7. **TENSES**

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### 7.1 The tense system

Three systems are involved in constituting the verbal forms and their manifestations. The *tense system* is the system of possible combinations for Tense (i.e., Time/Aspect/Mood and Negative) morphemes (TM) including the Final (F). The *tone system* is the system of possible combinations for the tones of the verbal stem (VS) with the tone of the subject concord (SC) plus the tone(s) of the TM’s. The *conjoint/disjoint system* is the system of verbal forms which constitute a phonological phrase on their own (i.e., one-word p-phrases: verbal focus tenses or disjoint tenses, marked *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, -a) 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 *dít*
22. Optative with OC *dít*
23. Imperative with OC *dít*
24. Imperative

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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 *kuvayangaátá* ‘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, Ps-H Tone Shift which is worked out in 3.5.4, shifts the
H tone of the SC to the first TBU of the stem (the S1-position) if there is no OC (e.g. *tuniyángáta* ‘we have helped’, Present Perfective *di̍t*); if there is a OC, the H tone of the SC shifts to the OC (e.g. *tuniyángáta* ‘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. *tuniyángáta* ‘we had helped’, Past Perfective *di̍t*) 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 *ci̍t / 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. *kunáváyángáta*).

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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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: *tukáváyángáta* ‘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: *tukáyángáta* ‘we do not help’ (and the H tone of the TM doubles to the right, the
S1-position; that this H tone on the S1-position is not the S1-H tone itself can be seen from the fact that it does not itself double to the right. For the Negative Present Perfective (1) a similar analysis holds. In the forms with OC, the S1-H tone is separated by the OC from the H tone which has been shifted from the SC to the TM: tukávayángééte ‘we have not helped them’ (and there is a H Tone Bridge from the S1-H tone to the retracted SF-H tone); in the forms without OC, the two H tones are adjacent, and the S1-H tone is deleted by Meeussen’s Rule: tukáyangééte ‘we have not helped’. Note that the rest of the H Tone Bridge remains intact; this can be better seen with longer stems, e.g. 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 Conditional/Concessive, but we found no compelling reasons to do so. Finally, there is no H Tone Doubling with the Negative Present Perfective (1) nor with the Negative Past Perfective: tukálííle ‘we have not eaten’, tukáyangéete ‘we had not helped’. — No difference in meaning has been found between Perfective 1 and Perfective 2.

The Negative Infinitive may not occur with OC. There is an alternative for the Negative Infinitive: an affirmative Infinitive (with or without OC) preceded by the Negative particle naanga (with penultimate shortening: nanga).

\[\text{nanga kúúlya} \text{ no eating}\]
\[\text{nanga kuyángááta/nanga uyángááta} \text{nang 'uyángááta} \text{ no helping}\]

The alternative way to negate other verbal forms is to use naanga after them which indicates a contrastive No!

\[\text{ahwenite kúkáaya naanga} \quad \text{he has not gone home}\]
\[\text{lit. he has gone home (? no!}\]

The Negative particle naanga may occur with all Negative verbal forms; it adds emphasis to the negation.

\[\text{naanga unahwéene kukáaya} \text{ you should absolutely not go home}\]

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

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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. *patúváyángaata* ‘when we help them’, Indirect Relative Present; *patúváyáneete* ‘when we have helped them’, Indirect Relative Present Perfective).

There is one exception: with the Indirect Relative Non-Past, there is no second doubling: *patúváyángaata* ‘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.

- *nanga patúliima - tukáliima* we do not cultivate
- *nanga patúyáneete - tukáyangéete* we have not helped

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

- *nanga patúkáng’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: -à (forms without OC) and -e (forms with OC). The various allomorphs 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

-à:

A  Past cjt
   Far Past cjt
   Infinitive

C1  Non-Past with SC participants djt
   Imperative (without OC)

C2  Non-Past with SC classes djt
   Present Perfective djt
   Past Perfective djt
   Far Past Perfective djt
   Suppositional Conditional djt
   Past djt
   Far Past djt
   Direct Relative Present with SC participants + cl.1
-ile:
D1 Situative Perfective \(djt\)
  Suppositional Conditional Perfective \(djt\)
  Negative Present Perfective 2 \(djt\)
  Negative Past Perfective \(djt\)
D2 Present Perfective \(cjt\)
  Indirect Relative Present Perfective \(djt\)
  Indirect Relative Past Perfective \(djt\)
  Indirect Relative Far Past Perfective \(djt\)
E Direct Relative Present Perfective with SC cl.2ff. \(djt\)
  Direct Relative Past Perfective \(djt\)
  Direct Relative Far Past Perfective \(djt\)

-ilé:
A Past Perfective \(cjt\)
  Far Past Perfective \(cjt\)
  Negative Present Perfective 1 \(djt\)
  Negative Indirect Relative Present Perfective \(djt\)
C2 Direct Relative Present Perfective with SC participants + cl.1

-e:
B Optative (with OC) \(djt\)
D1 Imperative (with OC) \(djt\)
  Negative Conditional/Concessive \(djt\)
  Negative Suppositional Conditional \(djt\)
D2 Subsecutive Optative \(djt\)
  Negative Optative \(djt\)

-é:
C1 Optative (without OC)

7.1.4 The Perfective Final

The manifestations of the Perfective Final with CVC-verbal bases generally are -ile and -ite (without vowel harmony); -ie is often heard instead of -ile. Either -ile or -ite may be used in most cases, but -ile tends to be more used with verbal bases with one of the final consonants \(p, t, k, ch, b, d, l, ng\), \(mb, nd, ng\), while -ite tends to be more used with verbal bases with one of the final consonants \(h, v, y, w, m, n, ny, nj\). But this is only a tendency, which means that in a group of verbal bases with a particular final consonant, most verbs of that group get one of the finals as a first choice by the speakers. The final consonant \(l\) changes to \(d\) when -ile is added, but not when -ite is added (e.g. -mila ‘swallow’ -midle 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. This means that the underlying ’i (or a copy of it) of the causatives appears before the final -e, and the I of the Perfective final becomes d. When added to lexicalized Passives -w- and -iw-, the same final is found as with causatives: -idy. 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 (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>-idle</td>
</tr>
<tr>
<td>-tuva rem. weeds</td>
<td>-tuvite</td>
</tr>
<tr>
<td>-taya put</td>
<td>-tait</td>
</tr>
<tr>
<td>-mowa shave</td>
<td>-mowite</td>
</tr>
<tr>
<td>-mila swallow</td>
<td>-midente</td>
</tr>
<tr>
<td>-lima cultivate</td>
<td>-limite</td>
</tr>
<tr>
<td>-hweneta 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 (with causatives):  
mak cut -ipy -ipidy  
mak cult. -imya -imididy  
mak d -imbya -imbididy  
mak poke -kocheha -kochehididy  
/-kochesa -kochesidy  
mak shave -moweha -mowehidy  
/-mowesa -mowesidy  
mak try -lingiha -linghididy  
/-lingisa -lingisidy

With -lola ‘look at’, -lolite is preferred; with -mala ‘know’, the form is -maite (next to -mela, see below; -ile is not possible). With some verbal bases ending in y, we find -dile as if there were a I instead of y.
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
- **-lala** lie — -lele
- **-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
- **-huva** rem. w. — -twive
- **-ona** see — -wene

With verbal bases having three or more syllables, the Perfective Final is imbricated, except with bases with final l. With such bases, the Perfective final is -ile, and the l changes to d under influence of the i of the final.

- **-malila** finish — -malidile
- **-lambila** deceive — -lambidile
- **-kimbila** drink — -kimbidile

I found only one example where imbrication is possible:

- **-pwechela** receive — -pwechedile/-pwechele

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
- **-hauila** 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).

<table>
<thead>
<tr>
<th>Base</th>
<th>Perfective Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>-walala</td>
<td>kill</td>
</tr>
<tr>
<td>-kalanga</td>
<td>fry</td>
</tr>
<tr>
<td>-kahama</td>
<td>become sour</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Base</th>
<th>Perfective Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>-sumisa</td>
<td>sell</td>
</tr>
<tr>
<td>-pelekedya</td>
<td>send</td>
</tr>
<tr>
<td>-kundanya</td>
<td>mix</td>
</tr>
<tr>
<td>-tongosa</td>
<td>seduce</td>
</tr>
<tr>
<td>-widuha</td>
<td>sweat</td>
</tr>
</tbody>
</table>

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 -i- 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 -veloe is either built in analogy with these forms or is an exception in that it is built from the root Û-va and the Perfective -ile, resulting in -veloe 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 cj
   Past Perfective cj
   Infinitive
B  Optative with OC dj
C1  Imperative
    Optative (without OC)
C2  Direct Relative Present with SC participants + cl.1
    Direct Relative Present Perfective with SC participants + cl.1
D1  Present with SC participants cj
    Situative Perfective dj
    Imperative with OC dj
D2  Present with SC classes cj
    Present Perfective cj
    Indirect Relative Present dj
    Indirect Relative Present Perfective dj
E  Direct Relative Present with SC cl.2ff. dj
    Direct Relative Present Perfective with SC cl.2ff. dj

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)  IL
   d)  L||, H||

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>slot 3</th>
<th>slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Far Past cj</td>
<td>-a-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Far Past Perfective cj</td>
<td>-a-</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Indirect Relative Non-Past dj</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>Non-Past with SC participants dj</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>Non-Past with SC classes dj</td>
<td>-na-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfective dj</td>
<td>-ni-</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>Suppositional Conditional Perfective dj</td>
<td>-ka-</td>
<td></td>
</tr>
</tbody>
</table>
Tenses which belong to the second type (H) are:

<table>
<thead>
<tr>
<th>Slot 3</th>
<th>Slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td></td>
</tr>
</tbody>
</table>

The H tone of the TM -ká- of the Negative Present djit and the Negative Indirect Relative Present djit 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:

<table>
<thead>
<tr>
<th>Slot 3</th>
<th>Slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td></td>
</tr>
</tbody>
</table>

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.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>tú-ná-yangaáta we helped</td>
<td></td>
</tr>
<tr>
<td>tú-ná-va-yangaáta we helped them</td>
<td></td>
</tr>
<tr>
<td>tú-ní-yangaáta we had helped</td>
<td></td>
</tr>
<tr>
<td>tú-ní-va-yangaáta we had helped them</td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Slot 3</th>
<th>Slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td></td>
</tr>
</tbody>
</table>

The shifted H tone on the Negative marker of the Negative Present Perfective 1 djit and the H tone of the Negative marker of the Negative Indirect Relative Present Perfective djit 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.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-ká-liile we have not eaten</td>
<td></td>
</tr>
<tr>
<td>cf. tu-ká-vi-liile we have not eaten them</td>
<td></td>
</tr>
</tbody>
</table>
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 djit is also blocked:

\[
\begin{align*}
tu-ká-yangeete & \quad \text{we had not helped} \\
tu-ká-va-yangeete & \quad \text{we had not helped them}
\end{align*}
\]

Finally, there are tenses with two TMs. The following types occur:

- a)  L  L  
- b)  L  IL  
- c)  L  H  
- d)  H  L  

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

\[
\begin{align*}
\text{D1 Negative Conditional/Concessive djit} & \quad \text{-ka-} & \quad \text{-na-} \\
\text{E Concessive djit} & \quad \text{-ka-} & \quad \text{-na-} \\
\text{Direct Relative Far Past Perfective} & \quad \text{-a-} & \quad \text{-na-}
\end{align*}
\]

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

\[
\begin{align*}
\text{C2 Far Past djit} & \quad \text{-a-} & \quad \text{-|na-} \\
\text{Far Past Perfective djit} & \quad \text{-a-} & \quad \text{-|ni-} \\
\text{Suppositional Conditional djit} & \quad \text{-ka-} & \quad \text{-|ni-}
\end{align*}
\]

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.

\[
\begin{align*}
tw-á-ná-yangaáta & \quad \text{we helped long ago} \\
tw-á-ná-va-yangaáta & \quad \text{we helped them long ago} \\
tw-á-ní-yangaátawe & \quad \text{had helped long ago} \\
tw-á-ní-va-yangaáta & \quad \text{we had helped them long ago} \\
tu-ká-ní-yangaáta & \quad \text{we would help} \\
tu-ká-ní-va-yangaáta & \quad \text{we would help them}
\end{align*}
\]

The third type (L H) consists of the Indirect Relative Far Past Perfective djit.

\[
\begin{align*}
\text{D2 Indirect Relative Far Past Perfective} & \quad \text{-a-} & \quad \text{-|ná-}
\end{align*}
\]

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.

\[
\begin{align*}
pa-tw-á-ná-yángaáta & \quad \text{when we had helped} \\
pa-tw-á-ná-va-yángaáta & \quad \text{when we had helped them}
\end{align*}
\]
Two tenses belong to the fourth type (H L):

<table>
<thead>
<tr>
<th></th>
<th>slot 3</th>
<th>slot 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Negative Present Perfective 2 (djt)</td>
<td>-ká-</td>
</tr>
<tr>
<td></td>
<td>Negative Suppositional Conditional</td>
<td>-ká-</td>
</tr>
</tbody>
</table>

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

- **tu-ká-ná-yangeete**  we have not helped
- **tu-ká-ná-va-yangeete**  we have not helped them
- **tu-ká-ná-yangaate**  we would not help
- **tu-ká-ná-va-yangaate**  we would not help them

### 7.1.6 The Pre-Final tense marker -ang-

The Pre-Final -ang- may occur in all tenses. It changes the Present into a Habitual, in other tenses, it expresses intensive/repetitive action. With many verbs, it is not fully clear what exact meaning the verb gets after addition of the Pre-Final; the Pre-Final added to the verb *-kalewa* ‘to be drunk’, changes the meaning to ‘to be totally drunk, to be drunk the whole time’. Especially in the Imperative, the Pre-Final is used as plural addressee marker.

**Present \(cjt\):**

- **tu-lim-ang-a mahaála**  we habitually cultivate fields
- **va-lim-ang-a máháála**  they habitually cultivate fields

**Non-Past \(djt\):**

- **tu-na-lim-áang-a**  we cultivate intensively/repeatedly
- **tu-na-kalew-áang-a**  we are totally drunk/the whole time
- **va-na-lim-áang-a**  they cultivate intensively/repeatedly
- **va-na-káléw-áang-a**  they are totally drunk/the whole time

**Direct Relative Present:**

- **tu-lim-áang-a**  we who cultivate intensively/repeatedly
- **tu-káléw-áang-a**  we who are totally drunk/the whole time
- **va-lim-áang-a**  they who cultivate intensively/repeatedly
- **va-káléw-áang-a**  they who are totally drunk/the whole time

**Indirect Relative Present \(djt\):**

- **pa-tú-lim-áang-a**  when we cultivate intensively/repeatedly
- **pa-tú-káléw-áang-a**  when we are totally drunk/the whole time
Conditional *dit:*

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

Optative (without OC):*

- **tu-lim-áang-e** we should cultivate intensively/repeatedly
- **tu-kaléw-aang-e** we should be totally drunk/the whole time

Negative Optative *dit:*

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

Imperative:

- **lim-áang-a** cultivate! (addressing several persons)
- **kalew-aang-a** be drunk! (addressing several persons)

Imperative with OC *dit:*

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

There are verbs where the complex plural addressee marker -ang’an- is possible as well; for *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-áang-a/hwen-ang’aán-a** go! (addressing several persons)
- **id-áang-a/id-ang’aán-a** come! (addressing several persons)
- **uy-áanga/uy-ang’aán-a** return! (addressing several persons)
- **uk-ang’aán-a** go away, arise! (addressing several persons)

The Pre-Final behaves like an extension, especially like the Reciprocal extension -an- (see 6.3.5). The Perfective final is added after the addition of the Pre-Final since the process Imbrication takes place on the stem including the Pre-Final.

- **-lim-ang-a** -> **-lim-eng-e** cultivate
- **yangat-ang-a** -> **yangat-eng-e** help

With minisyllabic stems, e.g. -lya ‘eat’, the form including the Pre-Final is -lyanga (with complex final syllable). The Perfective form is not *-lyangile* nor *-lyenge*, but the form is *-lilenge* without complex final syllable. We think that the form is built via the Applicative -lila, which does not have a complex final syllable, to which the Pre-Final is added: *lilanga*. This analysis is in line with our analysis of the Perfective form with minisyllabic stems (without the Pre-Final): as described in 7.1.4, Perfective forms with minisyllabic stems are built from the Applicative forms with minisyllabic stems.

- **tu-lîl-éeng-e** we who have eaten the whole time?/
- **ni-ká-lîl-éeng-e** we haven’t eaten the whole time?/
7.1.7 The final syllable before objects and adjuncts

The final syllables -la and Optative/Imperative variant -le (and their complex variants -dya and -dye) as well as Perfective -le/-te (and their complex variant -dye) may be omitted when followed by objects or adjuncts.

- tu-va-pweche(la) vayeéni  
  - we receive the guests
- tu-tongo(la) kadiiki  
  - we talk a bit
- ku-vá-pélékeddi(dya) vayeéni  
  - to send them guests
- tu-pweche(le) vayeéni  
  - we should receive guests
- tu-péléke(dye) vayeéni  
  - we should send guests
- tu-va-pwechedi(le) vayeéni  
  - we have received the guests
- tu-la-limi(te) mäháála  
  - we have cultivated the fields
- tu-va-pélékedi(dye) vayeéni  
  - we have send them guests

Other final syllables may not be omitted, like -ta (e.g. -yangata ‘help’), -ka (e.g. -pweteka ‘hurt’) and -nya (e.g. -kundanya ‘mix’).

With disjoint tenses, the penultimate syllables remain long after the omission of the final syllable when containing a contour tone; when there are two equal tones, the penultimate syllable tends to be short. This is also true within complex verbal forms.

- va-limi(ti) lihaála  
  - they who have cultivated a field
- tu-na-va-limi(la) lihaála  
  - we cultivate a field for them
- tu-ká-limiñ(te) lihaála  
  - we have not cultivated a field
- va-pweche(ele) vayeéni  
  - receive the guests!
- va-veé-ŋkúlíma  
  - we are cultivating
  /va-velé-ŋkúlíma  
  - we were cultivating

With conjoint tenses, the penultimate syllable is always short. When the final syllable has a H tone, this H tone disappears together with the syllable when preceded by a H-toned penultimate syllable, it does appear on a preceding penultimate syllable without a H tone.

- ku-pwéché(la) vayeéni  
  - to receive guests
- ku-vá-hangalali kadiiki  
  - to make them happy a bit

cf. ku-vá-hangalalilá kadiiki  
  - to make them happy a bit

7.2 The verbal tone system

The verbal tone system embraces the system of possible combinations of the tones of the verbal stem (tonal profiles) with the tone of the subject concord plus the tone(s) of the tense marker(s). Remember that in the second lexicon stems are formed, and that with word formation verbal prefixes and tense markers are joined to verbal stems. H Tone Assignment occurs, stems get their tonal profiles, and verbal prefixes and tense
markers get a H tone in case there is a H tone instruction for them. The category tense 
determines the profile of the stem as well as the tones of the prefixes and tense 
markers. If there is no H tone instruction, prefixes and tense markers get a default L 
tone post-lexically, just as the toneless (non H) positions of the tonal profiles of 
stems.

Stems are assigned a specific tonal profile in the second lexicon. As demonstrated in 
3.4.1 and 4.4, and repeated below, there are five tonal profiles for stems.

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

With nominal tone (4.4), we call the combination of the tone of the NPx with the 
tonal profile of the stem the Tone Group (TG) to which a noun belongs. In line with 
this analysis, we call the combination of the tone of the subject concord (SC) with the 
tonal profile of the stem the TG to which a verbal form belongs. Just as with nominal 
tone, the profiles A, B and E are combined with a SC with a (default) L tone; the 
profiles C and D may either be combined with a SC with a (instructed) H tone as well 
as with a SC with a (default) L tone, depending on the specific tense. As 
demonstrated in 4.4 and repeated below, the following TG’s occur (default L tones 
are also given below):

<table>
<thead>
<tr>
<th>TG</th>
<th>NPx</th>
<th>verb 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>

The TG’s are divided over the tenses described in 7.1 as follows:

A  Past cjt
   Far Past cjt
   Past Perfective cjt
   Far Past Perfective cjt
   Negative Present Perfective 1 djt
   Negative Indirect Relative Present Perfective djt
   Infinitive
B  Optative with OC djt
   Negative Present djt
   Negative Indirect Relative Present djt
C1 Non-Past with SC participants djt
Optative without OC
Imperative without OC

C2 Non-Past with SC classes djt
Present Perfective djt
Past Perfective djt
Far Past Perfective djt
Suppositional Conditional djt
Past djt
Far past djt
Direct Relative Present with SC participants + cl.1
Direct Relative Present Perfective with SC participants + cl.1

D1 Present with SC participants cjt
Subsecutive Infinitive djt
Situlative Perfective djt
Suppositional Conditional Perferfective djt
Imperative with OC djt
Negative Infinitive djt
Negative Past Perfective djt
Negative Present Perfective 2 djt
Negative Conditional/Concessive djt
Negative Suppositional Conditional djt

D2 Present with SC classes cjt
Present Perfective cjt
Subsecutive Optative djt
Negative Optative djt
Indirect Relatives djt

E Conditional djt
Concessive djt
Relative Past Perferfective djt
Relative Far Past Perfective djt
Direct Relative Present with SC cl.2ff. djt
Direct Relative Present Perfective with SC cl.2ff. djt

In this chapter, we deal with verbal forms which occur on their own (p-)phrase-finally, the so-called one-word p-phrases (see 3.5) or disjoint tenses (marked djt). Larger p-phrases are dealt with in chapter 8; they are conjoint tenses (marked cjt, see also 7.3). P-phrase-final words undergo penultimate lengthening, optionally followed by penultimate shortening. The surface Tone Patterns (TP) resulting from the TG’s include both the forms with penultimate lengthening as well as with penultimate shortening.

First, verbal forms with four-syllable stems, trisyllabic stems and disyllabic stems are described. Then, VCV-stems are considered; with these stems, the tonal and other processes which occur may result in other surface patterns than expected. In 7.2.3 and 7.2.4, the subject concord and the object concord are viewed from a tonal
perspective. In 7.2.5, we deal with the influence of the tone of an intervening TM on the TP of a TG.

### 7.2.1 Verbal forms with four-syllable stems, trisyllabic stems and disyllabic stems

Taking four-syllable stems and trisyllabic stems stems together, in the table below, the TG’s are followed by the resulting TP’s with penultimate lengthening as well as with penultimate shortening. The tones of the SC and the stem are separated by a dot in the description of the TG’s, but because of possible intervening prefixes like TM’s and OC’s, only the tones of the stem are given in the TP’s. The TP’s are the same as those of noun stems before specifiers with which they do not occur in the same p-phrase (see 4.4), except for two cases. The first case is that verb stems of TG A, C1 and C2 have TP’s in addition (in bold in the table below). The extra TP’s of these TG’s result from verbal forms with a complex final syllable, e.g. verbal forms with causative stems and passive stems; with these verbal forms, there is no Retraction of the final H tone to the penultimate syllable, so there is no H Tone Bridge with TG A (but only H Tone Doubling) and no penultimate R with TG C1 and C2 (see 3.5.2). It should be noted that the TP’s of forms with a complex final syllable of the other TG’s (which lack a final H tone) are not different from those with a simple final syllable, as shown with the examples which follow the table of TP’s below.

<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 / .HHL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1</td>
<td>.HHL:L / .HHHL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF</td>
<td>.LLRL / LLHH, .LLLH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.LLL:L / .LLL</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF</td>
<td>.HLRL / .HLHH, .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 / .LLL</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>.LHF / .LHL</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 djt
B Optative with OC djt
C1 Non-Past with participants as SC djt
C2 Non-Past with classes as SC djt
D1 Imperative with OC djt
D2 Negative Optative djt
E Conditional djt

For a detailed description of the role of the OC in tenses with respect to their classification into TG’s and the influence of the OC on TP’s, see 7.2.4.

A tu-ká-la-pilikéne / tu-ká-la-pilikéne maliidi
tu-ká-di-kátápeedye / tu-ká-di-kátápeedye ding’ánde
we haven’t heard the voices
we haven’t cleaned the houses

B tu-la-pilikane / tu-la-pilikane maliidi
tu-di-kátápaadye / tu-di-kátápaadye ding’ánde
we should hear the voices
we should clean the houses

C1 tu-na-la-pilikána / tu-na-la-pilikáná, tu-na-la-pilikáná maliidi
we (will) hear the voices
tu-na-di-katapaadya / tu-na-di-katapaadya ding’ánde
we (will) clean the houses

we (will) receive the guests
we (will) mix the yams
C2 va-na-pilikāna / va-na-pilikāná, va-na-pilikāná maliidi
they (will) hear voices
va-na-kātāpadya / va-na-kātāpadya ding’áande
they (will) clean houses
va-na-pwēchēla / va-na-pwēchēla, va-na-pwēchēla vayeéni
they (will) receive guests
va-na-kūndáanya / va-na-kūndanya vituúndi
they (will) mix yams

D1 la-pilikane / la-pilikane maliidi
hear the voices!
di-katapadye / di-katapadye ding’áande
clean the houses!
va-pwechele / va-pwechele vayeéni
receive the guests!
vi-kundaanye / vi-kundaanye vituúndi
mix the yams!

D2 va-na-pilikane / va-na-pilikane maliidi
they should not hear voices
va-na-kātāpadye / va-na-kātāpadye ding’áande
they should not clean houses
va-na-pwēchēle / va-na-pwēchēle vayeéni
they should not receive guests
va-na-kūndáanye / va-na-kūndanye vituúndi
they should not mix yams

E tu-ka-la-pilikāna / tu-ka-la-pilikana maliidi
if we hear the voices
tu-ka-di-katapadya / tu-ka-di-katapadya ding’áande
if we clean the houses
tu-ka-va-pwechēla / tu-ka-va-pwechēla vayeéni
if we receive the guests
tu-ka-vi-kundaanye / tu-ka-vi-kundaanye 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 .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 / .LL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H .L:L / .LL</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-liié / tu-ká-vi-líle viílyo
we haven’t eaten the food
tu-ká-vi-léedye / tu-ká-vi-lédye viínu
we haven’t laid down the things
B  tu-la-liíme / tu-la-lime mahaála
we should cultivate the fields
tu-vi-láadye / tu-vi-ládye viínu
we should lay down the things
C1 tu-na-la-liíma / tu-na-la-limá, tu-na-la-limá mahaála
we (will) cultivate the fields
tu-na-vi-laadya / tu-na-vi-ladya viínu
we (will) lay down the things
C2 va-ná-liíma / va-ná-líma, va-ná-líma mahaála
they (will) cultivate fields
va-na-láadya / va-na-ládyá viínu
they (will) lay down things
D1 la-liíme / la-lime mahaála
cultivate the fields!
vi-laadye / vi-ládyé viínu
lay down the things!
D2 va-na-liíme / va-na-lime mahaála
they should not cultivate fields
va-na-láadye / va-na-ládyé viínu
they should not lay down things
E  tu-ka-la-liima / tu-ka-la-liima mahaála
if we cultivate the fields
  tu-ka-vi-lááda / tu-ka-vi-lááda vàínu
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 disjoint</th>
<th>disyllabic stems with a complex final syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG</td>
<td>SC.stem</td>
</tr>
<tr>
<td>A</td>
<td>L.S1/SF .FL / .HL</td>
</tr>
<tr>
<td>B</td>
<td>L.S1 .FL / .HL</td>
</tr>
<tr>
<td>C1</td>
<td>L.SF .L:L / .LL</td>
</tr>
<tr>
<td>C2</td>
<td>H.SF .FL / .HL</td>
</tr>
<tr>
<td>D1</td>
<td>L.no H .L:L / .LL</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>

In the previous section, we gave examples of consonant-initial disyllabic verbal
stems, we now give examples of vowel-initial disyllabic verbal stems. The examples
below represent the same tenses as the ones used in the previous section, except for
the first one with TG A: in our vocabulary, there is no disyllabic vowel-initial
perfective stem with a complex final syllable. But there is no other disjoint (or: one p-
phrase) tense of TG A, so we take the Infinitive, which is a conjoint-disjoint tense; it
is disjoint without following noun, but conjoint when a noun is following (see 7.3).
Thus, to show at least one TP of the disjoint TG A, we use the Infinitive without a
following noun here.

A  ku-úudya
to ask
B  tu-la-úudye / tu-la-údye malóóve
we should ask the words
C1 tu-na-la-úudya / tu-na-la-udya malóóve
we (will) ask the words
C2 va-na-úudya / va-na-údya malóóve
they (will) ask words
D1 la-úudye / la-udye malóóve
ask the words!
D2 va-na-úudye / va-na-údye malóóve
they should not ask words
E  tu-ka-la-úudya / tu-ka-la-údya malóóve
if we ask the words

These forms may also undergo Vowel Coalescence/Glide Formation (VC/GF)
between the initial vowel of the stem and the vowel of the preceding morpheme; this
process applies post-lexically. Since the stem and the preceding morpheme merge, we
omit the dot in the TP’s below. The following forms (and resulting TP’s) appear after
this process.

<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  kúúdya
to ask
B  tu-lúúdye / tu-lúdye malóóve
we should ask the words
C1 tu-na-luudya / tu-na-ludya malóóve
we (will) ask the words
C2 va-nūúdy a / va-núdy a malóvé
they (will) ask words
D1 luúdye / luú dye malóvé
ask the words!
D2 va-núúdy e / va-núdy e malóvé
they should not ask words
E tu-ka-liúúdy a / tu-ka-lúúdy malóvé
if we ask the words

Two TP’s remain: H:L / HL and L:L / LL. As described in detail in 3.5.5, tonal coalescence occurs with VC/GF. One case of tonal coalescence occurs in the examples above: zeroHzero -> HH (with the examples of TG A, B, C2, D2 and E). Penultimate shortening occurs after VC/GF.

We now turn to minisyllabic stems. Minisyllabic stems are structurally identical with disyllabic vowel-initial stems with a complex final syllable. The vowel-initial disyllabic stem used above is -údya ‘ask’, -údia underlyingly. The minisyllabic stems we use below is -lya ‘eat’, -vilia underlyingly; the created S1-position, indicated by the lower case “v”, is filled by a copy of the preceding vowel in the verbal form. This lexical process is followed by the assignment of tonal profiles and other H tones, and post-lexically, the H tone of the SC of forms with TG C2 and D2 shifts to the S1-position. These processes are shown in the examples below (see 3.4.1 and 3.5.4), the S1-position also being indicated by small vowels.

A ku-úúlia
to eat
B tu-la-álie
we should eat them
C1 tu-na-vi-ilíia
we (will) eat them
C2 va-na-áalia (<vá-na-aália)
they (will) eat
D1 la-álie
eat them!
D2 va-na-álie (<vá-na-aálie)
they should not eat
E tu-ka-vi-ilíia
if we eat them

All forms are identical with the vowel-initial disyllabic forms above before VC/GF between the stem and the preceding morpheme. The big difference is that vowel-initial disyllabic stems may appear without VC/GF; but minisyllabic stems may not appear without this process (due to a different syllabification, see 3.4.1). Hence, the forms and TP’s concerning minisyllabic stems below are identical with those concerning vowel-initial disyllabic stems with a complex final syllable above where VC/GF has occurred (see 3.4.1 and 3.5.6).
<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>

A  kúúlya  
   to eat  
B  tu-láálýe / tu-láálýe mátiínjí  
   we should eat the pumpkins  
C1 tu-na-viílya / tu-na-viílya vitúńdi  
   we (will) eat the potatoes  
C2 va-náálya / va-náálya mátiínjí  
   they (will) eat pumpkins  
D1 laálýe / laálýe mátiínjí  
   eat the pumpkins!  
D2 va-náálya / va-náálya mátiínjí  
   they should not eat pumpkins  
E  tu-ka-viílya / tu-ka-viílya vitúńdi  
   if we eat the yams  

7.2.3 The subject concord

Next to the tonal profile of the verbal stem, the category tense ultimately determines the tones of the verbal prefixes. To begin with the subject concord, the tense determines whether the tone of the SC is neutralized to H or to (default) L, or whether the SC carries its own lexical tone.

Tenses where the SC carries its lexical tone are the Present cjt and the Non-Past djt. The lexical tones are as follows: classes have a tonal H instruction in the lexicon, participants lack such an instruction and they get a (default) L tone post-lexically. The Present cjt belongs to TG D (D1/D2), the Non-Past djt, which we use as example below, belongs to TG C (C1/C2).
L-toned SC (participants):

C1  
\( u-na-pwécheéla \) you (will) receive  
\( u-na-vá-pwécheéla \) you (will) receive them  
\( tu-na-pwécheéla \) we (will) receive  
\( tu-na-vá-pwécheéla \) we (will) receive them  
\( u-na-kündáanya \) you (will) mix  
\( u-na-vá-kündáanya \) you (will) mix them  
\( tu-na-kündáanya \) we (will) mix  
\( tu-na-vá-kündáanya \) we (will) mix them

H-toned SC (classes):

C2  
\( a-na-pwécheéla \) (s)he (will) receive(s)  
\( a-na-vá-pwécheéla \) (s)he (will) receive(s) them  
\( va-na-pwécheéla \) they (will) receive  
\( va-na-vá-pwécheéla \) they (will) receive them  
\( a-na-kündáanya \) (s)he (will) mix(es)  
\( a-na-vá-kündáanya \) (s)he (will) mix(es) them  
\( va-na-kündáanya \) they (will) mix  
\( va-na-vá-kündáanya \) 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 dit 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 dit, 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 dit

C2  
Present Perfective dit  
Past Perfective dit  
Far Past Perfective dit  
Suppositional Conditional dit  
Past dit  
Far past dit  
Direct Relative Present (with SC participants and cl.1)  
Direct Relative Present Perfective (with SC participants and cl.1)

Examples from the Present Perfective dit and Negative Optative dit:

C2  
\( tu-ní-pwécheéla \) we have received
There is one tense in the table above which has the same tonal behaviour as the Present \textit{cj\textit{t}} with a H-toned SC, which we consider to have a H-toned SC as well: Present Perfective \textit{cj\textit{fr}}; 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>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu-pwécheela</td>
<td>we who receive</td>
</tr>
<tr>
<td>tu-vá-pwecheela</td>
<td>we who receive</td>
</tr>
<tr>
<td>tu-pilikaána</td>
<td>we who hear</td>
</tr>
<tr>
<td>tu-vá-pilikaána</td>
<td>we who hear</td>
</tr>
<tr>
<td>a-pwécheela</td>
<td>(s)he who receives</td>
</tr>
<tr>
<td>a-vá-pwecheela</td>
<td>(s)he who receives</td>
</tr>
<tr>
<td>a-pilikaána</td>
<td>(s)he who hears</td>
</tr>
<tr>
<td>a-vá-pilikaána</td>
<td>(s)he who hears</td>
</tr>
<tr>
<td>tu-kündáanya</td>
<td>we who mix</td>
</tr>
</tbody>
</table>

\begin{table}[h]
\begin{center}
\begin{tabular}{ll}
\textbf{tu-ni-vá-pwecheela} & we have received them \\
\textbf{va-ni-pwécheela} & they have received \\
\textbf{va-ni-vá-pwecheela} & they have received them \\
\textbf{tu-ni-kündáanya} & we have mixed \\
\textbf{tu-ni-ví-kündaanya} & we have mixed them \\
\textbf{va-ni-kündáanya} & they have mixed \\
\textbf{va-ni-ví-kündaanya} & they have mixed them \\
\hline
\textbf{D2} & \\
\textbf{tu-na-pwécheele} & we should not receive \\
\textbf{tu-na-vá-pwécheele} & we should not receive them \\
\textbf{va-na-pwécheele} & they should not receive \\
\textbf{va-na-vá-pwécheele} & they should not receive them \\
\textbf{tu-na-kündáanye} & we should not mix \\
\textbf{tu-na-ví-kündaanye} & we should not mix them \\
\textbf{va-na-kündáanye} & they should not mix \\
\textbf{va-na-ví-kündaanye} & they should not mix them \\
\end{tabular}
\end{center}
\end{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-niliiima 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.

\[
\text{tu-náálye} < \text{tu-naálie} < \text{tu-naálie} < \text{tú-naálie}
\]

we should not eat
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.

\( \text{túuuliya} < '\text{túuulía} < '\text{tú-uluía} \quad \text{we who eat} \)
\( \text{áálya} < '\text{áaália} < '\text{á-aaliá} \quad \text{(s)he who eats} \)

The confirmation for this analysis of final H tone retraction comes from the dialect Chindonde. Chindonde shares many (tonal) rules with Chinnima, but differs with respect to VC/GF. In Chindonde, there is no VC/GF in case of a sequence of three identical vowels, so a tonal sequence HzeroH on a sequence of three identical vowels remains intact. With minisyllabic stems, there is such a tonal sequence in these tenses with participants and cl.1 as subject concords, which proves that H Tone retraction has taken place.

\( \text{túuuliya} < '\text{túuulía} < '\text{tú-uluía} \quad \text{we who eat} \)
\( \text{áálya} < '\text{áaália} < '\text{á-aaliá} \quad \text{(s)he who eats} \)

Such a retraction does, however, not occur when an OC is present. The H tone of the SC normally shifts to the OC, and this H tone retracts to the SC with VC/GF (the OC H tone retraction rule, see 3.5.5 and the next section about the OC), followed by doubling of this H tone. (In case of retraction, the non-attested form *tú-víilya would have surfaced.)

\( \text{tú-víilya} < '\text{tú-víílyá} < '\text{tu-ví-ílliá} < '\text{tú-ví-ílliá} \quad \text{we who eat} \)
\( \text{á-víilya} < '\text{á-víílyá} < '\text{a-ví-ílliá} < '\text{á-ví-ílliá} \quad \text{(s)he who eats} \)

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.

\( \text{va-liíma} < '\text{va-liíma} < '\text{va-liíma} \quad \text{they who cultivate} \)
\( \text{va-liíma} < '\text{va-liíma} < '\text{va-liíma} \quad \text{they who cultivate} \)
\( \text{váálya} < '\text{vááalia} < '\text{va-aáalia} < '\text{va-aália} \quad \text{they who eat} \)
\( \text{va-víilya} < '\text{va-víílla} < '\text{va-ví-íllia} < '\text{va-ví-íllia} \quad \text{they who eat it} \)
The Indirect Relatives $djt$ (except for the Indirect Relative Non-Past $djt$) belong to TG D2, i.e. they have a H-toned SC and a verb stem without H tones. The initial tonal sequence LH for the Pre-Initial-SC with Indirect Relatives has been established for Proto-Bantu by Meeussen (BGR, 1967). Since the H tone always appears on the SC, and since with forms with OC, there is an extra H tone doubling, their tone patterns are different from other tenses of D2. One example is the Indirect Relative Present $djt$.

**D2**  
\[
\text{pa-tú-liǐma} / \text{pa-tú-liima} \text{ mahaála} \\
\text{when we cultivate fields}
\]
\[
\text{pa-tú-lá-liǐma} / \text{pa-tú-lá- lima} \text{ mahaála} \\
\text{when we cultivate the fields}
\]
\[
\text{pa-tú-ládyá} / \text{pa-tú-ladya} \text{ vi̱nu} \\
\text{when we lay down things}
\]
\[
\text{pa-tú-vi-ládyá} / \text{pa-tú-vi-ladya} \text{ vi̱nu} \\
\text{when we lay down the things}
\]
\[
\text{pa-vá-pwécheela} / \text{pa-vá-pwéchela} \text{ vayeéni} \\
\text{when they receive guests}
\]
\[
\text{pa-vá-vá-pwécheela} / \text{pa-vá-vá-pwéchela} \text{ vayeéni} \\
\text{when they receive the guests}
\]
\[
\text{pa-vá-kúndaanya} / \text{pa-vá-kúndanya} \text{ vituúndi} \\
\text{when they mix yams}
\]
\[
\text{pa-vá-vi-kúndaanya} / \text{pa-vá-vi-kúndanya} \text{ vituúndi} \\
\text{when they mix the yams}
\]
\[
\text{pa-tú-pílikaana} / \text{pa-tú-pilikana} \text{ malóóve} \\
\text{when we hear words}
\]
\[
\text{pa-tú-lá-pílikaana} / \text{pa-tú-lá-pilikana} \text{ malóóve} \\
\text{when we hear the words}
\]
\[
\text{pa-tú-pélekedya} / \text{pa-tú-pélekedya} \text{ vaánu} \\
\text{when we send people}
\]
\[
\text{pa-tú-vá-pélekedya} / \text{pa-tú-vá-pélekedya} \text{ vaánu} \\
\text{when we send the people}
\]

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**  
\[
\text{ku-ná-pwécheela} / \text{ku-ná-pwéchela} \text{ vayeéni} \\
to go and receive guests
\]
\[
\text{ku-ná-vá-pwécheela} / \text{ku-ná-vá-pwéchela} \text{ vayeéni} \\
to go and receive the guests
\]
\[
\text{ku-ná-kúndaanya} / \text{ku-ná-kúndanya} \text{ vituúndi} \\
to go and mix yams
\]
\[
\text{ku-ná-vi-kúndaanya} / \text{ku-ná-vi-kúndanya} \text{ vituúndi} \\
to go and mix the yams
The Indirect Relative Non-Past dit 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 mahaálá
when we (will) cultivate fields
pa-tú-ná-la-liíma / pa-tú-ná-la-liíma mahaálá
when we (will) cultivate the fields
pa-tú-na-láádya / pa-tú-na-láádya viínu
when we (will) lay down things
pa-tú-ná-vi-láádya / pa-tú-ná-vi-láádya viínu
when we (will) lay down the things
pa-vá-na-pwéchéela / pa-vá-na-pwéchéela vayeéni
when they (will) receive guests
pa-vá-ná-va-pwéchéela / pa-vá-ná-va-pwéchéela vayeéni
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-pílikaana / pa-tú-na-pílikaana malóóve
when we (will) hear words
pa-tú-ná-la-pílikaana / pa-tú-ná-la-pílikaana malóóve
when we (will) hear the words
pa-tú-na-pélékedya / pa-tú-na-pélékedya vaánu
when we (will) send people
pa-tú-ná-va-pélékedya / pa-tú-ná-va-pélékedya vaánu
when we (will) send the people

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

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 dit</td>
<td>Optative with OC dit</td>
<td>Optative (without OC)</td>
</tr>
<tr>
<td>Far Past dit</td>
<td>Negative Present dit</td>
<td></td>
</tr>
<tr>
<td>Past Perfective dit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far Past Perfective dit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Present Perfective 1 dit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The examples below are from the Negative Present Perfective 1 djit, Optative with OC djit, Optative (without OC), Situative Perfective djit and the Conditional djit:

A  
\begin{align*}
\text{tu-ká-pwchédiile} & \text{ we have not received} \\
\text{tu-ká-va-pwchédiile} & \text{ we have not received them} \\
\text{va-ká-pwchédiile} & \text{ they have not received} \\
\text{va-ká-va-pwchédiile} & \text{ they have not received them} \\
\text{tu-ká-kündeennye} & \text{ we have not mixed} \\
\text{tu-ká-vi-kündeennye} & \text{ we have not mixed them} \\
\text{va-ká-kündeennye} & \text{ they have not mixed} \\
\text{va-ká-vi-kündeennye} & \text{ they have not mixed them}
\end{align*}

B  
\begin{align*}
\text{tu-va-pwchééele} & \text{ we should receive them} \\
\text{va-va-pwchééele} & \text{ they should receive them} \\
\text{tu-vi-kündeáanye} & \text{ we should mix them} \\
\text{va-vi-kündeáanye} & \text{ they should mix them}
\end{align*}

C  
\begin{align*}
\text{tu-pwchééle} & \text{ we should receive} \\
\text{va-pwchééle} & \text{ they should receive} \\
\text{tu-kundaanyé} & \text{ we should mix} \\
\text{va-kundaanyé} & \text{ they should mix}
\end{align*}

D  
\begin{align*}
\text{tu-pwchediile} & \text{ while (we) having received} \\
\text{tu-va-pwchediile} & \text{ while (we) having received them} \\
\text{va-pwchediile} & \text{ while (they) having received} \\
\text{va-va-pwchediile} & \text{ while (they) having received them} \\
\text{tu-kundeennye} & \text{ while (we) having mixed} \\
\text{tu-vi-kundeennye} & \text{ while (we) having mixed them} \\
\text{va-kundeennye} & \text{ while (they) having mixed} \\
\text{va-vi-kundeennye} & \text{ while (they) having mixed them}
\end{align*}

E  
\begin{align*}
\text{tu-ka-pwchééela} & \text{ if we receive} \\
\text{tu-ka-va-pwchééela} & \text{ if we receive them} \\
\text{va-ka-pwchééela} & \text{ if they receive} \\
\text{va-ka-va-pwchééela} & \text{ if they receive them} \\
\text{tu-ka-kündeáanya} & \text{ if we mix} \\
\text{tu-ka-vi-kündeáanya} & \text{ if we mix them} \\
\text{va-ka-kündeáanya} & \text{ if they mix} \\
\text{va-ka-vi-kündeáanya} & \text{ if they mix them}
\end{align*}
Finally, there are two tenses which do not have a SC at all: the Imperative and the Imperative with OC 

<table>
<thead>
<tr>
<th>TENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
</tr>
<tr>
<td><strong>pwecheela</strong></td>
</tr>
<tr>
<td><strong>kundaanya</strong></td>
</tr>
<tr>
<td>D1</td>
</tr>
<tr>
<td><strong>va-pwechele</strong></td>
</tr>
<tr>
<td><strong>vi-kundaanye</strong></td>
</tr>
</tbody>
</table>

### 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-kúndaanya** to mix
  - **ku-pilikána** to hear
  - **ku-pélékeedyá** 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-pwecheela** to receive them
  - **ku-ví-kúndaanya** to mix them
  - **ku-lá-pilikána** to hear them
  - **ku-vá-pélékeedyá** to send them

Except for one Negative tense and one Indirect Relative tense (see 7.1.1 and 7.1.2), tenses with a H-toned SC either belong to TG C2 (H.SF) or to D2 (H.no H). With disjoint tenses, the H tone of the SC shifts to the S1-position, but when there is an OC, it shifts to the OC (with conjoint tenses, the H tone of the SC shifts to the final TBU, see 8.3.2). So the forms of TG C2 and D2 which we have given in 7.2.1 and 7.2.2 have slightly different TP’s when they have an OC: the H tone in S1-position is
then in the position of the OC, that is one position to the left, before the dot (e.g. H.HLL:L instead of .HHL:L, H.HLLH instead of .HHLH, H.HL:L instead of .HFL, H.LRL instead of .HRL, H.LL instead of .HL, and H.LHH instead of .HLL which is the second TP of the trisyllabic stem with a simple final syllable of TG C2). We use the same examples as in 7.2.1 and 7.2.2, but now with OC.

<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 / H.HLLL</td>
</tr>
<tr>
<td>D2</td>
<td>H.no H</td>
<td>H.HL: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>

they (will) hear the voices
va-na-di-káta paad ya / va-na-di-kátapadya ding’áande
they (will) clean the houses
va-na-vá-pweche él a / va-na-vá-pweche lá, va-na-vá-pweche lá va yeéni
they (will) receive the guests
va-na-ví-kúnda a n a ya / va-na-ví-kúndanya v itu úndí
they (will) mix the yams
va-na-lá-li̍ma / va-na-lá-li̍ma, va-na-lá-li̍ma ma haála
they (will) cultivate the fields
va-na-ví-lá dy a / va-na-ví-lady a vi nut
they (will) lay down the things
D2  va-na-lá-pili ka n e / va-na-lá-pilikane mali̍idi
they should not hear the voices
va-na-di-káta paad y e / va-na-di-kátapadye ding’áande
they should not clean the houses
va-na-vá-pwéchele / va-na-vá-pwéchele vayeéni
they should not receive the guests
va-na-vi-kündaeanye / va-na-vi-kündanye vituündi
they should not mix the yams
va-na-lá-lümme / va-na-lá-lume mahaála
they should not cultivate the fields
va-na-vi-láadye / va-na-vi-ladye viínu
they should not lay down the things

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

<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>

C2 va-na-lá-úudyá / va-na-lá-udyá malóóvé
they (will) ask the words

D2 va-na-lá-úudyé / va-na-lá-udyé malóóvé
they should not ask the words

Here, too, the TP’s are slightly different compared to the TP’s of forms without OC. When there is Vowel Coalescence/Glide Formation (VC/GF) between the vowel of the OC and the initial vowel of the stem, and the OC has a H tone, the tonal process OC H Tone Retraction occurs: the H tone of the OC is shifted back one TBU to the left (from where doubling may occur, see 3.5.5).

<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>

C2 va-ná-lúudyá / va-ná-ludyá malóóvé
they (will) ask the words

D2 va-ná-lúudyé / va-ná-ludyé malóóvé
they should not ask the words
This retraction rule applies wherever there is an OC with a H tone which merges with the following stem, not only when a H tone has been shifted to the OC (as with the examples above), but also when the OC has a lexical H tone, as in the Infinitive; and of course also with stems longer than disyllabic ones.

A  ku-lá-úudyá — kú-lúuyda  to ask them
   ku-lá-iiwa — kú-liiwa  to steal them
C2  va-ni-tú-éneleedyá — va-ni-twéneleedyá  they have dispersed us

Forms consisting of minisyllabic stems with OC are identical with the vowel-initial disyllabic forms above before VC/GF between the stem and the preceding morpheme. We therefore give underlying forms.

C2  ’va-na-lá-aalya  (<vá-na-la-aalya)
     they (will) eat them
D2  ’va-na-lá-aalye  (<vá-na-la-aalye)
     they should not eat them

The big difference is that vowel-initial disyllabic stems may appear without VC/GF, but minisyllabic stems may not appear without these processes. So, the forms and TP’s concerning minisyllabic stems below are identical with those concerning vowel-initial disyllabic stems with a complex final syllable above where VC/GF have occurred (see 3.4.1 and 3.5.5).

<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>

C2  va-ná-láalya / va-ná-lalya mátiinji  they (will) eat the pumpkins
D2  va-ná-láalye / va-ná-lalye mátiinji  they should not eat the pumpkins

As a consequence of the obligatory VC/GF with minisyllabic stems, the OC H Tone Retraction rule always applies with minisyllabic stems with a OC with a H tone, also in case of an lexical H tone. Below, we follow the derivation of an Infinitive consisting of a minisyllabic stem with OC starting from H Tone Assignment (HTA). HTA results in a H tone on the OC, and in the tonal profile S1/SF (A) on the stem. Meeussen’s Rule (MR) deletes the S1-H tone of the stem because of the preceding H on the OC, and Retraction of the SF-H tone occurs (R). VC/GF applies which results in the glide in the final syllable, the OC merges with the stem and its H tone retracts to the previous TBU (this is the Object Concord H Tone Retraction rule, OCHTR). Resyllabification occurs (not indicated below). H Tone Doubling (HTD) and Final H deletion (F) apply, followed by Default L tone insertion (DI).
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).

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B</strong></td>
<td><strong>tu-la-liime</strong></td>
<td>we should cultivate them</td>
</tr>
<tr>
<td></td>
<td><strong>tu-vi-láadye</strong></td>
<td>we should lay them down</td>
</tr>
<tr>
<td></td>
<td><strong>tu-va-pwéchééle</strong></td>
<td>we should receive them</td>
</tr>
<tr>
<td></td>
<td><strong>tu-vi-kundáanye</strong></td>
<td>we should mix them</td>
</tr>
<tr>
<td></td>
<td><strong>tu-la-pilikaane</strong></td>
<td>we should hear them</td>
</tr>
<tr>
<td></td>
<td><strong>tu-va-pélekeedye</strong></td>
<td>we should send them</td>
</tr>
<tr>
<td><strong>C1</strong></td>
<td><strong>tu-liime</strong></td>
<td>we should cultivate</td>
</tr>
<tr>
<td></td>
<td><strong>tu-laadyé</strong></td>
<td>we should lay down</td>
</tr>
<tr>
<td></td>
<td><strong>tu-pwéchééle</strong></td>
<td>we should receive</td>
</tr>
<tr>
<td></td>
<td><strong>tu-kundaanyé</strong></td>
<td>we should mix</td>
</tr>
<tr>
<td></td>
<td><strong>tu-pilikaáne</strong></td>
<td>we should hear</td>
</tr>
<tr>
<td></td>
<td><strong>tu-pelekeedyé</strong></td>
<td>we should send</td>
</tr>
<tr>
<td><strong>C1</strong></td>
<td><strong>liima</strong></td>
<td>cultivate!</td>
</tr>
<tr>
<td></td>
<td><strong>laadya</strong></td>
<td>lay down!</td>
</tr>
<tr>
<td></td>
<td><strong>pwechéela</strong></td>
<td>receive!</td>
</tr>
<tr>
<td></td>
<td><strong>kundaanyya</strong></td>
<td>mix!</td>
</tr>
<tr>
<td></td>
<td><strong>pilikaána</strong></td>
<td>hear!</td>
</tr>
<tr>
<td></td>
<td><strong>pelekeedyya</strong></td>
<td>send!</td>
</tr>
<tr>
<td><strong>D1</strong></td>
<td><strong>la-liime</strong></td>
<td>cultivate them!</td>
</tr>
<tr>
<td></td>
<td><strong>vi-laadye</strong></td>
<td>lay them down!</td>
</tr>
<tr>
<td></td>
<td><strong>va-pwéchééle</strong></td>
<td>receive them!</td>
</tr>
<tr>
<td></td>
<td><strong>vi-kundaanyye</strong></td>
<td>mix them!</td>
</tr>
<tr>
<td></td>
<td><strong>la-pilikaáne</strong></td>
<td>hear them!</td>
</tr>
<tr>
<td></td>
<td><strong>va-pelekeedyye</strong></td>
<td>send them!</td>
</tr>
</tbody>
</table>

### 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 *djít* (and Negative Indirect Relative Present *djít*, TG B). Only forms without OC are affected; with forms with OC, the OC intervenes between the H-toned TM
and the S1-H tone, and Meeussen’s Rule does not apply. Some examples are the following (see 3.4.3 and 7.1.1 for more details):

| B          | tu-káala           | we do not eat       |
|           | tu-ká-liima        | we do not cultivate |
|           | tu-ká-yaŋaata      | we do not help      |
|           | tu-ká-pilikaana    | we do not hear      |
|           | tu-ká-pilikaniiła  | we do not listen    |
|           | tu-ká-viila        | we do not eat it    |
|           | tu-ká-la-liima     | we do not cultivate them |
|           | tu-ká-va-yaŋaata   | we do not help them |
|           | tu-ká-la-pilikaana | we do not hear them |
|           | tu-ká-la-pilikaniiła | we do not listen to them |

There is H Tone Doubling to the first TBU of the stem. With the Negative Present, forms with a complex and with a simple final syllable have the same tone pattern.

The second type of TM which alters a tone pattern has a L tone that blocks the shift of the H tone of the SC. The H tone appears on the SC or the (first) TM. There are two cases. The first case is the Negative Present Perfective 1 dji (and Negative Indirect Relative Perfective dji) where the shifted H tone on the TM deletes the S1-H tone of the stem by MR in the same way as described above with the negative Present. The H tone of the TM does not double to the first TBU of the stem.

| A          | tu-ká-liile         | we have not eaten   |
|           | tu-ká-leedye        | we have not laid down |
|           | tu-ká-yangéete      | we have not helped  |
|           | tu-ká-kundeene      | we have not mixed   |
|           | tu-ká-pilikéene     | we have not heard   |
|           | tu-ká-katapiedy     | we have not cleaned |
|           | tu-ká-pilikáníile   | we have not listened|
|           | tu-ká-pelekediiidye | we have not sent    |
|           | tu-ká-vi-liile      | we have not eaten it|
|           | tu-ká-vi-leedye     | we have not laid them down |
|           | tu-ká-va-yangéete   | we have not helped them |
|           | tu-ká-vi-kundéenye  | we have not mixed them |
|           | tu-ká-la-pilikéene  | we have not heard them |
|           | tu-ká-di-katapiedy  | we have not cleaned them |
|           | tu-ká-la-pilikáníile| we have not listened to them |
|           | tu-ká-va-pélékediiidye | we have not sent them |

The second case consists of the Past dji, the Past Perfective dji and the Suppositional Conditional dji. 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. Conjoint verbal forms always form a single p-phrase with the following word, conjoint-disjoint verbal forms may or may not form a p-phrase with a following word, and disjoint verbal forms form a p-phrase on their own whether or not followed by a word. Most tenses are disjoint. There are six conjoint tenses which form pairs with six disjoint tenses. There are five conjoint-disjoint tenses; except for the Infinitive, four of them are interconnected with four disjoint tenses in that both sets of tenses have half of the verbal paradigm (e.g. the Optative with object concord is a disjoint tense while the Optative without object concord is a conjoint-disjoint tense). Before going into details, we start with a brief history of notes, remarks and (short) descriptions of conjoint and disjoint forms (often called differently) in various languages.

7.3.1 A brief history

Ndumbu and Whiteley (1962) note that in several languages of zone E, it has been recorded that some ‘one-word tenses’ are characterized by an initial nasal element (\( n, ne, ni \)), and that in some cases these may be related semantically to other tenses in which such an initial nasal element does not occur, as in Gusii, Kuria, Gikuyu, Kamba and Nyore. They further note that a similar phenomenon occurs in Chaga and possibly also in Bemba, and in Remi of zone F. They state that where such a semantic correlation does occur it has been variously described, e.g., by Barlow (1927): ‘Thus it will be seen that the effect of \( ni \) is to give positiveness or emphasis to the word or phrase it precedes. Preceding a verb, it conveys a definiteness, an assertiveness which the verb would not otherwise possess.’ For another language, Gusii, Whiteley (1956,
p.93) describes: ‘...The most important distinction between the two forms is that the n-forms introduce a new point or theme; either by starting a conversation, or continuing a 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’. Meeuussen (1959) names the distinction in Rundi ‘disjoint’ / ‘conjoint’, translated as ‘disjunctive’ / ‘conjunctive’ by Creissels (1996) for Setswana. Creissels states that only the disjunctive form can be used in final sentence position, implying a break between the verb and what follows, whereas the conjunctive form implies a continuity. He says that the use of a conjunctive form means that the verb is followed by an element which belongs to the clause in which the verb in question fulfills 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 fulfills 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 \(dj\)) 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 \(cj\)); 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 \(dj\)
- Past \(dj\)
- Far Past \(dj\)
- Present Perfective \(dj\)
- Past Perfective \(dj\)
- Far Past Perfective \(dj\)
- Imperative (with OC) \(dj\)
- Optative (with OC) \(dj\)
- Direct Relative Present (with SC cl.2ff.) \(dj\)
- Direct Relative Present Perfective (with SC cl.2ff.) \(dj\)
- Suppositional Conditional \(dj\)
- Conditional \(dj\)
- Concessive \(dj\)
- Subsecutive Infinitive \(dj\)
- Situative Perfective \(dj\)
- Suppositional Conditional Perfective \(dj\)
- Subsecutive Optative \(dj\)
- Direct Relative Past Perfective \(dj\)
- Direct Relative Far Past Perfective \(dj\)
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** **dit:**

- **tú-ná-(va-)yangaáta (vayeéni)** we helped them/the guests

**Optative with OC dit:**

- **tu-va-yángáate (vayeéni)** we should help them/the guests

**Conditional dit:**

- **tu-ka-(va-)yangáata (vayeéni)** if we help them/the guests

**Indirect Relative Present dit:**

- **pa-tú-(vá-)yángaata (vayeéni)** when we help them/the guests

**Negative Present dit:**

- **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 dit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past cjt</td>
<td>Past dit</td>
</tr>
<tr>
<td>Far Past cjt</td>
<td>Far Past dit</td>
</tr>
<tr>
<td>Present Perfective cjt</td>
<td>Present Perfective dit</td>
</tr>
<tr>
<td>Past Perfective cjt</td>
<td>Past Perfective dit</td>
</tr>
<tr>
<td>Far Past Perfective cjt</td>
<td>Far Past Perfective dit</td>
</tr>
</tbody>
</table>

With the label Present/Non-Past dit, 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 conj – Present/Non-Past dis:**
- `tu-(va-)yangata vayeéni` we help (THE) GUESTS
- `tu-na-(va-)yangaáta (vayeéni)` we (will) help them/the guests

**Past conj – Past dis:**
- `tu-(va-)yángátá váyééni` we helped (THE) GUESTS
- `tú-ná-(va-)yangaáta (vayeéni)` we helped them/the guests

**Far Past conj – Far Past dis:**
- `tw-a-(va-)yángátá vayeéni` we helped (THE) GUESTS
- `tw-á-ná-(va-)yangaáta (vayeéni)` we helped them/the guests

**Present Perfective conj – Present Perfective dis:**
- `tu-(va-)yangete vayeéni` we have helped (THE) GUESTS
- `tu-ni-(va-)yangaáta (vayeéni)` we have helped them/the guests

**Past Perfective conj – Past Perfective dis:**
- `tu-(va-)yangéte vayeéni` we had helped (THE) GUESTS
- `tu-ní-(va-)yangaáta (vayeéni)` we had helped them/the guests

**Far Past Perfective conj – Far Past Perfective dis:**
- `tw-a-(va-)yangéte vayeéni` we had helped (THE) GUESTS
- `tw-á-ní-(va-)yangaáta (vayeéni)` we had helped them/the guests

All conjoint tenses have a zero tense marker in the formative positions; their disjoint counterparts all have a tense marker, `-na-` or `-ni-` (preceded by the tense marker `-a-` in the Far Past).

The conjoint-disjoint tenses are presented in the left column below. The other part of the verbal paradigm of these tenses (except for the Infinitive) are the disjoint tenses of the second block above, repeated below in the right column.

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Imperative (without OC)</th>
<th>Imperative (with OC) dis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optative (without OC)</td>
<td>Optative (with OC) dis</td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present</td>
<td>Direct Relative Present dis</td>
<td></td>
</tr>
<tr>
<td>(with SC participants + cl.1)</td>
<td>(with SC cl.2ff.)</td>
<td></td>
</tr>
<tr>
<td>Direct Relative Present Perfective</td>
<td>Direct Relative Present Perfective dis</td>
<td></td>
</tr>
<tr>
<td>(with SC participants + cl.1)</td>
<td>(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-yangaáta  to help them
- ku-yángáá váyééni  to help guests
- ku-vá-yángata váyééni  to help the guests

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

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

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

- tu-yangaáte  we should help
- tu-yangate váyééni  we should help guests
- tu-va-yángáate (vayeéni)  we should help them/the guests

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

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

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

- a-(vá-)-yángééte  (s)he who have helped (them)
- a-(vá-)-yángete váyééni  (s)he who have helped (the) guests
- va-(va-)-yángééte (vayeéni)  they who have helped them/the guests

When conjoint-disjoint tenses occur on their own, there is penultimate lengthening (and retraction of the final H tone); when an object or adjunct is following, they are like conjoint tenses; there is no penultimate lengthening, and there is a H Tone Bridge between the final H tone of the verbal form and the first H tone of the following nominal (see 8.3.2). Conjoint-disjoint tenses have a zero TM. They form conjoint-disjoint pairs on their own, without having a difference in TM’s. The choice between the conjoint form and the disjoint form is not determined by focus, but by the syntactic environment. The striking difference between the conjoint-disjoint parts of the verbal paradigm and the disjoint parts of the verbal paradigm of these tenses is that the disjoint parts do not have final H tone, while the conjoint-disjoint parts, including the Infinitive, do have final H tone. This phonological difference may be the reason for the different behaviour of the two kinds of tenses: the final H tone probably is connected with forming a p-phrase with a following nominal with these tenses, the H Tone Bridge being the instrument.
In this chapter, we have worked out the tonology of disjoint tenses (7.2). In chapter 8, we will work out the tone system of conjoint tenses and conjoint-disjoint tenses. Conjoint tenses and conjoint-disjoint tenses also belong to one of the TG’s A through E which are established for disjoint tenses in this chapter, but some adaptations with certain TG’s are needed for conjoint tenses because of tone rules like H Tone Bridge, where there is a stretch of H tones from the final syllable of the verbal form to the first H tone of the following object.

### 7.4 Complex tenses

Complex tenses consist of the Infinitive preceded by special verbal prefixes or by SC + TM(s) or by a verbal form. The larger complex tenses consist of the Infinitive preceded by SC + TM(s) or a verbal form; in case a conjoint verbal form with a final H tone precedes the Infinitive, there is a H Tone Bridge between this final H tone and the first H tone of the Infinitive. The smallest complex tenses are the Sequential Infinitive (i.e. an Infinitive preceded by the class 18 prefix n- ("mu-")), the Situative Infinitive (i.e. an Infinitive preceded by the Situative u-) and the Situative Sequential Infinitive (i.e. the Sequential Infinitive preceded by the Situative u-); these complex tenses themselves may occur as final part of larger complex tenses. The structural descriptions are (without tonal descriptions):

- **ku-(OC)-Verbal Base-a** (Infinitive)
- **n- ku-(OC)-Verbal Base-a** (Sequential Infinitive)
- **u- ku-(OC)-Verbal Base-a** (Situative Infinitive)
- **u- n- ku-(OC)-Verbal Base-a** (Situative Sequential Infinitive)

Just like the Infinitive, the Sequential Infinitive has a Subsecutive variant with the TM -ná- after the initial:

- **ku-ná-(OC)-Verbal Base-a**
- **n- ku-ná-(OC)-Verbal Base-a**

There are four types of larger complex tenses. The first type is composed of an Infinitive preceded by a verbal form or TM(s). There are three such forms:

1a) a verbal form with the verb -lembela ‘want’ or part of it, -(le)mbe(la), followed by an Infinitive with or without the initial ku- or u-; these complex tenses designate Future and Past Intentional.

1b) the verbal forms -kana(v,a) and -kanamba, followed by an Infinitive with or without the initial ku- or u-; these complex tenses designate “Not Yet” Negative Perfective and “Before” Negative Perfective.

1c) the TM’s -chi- and -nachi- followed by an Infinitive without initial; these complex tenses designate Past Progressive and Non-Past Progressive.
In the second type of complex tenses the Sequential Infinitive is preceded by:

2a) a verbal form with the verb -.va ‘be’; these complex tenses designate general Progressive tenses.

2b) a verbal form with the Perfective of -.va or part of it, -ve(le); these complex tenses designate specific Progressive tenses.

In the third type of complex tenses the Situative Sequential Infinitive is preceded by:

3a) a verbal form with the verb -.va ‘be’ followed by -chi; these complex tenses designate Non-Past Progressive.

3b) a verbal form with the Perfective of -.va or part of it, -ve(le) followed by -chi; these complex tenses designate Present Progressive and (Far) Past Progressive.

The fourth type of complex tenses is composed of certain combinations of parts of complex tenses mentioned above:

4a) the TM’s -chi- and -nachi- followed by complex tenses with -lembe- and -.va-; these tenses designate Past Intentional Progressive, Past Progressive and Non-Past Progressive.

4b) the initials n-ku- of the Sequential Infinitive may be followed by other non-Negative complex tenses, the initials replacing the SC; these tenses designate Sequential Future and Sequential Progressive tenses.

4c) the Subsequential Present Progressive may be preceded by a verbal form with -ve; its meaning is still unclear.
Structural descriptions of the complex tenses (without tonal description):

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

  - Present: Future
  - Negative Present: Negative Future
  - Direct Relative Present: Direct Relative Future
  - Indirect Relative Present: Indirect Relative Future
  - Negative Indirect Relative Present: Negative Indirect Relative Future
  - Past: Past Intentional
  - Far Past: Far Past Intentional

Although the full form -lembe/-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-lembé-kañíma/ngu-lembé-liíma/ngu-lembé-ulíima
I will cultivate

ngu-lembé-kañlííma/ngu-lembé-lañlííma/ngu-lembé-ulálliíma
I will cultivate them (cl.6)

ngu-lembé-kañúlya
I will eat

ngu-lembé-díílya/ngu-lembé-kú-díílya
I will eat them (cl.10)
```

As with the Present tense on its own, forms with participants as SC have no H tone; forms with classes as SC have a H toned SC. This H tone shifts to the final TBU of the Present tense part from where there is a H Tone Bridge to the first H of the Infinitive. The H tone on the final syllable is deleted by the process Regressive H Tone Dissimilation (see 8.3.2), but not when the Infinitive lacks an initial; when the initial is “u-”, the preceding vowel e of the verb is raised to H. Note that a H Tone Bridge to a minisyllabic verb results in a F tone on its penultimate syllable.

```
va-lembé-kañííma/va-lembé-liíma/va-lembé-ulííma
they will cultivate

va-lembé-kañlííma/va-lembé-lañlííma/va-lembé-ulálliíma
they will cultivate them (cl.6)

va-lembé-kañúlya
they will eat

va-lembé-díílya/va-lembé-kú-díílya
they will eat them (cl.10)
```

The shorter form -mbé- of -lembé/-lambé 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 -lembé- but the SC is not ngu- (or ni-) but the variant Prenasalization of the initial C of -lembé-.

```
tu-mbé-liíma/tu-mbé-ulííma
we will cultivate

tu-mbé-kañúlya
we will eat

ndembe-liíma/ndembe-ulííma
I will cultivate
```

**NEGATIVE FUTURE:**

The first part consists of the Negative Present of -(le)mbe-/-(la)mbe-; the second part is the Infinitive.
tu-ká-lémbe-kuliíma/tu-ká-lémbe-liíma/tu-ká-lémbe-ulííma
we will not cultivate

DIRECT RELATIVE FUTURE:
The first part consists of the Direct Relative of -(le)mbe-/-(la)mbe-. The forms with participants and cl.1 as SC have a H toned SC (which appears on the first TBU of the stem) and final H tone (which acts the same way as we saw with the Present, except that it does not appear on the final TBU); the forms with cl.2ff. as SC have a $2$-H tone.

tu-lémbe-kuliíma/tu-lémbe-liíma/tu-lémbe-ulííma
we who will cultivate
va-lembé-kuliíma/va-lembé-liíma/va-lembé-ulííma
they who will cultivate

(NEGATIVE) INDIRECT RELATIVE FUTURE:
These tenses have as first part the (Negative) Indirect Relative of -(le)mbe-/-(la)mbe-.

pa-tú-lémbe-kuliíma/pa-tú-lémbe-liíma/pa-tú-lémbe-ulííma
when we will cultivate
vayeéni va-tú-lémbe-uváyangááta
the guests who we will help

pa-tú-ká-lémbe-kuliíma/etc.
pa-tú-ká-mbe-ulííma...
when we will not cultivate
vayeéni va-tú-ká-lémbe-uváyangááta
vayeéni va-tú-ká-mbe-uváyangááta
the guests who we will not help

(FAR) PAST INTENTIONAL:
The first part consists of the (Far) Past of -(le)mbe-/-(la)mbe-, with a H Tone Bridge to the following Infinitive:

tu-lémbe-kuliíma/tu-lémbe-liíma/tu-lémbe-ulííma
we would cultivate (we had the intention to cultivate)

tu-mbé-liíma/tu-mbé-ulííma etc.
tu-lémbe-kuliíma/tu-lémbe-liíma/tu-lémbe-ulííma
tu-mbé-liíma/tu-mbé-ulííma etc.
we would cultivate long ago
Type 1b):

"NOT YET" NEGATIVE PERFECTIVE:

The "Not Yet" Negative Perfective is formed by an Infinitive preceded by three possible forms: SC + -ká-náa(va) and SC + -ká-náamba. The first part -ká- is the Negative marker. The -náa- 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). -náamba 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 kúúcha 'and it goes on with dawning'. Also the negative form is used with this Infinitive: ku-ká-náamba kúúcha 'and it has not yet started to dawn'. The Infinitive appears with the initials ku- or u; when preceded by -kánáa, the initials may also be omitted (except with minisyllabic stems).

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

There is also a Indirect Relative with all forms:

\[
\begin{align*}
u-tú-kánáamba-kulííma & etc. \\
while we have not yet cultivated \\
\end{align*}
\]

"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').

\[
\begin{align*}
tu-kanáamba-kulííma/ & tu-kanáamba-ulúííma \\
tu-kanáava-kulííma/ & tu-kanáava-ulúííma \\
tu-kanáa-kulííma/ & tu-kanáa-ulúííma/ tu-kanáa-liííma \\
before we cultivate (or: when we not yet cultivate) \\
tu-kanáamba-kuláliííma/ & tu-kanáamba-uláliííma etc. \\
before we cultivate them (cl.6) (or: when we not yet cultivate them) \\
\end{align*}
\]

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-liima we are cultivating
Tu-nachi-la-liima we are cultivating them (cl.6)

As in the Non-Past, the SC for the participants has L tone, but the SC for the classes has a H tone, which shifts to the TM -chi-. In forms without an OC, Meeussen’s Rule applies, so the S1-H tone is deleted, and there is no H Tone Bridge.

va-nachi-liima they are cultivating
va-nachi-la-liima 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-too ha/va-nachi-tőoha we are touching

INDIRECT RELATIVE NON-PAST PROGRESSIVE:

pa-tú-ná-chi-liima when we are cultivating
pa-tú-ná-chi-la-liima 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-liima/va-chi-liima we/they were cultivating
tu-chi-li-liima/va-chi-li-liima we/they were cultivating it
tu-chi-too ha/va-chi-tőoha we were touching

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

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

NEGATIVE PAST PROGRESSIVE:

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

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

(NEGATIVE) INDIRECT RELATIVE (FAR) PAST PROGRESSIVE:

pa-tú-chi-liima when we were cultivating
pa-tw-á-chi-liima id. long ago
pa-tú-chi-la-liima when we were cultivating them (cl.6)
pa-tw-á-chi-la-liima id. long ago
pa-tú-ká-chi-liima when we were not cultivating
pa-tú-ká-chi-la-liima when we were not cultivating them
Type 2a):

General Progressive tenses are formed by the Sequential Infinitive preceded by a verbal form with the verb -**va** 'be'. This verb may occur in almost every tense, on its own as well as in combination with the Sequential Infinitive. Its first TBU is a copy of the vowel of the preceding SC with which it forms a long syllable (see 8.3.1). With conjoint tenses with a final H tone, there is a H Tone Bridge between this final H tone and the first H tone of the Sequential Infinitive. Some examples:

Present:
- **tuuva-nkiliima** we are (generally) cultivating
- **vaavá-ñkiliima** they are (generally) cultivating

Negative Present:
- **tukáava-nkiliima** we are not cultivating

Direct Relative:
- **túuvá-ñkiliima** we who are not cultivating
- **vááva-nkiliima** they who are not cultivating

Indirect Relative:
- **patúuva-nkiliima** when we are cultivating

Negative Indirect Relative:
- **patükáava-nkiliima** when we are not cultivating

Optative:
- **tuuvé-ñkiliima** we should be cultivating

Negative Optative:
- **tunááve-nkiliima** we should not be cultivating

Suppositional Conditional:
- **tukáníva-nkiliima** we would be cultivating

Negative Suppositional Conditional:
- **tukánáave-nkiliima** we would not be cultivating

Type 2b):

Another group of Progressive tenses are formed by the Sequential Infinitive preceded by a verbal form with the Perfective of -**va**, viz. -**vele**, or its part -**ve** (often pronounced as -**vee**, especially when having a contour tone). All Perfective verb forms are possible in combination with the Sequential Infinitive. With conjoint tenses with a final H tone, there is a H tone Bridge between this final H tone and the first H tone of the Sequential Infinitive; but there is one exception: the Present Perfective on its own has a final H tone with all SC’s; in combination with the Sequential Infinitive, forms with SC’s for the participants do not have a H tone. Some examples:
Present Perfective:
- **tuve-nkulíma** we are cultivating
- **vavé-ŋkúlíma** they are cultivating

Past Perfective:
- **tuvé-ŋkúlíma** we were cultivating

Negative Past Perfective:
- **tukávé-nkulíma** we were not cultivating

Direct Relative Perfective:
- **tuvée-nkúlíma** we who are cultivating
- **vavé-ŋkúlíma** they who are cultivating

Indirect Relative Perfective:
- **patúvée-nkuliíma** when we are cultivating

Suppositional Conditional:
- **tuke-‡nkulíma** 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-ʊŋkúlíma** we are/will be cultivating
- **va-náavá-chi-ʊŋkúlíma** they are/will be cultivating

Type 3b):

**PRESENT PROGRESSIVE:**

The Present Progressive is formed by the Situative Sequential Infinitive preceded by the Present Perfective of -**va** ‘be’ plus -**chi**-.

- **tu-veé-chi-ʊŋkúlíma** 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-več-chi-ʊŋkúlíma** we were cultivating
- **tw-a-več-chi-ʊŋkúlíma** 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-čhí-lembe-kúlíma we had the intention to cultivate
NEGATIVE PAST INTENTIONAL PROGRESSIVE:

tu-ká-čhí-lémbe-kúlíma we did not have the intention to cultivate
INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:

pa-tú-čhí-lembe-kúlíma when we had the intention to cultivate
NEGATIVE INDIRECT RELATIVE PAST INTENTIONAL PROGRESSIVE:

pa-tú-ká-čhí-lémbe-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 -čhi-.

tu-čhíváŋkúlíma we were in the process of cultivating
NEGATIVE PAST PROGRESSIVE:

tu-ká-čhíváŋkúlíma we were not in the process of cultivating
INDIRECT RELATIVE PAST PROGRESSIVE:

pa-tú-čhíváŋkúlíma when we were in the process of cultivating
NEGATIVE INDIRECT RELATIVE PAST PROGRESSIVE:

pa-tú-ká-čhíváŋkúlíma 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 -nčhi-.

tu-nčhíváŋkúlíma we will be cultivating
INDIRECT RELATIVE NON-PAST PROGRESSIVE:

pa-tú-ná-čhíváŋkúlíma 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-lémbe-ůlíma and will cultivate

SEQUENTIAL FUTURE PROGRESSIVE:

nku-lémbe-čhi-ukúlíma and will be cultivating
SEQUENTIAL PRESENT PROGRESSIVE:

nkúu-váŋkúlíma and are cultivating

SEQUENTIAL NON-PAST PROGRESSIVE:

nku-náchí-liíma and will be cultivating

SEQUENTIAL PAST PROGRESSIVE:

nku-chí-liíma and was cultivating

SEQUENTIAL PAST PROGRESSIVE:

nku-chíváŋkúlíma 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-nkúuváŋkúlíma

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-chí-.chi (Past Progressive of -.chi 'say'), the second part may be one of a number of tenses; the exact meanings are still unclear.

2. Compound tenses with -.va 'be'.

2a) the first part is the Non-Past with -.va, the second part is the Perfective, the Unexpected Negative Perfective or the Situative; these tenses designate Future tenses.

2b) the first part is the Sequential Infinitive, and its Subsecutive variant plus -.chi, with -.va, the second part is a Situative; this tense designates (Subsecutive) Situative Progressive.
3. Compound tenses with -ve(le).

3a) the first part is the (Far) Past with -ve(le), the second part is the Perfective, the Unexpected Negative Perfective or the Situative; these tenses designate (Far) Past tenses.

3b) the first part is a verbal form with -ve, the second part is a larger complex tense; its meaning is still unclear.

Structural descriptions of compound tenses (without tonal description):

1a) SC-.chi SC- (OC)-Verbal Base-e
1b) SC-chi-chi SC- (OC)-Verbal Base-a/le
2a) SC-na-va SC- SC-kanaa-(k)u- (OC)-Verbal Base-a
     SC-na-va SC-kana.va-(k)u- (OC)-Verbal Base-a
     SC-na-va SC-kanaamba-(k)u- (OC)-Verbal Base-a
     SC-na-va u- SC- (OC)-Verbal Base-a
2b) n-ku-va u- SC- SC-kuna.vachi u- SC- (OC)-Verbal Base-a
3a) SC-ve SC- SC-kanaa-(k)u- (OC)-Verbal Base-a
     SC-ve SC-kana.va-(k)u- (OC)-Verbal Base-a
     SC-ve SC-kanaamba-(k)u- (OC)-Verbal Base-a
     SC-ve u- SC- (OC)-Verbal Base-a
3b) SC-ka-ve SC- SC-ve-n-ku- (OC)-Verbal Base-a

We have also found an example of a compound tense followed by a complex tense (described under 1a)) and a combination of two compound tenses (described under 1b)). We now work out the different types in more detail.

Type 1a):

FUTURE:

The Future is formed by an Optative preceded by the Present of -ve `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).

\[tuuchi\ tu-liime\] we will cultivate
\[tuuchi\ tu-la-liime\] we will cultivate them (cl.6)

NEGATIVE FUTURE:

\[tu-káachi\ tu-liime\] we will not cultivate
\[tu-káachi\ tu-la-liime\] we will not cultivate them (cl.6)

INDIRECT RELATIVE FUTURE:

\[pa-túuchi\ tu-liime\] when we will cultivate
\[pa-túuchi\ tu-la-liime\] when we will cultivate them (cl.6)
NEGATIVE INDIRECT RELATIVE FUTURE:

\[
\begin{align*}
\text{pa-tú-káachi tu-liíme} & \quad \text{when we will not cultivate} \\
\text{pa-tú-káachi tu-la-liíme} & \quad \text{when we will not cultivate them}
\end{align*}
\]

The Future may be combined with the complex tense Sequential Infinitive preceded by a verbal form with -.va ‘be’.

\[
tuuchi tuu-vé-ðkúlííma \quad \text{we will be cultivating}
\]

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:

\[
\begin{align*}
tu-chíchi tu-liíme & \quad \text{lit.: we were saying we should cultivate} \\
tu-ká-chíchi tu-liíme & \quad \text{Negation} \\
pa-tú-chíchi tu-liíme & \quad \text{Indirect Relative} \\
pa-tú-ká-chíchi tu-liíme & \quad \text{Negation}
\end{align*}
\]

+ Negative Optative:

\[
tu-chíchi tu-na-liíme
\]

+ Non-Past:

\[
\begin{align*}
tu-chíchi tu-na-liíma \\
va-chíchi va-ná-liíma
\end{align*}
\]

+ Present Progressive:

\[
tu-chíchi tu-ve-nkúlííma
\]

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

\[
tu-chíchi tuuchi tu-liíme
\]

Type 2a):

FUTURE PERFECTIVE:

The first part consists of the Non-Past with -.va ‘be’, the second part is the Present Perfective.

\[
\begin{align*}
tu-naava tu-límite liháála & \quad \text{we will have cultivated a field} \\
vá-náava va-límite liháála & \quad \text{they will have cultivated a field}
\end{align*}
\]

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.

\[
\begin{align*}
tu-naava & \quad \text{tu-kánáamba-kúlííma/tu-kánáamba-ullííma/} \\
& \quad \text{tu-kánáava-kúlííma/tu-kánáava-ullííma/}
\end{align*}
\]
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-limite liháála** we had been cultivating a field
**tw-a-vé(lé) tu-limite 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.

**tuvé 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**