli* LHHL:L, A:S:1/SF, N 14
**branch** *lutavi/dinavi* LH:L-L, A:S:1/SF, N 11/10
**branch as protection** against becoming wet *nyahamulilo/mihahamulilo* LHHH:L, A:S:1/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 -hakuka -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 7/8
bridewealth: belt nkaka LFL, B:S1, N 3/2
bring -ida na -H:L, V
broken thing, potsherd liyondo/mayonjo LH:L, E:S2, N 5/6
broom chipyai/vipaiyi LRL, C1:SF, N 7/8
brother → sibling
brother-in-law, sister-in-law nmamul
valamu LH:L, A:S1/SF, N 1/2
bruise -wanuka -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 -HH:L, V
bulge, swell out -tupu -H:L, V
bundle, bunch lifungu/mafungu LFL, B:S1, N 5/6
bundle (of things tied together with a cloth), load chitivi/vitivi LH:L, A:S1/SF, N 7/8
bundle of grass chiha/vihia 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 restless
-hakalika -HHH:L, V
but, to the contrary heka L:H, C1:SF, L
butterfly imbuluka/dimbuluka LHRL, C2:H:SF, N 9/10
butterfly ambuluka/ambuluka LHRL, C2:H:SF, N 1A/2A
buttocks dinako LRL, C1:SF, N 7/10
buy -suma -H:L, V

C
cackle (of chicken producing an egg) -tetela -HHH: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) mmasu/
mitusu 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 liti/riti/LHFL, B:S1, N 5/6
calabash plant liti/diti/LHFL, B:S1, N 11/10
calabash seed (edible) imukusa/
dimukusa LHFL, B:S1, N 9/10
calabash seed (edible) nkakahimba/
mikakahimba LHHLFL, D2:H.no H, N 3/4
calabash: skin of linguwa/
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,
car (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
classic: 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 -H:L, V
chopper: muundu/ myuundu LFL, E:S2, N 3/4
chrystal (stage between caterpillar and butterfly) nantikwi/ achanantiki LLL:L/LHHLL:L, D1:no H, N 1A/2A+
circle around the sun, moon chikuti/ vikuti LHL, A:S1/SF, N 7/8
circumcise: -kodola -HHL, V
circumcises: s.o. who ngaliba/ vangaliba LLL:L, 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 -HHL, V
clean: -hapa -H:L, V
clay: -swelela -HHL, V
clear, scrape away -palata -HHH:L, V
clear away: cultivate: make an area...
clear land: for cultivation: forge -hana -H:L, V
clever, be cunning -kalamuka -HHH:L, V
climb: ascend -kwela -H:L, V
close loosely: -hika -H:L, V
cloth: head chhindindi/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.) -yala -HH:L, V
clothing inguo/dinguo LRL, C1:SF, N 9/10
clothing: type of chechele/dicechele LL:L/LLL:L, D1:no H, N 9c/10c
clothing: type of jipani/hipani 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 lieplepende/mapelepende LHHH:L, A:S1/SF, N 5/6
coconut nasi/dinasi H:L/LH:L, ?, N 9c/10c
coconut: skin of limadi/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 7-7

cold: be ✠ cool down
collect, gather together -kunga -H:L, V
collect honey -pakula -HHH:L, V
comb -hamulila -HHH:L, V
comb -samulila -HHH:L, V
comb chihamula/vihamula LLLL: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 -HHH:L, V
come out -huma -H:L, V
comfort ➞ entice
command -patanisa -HHH:L, V caus.
companion: my mnyangu/avangu LH:L,
crocodile amamba amamba LFL, B:S1, N 1A/2A

crocodile ambulu/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 likufa/makufa LFL, B:S1, N 5/6
crowd of celebrating people
lihangavila LHHIL:L, B:S1, N 5/6
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.) chibahia LHHIL:L, A:S1/SF, N 7/6

cunning: be ➞ clever: be
curdle ➞ tied: get
cure -lampa -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 -HHH:L, V
cut down (millet) -hanjila -H:L, V
cut firewood -tema -H:L, V
cut grass -ipa -H:L, V
cut hair -chengula -HHH:L, V
cut navel string: cry -lila -H:L, V

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 LLLH:L, D1:no H, N 3/4
dance: type of (any celebration)
chingenge/vingenge LHHIL:L, A:S1/SF, N 7/8
dance: type of (any celebration)
maduru LRL, C1:SF, N 7/6
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 L:L:L, D1:no H, N 7/8
dance: type of (esp. weddings) malale LFL, B:S1, N 7/6
dance: type of (esp. weddings) mndanje/mindanje LFL, B:S1, N 3/4
dance: type of (every celebration)
bakali LFL, E:S2, N 9b/6.
dance: type of (every celebration)
mbeni FL, B:S1, N 9b/6.
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/kitipu 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 7/6
dance and jump of joy -yangala -HHH:L, V
dark: be ➞ black: be
darkness lupi L:L, D1:no H, N 11/6
dawn -cha H:L, V
dawn kulyamba LH:L, E:S2, N 17
day (24 h) lihiuku/mahiku LH:L, A:S1/SF, N 5/6
day (daytime) ➞ sun
day after tomorrow palyamba LH:L,

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 LLLH:L, D1:no H, N 3/4
dance: type of (any celebration)
chingenge/vingenge LHHIL:L, A:S1/SF, N 7/8
directed towards: be, face -lobya -FL, V caus.
directly mwaleku 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 -hattula -HH:L, V
dish -teulila -HHH:L, V
dish out food (with ladle) -kova -HH:L, V
display ↔ give
ditch lupolondo/dimolondo 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 mmlinad'i/vamilandi LHFL, D2:H:no H, N 1+/-
doctor: traditional mmitela/vamitela LHFL, D2:H:no H, N 1+/-
doctor's place kuchihanya LLLL, D1:no H, N 17
dog ing'ovanga/ding 'avanga LHFL, B:S1, N 9/10
dog ung'ovanga/ang 'avanga LHFL, B:S1, N 1A/2A
dog sp. (digging up corpses) ingwngwalati/dingwngwalati LHHH:L, A:S1/SF, N 9/10
dog sp. (digging up corpses) ungwngwalati/angwngwalati LHHH:L, A:S1/SF, N 1A/2A
door mnango/milango LRL, C1:SF, N 3/4
door (traditional, made from millet stalks) lwidi/dinjwidi RL/LRL, C1:SF, N 11/10+
door post hpadango/mapadango
dorsal muscle inono/dinono LLRL, C1:SF, N 5/6

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/umunda LH:L, A:S1/SF, N 1A/2A
draw a line -kuvu -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 -salula -HH:L, V
drive in (e.g. a nail) -komela -HH:L, V
drop litwene/matwene LFL, B:S1, N 5/6
drought chivungu LRL, C1:SF, N 7/-
drum ligwama/magwama 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) nakundanda 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 akatonga/vakatonga LHHL:L, V fin.
dust litutungu LLRL, C1:SF, N 5/-

ear likutu/makutu LRL, C1:SF, N 5/6
early in the morning umambambu LHFL, B:S1, N 14
earrings (three in each ear, filled with coloured pieces of paper) mapete LRL, C1:SF, N -/6
earthworm likwedo/mahwedo LH:L, E:S2, N 5/6
eat -fyza -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 namalowe LHRL, N 9a/-
effective: be (medicine) → true: be
egg lyee/maye RL, C1:SF, N 5/6
elbow → heel
elder akulungwa/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
tenice; comfort -pembeda -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, Vfin.
excrement mavi H:L, A:S1/SF, N -/6
excrement of chicken utahi LRL,
C1:SF, N 1/4
expanded: be; be widened -tanuka
-HH:L, V
explain → tell s.o.
extend, abound -weledeya -HHL:L, V caus.
extinguish -dimma -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 -HHH:L, V caus.
fail, make mistake, miss -lwea -H:L, V
faint, collapse -divika -HHH:L, V
fall -motoka -HHH:L, V
fall -awa -H:L, V
fall -yanguka -HHH:L, V
fall bit by bit -patakita -HHH:L, V
fall down -palatuka -HHH:L, V
far kulehu LH:L, E:S2, A
farmer nkulima/vakulima 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/ngaa-tata
LFL/LHFL/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) ilehe/maileha
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/djinji li:L,
D1:no H, N 9/10
fence: type of lingongo/mangongo
LL:L, D1:no H, N 5/6
fence: type of lwandi/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
fear, influenza chiwambu LRL, C1:SF, N 7/-
few, a bit kadiki LRL, C1:SF, I
field welu/mowelu H:L/LH:L, B:S1, N
1A/6+
field (near a valley, where rice is
planted) litimbe/matimbe LL:L,
E:S2, A
field which has been cultivated more
than three times in succession
likuluku/lakuluku LHHL: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 luvawa LL:L, D1:no H, N 11/
fight -panyana -HH:L, V
fight: show, strike -ng’ola -HH:L, V
fill -ambadya -HFL, V caus.
fill in (holes) -huhulila -HHH:L, V
filter, strain -hamata -HHH:L, V
finally ⇒ then
find -kodida -HFL, V caus.
fine -tosa -FL, V caus.
finger chala’yyala H:L, A:S1/SF, N 7/8
fingernail lukombe/ding’ombe LFL, B:S1, N 11/10
finish (tr. and itr.), accomplish -malila -HHH:L, V
fire mooto/myotoo LFL, E:S2, N 3/4
fire: lack enough, get underdone (food); be unclear (words) -tanda -H:L, V
fire: make (by friction) -pekeha -HFL, V caus.
fire: sticks for making mpekeho/ mipekeho LHHL:L, A:S1/SF, N 3/4
fireplace chiwuli/vivuli LH:L, A:S1/SF, N 7/8
fireplace lijiiko/majikio LRL, C1:SF, N 5/6
fireplace used during celebrations palitungulu LLHRL, C2:H:SF, N 16
firewood lukuni/ling’uni LH:L, A:S1/SF, N 11/10
firewood: small piece of lwawalanji/ dimbwalanji LHHL:L, B:S1, N 11/10
first -tandi -FL, B:S1, A
fish ihomba/dihomba LFL, B:S1, N 9/10
fish Ihomba/ahomba LFL, B:S1, N 1A/2A
fish ⇒ trap
five nyanyano 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 -HHH:L, V
flea nantitili/achanamititi LHHL/LHHHHL:, B:S1, N 1A/2A
flour ahu H:L, A:S1/SF, N 14
flourish -konda -H:L, V
flower litawa/mauwa LRL, C1:SF, N 5/6
flower, blossom induva/dinduva LRL, C1:SF, N 9/10
flute chimbeta/vimbelta 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 3/6
fog, mist, haze litambwe/matembwe LL:L, D1:no H, N 5/6
fold -kunja -H:L, V
follow -papata -HHH:L, V
follow: reap -londola -HHH:L, V
food chakula/vyakula HL:L, D2:H:no H. P nom.
food vilyo RL, C1:SF, N 8/8
food: type of (beans with millet or rice) chipw’ea LH:L, A:S1/SF, N 7/2
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 rchinduli LLHLHRL, N 3/
food: type of (rice with watery pumpkin sp.) likulambilo LLHLH:L, A:S1/SF, N 5/5
food: type of (with cassava) chitundu/vitundu LHRL, C2:H:SF, N 7/8
fool: make s.o. look a (by witchcraft) -lokotanya -HHH: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 ikumbatu/makumbatu LRL,
C1:SF, N 5/6
forbid, refuse s.o. -limbidya -HFL, V
caus.
force ⇒ strength
force: take by ⇒ rob
forehead /venye/ malvenye RL/LRL,
C1:SF, N 5/6+
forest (area with many trees) ingongo/
dingongo LHL, E:S2, N 9/10
forge ⇒ clear land for cultivation
forget -luvala -HH:L, V
forget sth. or s.o. -livalilla -HHH:L, V
forget sth. or s.o. -luvalilla -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 LHL, A:S1/SF, N 7/8
frog sp. (big, living in mud, edible)
lumia/lumwa LRL, C1:SF, N 5/6
front, before muyo L:L, D1:no H, N 18
fruit chilohili/chilohi LHL, E:S2, N 7/8
fry -namuha -HFL, Vcaus.
fry -kalanga -HHH:L, V
full: be -umbala -HHH:L, V
full: be very (of food), belch -tukula
-HHL:L, V
funeral masiko LRL, C1:SF, N -/6

gait chihweni/vihweni LRL, C1:SF, N 7/8
galago, bushbaby (Sw. komba) changa/
vyangava L:L, D1:no H, N 7/8
game: children’s (skip with a rope)
mputa LHL, E:S2, N 3/5
gather -heva -HHL, V
gather (beans, fruit, wild greens) ⇒
pluck
gather up -yola -H:L, V
genet ihungo/dhungo 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/wali H:L,
A:S1/SF, N 1/2
girl (before initiation) nahaku/
anamahaku HLHFL, D2:H:no H,
N 1a/2A
girl: person(s) taking care of namwali/
nkanamwali LH:L/LLLLH: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) -kuhava -HHH:L, V
glutton namulya LFL, D2:H:no H, N
1a-
gnaw -pumuna -HHH:L, V
go -lwena -H:L, V
go away, come from -ska -H:L, V
go out, come out suddenly -buhuka
-HHL:L, V
go up -palange -HHH: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, ogre nakadimu/achamakadimu
LHRL/LHHLRL, C2:H:SF, N 1A/2A+
god, god mmungu amilungu
LRL/LHH:L, C1:SF, N 1/2A
good -ambone HHL:L, P con.
good, beautiful, fine chikatapele
LLHFL, Vfin.
good: be, be beautiful -katapata
-HHH:H,L, V
gossip ⇒ converse; ⇒ mock
grandchild ndikulu/vadikulu LHFL,
D2:H:no H, N 1/2
grandfather; master anambuye LHFL, D2:H.no H, N 2A/
grandparent, ancestor avivi/angaa-vivi LRL/H/-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. chihuvi/ihuvi LRL, C1:SF, N 7/8
grass sp. lipelepende/mapelepende LHHH:L, A:S1/SF, N 5/6
grass sp. nachisvele LHHRL, C2:H.SF, N 3a/
grass sp. nachitukena LHHL, D2:H.no H, N 3a/
grass sp. nambu 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, B:S1, N 10
graveyard kumisati LLLL, D1:no H, N 17
greet -kamasi -HFL, V caus.
greetings disalamu LRLL, 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/dindo LL: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 LLHL, E:S2, N 3/4
grumble, speak in oneself -loloma -HH:L, V
grumble, speak to oneself -tongodika -HHH:L, V
guard, defend -hikalila -HHHL, V
guava lipela/mapela LFL, B:S1, N 5/6
guest, stranger nyeneyenye LRL, C1:SF, N 12
guest/stranger; state of being a uyeni LRL, C1:SF, N 14
guide, go ahead -longolela -HHHL, 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
gun (near teeth) uhinini LHHL, A:S1/SF, N 14
gun ithuti dihuti LL:L, D1:no H, N 9/10

H

hair (e.g. on legs) → feather
hair (of back) lihahamanga/
mahahamanga LLLL, C1:SF, N 5/6
hair (of head) ilindo LHFL, A:S1/SF, N 14
hair dressing; type of mpaneka/
mipaneka LLLL, 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 5/6
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 LLLL, C1:SF, N 7/8
hand, arm nkono/mikono LH:L,
A:S1/SF, N 3/4
handicapped: be -lamala -HH:L, V
handle mpimi/mipimi LH:L, A:S1/SF, N 3/4
hang -tanda -HL:L, V
hang (up) -koveka -HH:L, V
hard: be -monopa -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 -HH: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 -palula -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/michela LFL, B:S1, N 5/6
harvest time nechela/michela LFL, B:S1, N 3/4
hasten, do quickly (with negative result) -yangahana -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/achamwene 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) amwene/achamwene 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 ntimamitima LHL, 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‘ indo’/vihing‘ ino LHL: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 -HL:L, V
hey, tell me!, what? dachi L:L, D1:no H, I
hide oneself -litwaliha -HH:L, V refl./caus.
hide sth. -piha -HL: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 -HHH:L, V caus.
hoe (a field) -kang’ana -HL: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,
hole, hollow (small) ntupa/mitupa LL:L, D1:no H, N 3/4
hole (in lobe of ear) mbalenga/ mbalenga 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 LHHL:L, B:S1, N 9/10
hole (through sth.) imena/dimenya LL:L, D1:no H, N 9/10
hole: make a, break into -holoha -HHL, 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 HL, 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 -kulupidiya -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/ mbanda 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 -HHH: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 -HHL, V
hunt chihako/vihako LRL, C1:SF, N 7/8
hunt (with a sling), aim (with shooting, throwing) -lumbata -HHL, V
hunt for -hachila -HHH:L, V
hunt for -hakila -HHH:L, V
hunting stick indongo/dindongo LFL, B:S1, N 9/10
hurt -pwita -HHL, V
hurt: get => wound
husband: my ntwangu/achatwa vangu LFL/LHH RL, B:S1, N 1/24+
hut for boys during initiation rites ntengu/mitengu LRL, C1:SF, N 3/4
hut (round) ndile/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 naangun 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 alemwa LFL, B:S1, N 14
if => then
ill: be => wound
ill: fall -wula -HHH: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 -HHH:L, V
increase, become more and more
-pulung’anya -HHH:L, V caus.
infant (between 2 and 6 months old) lungu/dinfunga RL/LRL, C1:SF, N 11/10
infant (younger than 2 months old)
infect (and destroy) fruit, trees -humbwa -FL, V pas.
inform  → invite
initiate, circumcise (in former days) -yaluka -HH:L, V
initiates (returning from bush) litewe LHL: E:S2, N 5/-
initiation place (bush) kundagala LLL:L, D1:no H, N 17
initiation rites malangwe LLL:L, D1:no H, N 6
initiation rites (boys) likumbi makumbi LRL, C1:SF, N 5/6
initiation rites (girls) chiputa LRL, C1:SF, N 7/-
insect sp. (damaging produce of fields) chabanda vyabanda HFL: B:S1, N 7/8
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 LLL:L, A:S1/SF, N 5/6
jacakal mancheta anamicheta LLLR/LHHLRL, C1:SF, N 1a2A
jaw matama LRL, C1:SF, N 6
joint (of body) chingungunda -vungungunda LLL:L, D1:no H, N 7/8
joking relationship (Sw. utani) uvilo LHL: A:S1/SF, N 14
journey  → time
joy chimwemwe L: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) -chinjika -HH:L, V
jump down -chitika -HH:L, V

K
kernel of pumpkin inyomoko/ dinyomoko LLL:L, C1:SF, N 9/10
kidney dibhiyo LHL: A:S1/SF, N <10
kill -walala -HHH:L, V
kill at a distance (witchcraft) -lapilila -HHH:L, V
kill, die -hiya -HL, V
kill insect with tip of finger, toe -panda -HHH:L, V
killer, savage person mngwangwalati/ vangwangwalati LHHH:L, A:S1/SF, N 1/2

L
lack, get lost -hova -HL, V
ladle (for gravy) lupwawa dimwawa LFL, B:S1, N 11/10
ladle, spoon lukoko dinjoko RL/LRL, C1:SF, N 11/10
lake, pool litanda matanda LFL: B:S1, N 5/6
lame person akahwena vakhwena LHL, V fin.
lamp kandili dikandili LFL/LLFL, E:S2, N 9c/10c
lamp (small) chibatali/vibatali LLL: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/kitongodi LLRL, C1:SF, N 7/8
last -achiwango ?, 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.) -chika -FL, V caus.
learn -lileeya -HFL, V refl/caus.
learn -lifundisa -HH:LL, 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 ludo/mado LHL, E:S2, N 11/6
leg: calf of; very short person chingulima/vingulima LHRL, C2:H:SF, N 7/8
lemon: water likumbila/maungu LHLFL, B:S1, N 5/6
leopard isuvi/disuvi LFL, B:S1, N 9/10
leopard usuvi/usuvi LFL, B:S1, N 1A/2A
leper mnangundula/vamangundula LLHL:L, B:S1, N 1/2
leprosy mangundula LHL:L, B:S1, N 1-
liar nankalavanya/achanankalavanya LLLLFL/LHLLLFL, E:S2, N 1A/2A+
lick -lamba -H:L, V
lid (of pot) litano/matano LRL, C1:SF, N 5/6
lie -lavyanya -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 -HHL, V
light: be -langala -HH:L, V
light: be -langala -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 -humbala -HHHL, V
linger ↔ delay
lion ihimba/himba LFL, B:S1, N 9/10
lion uhimba/ahimba LFL, B:S1, N 1A/2A
lip layeye/dinjeye LFL, B:S1, N 11/10
lip-plug (in upper lip) indonya/ dindonya LL:L, D: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 lingwanga/mangwanga LLLFL, E:S2, N 5/6
lizard sp. (big, living in water) nakadindumba/achanakadindumba LLLFL/LHHHLFL, E:S2, N 1A/2A
lizard sp. (big, living on land) ung 'ondo/ang 'ondo LHL, A:S1/SF, N 9/10
lizard sp. (big, living on land) ung 'ondo/ang 'ondo LHL, A:S1/SF, N 1A/2A
load ↔ bundle
locust lihiyi/mahiye LHL, 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 -jugusa -HFL, V caus.
loose: be -jegeya -HHH:L, V
lose ➞ throw away
lost: be -yahiha -HHH:L, V
lost: get ➞ invisible: become
louse imboko/dimboko LHL, A:S1/SF, N 9/10
louse umboko/amboko LHL, 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 LHL, E:S2, N 17
lungs lipahu/mapahu LRL, C:SF, N 5/6
lust, desire lukou LHL, A:S1/SF, N 11/
M
maggot ihong’o/dihong’o LRL, C:SF, N 9/10
maggot uhong’o/ahong’o LRL, C:SF, N 1A/2A
maize ilombe/malombe LHL, 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) chikokowa/vikokwa LLLL:L, D1:no H, N 7/8
maize cob: leaves of lihahi mahahi LRL, C:SF, N 5/6
maize plant: knockly part of the stem of a imindzi/dimindzi LRL, C:SF, N 9/10
maize plant: leaves of likwati/makwati LRL, C:SF, N 5/6
maize plant: plume on top of inyanja/dinyanja LLLL:L, D1:no H, N 9/10
Makonde language, nature chimakonde LHL, D2:H:no H, N 7/
Makonde person mmakonde/yamakonde LHFL, D2:H:no H, N 1/2
male -achilume HLHL, P con.
man mmume/volume LHL, A:S1/SF, N 1/2
man: full-grown namumee HHFL,
D2:H:no H, N 1a/
mango yembe/diyembe RL/LRL, C:SF, N 9c/10c
Maraba dialect, nature chimala/L
LHL, 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, C:SF, N 5/6
marriage indowa/dindowa LRL,
C:SF, N 9/10
marriage ulombi/malombi LRL, C:SF, N 14/6
marriage: propose -posa -FL, V caus.
marry (of man) -ombai -H:L, V
marry (of woman) -lombwa -FL, V pas.
mash mangoose (Sw. nguchiro)
nimvula matavala LHFL, B:S1, N 3/6
mask chihu/kuhuku/vihukuhuku LHHL, B:S1, N 7/8
master ➞ grandfather
master; husband mm’anda/vang’anda HRL, C:2:H:SF, N 1/2
mat (made of plants) lyambi/malimbo RL/LRL, C:SF, N 5/6
mat: sleeping likande/makande LHL, 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 listwele LHFL, B:S1, N 5/
measure -pima -H:L, V
measure (for grains) pisii/dipisi RL/LRL, C:SF, N 9c/10c
meat inyama/dinyama LRL, C:SF, N 9/10
medicine lipeleko/mapeleko LHHL, A:S1/SF, N 5/6
medicine ntela/mitela LHHL, A:S1/SF,
misfortune chihakaw LHH:L, A:S1/SF, N 7/

mix, collect together, add -kundanya -HFL, V caus.

mock, ridicule, gossip -jemula -HH:L, V

modesty ⇒ shame

money (formerly rupee) lupia/dimia LFL, B:S1, N 11/10

monkey (Sw. kima) inyima/dinyima LHL, A:S1/SF, N 9/10

monkey (Sw. kima) unyima/anyima LHL, A:S1/SF, N 1A/2A

monkey (Sw. nyani) lingwele/ mangwele LHL, E:S2, N 5/6

monkey (Sw. tumbili) chitumbili/ vitumbili LHFL, B:S1, N 7/8

month ⇒ moon

moon, month mvledi/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 injenjema/anjenjema LHRL, C2:H.SF, N 1A/2A

mother amama/a chamama/ angaa-mama HRL/LHRL/LH:-H:L, C2:H.SF, N 2A/2A+

mother ayw achayu 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 LHL, A:S1/SF, N 5/?

mother (lying-in woman, i.e. s.o. who has just given birth) nnuku/ valuhuko LHLFL, D2:H.no H, N 1/2

motorcycle chitututu/vitututu LHRL, C2:H.SF, N 7/8

motorcycle mmutukasikeni/ muutukasikeni 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 *kanya/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 *wrahé/dimbehe* LRL, C1:SF, N 14/10

mushroom sp. (in the bush) *livanga/mavanga* LHL: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) *minganga/minganga* LHL: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 *ng'olé/ng'olé* HL:L, D2:H:no H, N 1/2A

Mwera language, nature *chimwela* HFL, D2:H:no H, N 7/-

Mwera person *munwela/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 *mungu/dimungu* LFL, B:S1, N 9/10

Ndonde dialect, nature *chindonde* HFL, D2:H:no H, N 7/-

Ndonde person *ndonde/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 *ntovel/motelo* HHL:L, A:S1/SF, N 3/4

neglect ➔ omit

**neighbour** *ndangani* LRL, C1:SF, N 18

nephew, niece: my *mvipwangu/vipwangu* HRL, C2:H:SF, N 1/8?

nest (of bird) *chitehi/vitehi* LHL:L, E:S2, N 7/8


new -ahambi HH:L, P con.

next (month, etc.) ➔ appear

Ngoni language, nature *chingoni* LRL, C1:SF, N 7/-

Ngoni person *ngongi/vangoni* LRL, C1:SF, N 1/2

night *chilo* RL, C1:SF, N 7/-

night *uhiku* LHL:L, A:S1/SF, N 14

**Nnima** dialect *chinnima* HHLFL, D2:H:no H, N 7/-

Nnima person *munnima/vannima* HHLFL, D2:H:no H, N 1/2

no!, there is no, Negative Particle *nanga* L:L, D1:no H, I

nod -hindlu/-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* LHL:L, A:S1/SF?, I

O

obedient: be - *teleka* -HH:L, V

obey ➔ respect

observe, notice - *lolehidya* -HHH:L, V

caus.
obstinate: be, refuse to obey -pinga -HL, V
offer present for a special occasion, esp. initiation -tuedya -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 -atangui HFL, P con.
old, used (things) ⇒ worn out; ⇒ rag; ⇒ broken; ⇒ homestead: abandoned
old: be, healthy and strong -komala -HH:HL, V
old: be (of people) -kongopala -HHH:HL, V
omit, neglect, leave (in a certain condition) -lekelela -HHHL:HL, V
one; a(n), some -mo RL, C1:SF, P
only, in vain, for free, no matter chiihi L:L, D1:no H, N 7/-
open, unfasten -chimula -HH:HL, 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:HL, V
owl namahihi anamahihi LLLR/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 -HL, V
pass, abate -hapuka -HH:HL, 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 -HL, V
pea imwevo/dimwevo LRL, C1:SF, N 9/10
peanut ntesa/mitesa LL:L, D1:no H, N 3/4
peel ⇒ scrape off
peel off -pukusula -HHH:HL, V
penis chitongo/vitongo LRL, C1:SF, N 7/8
penis chivolo/vivolo LFL, B:S1, N 7/8
people outside the family mmidi/ vanidi HFL, D2:H:no H, N 1/2
pepper immilipi/dimilipi 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 manu/vamu RL, C1:SF, N 1/2
pervasive: be ⇒ disagree
pestle mmersi/mihiri RL, C1:SF, N 3/4
pierce -homa -HL, V
pierced (ear) -ambalenga HLLL:L, P con.
pig inguluve/dinguluve LLLL, C1:SF, N
pig  ungulave/angulave  LLRL, C1:SF, N 1A/2A
pig: wild  imbango/dimbang o  LH:L,
A: S1/SF, N 9/10
pig: wild  ambango/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  chidi  HFL, B:S1, N 7/8
place  pachima  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 I4
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 7/8
pluck  (fowl) -kowa -H-L, V
pluck, gather (beans, fruit, wild greens)  -hepa -H-L, V
plucked food, e.g. fruit  chihepo/vihepo
plug, cork  chidiu/vidiu  LRL, C1:SF, N 7/8
point (with finger)  -olota -HH:L, V
poke into  -koch a -HH:L, V
poke up, put more wood on fire  -konylea -HH:L, V
pole  for two loads  ntenga/mitenga  LRL,
C1: SF, N 3/4
poles  isungula/disungula  LHFL,
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
LRL, C1:SF, N 7/8
pot  (for cooking)  lhlanja/mahanja
LL:L, D1:no H, N 3/6
pot  for water (big)  litende/matende
LH:L, A: S1/SF, N 5/6
pot: water  (small)  mnangelo/milangelo
LHFL, B: S1, N 3/4
potato  sp. (round shape)  mandale
LH:L, E:S2, N ~6
potato: sweet  nkanbe/mikambe  LH:L,
E:S2, N 3/4
potato: sweet  sp. (tall)  ljvale/dimbale
LRL, C1:SF, N 11/10
potsherder  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
pregnancy, embryo chitumbo/vitumbo

prepare, arrange, put in order, clean

prepare oneself to do sth. which needs strength -litumba -HRL, V refl.

present for a special occasion (esp. initiation) imudy/oimudy LL:L,

present for a special occasion (esp. initiation) ding’ombe LRL, C1:SF, N

present: be → sufficient: be

press → touch

press tight, squeeze -bana -H:L, V

pretend -ilambila -HRL, V refl.

pretend (to be good, nice, etc., in order to get sth.) -twesa -FL, V caus.

prevent, hinder -dvila -H:L, V

prick, pierce -chocha -H:L, V

private part lukundu/ding’undu LFL,

problems: bring -tundwila -HHH:L, V

problems, get, be afflicted -banika -HHH:L, V

problems: have -lava -H:L, V

prosper, rejoice -poka -H:L, V

protect against evil -lichilinganya -HHLL:L, V refl./caus.

pride of oneself: be, boast -linowa -HRL, V refl.

puberty: get to (boys) -tlumuka -HHH:L, V

puberty: get to (girls) -vayuka -HHH:L, V

publicly pameho LH:L, E:S2, N 16+6

puff adder chinyemavi/vinyemavi LHLR, C2:H:SF, N 7/8

pull (firmly) -ula -H:L, V

pull (softly) -holola -HHH:L, V

pull out, uproot -dobola -HHH:L, V

pulverize -dududa -HHH:L, V

pumpkin sp. (watery) likong ‘we/makong ‘we LL:L, D1:no H, N 5/6

pumpkin fruit litiini/matinji HRL,

pumpkin plant nini/mitiini HRL,

punishment -tubisa -HFL, V caus.

purpose: on namadi LRL, C1:SF, l

push (once) -gong ‘ola -HHH:L, V

push (and push again) -hingiliha -HHH: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 -HHH: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 -HHH: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,

quarrel with each other -pwatana -HHH:L, V

quarrelsome chihongahonga LHHL:L, A:S1/SF, N 7-

quarter (of town or village) luwungo/ dimbungo LH:L, A:S1/SF, N 11/10

quickly upeli LFL, B:S1, N 14

quiet: be, keep quiet -nyalala -HHH: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 LHHL:L, A:S1/SF, N 9/10
rains: drizzling -chiungi -LH:L, A:S1/SF, N 7/-
rains: early -imbuntu -LH:L, A:S1/SF, N 9a/-
rains: late -nangwe -LL: L, D1:no H, N 9a/-
rainy season; pool, pudding -chihoko/ vihoko -LRL, C1:SF, N 7/8
raise up (in order to prop) -chikula -HH:L, V
rape (a woman) → end: come to an
rash -namatata -HH:L, D2:H.no H, N 9a/-
rash-chipele -LRL, C1:SF, N 7/-
rat -likule / makuule -LFL, B:S1, N 5/6
rat -nkule / makuule -LFL, B:S1, N 3/6
rat sp. -litiku / matitu -LFL, B:S1, N 5/6
rave -luba -H:L, V
razor -chijembe / vijembe -LH:L, E:S2, N 7/8
reach -lnwikanila -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) -ilela -H:L, V
reason, cause -lyongo / mayongo -LRL, C1:SF, N 5/6
rebuke → scold
receive -pwechela -HHH:L, V
receive (sth. out of s.o.’s hand) → do
reclaim -longana -HHH:L, V
recover: live / exist -lama -H:L, V
red -anahuri -HHH:L, P con.
red: be -hurivila -HHH:L, V
redeem -kombola -HHH: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 -HHH:L, V
remain, think -kumbikula -HHH:L, V
remind -kumbusa -HFL, V caus.
remove weeds → scratch skin with force
repeat -ila -H:L, V
repeat -ilia -HHH:L, V
reply, respond -yambukila -HHH:L, V
respect, obey -kungumika -HHH:L, V
respect, dignity: behave with -limaka -HHH:L, V
rest -yowela -HHH:L, V
rest -yoweleta -HHH:L, V
restless: be, feel uncomfortable -lipweleta -LRL, V refl.
return -iya -H:L, V
revenge → overturn
revive -dyuha -FL, V caus.
rib -huvu / dimbu -LRL, C1:SF, N 11/10
rice (the husked grain) -nyele / miete -LFL, B:S1, N 3/4
rice (the plant) -mpunga / mipunga -LRL, C1:SF, N 3/4
riddle -nachihe -HHH:L, A:S1/SF, N 9a/-
riddle: answer to -nachilawa -LHFL, B:S1, N 9a/-
ridicule → mock
right -milimo / mililo -LH:L, A:S1/SF, N 3/4
right, correct -mwa ха -H:L, A:S1/SF?, I
right, justice -hunda -RL, C1:SF, N 11/-
right: set, tend -ongoleta -HHH:L, V
ripe badly -hunza -H:L, V
ripe -lapata -HHH:L, V
ripe (itr.) -ula -H:L, V
ripe (of papaya, mango, not of banana) -lemba -H:L, V
rise, come forward -uka -H:L, V
rise, get up -imuka -HHH:L, V
river → valley
roast -yochea -FL, V caus.
rob, take by force -dodoma -HHH: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: dead (found when clearing a field) litupa/matupa LH:L, A:S1/SF, N 5/6
rope ndidi/midi LHH: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 nhinyimila/michinyimala LLRL, C1:SF, N 3/4
rope: twisted luvoi/dimboi LRL, C1:SF, N 11/10
rotten: be -kandika -HH:L, V
round: go -dingaka -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 -HH:L, V
run away -tukuta -HH:L, V
rustle (in shrubs) -kachakacha -HHH:L, V red.
rustle (sheets of paper) -waya -HH:L, V
Ruvuma huuma LFL, B:S1, N 11/10

S
sacrifice unyolo/dinyolo LRL, C1:SF, N 14/10
saliva majoljoli LH:HH:L, A:S1/SF, N -6
salt munya LHL, A:S1/SF, N 3/-
same, the very one -nang'o -HH:L, E:S2, P
sand mnyangi HRL, C2:HF, N 3/-
sand nsangi HRL, C2:HF, N 3/-
sandy ground litimbwisi LLH:L, E:S2, N 5/-
satisfied: be (food) -ikuta -HH:L, V
satisfied: get -toleta -HH:L, V
savannah makolobeko LLLRL, C1:SF, N -6
save, be saved -poha -FL, V caus.
say -chi HH:L, V
saying lilonjedi/malonjedi LLRL, C1:SF, N 5/6
scar likwanda/makwanda LRL, C1:SF, N 5/6
scatter -mwigilanya -HHH:L, V caus.
scattered abroad: be -kanga -HH:L, V
scold, rebuke -duma -HH:L, V
scold, rebuke -kalipa -HHH:L, V
scoop water ➔ burn up
scorched: be, be burnt -pya H:L, V
scorn, despise -penda -HH:L, V
scorpion chivalavala/vivalavala LHHH:L, A:S1/SF, N 7/8
scrape off, peel -kwanga -HH:L, V
scratch, peck; harvest groundnuts -pala -HH:L, V
scratch skin -vava -HH:L, V
scratch skin forcefully; remove weeds -tava -HH:L, V
scream, make noise -nyokonya -HF, V caus.
scream (shriil scream) -luluta -HH:H, V
scream (until exhaustion) -lidila -HRL, V refl.
screen (used in hunting) chiumbo/viumbi LRL, C1:SF, N 7/8
search ➔ look for
second -avili HF, P con.
second day after tomorrow palyambapo LH:HH, N 16
seduc -torgosa -HF, V caus.
see, feel -ona -HH:L, V
seed imbeyu/dimbeyu LFL, B:S1, N 9/10
seize -kamula -HH:L, V
self -ene FL, ?, P/A
sell -sumisa -HF, V caus.
semen ubila LFL, B:S1, N 14
send, cause to go -pelekedya -HHH:L, V caus.
送 (person) -tuma -HH:L, V
send on in advance, put forward -logeleza -HHH: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 -HH:L, V
sexual intercourse: have -tupila -HHH: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) chimbwahedi/ vimbwahedi HHH:L, A:S1/SF, N 7/8
shadow (of things) mimbwheha/ mimbwheha HRL, C2:H:SF, N 3/4
shake (tr. and itr.) -tikny -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 -kundamila -HHH:L, V
sharp: be ⎯ to
sharpen -tema -H:L, V
sharpen (knife) -kwachakwicha -HHH:L, V red.
sharpen teeth -hangola -HHH:L, V
shave, cut all hair of head -mova -H:L, V
shed ngongwe/migongwe LL:L, D1:no H, N 3/4
sheep ingondolo/gingondolo 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 -HHH: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 -ananjip HHH:L, P con.
short: be -injipala -HHH:L, V
short: be -ipika -HHH:L, V
short person: very ⎯ leg: calf of shoulder livala/mavala LH:L, E:S2, N 5/6
shout, talk much and lively -pwahika -HHH: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 mnumbu/ 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 mnumg ‘une/vanung ’une LHHL: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 mnwele/vanwele LH:L, A:S1/SF, N 1/2
sickness ulwele/malwele 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 trossing -ululaha -HHH: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
sing -kupula -HHH:L, V
sink: disappear, vanish -titimila -HHH:L, V
sister ⎯ sibling
sit down, stay, live -ikala -HHH: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 -HHH:L, V
skin limbende/mambende LH:L, E:S2, N 5/6
skin of snake liyuwu mayuwu LH:L,
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
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 -*dikidi* -HHH:L, A:S1/SF, A
small -*dyoko* -H:L, A:S1/SF, A
small: become -*chakapala* -HHH:L, V
small*pox* chihoba LRL, C1:SF, N 7/-
smash, pound leaves -*ponda* -H:L, V
smear -*ilhwang anidyia* -HHH:L, V
smear -*lipakala* -HLRL, V refl.
smell a scent of s.o. or sth. -*yamulila* -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 myongo/mihongo LRL, C1:SF, N 3/4
snake sp. (big, colours: brown, white, black and yellow) lipatela mapatela LFL, 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/LHHHRL, C1:SF, N 1A/2A+
snake sp. (long, brown) lukukutu/*ding’ikatu* LHH:L, A:S1/SF, N 11/10
snake sp. (of medium size, brown, yellow) *ndalu* achamalu LFL/LHHFL, B:S1, N 3/2A+
snake sp. (related to python) *iuhuhi/dihuhi* LRL, C1:SF, N 9/10
snake sp. (related to python) *ahuhi* /ahuhi LRL, C1:SF, N 1A/2A
snake sp. (small, black) namalutu/achanamalutu LHRL/LHHHRL, C2:HSF, N 1A/2A+
snake sp. (small, very poisonous, making jumping movements) chisimila/visunila 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) -*musa* FL, V caus.
snuff: take a (tobacco) -*tona* -H:L, V
so and so, such a one *njooji* HRL, C2:HSF, 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/viikunda LFL, B:S1, N 7/8
soil: white lihangahi LHFL, C1:SF, N 5/?

solitariness, loneliness *uchiva* LFL, B:S1, N 14
song *luhimu/dihimu* LH:L, A:S1/SF, N 11/10
song *luhimudihimu* LH:L, A:S1/SF, N 11/10
soot machili LFL, B:S1, N 7/-
sorcerer myavi/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:H, 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:H, V
spear nkuchi/mikuchi LFL, B:S1, N 3/4
speech, utterance *ukuto* LRL, C1:SF, N 14
spider nankakatambwe/
anamikakatambwe LILLL:LI
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/mahoha 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 -suna -H:L, V
spit out (small thing) -pemba -H:L, V
split, cleave -vanga -H:L, V
split, cleave, burst -pasula -HHH:L, V
spread, infect -enelela -HHH:L, V
spread, lay down -ladya -FL, V caus.
spring up → bear fruit
sprout, shoot up -hipuka -H:L, V
sprout, shoot up -mela -H:L, V
squat -myonyomula -HHH:L, V
squeeze -kamila -HHH: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)
luchche/dinyche LFL, B:S1, N 11/10
stand -imila -HHH: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 -HHH:L, V
steal -iva -H:L, V
stem lilenga/malinga LRL, C1:SF, N 5/6
step in -kadamba -HHH: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 -HHH:L, V
sticks: kind of (long and thin)
lvalala/dimalava LHHH:L,
B:S1, N 11/10
still → now; not yet
sting, beak lulomo/dindomo LRL,
C1:SF, N 11/10
stink -mung’a -H:L, V
stir -kolo -HHH:L, V
stomach lipithu/mapithu LH:L,
A:S1/SF, 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 chiboda/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
LH:L, D1:no H, N 9/10
storage of produce: type of (plaited of
green 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 -HHH: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., C:SF?, I
stump, trunk of a fallen tree lihichi/mahichi LRL, C:SF, N 5/6
stupidity, foolishness avelu LRL, C: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, C:SF, N 3/4
sugar cane: knuckle of iminda/diminda LRL, C:SF, N 9/10
sun, day (daytime) lidava/madava LH:L, A:S1/SF, N 5/6
sunrise: ideophone expressing the ngwee LHR, C:2:H:SF, I
sunset (ideophone expressing that the sun has disappeared) pii HR, C:2:H:SF, I
sunset (ideophone expressing that the sun is about to disappear) pii HR, C:2: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, C:1:SF, N 7/-
Swahili language, nature chiswahili LLRL, C:1:SF, N 7/-
Swahili person nswahili/vaswahili LLRL, C:1:SF, N 1/2
swallow -kumila -HH:L, V
swallow -mita -H:L, V
swamppy soil chimbsimbwi HRL, C:2:H:SF, N 7/-
swear an oath -apila -HH:L, V
sweat -widuha -HFL, V caus.
sweat chiwiduhi LHFL, B:S1, N 7/-
sweep -pyaila -HH:L, V
sweet: be (taste) -laleha -HFL, V caus.
sweet potato: leaves of ntolilo/mitolilo LLRL, C:1:SF, N 3/4
swell ⇨ thatch
swell out ⇨ bulge
swollen: become -vuhuka -HH:L, V
syphilis inyambo LH:L, E:S2, N 9/-

T
taboo mpingo/mipingo LRL, C:1:SF, N 3/4
tail nchila/michila LH:L, A:S1/SF, N 3/4
tail (implement of divination) inyumba/ dinyumba LRL, C:1:SF, N 9/10
take -twa -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 -kangaluka -HHH:L, V
talk, converse -lone -HH:L, V
talk much and lively ⇨ shout
tall ⇨ long
tap, knock, beat (of heart) -duka -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 myodi/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 -HHH:L, V
teat ihonga/dihonga LRL, C:1:SF, N 9/10
tell, say, speak, explain -hauta -HH-L, V
tell a story -tana -H:L, V
tell s.o., explain, advise -haulila
ten likumi/makumi LRL, C1:SF, N 5/6
termite sp. (small winged, not edible) imbulimwindi/dimbulimwindi LHLRL, C2:H:SF, N 9/10
termite sp. (small winged, not edible) umbbulimwindi/dimbulimwindi LHLRL, 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 -HH:L, V
their -at(y)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) luunjii dimunji LH:L, E:S2, N 11/10
thicket: dense mnyitu/mihitu LH:L, A:S1/SF, N 3/4
thicket: thorny chiholo/viholo LRL, C1:SF, N 7/8
thin: be -yanda -HH:L, V
thing chimu/vima RL, C1:SF, N 7/8
thing, substance, what a thing is made of chitukutuku/vitukutuku LLHLFL, E:S2, N 7/8
think ➔ remember

third -*atatu HFL, P con.
third day after tomorrow ntondo LHL, 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 -HL, V
thresh; harvest millet, peas -hula -HL, V
throat lukalongo/ding’alongo LLRL, C1:SF, N 11/10
throw at -yela -H:L, V
throw away; lose -yaha -HL, V
throw down -tunedanya -HFH, 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 -dikududuku -HHHHH:L, V red.
tie, fasten, fix -hunga -HL, V
tied: get, curdle -kama -HL, V
time, period, journey mwanda/myanda H:L, A:S1/SF, N 3/4
tired: be, be hungry -doba -HL, V
tobacco tumbaku LFL, E:S2, N 5b-
today nelo RL, C1:SF, I
tomato linymchwa/manyincha HRL, C2:H:SF, N 3/6
tomorrow luundo HRL, C2:H:SF, N 11-
tomorrow muundo HRL, C2:H:SF, I
tong mmyova/mivuva LRL, C1:SF, N 3/4
tongue lulimi/dindimi LH:L, A:S1/SF,
tensil chilakali/vilakali LHFL, B:S1, N 7/8

tooth lino/meno LH, A:S1/SF, N 5/6

tooth: molar litang `unilo/matang `unilo LHNL, A:S1/SF, N 5/6

top, above, sky muha RL, C1:SF, N 18

torch chihambo/vihambo LRL, C1:SF, N 7/8

torment, cause to feel pain -ndonda -HL, V

tortoise ing `ambe/ding `ambe LFL, B:S1, N 9/10

tortoise ung `ambe/ang `ambe LFL, B:S1, N 1A/2A


track lwayo/dinayo RL/LRL, C1:SF, N 11/10

trade uhambachi LLRL, C1:SF, N 14

trap -teya -HL, V

trap lutambo/dinambo LRL, C1:SF, N 11/10

trap: type of (rope, to trap bigger animals) likoko/mokocho LH:L, A:S1/SF, N 5/6

trap: type of (rope, to trap birds) chikungu/vikungu LH:L, A:S1/SF, N 7/8

trap: type of (rope, to trap e.g. klipspringers) lupupuso/dimupo LLL:L, D1:no H, N 11/10

trap: type of (rope, to trap small bush animals) liputila/maputila LLFL, E:S2, N 5/6

trap: check a (whether an animal is caught) -onda -HL, V

trap: set a -inkila -HHH:L, V

tread livata/maivata LRL, C1:SF, N 5/6

tread on, put food on -livata -HH:L, V

tread on, put foot on -livata -HH:L, V

treat a sick person -nudya -HL, V caus.

tree mndani/milandi LFL, B:S1, N 3/4

tree sp. mmalala/mivalala LHFL, B:S1, N 3/4

tree sp. mmulwa/mimbulwa LL:L, D1:no H, N 3/4

tree sp. mmula/mivula LH:L, A:S1/SF, N 3/4

tree sp. mmwindi/mivwindi LH:L, A:S1/SF, N 3/4

trouble [fedeka] -HHH:L, V

true, be, be effective (medicine) -londa -HL, V

trunk litépo/matepo LH:L, A:S1/SF, N 5/6

trust, hope -kupilia -HHH:L, V

try, attempt -linga -HL, V

tryse 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/LHFL, B:S1, N 3/2A

turn -lauka -HHH:L, V

turn restlessly (as in pain) [crackle

turn round, stir (e.g. in making cassava porridge) -kolowanya -HHH: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) onang’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 mniungu 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 -HHH:L, V
up and down: go (e.g. fontanel on head of baby) -thohoma -HHH: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 -HHH:L, V
used to: be, get accustomed -dyovelela -HHH:L, V
useless ➞ bare

V
valley luahele/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 mnanga/minanga LH:L, E:S2, N 3/4
verandah, place before a house lupem/dimem LRL, C1:SF, N 11/10
very namene HRL, C2:H.SF, I
very sano RL, C1:SF, I
vexed: be, be angry -suna -HHH: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 -HHH:L, V
vomit -tapika -HHH:L, V

W
waist chikundu/vikundu LFL, B:S1, N 7/8
wait -linda -H:L, V
walk -hwendhweni -HHH:L, V red.
walk quickly -peya -H:L, V
walk: take a, stroll -onga -H:L, V
wall libaka/mahakha LRL, C1:SF, N 5/6
want, like, desire, wish, look for -lembela -HHH:L, V
war ➞ quarrel
wash (clothes) -chapa -H:L, V
wash (hands) -kalava -HHH:L, V
wash private parts (women) -ikasaula -HHRL, 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 lukwewe/ding ‘wekwe LH:L,
ENGLISH – CHINIMA

weed sp. nachitani LHFL, D2:H.no H, N 3a/
weed sp. nahuwe 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 LF,L, 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 ndwani LHRL, C2:H:SF, I
where kwachi RL, C1:SF, I
whether → or
which -lida -FL, B:S1, P
white -anaswe HH:H, P con.
white: be (rash) -swelela -HH:L, V
who -nani -RL, C1:SF, A
whole ⇒ healthy
whose -a-nani HLRL, P con.
why mwavachii LRL, C1:SF, I
wide: be -yandauka -HHH:L, V
widow mmilikanga/vumilikanga LHHL:L, D2:H.no H, N 1/2
wife: my adyangu/akadaya vangu LF,LHH RL, C2:H:SF, N 24/24+
wild-dog (Sw. mbwanwitu) likoha/ mahoho LHFL, 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 mpa/mipapa LH:L, A:S1/SF, N 3/4
window chitonono/vitonono LHHL:L, A:S1/SF, N 7/8
winds: rain bringing chimhunga LRL, C1:SF, N 7/-
going/bringing chimhunga 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 7/10
wish → want
witchcraft uhavi LFL, B:S1, N 14
witchcraft: practice -peleka -HH:L, V
witchcraft: practice, bewitch -lova
-H:L, V
wither -lovela -HH:L, V
without nnuvunu LLRL, C1:SF, N 18
woman mmaha/vamaha 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 -bika -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.
wrapping -popotola -HHH:L, V
wrist inyung’inyung’u/
dinyung’inyung’u LHHH:L,
A:S1/SF, N 9/10
write -lemba -H:L, V

Y
yam chinundvi/vitundi LRL, C1:SF, N 7/8
Yao language, nature chiha HFL, D2:H.no H, N 7/-
Yao person myau/vahau HFL, D2:H.no H, N 1/2
yawn -vahula -HH:L, V
year chaha’vaka 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.) -enu 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
3. elder 14. stones 25. fish 36. speak Present)
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 eē 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 mbi in the Chimaraba word for ‘rain’ represents the prenasalized consonant mb with a roll.

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<th>Chimátáambwe</th>
<th>Chíndoonde</th>
<th>Chiínjíma</th>
<th>Chimáláaba</th>
<th>Shímakoonde</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ?</td>
<td>mmável</td>
<td>nkóongwe</td>
<td>mmável</td>
<td>nkóongwe</td>
</tr>
<tr>
<td>2. ?</td>
<td>vamável</td>
<td>vakoóongwe</td>
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<td>3. nkúulu</td>
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<td>4. mwáana</td>
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<td>5. muúnu</td>
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<td>6. vaánu</td>
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<tr>
<td>Chimáitämbwe</td>
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<td>Chíńñíma</td>
<td>Chimáláaba</td>
<td>Shíímákoonde</td>
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<td>7. muútwe</td>
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<td>8. limbéende</td>
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<td>9. liloóve</td>
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<td>10. likóóla</td>
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<td>13. lidóódo</td>
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<td>likumbaátu/ kuúlu</td>
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<td>14. mayáanga</td>
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<td>16. chikwaakwa</td>
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<td>17. chiviímba</td>
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<td>mmííli</td>
<td>mmííli</td>
<td>ligwíímbu</td>
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<td>18. viyeewe</td>
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<td>viyeewa</td>
<td>viyeewa</td>
<td>vijeegwe</td>
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<td>19. mbúúla</td>
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<td>20. njúúya</td>
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<td>lundújúja</td>
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<td>21. muúla</td>
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<td>37. nnée(ya)</td>
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<td>nááangu</td>
<td>miípa</td>
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<td>38. uwéé(ya)</td>
<td>wááako</td>
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<td>39. wenéeyo/ nááhe</td>
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<td>náae</td>
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<td>40. uhwee(ya)</td>
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<td>wéépa</td>
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<td>41. mmwee(ya)</td>
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<td>44. pátúulya</td>
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<td>45. -ndi-</td>
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<td>46. -ka-</td>
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<td>47. -ká-</td>
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</tbody>
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Samenvatting (Summary in Dutch)


In hoofdstuk 2 wordt de fonologie behandeld, met daarin de inventaris van de klanken, de lettergreetstructuur en de klankregels. Het Chinnima heeft 21 consonanten en 5 vocalen. De typische lettergreet is open, d.w.z. eindigt op een klinker, maar ook de syllabische nasaal geldt als een lettergreet. 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 lettergreet is complex, d.w.z. het bestaat onderliggend uit twee klinkers, net als de laatste syllabe
van causatieve en passieve. De laatste syllabe van gelexicaliseerde passieve en die van disyllabische imperatieve worden gebouwd naar het voorbeeld van monosyllabische stammen, causatieve en passieve. 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 oplept aan de mate van nabijheid van twee hoge tonen. Als twee hoge tonen naast elkaar verschijnen, d.w.z. op twee adjacente 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 verraadt 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 specificerders 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 toengroepen 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 specificerders op een zelfde manier kunnen worden ingedeeld als *tenses*, namelijk in conjoint, disjoint en conjoint-disjoint specificerders. Omdat syntax 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-syntax.

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.