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# 7 Verbs

## 7.1 Introduction

This chapter is organized as follows. The structure of the verb form is presented in 7.2, followed by a description of the content in the verb-root position in 7.3. The pre-radical SM (subject prefix) position is described in 7.4 and the OM (object prefix and reflexive prefix) position in 7.5. Grammatical tense/aspect/mood tone is presented in 7.6. Tense and Aspect are further described in 7.7. Tense and aspect also involve the post-verbal time adverbials, affixes at several positions in the verb structure, which are presented from left to right, and pre-verbal auxiliaries. The time adverbials are glossed with F (Future) or P (Past) followed by a number which indicates the distance in time from the deictic centre.

Negative verb forms are described separately in 7.8, because Liko does not have a single way of negating an affirmative verb. Subjunctives, Imperatives and Conditionals occur in examples throughout this chapter and are treated in more detail in 7.9 and 7.10.

The Liko verb structure contains a slot for extensions<sup>297</sup>. In 7.11, the verb extensions attested in the language are described: Causative, Applicative, Benefactive, Resultative, Neuter, Associative<sup>298</sup> and Pluractional. Liko allows just one morpheme to occur in a verb structure position at the time, except for extensions and enclitics.

Derivation to other word classes is presented in 7.12 and the verb 'to be' in 7.13.

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<sup>297</sup>Derivational suffixes are commonly called 'extensions' in descriptions of Bantu languages. Extensions are formally different from other suffixes by their structure, -VC- (extensions) instead of -CV (suffixes) and by the position in the verb structure: extensions precede the verb-final vowel, whereas other suffixes follow the verb-final vowel. The term 'expansion' refers to the segmental material following a -CVC- verb root which cannot be analysed as a productive extension. Expansions precede productive extensions in the verb structure.

<sup>298</sup> One of the most frequent uses of the Associative extension is reciprocal.

There are several areas which are of interest compared to other Bantu languages: for instance, the use of the time adverbials to encode a point in time (see 7.7.1), verbal enclitics with aspectual use (see 7.7.4) and the absence of a reflex of the reconstructed Proto-Bantu passive extension. Constructions used to convey passive meaning are treated in 8.2.6.

## 7.2 The structure of the verb form

The structure of the verb form in Liko can be summarized as follows:

(7.1) SM + NEG + TA + OM + root + extension + FV + post-FV<sup>299</sup>

The positions in this structure contain the following elements (Meeussen's (1967:108) labels are added in brackets):

(7.2) <u>Position</u>	<u>Content</u>	<u>Meeussen</u>
SM	subject prefix	(initial)
NEG	negative prefix	(post-initial)
TA	aspect, Conditional	(formative)
OM	object prefixes, reflexive prefix	(infix)
root	verb root	(radical)
extension	derivational suffixes and expansions	(suffix)
FV	negation, aspect, mood	(final)
post-FV	aspect, several other suffixes/enclitics	(post-final)

SM and OM stand for 'subject marker' and 'object marker' respectively. TA is short for tense/aspect.<sup>300</sup> NEG is 'negative' and FV means 'verb-final vowel'. Post-FV refers to elements which follow the verb-final vowel.

The verbal base may be simple, consisting only of a verb root, or extended, consisting of a verb root followed by one or more extensions. Extensions are underlyingly toneless. The vowel of an extension is either high or low (no mid).

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<sup>299</sup> In order to facilitate a comparison of Liko with other Bantu languages, I have used the labels in Nurse (2005:40) for the positions in the Liko verb structure.

<sup>300</sup> Using Nurse's (2005) label because I do not think that it is helpful to add a new label to existing ones. The reader should keep in mind that although the TA position is used in Liko, tense and aspect are generally encoded in other positions.



with -CVC- structures include: **-dúk-** 'pour out', **-kún-** 'decorate', **-tuk-** 'help', **-nan-** 'stretch', **-dúk-** 'drip', **-kís-** 'look for', **-tók-** 'leave', **-lál-** 'sleep'.

The verb radical or root has the structure -CVC- in the majority of Liko verbs, where both  $C_1$  and  $C_2$  may be empty. Empty  $C_2$  occurs more frequently than empty  $C_1$ . The language has a small number of -CVV-, -CVVC- and -VVC- structures, see 2.4 and 2.5.2. The set of -CV-verbs contains basic verbs like **-gú-** 'do', **-lí-** 'eat', **-pa-** 'like, want', **-pá-** 'give', **-kú-** 'die', **-sí-** 'finish', **-va-** 'take'. The set of -VC-verbs is small, examples are **-am-** 'stop', **-amb-** 'cook', **-in-** 'see', **-ind-** 'go', **-ók-** 'heal and **-up-** 'rest'.

Examples of -CVC- structures with prenasalized  $C_2$  include: **-lúmb-** 'bury', **-tund-** 'multiply', **-sóng-** 'ferment', **-dúngb-** 'limp', **-panz-** 'scatter'. /nv/ as  $C_2$  is not found. Few -CVC- verb roots have prenasalized  $C_1$ , e.g. **-mbang-** 'admire', **-ndóng-** 'discover', **-ngát-** 'ripen', **-ngbát-** 'play (musical instrument)', **-nvit-** 'pinch', **-nzin-** 'talk'.

A number of -CV- and -CVC- verb structures have initial **t-**, which prevents [+ATR] spreading to the Infinitive prefix. Although the root without the initial vowel is not attested for these verbs, the vowel is analysed as a reflexive prefix which constitutes the left boundary of the domain of [+ATR] spreading. In verb forms with **-ibó-** 'know', **-ingí-** 'lay down', and **-ikút-** 'be satisfied (after eating)', the vowel of the Infinitive prefix is consistently /a/ instead of /o/ (see 3.2.2.3).

Most verb roots that are longer than -CVC- can be shown to result from derivational processes (Schadeberg 2003a:72). Liko has a number of -CVCVC- verbs in which the bare -CVC- root does not occur and where the following -VC part has not been identified. For examples of -CVCVC- verbs, see 7.11.9. Most -CV(C)VC- verbs have two identical vowels, in particular when the first vowel of the verb root is a high or a low vowel.

About twenty verb roots in my data have the structure -CVCV-, where  $V_2$  is a high vowel /t i u u/ that cannot be identified as a suffix with derivational properties, such as the Applicative extension **-t-**, see 7.11.2. If a corresponding -CVC- verb root exists for these verbs, then the meaning does not seem to be related, e.g. **-bák-**

'bud' vs. **-báki-** 'spit' and **-tól-** 'hurt (intr.)' vs. **-tólu-** 'be ready'. Preceding the final vowel, V<sub>2</sub> is desyllabified (see 3.3.5). Some other examples of -CVCV- verb roots are: **-pumbi-** 'accumulate', **-kíbi-** 'hold out', **-gbodi-** 'coat', **-kógu-** 'choke (on a piece of food)', **-baku-** 'peel', **-tóku-** 'chew', **-buku-** 'scratch' and **-kógu-** 'scream'.

Reduplication of the root-initial CV-syllable is not frequent. When it occurs, it modifies the meaning of the basic verb, e.g. **-vul-** 'touch' vs. **-vuvul-** 'feel, finger', **-gum-** 'iron' vs. **-gugum-** 'tremble, shiver'. Certain verbs with an extension are only attested with reduplication of the initial CV-syllable. For instance, with the Associative extension **-an-** (see 7.11.6): **-dik-** 'make cold or wet' vs. **-didik-an-** 'die, become old', and with the Applicative extension **-i-** (see 7.11.2): **-nzin-** 'speak, talk' vs. **-nzinzin-i-** 'talk scandal, discredit s.o.', **-yung-** 'tell, deliver a speech' vs. **-yoyung-i-** 'say s.th. bad to s.o.', **-kóng-** 'ask' vs. **-i-kókóng-i-** 'ask for oneself, beg'.

## 7.4 Subject prefix (SM position)

Subject prefixes in Liko agree with the noun class of the subject only for classes 1 and 2.<sup>301</sup> The subject prefixes are:

Table 24 Subject prefixes

<u>Noun classes 1 and 2</u>		<u>Other noun classes</u>	
1SG	na-		
2SG	wa-		
3SG	a-/Ø-	3SG	a-/Ø-
1PL	ta-		
2PL	má-		
3PL	bá-	3PL	a-/Ø-

<sup>301</sup> For this reason, the term 'subject prefixes' is used in this book, rather than 'subject concords' which is used in descriptions of Bantu languages where the subject marker agrees with the noun class of the subject. The same applies to object prefixes in the next section.

Third person singular subjects of class 1 as well as singular subjects of other noun classes take the prefix **a-**, except in Conditional and negative forms where the prefix is zero. A class 2 third person plural subject has the prefix **ǂá-**. Plural subjects of other noun classes take prefix **a-**, except in Conditional and negative forms where the prefix is zero.<sup>302</sup> Subject prefixes are unmarked for tone, except the second and third person plural prefixes **mǂá-** and **ǂá-** which have an underlying H tone. The vowel of subject prefixes is changed into /o/ in a [+ATR] context. Imperatives consist of the verb stem and they do not have a subject prefix.

The following clauses exemplify agreement between subjects and subject prefixes. All classes except class 2 take subject prefix **a-** for both singular and plural referents:

- (7.4)a. mu-kó á-pung-á ndi kǎ-ǎ-nzúnzǎny-á  
 1-woman 3SG<sup>P</sup>-start-FV<sup>P</sup> P<sub>3</sub> 9b-REFL-complain-FV  
 'The woman started to complain.'
- b. nékókó a wa-pǔ  
 1a.instrument 3SG:be 1.ASS-strong  
 'The musical instrument is strong.', i.e. made of hardwood
- c. ɩ-mbengí á-túɩ-á mu-lókú  
 5-heart 3SG<sup>P</sup>:1.O-hurt-FV<sup>P</sup> 1-man  
 'The man was angry.', literally, 'the heart hurt the man'
- d. ǂa-nyamá ǂá-gǔgǔ, ma-mbengí ú-túɩ-ǎ ndi  
 2-animal 2.ASS-other 6-heart 3SG/PL<sup>P</sup>:2.O-hurt-FV P<sub>3</sub>  
 'The other animals, they were angry.', literally, 'hearts hurt them'  
 (T2006.3)
- e. nzúyɩ yá-sɩ á-va kúwa ásɩ sɩ yó-<sup>4</sup>múkí áka<sup>303</sup>  
 9.body 9.ASS-all 3SG<sup>P</sup>-take:FV thus only 9.smell 9.ASS-6:smoke CT  
 'The whole body took on JUST THE SMELL OF SMOKE.' (T2006.5)

<sup>302</sup> Subject prefix **a-** is glossed '3SG' in this book unless it agrees with plural subjects that do not belong to class 2. In those cases it is glossed '3SG/PL'.

<sup>303</sup> The particle **áka** indicates contrast, see 8.6.2. The contrasted phrase is marked with underlining. In the free translation, it is marked with capitals. The surface tones on **áka** are H.L. when the preceding tone is High, and L.H. when the preceding tone is Low.

- f.      6o-úzu      6ayá-gɔgɔ      a      6ayá-<sup>4</sup>kpókú  
 2+9-island    2+9.ASS-other    3SG/PL:be    2+9.ASS-very big  
 'Other islands are very big'
- g.      ku-tú-ko      kakí      ó-6u6-ǎ      ndi      6í-tú  
 15-clothes-15    3SG.POSS    3SG<sup>P</sup>-become white-FV    P<sub>3</sub>    MOD-bright  
 'His piece of clothing became very white.'
- h.      6o-tú      kakí      ó-6u6-ǎ      ndi      6í-tú  
 2+9-clothes    3SG.POSS    3SG/PL<sup>P</sup>-become white-FV    P<sub>3</sub>    MOD-bright  
 'His clothes became very white.'
- i.      kpáká      kakí      Ø-ká-6ák-ag-t-gǔ      ndi  
 9.trap    3SG.POSS    3SG-NEG-sprout-PLUR-FV-NEG    P<sub>3</sub>  
 'His trap could not release'
- j.      6a-kpáká      kakí      Ø-ká-6ák-ag-t-gǔ      ndi  
 2+9-trap    3SG.POSS    3SG/PL-NEG-sprout-PLUR-FV-NEG    P<sub>3</sub>  
 'His traps could not release'

Class 2 subjects have **6a-** (regardless of animacy):

- (7.5)a. 6o-mbũ      6ó-pik-og-o      6a-ndá6u      na      6e-nvunvú  
 2-bird    3PL-build-PLUR-FV    2+9-house    with    2+9:9a-moss  
 'Birds build nests with moss.'
- b.      6o-nékókó      6á      6a-pǔpu  
 2-instrument    3PL:be    2.ASS-strong  
 'The musical instruments are strong.', i.e. with a loud sound

The third singular subject prefix is also used to refer to impersonal subjects, e.g. **a 6únza** 'it is good', **a 6ízu**<sup>304</sup> 'it is warm'.

The third plural subject prefix is also used to refer to indefinite subjects, e.g. **6úgyogyiso** /6á-ǔ-gyogy-is-o/, 3PL-2.O-suffer-CAUS-FV, 'people will make them suffer'.

In clauses where a subject performs an action with someone else, the subject is considered to be plural and the subject prefix has class 2 concord, e.g.:

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<sup>304</sup> For the forms of 'to be', see 7.13.



- (7.6) Lótu ní-nǎ b́á-kpakyán-á ndi na Ábaláma  
 "Lótu" COP-1.DEM.I 3PL<sup>P</sup>-travel-FV<sup>P</sup> P<sub>3</sub> with "Abaláma"  
 'This Lot travelled with Abraham.' (*translated Genesis 13:5*)

## 7.5 Object and reflexive prefixes (OM position)

### 7.5.1 Object prefixes

Pronominal marking on the verb in OM position is governed by grammatical relations and is obligatory if the object is the first or second person singular or plural, or belongs to class 1 and its subclasses or to class 2. The presence of a bound pronominal object prefix depends on the valency of the verb. The object may be impersonal. To express emphasis, a substitutive or participant pronoun occurs post-verbally, see examples at the end of this section. The object prefixes are listed in the following table:

Table 25 Object prefixes

1SG	ì-
2SG	ù-
class 1	mù- / ̀- / ˘-
1PL	tí-
2PL	mú-
class 2	ǔ-

The class 1 object prefix **mù-** occurs in Imperative forms, e.g. **mu-kúl-á**, 1.O-untie-FV.IMP, 'untie him!', see 7.9.2. Arguments for positing a combined LH tone on the class 2 object prefix are given in 7.5.2.

Examples of the object prefixes include:

- (7.7) ε-kúl-a 3SG:1SG.O-untie-FV 'he will untie me'  
 /a-ɪ-kúl-a/  
 υ-kúl-a 3SG:2SG.O-untie-FV 'he will untie you (sg)'  
 /a-υ-kúl-a/  
 a-kúl-a mémí 3SG:1.O-untie-FV 1a.goat 'he will untie the goat'  
 /a-̀-kúl-a/  
 a-tí-kúl-a 3SG-1PL.O-untie-FV 'he will untie us'

a-mú-kúl-a	3SG-2PL.O-untie-FV	'he will untie you (pl)'
ǎ-kúl-a	3SG:2.O-untie-FV	'he will untie them'
/a-ǎ-kúl-a/		

An object prefix consisting of a vowel, preceded or followed by a vowel, leads to a sequence of two vowels which must be resolved (see 3.3 and 4.6.3 to 4.6.5 for surface tone realizations in these contexts). Preceding vowel-initial verb roots, all object prefixes have an epenthetic /m/ between the object prefix and the initial vowel of the root.

The epenthetic /m/ occurs preceding vowel-initial verb roots. The vowel of vowel-initial verbs is either high, i.e. /i i u u/, or it is the low vowel /a/. The reflexive prefix **ř-** has the allomorph **řm-** in the same environment. Examples of the allomorph of the object prefix include:

(7.8) εm-tn-a	3SG:1SG.O-see-FV	'he will see me'
/a-ɪ-tn-a/		
um-tn-a	3SG:2SG.O-see-FV	'he will see you (sg)'
/a-u-tn-a/		
am-tn-a mémí	3SG:1.O-see-FV 1a.goat	'he will see the goat'
/a-`-tn-a/		
a-tím-tn-a	3SG-1PL.O-see-FV	'he will see us'
/a-tí-tn-a/		
a-múm-tn-a	3SG-2PL.O-see-FV	'he will see you (pl)'
/a-mú-tn-a/		
řm-tn-a	3SG:2.O-see-FV	'he will see them'
/na-ř-tn-a/		

Other examples with vowel-initial verbs are:

(7.9) na kám-ǔl-á	mu-sí	'I am breaking a fish'
1SG:be 9b:1.O-break-FV	1-fish	
na kám-al-á	mu-sí	'I am cleaving a fish'
1SG:be 9b:1.O-cleave-FV	1-fish	

The class 1 object prefix surfaces with the allomorph  $\tilde{a}$ -, i.e. additional slight nasalization on the preceding vowel<sup>305</sup>, if the object is not expressed:

- (7.10)a.  $\tilde{a}$ -kúl-a            3SG:1.O-untie-FV            'he will untie him'  
 /a- $\tilde{a}$ -kúl-a/  
 $\tilde{b}$ á-tnd-a            3PL:1.O-tattoo-FV            'they will tattoo him'  
 / $\tilde{b}$ á- $\tilde{a}$ -tnd-a/  
 b.  $\tilde{b}$ á-<sup>4</sup>kúl-a            3PL:1.O-untie-FV            'they will untie him'  
 / $\tilde{b}$ á- $\tilde{a}$ -kúl-a/  
 $\tilde{b}$ á-<sup>4</sup>ít-a            3PL:1.O-slap-FV            'they will slap him'  
 / $\tilde{b}$ á- $\tilde{a}$ -ít-a/  
 c.  $\tilde{b}$ á-mokisy-o            3PL:1.O-dress-FV            'they will dress him'  
 / $\tilde{b}$ á- $\tilde{a}$ -mokisi-a/  
 na kám-tn-á            1SG:be 9b:1.O-see-FV            'I am seeing him'  
 /na ká- $\tilde{a}$ -tn-á/

In all cases, the vowel of the preceding prefix surfaces with the nasalization. In (a), the L tone of the class 1 object prefix merges with an adjacent L tone, whereas in (b), the L tone causes non-automatic downstep of the primary H tone of the verb root. The nasalization is not absorbed by a following nasal consonant, as can be seen in (c).

The following sets, (7.11), (7.12) and (7.13), exemplify the relation between the object prefix and a human referent, and between the object prefix and classes 1 or 2. In (7.11), the object prefix refers to a human object. In (7.12), the object prefix refers to classes 1 or 2 animate or inanimate objects. In (7.13), in which the object is not human and does not belong to classes 1 or 2, no object prefix is present.

(7.11) *The object prefix refers to a human object*

- $\epsilon$ -tungbul-a bánu            3SG:1SG.O-support-FV F<sub>2</sub>            'he will support me'  
 u-tungbul-a bánu            3SG:2SG.O-support-FV F<sub>2</sub>            'he will support you (sg)'  
 á-tungbul-a bánu            3SG:1.O-support-FV F<sub>2</sub>            'he will support him'

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<sup>305</sup> I would like to thank Constance Kutsch Lojenga for sharing the information that nasalization is involved with respect to the class 1 object prefix, and the Liko consultant Dominique Banotanea Bapokanzo for revealing this to her.

a-tí-tungbul-a bánu	3SG-1PL.O-support-FV F <sub>2</sub>	'he will support us'
a-mú-tungbul-a bánu	3SG-2PL.O-support-FV F <sub>2</sub>	'he will support you (pl)'
ǔ-tungbul-a bánu	3SG:2.O-support-FV F <sub>2</sub>	'he will support them'

(7.12) *The object prefix refers to class 1 animate or inanimate objects*

- a. á-<sup>4</sup>kóng-ǎ            ndt   mǔ-mbembí  
 3SG<sup>p</sup>:1.O-roast-FV   P<sub>3</sub>   1-snail, sp.  
 'She roasted a snail.'
- b. ú-kóng-ǎ            ndt   6a-mbembí  
 3SG<sup>p</sup>:2.O-roast-FV   P<sub>3</sub>   2-snail, sp.  
 'She roasted snails.'
- c. á-<sup>4</sup>pát-ǎ            ndt   móngwǒ  
 3SG<sup>p</sup>:1.O-win-FV   P<sub>3</sub>   1a.iron arrow  
 'He won an iron arrow.'
- d. ú-pát-ǎ            ndt   6o-móngwǒ  
 3SG<sup>p</sup>:2.O-win-FV   P<sub>3</sub>   2-iron arrow  
 'He won iron arrows.'

In (a) and (c), the class 1 object prefix ǎ- is not visible as a separate morpheme at the surface. It is the absence of [+ATR] assimilation of the subject prefix and non-automatic downstep of the H tone of the verb root caused by the underlying L tone of the object prefix, which signal the presence of the class 1 object prefix (see 3.2.2.3 and 4.6.5). In (b), the class 2 object prefix -ǔ harmonizes with [+ATR] verb root **-kóng-**. In (b) and (d), the prefixal H tone of the Past TAM melody and the LH tone of the third plural object concord surface as a single H tone (see 4.6.4).

The examples in (7.13) show that there is no object prefix if the object is not human and does not belong to classes 1 or 2. In (7.13a, c), [+ATR] assimilation of the subject prefix to the verb root and the absence of non-automatic downstep show that there is no class 1 object prefix ǎ-. In (7.13b, d), the class 2 object prefix -ǔ is not allowed.

(7.13) *Object is not human and does not belong to classes 1 or 2*

- a. ó-bún-ǎ            ndt   mǔni má-gĩta  
 3SG<sup>p</sup>-break-FV            P<sub>3</sub>   3:handle 6.ASS-9.hoe  
 'He broke the handle of the hoe.'

- b. ó-bún-ǎ (\*ú-bún-ǎ) ndi ɓo-mũni ɓayá-ɓa-gĩta  
 3SG<sup>P</sup>-break-FV P<sub>3</sub> 2+9-handle 2+9.ASS-2+9-hoe  
 'He broke the handles of the hoes.'
- c. á-kís-ǎ ndi ɓalá  
 3SG<sup>P</sup>-search-FV P<sub>3</sub> 9.herd  
 'He looked for the herd.'
- d. á-kís-ǎ (\*ú-kís-ǎ) ndi ɓa-ɓalá  
 3SG<sup>P</sup>-search-FV P<sub>3</sub> 2+9-herd  
 'He looked for the herds.'

The referent of the object prefix is governed by grammatical relations, i.e. it refers to the primary relation according to the verb valency. The primary relation occur as the first object following the verb in unmarked clause structure. The first object has the semantic role of patient or goal in the above examples. When a transitive verb has the Benefactive extension **-ɩt-**, the object with the semantic role of beneficiary has to be the first object following the verb, preceding any other object. In the case of the Causative extension **-is-**, the causee is the first object. The object prefix agrees with the first object following the verb.

The ditransitive verb in the examples below has the Benefactive extension. In case the clause contains two objects, the valency of the verb determines which grammatical relation is represented in OM by an object prefix. In the case of **-kóng-** 'ask' the object prefix refers to the goal, as in (7.14a, b), but in **-kóng-ɩt-** 'ask for s.o.' in (7.14c, d), where the verb with the Benefactive extension has two object arguments, the object prefix refers to the beneficiary.

- (7.14)a. Zetu á-<sup>1</sup>kóng-ǎ ndi mu-kó  
 Zetu 3SG<sup>P</sup>:1.O-ask-FV P<sub>3</sub> 1-woman  
 'Zetu asked a woman.'
- b. Zetu ú-kóng-ǎ ndi ɓo-kó ɓá-ɓá  
 Zetu 3SG<sup>P</sup>:2.O-ask-FV P<sub>3</sub> 2-woman 2.NUM-two  
 'Zetu asked two women.'
- c. Zetu á-<sup>1</sup>kóng-ɩy-ǎ ndi míkací mu-kó  
 Zetu 3SG<sup>P</sup>:1.O-ask-BEN-FV P<sub>3</sub> 1a.child:3SG.POSS 1-woman  
 'Zetu asked a woman for his son.'

- d. Zetu ú-kúng-ty-ǎ ndt 6o-míkakí mu-kó  
 Zetu 3SG<sup>P</sup>:2.O-ask-BEN-FV P<sub>3</sub> 2-child:3SG.POSS 1-woman  
 'Zetu asked a woman for his sons.'<sup>306</sup>

Turning to verbs with the Causative extension **-is-**, the causee is marked with an object prefix if it is definite and if it is the first or second person singular or plural, or belongs to classes 1 or 2. In (7.15a), an intransitive verb is made transitive and in (7.15b), a transitive verb is made ditransitive. In both cases, the object prefix refers to the causee.

- (7.15)a. sukopí ø-ká-nzin-ís-á-gǔ gbukó  
 1a.leopard 3SG<sup>P</sup>-NEG:1.O-talk-CAUS-FV<sup>P</sup>-NEG 1a.rat  
 'Leopard caused rat not to talk.'<sup>307</sup> (T2006.3)
- b. bú-dung-is-o bánu i-títí tʷε a-bǎkti  
 3PL:2.O-carry-CAUS-FV F<sub>2</sub> 9a-anthill 2SG.PRO 1b-father:3SG.POSS  
 míkí íbúnú na a-mákti  
 1a.child 2PL.PRO and 1b-mother:3SG.POSS  
 'They let them carry an anthill, you the father of the child, you (pl) and his mother.'<sup>308</sup> (adapted from T2006.4)

A substitutive or participant pronoun may be used to emphasize the referent of the object prefix:

- (7.16)a. ø-kiβ-ó, bá-mwó tyí bégeyó  
 3SG-COND:steal-FV 3PL:1.O-kill:FV 1.PRO likewise  
 'If he steals, they will kill him (emphasized) likewise.' (T2006.2)
- b. no-do-kú bi ká-u-bis-ó ásu tʷε áka ?  
 1SG-come:FV-DIR P<sub>1</sub> 9b-2SG.O-put-FV only 2SG.PRO CT  
 'Did I come to put YOU [there]?'<sup>309</sup> (T2006.10)

<sup>306</sup> Normally, a woman would be asked for each of the sons. The patient is singular in this example in order to show that the object prefix agrees with the beneficiary.

<sup>307</sup> That is, the leopard made the rat keep silent.

<sup>308</sup> A ceremony after circumcision rituals, which signals that your child has died.

<sup>309</sup> Implied in the context of this example is: without you doing something useful?

## 7.5.2 Reflexive prefix

The reflexive prefix **ǃ-** is used for singular and plural referents of all noun classes and speech participants. When the reflexive prefix follows another prefix vowel, the sequence of two vowels is dealt with in some morphological environments by elision of the first vowel and in other by heterosyllabification (see 3.3.1 and 3.3.4 for a description and examples).

The surface tone of the reflexive prefix is L, H, or LH as exemplified in the following three sets:

(7.17) *Reflexive prefix ǃ- realized with a L tone*

- a. na-kǃ-kúl-á V<sub>1</sub>-elision, prefix L, verb H  
 1SG-COND:REFL-untie-FV  
 'If I untie myself.'
- b. na ká-t-ǃúnd-ág-á heterosyllabification, verb H  
 1SG:be 9b-REFL-look after-PLUR-FV  
 'I am looking after myself.'

(7.18) *Reflexive prefix ǃ- realized with a H tone*

- a. ní-kúl-á ndǃ V<sub>1</sub>-elision, prefix H, verb H  
 1SG<sup>P</sup>:REFL-untie-FV<sup>P</sup> P<sub>3</sub>  
 'I untied myself.'
- b. ní-sumb-á ndǃ V<sub>1</sub>-elision, prefix H, verb L  
 1SG<sup>P</sup>:REFL-burn-FV<sup>P</sup> P<sub>3</sub>  
 'I burned myself.'

(7.19) *Reflexive prefix ǃ- realized with a LH tone*

- a. nǃ-kúl-a bánǃ V<sub>1</sub>-elision, subject prefix L, verb H  
 1SG:REFL-untie-FV F<sub>2</sub>  
 'I will untie myself.'
- b. nǃ-sumb-o bánǃ V<sub>1</sub>-elision, subject prefix L, verb L  
 1SG:REFL-burn-FV F<sub>2</sub>  
 'I will burn myself.'
- c. na-kǃ-sumb-ó V<sub>1</sub>-elision, prefix L, verb L  
 1SG-COND:REFL-burn-FV  
 'if I burn myself.'

- d.     na       ká-ǎ-tund-á       *heterosyllabification, verb L*  
        1SG:be 9b-REFL-tattoo-FV  
        'I am tattooing myself.'

Table 26 summarizes the environments of the different realizations of the tone of the reflexive prefix when V<sub>1</sub>-elision takes place.

Table 26 Surface tone on the reflexive prefix ɾ- after V<sub>1</sub>-elision

Preceded by	Reflexive prefix Surface tone	Followed by
High-toned prefix	H	Low or High-toned verb root
Low-toned subject prefix	LH	Low or High-toned verb root
Low-toned other prefix	L	High-toned verb root
Low-toned other prefix	LH	Low-toned verb root

In the case of heterosyllabification, the surface tone of the reflexive prefix is L preceding a verb root with a H tone and LH preceding a verb root with a L tone.

If the underlying tone of the reflexive prefix would be L, a LH surface tone preceding a verb root with a L tone is unexpected. If the underlying tone would be H, L and LH realizations are difficult to explain. A combined LH tone can surface as a L tone, as a H tone and as a LH tone by the OCP or by application of the tone rules described in 4.6.2 to 4.6.4: a L tone surfaces when the H tone merges with the H tone of the following verb (OCP), a H tone surfaces when L-tone deletion applies in the context of a preceding High-toned prefix and V<sub>1</sub>-elision, and LH surfaces elsewhere. The analysis also applies to the underlying tone of the class 2 object prefix ǎ-, which has the same surface tone realizations as the reflexive prefix.<sup>310</sup>

The surface LH tone of the reflexive prefix when it occurs between a subject prefix with a L tone and a verb root with a H tone is remarkable, because the H part of

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<sup>310</sup> Examples of surface tone realizations of class 2 object prefixes can be found in the verb paradigms in Appendix B.



the combined LH tone does not merge with the adjacent identical H tone. The class 2 object prefix shows the same LH surface tone:

- (7.20)a. nǔ-kúl-a            ɓa-mémí  
 1SG:2.O-untie-FV 2-goat  
 'I will untie the goats.'
- b.        nǔ-pun-a            ɓa-súkwá  
 1SG:2.O-gather-FV 2-caterpillar  
 'I will gather caterpillars.'

Preceding vowel-initial verbs, the reflexive prefix ʎ- has the allomorph **ʎm-**:<sup>311</sup>

- (7.21) na ká-ʎm-ín-á    1SG:be 9b-REFL-see-FV    'I am seeing myself'  
 na ká-ʎm-úl-á    1SG:be 9b-REFL-break-FV    'I am breaking myself'  
 na ká-ʎm-ál-á    1SG:be 9b-REFL-cleave-FV    'I am cleaving myself'

The OM position cannot be occupied by both an object prefix and the reflexive prefix. When a verb has the Benefactive extension (see 7.11.3), only an object prefix occurs in OM position. In (7.22a), the OM position is occupied by the reflexive prefix and in (7.22b) by the class 1 object prefix. Adding the reflexive prefix as in (7.22c) is ungrammatical.

- (7.22)a. na        ká-t-kpánzy-á    tú<sup>4</sup>ká-tu  
 1SG:be 9b-REFL-comb-FV 13.hair-13  
 'I am combing myself hair.', i.e. I am combing my hair.'
- b.        na        ká-<sup>4</sup>kpánzy-íly-á    ngámá    tú<sup>4</sup>ká-tu  
 1SG:be 9b:1.O-comb-BEN-FV 1a.chief 13.hair-13  
 'I am combing hair for the chief.'
- c.        \*na        ká-t-kpánzy-íly-á    ngámá    tú<sup>4</sup>ká-tu  
*Int.* 'I am combing myself hair for the chief.'

The same can be seen with the second person singular object prefix. In (7.23a), the OM position is occupied by the reflexive prefix and in (7.23b) by the object prefix.

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<sup>311</sup> See (7.8) and (7.9) for object prefixes with epenthetic /m/.

Adding the reflexive prefix as in (7.23c) is not allowed. A way to express reflexive meaning in combination with a beneficiary would be (7.23d):

- (7.23)a. na ká-i-túm-ó na dukpá  
 1SG:be 9b-REFL-stab-FV with 9.knife  
 'I am stabbing myself with a knife.'
- b. na ká-u-túm-íly-ó a-lúkú nǝ na dukpá  
 1SG:be 9b-2SG.O-comb-BEN-FV 1b-man 1.DEM.I with 9.knife  
 'I am stabbing that man with a knife for you.'
- c. \*na ká-i-túm-íly-ó a-lúkú nǝ na dukpá  
 1SG:be 9b-REFL-stab-BEN-FV 1b-man 1.DEM.I with 9.knife  
*Int.* 'I am stabbing myself with a knife for that man.'
- d. na ká-i-túm-ó na dukpá kó bulyó kakú  
 1SG:be 9b-REFL-stab-FV with 9.knife PREP 9.reason 2SG.POSS  
 'I am stabbing myself with a knife for your sake.'

## 7.6 TAM (tense/aspect/mood) melodies

In 4.3.2, I introduced the concept of a tone melody that is expressive of a "tense", a verbal conjugation paradigm, the so-called TAM melody. The TAM melody is an overlay over the primary tone on the verb root and affixes in the verb form. The TAM melody consists of one or two tones: a prefixal tone and/or a final-vowel tone. Initial association of the prefixal tone links to the leftmost TBU and initial association of the final-vowel tone links to the TBU of the verb-final vowel, often the rightmost TBU. After initial association, the H tone spreads to toneless TBUs, see 4.6.1. Any tone that after spreading lacks a tone association, surfaces with the default L tone.

The Liko verb form has three subparts which, for tone assignment, can be grouped together in:

- prefixes preceding the verbal base;
- the first CV-syllable of the verb root and
- the verbal base following the first CV-syllable and the final vowel.

Prefixes preceding the verbal base are the subject prefix in SM-position, the negative prefix in NEG-position, three prefixes in TA-position and the object prefixes or the reflexive prefix in OM-position. The first CV-syllable of the verb

root bears the primary tone of the verb. The third subpart consists of any other root syllables, extensions and the final vowel. The second and third person plural subject prefixes, the object prefixes and the reflexive prefix have an underlying tone, as well as one prefix in TA position, the verb root and the post-FV suffixes and enclitics.

Affirmative and negative have separate TAM melodies. I will first present the affirmative forms.

Table 27 TAM (tense/aspect/mood) melodies (affirmative)

Prefixal tone	Final-vowel tone	Affirmative form
High	-	Past
-	High	Infinitive <sup>312</sup> , Imperative
-	°H + Low	Anterior
Low	High	Conditional
High	High	Past (specific <sup>313</sup> ), Subjunctive

The Future has no TAM melody with a H tone; its prefixal and final-vowel tones surface as L tones. The Past has a prefixal H tone and the Past (specific) has both a prefixal H tone and a H tone on the final vowel. To distinguish Past and Future in the glosses, I use superscript "P" as a notation for a High TAM tone that has a time reference to the past.

The Anterior aspect has a TAM melody with a floating H tone preceding the final vowel and a L tone on the final vowel: -<sup>H</sup>i. The floating H tone is associated with a free TBU if possible, e.g. **nodiki** in (7.24). In the case of -CVC- verbs with a L primary tone, the vowel of the verb root remains Low and the floating High is

<sup>312</sup> The Infinitive is not an inflected verb form, but its surface tones can be accounted for with a TAM melody.

<sup>313</sup> "Specific" indicates that time reference to the past is specifically set, see 7.7.3.

linked to the final vowel. For example, /ta-púk-<sup>H</sup>i/, 1PL-sway-FV.ANT, surfaces as **topíkí** 'we prepared [a field] for sowing recently'.<sup>314</sup>

In the following Affirmative forms, the verbal base is underlined. A -CVCVC-verb root with primary L tone is used, **-díkt-**, in order to show H-tone spreading from right to left, see 4.6.1. The final vowel is **-ɪ** (Subjunctive), **-<sup>H</sup>i** (Anterior aspect) and **-a** elsewhere. Inchoative aspect has a non-spreading H tone on the FV.

(7.24) <u>Affirmative form</u>			<u>prefixal</u>	<u>FV</u>
Past	ná <u>díkítá</u>	'I threw'	H	-
Infinitive	ká <u>díkítá</u>	'to throw'	-	H
Imperative	<u>díkítá</u>	'throw!'	-	H
Conditional	naka <u>díkítá</u>	'if I throw'	L	H
Past (specific)	ná <u>díkítá</u>	'I threw'	H	H
Subjunctive	ná <u>díkítí</u>	'that I throw'	H	H
Future	na <u>díkítá</u>	'I will throw'	-	-
Anterior	no <u>díkítí</u>	'I threw'	-	<sup>o</sup> H+L
Inchoative	naná <u>díkítá</u> <sup>315</sup>	'I am about to throw'	-	-

Glosses of the above verb forms are:

(7.25) Past	ná-díkt- <i>a</i>	1SG <sup>p</sup> -throw-FV
Infinitive	ká-díkít- <i>á</i>	9b-throw-FV
Imperative	díkít- <i>á</i>	throw-FV.IMP
Conditional	na-ka-díkít- <i>á</i>	1SG-COND-throw-FV
Past (specific)	ná-díkít- <i>á</i>	1SG <sup>p</sup> -throw-FV <sup>p</sup>
Subjunctive	ná-díkít- <i>í</i>	1SG-throw-FV.SUBJ
Future	na-díkt- <i>a</i>	1SG-throw-FV

<sup>314</sup> There are, however, two verbs in my data, where the floating H tone of Anterior aspect is associated with the primary tone of a -CVC- verb: **-sil-** 'arrive' and **-nyúk-** 'fall': **nosli** < /na-sil-<sup>H</sup>i/ 'I arrived' and **nonyúki** < /na-nyúk-<sup>H</sup>i/ 'I fell'. Other Low-toned -CVC- verbs do not have a surface LH tone on the vowel of the verb root in a tone frame with Anterior aspect.

<sup>315</sup> For the H tone on the final vowel of the Inchoative form, see (4.88) in 4.6.6.

Anterior	no-díkít-i	1SG-throw-FV.ANT
Inchoative	na-ná-díkt-á	1SG-INCH-throw-FV

Liko has the following TAM melodies for the negative forms:

Table 28 TAM (tense/aspect/mood) melodies (negative)

Prefixal tone	Final-vowel tone	Negative form
High	-	Future
Low	-	Subjunctive
High	High	Past, Anterior, Conditional

In the list of Negative forms below, the verbal base is underlined. The -CVCVC-verb root **-díkt-** is used again. The final vowel is **-t** (Future), [+ATR] **-i** (Anterior aspect and Conditional) and **-a** elsewhere. A hyphen is put between the final vowel and a first post-FV suffix or enclitic.

(7.26) <u>Negative form</u>			<u>prefixal</u>	<u>FV</u>
Future	náká <u>díkt</u> -gu	'I will not throw'	H	-
Subjunctive	nakó <u>díkít</u> -ní 'tógú	'that I not throw'	L	-
Past	náká <u>díkítá</u> -gu	'I did not throw'	H	H
Anterior	nákó <u>díkítí</u> -gu	'I did not throw'	H	H
Conditional	nákó <u>díkítí</u>	'if I do not throw'	H	H

Inchoative aspect does not have a negative form. The negative Imperative is expressed by the negative Subjunctive.

Glosses of the above verb forms are:

(7.27) Future	ná-ká-díkt-t-gu	
	1SG-NEG-throw-FV-NEG	
Subjunctive	na-ko-díkt-o-ní 'tógú	
	1SG-NEG-throw-FV-NEGSUBJ INS-NEG	

Past	ná-ká-díkít-á-gu 1SG <sup>P</sup> -NEG-throw-FV <sup>P</sup> -NEG
Anterior	ná-kó-díkít-í-gu 1SG-NEG-throw-FV.ANT-NEG
Conditional	ná-kó-díkít-í 1SG-COND-throw-FV.NEG

The second person plural subject prefix **má-** and the third person plural subject prefix **ḡá-** have an underlying H tone. This H tone is replaced by the prefixal L tone of a TAM melody. The verb used to exemplify this is **-ptk-** 'sway'. Compare the surface tone on the subject prefixes **na-** '1SG' and **ḡá-** '3PL' in (7.28a, b and c).

TAM melody effect on the underlying H tone of the subject prefix is shown in the following affirmative verb forms:

(7.28)	<u>Affirmative form</u>	<u>prefixal</u>	<u>FV</u>	<u>1SG na-</u>	<u>3PL ḡá-</u>
a.	Future	-	-	na-ptk-a	ḡá-ptk-a
	Anterior	-	°H+L	no-pik-í	ḡó-pik-í
	Inchoative	-	-	na-ná-ptk-á	ḡá- <sup>†</sup> ná-ptk-á
b.	Past	H	-	ná-ptk-a	ḡá-ptk-a
	Past (specific)	H	H	ná-ptk-á	ḡá-ptk-á
	Subjunctive	H	H	ná-ptk-í	ḡá-ptk-í
c.	Conditional	L	H	na-ka-ptk-á	ḡa-ka-ptk-á

In (a), the third person plural subject prefix surfaces with its underlying tone and the first person singular prefix surfaces with the default L tone. In (b), the tone on the subject prefix is the prefixal High tone of the TAM melody. The third person plural subject prefix of the Conditional form in (c) shows that the underlying H tone of the subject prefix is replaced by the prefixal L tone of the TAM melody.

Glosses of the above verb forms are:

(7.29)a.	Future	na-ptk-a	ḡá-ptk-a
		1SG-sway-FV	3PL-sway-FV
	Anterior	no-pik-í	ḡó-pik-í
		1SG-sway-FV.ANT	3PL-sway-FV.ANT
	Inchoative	na-ná-ptk-á	ḡá- <sup>†</sup> ná-ptk-á
		1SG-INCH-sway-FV	3PL-INCH-sway-FV

b.	Past	ná-ptk-a	6á-ptk-a
		1SG <sup>p</sup> -sway-FV	3PL <sup>p</sup> -sway-FV
	Past (specific)	ná-ptk-á	6á-ptk-á
		1SG <sup>p</sup> -sway-FV <sup>p</sup>	3PL <sup>p</sup> -sway-FV <sup>p</sup>
	Subjunctive	ná-ptk-í	6á-ptk-í
		1SG-sway-FV.SUBJ	3PL-sway-FV.SUBJ
c.	Conditional	na-ka-ptk-á	6a-ka-ptk-á
		1SG-COND-sway-FV	3PL-COND-sway-FV

In the negative forms, the prefixal tone of the TAM melody is either High or Low. In (7.30a), both the first person singular and the third person plural subject prefixes surface with a H tone, whereas in (7.30b), the H tone of the third person plural subject prefix is delinked by the prefixal L tone of the Subjunctive TAM melody.

TAM melody effect on the underlying H tone of the subject prefix is shown in the following negative verb forms:

(7.30)	<u>Negative</u>	<u>prefixal</u>	<u>FV</u>	<u>1SG na-</u>	<u>3PL 6á-</u>
a.	Future	H	-	ná-ká-ptk-t-gu	6á-ká-ptk-t-gu
	Past	H	H	ná-ká-ptk-á-gu	6á-ká-ptk-á-gu
	Anterior	H	H	ná-kó-pik-í-gu	6á-kó-pik-í-gu
	Conditional	H	H	ná-kó-pik-í	6á-kó-pik-í
b.	Subjunctive	L	-	na-ko-pik-o-ní <sup>4</sup> tó-gu	6a-ko-pik-o-ní <sup>4</sup> tó-gu

Glosses of the above verb forms are:

(7.31)a.	Future	ná-ká-ptk-t-gu	6á-ká-ptk-t-gu
		1SG-NEG-sway-FV-NEG	3PL-NEG-sway-FV-NEG
	Past	ná-ká-ptk-á-gu	6á-ká-ptk-á-gu
		1SG <sup>p</sup> -NEG-sway-FV <sup>p</sup> -NEG	3PL <sup>p</sup> -NEG-sway-FV <sup>p</sup> -NEG
	Anterior	ná-kó-pik-í-gu	6á-kó-pik-í-gu
		1SG-NEG-sway-FV.ANT-NEG	3PL-NEG-sway-FV.ANT-NEG
	Conditional	ná-kó-pik-í	6á-kó-pik-í
		1SG-COND-sway-FV.NEG	3PL-COND-sway-FV.NEG
b.	Subjunctive	na-ko-pik-o-ní <sup>4</sup> tó-gu	6a-ko-pik-o-ní <sup>4</sup> tó-gu
		1SG-NEG-sway-FV-NEGSUBJ	3PL-NEG-sway-FV-NEGSUBJ
		INS-NEG	INS-NEG

Liko has five pairs of verbal forms distinguished only by tone contrasts. I will give examples in (7.32).

The first pair is Past vs. Future. The Past has a TAM melody with prefixal H tone. The Future has no TAM melody with H tones.

The second pair is Past vs. Past (specific). The Past has a TAM melody with prefixal H tone, whereas the Past (specific) in addition has a H tone on the final vowel.

The third pair is Subjunctive vs. Anterior aspect. The Subjunctive has a TAM melody with prefixal H tone and a H tone on the final vowel, whereas Anterior aspect has a TAM melody with a floating H tone preceding the final vowel and a L tone on the final vowel.

The fourth pair, negative Anterior aspect vs. negative Future, differs in tone on the verb-final vowel. Both have a TAM melody with a prefixal H tone, but the TAM melody of negative Anterior aspect also has a H tone on the final vowel.

With respect to the third and fourth pairs, tone contrast is only found in [+ATR] verb roots. If the verb root is [-ATR], the verb forms differ not only in tone, but also in segments. The final vowel, in the case of Subjunctive or negative Future, is **-ɪ**, whereas both Anterior and negative Anterior aspect take a final vowel **-i**. If the verb root is [+ATR], the verb-final **-ɪ** of Subjunctive and negative Future assimilates to the value of the verb root and is changed into **-i**. This means that in the case of a [+ATR] root, the final vowels of Subjunctive, negative Future, Anterior and negative Anterior are identical.

The fifth pair is Progressive aspect vs. Conditional. The Conditional has a TAM melody with a prefixal L tone and a H tone on the final vowel. Progressive aspect is marked by means of a suppletive form or an inflected form of the auxiliary **-ik-** 'be' with a L tone and the Infinitive form of the main verb with a H tone on the final vowel. In speech, there is no pause between the auxiliary and the main verb which causes the tone contrast.



Examples of these pairs are (with the optional time adverbials in brackets)<sup>316</sup>:

(7.32) *Grammatical tone contrasts in verb forms*

a.	Past	nóǒínǒ (ndi)	'I danced'
	Future	noǒínó (bánu)	'I will dance'
b.	Past	nóǒínǒ (ndi)	'I danced'
	Past (specific)	nóǒínó (ndi)	'I danced'
c.	Anterior	noǒíni	'I danced'
	Subjunctive	nóǒíni	'that I dance'
d.	negative Anterior	nákóǒínígu	'I did not dance recently'
	negative Future	nákóǒínígu (bánu)	'I will not dance'
e.	Progressive	na kóǒínó	'I am dancing'
	Conditional	nakoǒínó	'if I dance'

Glosses of the above verb forms are:

(7.33) Past	nó-ǒín-o	1SG <sup>P</sup> -dance-FV
Future	no-ǒín-o	1SG-dance-FV
Past (specific)	nó-ǒín-ó	1SG <sup>P</sup> -dance-FV <sup>P</sup>
Anterior	no-ǒín-i	1SG-dance-FV.ANT
Subjunctive	nó-ǒín-í	1SG-dance-FV.SUBJ
negative Anterior	ná-kó-ǒín-í-gu	1SG-NEG-dance-FV.ANT-NEG
negative Future	ná-kó-ǒín-i-gu	1SG-NEG-dance-FV-NEG
Progressive	na kó-ǒín-ó	1SG:be 9b-dance-FV
Conditional	na-ko-ǒín-ó	1SG-COND-dance-FV

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<sup>316</sup> Besides tone, the language uses post-verbal adverbials to indicate time reference, e.g. <sup>H</sup>ndi refers to the past and bánu refers to the future. Other forms that are segmentally identical are usually disambiguated by context, e.g. Subjunctive is often preceded by a form of the verbs **-buman-** or **-kwanan-**, both mean 'ought to', or by the conjunction **kyé** 'in order to', whereas Anterior aspect is not. The Progressive aspect and the Conditional are orthographically distinguished by a space between the auxiliary and the main verb in the case of Progressive.

## 7.7 Tense and Aspect

In this book, tense and aspect are distinguished because in Liko, these two concepts reflect different segmental, suprasegmental and grammatical marking as well as semantic differences. Grammaticalized post-verbal time adverbials are related to tense, in that they refer to a point in time. Prefixes in TA position and one of the Post-FV suffixes are related to aspect. The Pluractional extension **-ag-** may have aspectual use, as well as constructions consisting of the auxiliary 'to be' and the main verb. Semantically, tense marking refers to a point in time, whereas aspect marking expresses "internal temporal constituency" (Comrie 1985: 9, 6) quoted in Nurse (2008:80).

It should be kept in mind that this distinction between tense and aspect, although based primarily on the time adverbials and differences in their position in the verb structure, does not imply that a given verb form in a certain context can always be analysed as clearly reflecting aspect or tense. In some contexts, for instance, Progressive aspect and the Insistive have developed into referring to a point in time.

Following Nurse (2008)<sup>317</sup>, "situation" is used as a cover term for action, process, state or event. The organization of this section is based on position in the verb structure: it starts with post-verbal time adverbials, it continues from left to right with the positions in the verb structure where tense and/or aspect is encoded and it finishes with pre-verbal auxiliaries.

### 7.7.1 Post-verbal time adverbials

Liko marks tense using time adverbials, the verb-final vowel and a TAM melody on the verb form. Table 29 lists these time adverbials with the point in time they refer to.

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<sup>317</sup> Nurse refers to Comrie and Bybee *et al.* (Nurse 2008:316).

Table 29 Time adverbials in tense marking

Time adverbial	Reference from the deictic centre	Gloss
<sup>H</sup> bi	hodiernal or hesternal	P <sub>1</sub>
ndóku	a few days earlier than hesternal	P <sub>2</sub>
<sup>H</sup> ndɪ	earlier than about a week ago	P <sub>3</sub>
bánu	from tomorrow to the next few weeks	F <sub>2</sub>
ndéke	later than the next few weeks	F <sub>3</sub>

Reference to the past is generally expressed by <sup>H</sup>bi or <sup>H</sup>ndɪ, ndóku is rarely used. The monosyllabic Past time adverbials <sup>H</sup>bi or <sup>H</sup>ndɪ have an initial floating H tone<sup>318</sup> and may cliticise to the verb form or to an adverbial.<sup>319</sup> When <sup>H</sup>bi or <sup>H</sup>ndɪ directly follow a word, their floating H tone is either merged with the preceding H tone or linked to the preceding L tone. A time adverbial referring to a point in time later today is absent from Table 29: Liko employs the Insistive enclitic -tɔ to refer to a situation later today (F<sub>1</sub>), see 7.7.4.

Examples of reference to the past:

- (7.34)a. ná-<sup>4</sup>kítáŋ-ò<sup>320</sup> bi no ngũ (í<sup>4</sup>syéyikũbi)  
 1SG<sup>P</sup>:1.O-pass-FV P<sub>1</sub> with 9.force yesterday  
 'I surpassed him in strength (yesterday).'
- b. b6-mbímb-ó ndóku ma-tá-mu (a kúwa p6s6 b6motí<sup>321</sup>)  
 3PL<sup>P</sup>-throw-FV<sup>P</sup> P<sub>2</sub> 6-stone-6 it is thus one week  
 'They threw stones (last week).'
- c. á-sǎ ndɪ li-gubó lá-6a-kpáká  
 3SG<sup>P</sup>-abandon:FV P<sub>3</sub> 5-work 5.ASS-2 + 9-trap  
 'He abandoned working with traps.'
- d. á-píkut-ǎ ndɪ kpáká  
 3SG<sup>P</sup>-tighten-FV P<sub>3</sub> 9.trap  
 'He set a trap.'

<sup>318</sup> Notice that the disyllabic time adverbials have a H.L pattern.

<sup>319</sup> For clarity, time adverbials are written as separate words in this book.

<sup>320</sup> The final vowel of the verb form assimilates to the [+ATR] value of the time adverbial.

<sup>321</sup> a kúwa p6s6 b6motí 3SG:be thus 1a.week 1.NUM-one.

Of the three time adverbials with reference to the past, <sup>H</sup>**bi**, **ndóku** and <sup>H</sup>**ndi**, only <sup>H</sup>**ndi** can be followed by a temporal phrase pointing to a point in time longer than several weeks ago, for instance, **a kówa syá'ngá-su sí-motí** 3sg:be thus 7:year 7.NUM-one 'a year ago'.

Examples of time reference to the future:

- (7.35)a. a-**bak**-a      **bánú**    **ɪ-zagǎ-su**  
 3SG-carve-FV    F<sub>2</sub>      19-arrow-19  
 'He will carve an arrow.'
- b.      o-tí**gol**-o    **bánú**    **wánú**  
 3SG-stay-F    F<sub>2</sub>      here  
 'He will stay here.'
- c.      **bo-kó**      **bó-yíp-o**    **ndéke**    **ndábú**    **na**    **ɪ-tómbú**  
 2-woman    3PL-hit-FV    F<sub>3</sub>      9.house    with    5-mud  
 'The women will cover the house with mud (far future).'
- d.      na-pík**it**-a    **ndéke**    **kpáká**    **wánú**  
 1SG-tighten-FV    F<sub>3</sub>      9.trap    here  
 'I will set a trap here (far future).'

A time adverbial referring to the future may be left out when, in the opinion of the speaker or writer, the context sufficiently locates the situation in time, e.g. by means of a temporal adverbial phrase:

- (7.36)a. a-**bak**-a      **ɪ-zagǎ-su**    **na**    **lí-sye**    **li**      **ní-ɪ**  
 3SG-carve-FV    19-arrow-19    with    5-day    5.DEM.III    COP-5.DEM.II  
 'He will carve an arrow today.'
- b.      na-pík**it**-a      **kpáká**    **kú-mbúso**    **wa-byǎnga**    **bí-bǎ**  
 1SG-tighten-FV    9.trap    17-back      17.ASS-8:year    8.NUM-two  
 'I will set a trap two years from now.'

With respect to the time adverbials referring to the past, <sup>H</sup>**ndi** is used most frequently. **ndóku** is only used when the speaker wants to specifically indicate that he refers to a past which is close, but not recent. The time adverbial **ndélu** 'long ago' can be added at the end of a clause when a Past time adverbial is present. It is not included in Table 29, because it does not occur independently. With <sup>H</sup>**ndi**, **ndélu** refers to a long time ago; in combination with <sup>H</sup>**bi**, **ndélu** refers to a point within the

time frame of <sup>H</sup>**bi**, i.e. from the sunrise of the day before the deictic centre until the deictic centre. For example:

- (7.37)a. wá-ḡak-á      ndt    ɪ-zagǎ-su      ndélt  
                   2SG<sup>P</sup>-carve-FV   P<sub>3</sub>    19-arrow-19   long ago  
                   'You carved an arrow a long time ago.'
- b.            a-kupy-í-nǐ                      ḡi    li-ḡúki      ndélt  
                   3SG-extort-FV.ANT-PFV   P<sub>1</sub>    5-parcel   long ago  
                   'He has extorted a parcel some time ago.' (T2009.32)

### 7.7.2 TA position

Three morphemes occur in TA position: the Conditional prefix **ka-**, the Inchoative aspect prefix <sup>L</sup>**ná<sup>L</sup>**- and the negative Anterior 'not yet' prefix **-na-**. Morphemes that establish a point in time do not occur in TA position in Liko.

#### a. The Conditional prefix **ka-**

Starting with the Conditional prefix **ka-**, examples are given here in order to show this morpheme in TA position in affirmative (the first set) and negative forms (the second one). The TAM melody has a prefixal L tone and a final-vowel H tone in affirmative forms. In negative Conditional forms, the NEG position between SM and TA is empty. The negative Conditional is marked by the final vowel **-i** and a prefixal High and final-vowel High TAM melody. Time reference in a Conditional is the present unless a time adverbial is used. For further description, I refer the reader to 7.10.

- (7.38) wa-ka-díkít-á      2SG-COND-throw-FV      'if you throw'  
                   wa-ko-yúkúm-ó    2SG-COND-breathe-FV    'if you breathe'

- (7.39) wá-kó-díkít-í      2SG-COND-throw-FV:NEG    'if you do not throw'  
                   wá-kó-yúkúm-í    2SG-COND-breathe-FV:NEG    'if you do not breathe'

Like other affixes with underlying /a/, the vowel of the Conditional prefix **ka-** is changed into /o/ after the association with a dominant [+ATR] value.

Textual examples include:

- (7.40) wa-ka-pǎ<sup>322</sup> nu-many-a mándé kakí, a wá  
 2SG-COND-want:FV 1SG:2SG.O-show-FV 9.trail 3SG.POSS 3sg:be there  
 ká lɪ-kǎ ní-ló ka-a-mbǒkú Ódingó  
 PREP 5-spring COP-5.DEM.I GEN-1b-old person "Odingo"  
 'If you want, I show you his trail, it is there at that spring of old  
 Odingo.' (T2006.1)

- (7.41) ø-ko-bw-ǒ, wá-túmb-a t-gbǒgbǒ yá-lɪ-dákí  
 3SG-COND-become big-FV 2SG-lift up-FV.INST 9a-s.th. worn 9.ASS-5-clay pot  
 'If it swells, lift up the worn clay pot.', literally, 's.th. worn of a clay pot'  
 (T2006.5)

- (7.42) wa-ka-vǎ mu-kó, wa-mak-y-á ká ndábu yi ní-yó  
 2SG-COND-take:FV 1-woman 2SG-put in-APPL-FV PREP 9.house 9.DEM.III  
 COP-9.DEM.I  
 'If you marry a woman, you put her in that<sup>323</sup> house.' (T2006.8)

#### b. The Inchoative aspect prefix -<sup>l</sup>ná<sup>l</sup>-

The next prefix in TA position is -<sup>l</sup>ná<sup>l</sup>-. The prefix -<sup>l</sup>ná<sup>l</sup>- indicates the beginning of or entry into a state or situation. I will use the label Inchoative. In situations without a context, a verb form with -<sup>l</sup>ná<sup>l</sup>- refers to the Present. When a verb form with -<sup>l</sup>ná<sup>l</sup>- occurs in a subsequent clause in a narrative, the situation with -<sup>l</sup>ná<sup>l</sup>- is understood to occur within the time frame set in a preceding clause. Inchoative -<sup>l</sup>ná<sup>l</sup>- always directly follows a subject prefix. There is no specific negative form. Inchoative aspect has no TAM melody with H or L tones. Non-automatic downstep occurs when the floating L tone(s) cannot merge with an adjacent identical tone, see 4.6.5. No time adverbials are allowed to follow a verb form with the Inchoative aspect prefix -<sup>l</sup>ná<sup>l</sup>-.

<sup>322</sup> The surface LH tone on the final vowel in these three examples is the result of a CV-verb with a L tone and the H tone of the Conditional TAM L.H melody which is associated with the final vowel.

<sup>323</sup> I.e. the house which the young man has built to prove that he is ready to be responsible for a family.

The following cases of Inchoative aspect  $-{}^L\text{ná}^L-$  exemplify the surface tones on the verb form. The primary H tone of a verb following  $-{}^L\text{ná}^L-$  surfaces as non-automatic downstepped High. The surface tone on the final vowel is High if the preceding tone is Low, otherwise, the tone on the final vowel is Low, 4.6.6.

- (7.43) a-ná-nzín-á            3SG-INCH-speak-FV    'he is about to speak'  
 a-nó-<sup>L</sup>mbímb-o        3SG-INCH-throw-FV    'he is about to throw'  
 a-nó-mbomboy-ó       3SG-INCH-doubt-FV    'he is about to doubt'  
 a-ná-<sup>L</sup>píkít-á            3SG-INCH-run-FV       'he is about to flee'

Textual examples of the use of  $-{}^L\text{ná}^L-$  in TA position, indicating Inchoative aspect, include:

- (7.44) mo-zíko    má-nzúyí    kakí        má-sí    á-pung-a        kó-búk-ó  
 6-joint    6.ASS-9.body    3SG.POSS    6.ASS-all    3SG/PL<sup>P</sup>-start-FV    9b-resonate-FV  
 bé:    mbwóko-mbwóko,    kání    a-nó-dw-ó        áma    ká-kpakyán-á  
 COMP    "mbwoko-mbwoko"    when    3SG-INCH-move-FV    or    9b-walk-FV  
 'All the joints of his body started to resonate: "Mbwoko-mbwoko",  
 when he started to move or walk.' (T2006.2)

- (7.45) á-ngbát-a    ngúdú    bé:    ngámá,    o-kw-í-ni.  
 3SG<sup>P</sup>-play-FV    9.drum    COMP    1a.chief    3SG-die-FV.ANT-PFV  
 kó    p̄sí    ɓa-nyamá    ɓá-<sup>L</sup>ní<sup>L</sup>m-úus-ó        ɓé:  
 PREP    9.path    2-animal    3PL-INCH:REFL-ask-FV    COMP  
 It-kp̄omóká    Iná    a    p̄tye    búní ?  
 5-thing        5.DEM.II    3sg:be    thus    how  
 'He played the drum saying: "The chief has died." On the road the  
 animals started to ask themselves: "How did this happen?" (T2006.3)

Other examples of the use of Inchoative  $-{}^L\text{ná}^L-$  in narratives are given below, the first is also from a story, the second from an instruction and the third from a piece of advice given to girls:

- (7.46) ɓa-lúkú    ní-ɓó        ɓó-dog-ó-kú        ndí    ɓá-sí,  
 2-man    COP-2.DEM.I    3PL<sup>P</sup>-come:PLUR-FV<sup>P</sup>-DIR    P<sub>3</sub>    2.ASS-all  
 ɓá-<sup>L</sup>níɓ-o        ma-kóló    ko-Mbwoko  
 3PL-INCH:steal-FV    6-meat    GEN-"Mbwoko"  
 'All the men who came, started to steal the meat of Mbwoko.' (T2006.2)

- (7.47) wá-va mbakú, wá-pung-a kó-yikós-ó kúwa  
 2SG-take:FV.INST 9.woman's knife 2SG-start-FV.INST 9b-turn-FV thus  
 kání wa-ná-matl-á mo-lingó ma-kékéké,  
 when 2SG-INCH-increase-FV 6-oil 6.ADJ-small  
 bukú bí-dóbo  
 8:burning piece of wood MOD-low<sup>324</sup>  
 'Take a woman's knife, start turning [in the pot], while you are about to  
 add a little bit of palm oil, with the fire burning well.' (T2006.5)
- (7.48) Ø-ké-gu a-dándá, mu-tú wa-kuítúbyă kámbwa  
 3SG-NEG:be:FV-NEG 1b-lazybones 1-man 1.ASS-9.laughter before  
 ka-6a-mbánzú, kání a-ná-<sup>4</sup>wístl-y-ă bí-wese-wese  
 GEN-2-person when 3SG-INCH:1.O-seduce-APPL-FV MOD-soft  
 'Not a lazybones, [not] a person of laughing in front of people, when  
 she starts to seduce someone softly.' (T2006.9)

### c. The negative Anterior 'not yet' prefix -na-

The third morpheme, **-na-**, is associated with 'not yet' in verb forms with negative Anterior aspect. This is the only case in which both the NEG position and the TA position are filled:

- (7.49) tá-ká-na-pun-í-gu 6a-súkwá  
 1PL-NEG-*yeŋ*-pick-FV.ANT-NEG 2-caterpillar  
 'We did not yet gather caterpillars.'

Other examples and a description of negative Anterior are given in 7.8.

## 7.7.3 Final vowel

### a. Affirmative forms

The final vowel in affirmative verb forms is **-a**, **-i** or **-i**.<sup>325</sup> In a [+ATR] context, **-a** is changed into **-o** and **-i** is changed into **-i**. The final vowel in affirmative forms is exemplified by the following [-ATR] verb forms:

<sup>324</sup> **bídobo** signifies a low sound, but can also mean 'functioning well'.

<sup>325</sup> Across Bantu, **-a** neutral or indicative, **-i** subjunctive and **-ile** anterior/past are frequent, **-i** anterior/near past/stative is less common. (Nurse 2008:37, 38).



(7.50)a.	ná-tíb-a	1SG <sup>P</sup> -laugh-FV	'I laughed'
b.	na-tíb-a	1SG-laugh-FV	'I will laugh'
c.	na ká-tíb-á	1SG-be 9b-laugh-FV	'I am laughing, I laugh'
d.	na-ka-tíb-á	1SG-COND-laugh-FV	'if I laugh'
e.	tíb-á	laugh-FV.IMP	'laugh!'
f.	ná-tíb-í	1SG-laugh-FV.SUBJ	'that I laugh'
g.	no-tíb-i	1SG-laugh-FV.ANT	'I laughed'

The final vowel **-a** marks Past (a), Future (b), Infinitive - (used in Progressive aspect) (c), Conditional (d) and Imperative (e).<sup>326</sup> The final vowel **-ɪ** encodes Subjunctive (f), which is described in 7.9. [+ATR] dominant final vowel **-i** marks Anterior aspect (g). All forms are optionally followed by a time adverbial (see 7.7.1).

The final vowel in (7.50a) has a L tone. With the Past (specific) TAM melody, the final vowel **-a** has a H tone. "Past (specific)" indicates that the speaker explicitly indicates that time reference is to the past. In the glosses, this is marked by means of a superscript P with the final vowel: FV<sup>P</sup>.

The forms in (7.50a) and (7.50g) are translated with 'I laughed', because it is difficult to capture Anterior aspect in English. Structurally (7.50a) **nátíba** and (7.50g) **notíbi** differ in two ways: the final vowel is different, **-a** vs. dominant [+ATR] **-i**, and the TAM melody is different, prefixal High in (7.50a) vs. a TAM melody with a floating H tone and a L tone on the final vowel in (7.50g). In **notíbi** the TAM H tone has merged with the H tone of the verb **-tíb-**.<sup>327</sup> With respect to co-occurrence with a time adverbial, (7.50a) **nátíba** 'I laughed' occurs with all three time adverbials that refer to the past: <sup>H</sup>**bi** 'earlier today or yesterday', **ndóku** 'from the day before yesterday to a week ago' and <sup>H</sup>**ndu** 'earlier in the past than a week

<sup>326</sup> One verb in my data does not have the final vowel **-a**: **-gwí** 'hold, grab', e.g. **ná-gwí ndu mu-sí** 1SG<sup>P</sup>:1.O-hold:FV<sup>P</sup> P<sub>3</sub> 1-fish 'I caught a fish'.

<sup>327</sup> If a -CVC- verb root has a primary L tone then the floating H tone of the Anterior TAM melody is linked to the final vowel, see 7.6. In longer verb forms the floating H tone of this TAM melody is associated with the penultimate vowel, e.g. **nodíkíti** 'I threw' (**-díkt-** 'throw').

ago', whereas (7.50g) **notibi** is found to occur with <sup>H</sup>**bi** 'earlier today or yesterday' in the majority of cases and occasionally with <sup>H</sup>**ndi**.

- (7.51)a. ná-nyŭk-ă ndi 1SG<sup>P</sup>-fall-FV P<sub>3</sub> 'I fell'  
 ná-nyŭk-ŏ<sup>328</sup> bi 1SG<sup>P</sup>-fall-FV P<sub>1</sub> 'I fell recently'  
 no-nyŭk-ĩ bi 1SG-fall-FV.ANT P<sub>1</sub> 'I fell recently'
- b. nó-bín-ă ndi 1SG<sup>P</sup>-dance-FV P<sub>3</sub> 'I danced'  
 nó-bín-ŏ bi 1SG<sup>P</sup>-dance-FV P<sub>1</sub> 'I danced recently'  
 no-bín-ĩ bi 1SG-dance-FV.ANT P<sub>1</sub> 'I danced recently'

Verb forms may occur without a time adverbial if the context contains a reference to a point in time. Passages in which the final vowel **-i** of Anterior aspect occurs, show that the time reference is not necessarily to the recent past, but fits in with the time frame of the context. In the following example, the clause with Anterior aspect is part of a story and is followed by a clause with the Past time adverbial <sup>H</sup>**ndi**:

- (7.52) tukón-i ási mó-ngóni má-ku-kwá-ku aká, (...),  
 1PL:hear-FV.ANT only 6-news 6.ASS-15-death-15 CT  
 bô-sil-y-on-ă ndi bá-si  
 3PL<sup>P</sup>-arrive-APPL-ASS-FV P<sub>3</sub> 2.ASS-all  
 'We heard ONLY THE NEWS OF THE DEATH, (...), they all came together.' (T2006.3)

The Anterior aspect in combination with the Past time adverbial <sup>H</sup>**ndi**:

- (7.53) ngbín-gó yi ní-nŏ tík-óg-ĩ ndi minó kú kunú,  
 1a.time 1.DEM.III 1PL:stay-PLUR-FV.ANT P<sub>3</sub> TRACE there 2PL.POSS,  
 COP-1.DEM.I  
 tá-mú-bíky-á ndi kámbwa áka bé bá-tí-gyogy-is-a-tú ndéke  
 1PL<sup>P</sup>-2PL.O-tell-FV<sup>P</sup> P<sub>3</sub> 17:front only COMP 3PL-1PL.O-suffer- F<sub>3</sub>  
 CAUS-FV-INS

'The time that we stayed with you, we told you upfront: they will cause us to suffer.' (translated 1 Thess. 3:4)

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<sup>328</sup> [+ATR] assimilation of the final vowel to the following [+ATR] time adverbial.

This shows that the function of Anterior is not to refer to a recent point in time. The point in time is set by means of a time adverbial (usually P<sub>1</sub> <sup>H</sup>**bi**) or it fits in with the time frame of the context. In order to make the function of Anterior aspect clearer, I will present some longer passages, including some texts translated by Liko translators. It appears that in texts, verb forms with Anterior **-i** are followed by other situations and that there is a relation between the Anterior and these situations. For instance, **tukóni** 'we heard' in (7.52) results in coming together to meet. In other words, the situation marked by the Anterior aspect final vowel **-i** is relevant for a later situation. Nurse uses the label 'anterior' (ANT) for this aspect, which I adopt in this book. In Nurse (2008), either the Present or a later state results from an earlier situation marked by Anterior aspect (mostly for stative verbs, e.g. 'hear'), or the past situation marked by Anterior aspect is relevant for the later situation (mostly for dynamic verbs). In (7.54), the giving is relevant for the fact that the man ate the fruit:

- (7.54) mu-lúkú á-sikisy-o b́é:  
 1-man 3SG<sup>P</sup>-answer-FV COMP  
 mu-kó yi ní-nǎ wé-<sup>4</sup>pá ndi nǎ,  
 1-woman 1.DEM.III COP-1.DEM.I 2SG<sup>P</sup>:1SG.O-give-FV<sup>P</sup> P<sub>3</sub> 1.DEM.I  
 e-pí bi li-bumó li ní-ló, ná-ly-ǎ bi  
 3SG:1SG.O-give:FV.ANT P<sub>1</sub> 5-fruit 5.DEM.III COP-5.DEM.I 1SG<sup>P</sup>-eat-FV P<sub>1</sub>  
 'The man answered: "That woman who you gave to me, she gave  
 me this fruit recently, I ate recently." (translated Genesis 3:12)

The following example is also from the translated text of Genesis. The first sentence sets the time reference in the past (<sup>H</sup>**ndi**). In the second sentence, **ekpuḍíkú bi** indicates that the situation occurred recently (<sup>H</sup>**bi**) and that the action described by the verb with the Anterior **-i** (*come near*) is relevant for the later situation (*have sex*). The next situation is in the recent past (<sup>H</sup>**bi**). The final situations (*leave and run away*, narratives without a time adverbial) result from the other situation in this passage with Anterior aspect, **ukóní bi** (*hear*).

- (7.55) mbonyámu ó-do-kú ndi na mu-ebalanía b́é  
 1a.husband:1SG.POSS 3SG<sup>P</sup>-come:FV-DIR P<sub>3</sub> with 1-hebrew COMP  
 'My husband came with the Hebrew so that'

á-tím-ín-í                      pǎyayá.    e-kpuḍ-í-kú bi                      6é  
 3SG-1PL.O-see-FV.SUBJ    worthless    3SG:1SG.O-go near-FV.ANT-DIR P<sub>1</sub>    COMP  
 'he would look at us with disrespect. He came near so that'  
 tá-kpakyán-í    na    iyí    ábě    mu-lókú    na    mu-kó,  
 1PL-walk-FV.SUBJ    with    1.PRO    like    1-man    and    1-woman  
 'we would walk with him like man and woman (i.e. we would have sex)'  
 lúkí lí-motí<sup>329</sup>    ná-kúgw-ag-ǒ bi    púlú.    nýó    ukón-í bi  
 5:object 5.NUM-one 1SG<sup>P</sup>-scream-PLUR-FV P<sub>1</sub>    hard    when    3SG:hear-FV.ANT P<sub>1</sub>  
 'but I screamed very hard. When he heard'  
 kání    na    ká-kúgw-ág-á    púlú    na    ká-álík-á,  
 when 1SG:be 9b-scream-PLUR-FV    hard    1SG:be 9b-call-FV  
 'me screaming hard and calling,'  
 é-sa    na    ku-tú-ko    kakí,    á-píkít-a    kú-nzi  
 3SG<sup>P</sup>:1SG.O-    with    15-clothes-15    3SG.POSS    3SG<sup>P</sup>-run-FV    17-outside  
 abandon:FV  
 'he left me with his coat, he ran outside.' (*translated Genesis 39:14,15*)

The Anterior often co-occurs with the Perfective aspect suffix **-ní**.<sup>330</sup> The following example describes what sometimes happened at the time the circumcisors returned to the village with the circumcised boys. When a boy had died (Anterior **-i**) during the time in the forest after circumcision, it triggered the ritual of presenting an anthill:

(7.56) Ø-kik-á ndt                      ní<sup>331</sup>    míkakú                      o-kw-í-ni,  
 3SG-COND:be-FV P<sub>3</sub>    when    1a.child:2SG.POSS    3SG-die-FV.ANT-PFV  
 6a-sambá    6á-va    i-títí,    6ó-do-kú                      noyú  
 2-circumcisor 3PL<sup>P</sup>-take:FV    9a-anthill    3PL<sup>P</sup>-come-FV-DIR    with:9.PRO  
 'If it happened, when your child had died, the circumcisors took an anthill, they came with it towards [you].' (*T2006.4*)

The conclusion, a few sentences later in the text, has the regular Past form of the verb 'die', because there is no further relevance (in the text):

<sup>329</sup> **lúkí límotí** expresses the conjunction 'but'.

<sup>330</sup> Anterior aspect in combination with Perfective aspect is further described in 7.7.4.

<sup>331</sup> Short for **kání** 'when'.

- (7.57) wīb-o kúwa b́é: mikámu ó-kw-ó-ní ndi  
 2SG:know-FV thus COMP 1a.child:1SG.POSS 3SG<sup>P</sup>-die-FV<sup>P</sup>-PFV P<sub>3</sub>  
 'You will know thus: "My child has died." ' (T2006.4)

The result of an Anterior is usually expressed by a verb (a situation), but can also be expressed by other word classes, such as a noun or a modifier as in the example below:

- (7.58) b́ó-mw-í-ni ma-káná lí-ngunú.  
 3PL-drink-FV.ANT-PFV 6-wine 5-truth  
 ɪ-kí píyε ? ɪ-bumá, b́u-tótó b́í-kyekyékýě  
 9a-what thus 5-drunkenness 14-laughter MOD-burst of laughter  
 'They have drunk a lot of wine. What happened? Drunkenness, bursts of laughter.' (T2006.1)

A specific use of Anterior aspect is asking for or introducing an explanation:

- (7.59) kó bulyó ɪ-kí yó we-sum-íly-ĩ bi ɪ-gundú kakú ?  
 PREP 9.reason 9a-what 2SG:1SG.O-hide-BEN- P<sub>1</sub> 5-journey 2SG.POSS  
 9.DEM.I FV.ANT  
 'Why did you hide your journey from me?'

- (7.60) no-gy-ĩ bi b́éyó kyé nõ bi ká-báng-á  
 1SG-do-FV.ANT P<sub>1</sub> like this because 1SG:be P<sub>1</sub> 9b-be afraid-FV  
 'I did it because I was afraid.'

### b. Negative forms

The final vowel in negative verb forms is exemplified by the verb **-tīb-** 'laugh':

- (7.61)a. ná-ká-tīb-t-gu 1SG-NEG-laugh-FV-NEG  
 'I will not laugh'  
 b. ná-ká-tīb-á-gu 1SG<sup>P</sup>-NEG-laugh-FV<sup>P</sup>-NEG  
 'I did not laugh'  
 c. na-ko-tīb-o-ní <sup>4</sup>tó-gu 1SG-NEG-laugh-FV-NEGSUBJ INS-NEG  
 'that I not laugh'  
 d. ná-kó-tīb-í 1SG-COND-laugh-FV-NEG  
 'if I do not laugh'

- e. ná-kó-tíb-í-gu 1SG-NEG-laugh-FV.ANT-NEG  
'I did not laugh'
- f. ná-ká-no-tíb-í-gu 1SG-NEG-*yeŋ*-laugh-FV.ANT-NEG  
'I did not yet laugh'

The negative Future (a) takes the final vowel **-i**. The Past (b) and the negative Subjunctive (c) take the final vowel **-a**. The negative Conditional (d) and the two negative forms of Anterior aspect (e, f) are encoded by the [+ATR] dominant final vowel **-i**. All forms are optionally followed by a time adverbial.

#### 7.7.4 Post-FV position

The morphemes occurring in post-FV position in Liko are:

Table 30 Morphemes in post-FV position

Form	Function	Gloss
-ni <sup>332</sup>	Plural Addressee	ADDR
-ní	Perfective aspect	PFV
-ní	negative Subjunctive	NEGSUBJ
-kú	Directional	DIR
-tó	Insistive / time reference: later today	INS / F <sub>1</sub>
-no	Supplicative	SUPP
-gu	negative	NEG

The application of the following criteria distinguishes the morphemes occurring in post-FV position with respect to their contemporary status, as enclitic or suffix:

- does the morpheme attach phonologically to the verb form?
- does its value for [ATR] spread to the verb root?

The first five morphemes in post-FV position, **-ni**, **-ní**, **-ní**, **-kú** and **-tó**, manifest phonological attachment to the verb form, either by the effect of [+ATR]

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<sup>332</sup> "The only morpheme occurring widely at post-final across Bantu is \*-ni. (...) It is glossed by Meeussen as 'plural imperative'." (Nurse 2008:39).

dominance (**-ni**, **-ní**, **-ní** and **-kú**) on the verb form or by assimilation to the [+ATR] feature of the verb (**-tś**). The last two morphemes, **-no** and **-gu**, do not assimilate to [+ATR]. According to second criterion, the **tś**, **-no** and **-gu** are different from **-ni**, **-ní**, **-ní**, and **-kú**, because the former three do not affect a verb root, they only affect preceding affixes with non-high vowels. On the basis of these criteria, Plural Addressee **-ni**, Perfective aspect **-ní**, negative Subjunctive **-ní** and Directional **-kú** are analysed as post-FV suffixes, whereas the other morphemes are considered to be enclitics.

The order in which post-FV suffixes and enclitics occur in affirmative verb forms is:

(7.62)	<u>suffix 1</u>	<u>suffix 2</u>	<u>enclitic</u>
	Plural Addressee <b>-ni</b>	Directional <b>-kú</b>	Insistive <b>-tś</b>
	Perfective <b>-ní</b>		Supplicative <b>-no</b>

Perfective aspect **-ní** is not attested together with Insistive **-tś** or Supplicative **-no**.

The order in which post-FV suffixes and enclitics occur in negative verb forms is:

(7.63)	<u>mood</u>	<u>suffix</u>	<u>enclitic 1</u>	<u>enclitic 2</u>
	Indicative <sup>333</sup>	Directional <b>-kú</b>		negative <b>-gu</b>
	Subjunctive	negative <b>-ní</b>	Insistive <b>-tś</b>	negative <b>-gu</b>

In negative forms, structures with more than one post-FV suffix have not been attested. The negative Subjunctive may have the Post-FV suffix and three enclitics. With the addition of the Supplicative enclitic **-no**, the verb form can get a specialized meaning (see 7.9.4).

In this section, the Plural Addressee suffix **-ni**, the Perfective aspect suffix **-ní**, the Directional suffix **-kú** and the Insistive enclitic **-tś** are presented in more detail. Information on the negative Subjunctive suffix **-ní** and the negative enclitic **-gu** is provided in 7.9.4. For the Supplicative enclitic **-no**, I refer the reader to 7.9.2.

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<sup>333</sup> Except the Conditional where the negated form takes the final vowel **-i**.

**a. The Plural Addressee suffix -ni**

Post-FV **-ni** ([ +ATR] dominant) occurs with the second person plural Imperative and with the Hortative. It directly follows the final vowel, which is **-a** for Imperatives, and **-ɪ** in the case of the Hortative<sup>334</sup>. I refer to it as the Plural Addressee suffix.

(7.64)	<u>2SG</u>	<u>2PL</u>		<u>1PL</u>
	<i>verb</i> -FV	<i>verb</i> -FV-ADDR		1PL- <i>verb</i> -FV.SUBJ-ADDR
	kpul-á	kpul-ó-ni	'rummage through!'	tó-kpul-í-ni <sup>335</sup>
	kút-á	kút-ó-ni	'wink!'	tó-kút-í-ni
	sám-á	sóm-ó-ni	'open the mouth!'	tó-sóm-í-ni
	ḃín-ó	ḃín-ó-ni	'dance!'	tó-ḃín-í-ni

(7.65)	u-kúl-á ḃamémí	2.O-untie-FV	'untie the goats!'
	u-kúl-ó-ni ḃamémí	2.O-untie-FV-ADDR	'untie (pl) the goats!'
	tú-kúl-í-ni ḃamémí	1PL:2.O-untie-FV.SUBJ-ADDR	'let us untie the goats'
	u-kúmb-ó ḃomíkí	2.O-carry-FV	'carry the children!'
	u-kúmb-ó-ni ḃomíkí	2.O-carry-FV-ADDR	'carry (pl) the children!'
	tú-kúmb-í-ni ḃomíkí	1PL:2.O-carry-FV.SUBJ-ADDR	'let us carry the children'

The gloss of the objects in these examples is **ḃa-mémí** '2-goat', **ḃo-míkí** '2-child'.

An example of the use of the Plural Addressee suffix with the Hortative is:

(7.66)	iḃúnú	ḃo-likó	ooo,	iḃúnú	ḃa-má*mákti	aaa,
	2PL.PRO	2-Liko person	"ooo"	2PL.PRO	2-brother:3SG.POSS	"aaa"
	iḃúnú	ḃa-va	kú	kămti	aaa,	
	2PL.PRO	2-clan member	there	1SG.POSS	"aaa"	
	to-gy-ĩ-ni	mo-gubó	má-si			
	1PL-do-FV.SUBJ-ADDR	ḃ-work	ḃ.ASS-all			

<sup>334</sup> The Hortative has the Subjunctive form followed by the Plural-Addressee suffix **-ni**, see 7.9.3.

<sup>335</sup> Meaning: 'let us rummage through', other examples in this column: 'let us *verb*'.





- (7.70)a. a-kúl-i-ní                      mémí  
 3SG:1.O-untie-FV.ANT-PFV    1a.goat  
 'He has untied the goat.'
- b.        u-kúmb-i-ní                      6o-míkí  
 3SG:2.O-car ry-FV.ANT-PFV    2-child  
 'She has carried the children.'
- (7.71) mu-nzyúku    a-tík-i-ní                      ndi    6ata    míkí    kú  
 1-ant                3SG:1.O-send-FV.ANT-PFV    P<sub>3</sub>    again    1a.child    there  
 ká    mēne                      dǎku  
 PREP    1a.blood brother    1a.s.o. of same age:3SG.POSS  
 'Ant has sent the child again there to his blood brother.' (T2007.8)

The H tone of the Perfective aspect suffix is changed into a L tone if it is preceded by the Anterior aspect final vowel with a surface H tone, see 4.6.6. This final vowel has a H tone when the floating High of the Anterior TAM melody cannot be associated with the primary L tone of the verb, and it links to the final vowel instead. The H tone on the final vowel of Anterior aspect causes the tone of the Perfective aspect suffix to be changed into a L tone.

- (7.72)a. o-pik-í-ni  
 3SG-sway-FV.ANT-PFV  
 'He has swayed.'
- b.        a-vid-í-ni                      mbo6ú  
 3SG:1.O-flay-FV.ANT-PFV    1a.small rodent  
 'He has flayed a small rodent.'
- c.        ů-pun-í-ni                      6a-súkwá  
 3SG:2.O-pick-FV.ANT-PFV    2-caterpillar  
 'He has gathered caterpillars.'
- (7.73) a-bílí        a-vĩ-ni                      Lungútu  
 1b-demon    3SG:1.O-take:FV.ANT-PFV    "Lungútu"  
 'Demon has married Star.' (T2009.12)

- (7.74) na-gy-a bóní kyé kókú o-my-í-nĩ bi ?  
 1SG-do-FV how because 1a.chicken 3SG-swallow-FV.ANT-PFV P<sub>1</sub>  
 'What can I do because a chicken has picked?'<sup>336</sup> (T2008.7)

When the Perfective aspect suffix **-ní** occurs in combination with the Pluractional extension **-ag-**, as in (7.75b), the interpretation is that the action described by the verb happened in the past, lasted for some time and is complete. Progressive aspect, which also indicates a situation which lasts for some time, cannot be combined with the Perfective aspect suffix **-ní**, neither as in (7.75c), nor if the auxiliary has the Perfective aspect suffix as in (7.75d).

- (7.75)a. ó-mbímb-ó-ní ma-tá-mu 'he has thrown stones'  
 3SG<sup>P</sup>-throw-FV<sup>P</sup>-PFV 6-stone-6
- b. ó-mbímb-óg-ó-ní ma-tá-mu 'he has thrown stones for some  
 3SG<sup>P</sup>-throw-PLUR-FV<sup>P</sup>-PFV 6-stone-6 time (and stopped)'
- c. \*ǎ ndi kó-mbímb-ó-ní ma-tá-mu  
 3SG:be-FV P<sub>3</sub> 9b-throw-FV-PFV 6-stone-6
- d. \*ík-ó-ni<sup>337</sup> kó-mbímb-ó ma-tá-mu  
 3SG:be-FV-PFV 9b-throw-FV 6-stone-6

Interpreting a verb form with the Perfective suffix **-ní** as a situation which will be complete in the future is only possible if the context provides a time frame which refers to the future. Perfective aspect in this case is usually used in combination with Anterior aspect. In the examples below, the adverbial phrase and the Future form of the verb 'to be' set the time frame in the future.

- (7.76) kámbwa ábe móní ó-gw-ĩ,  
 17:front like 9.sun 3SG-fall-FV.ANT

<sup>336</sup> I.e. Is it my fault that a chicken picked? It behaves according to its nature. In the story, it concerns a bead of a special necklace, which a friend's chicken has picked.

<sup>337</sup> **íkóni** 3SG:be-PFV by itself is not ungrammatical, it means 'he has been' with the understanding that the situation is complete.

nik-o kání, no-fum-í-ni t-ngbóló  
 1SG:be-FV when 1SG-moor-FV.ANT-PFV 9a-dugout  
 'Before sunset, if possible, I will have moored the dugout.'

- (7.77) pósɔ ní-yó a kó-do-kú  
 1a.week COP-9.DEM.I 3SG:be 9b-come:FV-DIR  
 mu-kó ik-o bánu kání o-píkít-i-ní  
 1-woman 3SG:be-FV F<sub>2</sub> when 3SG-run-FV.ANT-PFV  
 'Next week, the woman will have fled.'

### c. The Directional suffix **-kú**

The Post-FV suffix **-kú** indicates that the agent moves towards or is close to the deictic centre in performing the action described by the verb. A morpheme which can be used to refer to an agent moving away from the deictic centre is not attested. In other words, Liko has no itive marking. Because **-kú** has wider use than only ventive, the label Directional is used. The suffix **-kú** is not related to or derived from the verb 'come' (in Liko **-da-**). Almost always when **-da-** is used, it is cliticised with **-kú**: **kó-do-kú**, 9b-come:FV-DIR, 'to come'. For example:

- (7.78) o-do-kú ká pa<sup>338</sup> yá-ngba  
 3SG-come:FV-DIR PREP 9.area 9.ASS-shining  
 'He will come to a neat courtyard.' (T2006.9)

- (7.79) 6a-lókú 6á-pung-ă ndi kó-dog-ó-kú  
 2-man 3PL<sup>P</sup>-start-FV P<sub>3</sub> 9b-come:PLUR-FV-DIR  
 6é 6á-'súng-í Lungútu  
 COMP 3PL:1.O-give a dot-FV.SUBJ "Lingútu"  
 'The men started to arrive so that they would give a dot for Star.'<sup>339</sup>  
 (T2009.12)

The Directional suffix **kú-** occurs with many different verbs, including negative forms:

<sup>338</sup> The H tone of the LH contour merges with the following High.

<sup>339</sup> **li-ngótu** means '5-star'.

- (7.80) *nguyá*    *ø-kó-tígól-ó-kú-gǔ*    *ndi ká nékú*  
 1a.warthog 3SG<sup>P</sup>-NEG-stay-FV<sup>P</sup>-DIR-NEG P3 PREP 9.cassava  
 'Warthog did not stay at the cassava.' (T2006.3)
- (7.81) *tá-pung-a kúwa kám-ɪn-a<sup>340</sup> saḅuni kó-ful-ó-kú*  
 1PL-start-FV thus 9b:1.O-see-FV 1a.soap bar 9b-swell-FV-DIR  
 'We start to see the soap bar swell.' (T2006.5)
- (7.82) *ú-bíky-o-kú*    *ḅa-bǎkɪ*    *na*    *ḅa-má<sup>4</sup>máki*    *ḅá-sɪ*  
 3SG<sup>P</sup>:2.O-say-FV-DIR 2-father:3SG.POSS and 2-brother:3SG.POSS 2ASS-all  
 'He told all his fathers and his brothers.' (T2006.2)

#### d. The Insistive enclitic **-tɔ́**

The primary use of post-FV enclitic **-tɔ́** is to emphasize or insist on the situation of the verb. Due to phonological processes (in particular ATR vowel harmony and vowel-height dissimilation, see 3.2.4.2), the surface form of this enclitic is usually **-tɔ́** or **-tɔ̀**. The underlying H tone of this enclitic is changed into a L tone, when it occurs word-finally and follows a H tone, see 4.6.6.

The following three structures all mean 'I extinguished the fire', but with the Insistive enclitic **-tɔ́**, a speaker indicates that he actually did extinguish the fire.

- (7.83) *nó-lím-ó* *ḅukú*    1SG<sup>P</sup>-put out-FV<sup>P</sup> 8:burning piece of wood  
*nó-lím-á-tɔ́* *ḅukú*    1SG<sup>P</sup>-put out-FV<sup>P</sup>-INS 8:burning piece of wood  
*no-lím-i-tó* *ḅukú*    1SG-put out-FV.ANT-INS 8:burning piece of wood

The Insistive enclitic also occurs in structures in which reference is made to the future. When a young girl tells her father: "I want to go to Bole-Bole (the gold mine in the Liko area)." and her father does not believe her, the girl may reply:

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<sup>340</sup> Expected would be a H tone on the final vowel (Infinitive TAM melody), but the Liko consultants affirm that the verb **-ɪn-** 'see' has surface L tones when the form contains the class 1 object prefix.

- (7.84) wa-sangal-a-tú bǎnu  
 2SG-surprise-FV-INS F<sub>2</sub>  
 'You will certainly be surprised!'

In the context of a father talking to his son about the possibility to contribute to the bride price in the future:

- (7.85) ká syǎ<sup>+</sup>ngá-su si ní-só,  
 PREP 7:year-7 7.DEM.III COP-7.DEM.I  
 wa-va-tú bǎnu mu-kó yi ní-nǒ  
 2SG:1.O-take:FV-INS F<sub>2</sub> 1-woman 1.DEM.III COP-1.DEM.I  
 'In that year, you will certainly marry that woman.'

The Insistive enclitic **-tǔ** is also used frequently in combination with Imperatives, e.g. in the following two cases, affirmative and negative, from the text about a very good hunter:

- (7.86) wa-ság-á-tu ká-ǎ-monís-ó lúgo  
 2SG-abandon:PLUR-FV-INS 9b-REFL-show:CAUS-FV 9.middle  
 ka-ǎa-ǎengéní ǎéyó  
 GEN-2-other person like that  
 'Stop boasting like that among other people!' (T2006.1)

- (7.87) ká yigǒkú kakú wa-kíkwe-ní-to kú-mbúso  
 PREP 9a:return 2SG.POSS 2SG-NEG:look:FV- NEGSUBJ-INS 17-back  
 'When you return do not look back!' (T2006.1)

The other use of post-FV enclitic **-tǔ** is to refer to a point in time in the near future, in particular later today, e.g. (7.88a). The primary meaning of **-tǔ** without a time adverbial is that the speaker is referring to a situation which will happen later today. I assume that this has been a new development from the Insistive. When post-FV enclitic **-tǔ** is used with an Imperative or in a structure in which reference to the past or the future is indicated, the only interpretation is that of adding emphasis to the situation expressed by the verb, e.g. (7.88b, c):

- (7.88)a. a-ǎak-a-tú t-zagǎ-su  
 3SG-carve-FV-INS.F<sub>1</sub> 19-arrow-19  
 'He will carve an arrow later today.'

- b. a-ɓak-a-tú      ɓánu    ɪ-zagǎ-su  
 3SG-carve-FV-INS    F<sub>2</sub>      19-arrow-19  
 'He will certainly carve an arrow.'
- c. á-ɓak-á-tǔ      ndɪ    ɪ-zagǎ-su  
 3SG<sup>P</sup>-carve-FV<sup>P</sup>-INS    P<sub>3</sub>      19-arrow-19  
 'He certainly carved an arrow.'

### 7.7.5 Auxiliaries

The main auxiliary used is the verb **-ik-** 'be'. Structures containing an inflected form of **-ik-** 'be' followed by the Infinitive form of the main verb, indicate Progressive aspect. Progressive means that the action, which takes some time, is taking place at this moment or at the moment of reference. The auxiliary has tense and aspect morphology and can be negated. Object marking and extensions are found on the main verb.

- (7.89) nik-o<sup>341</sup>      ká-kpakyán-á    ɓí-wese  
 1SG:be-FV    9b-travel-FV      MOD-soft  
 'I will be travelling slowly.'

The verb **-ik-** is irregular in that it has two forms, the verb root and zero. The verb root **-ik-** is used for all tenses, aspects and moods, except indicative Present and Past (see 7.13). Past forms show that there is no complete verb form, including a final vowel, because the H prefixal tone of the Past TAM melody on the subject prefix is missing (7.90b) where the tone on **nǎ** is LH preceding the time adverbial <sup>H</sup>**ndɪ**. This means that **nǎ** cannot be analysed as 1SG:zero root:FV. The subject prefix **na-** and the other subject prefixes are assumed to be suppletive forms with verbal properties. They can be followed by a time adverbial and they occur in constructions with an Infinitive. In the negative Present and Past (7.90c), the empty verb-root position is preceded by the negative prefix **ká-** and followed by the final vowel **-ɪ** (see the next section on Negation). In the absence of segmental material between prefix **ká-** and final vowel **-ɪ**, the vowels are subject to height coalescence, which results in **-ké-**. In the matrix form, the first person singular subject prefix **ná-**

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<sup>341</sup> /na-ik-o/ '1SG-be-FV'.

and the negative enclitic **-gu** are present. Because **-ik-** occurs elsewhere in the paradigm, it is assumed that the verb root in the negative indicative Present and Past is zero.

- (7.90)a. na ká-síḏ-á mu-kəkó-mu má-lt-kě  
 1SG:be 9b-step over-FV 3-trunk-3 3.ASS-5-tree, sp.  
 'I am stepping over the trunk of a tree.'
- b. nə ndt ká-lúmb-á ká ndábu ko-Kúnzi  
 1SG:be P<sub>3</sub> 9b-pray-FV PREP 9.house GEN-1a.God  
 'I was praying in the church.'
- c. ná-ké-gu<sup>342</sup> kám-tn-a pápá  
 1SG-NEG:be:FV-NEG 9b:1.O-see-FV 1a.shrew  
 'I am not seeing the shrew.'

Other examples of auxiliary 'to be' in Progressive aspect include:

- (7.91) Sódú a ká-ınd-á ká mu-kó  
 "Sódú" 3SG:be 9b-go-FV PREP 1-woman  
 'Sódú is going to the woman.' (T2006.2)
- (7.92) tíko yó a ká-tí-tungbúl-ág-á ká  
 9.field 9.DEM.I 3SG:be 9b-1PL.O-support-PLUR-FV PREP  
 ɓa-mápumú ɓá-gɔgɔ  
 2-family need 2.ASS-other  
 'The field is supporting us regarding other needs.' (T2006.7)
- (7.93) ă ndt ást ká-ngbát-á li-kembé áka  
 3SG:be P<sub>3</sub> only 9b-play-FV 5-thumb piano CT  
 'He was PLAYING THE THUMB PIANO ALL THE TIME.' (T2006.2)

In Liko texts and in speech, the form **kégu** frequently occurs. This is the negative form of the verb **-ik-** 'be', underlyingly /ø-ká-ø-t-gu/ 3SG-NEG-be-FV-NEG:<sup>343</sup>

<sup>342</sup> /ná-ká-ø-t-gu/ '1SG-NEG-be-FV-NEG'.

<sup>343</sup> Augustin (2010:29) posits **kégu** as invariable adverbial 'not'.



- (7.94)a. kínili yíbtǎ Ø-ké-gu yá-nza  
 that is why 9a:pride 3SG-NEG:be:FV-NEG 9.ASS-good  
 'That is why pride is not good.' (T2006.1)
- b. Ø-ké-gu na ku-ḃó'kú-kɔ ku-ndǎ  
 3SG-NEG:be:FV-NEG with 15-arm-15 15.ADJ-long  
 'She is not with a long arm', i.e. someone who steals (T2006.9)

To express negation of Progressive aspect, the negative form of auxiliary **-ik-** 'be' in Past (7.95a), Present (7.95b) and Future (7.95c) is used:

- (7.95)a. ná-ké-gǔ ndi ká-ɪn-á 1SG-NEG:be:FV-NEG P<sub>3</sub> 9b-see-FV  
 'I was not seeing.'
- b. ná-ké-gu ká-ɪn-á 1SG-NEG:be:FV-NEG 9b-see-FV  
 'I am not seeing.'
- c. ná-kík-i-gu ká-ɪn-á 1SG-NEG:be-FV.NEG-NEG 9b-see-FV  
 'I will not be seeing.'

The Past and the Present have the zero root, while the verb root **-ik-** is present in the Future form in the above examples. In (a) and (b), height coalescence applies to the sequence of the vowel of the negative prefix **ka-** and the final vowel (see 3.3.2). In (c), the sequence of the vowel of the negative prefix **ka-** undergoes V<sub>1</sub>-elision preceding a vowel-initial root (see 3.3.1).

Another example is:

- (7.96) Ø-ké-gu ká-ĩm-ukán-á nza  
 3SG-NEG:be:FV-NEG 9b-REFL-hear-FV 9.hunger  
 'He is not feeling hungry.' (T2006.2)

In negative clauses, stative verbs like **-ib-** 'know' and **-pa-** 'like' are often preceded by the negative form of auxiliary **-ik-** 'be', e.g. **ḃá-ké-gǔ ndi ká-ib-ó**, 3PL-NEG:be:FV-NEG P<sub>3</sub> 9b-know-FV, 'they did not know' and **míkí Ø-ké-gǔ ndi ká-pǎ kó-ḃúk-ó**, 1a.child 3SG-NEG:be:FV-NEG P<sub>3</sub> 9b-like-FV 9b-answer-FV, 'the child did not want to answer'.

The combination of the Present form of auxiliary **-ik-** and an Infinitive can be used to refer to the present, without the connotation that the situation is in progress. Thus the alternative translation of (7.90a) is 'I step over the trunk of the tree.'

- (7.97) 6á      ʔkó-mbímb-ó    li-tá-lu    mbiya    wánu<sup>344</sup>  
 3PL:be    9b-throw-FV    5-stone-5    new    here  
 'They throw a stone right now.'

Following a High-toned suppletive form of the auxiliary, the tone of the class 9b prefix is changed into a non-automatic downstepped H tone, caused by the floating L tone at the boundary of an auxiliary and an Infinitive, see 4.6.5.

If the duration of the action, taking place at this moment, is important, the auxiliary takes the Pluractional extension **-ag-** as in (7.98a). The auxiliary **-ik-** cannot have Perfective aspect (7.98b):

- (7.98)a. 6í-kog-o      ká-kís-á      p̃si  
 3PL-be:PLUR-FV    9b-look for-FV    9.road  
 'They have been looking for the road (for some time now).'
- b. \*6ík-ó-ni      ká-ʔkóng-ó      séléngúndé  
 3PL<sup>P</sup>:be-FV<sup>P</sup>-PFV    9b:1.O-roast-FV    1a.peanut  
 \*6ík-i-ní      ká-ʔkóng-ó      séléngúndé  
 3PL:be-FV.ANT-PFV    9b:1.O-roast-FV    1a.peanut  
*Int.* 'They have been roasting peanuts.'

Other auxiliaries with aspectual use are **-d̃íky-** 'start, be first', **-pung-** 'start', **-ma-** 'finish' and **-sá-** 'stop'. They are used to indicate the start or the end of a situation. The main verb, which follows the auxiliary or a time adverbial, has the Infinitive form:

- (7.99)a. á-d̃íky-ǎ      ndi    kó-sil-ó      ká    mbúku  
 3SG<sup>P</sup>-be first-FV    P<sub>3</sub>    9b-arrive-FV    PREP    9.grave  
 'He was first to arrive at the grave.' (*translated John 20:8*)
- b. ó-muk-o      má-sú,    á-pung-a      ká-lut-ó      Dingopoyo  
 3SG<sup>P</sup>-pull out-FV    6-spring    3SG<sup>P</sup>-start-FV    9b:1.O-pull-FV    "Dingopoyo"  
 'He pulled out the spring, he started to pull Dingopoyo.' (*T2006.1*)
- c. á-mǎ      ndi    ká-6̃íky-á    li-kp̃umóká    ní-ló  
 3SG<sup>P</sup>-finish:FV    P<sub>3</sub>    9b-say-FV    5-thing      COP-5.DEM.I  
 'He finished to say that thing.'

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<sup>344</sup> mbiya wánu means 'now'.

- d. bá-sǎ ndu ká-bum-á mu-mbánzú  
 3PL<sup>P</sup>-stop:FV P<sub>3</sub> 9b:1.O-hit-FV 1-person  
 'They stopped to hit the man.'

## 7.8 Negation (NEG, final vowel and post-FV position)

Negation is marked by means of a combination of the negative prefix **ka-** in NEG position, by a specific final vowel, by post-FV enclitics and by tone. The following combinations are attested:

(7.100)	<u>NEG</u>	<u>FV</u>	<u>Post-FV</u>	<u>TAM melody</u> <sup>345</sup>
a.	ka-	-ɪ	-gu	prefixal H tone
b.	ka-		-gu	prefixal H tone and H tone on the final vowel
c.		-í		prefixal H tone and H tone on the final vowel
d.	ka-		-ní-to / -ní 'tɔ-gu	prefixal L tone

(7.100a), **ka- + -ɪ + -gu**, marks the negative Future verb forms. Examples for [-ATR] and [+ATR] verb roots are:

- (7.101)a. wá-ká-pɪk-ɪ-gu bánu<sup>346</sup> 2SG-NEG-sway-FV-NEG F<sub>2</sub> 'you will not sway'  
 b. wá-kó-βín-i-gu bánu 2SG-NEG-dance-FV-NEG F<sub>2</sub> 'you will not dance'

Without a time adverbial, these forms refer to the present or to the future, depending on the context:

- (7.102)a. wá-ká-pɪk-ɪ-gu 2SG-NEG-sway-FV-NEG 'you do/will not sway'  
 b. wá-kó-βín-i-gu 2SG-NEG-dance-FV-NEG 'you do/will not dance'

These forms can also be followed by the Past time adverbial <sup>H</sup>**ndu**, in which case inability in the past is expressed:

- (7.103)a. wá-ká-pɪk-ɪ-gũ ndu 2SG-NEG-sway-FV-NEG P<sub>3</sub> 'you could not sway'  
 b. wá-kó-βín-i-gũ ndu 2SG-NEG-dance-FV-NEG P<sub>3</sub> 'you could not dance'

<sup>345</sup> For TAM melodies, see 7.6.

<sup>346</sup> Or **ndéke**, F<sub>3</sub>, 'later than the next few weeks'.

(7.100b), **ka-** + **-gu**, with no change in final vowel compared to the affirmative form, is used to encode the negative Past and Anterior. Examples of the negative Past are:

- (7.104)a. wá-ká-pík-á-gu 2SG<sup>P</sup>-NEG-sway-FV<sup>P</sup>-NEG 'you did not sway'  
 b. wá-kó-bín-á-gu 2SG<sup>P</sup>-NEG-dance-FV<sup>P</sup>-NEG 'you did not dance'

Examples of the negative Anterior are:

- (7.105)a. wá-kó-pík-í-gu 2SG-NEG-sway-FV.ANT-NEG 'you did not sway'  
 b. wá-kó-bín-í-gu 2SG-NEG-dance-FV.ANT-NEG 'you did not dance'

With respect to the two possible negations of the Anterior aspect, (7.105) and (7.106b) indicate that the situation has not come about at present, whereas (7.106c), with **-na-** in TA position, includes the possibility that the situation may occur in the future:

- (7.106)a. no-pík-í 1sg-sway-FV.ANT 'I swayed'  
           no-bín-i 1sg-dance-FV.ANT 'I danced'  
 b. ná-kó-pík-í-gu 1SG-NEG-sway-FV.ANT-NEG 'I did not sway'  
       ná-kó-bín-í-gu 1SG-NEG-dance-FV.ANT-NEG 'I did not dance'  
 c. ná-ká-no-pík-í-gu 1SG-NEG-yet-sway-FV.ANT-NEG 'I did not yet sway'  
       ná-ká-no-bín-í-gu 1SG-NEG-yet-dance-FV.ANT-NEG 'I did not yet dance'

Nurse (2008:197-9) presents examples in other Bantu languages where something similar is reported. The presence of two distinct forms means that Liko has "grammaticalized a two-way distinction between 'not at any point in the past' and 'not in the past but might in the future.'" (Nurse 2008:200). In this specific negative Anterior form, H-tone spreading from the H tone on the final vowel does not happen, whereas HTS does apply from the H tone of the leftmost prefix. As (7.107) shows, the morphemes between the first CV-syllable of the verb root and the final vowel surface with a L tone:

- (7.107)a. ná-ká-nò-díkít-í-gù  
           1SG-NEG-*yeɬ*-throw-FV.ANT-NEG  
           'I did not yet throw'  
 b. ná-ká-nò-yúkùm-í-gù  
           1SG-NEG-*yeɬ*-breathe-FV.ANT-NEG  
           'I did not yet breathe'

(7.100c), negative marking with a combination of the final vowel **-i** ([+ATR] dominant) and the prefixal High and final-vowel High TAM melody, is used to distinguish the negative from the affirmative Conditional. In the examples below, first the negative form is given, followed by an affirmative one:

- (7.108)a. wá-kó-pík-í 2SG-COND-sway-FV.NEG 'if you do not sway'  
           wa-ka-pík-á 2SG-COND-sway-FV 'if you sway'  
 b. wá-kó-ńín-í 2SG-COND-dance-FV.NEG 'if you do not dance'  
      wa-ko-ńín-ó 2SG-COND-dance-FV 'if you dance'

Finally, (7.100d), **ka + -ńí-to**, or **ka + -ńí 'tǒ-gu**, is found in the negative Subjunctive forms. The negative Subjunctive is also used as the negative Imperative.

- (7.109)a. wa-ko-pík-o-ńí-to 2SG-NEG-sway-FV-NEGSUBJ-INS  
           wa-ko-pík-o-ńí 'tǒ-gu 2SG-NEG-sway-FV-NEGSUBJ INS-NEG  
           'that you not sway' / 'Do not sway!'  
 b. wa-ko-ńín-o-ńí-to 2SG-NEG-dance-FV-NEGSUBJ-INS  
      wa-ko-ńín-o-ńí 'tǒ-gu 2SG-NEG-dance-FV-NEGSUBJ INS-NEG  
      'that you not dance' / 'Do not dance!'

## 7.9 Subjunctive, Imperative and Hortative

Subjunctive, Imperative and Hortative are commonly categorized as mood. Mood relates the speaker's attitude toward the situation or the speaker's commitment to the probability that the situation is true (Payne 2003:234). In the following sections, Subjunctive, Imperative and Hortative are presented. Subjunctive, Imperative and Hortative share one negative form.

### 7.9.1 Subjunctive

Subjunctives are marked by the final vowel **-i** and a prefixal High and final-vowel High TAM melody. Semantically they indicate a situation which does not occur in reality, but may come about or might have come about. Time adverbials may be used to locate the situation in time. The most common are **ndéke** (later than the next few weeks) and <sup>H</sup>**bi** (earlier today or yesterday).





The Subjunctive final vowel **-i** may be followed by the Supplicative enclitic **-no**. In the example below, the subject of the verb **-bǐki-** 'say' in the main clause is the leopard. The first person singular subject of the Subjunctive in the subordinate clause is the person who tells the story. Leopard wishes that this man would release him:

- (7.119) na-tókóny-i sukopí ká kpáká, é-<sup>4</sup>bǐky-a b́é  
 1SG-find-FV.ANT 1a.leopard PREP 9.trap 3SG<sup>P</sup>:1SG.O-tell-FV COMP  
 nǎ-<sup>4</sup>úk-ús-í-no báka  
 1SG:1.O-heal-CAUS-FV.SUBJ-SUPP please  
 'I found Leopard in a trap, he said to me that I please save him.'  
 (T2008.5)

In the next example, the speaker wishes that the men he is talking to would chase away a spell. The Subjunctive in the subordinate clause has a third person plural subject, the desired agents of the action.

- (7.120) nu-bǐky-ǐ ǒi ǒa-ǒibýá kakú ámbé  
 1SG-tell-FV.ANT P<sub>1</sub> 2-follower 2SG.POSS attention  
 ǒó-kpummy-í-no báka ǐ-lumbá li ní-ló  
 3PL-chase-FV.SUBJ-SUPP please 5-spell 5.DEM.III COP-5.DEM.I  
 'I said to your followers, hear! they please chase away this spell.'  
 (translated Mark 9:18)

Verbs expressing obligation which are followed by a Subjunctive are the deontic operators **-kwanan-** and **-ǒuman-** 'should'.<sup>348</sup> Both verbs only occur with the shape **-an-** in this context, which might be a petrified Associative extension indicating intensive action. Preceding a Subjunctive, they always have the Anterior floating H tone preceding the final vowel and final vowel **-i**: e.g. **okwonóni**, **ǒfumóni** 'it should'. The use of Anterior aspect draws attention to the situation expressed by the verb in the subsequent subordinate clause. **-kwonóni** is more common than **-ǒumóni** as far as frequency of occurrence is concerned.

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<sup>348</sup> I am not aware of differences in strength of obligation.





**a. Imperative commands**

Second person singular Imperatives have a verb stem consisting of the verbal base and the final vowel, and a TAM melody with a H tone on the final vowel. With second person plural Imperatives, the verb stem is obligatorily followed by the Plural Addressee suffix **-ni**.

(7.124)	<u>2SG addressee</u>		<u>2PL addressee</u>
	ḃín-ó	dance-FV.IMP	ḃín-ó-ni
	kpul-á	rummage through-FV.IMP	kpul-ó-ni
	sám-á	open <sup>349</sup> -FV.IMP	sóm-ó-ni
			dance-FV.IMP-ADDR
			rummage through-FV.IMP-ADDR
			open-FV.IMP-ADDR

(7.125)	ú-ḃíky-a	ḃé:	yiii	ḃo-míkămt!	mamá
	3SG <sup>p</sup> :2.O-tell-FV	COMP	"yiii"	2-child:1SG.POSS	1a.mother
	o-kw-í-ni,	pung-ó-ni	ká-kpḃ	lt-tómbú	
	3SG-die-FV.ANT-PFV	start-FV.IMP-ADDR	9b-dig out:FV	5-ground	
	'He told them: "Ow, children! Mother has died, start (PL) to dig out the ground." (T2007.12)				

The class 1 object prefix uses the basic form, **mu-**, in the Imperative:

(7.126)	mu-sum-á	1.O-hide-FV.IMP	'hide him!'
	mu-sum-ó-ni	1.O-hide-FV.IMP-ADDR	'hide him! (pl)'
	mu-pútút-ó	1.O-hug-FV.IMP	'hug him!'
	mu-pútút-ó-ni	1.O-hug-FV.IMP-ADDR	'hug him! (pl)'

Other object prefixes do not have a specific form in Imperatives:

(7.127)	ḡ-sum-á	2.O-hide-FV.IMP	'hide them!'
	ḡ-sum-ó-ni	2.O-hide-FV.IMP-ADDR	'hide them! (pl)'
	i-pútút-ó	1SG.O-hug-FV.IMP	'hug me!'
	tí-pútút-ó-ni	1PL.O-hug-FV.IMP-ADDR	'hug us! (pl)'

Imperatives may include extensions with valency modification, e.g. Benefactive and Pluractional. Examples for the Benefactive extension **-lt-** with verb roots

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<sup>349</sup> I.e. open your mouth.

**-ngbát-** 'play an instrument', **-wany-** 'show' and **-lind-** 'sink to the bottom' are:

- (7.128)a. *mu-ngbát-íly-á* 'play for him on the instrument!'  
 1.O-play-BEN-FV.IMP  
*mu-wany-íly-á bɔ́lókɔ* 'show him the prison!'  
 1.O-show-BEN-FV.IMP 9.prison  
*ũ-lind-íly-ó* 'dive for them!'  
 2.O-dive-BEN-FV.IMP
- b. *mu-ngbót-íly-ó-ni* 'play (pl) for him on the instrument!'  
 1.O-play-BEN-FV.IMP-ADDR  
*mu-wony-íly-ó-ni bɔ́lókɔ* 'show (pl) him the prison!'  
 1.O-show-BEN-FV.IMP-ADDR 9.prison  
*ũ-lind-íly-ó-ni* 'dive (pl) for them!'  
 2.O-dive-BEN-FV.IMP-ADDR

Examples for the Pluractional extension **-ag-** with verb roots **-ḍín-** 'dance' and **-sám-** 'open the mouth' are:

- (7.129)a. *ḍín-óg-ó ábe mu-lúkú*  
 dance-PLUR-FV.IMP like 1-man  
 'Dance like a man!' (referring to the manner of dancing)
- b. *sóm-óg-ó-ni*  
 open-PLUR-FV-ADDR.IMP  
 'Open your mouths!' (to multiple children, to take medicine)

A few cases have been attested in which Imperatives occur with a subject prefix. The usage involves persuasion rather than a command. The context of the example below (from T2009.13) is that a young man does not want to dress after the death of his wife. His father tries to persuade him to get dressed:

- (7.130) *a-bákt ǎm-un-a, íg-a mbángu ká ndábu,*  
 1b-father: 3SG<sup>P</sup>:1.O-see-FV 3SG<sup>P</sup>:return-FV 9.run PREP 9.house  
 3SG.POSS  
*ǎ-vily-o-kú ku-tú-ko, ǎ-<sup>+</sup>pá,*  
 3SG<sup>P</sup>:1.O-take:BEN-FV-DIR 15-clothes-15 3SG<sup>P</sup>:1.O-give-FV  
*ǎ-<sup>+</sup>ḍíky-ǎ ndi ḍé: wĩ-mokísy-ó*  
 3SG<sup>P</sup>:1.O-tell-FV P<sub>3</sub> COMP 2SG:REFL-dress-FV.IMP

'His father saw him, he returned running to the house, he took a garment for him, he gave [it] to him, he said to him: "Get yourself dressed".'

The second person singular subject prefix **wa-** co-occurs with the Plural Addressee suffix **-ni** if the addressee is plural. In the first example below, the addressee is second person plural. In the next two examples, the verb expressing persuasion is followed by a verb form with second plural subject prefix and the H tone on the final vowel of the Imperative TAM melody. The referent of the plural subject prefix is identical to the addressee of the verb in the first clause.

- (7.131) Kamuma ú-bíky-a b́é:  
 "Kamuma" 3SG<sup>P</sup>:2.O-tell-FV COMP  
 bo-míka-mamá, wo-só-ni mbéyi yǐnzinzinyá  
 2-child:GEN-1a.mother 2SG-abandon:FV.IMP-ADDR first 9a:gossip  
 'Kamuma told them: "Brothers, first stop gossiping." ' (T2009.4)

- (7.132) wib-ǒ-ni, mó-tombísy-ó b́í-nza  
 2SG:know-FV.IMP-ADDR 2PL-see clearly-FV.IMP MOD-good  
 'Know, remember (pl) well.'

To a group of **bo-gbuwó** '2-chimpanzee':

- (7.133) wingy-ó-ni mbéyi ká ndábu, má-vá be-sángu  
 2SG:enter-FV.IMP-ADDR first PREP 9.house 2PL-take:FV.IMP 2+9:9a-  
 basket  
 'Enter first the house, take (pl) the baskets!' (T2007.1)

## b. Supplicative

To voice a request in a polite way, a Liko speaker adds the Supplicative enclitic **-no** to the singular Imperative form:

- (7.134) b́ín-á-no dance-FV.IMP-SUPP 'please dance'  
 do-kú-no come:FV.IMP-SUPP 'please come'

The use of the Supplicative enclitic signals the regard the dog has for leopard, the addressee, the chief of the animals:

- (7.135) ɿ-nvá á-túbtl-ǎ ndɿ b́é:  
 1c-dog 3SG<sup>P</sup>-cry out-FV P<sub>3</sub> COMP  
 a-lúkú ooo wǐ-gwǐ-no ɿ-mbengí  
 1b-man "ooo" 2SG:REFL-hold:FV.IMP-SUPP 5-heart  
 'Dog cried out: "Hey man, take heart." ' (T2009.31)

Another example from a text is:

- (7.136) míka-mamá, kíkílíki, um-un-íly-á-nɔ  
 1a.child:GEN-1a.mother please 1SG.O-see-BEN-FV.IMP-SUPP  
 ɓáka kúmbú, ɪ-tw-íly-á-nɔ ɓáka  
 please 9.compassion 1SG.O-quote-BEN-FV.IMP-SUPP please  
 lúkí lí-motí ní-lɔ wa ká-pǎ  
 5:object 5.NUM-one COP-5.DEM.I 2SG:be 9b-want:FV  
 'Brother, please, look at me please with compassion, name for me please  
 some object which you want.' (T2008.7)

It is not allowed to have the Plural Addressee suffix **-ni** and the Supplicative enclitic **-nɔ** together: \***ɓínónino**. With the Supplicative enclitic **-nɔ**, the addressee is usually singular, but reference to a plural addressee is also possible. The verb form **ɓínáno** 'please dance', for instance, is also used to ask several people to dance.

### c. Instructive

I use 'Instructive' for verb forms used to give instructions, which have a TAM melody which is different from Imperatives. Instead of having the Imperative TAM melody with a H tone on the final vowel, Instructives have a H tone on the subject prefix. Subject prefix **wa-** in these forms refers to either second person singular or plural. The Plural Addressee suffix **-ni** functions to show that the referent is plural. The following examples come from a text in which technical instruction is given to produce a body lotion:

- (7.137)a. wá-va lí-ɗakí, wó-ɗuk-o minó,  
 2SG-take:FV.INST 5-clay pot 2SG-pour-FV.INST TRACE  
 wóm-os-o kó ɓukú  
 2SG:arrive-CAUS-FV.INST PREP 8:burning piece of wood  
 'Take a clay pot, pour [it] into [the pot], put it on a fire.' (T2006.6)
- b. wá-va ma-dadǎ, wó-bís-o,  
 2SG-take:FV.INST 6-leaf 2SG-put-FV.INST  
 wó-kos-on-o kúwa kú-gǔ yí  
 2SG-pour-ASS-FV.INST thus 17-top 17.DEM.III  
 'Take some leaves, put them [in a sieve], pour [palm nuts] on top of them.' (T2006.6)

## 7.9.3 Hortative

The basic form of the Hortative is a Subjunctive with the first person plural subject prefix and either the Plural Addressee suffix **-ni** or the Supplicative enclitic **-no**.

Examples of the Hortative with the Plural Addressee suffix are:

(7.138) tó-lúmb-í-ni	1PL-pray-FV.SUBJ-ADDR	'let us pray'
tó-sum-í-ni	1PL-hide-FV.SUBJ-ADDR	'let us hide'
tó-gom-í-ni	1PL-weep-FV.SUBJ-ADDR	'let us weep'
tó-ḃín-í-ni	1PL-dance-FV.SUBJ-ADDR	'let us dance'
tá- <sup>4</sup> ngbót-íly-í-ni	1PL:1.O-play-BEN-FV.SUBJ-ADDR	'let us make music for him'
tá-lind-íly-í-ni	1PL:1.O-dive-BEN-FV.SUBJ-ADDR	'let us dive for him'

The Supplicative enclitic **-no** instead of the Plural Addressee suffix **-ni** signals that the speaker wants the exhortation to be regarded as a request. e.g.:

(7.139) tó-lúmb-í-no	1PL-pray-FV.SUBJ-SUPP	'let us please pray'
tó-gom-í-no	1PL-weep-FV.SUBJ-SUPP	'let us please weep'
tá- <sup>4</sup> ngbót-íly-í-no	1PL:1.O-play-FV.SUBJ-SUPP	'let us please make music for him'

## 7.9.4 Negative Subjunctive

Negation of Subjunctive, Imperative and Hortative is encoded by a single verb form, inflected for person and number. I call it 'negative Subjunctive' rather than negative Imperative, because the Subjunctive is inflected for all persons (Imperatives only for second person) and Subjunctives occur in more contexts than Imperatives. The negative Subjunctive is marked by complex morphology: the negative prefix **ka-**, the final vowel **-a**, the negative Subjunctive suffix **-ní**, the Insistive enclitic **-tṣ** and optionally the negative enclitic **-gu**. The negative Subjunctive has a TAM melody with Prefixal L tone, which results in surface L tone of all verbal prefixes. Extensions and the final vowel surface with the default L tone.

Examples of the negative Subjunctive are:

(7.140)a. ḃa-ko-pik-o-ní-to	3PL-NEG-sway-FV-NEGSUBJ-INS
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As example of negative Hortative meaning is:

- (7.145) 6o-míka-mamá, to-ko-so-ní 'tót-gu yǐgya yá-nza  
 2-child:GEN-1a.mother 1PL-NEG-abandon:FV-NEGSUBJ 9a:habit 9.ASS-good  
 INS-NEG  
 'Brothers, let us not abandon good habits.' (T2008.9)

Cases in which the negative Subjunctive follows one of the deontic operators **-kwanan-** or **-foman-** 'should' are not attested. The negation is encoded in the operator, rather than in the Subjunctive:

- (7.146)a. ø-kó-kwonón-í-gu b́é tá-gy-ǐ  
 3SG-NEG-should-FV:ANT-NEG COMP 1PL-do-FV.SUBJ  
 'We should not do it.', literally, 'it should not that we do' (T2008.9)
- b. \*o-kwonón-i b́é tá-ko-gy-i-ní 'tót-gu  
 3SG-should-FV.ANT COMP 1PL-NEG-do-FV-NEGSUBJ INS-NEG  
*Int.* 'It should that we not do.'

General prohibitives are expressed by means of negative Subjunctives with second person singular, e.g.:

- (7.147)a. wa-kiβ-o-ní 'tót-gu  
 2SG-NEG:steal-FV.SUBJ-ADDR INS-NEG  
 'One should not steal.' / 'Do not steal.' (-iβ- 'steal')
- b. wa-ko-bíky-o-ní 'tót-gu b́óngɔ  
 2SG-NEG-tell-FV.SUBJ-ADDR INS-NEG 1a.lie  
 'One should not lie.' / 'Do not lie.' (-b́íkɪ- 'say, tell')
- c. wa-ka-mwó-ni tót-gu mu-mbánzú  
 2SG-NEG-kill:FV.SUBJ-ADDR INS-NEG 1-person  
 'One should not kill a person.' / 'Do not kill a person.'  
 person.'

## 7.10 Conditional

In Liko, Conditional forms distinguish two degrees of irrealis, indicating whether the speaker regards the clause containing the condition (known as 'protasis') as more or less close to realis. The protatis usually precedes the other clause ('apodosis'). Conditionals do not formally mark common distinctions like habitual, hypothetical, counterfactual, etc.

Closer to realis, Conditionals are encoded by affixes and a TAM melody on the inflected verb of the protasis. The closer-to-realis Conditional refers to a situation which is more likely to be actually true, or could be true in the future, or could have been true. Closer-to-irrealis Conditionals are expressed by a cleft construction involving the Conditional form of the verb 'to be' followed by the conjunction **kání** and the protasis.

This distinction between closer to realis and closer to irrealis holds for both hypothetical and counterfactual Conditionals, for negation of Conditionals and for concessive clauses ("even if"). A time adverbial optionally follows the Conditional form of the verb.

#### a. Conditional form in the protasis

Conditionals have the Conditional prefix **ka-** in TA position. Affirmative and negative are distinguished by the final vowel and the TAM melody: the affirmative Conditional has the final vowel **-a** in combination with a prefixal Low and final-vowel High TAM melody, whereas the negative Conditional is marked by the final vowel **-i** and a prefixal High and final-vowel High TAM melody. The addition to the verb form of the negative enclitic **-gu** is not allowed. The prefixal L tone of the affirmative Conditional TAM melody causes even the underlying H tone of the second person plural subject prefix **má-** and the third person plural **ǂá-** to be changed into a L tone. If the subject is third person singular, the subject prefix is zero.

Several examples of Conditional forms expressing a hypothetical situation are presented here:

- (7.148)a. na-ko-kw-ó,      ǂá-kpummy-o    mu-kó    kǎmí  
 1SG-COND-die-FV    3PL-chase-FV    1-wife    1SG.POSS  
 'If I die, they will chase away my wife.'<sup>352</sup>

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<sup>352</sup> In Liko culture, after the death of a husband, his wife has to return to her family while any children remain with the family of the deceased husband.

- b. ná-kó-kw-í, bá-ká-kpumy-i-gu mu-kó kãmt  
 1SG-COND-die-FV.NEG 3PL-NEG-chase-FV.NEG-NEG 1-wife 1SG.POSS  
 'If I do not die, they will not chase away my wife.'

- (7.149) wa-ka-pǎ, nu-many-a mándé kakí  
 2SG-COND-want:FV 1SG:2SG.O-show-FV 9.trail 3SG.POSS  
 'If you want, I show you his trail.' (T2006.1)

- (7.150) ø-kiɓ-ó, bá-mwó iyí ðégyó  
 3SG-COND:steal-FV 3PL:1.O-kill:FV 1.PRO likewise  
 'If he steals, they kill him likewise.' (T2006.2)

- (7.151) mu-lúkú ø-ka-pǎ ká-vǎ,  
 1-man 3SG-COND-want:FV 9b-take:FV  
 o-do-kú ká pa yá-ngba  
 3SG-come:FV-DIR PREP 9.area 9.ASS-shining  
 'If a man wants to marry, he will come to a neat courtyard.' (T2006.9)

Hypothetical situations referring to a habit are described with a construction which is also used for Progressive aspect (using 'to be' plus Infinitive) where the auxiliary is inflected for the Conditional:

- (7.152)a. wa-kik-ó ká-und-á ká ma-lúmba,  
 2SG-COND:be-FV 9b-go-FV PREP 6-prayer  
 wá-kpag-a ðe-kpáku kakú  
 2SG-clean:PLUR-FV.INST 2:1c-shoe 2SG.POSS  
 'If you go to church, you clean your shoes.'

- b. wá-kík-i<sup>353</sup> ká-und-á ká ma-lúmba,  
 2SG-COND:be-FV.NEG 9b-go-FV PREP 6-prayer  
 wá-ká-kpag-t-gu ðe-kpáku kakú  
 2SG-NEG-clean:PLUR-FV-NEG 2:1c-shoe 2SG.POSS  
 'If you are not going to church, you do not clean your shoes.'

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<sup>353</sup> **-ik-** 'be' has an irregular negative Conditional TAM melody: a L tone on the final vowel instead of a H tone.

The H tone on the subject prefix of the verb in the apodosis marks instruction (see 7.9.2).

Counterfactuals express the presupposition that the logical opposite of the protasis is taken as real. Counterfactuals are encoded with the same Conditional affixes and tone as hypotheticals, but the apodosis usually has the deontic auxiliary **-kwanan-** 'should'. In the examples below, the Conditional form indicates what would be the case if its antecedent were true (although it is not):

- (7.153)a.  $\emptyset$ -ka-gy-ag-á ndi li-gubó,  
 3SG-COND-do-PLUR-FV P<sub>3</sub> 5-work  
 a-kwanan-a ká-buník-á li-vananza kakí  
 3SG-should-FV 9b-carry-FV 5-family 3SG.POSS  
 'If he worked, he could support his family.'
- b.  $\emptyset$ -kó-gy-og-í ndi li-gubó,  
 3SG-COND-do-PLUR-FV.NEG P<sub>3</sub> 5-work  
 $\emptyset$ -ká-kwanan-t-gǔ ndi ká-buník-á li-vananza kakí  
 3SG-NEG-should-FV-NEG P<sub>3</sub> 9b-carry-FV 5-family 3SG.POSS  
 'If he did not work, he could not support his family.'

- (7.154) na-kik-ó bi no ngǔ,  
 1SG-COND:be-FV P<sub>1</sub> with 9.force  
 ná-kwanan-ǒ bi ká-dum-á tíko yá-kpu  
 1SG-should-FV P<sub>1</sub> 9b-cultivate-FV 9.field 9.ASS-big  
 'If I had the strength, I cultivated a big field.'

- (7.155) ɓa-ko-ɓungúsy-á ndi li-zabú, ta-kwanan-ǒ bi ká-zab-á  
 3PL-COND-repair-FV P<sub>3</sub> 5-bridge 1PL-should-FV P<sub>1</sub> 9b-cross-FV  
 'If they had repaired the bridge, we should have crossed it.'

### b. Cleft construction with protasis

In order to indicate that the probability that the condition necessary for the situation which depends on it will be realized is low, Liko uses the invariable cleft construction **kikó (ká)ní** 'if it were that'<sup>354</sup>, usually abbreviated to **kikó ní** (in the free

<sup>354</sup>  $\emptyset$ -kik-ó kání, 3SG-COND:be-FV when, 'if it were that'.

translation rendered as 'in the unlikely event that' or 'if perhaps').<sup>355</sup> To compare the clefts with the Conditional clauses, some examples with conditions are used again, but this time they are preceded by **kikó (ká)ní**.

(7.156)a. Ø-kik-ó ní wo-kw-í-ni, bá-kpummy-o mu-kó kakú  
 3SG-COND:be-FV when 2SG-die-FV.ANT-PFV 3PL<sup>P</sup>-chase-FV 1-wife 2SG.POSS  
 'In the unlikely event that you had died, they would have chased away  
 your wife.'

b. Ø-kik-ó ní wá-ká-no-kw-i-gu,  
 3SG-COND:be-FV when 2SG-NEG-*yet*-die-FV.ANT-NEG  
 bá-ká-kpummy-i-gu mu-kó kakú  
 3PL-NEG-chase-FV-NEG 1-wife 2SG.POSS  
 'In the unlikely event that you have not yet died, they will not chase away  
 your wife.'

Negative inflection is marked on the verb in the protasis following **kikó (ká)ní**.

Liko uses the same cleft construction to express that a hypothetical condition referring to a habit is less likely. In the next examples, it is not certain what the person who is addressed will do:

(7.157)a. Ø-kik-ó ní wa ká-nd-á ká ma-lúmba,  
 3SG-COND:be-FV when 2sg:be 9b-go-FV PREP 6-prayer  
 wá-kpag-a ɓɛ-kpáku kakú  
 2SG-clean:PLUR-FV 2:1c-shoe 2SG.POSS

'If perhaps you are going to church, you clean your shoes.'

b. Ø-kik-ó ní wá-ké-gu ká-nd-á ká  
 3SG-COND:be-FV when 2SG-NEG:be:FV-NEG 9b-go-FV PREP  
 ma-lúmba, wá-ká-kpag-t-gu ɓɛ-kpáku kakú  
 6-prayer 2SG-NEG-clean:PLUR-FV-NEG 2:1c-shoe 2SG.POSS

'If perhaps you are not going to church, you do not clean your shoes.'

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<sup>355</sup> Apart from the cleft construction, a condition can be rendered more hypothetical by adding **gont** 'also' to the right of the verb: **kosilókú** 'if he arrives', **kosilókú gont** 'if he arrives (hypothetical)'.

Counterfactuals can also be preceded by **kikó (ká)ní**. The effect is that additional doubt is cast on the reality of the protasis:

- (7.158)a. Ø-kik-á            ndi ní        a-gy-ag-a-tú        li-gubó,  
 3SG-COND:be-FV P<sub>3</sub>    when 3SG-do-PLUR-FV-INS 5-work  
 a-kwanan-ǒ    6u ká-buník-á    lu-vananza kakí  
 3SG-should-FV P<sub>1</sub>    9b-carry-FV 5-family        3SG.POSS  
 'If perhaps he had worked, he could support his family.'
- b. Ø-kik-á            ndi ní        Ø-ká-gy-ag-t-gu        li-gubó,  
 3SG-COND:be-FV P<sub>3</sub>    when 3SG-NEG-do-PLUR-FV-NEG 5-work  
 Ø-ká-kwanan-t-gǔ    ndi ká-buník-á    lu-vananza kakí  
 3SG-NEG-should-FV-NEG P<sub>3</sub>    9b-carry-FV 5-family        3SG.POSS  
 'If perhaps he was not able to work, he could not support his family.'

An example of a Conditional indicating a high degree of uncertainty on the protasis is, from a text:

- (7.159) Ø-kik-ó            ní        má-bum-án-á        ndi na    6a-mbánzú  
 3SG-COND:be-FV    when 2PL<sup>p</sup>-fight-ASS-FV<sup>p</sup> P<sub>3</sub>    with 2-person  
 kó-6o-kó        6á-mu-sengí  
 GEN-2-woman    2.ASS-3-village  
 'If perhaps you (pl) fought with the men of women of the village.'  
 (T2006.4)

Although the apodosis usually follows the protasis, the next example shows that it may precede the cleft construction:

- (7.160) nu-pá-tu            ní-ma-ná            má-si,  
 1SG:2SG.O-give:FV-INS    COP-6.DEM.II-CONN    6.ASS-all  
 Ø-kik-ó            ní        we-6ún-íly-i-ní            mo-lí  
 3SG-COND:be-FV    when 2SG:1SG.O-break-BEN-FV.ANT-PFV 6-knee  
 'I would give you this all, if perhaps you have knelt for me.'  
 (translated Matt. 4:9)

### c. Concessive Conditional

In Conditionals with **gotúgu** 'even' in the protasis, the speaker explicitly assumes that the situation expressed by the second clause will become a reality, i.e. he asserts the apodosis whatever the status of the protasis.

In the following two sets, this is exemplified for the two levels of certainty:

- (7.161)a. *gutúgu ta-ka-gbit-á bukú-tò tá-si,*  
 even 1PL-COND-cut-FV 13.bush-13 13.ASS-all  
*bo-míkusú bá-kík-i-gu ndéke ká ɪ-sǎ*  
 2-children:1PL.POSS 3PL-NEG:be-FV-NEG F<sub>3</sub> PREP 9a-desert  
 'Even if we cut all the bushes, our children will not live in the desert.'
- b. *gutúgu tá-kó-gbit-í bukú-tò tá-si,*  
 even 1PL-COND-fell-FV.NEG 13.bush-13 13.ASS-all  
*bo-míkusú bík-o ndéke ká ɪ-sǎ áka*  
 2-children:1PL.POSS 3PL:sit-FV F<sub>3</sub> PREP 9a-desert CT  
 'Even if we do not cut all the bushes, our children will live in THE  
 DESERT.'

*gutúgu* 'even' may also follow the verb form in the Conditional.

With a greater degree of uncertainty about the condition:

- (7.162)a. *ø-kik-ó ní to-gbit-í-ni gutúgu bukú-tò tá-si,*  
 3SG-COND:be-FV when 1PL-fell-FV.ANT-PFV even 13.bush-13 13.ASS-all  
*bo-míkusú bá-kík-i-gu ndéke ká ɪ-sǎ*  
 2-children:1PL.POSS 3PL-NEG:be-FV-NEG F<sub>3</sub> PREP 9a-desert  
 'Even in the unlikely event that we have cut all the bushes, our  
 children will not live in the desert.'
- b. *ø-kik-ó ní tá-ká-no-gbit-í-gu gutúgu bukú-tò*  
 3SG-COND:be-FV when 1PL-NEG-*yef*-fell-FV.ANT-NEG even 13.bush-13  
*tá-si, bo-míkusú bík-o ndéke ká ɪ-sǎ*  
 13.ASS-all 2-children:1PL.POSS 3PL:sit-FV F<sub>3</sub> PREP 9a-desert  
 'Even in the unlikely event that we have not yet cut all the bushes, our  
 children will live in the desert.'

*gutúgu* 'even' preceding **kikó (ká)ní** is not acceptable.

## 7.11 Extensions

Extensions are productive derivational suffixes that can be analysed with respect to form and meaning. They change the number of arguments of the verb and/or the meaning of the verbal base. They have a reduced vowel system in that mid vowels do not occur. With respect to tone, they lack tonal distinctiveness and surface with the default L tone unless they are associated, through H-tone spreading, with a

High tone on the final vowel of a TAM melody (see 4.6.1). The extensions in Liko are Causative **-is-**, Applicative **-ɪ-**, Benefactive **-ult-**, Resultative **-ul-**, Neuter **-uk-**, Associative **-an-** and Pluractional **-ag-**. The Causative extension **-is-** is [+ATR] dominant. The vowels of the other extensions are changed into their [+ATR] counterparts in a [+ATR] context.

Both transitive and intransitive verbs can be the basis of a derivation with an extension, except the Neuter extension where only transitive basic verbs are attested. In a number of cases, the verbal base consists of a -CVC- root and a syllable with the phonological properties of an extension, but without identifiable meaning. These syllables are commonly referred to as expansions. Occurrence of a root without the expansion is usually not attested, e.g. **-kpukul-** 'rub' could be seen as **-kpuk-** plus **-ul-**, except that **-kpuk-** does not exist and **-ul-** has no independent meaning, or **-mukut-** 'throw', where the bare root **-mik-** is not found and **-it-** has no independent meaning. Verbal bases which are probably expansions are given in 7.11.9.

### 7.11.1 Causative extension -is-

The Causative extension **-is-** may be added to transitive (the first set of examples) as well as to intransitive verbs (the second set). Vowels of a [-ATR] verb root assimilate to the [+ATR] dominant extension.

(7.163)	kó-bíng-ó	9b-cut-FV	'to cut wood (with an axe)'
	kó-bíng-ís-ó	9b-cut-CAUS-FV	'to cause to cut wood'
	ká-dum-á	9b-cultivate-FV	'to cultivate'
	kó-dim-ís-ó	9b-cultivate-CAUS-FV	'to cause to cultivate'
	ká-kun-á	9b-plant-FV	'to plant'
	kó-kun-ís-ó	9b-plant-CAUS-FV	'to cause to plant'
	ká-ly-á	9b-eat-FV	'to eat'
	kó-lyólís-ó <sup>356</sup>	9b-eat:CAUS-FV	'to feed'

(7.164)	ká-báng-á	9b-fear-FV	'to fear'
	kó-bóng-ís-ó	9b-fear-CAUS-FV	'to frighten'

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<sup>356</sup> The -CV- verb root is reduplicated.



kó-lumb-ó	9b-smell-FV	'to give off a smell'
kó-lumb-ís-ó	9b-smell-CAUS-FV	'to cause to smell'
kó-púmúk-ó	9b-burst-FV	'to burst'
kó-púmúk-ís-ó	9b-burst-CAUS-FV	'to cause to explode'
ká-ikút-ó <sup>357</sup>	9b-be satisfied-FV	'to be satisfied (after a meal)'
ká-ikút-ís-ó	9b-be satisfied-CAUS-FV	'to cause to be satisfied'

Some verbs are irregular in that the underlying vowel /i/ of the Causative extension assimilates to the round value of the vowel of the verb root. It surfaces as **-us-** instead of as **-is-**.<sup>358</sup>

(7.165) kó-ńung-ó	9b-lose-FV	'to lose'
kó-ńung-ús-ó	9b-lose-CAUS-FV	'to cause to lose'
ká-zung-á	9b-become warm-FV	'to become warm'
kó-zung-ús-ó	9b-become warm-CAUS-FV	'to heat up'
kó-bwǒ	9b-grow big:FV	'to grow big'
kó-bus-ó	9b-grow big:CAUS-FV	'to cause to grow big', i.e. to make pregnant
ká-úk-á	9b-heal-FV	'to heal (e.g. a wound)'
kó-úk-ús-ó	9b-heal-CAUS-FV	'to cause to heal, to save'

The Causative extension introduces, with both transitive and intransitive verbs, a new argument to the syntactic frame of the verb. This new argument has the syntactic function of subject and the semantic role of causer. The agent-subject of the basic verb gets the semantic role of causee and is often not expressed by a noun phrase, but as an object prefix in the verb form.

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<sup>357</sup> In **káikútó**, **i-** is a (reflexive) prefix as can be seen by the vowel of the Infinitive prefix which does not harmonize with the [+ATR] value of the verb root.

<sup>358</sup> Assimilation of the underlying high unrounded vowel of the extension to the vowel of the verb root is also attested in some cases of the Benefactive and of the Neuter plus Associative extensions.

- (7.166) mbíké o-lumb-is-og-o líbó lá-nza kúgbe  
 9.pot 3SG-smell-CAUS-PLUR-FV 5:water 5.ASS-good very  
 'The pot will cause the water to taste very good.' (T2006.6)
- (7.167) mu-lókú a kúwă ndi kám-imínd-ís-ó<sup>359</sup>  
 1-man 3SG:be thus P<sub>3</sub> 9b:1.O-go holding hand-CAUS-FV  
 'The man was causing him to go holding his hand.' (T2006.10)
- (7.168) ká yigokú, sukopí Ø-ká-nzin-ís-á-gu gbukó  
 PREP 9a:return 1a.leopard 3SG<sup>P</sup>-NEG:1.O-talk-CAUS-FV<sup>P</sup>-NEG 1a.rat  
 'On the way back, leopard caused rat not to talk.' (T2006.3)

In the following example, the causee is not expressed at all, but understood:

- (7.169) mamá a kó-ńíng-ís-ó mísá mó-dumó  
 1a.mother 3SG:be 9b-cut-CAUS-FV 6:firewood 6.ASS-1a.feast  
 'Mother is causing someone to cut firewood for the feast.'

There are a few -CVCVC- verbs with **-is-** where the -CVC- root has not been found. I regard them as -CVC- verbs with a lexicalized Causative extension, e.g. **-dúgbis-** 'chase', **-totis-** 'put down, make loose from a trap'.

Periphrastic causative constructions have not been attested.

The examples given thus far are situations in which the causer is directly responsible for the effect and in which the effect almost instantly follows the cause. Some lexemes have two causative derivations, the short one, **-is-**, and a long one, **-isis-**. The latter one indicates an Indirect Causative. In Indirect Causatives, the causer of the subordinate Causative clause is generally indefinite and not expressed. Using the verb **-bang-** 'fix s.th. so that it stays in place', short and long Causatives can be shown. In (7.170a), a woman is directly responsible for drying

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<sup>359</sup> The verbal base is **-und-** 'go'. Remarkably, the epenthetic /m/ of the class 1 object prefix, which precedes vowel-initial verb roots, is repeated together with the initial vowel.

maize ears over a fire and in (7.170b), the speaker causes himself to die in a rope.

In both cases, the Causative extension is short:

- (7.170)a. *mamá o-bong-ís-i báde yá-ma-sóló kó*  
 1a.mother 3SG-fix-CAUS-FV.ANT 9.maize 9.ASS-6-seed PREP  
*ɓukú*  
 8:burning piece of wood  
 'Mother caused to fix (hang) maize ears over the fire.'
- b. *na ká-ĩ-bong-ís-ó*  
 1SG:be 9b-REFL-fix-CAUS-FV  
 'I am causing to fix (hang) myself.'

In the following example, a soldier causes someone to cause to hang a thief. In cases like this, the long Indirect Causative is used:

- (7.171) *sudá a-bong-ís-ís-i mu-tú wo-kú-ʼbá-ku*  
 1a.soldier 3SG:1.O-fix-CAUS-CAUS-FV.ANT 1-man 1.ASS-15-theft-15  
 'The soldier ordered someone to have fixed (i.e. hang) the thief.'

Another example of short and long Causatives differentiating between direct (7.172a) and indirect (7.172b) causation is:

- (7.172)a. *a-ɓín-is-o ɓánu míkí kámbwa ka-ngáma*  
 3SG-dance-CAUS-FV F<sub>2</sub> 1-child 17:front GEN-1a.chief  
 'He will cause a child to dance in front of the chief.'
- b. *a-ɓín-is-is-o ɓánu míkí kámbwa ka-ngáma*  
 3SG:1.O-dance-CAUS-CAUS-FV F<sub>2</sub> 1-child 17:front GEN-1a.chief  
 'He will order someone to have a child dance in front of the chief.'

In indirect causation, the object prefix refers not to the indefinite causee, but to the patient. In the examples below, the patient is plural and the object prefix has to be plural as well:

- (7.173)a. *sudá ʉ-bong-ís-ís-i ɓa-tú ɓó-ʼkú-ʼbá-ku*  
 1a.soldier 3SG:2.O-fix-CAUS-CAUS-FV.ANT 2-man 2.ASS-15-theft-15  
 'The soldier ordered someone to have fixed (i.e. hang) the thieves.'
- b. *\*sudá a-bong-ís-ís-i ɓa-tú ɓó-ʼkú-ʼbá-ku*  
 1a.soldier 3SG:1.O-fix-CAUS-CAUS-FV.ANT 2-man 2.ASS-15-theft-15

- c. u-*bín-is-is-o*                      *bánu* *6o-míkí* *kámbwa* *ka-ngáma*  
 3SG:2.O-dance-CAUS-CAUS-FV  $F_2$     2-child    17:front    GEN-1a.chief  
 'He will order someone to have the children dance in front of the chief.'
- d. \*a-*bín-is-is-o*                      *bánu* *6o-míkí* *kámbwa* *ka-ngáma*  
 3SG:1.O-dance-CAUS-CAUS-FV  $F_2$     2-child    17:front    GEN-1a.chief

(b) and (d) are ungrammatical, because the object prefix does not agree with the objects **batú** and **6omíkí** respectively.

One of the first examples is (7.169), where 'mother lets someone cut firewood for the feast'. In a situation in which someone issues a general order to have firewood cut, indirect causation is used:

- (7.174) *bugwě* *a*                      *kó-bíng-ís-ís-ó*                      *mísá*                      *mó-dumó*  
 1a.uncle    3SG:be    9b-cut-CAUS-CAUS-FV    6:firewood    6.ASS-1a.feast  
 'Maternal uncle is ordering to have firewood cut for the feast.'

The verb form **kó**́**bíngísísó** does not contain an object prefix. With the class 1 object prefix  $\text{̂}$ -, it would have been \***ká'**́**bíngísísó**.

The underlying vowel /i/ of the Causative extension assimilates to the high round vowel of some verbs (see 7.165). The Causative extension is repeated in cases of indirect causation. Only the first instance of the long Causative extension assimilates to the vowel of these verb roots. **-búng-** 'lose' is followed by the short Causative in (7.175a) and by the long one in (7.175b):

- (7.175)a. *míkí*    *o-búng-ús-i-ní*                      *li-fungúla*<sup>360</sup>  
 1a.child    3SG-lose-CAUS-FV.ANT-PFV    5-key  
 'The child has caused the key to get lost.'
- b. *míkí*    *o-búng-ús-ís-i-ní*                      *li-fungúla*  
 1a.child    3SG-lose-CAUS-CAUS-FV.ANT-PFV    5-key  
 'The child has caused the key to get lost.'

The interpretation of (a) is that the child had to look after the key, but had lost it. In (b), it is understood that the child had given the key to someone else who had lost it.

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<sup>360</sup> **lifungúla** is a Congo Swahili loanword, *ufunguo* 'key'.

Some verbs have both the Causative extension **-is-** and a similar shape in which the vowel has assimilated to the vowel in the verb root. In case this occurs, the derived verb with **-us-** or **-os-** usually expresses a specialized meaning.

(7.176)	ká-dǔk-á	9b-drip-FV	'to drip (e.g. a leak)'
	kó-dǔk-ís-ó	9b-drip-CAUS-FV	'to cause to drip (by making small holes) <sup>361</sup>
	kó-dǔk-ús-ó	9b-drip-CAUS-FV	'to pour slowly'
	kó-dw-ǒ	9b-move-FV	'to move'
	kó-dúfís-ó	9b-move:CAUS-FV	'to cause to sway or roll'
	kó-dúfús-ó	9b-move:CAUS-FV	'to stir, gesticulate'
	ká-ĩ-dúfús-ó	9b-REFL-move:CAUS-FV	'to be restless, e.g. in bed'
	ká-kpakp-á	9b-stick-FV	'to stick, try to get back'
	kó-kpokp-ís-óg-ó	9b-stick-CAUS-PLUR-FV	'to cause to stick (with glue)'
	kó-kpokp-ós-óg-ó	9b-stick-CAUS-PLUR-FV	'to patch up'

The derived verb **-dǔk-ús-** combined with **ǎngó** '9.blood', **kódǔkúsó ǎngó** 'to pour blood', means to kill someone.

### 7.11.2 Applicative extension **-t-**

The Applicative extension **-t-** introduces a syntactic argument with the semantic role of patient or beneficiary. The Applicative extension **-t-** is always desyllabified. In the first set, the Applicative introduces an argument with the semantic role of patient:

(7.177)a.	ká-alík-á	9b-call-FV	'to burst, to sing (birds), to call'
	ká-alík-y-á	9b:1.O-call-APPL-FV	'to call s.o.'
b.	ká-dít-á	9b-tread on-FV	'to tread on'
	ká-dít-y-á	9b-tread on-APPL-FV	'to stamp s.th. (a floor)'

In the next set, the Applicative introduces an argument which indicates that someone is disadvantaged by the action:

(7.178)a.	ká-nzún-á	9b-talk-FV	'to talk'
	ká-nzún-y-á	9b:1.O-talk-APPL-FV	'to rebuke s.o.'

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<sup>361</sup> Other meaning: 'to cause to swell'.

- b. ká-pak-á 9b-protect-FV 'to protect s.th.'  
 kǎ́-pak-y-á 9b:1.O-protect-APPL-FV 'to forbid s.o. s.th.'
- c. ká-pám-á 9b-bark-FV 'to bark'  
 kǎ́-<sup>4</sup>pám-y-á 9b:1.O-bark-APPL-FV 'to bark at s.o., blame s.o.'

(7.179)a. na ká-pak-á tú<sup>4</sup>ká-tu kǎmɪ  
 1SG:be 9b-protect-FV 13.hair-13 1SG.POSS  
 'I am protecting my hair.'

- b. na ká-pak-y-á má<sup>4</sup>mámɪ ké-kǒ tú<sup>4</sup>ká-tu  
 1SG:be 9b:1.O-protect-APPL-FV 1a.brother: 9b:1SG.O-cut:FV 13.hair-13  
 1SG.POSS  
 'I forbid my brother to cut my hair.'

The verb **-bum-** 'hit' with the Applicative extension **-t-** indicates the result of the action described by the verb:

- (7.180) ká-bum-á 9b-hit-FV 'to hit, fight'  
 kǎ́-bum-y-á 9b:1.O-hit-APPL-FV 'to fell s.o.'

The intransitive verb **-pul-** 'be immobile' with the Applicative extension makes secondary predication possible in:

- (7.181)a. mu-lúkú á-pul-a b́í-peɛɛ  
 1-man 3SG<sup>p</sup>-be immobile-FV MOD-"peɛɛ"  
 'The man remained motionless.'
- b. mu-lúkú á-pul-y-a muʒʒʒulá  
 1-man 3SG<sup>p</sup>-be immobile-APPL-FV 9.awful pain  
 'The man endured the awful pain.'

The Applicative extension **-t-** is not very productive. The function of introducing a beneficiary role has been taken over by the Benefactive extension **-ilt-**. Most new derivations with a beneficiary, both for someone who benefits from the situation expressed by the verb and for someone who is impaired by it, are formed with **-ilt-**, see the next section. There are, however, some verbs that use the Applicative extension **-t-** in new derivations introducing the role of beneficiary: verbs in which the second syllable of the basic verb ends with **-il-** or **-il-** or with **-ul-** or **-ul-**.

Examples include:

(7.182)a.	ká-gbatíl-á	9b-spread-FV	'to spread out'
	kǎ́-gbatíl-y-á	9b:1.O-spread-APPL-FV	'to spread out for s.o.'
b.	ká-tundíl-á	9b-draw lines-FV	'to draw lines'
	kǎ́-tundíl-y-á	9b:1.O-draw lines-APPL-FV	'to draw lines for s.o.'
c.	ká-kpukól-á	9b-rub-FV	'to rub'
	kǎ́-kpukól-y-á	9b:1.O-rub-APPL-FV	'to rub for s.o.'
d	ká-tumból-á	9b-explain-FV	'to explain'
	kǎ́-tumból-y-á	9b:1.O-explain-APPL-FV	'to explain for s.o.'
e.	kó-túndúl-ó	9b-stimulate-FV	'to stimulate'
	kǎ́- <sup>4</sup> túndúl-y-ó	9b:1.O-stimulate-APPL-FV	'to stimulate for s.o.'

The verbs that use the Applicative extension **-t-** to introduce a beneficiary role do not take the Benefactive extension **-ú-**. There are a few exceptions in my data, where both extensions are allowed. They are listed here:

(7.183)a.	ká-gam-á		'9b-weep-FV'
	kǎ́-gam-y-á	/ kǎ́-gam-íly-á	'to weep for s.o.'
	9b:1.O-weep-APPL-FV	9b:1.O-weep-BEN-FV	
b.	ká-ndúng-á		'9b-discover-FV'
	kǎ́- <sup>4</sup> ndúng-y-á	/ kǎ́- <sup>4</sup> ndúng-íly-á	'to discover for s.o.'
	9b:1.O-discover-APPL-FV	9b:1.O-discover-BEN-FV	
c.	ká-kúng-á		'9b-ask-FV'
	kǎ́- <sup>4</sup> kúng-y-á	/ kǎ́- <sup>4</sup> kúng-íly-á	'to ask for s.o.'
	9b:1.O-ask-APPL-FV	9b:1.O-ask-BEN-FV	
d.	kó-tumík-ó <sup>362</sup>		'9b-work-FV'
	kǎ́-tumík-y-ó	/ kǎ́-tumík-íly-ó	'to work for s.o.'
	9b:1.O-work-APPL-FV	9b:1.O-work-BEN-FV	

### 7.11.3 Benefactive extension **-ú-**

The Benefactive extension **-ú-** indicates that the action is beneficial to a person or directed against a person. The Benefactive extension introduces an argument with the semantic role of beneficiary. When the basic verb is transitive, the object of the

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<sup>362</sup> **kótumíkó** is a Congo Swahili loanword, *-tumika* 'be engaged, work'.

basic verb loses its object properties in the construction with the verb with the Benefactive extension, as is apparent by the position of the object with respect to the verb and by agreement with the object prefix. The new argument of the verb with the Benefactive extension takes over the object properties. To start with, examples of the Benefactive extension in Infinitive forms are given to make the reader familiar with vowel changes due to ATR vowel harmony (see 3.2.2), desyllabification (see 3.3.5) and non-automatic downstep (see 4.6.5).

(7.184)a.	ká-bug-á	9b-sharpen-FV	'to sharpen'
	ká- <sup>̃</sup> bug-íly-á	9b:1.O-sharpen-BEN-FV	'to sharpen for s.o.'
b.	ká- <sup>̃</sup> bák-á	9b-grow-FV	'to grow'
	ká- <sup>̃</sup> bák-íly-á	9b:1.O-grow-BEN-FV	'to grow for s.o.'
c.	kó-totís-ó	9b-put down-FV	'to put down'
	ká- <sup>̃</sup> totís-íly-ó	9b:1.O-put down-BEN-FV	'to put down for s.o.'
d.	kó-túm-ó	9b-pierce-FV	'to pierce'
	ká- <sup>̃</sup> túm-íly-ó	9b:1.O-pierce-BEN-FV	'to pierce for s.o.'

The second /t/ of the Benefactive extension **-*ut*-** is desyllabified preceding a vowel, in these examples, the final vowel **-a** (or **-o** in a [+ATR] context). The presence of the class 1 object prefix <sup>̃</sup> is shown by the nasalization of the vowel of the class 9b prefix, and in addition, by the non-automatic downstep of the H tone of the verb root caused by the floating L tone of the class 1 object prefix in (b, d) and by the non-assimilation of the vowel of the class 9b prefix to the [+ATR] value of the verb root in (c, d).

When the vowel of the basic verb root is high rounded /u u/, the first underlying high unrounded vowel of the Benefactive extension of a few verbs has a high round allomorph **-*ut*-**:

(7.185)	ká-kúng-á	9b-ask-FV	'to ask'
	ká- <sup>̃</sup> kúng-íly-á / ká- <sup>̃</sup> kúng-úly-á	9b:1.O-ask-BEN-FV	'to ask for s.o.'
	kó-tutw-ó	9b-peel-FV	'to peel'
	ká- <sup>̃</sup> tutw-íly-ó / ká- <sup>̃</sup> tutúly-ó	9b:1.O-peel-BEN-FV	'to peel for s.o.'

In (7.186a, b, c), the Benefactive is derived from an intransitive verb. The object is referred to by the object prefix as can be seen by the nasalization of the vowel of the class 9b prefix in (7.186a), by non-automatic downstep in (7.186a, c), and by



non-assimilation to the [+ATR] value in (7.186b, c). In (7.186d-g), where the basic verb is transitive, the new object of the Benefactive obligatorily occupies the object position directly following the verb and the object of the basic verb occurs later in the clause.

- (7.186)a. tíko a kǎ-<sup>4</sup>bák-íly-á yá-nza  
 9.field 3SG:be 9b:1.O-grow-BEN-FV 9.ASS-good  
 '[The crop on] the field grows well for someone (the owner).'
- b. a-ḡín-ily-o bǎnu ngámá  
 3SG:1.O-dance-BEN-FV F<sub>2</sub> 1a.chief  
 'He will dance for the chief.'
- c. tá-<sup>4</sup>kw-íly-ó ndi gbukó  
 1PL<sup>P</sup>:1.O-die-BEN-FV<sup>P</sup> P<sub>3</sub> 1a.rat  
 'We died for rat.' (T2006.3)
- d. ó-tíky-ǒ ndi mu-pumí  
 3SG<sup>P</sup>-close-FV P<sub>3</sub> 3-door  
 'He closed the door.'
- e. mu-tíky-íly-ó mǐkí mu-pumí  
 1.O-close-BEN-FV.IMP 1-child 3-door  
 'Close the door for the child!'
- f. na kó-kpumy-ó ma-lumbá  
 1SG:be 9b-hunt-FV 6-spell  
 'I am chasing away the spells.'
- g. Tapanóbi a kǎ-kpumy-íly-ó bugwákti ḡa-nyamá  
 "Tapanóbi" 3SG:be 9b:1.O-hunt-BEN-FV 1a.uncle:3SG.POSS 2-animal  
 'Tapanóbi'<sup>363</sup> is hunting animals for his uncle.'

The argument introduced by the Benefactive extension either benefits from the action of the verb or experiences a disadvantage. In the following examples, the "beneficiary" is adversely affected by the action of the verb:

- (7.187)a. kǎ-ngukan-á 9b-snore-FV 'to snore'  
 kǎ-ngukan-íly-á 9b:1.O-snore-BEN-FV 'to snore and trouble s.o.'

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<sup>363</sup> The meaning of the name is: 'we love each other at a distance' (*tapananaga kǎ buḡyí*), i.e. if we live too close, our relation will not last.



- (7.191) wa ká-am-á kó-dúk-ús-íl-ó<sup>364</sup> kó bukú  
 2SG:be 9b-limit-FV 9b-pour-CAUS-RES-FV PREP 8:burning piece of wood  
 'You are finishing by pouring slowly in the fire.' (T2006.5)

Other examples include: **-kand-** 'tie' vs. **-kand-íl-** 'be tied up', **-tund-** 'carve' vs. **-tund-íl-** 'drawn a line'.

Soms verbs in my data have **-íl-** following CVC, but the basic **-CVC-** verb has not been attested, for instance, **-bulíl-** 'regain consciousness', **-kpilil-** 'slide', **-kpíndíl-** 'tread down', **-tóbíl-** 'cry out, announce', **-wtsíl-** 'faint, pass out, wither', **-pidíl-** 'extract' and **-tikil-** 'rub, model'.

#### 7.11.5 Neuter extension **-ík-**

Schadeberg (2003:75) proposes that "a more precise semantic-syntactic label for this extension would be 'neutro-passive'. Verbs with this extension indicate that the subject is potentially or factually affected by the action expressed by the verb. (...) No agent is implied, and it is typically impossible to express the agent."

The difference in meaning between the Resultative extension **-íl-** and the Neuter extension **-ík-** is that the former indicates the result of some action, whereas the latter changes a transitive verb into an intransitive verb without agent. With the Resultative extension, the agent may be expressed.

The Neuter extension is not very productive. Derivation to intransitive verbs generally involves a combination of Neuter **-ík-** and Associative **-an-**, see the next section.<sup>365</sup> The Neuter extension **-ík-** is nearly always represented with verbs of destruction:

- (7.192) ká-nuw-á 9b-tear-FV 'to tear'  
 ká-nuw-ík-á 9b-tear-NEUT-FV 'to tear' (intransitive)  
 kó-bún-ó 9b-break-FV 'to break'

<sup>364</sup> **-dúk-us-** has a specialized meaning 'pour slowly', see 7.11.1.

<sup>365</sup> Schadeberg (2003a:76) mentions that in some languages of zone C "\*" **-an-** has taken over the function of neuter **\*-ík-**.

kó-ḡún-ík-ó 9b-break-NEUT-FV 'to break' (intransitive)

Other derivations with the Neuter extension (in all cases, the basic verb is transitive and the form with the extension is intransitive) in my data are: **-lím-** 'extinguish, put out' vs. **-lím-ík-**, **-tún-** 'cut' vs. **-tún-ík-**, **-ól-** 'break, smash, wrack' vs. **-ól-ík-** and **-yíḡ-** 'tear apart' vs. **-yíḡ-ík-**.<sup>366</sup>

#### 7.11.6 Associative extension -an-

The most productive use and meaning of the Associative extension **-an-**<sup>367</sup> is reciprocal. "Reciprocal verbs require more than one agent, and the agents are at the same time mutual patients of their action." (Schadeberg 2003:76).

- (7.193)a. ká-múy-á 9b-hate-FV 'to disapprove, hate'  
           ká-múy-án-á 9b-hate-ASS-FV 'to hate each other'  
 b. kó-sily-ó 9b-meet-FV 'to meet'  
       kó-sily-ón-ó 9b-meet-ASS-FV 'to meet each other'

Syntactically speaking, a single plural subject may fulfil the roles of agent and patient, as in the first example below. Otherwise, there are two noun phrases as in the second example, in which the first noun phrase in the canonical subject position is the subject and the other one is a prepositional phrase, preceded by **na** 'with'. In reciprocal use, there is no object prefix as can be seen from the examples below, in which the vowel of the subject prefix has assimilated to [+ATR] and where no non-automatic downstep occurs between a H tone on the subject prefix and a High-toned verb.

- (7.194) ḡa-mbánzú ḡó-sily-on-o na ḡú-galá

<sup>366</sup> This is the case if Neuter **-ík-** is the only extension. In combinations of the Neuter extension **-ík-** and the Associative extension **-an-**, the basic verb can be intransitive as well, e.g. **-pám-ík-an-** 'be cracked' from **-pám-** 'bark, crack'.

<sup>367</sup> I follow Schadeberg (2003:76) in using the label Associative for this extension, because it not only expresses reciprocity, but it also has other uses.

2-person 3PL-meet-ASS-FV with 14-tomorrow

'The men will meet each other tomorrow.'

- (7.195) kínili 6a-mbánzú 6á-múy-án-á na 6a-bílí  
 that is why 2-person 3PL<sup>p</sup>-hate-ASS-FV<sup>p</sup> with 2:1b-demon  
 'That is why men and demons hated each other.' (T2006.2)

The Associative extension is reduplicated with -VC- or -CV- verbs, e.g. **-as-** 'leave behind' vs. **-as-an-an-** 'say goodbye', **-du-** 'offend' vs. **-dw-an-an-** 'offend each other, quarrel' and **-gwi**<sup>368</sup> 'hold, grab' vs. **-gwin-on-** 'hold each other'.

The second use of the Associative extension **-an-** is to indicate that the action described by the verb is repetitive or intensive. Cases in which repetitive action is involved are exemplified in the first set, whereas the second set has intensified actions:

- |         |                |                           |  |
|---------|----------------|---------------------------|--|
| (7.196) | ká-gbǎ         | 9b-reduce:FV              | 'to reduce'                                    |
|         | ká-gban-án-á   | 9b-reduce:ASS-ASS-FV      | 'to reduce repetitively'                       |
|         | ká-ǐ-gban-án-á | 9b-REFL-reduce:ASS-ASS-FV | 'to split up, separate'                        |
|         | ká-kǒ          | 9b-cut:FV                 | 'to cut'                                       |
|         | ká-kun-án-á    | 9b-cut:ASS-ASS-FV         | 'to cut in pieces'                             |
|         | ká-zab-á       | 9b-cross-FV               | 'to cross (a river)'                           |
|         | ká-zab-án-á    | 9b-cross-ASS-FV           | 'to cross walking from one branch to the next' |
|         |                |                           |  |
| (7.197) | kó-duk-ó       | 9b-pour out-FV            | 'to pour out'                                  |
|         | kó-duk-ón-ó    | 9b-pour out-ASS-FV        | 'to collapse (e.g. a wall)'                    |
|         | ká-lóngy-á     | 9b-rebuke-FV              | 'to rebuke'                                    |
|         | ká-lóngy-án-á  | 9b-reduce-ASS-FV          | 'to growl'                                     |
|         | ká-ul-á        | 9b-break-FV               | 'to break, smash, wrack'                       |
|         | ká-ul-án-án-á  | 9b-break-ASS-ASS-FV       | 'to fight, make war'                           |

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<sup>368</sup> This is the only verb in my data where the final vowel **-a** does not occur.

An action can be regarded as repeated when plural agents are doing it (a joint action by several agents without having the notion of reciprocity), e.g.

- (7.198) no bití, kání 6a-mbánzú 6ó-lól-ón-i-ní,  
 with 9.darkness when 2-person 3PL-sleep-ASS-FV.ANT-PFV  
 á-bɪnk-a li-ɖákɥ lí-motí  
 3SG<sup>P</sup>-carry-FV 5-pot 5.NUM-one  
 'During the night, when the men had fallen asleep, he carried [away] one pot.' (T2006.2)

In addition to the usages mentioned above, the Associative extension **-an-** is used in conjunction with the Neuter extension **-ɪk-** to indicate that the subject is in a state which is the result of the action of the basic verb:

- (7.199) ká-kúl-á 9b-untie-FV 'to untie'  
 ká-kúl-ɪk-án-á 9b-untie-NEUT-ASS-FV 'to be untied'  
 ká-nan-á 9b-stretch-FV 'to stretch, make straight'  
 ká-nan-ɪk-án-á 9b-stretch-NEUT-ASS-FV 'to be straight'  
 kó-misy-ó 9b-sow-FV 'to sow'  
 kó-mis-ɪk-ón-ó 9b-sow-NEUT-ASS-FV 'to be spread, be scattered'  
 ká-pám-á 9b-crack-FV 'to bark, to crack'  
 ká-pám-ɪk-án-á 9b-crack-NEUT-ASS-FV 'to be cracked'  
 ká-tun-á 9b-light-FV 'to light'  
 ká-tun-ɪk-án-á 9b-light-NEUT-ASS-FV 'to be lit'

The Associative extension **-an-** seems to have neutro-passive use without the presence of the Neuter extension **-ɪk-** in the following verb forms: **-ɖímon-** 'be dying', **-túngan-** 'be enough, suffice', **-zúkan-** 'be surprised, jump up'. The basic -CVC- verb of these verb forms has not been attested.

### 7.11.7 Pluractional extension **-ag-**

The Pluractional extension **-ag-** has a range of uses involving plurality of the action. The action is plural because it is repetitive, habitual or durative, or a single action is made plural by having multiple subjects or objects. The Pluractional extension **-ag-** does not increase or diminish the number of arguments of the verb. Structurally, **-ag-** has the VC-shape of an extension and tonally **-ag-** behaves like an extension: it is underlyingly toneless and it surfaces with a H tone after H-tone

spreading (see 4.6.1) in the same way as other extensions in the verb form. The Pluractional extension **-ag-** occurs with all tenses and moods, like other extensions. It can have aspectual meaning, e.g. habitual, durative.

The Pluractional extension **-ag-** is frequently used to indicate repeated action. When **-ag-** is added, many dynamic verbs describing a single action get a meaning where repetition is involved, e.g. **-al-** 'cleave' vs. **-al-ag-** 'cut to pieces', **-nan-** 'stretch' vs. **-nan-ag-** 'iron (clothes)', **-táman-** 'remember' vs. **-táman-ag-** 'think', **-tín-** 'cut' vs. **-tín-ag-** 'whip'.

The following examples show repetitive use of **-ag-**:<sup>369</sup>

- (7.200)a. 6a-lúkú na 6o-kó 6á-mu-sengí 6ó-bilisy-og-o  
 2-man and 2-woman 2.ASS-3-village 3PL<sup>P</sup>-chant slogan-PLUR-FV  
 kúwǎ ndi 6é rigo hoo ! rigo hoo !  
 thus P<sub>3</sub> COMP "rigo hoo" "rigo hoo"  
 'The men and the women of the village scanted: "Rigo hoo!, Rigo hoo!"  
 (T2006.4)
- b. iyí gbukó á-lyály-ag-a kúwǎ ndi wá go wá  
 1.PRO 1a.rat 3SG<sup>P</sup>-graze-PLUR-FV thus P<sub>3</sub> there  
 'He, rat ate there every day.' (T2006.3)
- c. ngámá Ø-und-ag-ǎ ndi yí-motí<sup>370</sup>, yágo<sup>371</sup> yí-6ǎ  
 1a.chief 3SG-go-PLUR-FV P<sub>3</sub> 9.NUM-one perhaps 9.NUM-two  
 ká tumbá  
 PREP 9.month  
 'The chief went [to check his field] once, perhaps two times a month.'  
 (T2006.3)
- d. ngbínogó yi ní-nǎ 6á-zang-ág-ǎ ndi minó  
 1a.time 1.DEM.III COP-1.DEM.I 3PL<sup>P</sup>-lack-PLUR-FV P<sub>3</sub> TRACE  
 mo-lingó, mu-kó á-<sup>+</sup>pá mbunyákí líso  
 6-oil 1-woman 3SG<sup>P</sup>:1.O-give:FV<sup>P</sup> 1a.husband:3SG.POSS 5:eye

<sup>369</sup> Schadeberg (2003a) uses "repetitive" to refer to the morpheme **-a(n)g-** at the pre-FV position.

<sup>370</sup> Understood is **ngángá** '9.time'.

<sup>371</sup> Short for **yágo**.

'When they lacked oil, the woman gave her husband the eye.'

(T2006.10)

The second use of **-ag-** is habitual, which "refers to a situation characteristic of an extended period of time, so extended that the situation is viewed as a characteristic feature of a whole period." (Comrie 1976:27-8, cited in Nurse 2008:311). For example:

(7.201)a. 6a-tuté      b́i-tikil-og-ǎ      ndı      nzúyɪ      na      mo-lingó      mó-pi  
 2-old person    3PL<sup>P</sup>:REFL-rub-    P<sub>3</sub>    9.body    with    6-oil      6.ASS-black  
 PLUR-FV

'The forefathers used to rub their bodies in with black oil.' (T2006.6)

b.      kínili      t́n-ag-a      kúwa      6e-títí      kú-silí      wa-bukú-tò  
 that's why    1PL:see-    thus    2+9:9a-anthill    17-bottom    17.ASS-13.bush-13  
 PLUR-FV

'That is why we always see anthills under bushes.' (T2006.10)

The next use of **-ag-** is durative, referring to a situation that lasts over a period of time. In the example below, **-ag-** indicates that it takes some time to tie up the chief:

(7.202)      nzúka      ó-pup-ǎ      ndı      kó      tutú,      á-kand-ag-ǎ  
 1a.snake    3SG<sup>P</sup>-come out-FV    P<sub>3</sub>    PREP    9.forest    3SG<sup>P</sup>:1.O-tie-PLUR-FV  
 ndı      ngámá      nzúyɪ      yá-sɪ      kádwe      kúkwakú      ká      mu-nókú  
 P<sub>3</sub>    1a.chief    9.body    9.ASS-all    up to    down there    PREP    3-mouth  
 'A snake came out of the forest, he was winding around the chief, the whole  
 body, all the way to his mouth.' (T2009.5)

When the Pluractional extension with durative use co-occurs with the Perfective aspect suffix **-ní** in post-FV position, it indicates that the situation has lasted for some time before the action is completed. Before the attack described in the above example, chief Kɔ̀pɪ had given an object that represented his forefather to a young man who had hidden it in a space between tree roots. When the young man saw that the chief was in danger, he searched for his 'forefather' and asked him:

(7.203)      yě      ba,      bá-gy-a      kúwa      wánu      búní      kyé      nzúka  
 excuse me!    sir    3PL-do-FV    thus    here    how    because    1a.snake  
 a-kond-óg-i-ní      ngámá      nzúyɪ      yá-sɪ ?  
 3SG:1.O-tie-PLUR-FV.ANT-PFV    1a.chief    9.body    9.ASS-all



'Excuse me sir, how should one act here, because a snake has wound completely around the chief, his whole body?' (T2009.5)

The other passage where the same verb is used twice, the second time with the Pluractional extension and Perfective aspect, is from a text in which **si-bĩ** 'sr:1-tortoise', often a malignant character in Liko stories, disturbs the good relationship between the friends Madapuwa and Madı̀pɔ̀pɔ̀ by going from one to the other and talking scandal. The first time the verb **-bálkan-** 'pass around, make a detour'<sup>372</sup> is used, the form has no aspectual marking and tells that tortoise just met Madı̀pɔ̀pɔ̀:

(7.204) si-bĩ            á-<sup>4</sup>tók-y-ıly-ǎ                            ndı gɔnı lt-gundú,  
 sr:1-tortoise 3SG<sup>P</sup>:1.O-leave-APPL-BEN-FV P<sub>3</sub> also 5-journey  
 á-bál-tk-an-a       kú ká Mádı̀pɔ̀pɔ̀ na á-bĩky-ǎ ndı bÉ  
 3SG<sup>P</sup>-tie-NEUT-ASS-FV there PREP "Madı̀pɔ̀pɔ̀" and 3SG<sup>P</sup>-say-FV P<sub>3</sub> COMP  
 'Tortoise left him [Madapuwa] [to go on] a journey too, he passed the  
 place where Madı̀pɔ̀pɔ̀ was and said to him!' (T2009.9)

The second time **-bálkan-** has both the Pluractional extension **-ag-** and the Perfective aspect suffix **-nı́**. Tortoise's passing around from one to the other is completed; he has managed to destroy the friendship:

(7.205) ká mǒngónı mi ní-mó má-ba mó, Madapuwa  
 PREP 6:news 6.DEM.III COP-6.DEM.I 6.NUM-two 6.DEM.I "Madapuwa"  
 ıbú na Mádı̀pɔ̀pɔ̀, bayá<sup>373</sup> kabú na yukánána  
 2.PRO and "Madı̀pɔ̀pɔ̀" 9.trust 3PL.POSS and 9a:understanding  
 kabú á-pung-ǎ ndı kó-sy-ó, kyé mu-múyónıso<sup>374</sup>  
 3PL.POSS 3SG<sup>P</sup>-start-FV P<sub>3</sub> 9b-end-FV because 1-instigator  
 bÉyɔ ka si-bĩ, ǎ ndı nt<sup>375</sup> u-ból-ík-y-ón-óg-i-nı́  
 called sr:1-tortoise 3SG-be P<sub>3</sub> while 3SG:2.O-tie-NEUT-APPL-ASS-PLUR-  
 FV.ANT-PFV

<sup>372</sup> The basic verb is **-bál-** 'tie at the same level (e.g. sticks when building a house)'.

<sup>373</sup> Short for **baılyá** 'trust, belief'.

<sup>374</sup> From **-múy-** 'dislike, hate', with the Associative extension **-an-** and the Causative extension **-is-**, **-múyonis-** 'cause to hate e.o.'.

<sup>375</sup> Short for **kánt** 'when, while, at the time'.

'At these two news accounts, Madapuwa and Madipɔpɔ, their trust and mutual understanding started to end, because the instigator tortoise was present, he had passed around them.' (T2009.9)

Other examples of co-occurrence of the Pluractional extension **-ag-** and the Perfective aspect suffix **-ní** are:

- (7.206)a. ɪbú bá-sɪ bó-misík-ón-óg-i-ní<sup>376</sup>  
 2.PRO 2.ASS-all 3PL-disperse:NEUT-ASS-PLUR-FV.ANT-PFV  
 'They have all dispersed.' (T2006.1)
- b. nó-úk-óg-ó-ní dagã-tu, ma-sikúǎngí, mangá  
 1SG<sup>P</sup>-heal-PLUR-FV<sup>P</sup>-PFV 13.arrow-13 6-fish hook 9.mango  
 'I have saved raffia arrows, fish hooks, mangos.' (T2009.6)
- c. Gbađi á-<sup>4</sup>kúl-a sukopí. nýs áka yó sukopí  
 "Gbađi" 3SG<sup>P</sup>:1.O-untie-FV 1a.leopard when only 9.DEM.I 1a.leopard  
 ín-á bÉ bǎ-<sup>4</sup>kúl-óg-i-ní, á-mbumbt-a a-mbőkú Gbađi  
 3SG<sup>P</sup>:see-FV<sup>P</sup> COMP 3PL:1.O-untie- 3SG<sup>P</sup>:1.O- 1b-old man "Gbađi"  
 PLUR-FV.ANT-PFV pinch-FV  
 'Gbađi untied leopard. As soon as leopard saw that he had been untied, he grabbed old Gbađi [with his claws].' (T2008.5)

The fourth use of the Pluractional extension is to indicate plurality of the subject or the object. A more or less extended period of time is involved in which the action is performed. Examples of the plurality of the subject is:

- (7.207)a. 6a-mbánzú bó-kw-óg-á ndi ká lúnga  
 2-person 3PL<sup>P</sup>-die-PLUR-FV<sup>P</sup> P<sub>3</sub> PREP 5:war  
 'Masses of people died in the war.'
- b. ní-6s 6o-túgbö bá-ná-bum-an-ag-á na  
 COP-2.DEM.I 2-strong man 3PL-INCH-fight-ASS-PLUR-FV with  
 6a-lúkú 6a-dǎbu  
 2-man 2-s.o. of same age:3PL.POSS  
 'Those who are strong men started to fight with men of their age.'  
 (T2006.2)

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<sup>376</sup> The basic verb is **-misi-** 'sow'. With the Neuter and the Associative extensions, the meaning of **-misikon-** is 'be spread'.

In (b), multiple subjects or multiple object may be referred to.

Plural objects are exemplified by the following sentences:

- (7.208)a. wǐ-bub-ag-a                      b́é      ɔ-mwóǵ-ɔ                      ɓa-nyamá  
 2SG:REFL-praise-PLUR-FV    COMP    2SG:2.O-kill:PLUR-FV    2-animal  
 'You praise yourself that you kill animals.' (T2006.1)
- b. mo-lingó mi ní-mó a-mwóǵ-ɔ-tú<sup>377</sup>      ǵoní pándá ká      nzúyi  
 6-oil 6.DEM.III                      3SG/PL-kill:PLUR-FV-      also      9.scabies    PREP    9.body  
 COP-6.DEM.I                      INS  
 'This oil also kills scabies on the body.' (T2006.6)
- c. a-kóǵó                      nǎ      a-tí-pag-a                      má-búǵu kú-mbúso  
 1b-banana shoot    1.DEM.I    3SG-1PL.O-give:PLUR-FV    6-banana    17-back  
 'This banana shoot will give us bananas later.' (T2006.7)
- d. ɓó-mumul-ag-ǎ                      ndi ɓo-míkí ká      mu-sengí má-si  
 3PL<sup>P</sup>:2.O-round up-PLUR-FV    P<sub>3</sub>    2-child    PREP    3-village    3.ASS-all  
 'They rounded up all the children of the village.' (T2006.4)

Some -CVCVC- verbs with **-ag-** have no -CVC- counterpart and refer to a situation which lasts over a period of time. Examples are **-kítáǵ-** 'pass', **-nzukpag-** 'stare wide-eyed', **-sanzag-** 'go towards the zenith (sun)', **-sílog-** 'consume' and **-wáyag-** 'dissolve'.

### 7.11.8 Combinations of extensions

Verb structures may contain more than one extension. Some combinations are shown in the sections above. Here, I will first present examples from texts, before summarizing the probable order of extensions in Liko.

The Neuter extension **-ik-** precedes other extensions, e.g. Causative **-is-** in (7.209a) and Associative **-an-** in (7.209b):

- (7.209)a. ká-tík-ík-ís-ó      9b-send-NEUT-CAUS-FV      'to cause to be sent'  
 b. ká-pút-ík-án-á      9b-destroy-NEUT-ASS-FV      'to be destroyed, out of shape'

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<sup>377</sup> Vowel copy after height coalescence has applied to the sequence of the high vowel of the [-ATR] -CV- verb and the final vowel **-a**.

In (7.205), the Neuter extension precedes the Applicative extension.<sup>378</sup>

The Causative extension **-is-** precedes Applicative **-t-** in (7.210a), Benefactive **-lt-** in (7.210b, c), Resultative **-lt-** in (7.210d) and Associative **-an-** in (7.210e):

- (7.210)a. im-ig-ís-y-ó-kú líso kǎmɪ  
 1SG.O-return-CAUS-APPL-FV-DIR 5:eye my  
 'Give me back (cause to return) my eye.'
- b. a-bǎktĩ ã-pik-ís-íly-i-ní ndáɓu  
 1b-father:3SG.POSS 3SG:1.O-build-CAUS-BEN-FV.ANT-PFV 9.house  
 'His father had caused him to build a house for him.'
- c. ú-monis-ily-ǎ ndt ɓo-míkakí ká-gbɪt-á bumó  
 3SG<sup>P</sup>:2.O-indicate:CAUS-BEN- P<sub>3</sub> 2-child:3SG.POSS 9b-fell-FV 9.palm nut  
 FV  
 'He taught (caused to indicate) his children [how to] cut palm nuts.'
- d. st-panání-sɔ sá-sɪ ní-sɔ wǎ-wonís-íl-á ndt  
 19-love-19 19.ASS-all COP-7.DEM.I 2SG<sup>P</sup>:1.O-show:CAUS-RES-FV<sup>P</sup> P<sub>3</sub>  
 'All the love which you showed to someone.'
- e. to-túm-is-on-o ma-mbengí ká st-panání-sɔ sá-nza  
 1PL-fill-CAUS-ASS-FV 6-heart PREP 19-love-19 19.ASS-good  
 'We will cause to fill each other the hearts to good love.', i.e. we will encourage one another to pure love

The Associative extension **-an-** follows Applicative **-t-** in (7.211a) and Benefactive **-lt-** in (7.211b, c):

- (7.211)a. ma-syé má-kpu ɓá-kó-sil-y-on-og-i-gǔ ndt ɓatǎ  
 6-day 6.ASS-big 3PL-NEG-arrive-APPL-ASS-PLUR-FV-NEG P<sub>3</sub> again  
 'Not long afterwards.', literally, 'many days could not meet each other again' (*T2009.21*)
- b. ɓa-kɔndɔlɔ ɓǎ-ɗak-ɪly-an-ǎ ndt  
 2-sheep 3PL<sup>P</sup>:1.O-climb-BEN-ASS-FV P<sub>3</sub>  
 'The sheep climbed each other for him.' (*translated Genesis 30:39*)

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<sup>378</sup> The Neuter extension preceding the Benefactive or the Resultative extension has not been found.

- c. sukopí ká-úkán-á b́éyó, ngũ á-sy-o,  
 1a.leopard 9b-hear-FV like that 9.strength 3SG<sup>P</sup>:1.O-finish-FV  
 í-ny-íly-on-og-o wá áka wá  
 3SG<sup>P</sup>:REFL-urinate-BEN-ASS-PLUR-FV there on the spot  
 'Leopard hearing that, strength left him, he urinated unconsciously right  
 there.'<sup>379</sup> (T2008.10)

There are no combinations of the Associative extension **-an-** and the Resultative extension **-il-** in my data.

The Pluractional extension **-ag-** occurs with every extension and always occurs as the last extension in a verb form.

Based on the data available, the most likely order of combinations of extensions is:

- (7.212) Neuter Causative Applicative **-i-** Associative Pluractional  
**-ik-** **-is-** Benefactive **-il-** **-an-** **-ag-**  
 Resultative **-il-**

This corresponds to the neutral order of Bantu extensions, "CARP" (Causative, Applicative, Reciprocal, Passive (Hyman 2002)). Recall that Liko does not have a Passive extension.

There are verb forms where the Causative extension does not precede, but follows the Associative, e.g.:

- (7.213) ká-dund-á 9b-touch-FV 'to touch'  
 kó-dund-ón-ís-ó 9b-touch-ASS-CAUS-FV 'to join'  
 ká-úkán-án-á 9b-hear-ASS-FV 'to agree'  
 ká-ukón-ón-ís-ó 9b:1.O-hear-ASS-CAUS-FV 'to reconcile with s.o.'

In these cases, the scope of the Causative extension includes the Associative. The Causative extension may be added more than once to a verbal base. If another extension has been added to a verbal base with the Causative extension, then, depending on the semantics of the verb, the Causative extension can be added

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<sup>379</sup> Because of fright for a shrew which, of course, is bad for his status as king of the animals.

again with the existing verbal base in scope. Take for example **káibó** 'to know', **káibísó** 'to make known' and **káibísikónó** 'to be known', the latter form with the Causative, Neuter and the Associative extensions. The Causative extension can be added again to the derived form, yielding **káibísikónísó**<sup>380</sup> 'to cause to be known'. Another verbal base in which two Causative extensions are attested is **káinísónísó**<sup>381</sup> 'to cause to appear', based on **káuná** 'to see', **káinísó** 'to cause to see' and **káinísónó** 'to appear'.

### 7.11.9 Expansion

Expansions refer to segmental material following a -CVC- verb root, that cannot be analysed as a productive extension with either a change in the number of arguments or with a consistent change in the meaning of the verb. Some expansions have a shape that may be recognizable as a Bantu extension. VC shapes in -CVCVC- verbs that occur with some frequency are **-an-**, **-ik-**, **-uk-** and **-ul-**.

The Associative extension **-an-** is used mainly to indicate reciprocity with additional repetitive/intensive and neutro-passive usages. In some instances of VC shape **-an-**, there does not seem to be a common semantic meaning related to **-an-**: **-bóman-** 'should', **-bimon-** 'come near', **-kwanan-** 'should', **-kpakyan-** 'travel', **-nginan-** 'reflect', **-ngókan-** 'snore', **-nyakan-** 'appear suddenly' and **-táman-** 'remember, think'. These verb forms do not occur with **-an-**.

In a few -CVCVC- verbs, **-ik-** resembles the Neuter extension but it lacks its properties. The following -CVCVC- verbs in my data are transitive and active with the agent performing the action: **-bunk-** 'carry', **-didik-** 'bend down' and **-tíndik-** 'push over'. A corresponding -CVC- root has not been found. These verbs do not have the neutro-passive meaning represented by the extension **-ik-**.

The following verbs have **-uk-**, e.g. **-kpómuk-** 'talk', **-bumbuk-** 'jump', **-púmuk-** 'burst' and **-zuzuk-** 'get up'. The last three share the sense of 'moving out of some original position'.

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<sup>380</sup> **ká-ib-ís-ík-ón-ís-ó** '9b-know-CAUS-NEUT-ASS-CAUS-FV'.

<sup>381</sup> **ká-in-ís-ón-ís-ó** '9b-see-CAUS-ASS-CAUS-FV'.

One verb in my data has **-ul-** following a **-CVC-** root, **-tángul-** 'read, recite' vs. **-táng-** 'count'. The following verbs lack a **-CVC-** basic verb: **-bókul-** 'suspect', **-dukul-** 'continue', **-gbulul-** 'thunder (of rain)', **-gbundul-** 'pound', **-kungul-** 'surround', **-kpukul-** 'rub', **-súngul-** 'succeed, to end in or at', **-túndul-** 'stimulate', **-tumbul-** 'explain', **-tungbul-** 'help, support', **-vukul-** 'sit down (pejorative)', **-zotul-** 'be surprised'.<sup>382</sup>

Other final VC shapes in **-CVCVC-** structures where the basic **-CVC-** root has not been attested are listed below. Each shape rarely occurs and the final VC does not seem to have an identifiable meaning.

(7.214)	-zakad-	'hesitate'
	-búsal-	'forget'
	-zıgıb-	'sieve'
	-stıkd-	'tickle'
	-piling-	'twist'
	-stıks-	'feel, caress'
	-gubıt-	'cover a roof'
	-tulub-	'roll, sprawl'
	-mbukud-	'dig using fingers'
	-dúkuf-	'fold, bend'
	-kpukum-	'rinse the mouth'
	-zugus-	'itch'
	-lökut-	'boil'

## 7.12 Derivation to nouns, adjectives and adverbs

### 7.12.1 Verb-to-noun derivation

Several productive processes are involved in the formation of deverbative nouns. The process involves two parts: the derivation of a nominal stem from a verbal base<sup>383</sup> by the addition of a word-final suffix, and the assignment of the derived

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<sup>382</sup> Some of these verbs may have the Resultative extension **-ıl-** with assimilation to the round vowel of the first syllable of the verb root.

<sup>383</sup> The verbal base may be simple, consisting only of a verb root, or extended, consisting of

nominal stem to a nominal class (or gender) (Schadeberg 2003:79). Deverbative nouns have a wide range of meanings.

### a. Agent nouns

Several processes are employed in deriving an agent noun from a verbal base. These processes have various degrees of productivity. Two processes involve the nominalization suffix **-á**. The first process is productive, the second seems to have gone out of use. Other processes, marked by word-final high vowels, are presented at the end of this section.

Firstly, the productive process to derive an agent noun from a verb involves repeating the consonant and the first vowel of the verb root, adding the nominalization suffix **-á** to the verbal base and assigning the nominal stem to class 1 (the class 2 prefix is added in brackets). The first TBU of the verbal base is associated with the primary tone of the verb:

(7.215)	<i>mʊ-kúkʊng-á</i> <sup>384</sup> , (6a-)	'1-begger'	< -kúng-	'ask'
	<i>mʊ-lílik-á</i> , (6a-)	'1-trapper'	< -lík-	'trap'
	<i>mʊ-bubuuly-ó</i> , (6o-)	'1-s.o. who harvests rice'	< -buuli-	'harvest'
	<i>mʊ-bubusy-á</i> , (6a-)	'1-burner'	< -busɪ-	'burn'
	<i>mʊ-pípiik-ó</i> , (6o-)	'1-builder'	< -pík-	'build'

The nominalization suffix has a H tone in the above examples, but when it follows a H tone, it is changed to a L tone (see 4.6.6). This happens when the verb root is monosyllabic with a primary H tone:

(7.216)	<i>mʊ-lyály-a</i> , (6a-)	'1-eater'	< -lí-	'eat'
	<i>mʊ-mwómw-o</i> , (6o-)	'1-drinker'	< -mú-	'drink'
	<i>mʊ-mwómw-o</i> , (6a-)	'1-s.o. who ill-treats'	< -múu-	'kill'
	<i>mʊ-twátw-a</i> , (6a-)	'1-skilled archer'	< -tú-	'hit the target'

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a verb root followed by one or more extensions, see 7.2.

<sup>384</sup> In this section and the next one, I have indicated the nominalization suffix and the suffix in derived adjectives with a hyphen. For convenience, this is not done in the other parts of this book.



**-da** 'come' has a deverbative stem with the Directional suffix **-kú**: **mu-dodokú** '1-visitor'.

Monosyllabic verbs reduplicate the verbal base together with the final vowel. If the last vowel of the verbal base is subject to height coalescence preceding the verb-final vowel **-a**, as in **-móu-** 'kill' (/u-a/ → /ɔ/), then the resulting mid vowel is copied. When a monosyllabic verb has a L tone, the nominalization suffix has a H tone, e.g. **mu-sosó**, (**6a-**) '1-s.o. who harvests rice', from **-su-** 'weed'.

Secondly, agent nouns are derived from verbs by adding the nominalization suffix **-á** to the verbal base and assigning the nominal stem to class 1. The difference with the first process is that there is no reduplication in the second one.

- (7.217) **mu-kwanan-á**, (**6a-**) '1-person of value' < **-kwanan-** 'should'  
**mu-kpakyán-á**, (**6a-**) '1-traveller, walker' < **-kpakyan-** 'walk'  
**mu-ndondulá**, (**6a-**) '1-biting midge' < **-ndondul-** 'stick in'  
**6a-6úkutan-á**<sup>385</sup> '2-s.o. of same kin' < **-6úkút-** 'give birth'

The first two agent nouns always occur preceded by **mu-tú** '1-man': e.g. **mutú mukwananá**.

Examples of the application of this process to agent nouns in classes 1a or 1b:

- (7.218) **gbit-á**, (**6a-**) '1a.octopus'<sup>386</sup> < **-gbit-** 'bite'  
**á-púk-átu**, (**6ă-**)<sup>387</sup> '1b-premature baby' < **-púk-** 'leave quietly'  
**o-sumb-o**, (**6o-**) '1b-insect, sp.'<sup>388</sup> < **-sumb-** 'burn'  
**o-twógõ**, (**6o-**)<sup>389</sup> '1b-good speaker' < **-tú-** 'make'

<sup>385</sup> Class 1 **mu-6úkút-an-á** exists but is less common; **-an-** is the Associative extension used here to indicate reciprocity, see 7.11.6.

<sup>386</sup> The word **gbutá** '1a.octopus' is regarded as a river monster, e.g. **mumbánzú kamíná gbutá ókwó** 'If a man sees an octopus, he dies' (**mu-mbánzú** Ø-**kam-ín-á gbutá**, **ó-kw-ó** 1-man 3SG-COND:1.O-see-FV 1a.octopus 3SG<sup>P</sup>-die-FV<sup>P</sup>). The fatality is expressed by the Past form of the verb 'to die'.

<sup>387</sup> **-tu** (following the nominalization suffix) is a realization of the Insistive enclitic **-tá**, see 7.7.4.

<sup>388</sup> If its liquid comes into the eye, it hurts.

Deriving an agent noun in classes 1a or 1b from verbs is no longer productive.

Tone assignment in the derived forms in classes 1a and 1b is not regular.

### b. Actions, results, instruments

The same processes that are used to derive agent nouns are employed in deriving nouns which refer to the action described by the verb (action nouns), to the product or result of an event described by the verb (result nouns) or to an instrument used to accomplish the action represented by the verb (instrument nouns). These nouns are derived by adding the nominalization suffix **-á** to the verbal base and assigning the nominal stem to a class or gender. Deriving action, result and instrument nouns is productive. The surface tone on the nominalization suffix is less regular than in the case of productive derivation to agent nouns in class 1. Here are examples of noun classes with deverbative nouns in my data. If a plural exists, its class prefix is added in brackets.

(7.219)	dúm-á, (6a-)	'1a.secret'	< -dúm-	'have sex' (man)
	a-gbǔm-a, (6a-)	'1b-brake'	< -gbǔm-	'forbid, stop'
	o-mbomb-ó, (6o-)	'1b-fright'	< -mbomb-	'fear'
(7.220)	mǔ-kungy-á	'3-imitation'	< -kungi-	'try'
	mǔ-nzin-á	'3-speech'	< -nzin-	'speak'
	mǔ-pǔly-á	'3-pardon'	< -pǔli-	'forgive'
	mǔ-wá	'3-scalpel'	< -wá-	'shave'
(7.221)	li-bín-o, (mo-)	'5-dance' <sup>390</sup>	< -bín-	'dance'
	li-giny-ó, (mo-)	'5-taboo'	< -gini-	'reject'
	li-lúng-o, (mo-)	'5-breast'	< -lúng-	'nurse'
	li-dyódý-o	'5-taste'	< -dí-	'lap up, try'
	li-twót-w-o	'5-making'	< -tú-	'make'
	lɪ-kɔk-ɔ	'5-rice or maize harvest'	< -ku-	'cut'
	lɪ-kók-ɔ	'5-cough'	< -kú-	'cough'

<sup>389</sup> **-og-** (preceding the nominalization suffix) is the Pluractional extension **-ag-**, see 7.11.7.

<sup>390</sup> This is a generic term.

(7.222)	ful-ó	'9.swelling'	< -ful-	'swell'
	píkít-á	'9.run'	< -píkít-	'run'
	ı-bıb-á	'9a-honour'	< -bıb-	'praise'
	ytángúl-á	'9a:lamentation'	< -tángúl-	'recite'
	yǐgyogyıs-ó	'9a:sorrow'	< -ǐ-gyogyıs-	'be in trouble'
	yǐgbat-á	'9a:surface'	< -gbat-	'spread'
	yǐbuník-á	'9a:airs'	< -buník-	'lift'

The class 9a prefix **ı-** is desyllabified preceding (reflexive) prefix **ǐ-** of the verbal base.

Finally, two sets of action or result nouns in classes 14 and 15:

(7.223)	bu-mbomb-ó	'14-slowness to react'	< -mbomb-	'fear'
	bu-bung-á	'14-happiness'	< -bung-	'improve'
(7.224)	ku-bá'ng-á-ku	'15-fear'	< -báng-	'fear'
	ku-luk-á-ku	'15-sculpture'	< -luk-	'mould'
	ku-bɔb-ó-ku	'15-lie'	< -bu-	'deceive'

### c. State nouns

State nouns describe a state which is the result of performing the action of the verb. Deverbative state nouns are derived from verbs by means of the addition to the verbal base of prefix **kǐ-**, the nominalization suffix **-a** and a floating H tone word-finally (like adjectives derived from verbs, see 7.12.2):

(7.225)	ki-dúkuf-ǒ	'9.s.th. bent'	< -dúkuf-	'fold, bend'
	kǐ-gyagy-ǎ	'9.s.th. turned bad'	< -gyagt-	'suffer, punish'
	kǎlá	'9.s.th. split'	< -al-	'split'
	kǐbǒ	'9.s.th. known'	< -ib-	'know'
	kúusó <sup>391</sup>	'9.s.th. asked'	< -uus-	'ask'

In the last three examples, the prefix vowel is lost through V<sub>1</sub>-elision (see 3.3.1).

Derived state nouns are often used attributively in associative constructions, where the first noun is the head followed by an associative prefix and the state noun, e.g.:

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<sup>391</sup> I do not know why there is a surface LH tone on the first TBU of this derived noun.

(7.226)	mu-tú	wa-kĩtbǎ	'a person who boasts'
	1-man	1.ASS-9.s.th. honoured	
	míkí	wa-kiṭúṭusalǎ	'a forgetful child'
	1a.child	1.ASS-9.s.th. forgotten	
	mu-sáki	má-kǎǎ	'chopped firewood'
	3-firewood	3.ASS-9.s.th. split	
	li-kpumóká	lá-kĩbǒ	'a public affair'
	5-thing	5.ASS-9.s.th. known	
	ma-lílí	má-kǎmbǎ	'cooked food'
	6-food	6.ASS-9.s.th. cooked	

The verbal bases of the first two and the final example are **-ĩtb-** 'honour oneself', **-ṭusal-** 'forget' and **-amb-** 'cook'.

#### d. Manner nouns

Manner nouns refer to the act described by the verb or the way in which it is performed. Deverbative manner nouns are derived from verbs by repeating the initial CV of the verb root, adding the nominalization suffix **-á** to the verbal base and assigning the nominal stem to class 5 (usually the plural form is not used). The first TBU of the derived stem is associated with the primary tone of the verb:

(7.227)	li-mamak-á	'5-way of throwing'	< -mak-	'throw'
	li-tútumb-á	'5-way of lifting'	< -túmb-	'lift'
	li-uusy-ó	'5-diversion'	< -usi-	'turn off course'
	li-ṭubungusy-ó	'5-preparation'	< -ṭungusi-	'repair'
	li-ṭúbuuly-ó	'5-protection'	< -ṭúuli-	'guard'
	li-bubuuly-ó	'5-harvesting rice'	< -buuli-	'harvest'

#### e. Nouns derived from verbs with suffixes **-i**, **-i** or **-u**

High vowels /i u/ occur as nominalization suffix in deverbative nouns, with a wide range of meanings, including agent nouns. The nominalization suffix **-i** is [+ATR] dominant. The tone of these suffixes surfaces with a H tone, unless the suffix is preceded by a H tone. There are exceptions where the suffix has a H tone following another High.

Examples of nominalizations with suffix **-i** are:

(7.228)	a-dundl-í, (6a-)	'1b-anaesthesia'	< -dundl-	'anaesthetize'
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mU-tíw-í, (tíwí)	'3-advice'	< -tíw-	'advise'
mU-támanag-í	'3-thinking'	< -támanag- <sup>392</sup>	'remember'
mU-ngúkan-í	'3-snoring'	< -ngúkan-	'snore'
lI-kwanan-í	'5-straightness'	< -kwanan-	'should'
ǂU-síktl-í	'14-funniness'	< -síktl- <sup>393</sup>	'insult'

Examples of nominalizations with suffix **-í** are:

(7.229) i-zong-í, (ǂe-)	'1c-idiot'	< -zǎng-	'miss the objective'
mu-wonisil-í, (ǂo-)	'1-teacher'	< -wonisili- <sup>394</sup>	'teach'
mu-yoyis-í, (ǂo-)	'3-rebuke'	< -yoyis-	'admonish'
mu-yúkum-í	'3-breathing'	< -yúkum-	'breathe'
li-ǂúnik-í, (mo-)	'5-fracture'	< -ǂúnik- <sup>395</sup>	'be broken'
li-ǂúkút-í, (mo-)	'5-birth'	< -ǂúkút-	'give birth'
ǂU-kpílil-í	'14-going down'	< -kpílil-	'slide'
ǂU-zong-í	'14-stupidity'	< -zǎng-	'miss the objective'

Examples of nominalizations with suffix **-U** are:

(7.230) mU-gam-ú, (gamú)	'3-call' (bird)	< -gam-	'cry'
mU-pám-U	'3-bark'	< -pám-	'scream'
mU-tú-U	'3-advice'	< -tú-	'quote'
lI-gab-ú, (ma-)	'5-trade'	< -gab-	'sell'
lím-b-U, (ma-)	'5-song'	< -ím-b-	'sing'
lI-zab-ú, (ma-)	'5-bridge'	< -zab-	'cross'
ǂU-b-ú, (ǂa-)	'9.story'	< -ǂU-b-	'tell'

### 7.12.2 Verb-to-adjective derivation

Derivation of adjectives from verbal bases is productive. The process involves the addition of the suffix **-a** and a word-final floating H tone. Derived adjectives take

<sup>392</sup> The verb root is **-táman-** 'remember' with the Pluractional extension **-ag-**, see 7.11.7.

<sup>393</sup> The verb root is **-síkt-** 'insult' with the Resultative extension **-il-**, see 7.11.4.

<sup>394</sup> The verb root is **-wan-** 'show' with the Causative extension **-is-** and the Benefactive extension **-il-**, see 7.11.8.

<sup>395</sup> The verb root is **-ǂún-** 'break' with the Neuter extension **-ik-**, see 7.11.5.

an adjective prefix which agrees with the noun they modify. They occur in noun phrases and - when the referent is known from the context - independently.

Adjectives derived from verbs are realized with the primary tone of the verb (L or H on the first TBU) followed by L tones. The final vowel surfaces with a LH tone after the association of the word-final floating H tone. Non-automatic downstep occurs when an adjective prefix with a H tone precedes a High-toned verb, see 4.6.5.

Examples of adjectives derived from verbs with the class 5 adjective prefix, referring to *li-kpomóká* '5-thing':

(7.231)	<i>lí-<sup>4</sup>fá</i>	'5.ADJ-dried up'	< -fá-	'dry'
	<i>lí-pǎ</i>	'5.ADJ-rotten'	< -pǔ-	'rot'
	<i>lí-<sup>4</sup>búw-ǎ</i>	'5.ADJ-wrapped'	< -búw-	'wrap'
	<i>lí-ful-ǒ</i>	'5.ADJ-swollen'	< -ful-	'swell'
	<i>lí-gbókumy-ǎ</i>	'5.ADJ-incubated'	< -gbókum-	'brood'
	<i>lí-<sup>4</sup>púmuk-ǒ</i>	'5.ADJ-sprouted'	< -púmuk-	'sprout'

Other examples include:

(7.232)a.	<i>mú-nzíná</i>	<i>mú-husy-ǒ</i>	'senseless talking'
	3-speech	3.ADJ-miss	< -husi- 'miss'
b.	<i>písi</i>	<i>yí-<sup>4</sup>tg-ǎ</i>	'a tortuous road'
	9.path	9.ADJ-bend	< -tg- 'bend'

Examples of non-automatic downstep in the context of two adjacent H tones across a morpheme boundary are:

(7.233)a.	<i>bo-tikító</i>	<i>bú-<sup>4</sup>báky-ǎ</i>	'spit saliva' <sup>396</sup>
	2-saliva	2.ADJ-spit	< -bákt- 'spit'
b.	<i>gní</i>	<i>yí-<sup>4</sup>tán-ǎ</i>	'ripe bananas'
	9.banana	9.ADJ-ripe	< -tán- 'ripen and changing the colour'
c.	<i>mu-pumí</i>	<i>mú-<sup>4</sup>húkw-ǒ</i>	'an open door'
	3-door	3.ADJ-open	< -húku- 'open'

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<sup>396</sup> In Liko culture, spitting on the ground is a sign of reconciliation.

Remarkably, the primary L tone of the verb is changed into a H tone in derived adjectives when it is preceded by an adjective prefix with a L tone. The following examples are derived from the verbs **-bɪlɪ-** 'regain consciousness', **-bɪnk-** 'carry' and **-zakad-** 'hesitate':

- (7.234)a. *mU-tú*    *mU-bɪlɪl-ǎ*    'a man who regained consciousness'  
 1-man    1.ADJ-regained consciousness
- b.        *mǎnda*    *mU-bɪnk-ǎ*    'a carried corpse'  
 1a.corpse 1.ADJ-carried
- c.        *míkí*        *mU-zákadag-ǎ*    'a doubtful-speaking child'  
 1a.child    1.ADJ-hesitant

One adjective derived from a verb in my data has reduplicated the consonant of the verb root: **-iɓ-** 'steal', **nyamá mu-ɓiɓ-ǎ**, 1a.animal 1.ADJ-steal, 'stolen animal'.

Derived adjectives are used both attributively and predicatively, as can be seen in the following pair. The verb root in (7.235) is **-ɗɪy-** 'show anger':

- (7.235)a. *nyamá*    *mU-ɗɪy-ǎ*    'a dangerous animal'  
 1a.animal 1.ADJ-fierce
- b.        *sukopí*    *a*        *mU-ɗɪy-ǎ*    'A leopard is dangerous.'  
 1a.leopard 3SG:be 1.ADJ-fierce

When someone feels pain or when the body does not function properly, Liko speakers commonly use derived adjectives predicatively, e.g.:

- (7.236) *li-kúbu*    *kǎmɪ*    *a*        *lí-ful-ǎ*    'My navel is swollen.'  
 5-navel 1SG.POSS 3SG:be 5.ADJ-swollen
- kU-ɓó<sup>h</sup>kú-kɔ*    *kǎmɪ*    *a*        *kú-ful-ǎ*    'My arm is swollen.'  
 15-arm-15 1SG.POSS 3SG:be 15.ADJ-swollen

### 7.12.3 Verb-to-adverb derivation

Adverbs are derived from verb stems by means of the addition of modifier prefix **ɓɪ-** and a word-final suffix **-a**. The process is not very productive. Examples include:

- (7.237) *ḡi-gbatat-a*<sup>397</sup> 'totally (flat)' < -gbat- 'spread out'  
*ḡi-sɔsɔsɔ* 'hasty, speedy' < -sɔ 'weed'  
*ḡi-tw-a(twatwa)* 'quickly' < -tú- 'reach one's goal'

### 7.13 To be

The verb **-ik-** 'be' occurs in the affirmative Future, in the negative forms, in the Perfective aspect, in the Conditional and in the Subjunctive. The inflected Present 'be' is identical in form to subject prefixes (see 7.4) and the form of the inflected Past 'be' is that of a subject prefix followed by a time adverbial.

The subject prefixes in the affirmative indicative Present and Past are assumed to be suppletive forms with verbal properties, filling in for both the subject prefix and the verbal base. They can for instance not only be followed by a time adverbial, as <sup>H</sup>**ḡi** and <sup>H</sup>**ndi** in Table 31, but also by the Insistive enclitic **-tú**, e.g. **a-tú** 3SG:be-INS 'he certainly is/he will be'. There is no overlap between the suppletive forms and **-ik-**, because **-ik-** does not occur in the affirmative Present and Past.

The inflected forms of **-ik-** ~ zero 'be' are:

Table 31 **-ik-** 'be', affirmative

	<u>Present</u>	<u>Past</u> (P <sub>1</sub> )	<u>Past</u> (P <sub>3</sub> )	<u>Future</u> (F <sub>2</sub> )
1SG	na	nǒ ḡi	nǎ ndi	niko bánu
2SG	wa	wǒ ḡi	wǎ ndi	wiko bánu
3SG/PL	a	ǒ ḡi	ǎ ndi	iko bánu
1PL	ta	tǒ ḡi	tǎ ndi	tiko bánu
2PL	má	mó ḡi	má ndi	míko bánu
3PL	bá	bó ḡi	bá ndi	bíko bánu

If the inflected form of **-ik-** 'be' is not followed by a time adverbial, it is interpreted as referring to the Present:

<sup>397</sup> **ḡi-gbatata** is used with verbs indicating harvesting or destroying.



- (7.238) *nǎ ndi* 1SG:be P<sub>3</sub> 'I was'  
*na* 1SG:be 'I am'  
*na ká-kún-á* 1SG:be 9b-plant-FV 'I am planting'

The verb **-ik-** 'be' is used to locate a subject in space:

- (7.239)a. *na wánu kó buló kakú*  
 1SG:be here PREP 9.speech 2SG.POSS  
 'I am here for your speech.', i.e. I am here for you
- b. *a-lúkú nǎ a ká li-gbító*  
 1b-man 1.DEM.I 3SG:be PREP 5:prison  
 'This man is in prison.'

In (7.238) and (7.239a), **na** is a suppletive form filling in for both the subject prefix and the verbal base. The reference to the Present with the Pluractional extension, usually with imperfective meaning, employs the verbal base as in **nikogo** 1SG-be:PLUR-FV 'I am being/staying/sitting', **bíkogo** 3PL-be:PLUR-FV 'They are being/staying/sitting'.

The negative, Perfective, Subjunctive and Conditional forms of **-ik-** are presented in the following three tables.

Table 32 **-ik-** 'be', negative

	<u>Present</u>	<u>Past</u> (P <sub>1</sub> /P <sub>3</sub> )	<u>Future</u> (F <sub>2</sub> )
1SG	<i>nákégu</i>	<i>nákégǔ ñi/ndi</i>	<i>nákíkigu bánu</i>
2SG	<i>wákégu</i>	<i>wákégǔ ñi/ndi</i>	<i>wákíkigu bánu</i>
3SG	<i>Ø-kégu</i>	<i>Ø-kégǔ ñi/ndi</i>	<i>Ø-kíkigu bánu</i>
1PL	<i>tákégu</i>	<i>tákégǔ ñi/ndi</i>	<i>tákíkigu bánu</i>
2PL	<i>mákégu</i>	<i>mákégǔ ñi/ndi</i>	<i>mákíkigu bánu</i>
3PL	<i>bákégu</i>	<i>bákégǔ ñi/ndi</i>	<i>bákíkigu bánu</i>

Table 33 **-ik-** 'be', Perfective aspect

	<u>Affirmative</u>	<u>Negative</u>
1SG	níkóni	nákí'kágú
2SG	wíkóni	wákí'kágú
3SG	íkóni	Ø-kí'kágú
1PL	tíkóni	tákí'kágú
2PL	míkóni	mákí'kágú
3PL	ǂíkóni	ǂákí'kágú

Table 34 **-ik-** 'be', Conditional and Subjunctive

	<u>Conditional</u>		<u>Subjunctive</u>	
	<u>Affirmative</u>	<u>Negative</u>	<u>Affirmative</u>	<u>Negative</u>
1SG	nakikó	nákíki	níki	nakikonító(/ 'tógú)
2SG	wakikó	wákíki	wíki	wakikonító(/ 'tógú)
3SG	Ø-kikó	Ø-kíki	Ø-íki	Ø-kikonító(/ 'tógú)
1PL	takikó	tákíki	tíki	takikonító(/ 'tógú)
2PL	makikó	mákíki	míki	makikonító(/ 'tógú)
3PL	ǂakikó	ǂákíki	ǂíki	ǂa kikonító(/ 'tógú)

**Ø-kíki** 'if he/she/it is not' is also used to express 'except', e.g.

- (7.240) ǂengéní      ǂá-sí      ǂá-kún-i-ní      séléngúndé,  
 1a.other person    2.ASS-all    3PL-plant-FV.ANT-PFV    1a.peanuts  
 Ø-kík-i              ásí      ímí      aká  
 3SG-COND:be-FV.NEG    only    1SG.PRO    CT  
 'All the others have planted peanuts, except ME.'

The verb **-ik-** 'be' is used as a tensed auxiliary in conjunction with an Infinitive form (see 7.7.5), and preceding a noun phrase introduced by **na** to express 'to have':

- (7.241)a. ta      na      ǂa-kókú      míya  
 1PL:be    with    2-chicken    hundred  
 'We have 100 chicken.'
- b. a-búlí      ǂé-motí      ǂ      ndí      na      mú-síká      kakí      ǂí-tú  
 1b-demon    1.NUM-one    3SG:be    P<sub>3</sub>    with    1-girl      3SG.POSS    MOD-light  
 'A demon had a beautiful daughter.'

