

Tone and Variation in Idakho and Other Luhya Varieties

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Introduction

Bantu languages commonly signal tense, aspect, mood, polarity, and clause-type distinctions with tonal as well as segmental cues. Compare, for example, data from the Near Future and the Indefinite Future in the Idakho variety of the Bantu macrolanguage Luhya. The Near Future (left) is marked with the tense prefix **la-**, while the Indefinite Future (right) takes the tense prefix **li-**. Tense prefixes are expressed to the left of the verbal stem in the examples below, and stem boundaries are indicated with square brackets. In addition to these segmental differences, a verb like ‘cut’ surfaces with a high tone (henceforth, ‘H’ or ‘H tone’) on the initial stem syllable in the Near Future, but a H tone on the final syllable in the Indefinite Future.

- (1) Contrastive Tonal Melodies in Idakho ‘*s/he will cut*’
- | | |
|---|---|
| <p>Near Future
a-la[xálaka]</p> | <p>Indefinite Future
a-li[xalaká]</p> |
|---|---|

In Idakho, there are two tonal classes of verbs: underlyingly H-toned verbs (henceforth, ‘/H/ verbs’) and underlyingly toneless verbs (henceforth, ‘/Ø/ verbs’). /H/ verbs behave like ‘cut’. Below, observe that the /H/ verbs all have a H on the initial syllable in the Near Future and a H on the final in the Indefinite Future. /Ø/ verbs behave differently. In the Near Future, there is no H on the verb, and in the Indefinite Future, there is a H on the second mora of the stem.

(2) /H/ vs. /Ø/ verbs ‘s/he will...’

	Near Future	Indefinite Future	Gloss
/H/	a-la[kálaangá] a-la[βóolitsa]	a-li[kalaangá] a-li[βoolitsá]	‘fry’ ‘seduce’
/Ø/	a-la[laxuula] a-la[seeβula]	a-li[laxúula] a-li[seeéβula]	‘release’ ‘say bye’

The focus of this dissertation is on verbal ‘tonal melodies’, which will refer, in the case of Idakho, to the pairing of the tonal properties of /H/ and /Ø/ verbs within a particular set of morpho-syntactic constructions. For example, the tonal properties of Infinitives and the Perfect are identical to those of the Near Future, and, as such, may be described as exhibiting the same tonal melody. That is, for each of these constructions, /H/ verbs surface with a H on the initial syllable, while /Ø/ verbs surface with no H.

Though /H/ and /Ø/ verbs frequently have strikingly different surface patterns, as seen in the examples in (2) above, both classes of verbs are subject to the same set of principles of tone assignment within a given tonal melody. Differences between /H/ and /Ø/ verbs arise from differences in lexical tone: /H/ verbs are analyzed as bearing a H tone on the initial mora of the stem underlyingly, while /Ø/ verbs have no such lexical H.

Along with a small set of construction-specific tonal adjustment rules, the number and position of inflectional (or ‘melodic’) Hs distinguish one tonal melody from another. Inflectional Hs are analyzed as being contributed by the morpho-syntax and enter the derivation as floating tones awaiting assignment via Melodic H Assignment (MHA) rules. I characterize the Near Future as being *tonally uninflected*, as the only H tones which surface in the Near Future are lexical. On the other hand, the tonal melody exhibited by the Indefinite Future is characterized by one inflectional H and a tonal adjustment rule whereby the lexical

H in /H/ verbs is lowered (see §2.5.2 for a detailed account of the tonal properties of the Indefinite Future).

In this dissertation, I make two contributions to the study of the special role that tone plays in Bantu verbal morpho-syntax. First, the dissertation contributes extensive novel documentation of the verbal tone system of Idakho, known by the autoglossonym [lwiítakho], a variety of the Luhya cluster of Bantu languages spoken near Lake Victoria in western Kenya and eastern Uganda. Second, I show how aspects of the Idakho system and that of other Luhya varieties like it have contributed to the development of rich diversity within the verbal tone systems of Luhya.

Chapter 2 comprises the descriptive component of the dissertation and emphasizes the influence of several factors known to influence verb tone in Bantu. Because many language consultants contributed to the project, the dissertation makes note of variation within and across speakers of Idakho. In Chapter 3, I demonstrate the role that a preference for prosodically well-cued morphological boundaries has played in two striking tonal developments within the Luhya macrolanguage: the loss of the lexical tonal contrast between /H/ and /Ø/ verbs, reconstructed even to Proto-Bantu (Stevick 1969),¹ and the introduction of tonal melodies in constructions for which there is no historical precedence for tonal inflection. Chapter 4 presents conclusions.

The present introductory chapter begins by specifying the transcription conventions adopted in this work. In §1.2, I contextualize this thesis within the growing body of literature on Luhya and Bantu verbal tone systems. §1.3 provides a basic description of those aspects of Idakho verbal morphology which are most relevant to the description of Idakho's verbal tonology. The methodology which guided data elicitation for the study is described in §1.4, and §1.5 presents an overview of the basic properties of Idakho verbal tone patterns.

¹Greenberg (1948) and Guthrie (1967-1971), *inter alia*, analyze the lexical contrast in Proto-Bantu as one between /H/ and /L/.

1.1 Transcription and Phonetic Inventory

The present section describes the phonetic inventory of Idakho and the hybrid transcription system used in this dissertation to represent its members. To enhance the usefulness of this document to the Idakho community, the local orthography is used as much as possible. Transcriptions of the data below deviate from the local orthography in two ways. First, orthographic, intervocalic <b/v> is transcribed as IPA [β], except after nasals, in which case orthographic corresponds with IPA [b]. Additionally, orthographic <i> and <e> are represented as IPA [ɪ] and [ɛ], respectively, in particular morpho-syntactic environments so as to capture the otherwise unrepresented phonemic contrast which emerges only word-finally in a limited set of verb forms.

The local orthography corresponds with IPA symbols except as indicated in the table below.

(3) Transcription Conventions

<kh>	[x]	<sh>	[ʃ]	<j>	[d͡ʒ]	<ch>	[t͡ʃ]
<ng'>	[ŋ]	<ng>	[ŋg]	<nj>	[nd͡ʒ]	<ny>	[ɲ]

The following tables summarize the phonetic inventory of Idakho and indicate the symbol I use to represent Idakho phones according to their featural description. Idakho has a pair of voiced and voiceless affricates, which I represent as <j> and <ch>, respectively. The series of voiced stops (plosives) and the voiced affricate appear only after nasals. The segment <ɸ> is represented within angular brackets to indicate its marginal use; it appears only in borrowings.

(4) Consonant Inventory

	Bilabial		Labiodental	Alveolar		Palatal	Velar		Glottal
Plosive	p	b		t	d		k	g	
Nasal		m			n	ny		ng'	
Trill					r				
Fricative		β	<f>			sh	kh		h
Affricate									
Approximant						y			
Lat. Approx.					l				

The Idakho vowel system has an ATR contrast, but that contrast emerges only among front vowels.

(5) Vowel Inventory

	Front	Central	Back
High	i		u
	ɪ		
Mid	e		o
	ɛ		
Low			a

Transcriptions in this thesis do not represent the allophonic contrast between a lateral approximate [ɭ] and a lateral flap [ɭ̣]. Both appear as <ɭ> throughout. It appears that the flap allophone is observed following front vowels, though I did not attend to this contrast while verifying my tonal transcriptions.

Word-final syllables may be long only in a narrow set of phrase-final contexts. Idakho has a rule of *Non-Final Shortening* whereby long word-final syllables are shortened when non-final within the phrase. This makes possible alternations like the following. Many constructions involving monosyllabic stems, such as **a-la{[tsia]}** ‘s/he will go’, have a long final syllable when the verb form is phrase-final, but a short final syllable when an object follows the verb form in the phrase, e.g., **a-la{[tsya]}** **muundu** ‘s/he

will go for someone’. Similarly, passive verb forms, which are formed with the addition of the suffix **-u**, include a long final syllable when the verb form is phrase-final, as in **a{ [khalaachúi] }** ‘s/he was cut’, but a short final syllable when the verb form is phrase-medial, as in **a{ [khalaachwí ‘tá] }** ‘s/he was not cut’.

The <i/y> and <u/w> alternations are intended to represent the length contrast in these cases, rather than to make a claim about the segments’ status as a glide or vowel. The acoustics of such sequences do not fall within the scope of this dissertation, though interested parties may consult the audio archive described in Appendix A.

One final point of difference between IPA conventions and the transcription system I adopt in this thesis relates to the representation of vowel length when the first and second half of a long syllable share the same vowel quality. Such cases are represented as sequences of two vowels, e.g. [ee], rather than with the IPA length mark [e:].

I adopt the convention for representing vowel length described in the preceding paragraph to facilitate marking tone. The tone bearing unit in Idakho is the mora. At surface representation, the mora may bear either a high tone (henceforth, H) or a low tone (henceforth L); at underlying and intermediate representations, moras may also be unspecified for tone. Representing long vowels as sequences of two vowels makes it possible to mark a mora associated with a H with an acute accent uniformly, whether that mora is followed by a second mora within the same syllable as not, e.g. [ée] rather than [ê:]. This is desirable because "falling tone" is not a phonological category in Idakho, as the circumflex would imply. In addition, it simplifies representations of intrasyllabic downstep, e.g. [é⁺é]. Toneless moras and moras associated with L are unmarked.

1.2 Context of the Study

The Luhyas comprise the second largest ethnic group in Kenya with a population of over 7 million. Lewis et al. (2013) designates Luhya as a ‘macrolanguage’, defined as “multiple, closely related individual languages that are deemed in some usage contexts to be a single language” (ibid). Luhya may be divided into more than 20 sub-groups, each with its own linguistic variety. Population estimates for known sub-ethnicities, compiled from the 2009 Kenya census and the 2002 Uganda census, are provided below.

(6) Population estimates for Luhya sub-groups²

Bukusu	1,446,854	Gisu-Masaaba	1,117,661	Logoori	618,340
Saamia	404,924	Nyole	340,507	Nyore	310,894
Wanga	309,407	Nyala	273,198	Kabaras	252,761
Isukha	217,327	Tiriki	209,814	Idakho	170,720
Marachi	155,341	Marama	152,427	Kisa	137,268
Khayo	124,555	Tsotso	121,518	Tachoni	118,363
Gwe	75,257	Tura	30,388		

Luhya varieties make up a ‘dialect continuum’ in which geographically close varieties enjoy higher rates of mutual intelligibility, e.g., 89-93% between Logoori and Idakho, while geographically distant varieties have considerably lower rates of mutual intelligibility, e.g., 21-54% between Logoori and Bukusu (Kanyoro 1983).³ Heine & Möhlig (1980), Kitembe (2005), Kanyoro (1983), and Mould (1981) identify several phonological, morphological,

²Figures presented here for Bukusu and Saamia sum the populations reported for Kenyan and Ugandan populations: 1,432,810 Bukusu in Kenya and 15,044 in Uganda; 124,952 Saamia in Kenya and 279,972 in Uganda. 578,583 additional respondents to the 2009 Kenya census identified their ethnic affiliation as “Luhya”. Additionally, there are two markedly different Luhya varieties known as Luhya; it is not clear what population the provided figure of 273,198 represents.

³Kanyoro’s (1983: 150) mutual intelligibility measure is based on how well 10 speakers per test language were able to translate 15 sentences from one variety into their own.

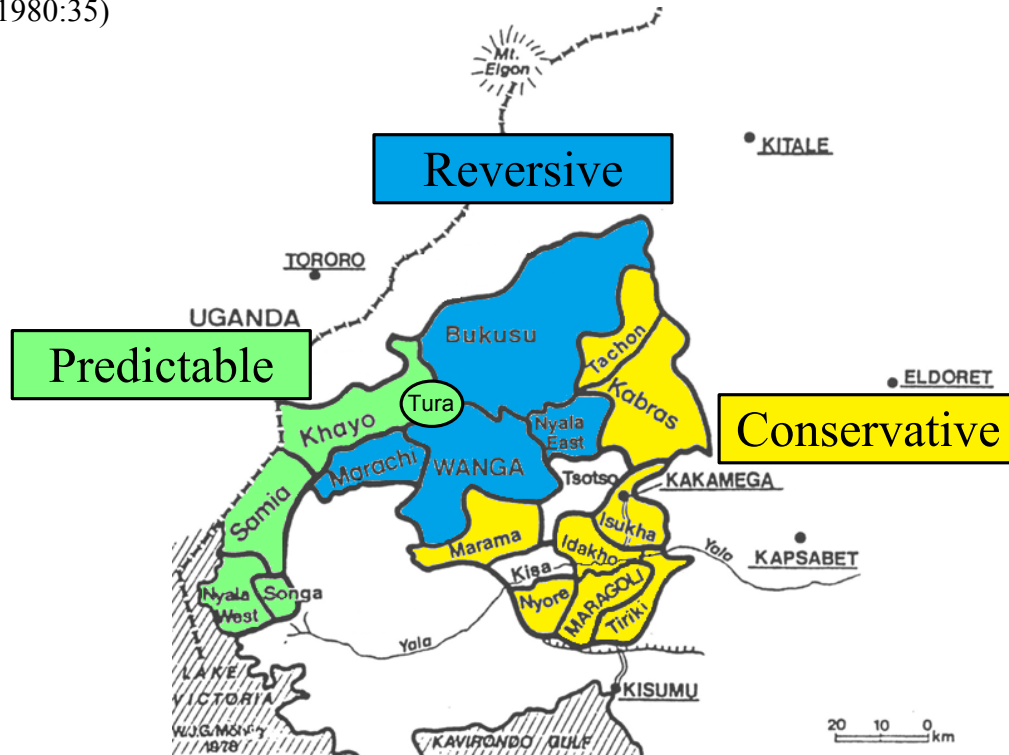
and lexical indexes of linguistic diversity within Luhya: the number of contrastive vowel qualities (5 vs. 7), the particular suite of phonological alternations triggered by nasals, and degree of shared vocabulary, *inter alia*. In addition, Luhya varieties diverge with respect to the particular set of reflexes they inherited through two sporadic diachronic processes: Bantu spirantization, an areal change whereby stops in Proto-Bantu were inherited as fricatives or sibilants into modern Bantu languages, and the Luhya Law, a process which, much like Grimm's Law, spirantized voiceless stops and devoiced voiced stops.

Descriptive work on verb tone in Luhya reveals rich diversity within the tonal systems in addition to the segmental and lexical diversity noted above. With increasing access to detailed descriptions of Luhya verbal tone systems, Marlo (2008a, 2009a, 2013b:153-156) develops a typology of Luhya verbal tone systems based on reflexes of the */H/ vs. */Ø/ tonal classes reconstructed for Proto-Bantu (Stevick 1969) and associated properties.

Bantu verbs often fall into one of two tonal classes: verbs that are underlyingly high-toned vs. verbs that are underlyingly low-toned or toneless. Most modern Bantu languages may be characterized as 'conservative', maintaining the historical /H/ vs. /Ø/ contrast and a set of morpho-syntactic contexts in which that contrast is transparently revealed on the initial stem syllable. There are other 'predictable' languages that have lost the lexical contrast, treating all verbs equally and inflecting all verbs with inflectional tonal melodies (Odden 1989), and others still, 'reversive' systems, in which all verbs are inflected with a tonal melody and which now contrast between a /L/ class of verbs and a /Ø/ class.

It is unusual to find multiple examples of two of these tone system types within a single macrolanguage. The Luhya situation is special in having multiple examples of all three system types, with conservative varieties situated to the east and predictable varieties to the west. Reversive varieties, linguistically intermediate between 'conservative' and 'predictable', are geographically intermediate as well.

- (7) Luhya dialect map (adapted from Marlo 2009a, in turn from Heine & Möhlig 1980:35)



The table below lists by system type references with descriptions of Luhya tone.

(8) References on Luhya Verbal Tone Systems

System Type	Language	Reference
<i>Predictable:</i>	Khayo	Marlo (2009b)
	Tura	Marlo (2008b)
	Saamia	Chagas (1976)
		Poletto (1998)
	Nyala-West	Onyango (2006)
		Marlo (2007)
		Ebarb & Marlo (2009)
<i>Reversive:</i>	Nyala-East	Ochwaya-Oluoch (2003)
	Marachi	Marlo (2007)
		Bruckhaus (2012)
	Bukusu	Austen (1974a, 1974b)
		de Blois (1975)
		Mutonyi (1996, 2000)
<i>Conservative:</i>	Logoori	Leung (1991)
	Tachoni	Odden (2009)
	Tiriki	Paster & Kim (2011)

In Chapter 2, I describe and analyze the tonal properties of 12 tonal melodies, organized into 8 primary ‘Patterns’, in the tonally conservative Idakho variety of Luhya. Chapter 3 identifies ways in which aspects of tonally conservative varieties like Idakho help explain the development of predictable systems within Luhya.

The analysis of Idakho verbal tone presented in Ch. 2 is cast within a derivational, rule-based autosegmental theoretical framework, like much work on Bantu tone within the autosegmental period (e.g., Bickmore 1997, 2000, 2007; Cassimjee 1986; Cheng & Kisseberth 1979, 1980, 1981; Clements 1984; Downing 1990; Hyman & Ngunga 1994; Kidima 1991; Liphola 2001; Marlo 2008b, 2009b; Mwita 2008; Odden 1981, 1987, 1996, 1998, 2009; Roberts-Kohn 2000).

The choice to follow this tradition is a reflection of the dissertation’s emphasis on systematic description in the service of informing historical developments. Because studies

in Luhya tone nearly all take a derivational approach with autosegmental representations, the goals of the thesis are best served by adopting the same framework. Doing so facilitates identifying differences in the formal statement of tonal rules from one variety to another, which naturally reflect systematic differences among the varieties themselves.

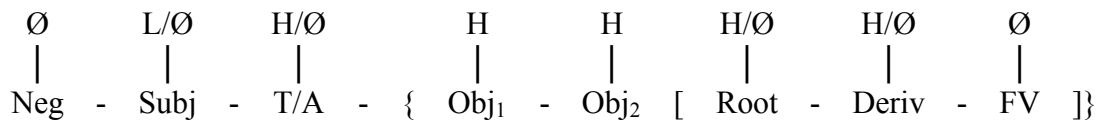
While I hope that the data made available through this dissertation are useful in the pursuit of advancing theories of phonology and tonal representations, I make no attempt to compare alternative analytical frameworks. Consult Bickmore (1999), de Lacy (2002), and Downing (2009a) on applying an optimality theoretic framework to autosegmental representations, or Cassimjee 1998 and Cassimjee & Kisseberth 1998 (Optimal Domains Theory) and McCarthy 2004 (Headed Span Theory) on applying an optimality theoretic framework to non-autosegmental representations.

1.3 Verbal Morphology

The Idakho verb is comprised of a stem and a number of ordered inflectional prefixes. The prefixes mark subjects, objects, tense-aspect (T/A), and negation. The stem itself is comprised of a verbal root, derivational suffixes (including the passive suffix, which is a point of focus throughout the following description), and a marker of mood known as the ‘final vowel’ (hereafter, ‘FV’). In addition to the boundaries of the stem, tonal rules in Idakho are sensitive to those of a unit of structure known as the macrostem. The macrostem is comprised of the verb stem and any object prefix. There are two slots for object prefixes, though two object prefixes may appear in a single verb form in certain combinations. See §1.3.2 for some discussion on what possible object prefix combinations.

Stem boundaries are marked with square brackets, and macrostem boundaries are marked with curly brackets. A simplified schema is provided below in (9). The possible underlying tonal specifications for each morpheme type are also indicated.

(9) Simplified Verb Morphology



In Bantu languages, nouns are grouped into classes (Katamba 2003). The classes are in turn grouped into singular/plural pairs, or ‘genders’. Noun class membership is typically

marked on nouns with a unique prefix.⁴ For example, the gender containing most human nouns are marked with the Class 1 prefix, **mu-**, in the singular, but the Class 2 prefix **βa-** in the plural.

(10) Noun Class Marking on Nouns

Class 1	Class 2	Gloss
mu-sáatsa	βa-sáatsa	‘man’
mú-‘yáyí	βá-‘yáyí	‘boy’

In addition, Idakho encodes the class to which verbal arguments belong through the selection of differentiated subject and object prefixes. The following sections identify subject and object prefixes according to the person, number, and noun class of the argument. In addition, tense, negation, and other prefixal markers are listed and their tonal impact broadly discussed.

⁴The Class 1 and Class 3 noun class prefixes are segmentally identical, though differences between the two classes emerge in the agreement morphology expressed on certain modifiers. Cf. Class 1 **mu-sá’átsá w-áanje** ‘my man’ vs. **mu-rwí** ‘my head’.

1.3.1 Subject Prefixes

The form that each subject prefix takes is indicated in (11) below. Singular prefixes appear left of their plural counterparts. In Idakho, there are unique subject markers for 1st and 2nd person subjects, while 3rd person human subjects are marked with the same markers that are used for subjects belonging to Classes 1 and 2.

(11) Subject Prefixes

Singular		Plural	
1 st person	Ñ-	1 st person	khù-
2 nd person	ù-	2 nd person	mù-
Cl. 1	a- / y-	Cl. 2	βa-
Cl. 3	ku-	Cl. 4	chi-
Cl. 5	li-	Cl. 6	ka-
Cl. 7	shi-	Cl. 8	βi-
Cl. 9	i-	Cl. 10	tsi-
Cl. 11	lu-		
Cl. 12 (Dim)	kha-	Cl. 13 (Dim)	ru-
Cl. 14	βu-		
Cl. 20 (Aug)	ku-	Cl. 4 (Aug)	chi-

As reflected in (11) above, all subject prefixes are underlyingly toneless, except in the case of 1st and 2nd person subjects, which I analyze as being underlyingly /L/. The importance of this distinction will be made clear in §2.1.1.3.

As indicated above, 3rd sg human subjects may take either **a-** or **y-**. The selection between the two is phonologically conditioned, with **a-** being selected when the following morpheme is consonant-initial and **y-** being selected when the following morpheme is vowel-initial.

1.3.2 Object Prefixes

Object prefixes, which appear immediately left of the stem, are largely homophonous with their subject prefix counterparts with a few exceptions. Notably, object marking in Class 1 shifts from **u-** and **a-** / **y-** to **khú-** and **mú-** for 2nd and 3rd person objects, respectively. For the Class 9 object prefix, some of my consultants preferred **chí-**, while others used **í-**. Tonally the two sets differ with respect to their underlying specification. In particular, object prefixes are underlyingly /H/ in contrast to their subject prefix counterparts.

(12) Object Prefixes

Reflexive	í ⁵		
1sg	Ń-	1pl	khú-
2sg	khú-	2pl	mú-
3sg	mú-	3pl	βá-
Cl. 3	kú-	Cl. 4	chí-
Cl. 5	lí-	Cl. 6	ká-
Cl. 7	shí-	Cl. 8	βí-
Cl. 9	í- / chí-	Cl. 10	tsí-
Cl. 11	lú-		
Cl. 12 (Dim)	khá-	Cl. 13 (Dim)	rú-
Cl. 14	βú-		
Cl. 20 (Aug)	kú-	Cl. 4 (Aug)	chí-

The 1st sg object prefix is a homorganic nasal which is involved in a number of segmental alternations: (i) lengthening of the preceding syllable, (ii) obstruent voicing, and (iii) hardening (of liquids). Additionally, the nasal is deleted before voiceless fricatives, though

⁵The present work does not include a description of the tonal properties of reflexive object prefixes; while the questionnaire includes many paradigms with reflexive object prefixes, time constraints demand that these data be reported only in later work. In other Luhya varieties, such as Nyala-West (Ebarb et al. in prep), the tonal properties of reflexive object prefixes differ from those of other object prefixes in ways that motivate analyzing the H reflexives contribute as underlyingly floating rather than underlyingly associated to the corresponding segmental material. It appears that this differential treatment is not required in the case of Idakho, though this claim merits further verification.

deletion in this manner does not bleed lengthening of the preceding syllable, nor does it result in the failure of the H which it contributes to be deleted. As will be demonstrated in §2.1.1.1, the 1st sg H will be realized as a rising tone on the lengthened preceding syllable in the basic case, as nasals are not tone bearing units at surface representation.⁶

Verbal forms which combine two object prefixes are uncommonly used but two object prefixes may co-occur just in case one is the 1st sg, in which case the 1st sg is ordered nearer to the stem. It is not clear whether the reflexive object prefix is able to combine with other object prefixes, including the 1st sg. One speaker produced two verbal forms which included the reflexive object prefix and a CV- object prefix, but expressed uncertainty regarding the grammaticality of such forms. Another speaker [SB] produced a verbal form which contained a reflexive object prefix in combination with a 1st sg and asserted that it was well formed (**a-laá-nz-i** [**bechela**] ‘he will shave himself for me’). The form that was produced ordered the reflexive object prefix nearer to the stem than the 1st sg. The tonal properties of this combination were not investigated after it was determined to be possible.

Verbal forms with two CV- object prefixes are not possible in Idakho.

⁶One likely exception to the claim that nasals are not tone bearing units at surface representation relates to geminate nasal sequences which result from the deletion of vowels between identical sonorants. In such cases, nasals appear to preserve the mora contributed by the deleted vowel.

1.3.3 Tense, Aspect, and Mood

Tense, aspect, and mood contrasts are marked tonally, as described in Ch. 2, as well as segmentally through prefixation and suffixation.

Prefixes situated between subject and object markers typically express tense-aspect information, but may also signal clause-type and polarity distinctions. Prefixes appearing in this position, or set of positions, will be referred to simply as ‘tense prefixes’ (‘Tns’, in data displays), in spite of the fact that doing so surely oversimplifies the morpho-syntactic functions fulfilled by this set of prefixes.

Known ‘tense’ prefixes and their associated constructions are listed below, where “Subj. Rel.” and “Neg.” abbreviate “Subject Relative” and “Negative,” respectively.

(13) Idakho Tense Prefixes

a.	la-	Near Fut.	SP-la[ROOT-a]
		Near Future Neg.	SP-la[ROOT-a] tá(awe)
b.	li-	Indefinite Future	SP-li[ROOT-a]
		Indefinite Future Neg.	SP-li[ROOT-a] tá(awe)
c.	lí-	Indefinite Future: Subj. Rel.	SP-lí[ROOT-a]
d.	akha-	Remote Future	SP-akha[ROOT-ε]
		Remote Future Neg.	SP-akha[ROOT-ε] tá(awe)
		Future Perfective	SP-akha[ROOT-ile]
		Future Perfective Neg.	SP-akha[ROOT-ile] tá(awe)
e.	ákha-	Immediate Past	SP-ákha[ROOT-a]
		Immediate Past Neg.	SP-ákha[ROOT-a] tá(awe)
f.	kha-	Imperative _{sg} Neg.	SP-kha[ROOT-a] tá(awe)
		Subjunctive Neg.	SP-kha[ROOT-a] tá(awe)
		Imperative _{pl} Neg.	SP-kha[ROOT-i] tá(awe)
		Conditional Neg.	ni-SP-kha[ROOT-a] tá(awe)
		Hesternal Perfective Neg.:	SP-a-kha[ROOT-ile]
		Subj. Rel.	
g.	khá-	Future Neg.: Subj. Rel.	SP-khá[ROOT-a] tá(awe)
		Present Neg.: Subj. Rel.	SP-khá[ROOT-aa(nga)] tá(awe)
		Subjunctive Neg.: Subj. Rel.	SP-khá[ROOT-a] tá(awe)

		Perfective Neg.: Subj. Rel.	SP-khá[ROOT-ile] tá(awe)
h.	a-	Hesternal Perfective	SP-a[ROOT-ile]
		Hesternal Perfective Neg.	SP-a[ROOT-ile] tá(awe)
i.	á-	Hesternal Perfective: Subj. Rel.	SP-á[ROOT-ile]
j.	aa-	Remote Past	SP-aa[ROOT-a]
		Remote Past Neg.	SP-aa[ROOT-a] tá
k.	aa-	Habitual	SP-aa[ROOT-a]
		Habitual Neg.	SP-aa[ROOT-a] tá(awe)
l.	shi-	Persistent	SP-shi[ROOT-aa(nga)]
		Persistent Neg.	SP-shi[ROOT-aa(nga)] tá(awe)
m.	shí-	Persistent: Subj. Rel.	SP-shí[ROOT-aa(nga)]
		Persistent Neg.: Subj. Rel.	SP-shí[ROOT-aa(nga)] tá(awe)

In the table above, there are a number of H vs. L/Ø pairings among the tense prefixes that appear not to be accidental, in particular: **li-** vs. **lí-**, **kha-** vs. **khá-**, **a-** vs. **á-**, and **shi-** vs. **shí-**. The H-toned members of these pairs only appear in subject relative constructions, whereas the toneless member is observed in matrix clauses. This seems to be part of a process whereby an inflectional H is linked to a mora preceding the macrostem boundary in only specific constructions. The subject relatives noted above fall within this set of particular constructions.

The cases above may be related to another construction in which underlying toneless prefixes exceptionally surface H: the Conditional Negative **ni-SP-kha[ROOT-a] tá** (Pattern 2b, §2.2.2). Uniquely in this context, subject prefixes are realized with a H.

Two additional prefixes appear in a position preceding the subject prefix: (i) the **ni-** prefix or particle, which marks the Crastinal Future and conditional tenses, and (ii) the negative marker **shi-**.

The negative marker **shi-** was optional for most of the speakers I consulted. The tonal implications for the decision to include this marker (or not) were not systematically investigated for this study, though it is at least clear in the case of the Near Future Negative

that when the marker is not included one tone pattern obtains, whereas another pattern obtains when the prefixal negative marker is present, as shown in (14). Notice that, in addition to the tonal differences, the tense prefix is eliminated in the form marked with the prefixal negative marker.

(14) Tonal Alternations Induced by Prefixal Negative Marker: ‘*s/he will not...*’

	No Prefixal Negative Marker	Prefixal Negative Marker	Gloss
/H/	a-la{[βó'ólítsá]} tá	sh-a{[βoolitsa]} tá	‘seduce’
/Ø/	a-lá{[lákhuúlá]} tá	sh-a{[lakhúula]} tá	‘release’

The verb stem terminates with one of four final vowels (FV) or two aspectual suffixes. The FV is a marker of mood, and Idakho has four: **-a**, **-ε**, **-i**, and **-ɪ**. The most commonly appearing FV is **-a**, with the other three appearing in subjunctive and imperative constructions.

The aspectual **-aanga** suffix is obligatory in all Present and present-based Persistent contexts, but is variably truncated to **-aa**. It admittedly remains mysterious to the author what licenses the truncated form and under what conditions the suffix adds an imperfective meaning, as it is reported to contribute in other Bantu languages (Nurse 2003, 2008).

The form that the perfective suffix takes—represented in the morphological schema in (13) simply as **-ile**—is complex and dependent upon prosodic properties of the verb root. Only monosyllabic roots (15 a-e) take the full suffix as either **-ile** or **-ele**. Disyllabic roots (15 f-i) invariably take **-i**. Trisyllabic and longer roots with an underlyingly long penultimate syllable (that is, penultimate within the stem, final within the root) also invariably take **-i** (15 l-m, o), while trisyllabic and longer roots with an underlyingly short penultimate syllable will take **-ɪ** or **-ε**, depending on the height of the preceding vowel (15 j-k, n, p). In this last case, the perfective suffix also triggers lengthening of the penult.

(15) Idakho Perfective Morphology

	Infinitives ('to...')	Perfect ('he has...+Pst Part')	Gloss
a.	khu{[ráa]}	a-a{[réele]}	'bury'
b.	khu{[khúa]}	a-a{[khwéele]}	'pay dowry'
c.	khu{[lía]}	a-a{[líili]}	'eat'
d.	khu{[kua]}	a-a{[kwiili]}	'fall'
e.	khu{[sia]}	a-a{[syeele]}	'grind'
f.	khu{[lúma]}	a-a{[lúmi]}	'bite'
g.	khu{[béka]}	a-a{[béchi]}	'shave'
h.	khu{[téekha]}	a-a{[téeshi]}	'cook'
i.	khu{[loonda]}	a-a{[loondi]}	'follow'
j.	khu{[khálaka]}	a-a{[khálaache]}	'cut'
k.	khu{[kumila]}	a-a{[kumiili]}	'hold'
l.	khu{[kálaanga]}	a-a{[kálaanji]}	'fry'
m.	khu{[homoola]}	a-a{[homooli]}	'massage'
n.	khu{[βóolitsa]}	a-a{[βóoliitsi]}	'seduce'
o.	khu{[khóng'oonda]}	a-a{[khóng'oondi]}	'knock'
p.	khu{[βóholola]}	a-a{[βóholoolé]}	'untie'

The data in (15) reveal as well that the perfective suffix triggers spirantization in root final velar consonants, e.g. (15 g-h, j, l). All the front FVs mentioned above condition the same alternations.

1.4 Methods

The description of Idakho's verbal tone system presented in Ch. 2 is based on over 250 combined hours of interviews with 22 native speakers of Idakho living in the U.S., Nairobi, and rural areas in western Kenya to which Idakho is indigenous. Data collection for the study began with (now Dr.) Phoebe Khasiala Wakhungu during a year-long field methods course at Indiana University in 2009-10. In consultation with Phoebe, I prepared a questionnaire to survey the properties of constructions that I did not investigate during the field methods course. Michael Marlo administered this questionnaire on my behalf to two Idakho speakers during the summer of 2011, when he was in Kenya for his own research. Data collection for the thesis culminated with 9 months of fieldwork in western Kenya from September 2012 through June 2013.

The majority of my time in Kenya was spent in Kaimosi, where I interviewed the study's primary consultants. Near the end of my trip, I traveled to three villages within Idakholand for interviews of approximately 3-5 hours with nine additional speakers of Idakho. During these interviews, I administered a questionnaire surveying the core properties of the Idakho verbal tone system. I did this to assess the type and extent of variation within a community of speakers of a single variety. Moses Egesa administered the same questionnaire on my behalf to yet another nine speakers who current live in Nairobi. The two sets of recordings may soon serve as the empirical basis for a study on the impact of language contact and attrition in an urban setting on Bantu verbal tone systems.

Though Idakho is the clear focus of this dissertation, during my fieldwork I carried out several parallel studies of comparable breadth on the verbal tone systems of other undocumented or little-documented Luhya varieties: Isukha, Nyore, Marama, Kabras, and Nyala-

East. These will be the focus of separate manuscripts in time, though a limited amount of data from most of these varieties may be found in Chapter 3—a discussion of historical developments within Luhya tone.

This section is organized as follows: §1.4.1 lists the hardware used to present prompts, record audio, and store recordings. §1.4.2 lists computer programs used in the presentation of prompts, analysis of audio recordings, and preparation of the dissertation. §1.4.3 describes language consultant recruitment, and §1.4.4 touches on the sociolinguistic background of this study's primary language consultants. §1.4.5 briefly summarizes issues informing the preparation of the study's elicitation prompts and describes the structure of the questionnaire upon which the following description is based. This questionnaire, reformat-
ted to conserve space, may be viewed in full in Appendix A.

1.4.1 Hardware

The audio archive upon which the dissertation is based was recorded using a Marantz PMD 660 recorder with Super MOD upgrades by Oade Brothers Audio. The recorder is powered by four Sanyo Eneloop 2000 MAH LOW Discharge AA rechargeable batteries and writes to Lexar Professional 400x 8 GB SDHC cards.

The recorder was paired with a Sanken COS-11D omni-directional lavalier microphone using phantom power. An improvised head mount was used to position the microphone near the participants' mouths.

Interviews were held in a building near the main tarmacked road passing through Kaimosi. Along with myself, the building was occupied by a seamstress, a barber, and other small businesses. While my neighbors were courteous, ambient noise was occasionally unavoidable, not least of all during the rainy season.

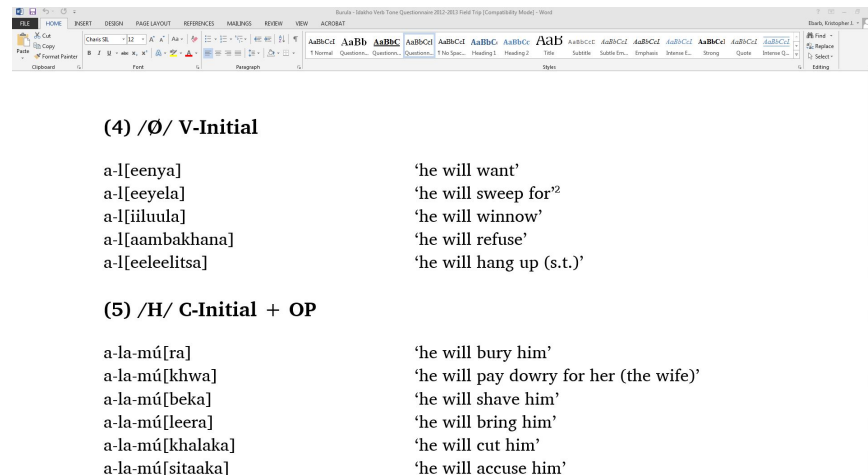
Questionnaires were presented to study participants using one of two laptops. The laptops I brought to use for this purpose were chosen for their long battery life. Power resources permitting, participants viewed the questionnaire on an external monitor.

Copies of the original recordings are currently stored on separately housed external hard drives: a 2 TB Western Digital Passport and a 3 TB Seagate Expansion. An additional copy of the original recordings is also stored in DVD format (Taiyo Yuden/JVC 8X DVD-R 4.7GB Silver Thermal Lacquer) in a third location. Arrangements are still being made to host a copy of the recordings in a more permanent, publicly-accessible venue.

1.4.2 Software

The questionnaires developed for this study were prepared in and presented to the participants using Microsoft Word (2010/2013), as shown in (16). Using this format to present the elicitation prompts, I paced participants' progress through the questionnaire and solicited repetitions of some verb forms by manually highlighting the first letter of the desired verb form among the many other forms displayed on the screen concurrently. I added impressionistic tonal transcriptions as we progressed through the questionnaire. I also took note of tonal variants, where they were possible, and corrected errors in the form and meaning of elicitation prompts.

(16) Questionnaire Screenshot



Verifying and correcting initial transcriptions of tone and vowel length relied heavily on Praat (Boersma & Weenink 2014). Audacity (Audacity 2014) helped repair several recordings that failed to close properly after accidental power loss. Audacity was also used to remove silence from the original recordings in the preparation of the audio archive; this was done to reduce the total file size of the archive.

The dissertation itself has been authored with XLingPaper⁷ (Black 2009) using XMLmind XML Editor. These programs help to minimize formatting inconsistencies. Additionally, readers of the ‘Portable Document Format (PDF)’ may enjoy the extensive use of hyperlinks: all citations link directly to the relevant reference in the works cited section. Left-clicking on all section and numbered display references will similarly bring the reader to the referenced section or numbered display. Return to the referring page by right-clicking within the document and selecting ‘Previous View’ (or pressing ‘Alt + Left Arrow’).

Derivations and formal rules were drawn using Inkscape (Bah 2007).⁸

⁷XLingPaper is freely downloadable at <http://www.xlingpaper.org>.

⁸Inkscape is freely downloadable at <http://www.inkscape.org>.

1.4.3 Informant Recruitment

Recruitment of study participants proceeded by word of mouth, beginning with an introduction to Billystrom Jivetti (Wiley College) facilitated by Michael Marlo (University of Missouri). Billy connected me with his sister-in-law, Lydia Songole, who then identified the majority of the study's primary language consultants at Friends College Kaimosi, where she worked as an instructor, and surrounding educational institutions. For my studies of Nyore, Isukha, Marama, Kabras, and Nyala-East verbal tone, I consulted only one speaker each. I worked with two speakers of Idakho as primary consultants on the Idakho study: Julius Ingosi (henceforth, 'JI') and Sylvester Burula ('SB').

Sylvester Burula later coordinated the recruitment of 18 additional Idakho speakers to respond to the questionnaire developed to elicit additional information on just core properties of Idakho verbal tone. Burula identified three friends of his living in different villages within Idakholand; each of these three then recruited an additional five participants: two currently living within the same village, and three currently living in Nairobi. The three originally contacted by Burula were asked to recruit only siblings or close friends who grew up in the same village. (17) lists by place of primary residence at the time of the interview the total number of Idakho speakers consulted for this study.

(17) Number of Speakers by Location

	Residence	Speakers
a.	Kaimosi Sub-Location, Shaviringa Location	2
b.	Malinya Sub-Location, Shirumba Location	3
c.	Makhokho Sub-Location, Iguhu Location	3
d.	Shivagala Sub-Location, Shirumba Location	3
e.	Nairobi	9

The interviews were conducted in English, and all study participants are proficient speakers of English. Their ages range from 22, at the very youngest, through 50 years old. While there is an even ratio between male and female participants among the primary language consultants, only 2 of the additional 18 Idakho speakers are female. While I specified to those helping me identify study participants that “middle aged” speakers would be desirable, I gave no guidance regarding the sex and gender of study recruits.

1.4.4 Sociolinguistic Profiles

The description below is based on the speech of two primary consultants: Sylvester Burula and Julius Ingosi. Both currently live in Jeptulu, an area where the closely related and mutually intelligible Tiriki variety of Luhya predominates, but they spent their childhoods in the Malinya Sub-Location within the Shirumba Location in Kakamega District.

Burula is now in his mid 30s and has spent the majority of his life within or very near his home village. He was born and stayed in Shikulienyi Village within the Malinya Sub-Location through the completion of his secondary education. He spent 4 years in Nairobi, where he earned a Bachelors in Business and Economics. After completing his Bachelors degree, he returned to work near his home village until moving to Jeptulu (Tirikiland) approximately two years before our interviews began, where he now teaches business, economics, and project management.

Burula speaks Idakho, English, Swahili, and Isukha (another Luhya variety which is perhaps even more similar to Idakho than Tiriki). While he can converse comfortably in each of these languages, he indicated that Idakho was the primary language of communication when interacting with his parents, his wife, his siblings, and his children.

Ingosi, currently in his early 40s, spent the first 10 years of his life in Malinya Village and the next 11 years of his life in Kabras (where the Kabras Luhya variety is spoken). From his early 20s on, he has lived in Jeptulu (Tirikiland). Ingosi holds a Bachelors of Divinity and serves as a pastor at his church. He also operates a motorcycle taxi service.

Though he considers Idakho to be his mother tongue and feels most comfortable using Idakho, Ingosi is highly multilingual, and his language selection decisions are complex. He speaks the Idakho, Tiriki, and Kabras Luhya varieties, as well as Swahili and English. He and I primarily communicated in English. He speaks Idakho with his mother, who also

speaks Kabras. He speaks a “mixture [of] Idakho and Tiriki” with his Tiriki wife and primarily English and Swahili with his three children. With his siblings, he alternates between Idakho, Kabras, English, and Swahili.

While his linguistic background is quite rich, Ingosi’s tonal system is largely consistent with that of Burula (differences, where present, will be noted at the relevant section in the description to follow). It is particularly noteworthy that Ingosi does not have as part of his tonal phonology several rules which characterize the other Luhya varieties with which he has had extensive contact. For instance, /H/ verbs in the Near Future ordinarily surface with a H on the initial syllable when the verb is long in both Tiriki (Marlo in prep) and Kabras (18c-d). Both varieties have a rule of *Flop*, which shifts a singly linked H from the phrase-final syllable to the penult (18c-d). In addition, Kabras has an additional rule, *Penultimate Doubling*, which spreads a singly linked H from the penult onto the phrase-final syllable

- (18) FLOP and PENULTIMATE DOUBLING in Kabras and Tiriki, Near Future /H/: ‘s/he will...’

	Kabras		Tiriki
a.	a-lá[khua] ‘pay dowry’		a-lá[ng’wa] ‘pay dowry’
b.	a-la[βéká]] ‘shave’		a-la[véka] ‘shave’
c.	a-la[khálaka] ‘cut’		a-la[khálaka] ‘cut’
d.	a-la[káraanga] ‘fry’		a-la[kálaanga] ‘fry’

Ingosi, like other Idakho speakers consulted for this study, exhibits neither *Flop* nor *Penultimate Doubling*.

1.4.5 Questionnaire Preparation

Preparing the questionnaires which inform the description of Idakho verbal tone presented in Chapter 2 was guided by the methodology articulated at length in Marlo (2013b). The methodology capitalizes on the insight that Bantu verbal tone melodies appear to be unitary exponents of a culmination of morpho-syntactic features rather than a composite of morphological tonal features, with verbal morphemes consistently exerting a predictable influence on the tonal properties of the verb forms in which they appear. Melody selection is conditioned by the verb form's particular combination of tense, aspect, mood, polarity, and clause-type features.

For a given construction, a particular tonal melody is idiosyncratically selected. This melody then interacts with additional phonological, morphological, and syntactic factors. These include (i) the presence of underlyingly high-toned affixes, (ii) verbal stem length, (iii) stem syllable weight, and (iv) the position of the verb within its clause, *inter alia*. These factors must therefore be controlled for and systematically varied to arrive at a complete description of a Bantu verbal tone system. In the following, I illustrate the importance of these factors among the tonal systems of several Luhya varieties. The structure of the questionnaire used in this study is informed by examples such as those presented below.

High-toned affixes in Luhya may trigger alternations in stem tone properties. In Tachoni, for instance, the Hortative is tonally marked with a melodic H on the second syllable of the stem: e.g., **xa-ba [karáange]** 'let them fry'. Subject prefixes in Tachoni are high-toned only in certain morpho-syntactic contexts. The negative subjunctive-based future is one such context. This construction also realizes a melodic H on the second stem syllable, but it spreads leftward in this context following a high-toned subject prefix: **si-na-xú [káraánganile]** 'we won't fry for e.o.' (Odden 2009). In this case, then, the presence of

a high-toned subject prefix causes the stem initial syllables to be realized with a H where it would otherwise not be expected to do so (by a process commonly referred to as *Plateau*).

Nyala-West shows that the number of high-toned prefixes must also be varied to gain a full picture of a tonal system. One tonal melody realizes a melodic H on the first mora of the second syllable in Nyala-West, e.g.: **si-i**[mbaangúlul-a] ‘I am not disarranging’. The presence of one high-toned object prefix does not alter the stem tone pattern (**si-βa-chí**[saambúlul-a] ‘they are not de-roofing them₁₀’), but the addition of a second high-toned object prefix triggers a striking stem pattern alternation. In this alternation, the H of the second object prefix is realized on the stem initial mora and the melodic H is realized, not on the second syllable as expected, but on the final mora of the stem: **s-aa-mú-u**[fúunix-ir-á] ‘he is not covering him for me’ (Ebarb et al. in prep). This example is representative of a larger pattern in Luhya, and makes clear that the number of high-toned prefixes should be varied systematically in a study of Luhya verbal tonology.⁹

In order to develop a truly comprehensive description, the length of the verbal stem must also be varied as some melodies may respond differently to the constraints of a smaller domain of tone assignment. Consider two melodies from Nyala-West: one realizes a melodic H which spans from the second stem syllable through the final in long stems, as in **a-ri**[paangúlúlá] ‘he will disarrange’, while the other realizes a H on the first mora of the second stem syllable, as in **sii**[ngaráangaanga] ‘I do not fry’. In disyllabic stems, the first melody has the same characterization as in longer stems, i.e., the melodic H is realized on the second/final syllable: **a-ri**[xwees-á] ‘he will fall’. Contrastively, disyllabic forms expressing the other melody realize a melodic H on the first stem syllable rather than the second/final: **si-i**[ndeéx-a] ‘I am not cooking’. These two melodies differ further in

⁹Not all varieties permit two object prefixes, e.g. Bukusu (Mutonyi 1996 2000) and Tura (Marlo 2008b), but Idakho does.

monosyllabic stems. The first fails to realize a melodic H, but the second realizes a H on the sole stem syllable: **a-ri [fu-a]** ‘he will die’ vs. **sa-a [rí-a]** ‘he is not eating’ (Ebarb et al. in prep).

Syllable weight also must be varied, especially within the first two stem syllables. A comparison of two similar, but distinct, melodies in the Nyala-West and Idakho varieties of Luhya demonstrate the importance of varying the length of the stem initial syllable. In Nyala-West, one melody realizes a H on the first mora of the second stem syllable regardless of the weight of the stem initial syllable: cf. **si-i [mbaangúlul-a]** ‘I am not disarranging’ and **si-i [ngaráang-aang-a]** ‘I do not fry’ (ibid). Contrastively, one tonal melody in Idakho realizes a melodic H on the first mora of the second stem syllable only when the initial syllable is monomoraic. When it is bimoraic, the melodic H is realized as a rising tone on the initial syllable: cf. **βa [βalítsaanga]** ‘they are counting’ vs. **βa [syeeéβaanga]** ‘they are dancing’. The above contrast between the two similar, but distinct Nyala-West and Idakho tonal melodies would have gone unnoticed if the weight of the stem initial syllable was not systematically varied in both studies.

A similar distinction manifests in the Crastinal Future in Idakho, demonstrating the importance of varying the weight of the second stem syllable. The Crastinal Future is tonally marked with a melodic H on the second mora after the initial syllable. That is, the melodic H is realized on the second stem syllable when that syllable is bimoraic, as in **na-a [kalaánje]** ‘he will fry’, but on the third when the second syllable is monomoraic, as in **na-a [khalaché]** ‘he will cut’.

Finally, the position of a verb within its clause and the tonal properties of any post-verbal elements can have a dramatic impact on the realization of verbal tone. In Tiriki, some infinitives are fully toneless phrase finally, e.g.: **xu [molom-el-a]** ‘to speak for’. When an

object follows, the same verb will be realized (i) the same, if that noun is toneless, or (ii) entirely high-toned, if that noun bears a H: cf., **xu[molomel-a] mulimi** ‘to speak for a farmer’ vs. **xú[mólóm-él-á] mú-lína** ‘to speak for a friend’ (Paster & Kim 2011). This is known as *H Tone Anticipation* and plays a role in Idakho verbal tone as well.

The primary questionnaires used in this study were prepared with the above factors in mind. After an initial period of vocabulary elicitation using a compilation of approximately 700 Proto-Bantu reconstructions as prompts. The full compilation used appears appended in Marlo (2013b:215-230). After a sufficiently large sample of prosodically diverse verbs was secured, I briefly surveyed the tense-aspect system, probing in particular for constructions described in previous studies on Luhya tone. I conjugated some 10,000+ verb forms for each language and organized these into over a thousand paradigms containing between 4 and 20 individual verb forms. The verbs in each paradigm were carefully controlled for their prosodic properties, so that a variety of stem shapes were represented in each paradigm.

For each of the approximately 22 constructions surveyed in this study, dozens of paradigms were compiled for an initial investigation. Each paradigm was composed of verb forms that held constant a number of factors: the presence, number, and kind (CV- vs. 1st sg vs. reflexive) of object prefixes, the choice of subject, the position of the verb within the phrase, the tonal properties of post-verbal elements, and whether the initial segment of the verbal root is a consonant or a vowel.

For instance, each of the verb forms contained within the first full paradigm of Near Future data held the following constant: the verb root is underlyingly H-toned, the verb root begins with a consonant, the verb form has no object prefixes of any kind, and the verb appears finally within the phrase.

(19) Sample Paradigm: Near Future /H/ C-Initial, OPx0 Phrase-Final

Idakho	Gloss
a-la[ráa]	‘s/he will bury’
a-la[ng’úa]	‘s/he will drink’
a-la[lía]	‘s/he will eat’
a-la[khúa]	‘s/he will pay dowry’
a-la[lúma]	‘s/he will bite’
a-la[βéka]	‘s/he will shave’
a-la[téekha]	‘s/he will cook’
a-la[léera]	‘s/he will bring’
a-la[khálaka]	‘s/he will cut’
a-la[kálaanga]	‘s/he will fry’
a-la[sítaaka]	‘s/he will accuse’
a-la[βóolitsa]	‘s/he will seduce’
a-la[sáanditsa]	‘s/he will thank’
a-la[khóng’oonda]	‘s/he will knock’
a-la[βóholola]	‘s/he will untie’
a-la[βóyong’ana]	‘s/he will go around’
a-la[ng’óng’oolitsa]	‘s/he will make a (particular) funny face’
a-la[língakanyinya]	‘s/he will crumple’

Subsequent paradigms systematically vary a number of properties which can influence verb tone. For instance, the second full paradigm contains only phrase final verb forms with underlyingly H-toned verb roots and no object prefixes, but verb roots are vowel-initial, rather than consonant-initial as in the sample paradigm in (19) above.

Later paradigms include object prefixes of various kinds, all of which contribute a H. Prompts for verb forms with canonical object prefixes with a prosodic shape consonant-vowel (CV-) are included. Some paradigms include object prefixes with non-canonical prosodic shapes: 1st person singular objects, marked with a homorganic nasal (N-) and reflexive objects, marked with just a high front vowel (i-). Two object prefixes are possible in certain combinations. The questionnaire I developed includes verb forms with a CV- object

prefix in combination with a 1st person singular object prefix, though other combinations may be possible.¹⁰

Still later paradigms investigated how the inclusion of full noun objects influence the tonal properties of the verbs they follow. Both H-toned and toneless objects are used, though only a subset of the preceding verb forms are tested. In particular, the questionnaire includes phrase-medial verb forms with no object prefixes, one CV object prefix, and a CV object prefix in combination with a 1^{sg} person singular object prefix.

The following display summarizes the properties of the 32 paradigms elicited for each construction as part of the primary questionnaire.

(20) Initial Paradigm Set: Near Future

- /H/ C-Initial
- /H/ V-Initial
- /Ø/ C-Initial
- /Ø/ V-Initial
- /H/ C-Initial + OP
- /H/ V-Initial + OP
- /Ø/ C-Initial + OP
- /Ø/ V-Initial + OP
- /H/ C-Initial + OP_{1sg}
- /H/ V-Initial + OP_{1sg}
- /Ø/ C-Initial + OP_{1sg}
- /Ø/ V-Initial + OP_{1sg}
- /H/ C-Initial + OP_{refl}
- /H/ V-Initial + OP_{refl}
- /Ø/ C-Initial + OP_{refl}
- /Ø/ V-Initial + OP_{refl}
- /H/ C-Initial + OP + OP_{1sg}
- /H/ V-Initial + OP + OP_{1sg}
- /Ø/ C-Initial + OP + OP_{1sg}
- /Ø/ V-Initial + OP + OP_{1sg}
- /H/ C-Initial Phrase-medial, H-toned object

¹⁰Verb forms with two CV- object prefixes are not possible in Idakho.

/H/ C-Initial Phrase-medial, Toneless object
 /Ø/ C-Initial Phrase-medial, H-toned object
 /Ø/ C-Initial Phrase-medial, Toneless object
 /H/ C-Initial + OP Phrase-medial, H-toned object
 /H/ C-Initial + OP Phrase-medial, Toneless object
 /Ø/ C-Initial + OP Phrase-medial, H-toned object
 /Ø/ C-Initial + OP Phrase-medial, Toneless object
 /H/ C-Initial + OP + OP_{1sg} Phrase-medial, H-toned object
 /H/ C-Initial + OP + OP_{1sg} Phrase-medial, Toneless object
 /Ø/ C-Initial + OP + OP_{1sg} Phrase-medial, H-toned object
 /Ø/ C-Initial + OP + OP_{1sg} Phrase-medial, Toneless object

Time permitting, some subset of each construction's original paradigms was re-elicited with slight modification to briefly survey how melodies interact with other factors, such as clause-type (two types of questions and relative clauses), and the presence of H-toned suffixes and enclitics. The full questionnaire used in my study of Idakho verbal tone may be found in Appendix A. For reasons of time, most of the paradigms eliciting information on these topics are not described in this thesis.

1.5 Overview of Idakho Verbal Tone

Idakho is a conservative variety of Luhya, contrasting between underlyingly /H/ and /Ø/ classes of verbal roots. The present work identifies 8 distinct patterns, some of which may be further divided into sub-patterns. These patterns are distinguished by the number and position of melodic Hs within the macrostem, the tonal properties of verbal affixes, and how melodic Hs interact with the verb's position in the phrase. In this section, I describe the basic properties of each pattern, preview the general analytical approach adopted in the thesis, and highlight some of the most pervasive tonal rules that influence Idakho's tonal melodies.

Pattern 1 comprises constructions, including Infinitives, which are not inflected with a melodic H. In the simplest Pattern 1 forms, the root H surfaces on the initial mora of the stem. In Pattern 1a, this is the only H in the verb form. In Pattern 1b, the tense prefix also surfaces H. The construction representing Pattern 1b, the Immediate Past, is somewhat unusual in being disyllabic **ákha-**.¹¹ In /H/ verbs, the leftmost mora of the of the tense prefix is H, and the second mora bears a downstepped H. The height of the downstepped H on the second mora of the tense prefix is the same the height of the root H on the following mora. In /Ø/ verbs, only the leftmost mora of the tense prefix is H.

¹¹It may be that **ákha-** decomposes into two morphemes, **á-** and **kha-**. Morphemes with the same forms are recruited to mark other constructions, though it is not clear that the same forms contribute equivalent meanings across constructions.

(21)	Pattern 1a	<u>Near Future: /H/, H on μ1; /Ø/, All L</u>	
		/H/	a-la{[khálaka]} ‘s/he will cut’
			a-la{[βóolitsa]} ‘s/he will seduce’
	Pattern 1b	/Ø/	a-la{[kulikha]} ‘s/he will name’
			a-la{[lakhuula]} ‘s/he will release’
		<u>Immediate Past (TP = H): /H/, H on μ1; /Ø/, All L</u>	
		/H/	y-á ¹ khá{[khálaka]} ‘s/he just cut’
			y-á ¹ khá{[βóolitsa]} ‘s/he just seduced’
		/Ø/	y-ákha{[kulikha]} ‘s/he just named’
			y-ákha{[lakhuula]} ‘s/he just released’

The Pattern 1b forms involving /H/ verbs illustrate a tonal process which is common both in Idakho and in Bantu languages generally: *Plateau* (Kisseberth & Odden 2003). The downstepped H on the second mora of the tense prefix arrives there via this leftward spreading process. In this case, the root H spreads leftward onto the mora intervening between the root H and the H of the tense prefix.

Verbal forms exhibiting the properties of Pattern 2 are characterized by an all L surface pattern in /H/ verbs and a melodic H which surfaces on the second stem mora in /Ø/ verbs. As in Pattern 1, the ‘b’ subtype of Pattern 2 includes a construction with a H-toned prefix where the ‘a’ subtype does not: subject prefixes surface H in the Conditional Negative.

- (22) **Pattern 2a** Subjunctive Neg.: /H/, All L; /Ø/, H on μ 2
- | | | |
|-----|----------------------|-----------------------|
| /H/ | u-kha{[khalaka]} tá | ‘do not cut!’ |
| | u-kha{[βoolitsa]} tá | ‘do not seduce!’ |
| /Ø/ | u-kha{[kulíkha]} tá | ‘do not name!’ |
| | u-kha{[seéβula]} tá | ‘do not say goodbye!’ |
-
- Pattern 2b** Conditional Neg. (SP = H): /H/, All L; /Ø/, H on μ 2
- | | | |
|-----|-------------------------|--------------------------------|
| /H/ | na-á-kha{[khalaka]} tá | ‘if s/he does not cut’ |
| | na-á-kha{[βoolitsa]} tá | ‘if s/he does not seduce’ |
| /Ø/ | na-á-kha{[kulíkha]} tá | ‘if s/he does not name’ |
| | na-á-kha{[seéβula]} tá | ‘if s/he does not say goodbye’ |

Pattern 3 may be observed in the affirmative Subjunctive and the subjunctive-based Crastinal Future. These constructions take a unique melody in which /H/ and /Ø/ both express a melodic H on the second mora after the initial syllable of the macrostem. In other words: regardless of the weight of the initial syllable of the macrostem, if the second syllable is short the melodic H will surface on the third syllable, otherwise it will be realized on the second half of a long second syllable (i.e., as a rising tone on the second stem syllable). While the lexical contrast is neutralized in the basic forms presented below, §2.3 will show that the lexical contrast re-emerges in other contexts.

(23)	Pattern 3	<u>Subjunctive: /H/ & /Ø/, H on μ_2 after σ_1 of macrostem</u>	
	/H/	a{[βoolitsí]}	‘let him/her seduce’
		a{[kalaánje]}	‘let him/her fry’
		a{[tsuunzuúni]}	‘let him/her suck’
		a{[βoyong’áne]}	‘let him/her go around’
	/Ø/	a{[sebulí]}	‘let him/her say goodbye’
		a{[lakhuúli]}	‘let him/her release’
		a{[siinjilítsi]}	‘let him/her make stand’
		a{[seβulúkhaɪ]}	‘let him/her scatter’

In Pattern 4, the melodic H surfaces on the initial mora of the macrostem in both /H/ and /Ø/ verbs. As with Pattern 3, the lexical contrast between /H/ and /Ø/ verbs is neutralized in the small sample of data given below, but the contrast re-emerges in other contexts.

(24)	Pattern 4	<u>Remote Past: /H/ & /Ø/, H on μ_1 of macrostem</u>	
	/H/	y-aa{[khálaka]}	‘s/he cut’
		y-aa{[βóolitsa]}	‘s/he seduced’
	/Ø/	y-aa{[kúlikha]}	‘s/he named’
		y-aa{[lákhuula]}	‘s/he released’

The Pattern 5 subtypes are grouped together due to similarities in the formal analysis I offer in §2.5, though there are many notable differences in their basic tonal properties. In Pattern 5a, /H/ verbs surface with a H on all moras of the third stem syllable, and /Ø/ verbs surface with a H on the second stem mora. In Pattern 5b, /Ø/ verbs surface with a H on the second stem mora as well, but /H/ verbs surface with a H on the final syllable rather than the third. Pattern 5c sets itself apart from the other Pattern 5 constructions in having a H-toned subject prefix. In addition, /H/ verbs surface with a downstepped H which spans the full length of the stem, while /Ø/ verbs surface with a downstepped H spanning the first two moras of the stem.

- (25) **Pattern 5a** Present: /H/, H on σ_3 ; /Ø/, H on μ_2
 /H/ a{[khalakáánga]} ‘s/he is cutting’
 a{[boolitsáánga]} ‘s/he is seducing’
 /Ø/ a{[kulíkhaanga]} ‘s/he is naming’
 a{[lakhúulaanga]} ‘s/he is releasing’
- Pattern 5b** Indefinite Future: /H/, H on FV; /Ø/, H on μ_2
 /H/ a-li{[khalaká]} ‘s/he will cut’
 a-li{[boyong’aná]} ‘s/he will go around’
 /Ø/ a-li{[kulíkha]} ‘s/he will name’
 a-li{[lakhúula]} ‘s/he will release’
- Pattern 5c** Conditional (SP = H): /H/, H on μ_1 —FV; /Ø/, H on μ_1 — μ_2
 /H/ na-á{[‘khaláká]} ‘if s/he cuts’
 na-á{[‘boolítsá]} ‘if s/he seduces’
 /Ø/ na-á{[‘kulíkha]} ‘if s/he names’
 na-á{[‘lakhúula]} ‘if s/he releases’

Pattern 6 includes affirmative Imperative constructions. /H/ verbs are characterized by a H on the FV. /Ø/ verbs also surface with a H on the FV, but this H is downstepped in /Ø/ verbs following a H which spans all preceding moras of the stem.

- (26) **Pattern 6** Imp.sg: /H/, H on FV; /Ø/, Hs on μ_1 —penult, FV
 /H/ {[khalaká]} ‘cut!’
 {[boolitsá]} ‘seduce!’
 /Ø/ {[kulí‘khá]} ‘name!’
 {[lakhúú‘lá]} ‘release!’

Pattern 7 is reserved for the Hesternal Perfective. In this construction, /H/ verbs surface with a H spanning the full length of the stem. The stem in /Ø/ verbs is similarly H throughout the full stem, but downstep is observed between the second and third moras of the stem.

- (27) **Pattern 7** Hesternal Perf.: /H/, H on $\mu 1$ —FV; /Ø/, Hs on $\mu 1$ — $\mu 2$, $\mu 3$ —FV
- | | | |
|-----|------------------|---------------------|
| /H/ | y-a{[kháláché]} | ‘s/he cut’ |
| | y-a{[βóólítsí]} | ‘s/he seduced’ |
| /Ø/ | y-a{[lákhu‘úlí]} | ‘s/he released’ |
| | y-a{[séé‘βúúlí]} | ‘s/he said goodbye’ |

Finally Pattern 8 is found only in the Habitual and is characterized by both a H-toned tense prefix and a melodic H which surfaces on all moras of the stem in both /H/ and /Ø/ verbs.

- (28) **Pattern 8** Habitual (TP = H): /H/ & /Ø/, H on $\mu 1$ —FV
- | | | |
|-----|--------------------|---------------------|
| /H/ | y-aá{[‘kháláká]} | ‘s/he will cut’ |
| | y-aá{[‘βóólítsá]} | ‘s/he will seduce’ |
| /Ø/ | y-aá{[‘kúlíkhá]} | ‘s/he will name’ |
| | y-aá{[‘lákhu‘úlá]} | ‘s/he will release’ |

I analyze differences among tonal melodies as arising from differences in (i) the construction-specific number of inflectional Hs, (ii) the positions targeted by melodic H assignment (MHA) rules, which are often construction-specific, and (iii) a number of tonal adjustment rules, which may spread, delete, or lower inflectional and lexical Hs.

Constructions may contribute up to two melodic Hs, or none at all. Pattern 1 constructions are tonally uninflected, receiving no inflectional Hs. Constructions exhibiting the properties of Patterns 2, 3, and 5 all receive one inflectional H, while constructions exhibiting the properties of Patterns 4, 6, 7, and 8 all receive two inflectional Hs. Not all inflectional Hs ultimately surface in a particular verb form. It is especially common for /H/ verbs not to realize all inflectional Hs.

The positions targeted by the various melodic H assignment rules are summarized in (29) below. The second mora of the stem is a commonly targeted position for melodic

H assignment in /Ø/ verbs, but melodic Hs may target any of the positions listed below, as licensed by morpho-syntactic context.

(29) Targets of Melodic H Assignment

- | | |
|---|--------------------------|
| a. Initial mora of the stem | Pattern 6 |
| b. Second mora of the stem | Patterns 2, 4, 5, 6, 7 |
| c. All moras of the third syllable of the stem | Pattern 5a |
| d. Final mora of the stem | Patterns 5b, 5c, 6, 7, 8 |
| e. Initial mora of the macrostem | Pattern 4 |
| f. 2 nd mora after the initial syllable of the macrostem | Pattern 3 |

The tonal properties of /H/ verbs can be and very often are considerably different than those of /Ø/ verbs. Under my analysis, these differences are frequently attributed to the order in which melodic H assignment rules apply and whether the tonal class of a verb form permits the earliest melodic H assignment rules to apply to it. For instance, the rule targeting the second stem mora applies relatively early in the derivation, and requires that the mora preceding the targeted second mora is toneless. While this rule applies freely in many /Ø/ verbs, it is blocked from applying in /H/ verbs because the root H occupies the mora preceding its target. Inflectional Hs are therefore assigned in /H/ verbs by later rules which target different positions.

Once assigned to the verb, inflectional Hs are then subject to a number of tonal adjustment rules. One such rule was mentioned previously in this section with reference to Pattern 1b, namely: *Plateau*,¹² which may spread a H to the left when that H is preceded by another H. Another rule which plays an important role in the surface tonal properties of Idakho verbs is *Meeussen's Rule*, which deletes the second of two adjacent Hs. This common rule may also be illustrated using data from Pattern 1 verb forms. Consider, for

¹²While *Plateau* applies generally in Idakho, it also only applies optionally. My corpus of recordings includes particularly few instances of *Plateau* applying in the Conditional Negative.

example, the data below. As was noted in §1.3.2, object prefixes in Idakho are analyzed as underlyingly H. In /Ø/ Pattern 1 verbs, object prefixes contribute a H to the verb form which surfaces *in situ* (30a). In (30b), one observes that the introduction of a H-toned object prefix causes the root H in /H/ verbs not to surface.

(30) Meeussen's Rule, Near Future: '*s/he will...(him/her)*'

	No Object Prefix	One Object Prefix	Gloss
a.	a-la{[lakhuula]}	a-la{mú[lakhuula]}	'release'
b.	a-la{[khálaka]}	a-la{mú[khalaka]}	'cut'

Meeussen's Rule is analyzed as preceding *Plateau* in the derivation, such that the *Plateau* does not feed *Meeussen's Rule*.

Finally, all tonally inflected constructions (Patterns 2-8) are affected by a general rule of *Initial Lowering*, whereby Hs underlyingly initial within the macrostem are rendered L. The pervasiveness of this rule within the verbal tonology of Idakho is one reason that the root H fails to surface in the majority of the data presented in this section. Within Luhya, there is evidence that it has also directly contributed to the introduction of tonal melodies in historically uninflected constructions: see how in Chapter 3.

1.6 Organization

The present work makes contributions in two areas of Bantu tone. First, I will describe and analyze the verbal tone patterns of Idakho. Following this, I will describe and offer an account for a series of tonal developments within Luhya.

Chapter 2 presents and analyzes in more detail the basic properties of Idakho's 12 tonal melodies. It also describes how these tonal melodies interact with a verb's stem length and phrase position, as well as the presence of H-toned object prefixes, L-toned subject prefixes, and spuriously H-toned passive suffixes.

Chapter 3 is comprised of two components, both relating to the emergence of 'predictability' in western Luhya varieties. The first section offers an account of how tonal melodies came to be used in constructions in which there is no historical precedence for tonal inflection. The second section describes patterns of neutralization in the vowel-initial verb roots of tonally conservative varieties like Idakho. Both sections recommend a unified account of their respective phenomena in terms of a speaker preference for clear prosodic cues of stem boundary position.

Chapter 4 briefly concludes.

Idakho Verbal Tone

This chapter provides a comprehensive description and analysis of the tonal properties of the Idakho verb. In the following sections, I detail the properties of Idakho's twelve tonal melodies, which I group into eight 'Patterns'. Tonal melodies belonging to the same Pattern share most of the same core properties, but differ with respect to a peripheral property, such as the underlying tonal specification of verbal prefixes or the construction's behavior in a phrase-medial context. The chapter devotes one section to each of the eight Patterns I identify and concludes with a final summary.

The first eight sections have the same general structure and begin with a description of the melody as it is realized in its most morphologically simple form using representative lexical items with varying prosodic properties (namely, syllable weight and stem length). Following this, the influence of single and multiple object prefixes will be demonstrated, and an analysis offered of the pattern's core properties. Next, peripheral properties of the tonal melodies will be presented, including the effect, if any, of (i) the verb's position within its phrase, (ii) the choice of verbal subject, and (iii) the presence of the spuriously H-toned passive suffix. Finally, each section will conclude with a discussion of other morpho-syntactic contexts in which the melody in question may be observed.

The chapter is organized in this way so that this dissertation may be used as a reference in which it is easy to look up data of a specific type (e.g., the behavior of passives in Pattern 2b). This structure can make it more difficult to present clear analytical arguments, particularly of the peripheral properties of tonal melodies such as passives and

phrase-position effects. I have endeavored to provide useful summaries at various points throughout the chapter to remedy this limitation.

2.1 Pattern 1: The lexical pattern

The description of Idakho's verbal tone system begins with an examination of the tonal properties of Pattern 1, which is characterized by a H on the initial stem mora in /H/ stems and /Ø/ stems surface all L in basic contexts. There is no melodic H in Pattern 1; only lexical Hs surface, revealing the lexical contrast between /H/ and /Ø/ verbs.

Two sub-patterns comprise Pattern 1: Pattern 1a and Pattern 1b. Pattern 1a constructions are marked with either a toneless tense prefix or no tense prefix; Pattern 1b constructions are marked with a H-toned tense prefix.

2.1.1 Pattern 1a: Near Future

The Near Future illustrates the properties of the lexical pattern. It is marked with the toneless **1a-** tense prefix and is uninflected with a melodic H. As shown in (31), the root H of /H/ verbs on the initial stem mora is the only H that surfaces in consonant-initial (henceforth, 'C-initial').

(31) Near Future C-Initial /H/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	la	{[khúa]}	'pay dowry' [SB] ¹
a-	la	{[béka]}	'shave'
a-	la	{[téekha]}	'cook'
a-	la	{[khálaka]}	'cut'
a-	la	{[kálaanga]}	'fry'
a-	la	{[sáanditsa]}	'thank'
a-	la	{[βóyong'ana]}	'go around'

In forms involving stems beginning with vowels (henceforth, 'V-Initial'), the lexical H surfaces on the latter half of the syllable which straddles the left stem boundary. The vowel of the tense prefix **la-** deletes preceding the initial vowel of the verbal root, which in turn undergoes compensatory lengthening. The result is a surface rising tone on the first syllable that includes segmental content contributed by the verb root.

(32) Near Future V-Initial /H/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	li	{[íra]}	'kill'
a-	lo	{[ónonyinya]}	'spoil'
a-	la	{[ábukhanyinya]}	'separate'

In contrast, /Ø/ verbs are realized all L in both C-initial (33) and V-initial (34) stems.

¹I use speaker initials in square brackets to indicate that recordings for the particular example are only available for one speaker. This represents differences in the stimuli presented to each speaker rather than systemic phonological differences unless explicitly acknowledged in the text.

(33) Near Future C-Initial /Ø/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	la	{[kwaa]}	'fall'
a-	la	{[lekha]}	'leave'
a-	la	{[reeβa]}	'ask'
a-	la	{[sosana]}	'resemble' [SB]
a-	la	{[lakhuula]}	'release'
a-	la	{[seeβula]}	'say goodbye'
a-	la	{[kalushitsa]}	'return' [SB]

(34) Near Future V-Initial /Ø/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	le	{[enya]}	'want'
a-	le	{[eyela]}	'wipe for'
a-	li	{[iluula]}	'winnow'
a-	la	{[ambakhana]}	'refuse'

2.1.1.1 Near Future with Object Prefixes

The lexical contrast among verb roots is lost when an object prefix is introduced. The object prefix itself surfaces H, but the stems of both /H/ (35) and /Ø/ (36) verbs are all L.

(35) Near Future C-Initial /H/ + OP 's/he will...him/her'

Subj	Tns	Obj	Stem	Gloss
a-	la	{mú	[khwaa]}	'pay dowry'
a-	la	{mú	[βeka]} ²	'shave'
a-	la	{mú	[leera]}	'bring'
a-	la	{mú	[khalaka]}	'cut'
a-	la	{mú	[βoolitsa]}	'seduce'
a-	la	{mú	[βoyong'ana]}	'go around'

²The vowel of the third person singular object prefix {mú-} is optionally deleted before [β], triggering compensatory lengthening of the nasal. Under these conditions, the H of the object prefix is borne by the lengthened nasal: a-la{mám [beka]}.

(36) Near Future C-Initial /Ø/ + OP 's/he will...him/her'

Subj	Tns	Obj	Stem	Gloss
a-	la	{mú	[tsia]}	'go (for)'
a-	la	{mú	[lekha]}	'leave'
a-	la	{mú	[loonda]}	'follow'
a-	la	{mú	[kumila]}	'hold' [JI]
a-	la	{mú	[lakhula]}	'release'
a-	la	{mú	[kalushitsa]}	'return' [SB]

The same generalization holds in V-Initial stems. In (37), the H of the object prefix surfaces *in situ*, but the root H fails to surface. The result is a falling tone in the syllable which straddles the stem boundary.

(37) Near Future V-Initial /H/ + OP 's/he will...him/her'

Subj	Tns	Obj	Stem	Gloss
a-	la	{mwí	[ira]}	'kill'
a-	la	{mwó	[ononyinya]}	'spoil'
a-	la	{mwá	[abukhanyinya]}	'separate'

/Ø/ V-initial verbs exhibit the same surface tonal properties in (38), in which only the H of the object prefix surfaces.

(38) Near Future V-Initial /Ø/ + OP 's/he will...him/her'

Subj	Tns	Obj	Stem	Gloss
a-	la-	{mwé	[enya]}	'want'
a-	la-	{mwé	[eyela]}	'wipe for'
a-	la-	{mwá	[ambakhana]}	'refuse'

The H of the 1st sg object prefix surfaces as a rising tone on the lengthened pre-stem syllable. In the displays below, the tone-bearing mora contributed by the 1st sg object prefix is represented under the 'Obj' column, and the segmental contribution of the prefix is represented under the 'Stem' column. This is done because the nasal object prefix frequently

triggers phonological alternations such as hardening and post-nasal obstruent voicing, and representing the nasal nearer to the alternating segment renders these alternations easier to recognize.³ Note that the lexical H of /H/ stems fails to be realized in forms with 1st sg object prefixes (39), as was the case with CV- object prefixes (35).

(39) Near Future C-Initial /H/ + OP_{1sg} 's/he will...me'

Subj	Tns	Obj	Stem	Gloss
a-	la	{á	[khwaa]}	'pay dowry'
a-	la	{á	[mbeka]}	'shave'
a-	la	{á	[ndeera]}	'bring'
a-	la	{á	[khalaka]}	'cut'
a-	la	{á	[mboolitsa]}	'seduce'
a-	la	{á	[mboyong'ana]}	'go around'

In (40) it is shown that the H contributed by the 1^{sg} object prefix is the only H that surfaces in /Ø/ verbs with this object prefix in the Near Future.

(40) Near Future C-Initial /Ø/ + OP_{1sg} 's/he will...me'

Subj	Tns	Obj	Stem	Gloss
a-	la	{á	[ndekha]}	'leave'
a-	la	{á	[noonda]}	'follow'
a-	la	{á	[ndakhuula]}	'release'
a-	la	{á	[seeβula]}	'say goodbye (to)'

When a 1st sg object prefix appears in conjunction with a CV- object prefix, a falling tone on the pre-stem syllable is observed. Here again the lexical contrast is neutralized: the stem is toneless in both /H/ and /Ø/ stems. I am not aware of any ditransitive monosyllabic stems; a valence-increasing suffix like the applicative **-il/el** is required to license a second object prefix, so that even verb forms with monosyllabic roots involve disyllabic stems.

³Nasals delete before voiceless fricatives.

- (41) Near Future C-Initial /H/ + OP + OP
- _{1sg}
- 's/he will...him/her for me'

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
a-	la	{mú-	u	[ndeela]}	'bury'
a-	la	{mú-	u	[mbechela]}	'shave'
a-	la	{mú-	u	[ndeerela]}	'bring'
a-	la	{mú-	u	[khalachila]}	'cut'

- (42) Near Future C-Initial /Ø/ + OP + OP
- _{1sg}
- 's/he will...him/her for me'

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
a-	la	{mú-	u	[nziila]}	'go (for)'
a-	la	{mú-	u	[ndeshela]}	'leave'
a-	la	{mú-	u	[noondela]}	'follow'
a-	la	{mú-	u	[ngulishila]}	'name' [SB]

A summary of the primary tonal properties of the Near Future is presented schematically in the following display.

- (43) A Schematic Representation of the Near Future's Tonal Properties

<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-la	{	[C [́] V _{CV} CV]}
OPsx1	a-la	{C [́] V	[CVCVCV]}
OPsx2	a-la	{C [́] V ₋ V	[CVCVCV]}

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-la	{	[CVCVCV]}
OPsx1	a-la	{C [́] V	[CVCVCV]}
OPsx2	a-la	{C [́] V ₋ V	[CVCVCV]}

The common cross-Bantu *Meeussen's Rule* may be invoked to explain the tonal properties of all of the forms above involving object prefixes. In Idakho, *Meeussen's Rule* deletes a H after H. Recall that in forms involving only one object prefix, the H of the object prefix surfaces *in situ*, but the root H does not surface at all. In forms with two object prefixes,

there are up to three adjacent underlying Hs: (i) the H of the CV object prefix, (ii) the H of the 1st sg object prefix, and (iii) the lexical H (in /H/ stems). Only the leftmost underlying H surfaces in such cases. I account for this by stipulating that *Meeussen's Rule* applies iteratively from right-to-left. I formulate *Meeussen's Rule* as in (44) below.

(44) MEEUSSEN'S RULE

$$\begin{array}{cc} \text{H} & \text{H} \rightarrow \emptyset \\ | & | \\ \mu & \mu \end{array}$$

In the derivation below, the analysis of all Near Future forms with a single object prefix is modelled.

(45) Derivation, /H/ Near Future + OP: a-la{mú[khalaka]} 's/he will cut him/her'

$$\begin{array}{cc} 1 & \text{UNDERLYING} \\ \text{H} & \text{H} \\ | & | \\ \text{a-la}\{\mu\text{[khalaka]}\} & \end{array} \quad \begin{array}{cc} 2 & \text{MEEUSSEN'S RULE} \\ \text{H} & \text{H} \rightarrow \emptyset \\ | & | \\ \text{a-la}\{\mu\text{[khalaka]}\} & \end{array}$$

Finally, the derivation below illustrates the iterativity and directionality of *Meeussen's Rule*.

(46) Derivation, /H/ Near Future + OPx2: a-la{mú-u[mbechela]} 's/he will shave him/her for me'

$$\begin{array}{ccc} 1 & \text{UNDERLYING} & 2 \text{ MEEUSSEN'S RULE} & 3 \text{ MEEUSSEN'S RULE} \\ \text{H} & \text{H} & \text{H} & \text{H} \\ | & | & | & | \\ \text{a-la}\{\mu\text{-u[mbechela]}\} & \text{a-la}\{\mu\text{-u[mbechela]}\} & \text{a-la}\{\mu\text{-u[mbechela]}\} & \end{array}$$

2.1.1.2 Near Future: Phrase Medially

The basic tonal properties of the Near Future are unaffected by the verb's position within its phrase, with one notable exception. It continues to be the case that only the leftmost underlying H surfaces on the verb, but an additional H spanning the full length of

the verb up until the leftmost underlying H is also realized when the post-verbal word is H-toned, as shown below.

Four pairs of /H/ and /Ø/ verbs each are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement. Notice that the stem tone properties of the verb are the same as they are pre-pausally only when a toneless object follows.

(47) Near Future Phrase Medially [SB] ‘*s/he will... (for him/her)*’

/H/ Stems	No OP	a-la{[rá]} ‘músáatsa	‘bury the man’ ⁴
		a-la{[rá]} muundu	‘bury somebody’
	One OP	a-la{[khá‘láká]} músáatsa	‘cut the man’
		a-la{[khálaka]} muundu	‘cut somebody’
/Ø/ Stems	No OP	a-la{mú[‘réélá]} músáatsa	‘bury the man’
		a-la{mú[reela]} muundu	‘bury somebody’
	One OP	a-la{mú[‘kháláchílá]} músáatsa	‘cut the man’
		a-la{mú[khalachila]} muundu	‘cut somebody’
	No OP	a-lá{[tsyá]} músáatsa	‘go for the man’ ⁵
		a-la{[tsya]} muundu	‘go for somebody’
	One OP	a-lá{[sééβúlá]} músáatsa	‘say goodbye to the man’
		a-la{[seeβula]} muundu	‘say goodbye to somebody’
	No OP	a-la{mú[‘tsíílá]} músáatsa	‘go for the man’
		a-la{mú[tsiila]} muundu	‘go for somebody’
	One OP	a-la{mú[‘sééβúlílá]} músáatsa	‘say goodbye to the man’
		a-la{mú[seeβulila]} muundu	‘say goodbye to somebody’

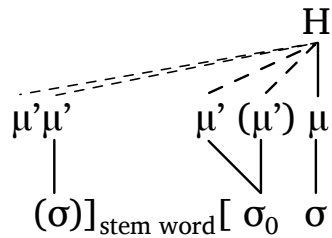
⁴For both of my primary speakers, [músáatsa] may be understood as ‘husband’ in many cases.

⁵The verb [tsia] used transitively and without the applicative suffix expresses an intent to retrieve or pick up someone, not an intent to go someplace on someone’s behalf.

The leftward spreading of post-verbal Hs is attested in other tonally conservative Luhya varieties, e.g. Tiriki (Marlo in prep, Paster & Kim 2011) and Logoori (Leung 1991). While it is clear that *H Tone Anticipation* is a ubiquitous feature of the Idakho verbal tone system as well, the leftward extent of the resulting H span is sometimes less clear.

H spans in Idakho are characterized by *crescendo*, whereby later syllables within a single phonological H span are produced with progressively higher pitch.⁶ Because the increase is so gradual, it is often difficult to identify the left edge of the H span, particularly when there is no preceding H serving as a reference for the token's pitch range. For example, the transcriptions of /Ø/ verbs lacking object prefixes above indicate that the H span begins on the tense prefix **la-**, though my recordings include productions in which the H span appears to begin on the stem and even word initial moras. In light of descriptive challenges associated with the left edge of the H span, no attempt is made to specify the terminus of leftward spreading in the formal statement of *H Tone Anticipation* below.

(48) H TONE ANTICIPATION



Condition:

Does not apply in tonally inflected contexts

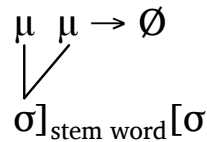
The formalism offered above has the following notable features: the σ_0 in initial position within the post-verbal word is intended to capture the generalization that, while the underlying H undergoing leftward spreading via *H Tone Anticipation* may be initial within the word, it need not be. The rule is structured to also capture the generalization that leftward spreading will only take place if doing so will result in a H span that reaches into the

⁶Austen 1974b observes that *crescendo* also characterizes sequences of H-toned syllables without downstep in the Bukusu variety of Luhya.

verb stem. The latter feature is important to account for the fact that ‘man’ is produced as **musáatsa** in isolation, not ***músáatsa**.

The data in (47) also illustrate an effect of a rule of *Non-Final Shortening*, whereby underlyingly long word final syllables are shortened when non-final within the phrase. This is the case in monosyllabic stems: the final and only stem syllable is underlyingly bimoraic, with one mora originating from the verbal root and the second from the FV. Pre-pausally that underlying length is expressed. However, when another word follows the verb, the final syllable is shortened. The Nyala-West Luhya variety also exhibits such a rule (Ebarb et al. in prep), and it may be formulated as below.

(49) NON-FINAL SHORTENING



Finally, note that for post-verbal complements with an initial H, that H will be downstepped relative to the lexical H in monosyllabic, as in, e.g., **a-la{ [rá] }** ‘**mú’yáyi** ‘she will bury the boy’.

2.1.1.3 Near Future: Impact of Subject Choice

In (50) below, observe that the root H surfaces in verb forms with 3rd person subjects, but does not in forms with 1st and 2nd person subjects.

(50) Subject Choice in the Near Future /H/ ‘...will bring’ [SB]

	Singular	Plural
1st Person	n-a{[leera]} ⁷	khu-la{[leera]}
2nd Person	u-la{[leera]}	mu-la{[leera]}
3rd Person	a-la{[léera]}	βa-la{[léera]}

There is no H in /Ø/ verbs regardless of subject selection, as shown in (51).

(51) Subject Choice in the Near Future /Ø/ ‘...will ask’ [SB]

	Singular	Plural
1st Person	n-a{[reeβa]}	khu-la{[reeβa]}
2nd Person	u-la{[reeβa]}	mu-la{[reeβa]}
3rd Person	a-la{[reeβa]}	βa-la{[reeβa]}

After the 1st and 2nd person subject prefixes, the object prefix H, as well as the root H, fails to surface. This is shown in (52) below.

(52) Subject Choice in the Near Future /H/ + OP ‘...will bring him/her’ [SB]

	Singular	Plural
1st Person	n-a{mu[leera]}	khu-la{mu[leera]}
2nd Person	u-la{mu[leera]}	mu-la{mu[leera]}
3rd Person	a-la{mú[leera]}	βa-la{mú[leera]}

In /Ø/ verbs, the object prefix H surfaces in verb forms with 3rd person subjects, but not with 1st or 2nd person subjects.

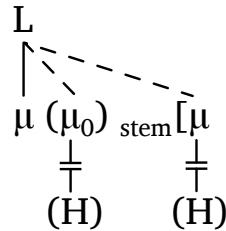
⁷The 1st sg subject prefix triggers deletion of the tense prefix <l> as a diachronic extension of a general process in Idakho whereby laterals delete following nasals when a second NC cluster appears later in the word, e.g., **a-la-mú[loonda]** ‘she will follow him’ vs. **a-la-á[noonda]** ‘she will follow me’ (/a-la-N[loonda]/). This is known as Meinhof’s Law (Hyman 2003). Cases in which one observes Meinhof’s Law differ from cases in which /nl/ sequences which are not followed by a nasal, e.g., a-la-mú[leera] ‘she will bring him’ vs. a-la-á[ndeera] ‘she will bring me’. In this case the lateral undergoes hardening rather than deletion.

(53) Subject Choice in the Near Future /Ø/ + OP ‘...will ask him/her’ [SB]

	Singular	Plural
1 st Person	n-a{mu[reeβa]}	khu-la{mu[reeβa]}
2 nd Person	u-la{mu[reeβa]}	mu-la{mu[reeβa]}
3 rd Person	a-la{mú[reeβa]}	βa-la{mú[reeβa]}

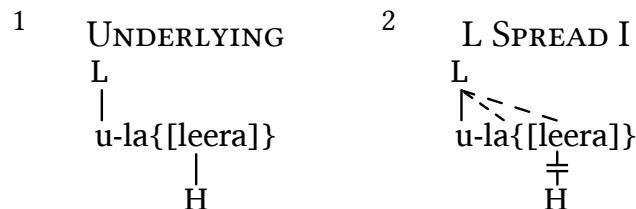
The data in (50), (52), and (53) form the basis for positing underlying L for 1st and 2nd person subject prefixes and underlying tonelessness for 3rd person subject prefixes. I analyze the failure of the root and object prefix Hs to surface as resulting from the L of 1st and 2nd person subject prefixes spreading rightward through the initial mora of the stem, overwriting any tones present on the following syllable. I posit the rule *L Spread I*, formulated in (54).

(54) L SPREAD I



In verb forms without an object prefix, the subject prefix L spreads first to the toneless tense prefix **la-**, then second to the initial mora of the stem, delinking the root H.

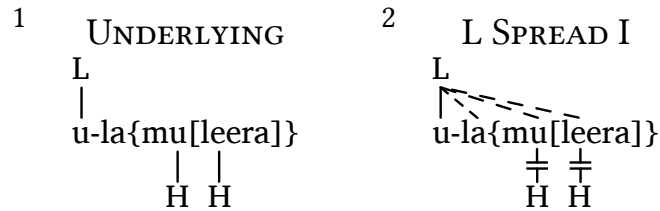
(55) Derivation, /H/ Near Future 2nd sg: u-la{[leera]} ‘you will bring’



The tonal properties of verb forms with an object prefix proceeds in much the same way. First, the L of the subject prefix spreads to the toneless tense prefix **la-**, then to the object

prefix **mú-**, and finally to the initial syllable of the stem. Both the object prefix and root Hs are delinked in the process.

(56) Derivation, /H/ Near Future 2nd sg + OP: u-la{mu[leera]} ‘you will bring him/her’



2.1.1.4 Near Future: Passives

In the Near Future, the passive suffix -u^H does not surface H. Consider the data below.

(57) Near Future: Passives ‘s/he will be...’ [SB]

/H/ Stems

a-la{[khálak-u-a]}

‘cut’

a-la{[tsúunzuun-u-a]}

‘sucked’

/Ø/ Stems

a-la{[lakhul-u-a]}

‘released’

a-la{[kalushil-u-a]}

‘defended’

It is important to note the absence of a H on the passive suffix in this context, as its presence has an impact on stem tone in other contexts. It is therefore necessary to account for when the passive does and does not realize a H.

I account for the absence of a passive H in the Near Future in the following manner. I assert that the H contributed by the passive suffix is underlyingly floating and is only expressed when it comes to be linked to its sponsoring vowel via a rule of *Passive H Assignment* in those constructions in which it is operative. In the Near Future, the rule is not operative, and so the passive H remains floating without being expressed on the verb form.

The circumstances under which *Passive H Assignment* applies are complex, and will be described in more detail in §2.2.1.5 and §2.2.1.6.

2.1.1.5 Pattern 1a: Other Verbal Contexts

I have shown that the following properties characterize the Near Future: (i) the most morphologically simple forms realize a H on the initial stem mora in /H/ stems and surface all L in /Ø/ stems, (ii) the lexical contrast is neutralized in forms with an object prefix, where the object prefix H is realized *in situ* and the lexical H fails to surface in /H/ stems, (iii) the verb's position within its phrase does not affect stem tone, (iv) the lexical H does not surface in forms with 1st and 2nd person subjects, and (v) the passive suffix does not surface H. The tenses below exhibit these properties as well.

(58) Other Pattern 1a Verbal Contexts⁸

- | | |
|--------------------------------------|------------------------|
| a. Near Future Negative ⁹ | SP-1a[ROOT-a] tá(awe) |
| b. Perfect | SP-Ø[ROOT-ile] |
| c. Perfect Negative | SP-Ø[ROOT-ile] tá(awe) |
| d. Infinitive | khu[ROOT-a] |

The following displays demonstrate that for each of the constructions in (58), /H/ verbs realize a H on the stem initial mora as in the Near Future. The negative constructions have the added complication *H Tone Anticipation* spreads the H of the negative particular **tá(awe)** onto all moras beyond the initial mora of the stem.

⁸The Infinitive has not been tested for each of the properties enumerated above, but the available data are sufficient to uniquely identify it as patterning with the others.

⁹The Near Future Negative only patterns with its affirmative counterpart when it is not marked with the negative prefix **shi-**, in which case the Near Future Negative selects the Pattern described in 2.2.

(59) Morphologically Simple /H/ Stems¹⁰

	Subj	Tns	Stem	Neg
Near Fut Neg	a-	la	{[khá ¹ láká]}	tá(awe) ¹¹
Perfect	aa- ¹²	Ø	{[khálaachε]}	
Perf Neg	aa-	Ø	{[khá ¹ lááché]}	tá(awe)
Infinitive [JI]	khu		{[khálaka]}	

/Ø/ verbs surface all L in the most morphologically simple forms, except in the negative constructions. In negative constructions, the H of the **tá(awe)** spreads left via *H Tone Anticipation* far into the verb.¹³

(60) Morphologically Simple /Ø/ Stems

	Subj	Tns	Stem	Neg
Near Fut Neg	a-	lá	{[lákhuúlá]}	tá(awe)
Perfect	aa-	Ø	{[lakhuuli]}	
Perf Neg	aa-	Ø	{[lákhuúlí]}	tá(awe)
Infinitive [JI]	khu		{[lakhuula]}	

As in the Near Future, the tenses in (58) also neutralize the lexical contrast in forms with an object prefix.¹⁴ The H of the object prefix surfaces H and the stem toneless.

¹⁰The examples included in the current section use **-khálak-** ‘cut’ and **-lakhuul-** ‘release’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the tenses discussed in this section is the following: Near Future Negative - ‘s/he will not...’; Perfect - ‘s/he has...-ed’; Perfect Negative - ‘s/he has not...-ed’; Infinitive - ‘to...’.

¹¹SB preferred truncated tá, while JI preferred the full form **táawe**.

¹²3rd sg subjects may alternatively select **u-** as the subject prefix with no apparent effect on meaning or tone. In addition, the vowel of the subject prefix is lengthened in the Perfect and Perfect Negative (but not other constructions which involve the perfective suffix). I assume that the Perfect contributes a floating mora which lengthens the subject prefix.

¹³The prose description of how far the negative H extends into the verb is purposely vague. The left edge of the H span is not clear in my corpus.

¹⁴No recordings of Infinitives with object prefixes were collected. However, several instances of this construction were encountered during the course of my interviews with both primary consultants, and the tonal properties are consistent with those of Near Future forms with object prefixes.

(61) /H/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Near Fut Neg	a-	la	{mú	[¹ kháláká]}	tá(awe)
Perfect	aa-	Ø	{mú	[khalaache]}	
Perf Neg	aa-	Ø	{mú	[¹ khálááché]}	tá(awe)

(62) /Ø/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Near Fut Neg	a-	la	{mú	[¹ lakhúúlá]}	tá(awe)
Perfect	aa-	Ø	{mú	[lakuuli]}	
Perf Neg	aa-	Ø	{mú	[¹ lakhúúlí]}	tá(awe)

As in the Near Future, the stem tone properties of the Near Future Negative, the Perfect, and the Perfect Negative are the same phrase-medially as they are pre-pausally if one abstracts away from the regularly applying process of *H Tone Anticipation*. Examples of both /H/ and /Ø/ stems followed by a H-toned noun, *musáatsa* ‘man’ or *mú¹yáyi* ‘boy’, and a toneless noun, *muundu* ‘person/somebody’ are provided below. When a H-toned object follows the verb form, the H of the object spreads leftward far into the verb.

(63) Tenses Like the Near Future Phrase Medially

	/H/	a-la{[khá'láká]} músá'átsá tá(awe)
		a-la{[khá'láká]} múúndú tá(awe)
Near Fut Neg		
	/Ø/	a-lá{[lákhúúlá]} músá'átsá tá(awe)
		a-lá{[lákhúúlá]} múúndú tá(awe)
	/H/	aa{[khá'lááché]} músáatsa
		aa{[khálaache]} muundu
Perfect [SB]		
	/Ø/	aa{[lákhúúlí]} músáatsa
		aa{[lakuuli]} muundu
	/H/	aa{[khá'lááché]} mú'yá'yí tá
		aa{[khá'lááché]} múúndú tá
Perf Neg [SB]		
	/Ø/	aa{[lákhúúlí]} mú'yá'yí tá
		aa{[lákhúúlí]} múúndú tá

The lexical H fails to surface in /H/ stems in the Near Future Negative, the Perfective, and the Perfective Negative, when the subject is 1st or 2nd person as in the Near Future. Forms with the 2nd sg subject provided below for each of these three tenses.

(64) /H/ Stems with 2nd sg Subjects 'bring'

	Subj	Tns	Stem	Neg
Near Fut Neg	u-	la	{[leera]}	tá(awe)
Perf	uu-	Ø	{[leera]}	
Perf Neg	uu-	Ø	{[leera]}	tá(awe)

In (64), *H Tone Anticipation* appears unexpectedly not to apply in the negative constructions, though this appears to be an artifact of the short stem size and the fuzziness of the leftward extent of H spans in Idakho. In Perfect Negative forms with longer stem sizes, *H Tone Anticipation* more clearly spreads post-verbal Hs some distance into the verbs affected

by subject-induced lowering of the root H, as in **uu** [βohólóólé] **mú'yáyi** ‘you have untied the boy’.

The display below demonstrates that, as in the Near Future, the passive suffix does not contribute a H in the Near Future Negative, the Perfective, and the Perfective Negative. Though the passive suffix surfaces H in the negative constructions, it does so only as part of a H span generated by *H Tone Anticipation*.

(65) /H/ & /Ø/ Stems with the Passive Suffix [SB]

Near Fut Neg	a-la{[khá'лак-w-á]} tá
	a-lá{[lákhuúl-w-á]} tá
Perfect	uu{[khálaach-u-i]} ¹⁵
	uu{[lakuul-u-i]}
Perf Neg	aa{[khá'láách-w-í]} tá
	aa{[lákhuúl-w-í]} tá

Finally, note that the Near Future Negative demonstrates that the post-verbal negative element **tá(awe)** will also be downstepped relative to the lexical H in /H/ monosyllabic stems as in, e.g., **a-la** [rá] ‘tá’ ‘he will not bury’ and **a-la** [ng'wá] ‘tá’ ‘he will not drink’. Both examples derive from intermediate representations in which the verb stem is comprised of two moras, one from the root, and one from the FV: **a-la** [ráa] ‘tá’ ‘he will not bury’ and **a-la** [ng'úa] ‘tá’ ‘he will not drink’. The L that intervenes between the root H and the negative H, delinked through the process of *Non-Final Shortening*, triggers downstep.

¹⁵Recall that 3rd sg subjects can be marked either by u- or a-. See also fn. 12.

2.1.2 Pattern 1b: Immediate Past

Pattern 1b has the same basic properties as Pattern 1a, with the difference that verbal contexts comprising Pattern 1b are all marked with the H-toned **ákha-** tense prefix. Data from the Immediate Past illustrate the properties of Pattern 1b.

In (66) below, we see that /H/ verbs surface with a H on the word-initial syllable, followed by a downstepped H which spans from the pre-stem syllable through the initial mora of the stem.

(66) Immediate Past C-Initial /H/ ‘*s/he just...*’

Subj	Tns	Stem	Gloss
y-	á ⁴ khá	{[khwáa]}	‘paid dowry’
y-	á ⁴ khá	{[béka]}	‘shaved’
y-	á ⁴ khá	{[téekha]}	‘cooked’
y-	á ⁴ khá	{[khálaka]}	‘cut’
y-	á ⁴ khá	{[kálaanga]}	‘fried’
y-	á ⁴ khá	{[sáanditsa]}	‘thanked’
y-	á ⁴ khá	{[béyong’ana]}	‘went around’

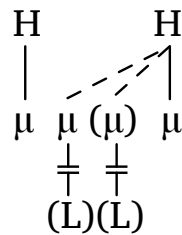
In /Ø/ verbs, only the word-initial syllable is H, while the remainder of the verb surfaces L. This is shown in (67).

(67) Immediate Past C-Initial /Ø/ ‘s/he just...’

Subj	Tns	Stem	Gloss
y-	ákha	{[kwaa]}	‘fell’
y-	ákha	{[lekha]}	‘left’
y-	ákha	{[reeβa]}	‘asked’
y-	ákha	{[kulikha]}	‘named’ [SB]
y-	ákha	{[lakuuula]}	‘released’
y-	ákha	{[seeβula]}	‘said goodbye’
y-	ákha	{[kalushitsa]}	‘returned’ [SB]

I analyze the leftward spreading of the lexical H onto the syllable preceding the tense prefix H as an instance of a rule common within Bantu languages, *Plateau*, which renders HØH (or HLH) sequences as HHH (Kisseberth & Odden 2003). In Idakho, the latter two syllables in such sequences are downstepped relative to the underlying H of the tense prefix. I formulate *Plateau* in (68).¹⁶

(68) PLATEAU



Domain: *Grammatical word*

The rule as formulated above has three features which are not immediately motivated by the data above. In particular, the formulation allows for *Plateau* to apply across multiple moras (and syllables) and for leftward spreading of the H across moras bearing a L. Furthermore, the rule is restricted to applying only within the grammatical word (the phonological word

¹⁶This rule applies optionally and is more frequently observed in the speech of JI than that of SB. Furthermore, *Plateau* is more likely to apply when the toneless mora belongs to the same syllable as the second H. It may be the case that there are specific constructions in which *Plateau* fails to apply, such as the Conditional Negative.

less enclitics). These features will be justified in Pattern 5a (§2.5.1), Pattern 2b (§2.2.2), and Pattern 2a (§2.2.1), respectively.

There are several reasons to analyze *Plateau* as applying very late. Among the many tonal rules I posit, none are crucially required to apply after *Plateau*. Indeed, the opposite is required of several of them. The observation that resultant surface H⁺H sequences are not reduced to HØ by *Meeussen's Rule* suggests that *Plateau* minimally follows *Meeussen's Rule*.

What's more, the observation that *Plateau* generates downstep structures may indicate that *Plateau* not only can spread across Ls, but must, if downstep is to be analyzed as resulting from a floating L between two Hs. A late rule of *Default L Insertion* is often regarded as necessary merely as a matter of phonetic implementation (e.g., Yip 2002), though Paster & Kim (2011) argue that it plays an important role in accounting for patterns of downstep in the Tiriki variety of Luhya. If *Plateau* applies after a process of *Default L Insertion*, whereby default Ls are assigned to moras remaining without tonal specifications near the end of a phonological derivation, then the observed downstep in the forms in (66) may be attributed to a floating L between the H of the tense prefix and the root H.

2.1.2.1 Immediate Past with Object Prefixes

As in Pattern 1a, the lexical contrast is lost in Immediate Past forms with an object prefix. Note that the object prefix H, which constitutes the second H in a HØH sequence, spreads left by *Plateau*.

(69) Immediate Past C-Initial /H/ + OP ‘s/he just...him/her’

Subj	Tns	Obj	Stem	Gloss
y-	á'khá	{mú-	[ra]}	‘buried’
y-	á'khá	{mú-	[βeka]}	‘shaved’
y-	á'khá	{mú-	[leera]}	‘brought’
y-	á'khá	{mú-	[khalaka]}	‘cut’
y-	á'khá	{mú-	[βoolitsa]}	‘seduced’
y-	á'khá	{mú-	[βoyong'ana]}	‘went around’

(70) Immediate Past C-Initial /Ø/ + OP ‘s/he just...him/her’

Subj	Tns	Obj	Stem	Gloss
y-	á'khá	{mú-	[tsia]}	‘went (for)’
y-	á'khá	{mú-	[lekha]}	‘left’
y-	á'khá	{mú-	[loonda]}	‘followed’
y-	á'khá	{mú-	[kulikha]}	‘named’ [SB]
y-	á'khá	{mú-	[lakuula]}	‘released’
y-	á'khá	{mú-	[kalushitsa]}	‘returned’ [SB]

When two object prefixes appear on a single verb form, a falling tone surfaces on the pre-stem syllable as in Pattern 1a. Here again the lexical contrast is neutralized: the stem is toneless in both /H/ and /Ø/ stems.

(71) Immediate Past C-Initial /H/ + OP + OP_{1sg} ‘s/he just...him/her for me’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	á'khá	{mú-	u	[ndeela]}	‘buried’
y-	á'khá	{mú-	u	[mbechela]}	‘shaved’
y-	á'khá	{mú-	u	[ndeerela]}	‘brought’
y-	á'khá	{mú-	u	[khalachila]}	‘cut’

(72) Immediate Past C-Initial /Ø/ + OP + OP_{1sg} ‘s/he just...him/her for me’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	á ⁺ khá	{mú-	u	[nziila]}	‘went (for)’
y-	á ⁺ khá	{mú-	u	[ndeshela]}	‘left’
y-	á ⁺ khá	{mú-	u	[noondela]}	‘followed’
y-	á ⁺ khá	{mú-	u	[ngulishila]}	‘named’ [SB]

The primary properties of Pattern 1b are summarized schematically below.

(73) A Schematic Representation of the Immediate Past’s Tonal Properties

<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-á ⁺ khá	{	[C [́] V [́] CVCV]}
OPsx1	y-á ⁺ khá	{C [́] V [́]	[CVCVCV]}
OPsx2	y-á ⁺ khá	{C [́] V [́] -V	[CVCVCV]}

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-ákha	{	[CVCVCV]}
OPsx1	y-á ⁺ khá	{C [́] V [́]	[CVCVCV]}
OPsx2	y-á ⁺ khá	{C [́] V [́] -V	[CVCVCV]}

2.1.2.2 Immediate Past: Phrase Medially

The data below demonstrate that, as in the Near Future, the verb's position within its phrase does not impact its tone in the Immediate Past. The verb's tonal properties are the same phrase-medially as they are pre-pausally, except where the H of H-toned objects spreads left onto the verb stem via *H Tone Anticipation*.

(74) Immediate Past Phrase Medially [SB] 's/he just...(for him/her)'

/H/ Stems	No OP	y-á ¹ khá{[rá]} 'músáatsa	'buried the man'
		y-á ¹ khá{[rá]} muundu	'buried somebody'
	One OP	y-á ¹ khá{[khá ¹ láká]} músáatsa	'cut the man'
		y-á ¹ khá{[khálaka]} muundu	'cut somebody'
/Ø/ Stems	No OP	y-á ¹ khá{mú[¹ réélá]} músáatsa	'buried the man'
		y-á ¹ khá{mú[reela]} muundu	'buried somebody'
	One OP	y-á ¹ khá{mú[¹ kháláchílá]} músáatsa	'cut the man'
		y-á ¹ khá{mú[khalachila]} muundu	'cut somebody'
	No OP	y-á ¹ khá{[tsyá]} músáatsa	'went for the man'
		y-ákha{[tsya]} muundu	'went for somebody'
/Ø/ Stems	No OP	y-á ¹ khá{[sééβúlá]} músáatsa	'said goodbye to the man'
		y-ákha{[seeβula]} muundu	'said goodbye to somebody'
	One OP	y-á ¹ khá{mú[¹ tsíílá]} músáatsa	'went for the man'
		y-á ¹ khá{mú[tsiila]} muundu	'went for somebody'
	One OP	y-á ¹ khá{mú[¹ sééβúlílá]} músáatsa	'said goodbye to the man'
		y-á ¹ khá{mú[seeβulila]} muundu	'said goodbye to somebody'

2.1.2.3 Immediate Past: Impact of Subject Choice

One difference between the Immediate Past and Pattern 1a verbal contexts is that the choice of verbal subject does not cause the failure of any underlying Hs to surface in the Immediate Past. The Hs contributed by the tense prefix and the verbal root both surface when the subject of the verb is 1st or 2nd person in forms lacking an object prefix.

(75) Subject Choice in the Immediate Past /H/ ‘...just brought’ [SB]

	Singular	Plural
1st Person	n-á ¹ khá{[léera]}	khw-á ¹ khá{[léera]}
2nd Person	w-á ¹ khá{[léera]}	mw-á ¹ khá{[léera]}
3rd Person	y-á ¹ khá{[léera]}	β-á ¹ khá{[léera]}

(76) Subject Choice in the Immediate Past /Ø/ ‘...just asked’ [SB]

	Singular	Plural
1st Person	n-ákha{[reeβa]}	khw-ákha{[reeβa]}
2nd Person	w-ákha{[reeβa]}	mw-ákha{[reeβa]}
3rd Person	y-ákha{[reeβa]}	β-ákha{[reeβa]}

In forms containing an object prefix, the Hs contributed by the tense prefix and the object prefix are both realized, as in forms with 3rd person subjects. Predictably, the root H is deleted following the H of the object prefix via *Meeussen's Rule*.

(77) Subject Choice in the Immediate Past /H/ + OP ‘...just brought him/her’ [SB]

	Singular	Plural
1st Person	n- á ¹ khá{mú[leera]}	khw-á ¹ khá{mú[leera]}
2nd Person	w-á ¹ khá{mú[leera]}	mw-á ¹ khá{mú[leera]}
3rd Person	y-á ¹ khá{mú[leera]}	β-á ¹ khá{mú[leera]}

(78) Subject Choice in the Immediate Past /Ø/ + OP ‘...just asked him/her’ [SB]

	Singular	Plural
1st Person	n- á ¹ khá{mú[reeβa]}	khw-á ¹ khá{mú[reeβa]}
2nd Person	w-á ¹ khá{mú[reeβa]}	mw-á ¹ khá{mú[reeβa]}
3rd Person	y-á ¹ khá{mú[reeβa]}	β-á ¹ khá{mú[reeβa]}

Note that the word initial syllable in the above forms is short, despite there seemingly being two underlying vowels in the sequence: that of the subject prefix and that of the vowel-initial tense prefix. Note also that the subject prefix for 3rd sg subjects in the above tenses

is y- rather than a- as is found when the segment immediately following the subject marker position is a consonant.

These two observations support an analysis whereby subject prefixes are selected from among one set when preceding a consonant and from another when preceding a vowel. Prefixes belonging to the latter set are composed of non-moraic segments which are, as such, incapable of bearing tone. The absence of any subject induced tonal alternations in the above tenses, then, may be analyzed as resulting from the absence of a L associated to the 1st and 2nd person prefixes which precede vowel-initial morphemes.

2.1.2.4 Immediate Past: Passives

Finally, as in the Near Future, the passive suffix surfaces L in the Immediate Past.

(79) Immediate Past: Passives ‘s/he was just...’ [SB]

/H/ Stems

y-á^hkhá{[khálak-u-a]}

‘cut’

y-á^hkhá{[tsúunzuun-u-a]}

‘sucked’

/Ø/ Stems

y-ákha{[lakuul-u-a]}

‘released’

y-ákha{[kalushits-u-a]}

‘returned’

2.1.2.5 Pattern 1b: Other Verbal Contexts

There are several other verbal contexts in which the properties of Pattern 1b may be observed; in addition to the Immediate Past, the verbal contexts listed in (80) exhibit the properties of Pattern 1b. As in the Immediate Past, the tense prefix is H-toned **ákha-** and the selection of subject prefix does not affect verb tone.

(80) Other Pattern 1b Verbal Contexts

- | | |
|--------------------------------|-------------------------------|
| a. Immediate Past Negative | SP-ákha[ROOT-a] tá(awe) |
| b. Remote Future ¹⁷ | SP-ákha[ROOT-ε] ¹⁸ |
| c. Remote Future Negative | SP-ákha[ROOT-ε] tá(awe) |

The following display shows that, in /H/ stems, the lexical H is realized on the initial stem mora and spreads onto the pre-stem mora in morphologically simple forms, just as in the Immediate Future. In addition, the H of **tá(awe)** spreads onto the peninitial syllable of the stem via *H Tone Anticipation*.

(81) Morphologically Simple /H/ Stems¹⁹

	Subj	Tns	Stem	Neg
Imm Pst Neg	y-	á ¹ khá	{[khá ¹ láká]}	tá(awe)
Rem Fut [JI]	y-	á ¹ khá	{[khálache]}	
Rem Fut Neg [JI]	y-	á ¹ khá	{[khá ¹ láché]}	táawe

In /Ø/ stems, the underlying H of the tense prefix surfaces. In negative constructions, the H of **tá(awe)** predictably spreads left through the pre-stem syllable via *H Tone Anticipation*.

¹⁷There appears to be another tense which is segmentally and semantically similar, but tonally distinct. This similarity led to several time consuming diversions which did not ultimately result in much clarity. According to my best estimation, the Remote Future is marked with the **ákha-** tense prefix, the final vowel -ε, and the lexical tonal pattern as described in this section. There may be another tense marked with a toneless **akha-** tense prefix, the perfective suffix -irε, and a Pattern 2 tonal melody (refer to §2.2.1). All the data in this section come from JI, who consistently produced these forms with the FV -ε and the lexical tonal pattern.

¹⁸The FV of polysyllabic stems in the Remote Future is a front vowel, -ε. For SB, the FV raises to -i following high vowels, though for JI polysyllabic stems invariantly take ε-. The FV is tense in monosyllabic stems, which take either -e or -i according to the height of the root vowel.

¹⁹The examples included in the current section use **-khálak-** ‘cut’ and **-lakhuul-** ‘release’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the tenses discussed in this section is the following: Immediate Past - ‘s/he just...-ed’; Immediate Past Negative - ‘s/he did not just...-ed’; Indefinite Future - ‘s/he will...’; Indefinite Future Negative - ‘s/he will not...’.

(82) Morphologically Simple /Ø/ Stems

	Subj	Tns	Stem	Neg
Imm Pst Neg	y-	á ¹ khá	{[lákhúúlá]}	tá(awe)
Rem Fut [JI]	y-	ákha	{[lakhuule]}	
Rem Fut Neg [JI]	y-	á ¹ khá	{[lákhúúlé]}	táawe

As in the Immediate Past, the verbal contexts listed in (80) lose the lexical contrast in forms with an object prefix, and the object prefix H spreads left by Plateau.

(83) /H/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Imm Pst Neg	y-	á ¹ khá	{mú	[¹ kháláká]}	tá(awe)
Rem Fut [JI]	y-	á ¹ khá	{mú	[khalache]}	
Rem Fut Neg [JI]	y-	á ¹ khá	{mú	[¹ kháláché]}	táawe

(84) /Ø/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Imm Pst Neg	y-	á ¹ khá	{mú	[¹ lákhúúlá]}	tá(awe)
Rem Fut [JI]	y-	á ¹ khá	{mú	[lakhuule]}	
Rem Fut Neg [JI]	y-	á ¹ khá	{mú	[¹ lákhúúlé]}	táawe

Below, it may be observed that the verb's position within its phrase does not impact its tone in this set of tenses.

(85) /H/ Stems Phrase Medially

Imm Pst Neg	y-á ¹ khá{[khá ¹ láká]}	músá ¹ átsá	tá(awe)
	y-á ¹ khá{[khá ¹ láká]}	múúndú	tá(awe)
Rem Fut [JI]	y-á ¹ khá{[khá ¹ láché]}	músáatsa	
	y-á ¹ khá{[khálache]}	muundu	
Rem Fut Neg [JI]	y-á ¹ khá{[khá ¹ láché]}	mu ¹ sá ¹ átsá	táawe
	y-á ¹ khá{[khá ¹ láché]}	múúndú	táawe

As in the Immediate Past, the choice of verbal subject does not cause the failure of any underlying Hs to surface in the Immediate Past Negative.²⁰

(86) Subject Choice in the Immediate Past Negative /H/ ‘...*did not just bring*’ [SB]

	Singular	Plural
1st Person	n- á'khá{[lé'érá]} tá	khw-á'khá{[lé'érá]} tá
2nd Person	w-á'khá{[lé'érá]} tá	mw-á'khá{[lé'érá]} tá
3rd Person	y-á'khá{[lé'érá]} tá	β-á'khá{[lé'érá]} tá

(87) Subject Choice in the Immediate Past Negative /H/ + OP ‘...*did not just bring him/her*’ [SB]

	Singular	Plural
1st Person	n- á'khá{mú[⁺ léérá]} tá	khw-á'khá{mú[⁺ léérá]} tá
2nd Person	w-á'khá{mú[⁺ léérá]} tá	mw-á'khá{mú[⁺ léérá]} tá
3rd Person	y-á'khá{mú[⁺ léérá]} tá	β-á'khá{mú[⁺ léérá]} tá

Finally, as in the Immediate Past, the passive suffix surfaces does not contribute a H in Immediate Past Negative. It does, however, come to be H due to the leftward spreading of the negative H via *H Tone Anticipation*²¹.

²⁰No data is available for verbs in the Indefinite Future and Indefinite Future Negative.

²¹Paradigms with passives in the Remote Future and Remote Future Negative were elicited from SB, though it is not clear at this time if SB's passive data is related to JI's non-passive data, upon which the characterization of the Remote Future's properties is based. One notable unexpected property of SB's productions of Remote Future passive forms is that the tense prefix is L, rather than H. While the lexical H surfaces on the initial stem mora, as in **y-akha**{[khálakua]} ‘s/he will be cut’, /Ø/ verbs surface with a H on the second stem mora, as in **y-akha**{[lakhúlua]} ‘s/he will be released’.

(88) /H/ & /Ø/ Stems with the Passive Suffix [SB]

Imm Pst	y-á ¹ khá{[khálak-u-a]}
	y-ákha{[lakhuul-u-a]}
Imm Pst Neg	y-á ¹ khá{[khá ¹ lák-w-á]} tá
	y-á ¹ khá{[lákhuúl-w-á]} tá

2.1.3 Summary of Pattern 1

The preceding sections have detailed the tonal properties of the ‘lexical pattern’, i.e., the pattern which emerges when no melodic H is imposed on the verb stem. The key features of the lexical pattern are the following: (i) /H/ stems surface with the underlying root H on the initial stem mora while /Ø/ stems surface toneless in morphologically simple forms, (ii) *Meeussen’s Rule* applies iteratively from right-to-left, leaving only the leftmost of a series of adjacent underlying H to surface, and (iii) 1st and 2nd person subject prefixes prevent root and object prefix Hs from being realized as long as the subject prefix appears before a consonant-initial morpheme.

Somewhat less remarkable, but noteworthy, properties of the lexical pattern are that the verb’s position within its phrase does not impact its tone and the passive suffix does not surface H.

2.2 Pattern 2: The second mora pattern

While many verbal contexts exhibit the lexical pattern described in §2.1, others are inflected with a melodic H. Pattern 2 groups several verbal contexts in which the melodic H targets the second mora of the stem. Additionally, tenses which select this melody share in common the property that underlying Hs regularly fail to surface when initial within the macrostem, a unit of structure which includes the verbal stem and any object prefixes.

2.2.1 Pattern 2a: Subjunctive Negative

The present section details the tonal properties of Pattern 2a. The description primarily draws from the Subjunctive Negative, which is marked by the toneless **kha-** prefix, the FV **-a**, and a melodic H which surfaces on the second stem mora in /Ø/ stems.

The following displays illustrate how this pattern is realized in morphologically simple forms. /H/ stems surface with an all L surface pattern in both C- and V-initial stems.

(89) Subjunctive Negative C-Initial /H/ ‘let him/her not...’

Subj	Tns	Stem	Neg	Gloss
a-	kha	{[khwa]}	tá(awe)	‘pay dowry’
a-	kha	{[βeka]}	tá(awe)	‘shave’
a-	kha	{[teekha]}	tá(awe)	‘cook’
a-	kha	{[khalaka]}	tá(awe)	‘cut’
a-	kha	{[kalaanga]}	tá(awe)	‘fry’
a-	kha	{[saanditsa]}	tá(awe)	‘thank’
a-	kha	{[βoyong’ana]}	tá(awe)	‘go around’

(90) Subjunctive Negative V-Initial /H/ 'let him/her not...'

Subj	Tns	Stem	Neg	Gloss
a-	khi	{[ira]}	tá(awe)	'kill'
a-	kho	{[ononyinya]}	tá(awe)	'spoil'
a-	kha	{[abukhanyinya]}	tá(awe)	'separate'

In contrast, /Ø/ stems realize a melodic H on the second stem mora,²² as shown in the following displays. Monosyllabic stems, though underlyingly bimoraic, are shortened before the negative **tá(awe)** particle. The melodic H is realized on the sole stem mora in this case. Notice also that the H of the negative **tá(awe)** element is downstepped relative to the verb final melodic Hs of monosyllabic and CVCV stems, and, unlike previously discussed negative constructions, does not spread onto the verb in stems of any size.

(91) Subjunctive Negative C-Initial /Ø/ 'let him/her not...'

Subj	Tns	Stem	Neg	Gloss
a-	kha	{[kwá]}	ʔtá(awe)	'fall'
a-	kha	{[tsyá]}	ʔtá(awe)	'go'
a-	kha	{[lekhá]}	ʔtá(awe)	'leave'
a-	kha	{[reéβa]}	tá(awe)	'ask'
a-	kha	{[kulíkha]}	tá(awe)	'name' [SB]
a-	kha	{[lakhúula]}	tá(awe)	'release'
a-	kha	{[seéβúla]} ²³	tá(awe)	'say goodbye (to)'
a-	kha	{[kalúshítsa]}	tá(awe)	'return' [SB]

The same generalization holds for V-initial stems. Note that in vowel-initial stems, the second stem mora is always on the second stem syllable, as the first vowel represented within square brackets morphologically originates in the tense prefix.

²²The melodic H undergoes a rightward spreading process in very long stems, the details of which are provided in §2.2.1.3.

²³The melodic H doubles onto the penult in this and the following example for reasons explained in §2.2.1.3.

- (92) Subjunctive Negative V-Initial /Ø/ 'let him/her not...'

Subj	Tns	Stem	Neg	Gloss
a-	khe	{[enyá]}	ʼtá(awe)	'want'
a-	khe	{[eyéla]}	tá(awe)	'wipe for'
a-	khi	{[ilúula]}	tá(awe)	'winnow'
a-	kha	{[ambákhana]}	tá(awe)	'refuse'

2.2.1.1 Subjunctive Negative with Object Prefixes

The root H is able to surface in /H/ stems when an object prefix is present. The H of the object prefix, however, does not surface. This generalization holds in both C- and V-initial /H/ stems.

- (93) Subjunctive Negative C-Initial /H/ + OP 'let him/her not...him/her'

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{mu	[khwá]}	ʼtá(awe)	'pay dowry'
a-	kha	{mu	[béka]}	tá(awe)	'shave'
a-	kha	{mu	[léera]}	tá(awe)	'bring'
a-	kha	{mu	[khálaka]}	tá(awe)	'cut'
a-	kha	{mu	[βóolitsa]}	tá(awe)	'seduce'
a-	kha	{mu	[βóyong'ana]}	tá(awe)	'go around'

- (94) Subjunctive Negative V-Initial /H/ + OP 'let him/her not...him/her'

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{mwi	{[íra]}	tá(awe)	'kill'
a-	kha	{mwo	{[ónonyinya]}	tá(awe)	'spoil'
a-	kha	{mwa	{[ábukhanyinya]}	tá(awe)	'separate'

The H of the object prefix similarly does not surface in /Ø/ stems. The melodic H is realized on the second stem mora, just as in forms with no object prefix.

- (95) Subjunctive Negative C-Initial /Ø/ + OP 'let him/her not...him/her'

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{mu	[tsyá]}	ʔtá(awe)	'go (for)'
a-	kha	{mu	[lekhá]}	ʔtá(awe)	'leave'
a-	kha	{mu	[loónɗa]}	tá(awe)	'follow'
a-	kha	{mu	[kulíkha]}	tá	'name' [SB]
a-	kha	{mu	[seéβula]}	tá(awe)	'say goodbye'
a-	kha	{mu	[kalúshitsa]}	tá	'return' [SB]

- (96) Subjunctive Negative V-Initial /Ø/ + OP 'let him not...her'

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{mwe	[enyá]}	ʔtá(awe)	'want'
a-	kha	{mwe	[eyéla]}	tá(awe)	'wipe for'
a-	kha	{mwa	[ambákhana]}	tá(awe)	'refuse'

Hs contributed by 1st sg object prefixes similarly fail to surface with both /H/ and /Ø/ stems.

The stem tone properties in such forms are also the same.

- (97) Subjunctive Negative C-Initial /H/ + OP
- _{1sg}
- 'let him/her not...me'

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{a	[ryá]}	ʔtá	'fear' [SB] ²⁴
a-	kha	{a	[mbéka]}	tá(awe)	'shave'
a-	kha	{a	[ndéera]}	tá(awe)	'bring'
a-	kha	{a	[khálaka]}	tá(awe)	'cut'
a-	kha	{a	[mbóolitsa]}	tá(awe)	'seduce'
a-	kha	{a	[mbóyong'ana]}	tá(awe)	'go around'

²⁴Though /r/ typically hardens following 1st sg subject and object prefixes N-/Ń-, SB prefers a-kha-a [ryá] ʔtá in this case, as it would otherwise be homophonous with a-kha-a [ndyá] tá 'let him not eat me'. These two meanings are homophonous for JI, with hardening of both /l/ and /r/.

(98) Subjunctive Negative C-Initial /Ø/ + OP_{1sg} ‘let him/her not...me’

Subj	Tns	Obj	Stem	Neg	Gloss
a-	kha	{a	[syá]}	‘tá	‘grind’ [SB]
a-	kha	{a	[ndekhá]}	‘tá(awe)	‘leave’
a-	kha	{a	[noónda]}	tá(awe)	‘follow’
a-	kha	{a	[ngulíkha]}	tá	‘name’ [SB]
a-	kha	{a	[seéβula]}	tá(awe)	‘say goodbye (to)’
a-	kha	{a	[ngalúshitsa]}	tá	‘return’ [SB]

My corpus of Subjunctive Negative data involving both a CV- and a 1st sg object prefix reveal a discrepancy between my two consultants which I suspect is rooted in the infrequency of constructions with both object prefixes, though I did not become aware of the discrepancy in time to investigate the matter further. To demonstrate the basic properties of this pattern, examples are taken from one of the other Pattern 2a constructions discussed in §2.2.1.6: the Imperative_{sg} Negative. In this context, the available recordings show agreement between both speakers. In particular, the long pre-stem syllable surfaces with a rising tone. In /H/ verbs, the root H fails to surface, and in /Ø/ verbs the melodic H surfaces on the first two moras of the stem.²⁵

²⁵The available data indicate that the study’s primary consultants differ in the following ways with respect to Subjunctive Negative with CV- and 1_{sg} object prefixes. JI realizes a rise on the pre-stem syllable. The stem is all L in both /H/ verbs (**a-kha{mu-ú[mbechela]}** ‘let him/her not shave him/her for me’) and /Ø/ verbs, (**a-kha{mu-ú[ndeshela]}** ‘let him/her not leave him/her for me’). In contrast, SB realizes the pre-stem syllable as L, and produces /H/ verbs with a H on the stem initial mora (**a-kha{mu-u[mbéchela]}** ‘let him/her not shave him/her for me’), and /Ø/ verbs with a melodic H on the second stem mora (**a-kha{mu-u[ndeshéla]}** ‘let him/her not leave him/her for me’).

(99) Imperative_{sg} Negative C-Initial /H/ + OP + OP_{1sg} ‘do not...him/her for me!’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Neg	Gloss
u-	kha	{mu-	ú	[ndeela]}	tá(awe)	‘bury’
u-	kha	{mu-	ú	[mbechela]}	tá(awe)	‘shave’
u-	kha	{mu-	ú	[ndeerela]}	tá(awe)	‘bring’
u-	kha	{mu-	ú	[khalachila]}	tá(awe)	‘cut’

(100) Imperative_{sg} Negative C-Initial /Ø/ + OP + OP_{1sg} ‘do not...him/her for me!’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Neg	Gloss
u-	kha	{mu-	ú	[‘nzííla]}	tá(awe)	‘go (for)’
u-	kha	{mu-	ú	[‘ndéshéla]}	tá(awe)	‘leave’ [SB]
u-	kha	{mu-	ú	[‘nóóndela]}	tá(awe)	‘follow’
u-	kha	{mu-	ú	[‘ndákhúulila]}	tá(awe)	‘release’

In (100) above, the /Ø/ verbs with long initial syllables realize the melodic H as a level, rather than rising, tone which is downstepped relative to the H of the object prefix. This is another instance of *Plateau*. *Plateau* was first noted in the discussion of Pattern 1b (§2.1.2). As in that context, *Plateau* appears to apply variably.

The available data for Subjunctive Negative forms involving both a CV- and a 1st sg object prefix show that, in that context, SB does not have a rise on the pre-stem syllable and JI does not have the melodic H in /Ø/ stems (refer to fn. ²⁶ for exemplary data). For SB, this deviation from the basic pattern has the result of also allowing the root H to surface in /H/ stems (as will be argued momentarily, the root H fails to surface in the basic pattern as a result of being deleted by *Meeussen's Rule* following the object prefix H; with the H of the object prefix missing, the root H is free to surface).

The forms presented in (99) and (100) are taken as representative of the basic pattern because these forms reflect what appears in all of the other parallel contexts to be discussed in §2.2.1.6. In addition to the infrequency with which forms involving two object prefixes

²⁶See footnote 25 in chapter 2.

are used in daily conversation, speaker fatigue may have played a role in the divergences noted here. There were considerably more paradigms elicited for the Subjunctive Negative (which is why it was selected as the tense to illustrate this pattern), and these double object constructions were elicited last among those many paradigms. The task is quite taxing, particularly when the elicitation prompts involve complicated and infrequently used constructions.

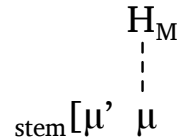
There are four key observations regarding the Subjunctive Negative's tonal properties of which an analysis is offered below: (i) underlying macrostem initial Hs fail to surface, (ii) the melodic H, when realized, surfaces on the second stem mora, (iii) the melodic H is not realized in /H/ stems, and (iv) the root H surfaces only in forms with precisely one object prefix. These properties are summarized schematically in the following display. The position of underlying Hs is indicated with a single underline, and the melodic H, when it appears, is indicated with double underlining. Curly brackets mark boundaries of the macrostem.

(101) A Schematic Representation of the Subjunctive Negative's Tonal Properties

/H/ Verbs			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-kha	{	[CVCVCV]}
OPsx1	a-kha-	{CV	[C [̂] VVCV]}
OPsx2	a-kha-	{CV- [̂]	[CVCVCV]}
/Ø/ Verbs			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-kha	{	[CV(C) [̂] CV]}
OPsx1	a-kha-	{CV	[CV(C) [̂] CV]}
OPsx2	a-kha-	{CV- [̂]	[[̂] CV(C) [̂] CV]}

In analyzing the properties of the Subjunctive Negative, I posit a rule *Default Melodic H Assignment* (henceforth *Default MHA*), which assigns a floating inflectional H to the second mora of the stem. It is formulated as in (102).

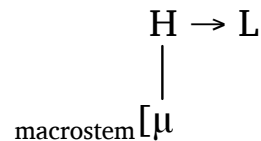
(102) DEFAULT MELODIC H ASSIGNMENT



While *Default MHA* accounts for the tonal properties of simple /Ø/ verb forms rather directly, two observations relating to the tonal properties of /H/ verbs require further elaboration: (i) the root H is not realized in forms lacking an object prefix, and (ii) *Default MHA* does not assign a melodic H to the second mora of the stem in /H/ verbs.

The failure of the root H to surface when there are no object prefixes is analyzed as one instance of the broader generalization that /H/s initial within the macrostem routinely fail to surface in tonally inflected constructions. I posit a rule *Initial Lowering*, which renders Hs associated to the initial macrostem mora as L to account for this observation.

(103) INITIAL LOWERING



The fact that *Default MHA* fails to assign the melodic H to the second stem mora in /H/ verbs is accounted for by a condition built into the formal statement of the rule. The condition requires that the mora preceding the target be toneless. This feature of the rule is frequently exploited in analyzing the surface tone patterns of the many melodies that *Default MHA* interacts with.

That the root H surfaces in forms with one object prefix, but not two, is achieved through *Initial Lowering*, *Meeussen's Rule*, and the crucial ordering relationship which holds between them. In forms with one object prefix, *Initial Lowering* first lowers the H of the object prefix, bleeding *Meeussen's Rule*.

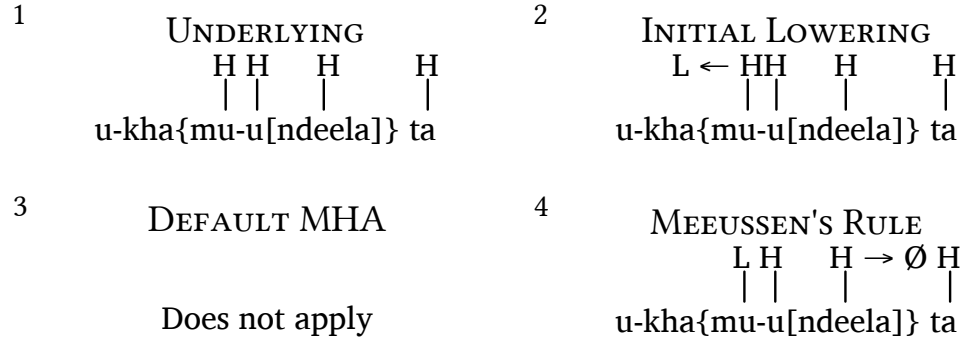
- (104) Derivation, /H/ Subj. Neg. + OP: a-kha{mu[khálaka]} tá 'let him/her not cut him/her'

1	UNDERLYING	2	INITIAL LOWERING
	$\begin{array}{ccc} \text{H} & \text{H} & \text{H} \\ & & \\ \text{a-kha}\{\text{mu}[\text{khalaka}]\} & \text{ta} & \end{array}$		$\begin{array}{ccc} \text{L} \leftarrow \text{H} & \text{H} & \text{H} \\ & & \\ \text{a-kha}\{\text{mu}[\text{khalaka}]\} & \text{ta} & \end{array}$
3	DEFAULT MHA	4	MEEUSSEN'S RULE
	Does not apply		Does not apply

When a second object prefix is present, the H of the leftmost object prefix is lowered by *Initial Lowering*, and the H of the rightmost object prefix remains. Following the H of the object prefix, the root H is now subject to deletion by *Meeussen's Rule*.

Verb forms with two object prefixes illustrate the need to order *Default MHA* before *Meeussen's Rule* in the derivation. In forms with less than two object prefixes, the initial mora of the stem is occupied by some tone: when no object prefix is present, the initial mora is L, and when one object prefix is present, the initial mora is H. In both cases, *Default MHA* would not apply, regardless of its ordering relationship with *Meeussen's Rule*. This is because the rule requires that the mora preceding its target be toneless. However, in forms with two object prefixes, the initial mora of the stem would be toneless at the time *Default MHA* applies, were it to be preceded in the derivation by *Meeussen's Rule*. Because *Meeussen's Rule* does not apply first, *Default MHA* is blocked from applying by the root H. The tonal properties of forms with two object prefixes are derived in (105) below.

(105) Derivation, /H/ Subj. Neg. + OPx2: u-kha{mu-ú[ndeela]} tá ‘do not bury him/her for me’



I adopt the analysis described above for its simplicity, though there are numerous analytical alternatives capable of deriving the same surface patterns. One notable alternative involves analyzing the failure of macrostem-initial Hs as resulting from a rule of *Initial Deletion* (106), which would delete, rather than lower, macrostem-initial Hs. I sketch an analysis that invokes *Initial Deletion* such a rule in the paragraphs below (106).

(106) INITIAL DELETION

$$H \rightarrow \emptyset$$

$$|$$

macrostem [μ

Recall that in /H/ Subjunctive Negative forms lacking an object prefix, e.g., **a-kha{ [khalaka] } tá** ‘let him/her not cut’, the melodic H fails to surface despite the fact that the root H does not surface either. This may be analyzed under a deletion approach by ordering *Initial Deletion* after *Default MHA*. The root H is therefore present and blocks *Default MHA* at the relevant point in the derivation.

When an object prefix is added to the construction, as in **a-kha{mu [khálaka] } tá** ‘let him/her not cut’, we see that *Initial Deletion* must precede *Meeussen's Rule*. If the order were reversed, both the root H and the object prefix H would be deleted. The required rules

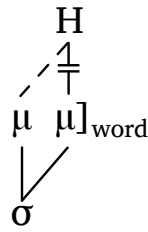
and crucial rankings are therefore the following: 1) *Default MHA*, 2) *Initial Deletion*, and 3) *Meeussen's Rule*.

In verb forms with two object prefixes, as in **a-kha{mu-ú[khalachila]}** **tá** 'let him/her not cut him/her for me', *Default MHA* is first blocked from applying by the root H. Then, *Initial Deletion* deletes the H of the leftmost object prefix. Finally, *Meeussen's Rule* deletes the root H immediately following the H of the rightmost object prefix.

While the *Initial Deletion* analysis satisfactorially accounts for the tonal properties of /H/ Subjunctive Negative verb forms, I ultimately reject this analysis in favor of the *Initial Lowering* approach advocated previously. The justification for this choice is presented in §2.5, where it is shown that a lowering analysis offers a simple account for limiting the leftward extent of H spans resulting from *H Tone Anticipation* in Pattern 5a and 5b phrase-medial constructions and the properties of short /H/ verbs in Pattern 5b and 5c phrase-final constructions.

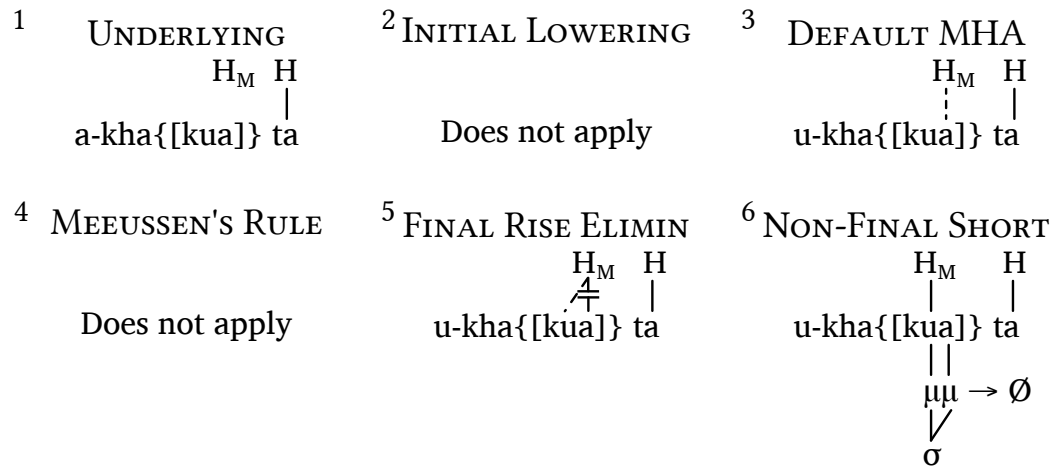
We turn now to /Ø/ monosyllabic verbs, which realize the melodic H despite consisting of just one mora (and not two, as required by *Default MHA*). In monosyllabic /Ø/ verbs lacking an object prefix, the melodic H appears on the initial, and only, mora of the stem, as in **a-kha{[kwá]}** **ʔtá** 'let him not fall'. I argue that this form derives from an intermediate representation in which such verb forms consist of two moras, one contributed by the verb root and the other by the FV. The melodic H is assigned to the second stem mora, in this case also the final, in the usual way by *Default MHA*. The melodic H is subsequently shifted to the left by a rule *Final Rise Elimination*, formulated in (107) below. Finally, the long stem syllable is shortened via *Non-Final Shortening* (first introduced in §2.1.1.2 in (49)).

(107) FINAL RISE ELIMINATION



The analysis of a /Ø/ monosyllabic stem is illustrated in the derivation below.

(108) Derivation, /Ø/ Subj. Neg.: a-kha{[kwá]} 'tá 'let him/her not fall'



Meeussen's Rule does not delete the H of the negative element **tá** because the two Hs are not within the domain of its application, namely, a single word.

The ordering relationship which holds between *Meeussen's Rule* and *Final Rise Elimination* is indeterminate in this case due to the morphology, despite their potential for interaction. In particular, the melodic H could come to be adjacent to a pre-stem H via *Final Rise Elimination*. Within the context of the Subjunctive Negative, Hs are realized on the pre-stem moras only in constructions with two object prefixes. Such constructions in the Subjunctive Negative are only possible with the applicative suffix **-il**, which removes the environment for *Final Rise Elimination*.

While data from the Subjunctive Negative cannot inform the ordering relationship that holds between *Final Rise Elimination* and *Meeussen's Rule*, data from the Conditional (Pattern 5c, §2.5.3) can. The Conditional also realizes a H on the second stem mora in /Ø/ verbs, and subject prefixes, which immediately precede the stem, exceptionally surface with a H. In monosyllabic stems, the melodic H surfaces as a downstepped fall on the final syllable following the H of the subject prefix: **na-á{['kúá]}** 'if s/he falls'.

Finally, if the melodic H is in place on the initial mora of the stem at the point in the derivation at which *Initial Lowering* applies, one might expect the melodic H to be lowered just as root Hs are. Because the melodic H is not lowered in this context, I argue that *Initial Lowering* applies prior to *Final Rise Elimination* in the derivation.

2.2.1.2 Subjunctive Negative: Phrase Medially

The tonal properties of forms in the Subjunctive Negative are unaffected by the verb's position within its phrase. Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement. In each case, the stem tonal properties are the same as the pre-pausal counterparts.²⁷

²⁷*Plateau* may variably apply to spread the H of the negative element tá(awe) and the H of H-toned post-verbal words leftward up until a preceding H, even when the preceding H is associated with the verb stem. Due to the variable nature of *Plateau* and the challenges introduced by the phonetic effect of 'crescendo', whereby H spans are produced with progressively higher pitch (Austen 1974b), such potential H spans are not represented in my transcriptions. For instance, productions of the phrase 'let him/her not cut the boy' may in some cases be best transcribed as **a-kha{mu[khálaka]}** mú'yáyí tá and in other cases as **a-kha{mu[khá'láká]}** mu'yáyí tá.

(109) Subjunctive Negative Phrase Medially ‘let him/her not...’²⁸

/H/ Stems	No OP	a-kha{[ra]} mú’yáyí tá(awe)	‘bury the boy’
		a-kha{[ra]} muundu tá(awe)	‘bury somebody’
	One OP	a-kha{[khalaka]} mú’yáyí tá(awe)	‘cut the boy’
		a-kha{[khalaka]} muundu tá(awe)	‘cut somebody’
/Ø/ Stems	No OP	a-kha{mu[rá]} ‘mú’yáyí tá(awe)	‘bury the boy’
		a-kha{mu[rá]} muundu tá(awe)	‘bury somebody’
	One OP	a-kha{mu[khálaka]} mú’yáyí tá(awe)	‘cut the boy’
		a-kha{mu[khálaka]} muundu tá(awe)	‘cut somebody’
	No OP	a-kha{[tsyá]} ‘mú’yáyí tá(awe)	‘go for the boy’
		a-kha{[tsyá]} muundu tá(awe)	‘go for somebody’
	One OP	a-kha{[seébula]} mú’yáyí tá(awe)	‘say goodbye to the boy’
		a-kha{[seébula]} muundu tá(awe)	‘say goodbye to somebody’
	No OP	a-kha{mu[tsyá]} ‘mú’yáyí tá(awe)	‘go for the boy’
		a-kha{mu[tsyá]} muundu tá(awe)	‘go for somebody’
	One OP	a-kha{mu[seéβula]} mú’yáyí tá(awe)	‘say goodbye to the boy’
		a-kha{mu[seéβula]} muundu tá(awe)	‘say goodbye to somebody’

2.2.1.3 Subjunctive Negative: Pre-penultimate Doubling

Uncommonly long stems reveal that the melodic H in /Ø/ stems participate in a binary spreading process whereby the melodic H, originating on the second stem mora, spreads one mora to the right just in case the target mora belongs to a pre-penultimate syllable. Consider the additional /Ø/ stems below.

²⁸The object prefix and the full object complement are co-referential in the examples below. This is a marked, but grammatical, construction which emphasizes the identity of the object.

(110) Subjunctive Negative C-Initial /Ø/ 'let him/her not...'

Subj	Tns	Stem	Neg	Gloss
a-	kha	{[reéβáreeba]}	ʼtá(awe)	'repeatedly ask'
a-	kha	{[seβúlúkhanganyinya]}	tá(awe)	'scatter'

Pre-Penultimate Doubling applies even when the verb is not phrase-final, as shown in (111).

(111) Subjunctive Negative Phrase Medially C-Initial /Ø/ 'let him/her not...the boy' / 'don't repeatedly ask the boy for him!'

Subj	Tns + Obj	Stem	Obj	Neg	Gloss
a-	kha	{[reéβáreeba]}	múʼyáyí	tá(awe)	'repeatedly ask'
a-	kha	{[síinjílitsa]}	múʼyáyí	tá(awe)	'make stand'
u-	kha-mu	{[reéβáreeβela]}	múʼyáyí	tá	'repeatedly ask' ²⁹

In addition, phrase-medial forms involving shorter stems reveal that *Pre-Penultimate Doubling* is sensitive to the melodic H's position within the phrase rather than within the verb. That is, it will double the melodic H to the penultimate and even final syllables of the verb so long as the target precedes the penultimate syllable of the phrase.

(112) Imperative_{sg} Negative Phrase Medially C-Initial /Ø/ 'do not...somebody!' [SB]

Subj	Tns + Obj	Stem	Obj	Neg	Gloss
u-	kha	{[kulíkhá]}	muundu	tá	'repeatedly ask'
u-	kha	{[seéβúla]}	muundu	tá	'make stand'

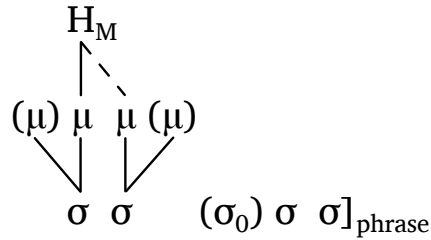
It is noteworthy that *Pre-Penultimate Doubling* does not impact the position of root or object prefix Hs when they surface, as in e.g., **a-kha-mu**[βóyong'ana] **tá** 'let him/her not cut him/her'. This again motivates reference to the morphological origins of tone in tonal rules.

Finally, a melodic H will not double onto the second mora of a long antepenultimate syllable, as in e.g., **u-kha-mu-ú**['ndákhúulila] **tá** 'let him/her not release him/her for me'.

²⁹This example is from the Imperative_{sg} Negative, a construction marked with the same tonal melody.

Pre-Penultimate Doubling is stated formally in (113).

(113) PRE-PENULTIMATE DOUBLING



There may be further restrictions on the application *Pre-Penultimate Doubling* whereby the rule is blocked if its application would result in a sequence of adjacent Hs, e.g., **a-kha{mu [kulíkha] } mú'yáyi tá** ‘let him/her not name the boy’. That is, the process may be constrained by the OCP, though the data in my corpus are unclear.

2.2.1.4 Subjunctive Negative: Impact of Subject Choice

As the data below demonstrate, subject choice has no impact on the stem tonal properties of verbs in the Subjunctive Negative. /H/ and /Ø/ stems lacking an object prefix are realized the same whether the subject is 1st, 2nd, or 3rd person. /H/ stems surface without the root H, and /Ø/ stems realize the melodic H on the second stem mora.

(114) Subject Choice in the Subjunctive Negative /H/ ‘let...not bring’ [SB]

	Singular	Plural
1 st Person	kha{[leera]} tá ³⁰	khu-kha{[leera]} tá
2 nd Person	u-kha{[leera]} tá	mu-kha{[leera]} tá
3 rd Person	a-kha{[leera]} tá	βa-kha{[leera]} tá

³⁰Nasals are deleted before voiceless fricatives.

(115) Subject Choice in the Subjunctive Negative /Ø/ ‘let...not ask’ [SB]

	Singular	Plural
1st Person	kha{[reéβa]} tá	khu-kha{[reéβa]} tá
2nd Person	u-kha{[reéβa]} tá	mu-kha{[reéβa]} tá
3rd Person	a-kha{[reéβa]} tá	βa-kha{[reéβa]} tá

That no tonal alternations are triggered by the choice of subject in /H/ stems is unsurprising; the root H fails to surface even in forms with 3rd person subjects.

The melodic H surfaces in all /Ø/ verbs regardless of the choice of subject. This may be accounted for in several ways, but the interpretation afforded by the formulation of *L Spread I* provided in (54) is that the L of 1st and 2nd person subjects spreads only through the initial mora of the stem, and does so only after *Default MHA* has associated the melodic H to the second stem mora; if *Default MHA* were ordered after *L Spread I*, it would fail to apply because the mora preceding the target of *Default MHA* would not be toneless, as required by the statement of the rule given in (102).

Unfortunately, my corpus does not include Subjunctive Negative forms with both an object prefix and a 1st or 2nd person subject. Notwithstanding this gap, I would not expect subject-induced tonal alternations in such forms either based on data from the Indefinite Future (Pattern 5b, §2.5.2.3). The Indefinite Future is a construction with formally similar tonal properties, and Indefinite Future verb forms with object prefixes all pattern the same, regardless of the verbal subject.

2.2.1.5 Subjunctive Negative: Passives

The passive data available for the Subjunctive Negative are inappropriate for the current section.

As shown in (116), /Ø/ stems are realized with one more H than their passive-less counterparts, which surfaces on the final syllable (cf. **u-kha** [**lakhúula**] **tá** ‘don’t release!’). /H/ verbs surface all L both with and without a passive suffix.³¹

(116) Imperative_{sg} Negative: Passives ‘don’t be...!’ [SB]

/H/ Stems

u-kha{[khalak-w-a]} **tá** ‘cut’
u-kha{[tsuunzuun-w-a]} **tá** ‘sucked’

/Ø/ Stems

u-kha{[lakhúul-w-á]} ‘**tá** ‘released’
u-kha{[kalúshits-w-á]} ‘**tá** ‘returned’

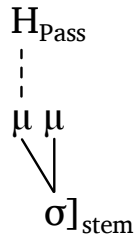
Recall that the passive suffix does not contribute a H in the Near Future (§2.1.1.4) and other tenses exhibiting the lexical pattern (§2.1), regardless of the tonal class to which the verbal root belongs. An important property that Near Future passives and Imperative_{sg} share in common is that /H/ verbs do not realize a melodic H on the stem.

I attribute the H that surfaces on the passive suffix in /Ø/ verbs as resulting from the successful application of a rule, *Passive H Assignment*. As shown in (117), passive Hs, which enter the derivation as floating tones are assigned to the penultimate mora of the stem under certain conditions.

³¹Passive data was collected (accidentally) for a version of the Subjunctive Negative which does not include the **kha-** prefix that appears in the Subjunctive Negative forms described in preceding sections related to Pattern 2a. Such forms exhibit the tonal properties of Pattern 3 (§2.3) and the FV selected by Subjunctives in the affirmative. Cf. **a**{[khalakwí]} ‘**tá** ‘let him/her not be cut’.

This situation parallels that of the two versions of the Near Future Negative. When marked with the negative **shi-** prefix, the Near Future Negative takes the all L / second mora pattern: /H/, **sh-a**{[khalaka]} **tá** ‘s/he will not cut’; /Ø/: **sh-a**{[lakhúula]} **tá** ‘s/he will not release’. Contrastively, when the negative prefix is absent, the Near Future Negative exhibits the same tonal properties of its affirmative counterpart, Pattern 1a: /H/, **a-la**{[khá‘láká]} **tá** ‘s/he will not cut’; /Ø/: **a-lá**{[lakhúúlá]} **tá** ‘s/he will not release’.

(117) PASSIVE H ASSIGNMENT (PRELIMINARY)

**Conditions:**

- (i) *Verb form includes the passive suffix*
- (ii) *Construction is tonally inflected*
- (iii) *The melodic H is associated to the stem*

The formulation of *Passive H Assignment* is preliminary and will be modified in §2.2.1.6 on the basis of data from other Pattern 2a constructions. The current formulation is, however, sufficient to account for the distribution of passive Hs in the Idakho data seen so far. /Ø/ verb forms with passives in the Subjunctive Negative meet each of the conditions listed in (117), unlike /H/ verbs in the Subjunctive Negative and verbs of both tonal classes in all Pattern 1 (§2.1) constructions.

Pattern 1 constructions do not realize the passive H because they are not tonally inflected and, by extension, they do not realize a melodic H on the verb form, thus violating the rule's latter two conditions. Although the Subjunctive Negative is a context inflected with a melodic H, the passive H is not realized in /H/ verbs because such verbs violate the condition that the melodic H be associated to the stem.

Hyman & Katamba (1990) take a similar approach to passive and causative Hs in (Lu)Ganda. According to them, these suffixes will realize the Hs they contribute only under the following three conditions: (i) the verb must contain the causative or passive suffix, (ii) the verb must appear in a tense with a melodic H, and (iii) the verb must appear in a tense with the historically perfective suffix **-ide*.

The Idakho data require a stronger version of Hyman & Katamba (1990)'s second criterion for Ganda: not only must the verb form appear in a tense with a melodic H, but that H must be realized. It is also not crucial in Idakho that the verb appear in a tense with the perfective suffix.

In §2.2.1.6, the role of the perfective suffix in the distribution of passive Hs in Idakho will be revisited in light of data from other Pattern 2a constructions, and the final formulation of *Passive H Assignment* will be given.

2.2.1.6 Pattern 2a: Other Verbal Contexts

The preceding section gave a comprehensive description of the tonal properties of the Subjunctive Negative, supplemented with a few examples taken from the form-identical Imperative_{sg} Negative. In particular, it was shown that: (i) a rule of *Initial Lowering* lowers all macrostem initial Hs (root Hs in morphologically simple forms or the leftmost object prefix), (ii) a melodic H is realized on the second stem syllable in all /Ø/ stems, (iii) the verb's position within its phrase and the choice of verbal subject do not impact stem tone, and (iv) the passive H is realized on the final syllable in /Ø/ stems when the passive suffix is present. The tenses below exhibit all of these same properties.

(118) Other Pattern 2a Verbal Contexts

a. Imperative _{sg} Negative	u-kha[ROOT-a] tá(awe)
b. Imperative _{pl} Negative	mu-kha[ROOT-i] tá(awe)
c. Near Future Negative	shi-SP[ROOT-a] tá(awe)
d. Hodiernal Perfective	SP[ROOT-ile]
e. Hodiernal Perfective Negative	SP[ROOT-ile] tá(awe)

For each of the tenses listed in (118), /H/ stems fail to realize the root H (119), and /Ø/ stems take a melodic H on the second stem mora (120) in the most morphologically simple forms.

(119) Morphologically Simple /H/ Stems³²

	Neg	Subj	Tns	Stem	Neg
Imp_{sg} Neg	Ø	u-	kha	{[khalaka]}	tá(awe)
Imp_{pl} Neg	Ø	mu-	kha	{[khalachi]}	tá(awe)
Near Fut Neg [SB]	sh-	a	Ø	{[khalaka]}	tá
Hod Perf	Ø	a	Ø	{[khalaache]}	
Hod Perf Neg	Ø	a	Ø	{[khalaache]}	tá(awe)

(120) Morphologically Simple /Ø/ Stems

	Neg	Subj	Tns	Stem	Neg
Imp_{sg} Neg	Ø	u-	kha	{[lakhúula]}	tá(awe)
Imp_{pl} Neg	Ø	mu-	kha	{[lakhúuli]}	tá(awe)
Near Fut Neg [SB]	sh-	a	Ø	{[lakhúula]}	tá
Hod Perf	Ø	a	Ø	{[lakhúuli]}	
Hod Perf Neg	Ø	a	Ø	{[lakhúuli]}	tá(awe)

As in the Subjunctive Negative, the H contributed by a single object prefix fails to surface, while the root H re-emerges in /H/ stems. The melodic H continues to be realized on the second stem mora in /Ø/ stems.

(121) /H/ Stems with an Object Prefix

	Neg	Subj	Tns	Obj	Stem	Neg
Imp_{sg} Neg	Ø	u-	kha	{mu	[khálaka]}	tá(awe)
Imp_{pl} Neg	Ø	mu-	kha	{mu	[khálachi]}	tá(awe)
Near Fut Neg [SB]	sh-	a	Ø	{mu	[khálaka]}	tá
Hod Perf	Ø	a	Ø	{mu	[khálaache]}	
Hod Perf Neg	Ø	a	Ø	{mu	[khálaache]}	tá(awe)

³²The examples included in the current section use **-khálak-** ‘cut’ and **-lakhúul-** ‘release’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the tenses discussed in this section is the following: Imperative_{sg/pl} Negative - ‘don’t...!’; Near Future Negative - ‘s/he will not...’; Hodiernal Perfective - ‘s/he...{PAST}’; Hodiernal Perfective Negative - ‘s/he did not...’.

(122) /Ø/ Stems with an Object Prefix

	Neg	Subj	Tns	Obj	Stem	Neg
Imp_{sg} Neg	Ø	u-	kha	{mu	[lakhúula]}	tá(awe)
Imp_{pl} Neg	Ø	mu-	kha	{mu	[lakhúuli]}	tá(awe)
Near Fut Neg [SB]	sh-	a	Ø	{mu	[lakhúula]}	tá
Hod Perf	Ø	a	Ø	{mu	[lakhúuli]}	
Hod Perf Neg	Ø	a	Ø	{mu	[lakhúuli]}	tá(awe)

As in the Subjunctive Negative, the Hodiernal Perfective, the Hodiernal Perfective Negative, and the negative Imperatives surface with the same tonal properties whether they appear pre-pausally or phrase-medially. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyí** 'boy', and a toneless noun **muundu** 'person/somebody'.

(123) Tenses Like the Subjunctive Negative Phrase Medially

Imp_{sg} Neg	/H/	u-kha{[khalaka]} mú'yáyí tá(awe) u-kha{[khalaka]} múúndú tá(awe) ³³
	/Ø/	u-kha{[lakhúula]} mú'yáyí tá(awe) u-kha{[lakhúula]} múúndú tá(awe)
Imp_{pl} Neg	/H/	mu-kha{[khalachi]} mú'yáyí tá(awe) mu-kha{[khalachi]} muundu tá(awe)
	/Ø/	mu-kha{[lakhúuli]} mú'yáyí tá(awe) mu-kha{[lakhúuli]} muundu tá(awe)
Hod Perf	/H/	a{[khalaache]} mú'yáyí a{[khalaache]} muundu
	/Ø/	a{[lakhúuli]} mú'yáyí a{[lakhúuli]} muundu

³³The H of the negative particle seems often to spread into even the verb in forms like this, e.g. **u-kha{[kháláká]} múúndú tá**. This contrasts with parallel forms followed by H-toned **mú'yáyí**, in which the post-verbal H distinctly does not spread into the verb by *H Tone Anticipation*. I admit to having an incomplete understanding of the properties of *H Tone Anticipation* in Idakho and hope to offer more definitive transcriptions of the phrasal data in later versions of this work.

Hod Perf Neg	/H/	a{[khalaache]} mú'yáyí tá(awe)
		a{[khalaache]} muundu tá(awe)
	/Ø/	a{[lakhúuli]} mú'yáyí tá(awe)
		a{[lakhúuli]} muundu tá(awe)

Both of the negative Imperatives obligatorily take 2nd person subjects, and the subject was not varied during the collection of data for these other Pattern 2a tenses. While there is little reason to expect subject-induced tonal alternations in these contexts, the unavailability of data preclude further comment.

Finally, observe that the passive suffix realizes its H in the Imperative_{pl} Negative only in /Ø/ stems, just as in the Imperative_{sg} Negative forms presented in §2.2.1.5 above.

(124) /H/ & /Ø/ Stems with the Passive Suffix

Imp_{pl} Neg	mu-kha{[khalak-w-i]} tá
	mu-kha{[lakhúul-w-í]} 'tá

A surprising difference emerges when one compares the behavior of passive Hs in Hodiernal Perfective and Hodiernal Perfective Negative constructions against passive H behavior in other P2a constructions: the stem tone properties are the same as in non-passive contexts except that a H is realized within the final stem syllable in both /H/ and /Ø/ stems, rather than only in the latter. Consider the data below.

(125) Hodiernal Perfective & Hodiernal Perfective Negative: Passives ‘s/he was (not)...ed’ [SB]³⁴

/H/ Stems

a[khalaachúi] ‘cut’
 a[tsuunzuunúi] ‘sucked’
 a[khalaachwí] ‘tá’ ‘cut’
 a[tsuunzuunwí] ‘tá’ ‘sucked’

/Ø/ Stems

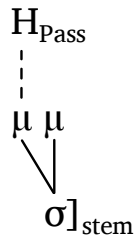
a{[lakhúulúi]} ‘released’
 a{[kalúshiitsúi]} ‘returned’
 a{[lakhúulwí]} ‘tá’ ‘released’
 a{[kalúshiitswí]} ‘tá’ ‘returned’

The data in (125) differ from the Imperative_{sg} Negative (and other tenses like it) in that both /H/ and /Ø/ stems realize the passive H, rather than just /Ø/ stems. These facts motivate a revision to the preliminary formulation of *Passive H Assignment* given in (117).

The preliminary formulation required that the verb appear in a context inflected with a melodic H and that the melodic H be realized on the stem. To account for the Hodiernal Perfective and Hodiernal Perfective Negative data, I revise the second criterion such that it is disjunctive, satisfied by fulfilling *either* of the two following conditions: (i) the melodic H is realized on the stem *or* (ii) the verb appears in a tense with the perfective suffix.

The final version of *Passive H Assignment* is formulated below.

(126) PASSIVE H ASSIGNMENT (FINAL)

**Conditions:**

- (i) Construction is tonally inflected
- (ii) The melodic H is associated to the stem

or

Construction includes perfective suffix

The Hodiernal Perfective data show that the perfective suffix plays an important role in determining whether the passive H will appear in a given verbal form, but that role is notably different from the role it plays in Ganda. In Ganda, the perfective suffix is necessary, and not just sufficient, to license the passive H (Hyman & Katamba 1990).

³⁴The final syllable is long in the affirmative, but short in the negative because the negative element *tá* triggers *Non-Final Shortening* (49).

2.2.2 Pattern 2b: Conditional Negative

Pattern 2b has the same core properties as Pattern 2a, except that subject prefixes are H-toned in Pattern 2b. The Conditional Negative is the only construction that exhibits the properties of this melody. The morphology of the Conditional Negative is very much like the Subjunctive Negative, except that it is marked with the *ni*-³⁵ particle. This particle is expressed immediately left of the subject prefix. In addition, the subject prefix surfaces H in the Conditional Negative, with the result that the word initial syllable is produced with a rising tone. In §2.2.2.1, we will see that the Conditional Negative also differs from Pattern 2a constructions in exhibiting a striking tonal alternation, *Pinball Shift*, in forms with two object prefixes.

In the Conditional Negative, /H/ verbs surface all L (127), and /Ø/ verbs realize a melodic H on the second stem mora (128). In addition, the subject prefix is H.

(127) Conditional Negative C-Initial /H/ ‘if s/he does not...’

Part	Subj	Tns	Stem	Neg	Gloss
na-	á-	kha	{[khwa]}	tá(awe)	‘pay dowry’
na-	á-	kha	{[βeka]}	tá(awe)	‘shave’
na-	á-	kha	{[teekha]}	tá(awe)	‘cook’
na-	á-	kha	{[khalaka]}	tá(awe)	‘cut’
na-	á-	kha	{[kalaanga]}	tá(awe)	‘fry’
na-	á-	kha	{[βoolitsa]}	tá(awe)	‘seduce’
na-	á-	kha	{[βoyong’ana]}	tá(awe)	‘go around’

³⁵The particle is hypothesized to be underlyingly /ni-/ on parallel with the Crastinal Future. In the Crastinal Future, the vowel of the *ni*- particle elides and triggers compensatory lengthening of the subject prefix vowel when combined with vowel-initial subject prefixes (e.g., *na-a* for 3_{rd} singular and *nu-u* for 2_{nd} singular subjects, but *ni-βa* for 3_{rd} plural and *ni-mu* for 2_{nd} plural subjects). The only tonal data available for the Conditional Negative involves 3_{rd} singular subjects.

(128) Conditional Negative C-Initial /Ø/ ‘if s/he does not...’³⁶

Part	Subj	Tns	Stem	Neg	Gloss
na-	á-	kha	{[kwá]}	‘tá(awe)	‘fall’
na-	á-	kha	{[lekhá]}	‘tá(awe)	‘leave’
na-	á-	kha	{[reéβa]}	tá(awe)	‘ask’
na-	á-	kha	{[kulíkha]}	tá(awe)	‘name’
na-	á-	kha	{[lakhúula]}	tá(awe)	‘release’
na-	á-	kha	{[seéβula]}	tá(awe)	‘say goodbye’
na-	á-	kha	{[kalúshitsa]}	tá(awe)	‘return’

2.2.2.1 Conditional Negative with Object Prefixes

As in the Subjunctive Negative, Hs contributed by a single object prefix do not surface, though the root H does. /Ø/ stems realize the melodic H on the second stem mora.

(129) Conditional Negative C-Initial /H/ + OP ‘if s/he does not...him/her’

Part	Subj	Tns	Obj	Stem	Neg	Gloss
na-	á-	kha	{mu	[khwá]}	tá(awe)	‘pay dowry’
na-	á-	kha	{mu	[béka]}	tá(awe)	‘shave’
na-	á-	kha	{mu	[téekha]}	tá(awe)	‘cook’
na-	á-	kha	{mu	[khálaka]}	tá(awe)	‘cut’
na-	á-	kha	{mu	[βóolitsa]}	tá(awe)	‘seduce’
na-	á-	kha	{mu	[βóyong’ana]}	tá(awe)	‘go around’

³⁶The formulation of *Plateau* in (68) predicts that the melodic H should undergo leftward spreading through the tense prefix in this context, though my recordings include few productions in which *Plateau* was unambiguously operative. While many Conditional Negative forms meet the structural description of *Plateau*, only those tokens in which *Plateau* clearly played a roll in determining the surface tone pattern are transcribed as having undergone the rule.

(130) Conditional Negative C-Initial /Ø/ + OP ‘if s/he does not...(to) him/her’

Part	Subj	Tns	Obj	Stem	Neg	Gloss
na-	á-	kha	{mu	[kwá]}	‘tá(awe)	‘fall’
na-	á-	kha	{mu	[lekhá]}	‘tá(awe)	‘leave’
na-	á-	kha	{mu	[reéβa]}	tá(awe)	‘ask’
na-	á-	kha	{mu	[kulíkha]}	tá(awe)	‘name’
na-	á-	kha	{mu	[seéβula]}	tá(awe)	‘say goodbye’
na-	á-	kha	{mu	[kalúshitsa]}	tá(awe)	‘return’

Conditional Negative forms with two object prefixes are tonally identical to parallel Pattern 2a except that, in addition to the H on the subject prefix, there is also an unexpected H on the FV. In /Ø/ stems, the melodic H surfaces as usual on the second stem mora and spreads left to the initial mora via *Plateau*.³⁷

(131) Conditional Negative C-Initial /H/ + OP + OP_{1sg} ‘if s/he does not...him/her for me’
[SB]

Part	Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Neg	Gloss
na-	á-	kha	{mu-	ú	[ndeelá]}	‘tá(awe)	‘bury’
na-	á-	kha	{mu-	ú	[mbechelá]}	‘tá(awe)	‘shave’
na-	á-	kha	{mu-	ú	[ndeerelá]}	‘tá(awe)	‘bring’
na-	á-	kha	{mu-	ú	[khalachilá]}	‘tá(awe)	‘cut’

³⁷JI does not produce the melodic H in Conditional Negative /Ø/ verbs with two object prefixes, e.g., **na-á-kha{mu-ú[n дешela]}** **táawe** for ‘if s/he does not leave him/her for me’. This point of divergence between my primary consultants was noted previously in 25. Additionally, his recordings for /H/ stems with two object prefixes in phrase final position indicate that he does not realize a H on the FV either. This may be a case of free variation, as his productions of the same verb forms in a phrase-medial context exhibit the effects of Pinball Shift.

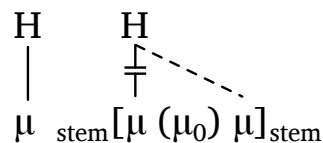
(132) Conditional Negative C-Initial /Ø/ + OP + OP_{1sg} ‘if s/he does not...(to) him/her for me’ [SB]

Part	Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Neg	Gloss
na-	á-	kha	{mu-	ú	[‘nzííla]}	tá(awe)	‘go’
na-	á-	kha	{mu-	ú	[‘ndéshéla]}	tá(awe)	‘leave’
na-	á-	kha	{mu-	ú	[‘nóóndela]}	tá(awe)	‘follow’
na-	á-	kha	{mu-	ú	[‘ngúlíshila]}	tá(awe)	‘name’

The unexpected H on the FV is noteworthy as it illustrates yet another way in which sequences of adjacent underlying Hs are treated in Idakho’s tonal system. Ordinarily, multiple potential Hs at the left edge of the stem are reduced to one H by *Meeussen’s Rule* and/or *Initial Lowering*. In Pattern 1 constructions, HH becomes HL and HHH becomes HLL. In Pattern 2a constructions HH becomes LH and HHH becomes LHL. What is true of Pattern 2a is true of Pattern 2b as well, except that in Pattern 2b, one of the lost Hs is preserved on the FV.

I analyze the H appearing on the FV in /H/ stems as the root H, originating on the stem initial syllable and undergoing a long distance shifting process *Pinball Shift*. The Nyala-West variety of Luhya (Ebarb et al. in prep) and the non-Luhya language Ciruri (Massamba 1982, 1984) also attest versions of *Pinball Shift*. The H immediately preceding the stem is the conditioning structure. Building from the analysis of Pattern 2a, I derive the tonal properties of Pattern 2b with a rule *Pinball Shift*. This rule delinks and subsequently re-associates the root H to the final mora of the stem, as formalized in (133).

(133) PINBALL SHIFt



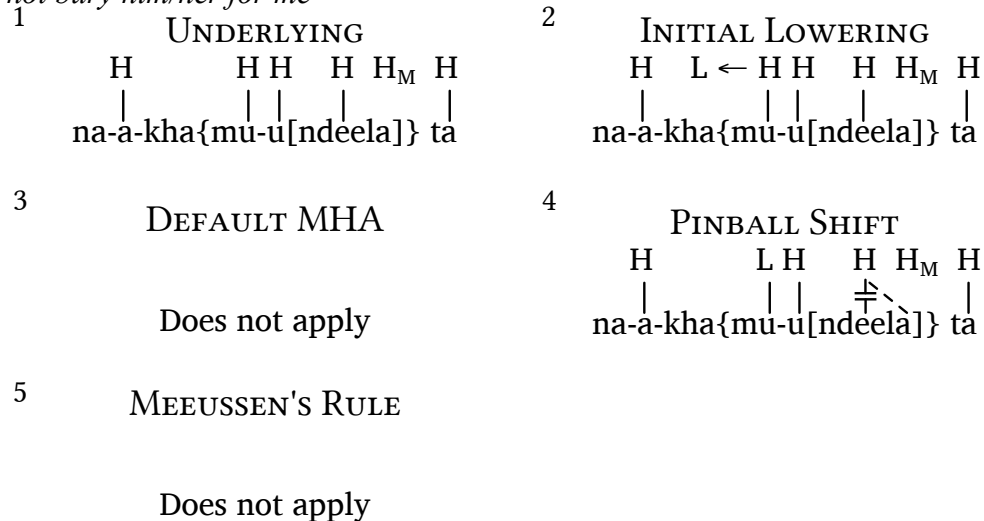
Condition:

Applies in the Conditional Negative only

Note that this analysis requires that *Pinball Shift* precede *Meeussen’s Rule* so that *Meeussen’s Rule* should not bleed *Pinball Shift*, and *Pinball Shift* must follow *Initial Lowering* in the

derivation to account for the fact that Pinball Shift is not observed in /H/ stems containing a single object prefix, as shown in the derivation below.

- (134) Derivation, /H/ Cond. Neg. + OPx2: na-á-kha{mu-ú[ndeelá]} 'tá 'if s/he does not bury him/her for me'



An alternative would be to re-interpret *Meeussen's Rule* as a delinking, rather than deletion, rule and *Pinball Shift* as a later applying rule which associates the root H to the final mora. While this approach could be made to work, it complicates the explanation of stranded melodic Hs in /H/ verbs with no or only a single object prefix. Recall that in this case, the melodic H, which surfaces on the second stem mora in /Ø/ verbs, fails to be assigned to /H/ stems due to the proximity of the root H. If there were a rule which associates floating Hs to the FV in the Conditional Negative, one would expect the melodic H to surface on the FV in these contexts. Under this approach, the assignment rule would have to be restricted to interact only with stranded root Hs, while ignoring melodic Hs. While there is precedent for rules referring to the morphological origins of tones, I advocate for the more direct approach described above.

The properties of the Conditional Negative are summarized schematically in (135).

(135) A Schematic Representation of the Conditional Negative's Tonal Properties

<u>/H/ Verbs</u>		
	<i>Part + Subj + Tns</i>	<i>Macrostem</i>
OPsx0	na-á-kha	{ [CVCVCV]}
OPsx1	na-á-kha-	{CV [CVCVCV]}
OPsx2	na-á-kha-	{CV-́ [CVCVĆ]}

<u>/Ø/ Verbs</u>		
	<i>Part + Subj + Tns</i>	<i>Macrostem</i>
OPsx0	na-á-kha	{ [CVCVĆ]}
OPsx1	na-á-kha-	{CV [CVCVĆ]}
OPsx2	na-á-kha-	{CV-́ [CVCVĆ]}

2.2.2.2 Conditional Negative: Phrase Medially

As in Pattern 2a, the position of the verb within its phrase has no impact on the stem tone properties of the Conditional Negative. The verb tone phrase-medially is the same as in phrase final position.

(136) Conditional Negative Phrase Medially [SB] 'if s/he does not...(for him/her)'

/H/ Stems	No OP	na-á-kha{[ra]} mú'yáyi tá	'bury the boy'
		na-á-kha{[ra]} muundu tá	'bury somebody'
		na-á-kha{[khalaka]} mú'yáyi tá	'cut the boy'
		na-á-kha{[khalaka]} muundu tá	'cut somebody'
	One OP	na-á-kha{mu[réela]} mú'yáyi tá	'bury the boy'
		na-á-kha{mu[réela]} muundu tá	'bury somebody'
/Ø/ Stems	No OP	na-á-kha{mu[khálachila]} mú'yáyi tá	'cut the boy'
		na-á-kha{mu[khálachila]} muundu tá	'cut somebody'
		na-á-'khá{[tsyá]} mú'yáyi tá	'go for the boy'
		na-á-'khá{[tsyá]} muundu tá	'go for somebody'
		na-á-kha{[seéβula]} mú'yáyi tá	'say goodbye to the boy'

	na-á-kha{[seéβula]} muundu tá	‘say goodbye to somebody’
One OP	na-á-kha{mu[tsiíla]} mú’yáyí tá	‘go for the boy’
	na-á-kha{mu[tsiíla]} muundu tá	‘go for somebody’
	na-á-kha{mu[seéβulila]} mú’yáyí tá	‘say goodbye to the boy’
	na-á-kha{mu[seéβulila]} muundu tá	‘say goodbye to somebody’

In addition, /H/ verbs with two object prefixes surface with a H on the FV phrase-medially, as in **na-á-kha-mu-ú[ndeerelá] muundu tá** ‘if he does not bring somebody for me for him/her’.

2.2.2.3 Conditional Negative: Impact of Subject Choice

The H involved in the rise on the word initial syllable in the Conditional Negative is associated to the mora contributed by the subject prefix. The subject prefix appears to be H in this context for no other reason than that it appears in the Conditional Negative construction. A similar phenomenon is observed in the Tachoni variety of Luhya, in which subject prefixes are ordinarily toneless, but surface with a H tone in tenses involving the **ni**-particle (Odden 2009: 317-319).

My corpus does not include any examples with 1st and 2nd person subjects for this construction. This tense was not included in the survey which tested the impact of subject choice on stem tonal properties, and so it remains to be seen how the /L/ vs. /Ø/ contrast in subject prefixes plays out in this context.

2.2.2.4 Conditional Negative: Passives

As in the Subjunctive Negative, the passive suffix realizes a H in the final syllable only in Conditional Negative /Ø/ verbs, which surface also with a melodic H on the second stem syllable. /H/ stems do not realize the root H, the melodic H, or the passive H. This is consistent with the analysis of passives developed in §2.2.1.6.

(137) Conditional Negative: Passives ‘if s/he is not...’ [SB]

/H/ Stems

na-á-kha{[khalak-u-a]}

na-á-kha{[tsuunzuun-u-a]}

‘cut’

‘sucked’

/Ø/ Stems

na-á-kha{[lakhúul-ú-a]}

na-á-kha{[kalúshits-ú-a]}

‘released’

‘returned’

2.2.3 Summary of Pattern 2

Key features of constructions which select Pattern 2 melodies are (i) a rule of *Initial Lowering* and (ii) a melodic H which surfaces on the second stem mora in /Ø/ stems. *Initial Lowering* has the effect of lowering the root H in forms which do not involve object prefixes, and the H associated with the leftmost object prefix in forms with one or more object prefixes. The verbs position within its phrase and the choice of subject appear not to impact stem tonal properties in tenses which exhibit this pattern.

Pattern 2 constructions reveal a complex set of conditions which determine the distribution of passive Hs. In particular, verbs realizing a passive H must appear in a context inflected with a melodic H. In addition, the verbal form must satisfy either of the following two conditions: (i) the melodic H surfaces on the stem or (ii) the verb appears in a tense with the perfective suffix.

2.3 Pattern 3: The subjunctive pattern

The affirmative Subjunctive, as well as the affirmative and negative of the subjunctive-based future, exhibit the properties of Pattern 3. The basic tonal melody associated with this pattern is expressed as a H which surfaces on the second mora after the initial syllable of the macrostem. *Initial Lowering* also characterizes Pattern 3.

2.3.1 Pattern 3: Subjunctive

This section details the tonal properties of Pattern 3, as illustrated by the Subjunctive. The Subjunctive is marked by the FV -*ε*, which raises to -*ɪ* following high vowels, and a melodic H which surfaces on the second mora after the initial syllable of the macrostem. The Subjunctive takes no tense prefix.

The data below demonstrate that, in stems comprising three or more syllables, the melodic H surfaces on the second stem syllable when the same is long, but on the third stem syllable otherwise. In other words, the melodic H is realized on the second mora beyond the first stem syllable. In stems of fewer than three syllables, the melodic H surfaces on the FV. Note also that the root H is not realized.

(138) Subjunctive C-Initial /H/ ‘let him/her...’

Subj	Stem	Gloss
a	{[khúi]}	‘pay dowry’
a	{[βeché]}	‘shave’
a	{[teeshé]}	‘cook’
a	{[khalaché]}	‘cut’
a	{[kalaánje]}	‘fry’
a	{[sitaáche]}	‘accuse’
a	{[βoolitsí]}	‘seduce’
a	{[saanditsí]}	‘thank’
a	{[tsuunzuúni]}	‘suck’
a	{[βoyong’áne]}	‘go around’
a	{[ng’ong’oolitsi]}	‘tease’

(139) Subjunctive V-Initial /H/ ‘let him/her...’

Subj	Stem	Gloss
y	{[iirí]}	‘kill’
y	{[oonoŋ́ɲi]}	‘spoil’ ³⁸
y	{[aabukhány:i]}	‘separate’

The melodic H targets the same position in /Ø/ verbs—the melodic H surfaces on the second mora after the initial syllable of the macrostem. Because *Initial Lowering* lowers the root H in /H/ verbs, the lexical contrast is neutralized in Subjunctive forms lacking an object prefix.

³⁸The IPA symbol for a palatal nasal is used rather than the digraph in this instance to facilitate representing the tonal contour. The geminate palatal nasal is derived via a syncope rule which applies between identical sonorants. The first half of the resultant geminate takes on the mora, and associated tone, of the lost vowel.

(140) Subjunctive C-Initial /Ø/ ‘let him/her...’

Subj	Stem	Gloss
a	{[kúi]}	‘fall’
a	{[leshé]}	‘leave’ [SB]
a	{[reeβé]}	‘ask’
a	{[kulishí]}	‘name’ [SB]
a	{[lakhuúli]}	‘release’
a	{[seeβulí]}	‘say goodbye (to)’
a	{[kalushítsi]}	‘return’ [SB]
a	{[siinjilítsi]}	‘make stand’
a	{[seβulúkhar:i]}	‘scatter’

V-initial /Ø/ stems pattern with C-initial stems.

(141) Subjunctive V-Initial /Ø/ ‘let him/her...’

Subj	Stem	Gloss
a	[eenyé]	‘want’
a	[eeyelé]	‘wipe for’
a	[iiluúli]	‘winnow’
a	[aambakháne]	‘refuse’

2.3.1.1 Subjunctive with Object Prefixes

In /H/ verbs with an object prefix, a single H appears on the initial mora of the stem.

I analyze this as the root H.

(142) Subjunctive C-Initial /H/ + OP ‘let him/her...him/her’

Subj	Obj	Stem	Gloss
a	{mu	[réɛ]}	‘bury’
a	{mu	[béɛhɛ]}	‘shave’
a	{mu	[léerɛ]}	‘bring’
a	{mu	[khálachɛ]}	‘cut’
a	{mu	[βóolitsɪ]}	‘seduce’
a	{mu	[βóyong’anɛ]}	‘go around’

(143) Subjunctive V-Initial /H/ + OP ‘let him/her...him/her’

Subj	Obj	Stem	Gloss
a	{mw	[íírɪ]}	‘kill’
a	{mw	[oónony:ɪ]}	‘spoil’
a	{mw	[aábukhany:ɪ]}	‘separate’

The H of the object prefix similarly does not surface in /Ø/ stems, while the melodic H is realized on the second stem mora.

(144) Subjunctive C-Initial /Ø/ + OP ‘let him/her...him/her’

Subj	Obj	Stem	Gloss
a	{mu	[tsíi]}	‘go (for)’
a	{mu	[leshé]}	‘leave’
a	{mu	[loóndɛ]}	‘follow’
a	{mu	[kulíshɪ]}	‘name’ [SB]
a	{mu	[seéβulɪ]}	‘say goodbye’
a	{mu	[kalúshitsɪ]}	‘return’ [SB]

(145) Subjunctive V-Initial /Ø/ + OP ‘let him...him/her’

Subj	Obj	Stem	Gloss
a	{mw	[eenyé]}	‘want’
a	{mw	[eeyéɛ]}	‘wipe for’
a	{mw	[aambákhane]}	‘refuse’

As shown in (146)-(147), the tonal properties of Subjunctive verb forms with 1st sg object prefixes are identical to those involving CV- object prefixes. A H surfaces on the initial stem mora in /H/ verbs, while a H surfaces on the second stem mora in /Ø/ verbs.

(146) Subjunctive C-Initial /H/ + OP_{1sg} ‘let him/her...me’

Subj	Obj	Stem	Gloss
a	{a	[ríi]}	‘fear’ [SB]
a	{a	[mbéche]}	‘shave’
a	{a	[ndéere]}	‘bring’
a	{a	[khálache]}	‘cut’
a	{a	[mbóolitsɪ]}	‘seduce’
a	{a	[mbóyong’ane]}	‘go around’

(147) Subjunctive C-Initial /Ø/ + OP_{1sg} ‘let him/her...me’

Subj	Obj	Stem	Gloss
a	{a	[síi]}	‘grind’ [SB]
a	{a	[ndeshé]}	‘leave’
a	{a	[noónde]}	‘follow’
a	{a	[ngulíshé]}	‘name’ [SB]
a	{a	[seéβulɪ]}	‘say goodbye (to)’
a	{a	[ngalúshitsɪ]}	‘return’ [SB]

When CV- and 1st sg object prefixes appear together in the Subjunctive, a rising tone surfaces on the pre-stem syllable. In /H/ verbs, the stem is all L.

(148) Subjunctive C-Initial /H/ + OP + OP_{1sg} ‘let him/her...him/her for me’

Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
a	{mu-	ú	[ndeelɛ]}	‘bury’
a	{mu-	ú	[mbechelɛ]}	‘shave’
a	{mu-	ú	[ndeereɛ]}	‘bring’
a	{mu-	ú	[khalachilɪ]}	‘cut’

/Ø/ verbs with two object prefixes also realize a rise on the pre-stem syllable, but a H appears on the first two moras of the stem.

(149) Subjunctive C-Initial /Ø/ + OP + OP_{1sg} ‘let him/her...him/her for me’ [SB]

Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
u-	{mu-	ú	[‘nzíílɪ}]	‘go (for)’
u-	{mu-	ú	[‘ndéshéɛ}]	‘leave’
u-	{mu-	ú	[‘nóóndele}]	‘follow’
u-	{mu-	ú	[‘ndákhúulɪɪ}]	‘release’

The Subjunctive has the following tonal properties: (i) underlying macrostem initial Hs fail to surface, (ii) the melodic H, when realized, surfaces on the second mora after the initial syllable of the macrostem in forms with and without object prefixes, regardless of the verb’s tonal class, and (iii) the melodic H does not surface in /H/ verbs with one or more object prefixes. These properties are summarized schematically in the following display. As before, the position of underlying Hs is indicated with a single underline, and the melodic H, when it appears, is indicated with double underlining.

(150) A Schematic Representation of the Subjunctive's Tonal Properties

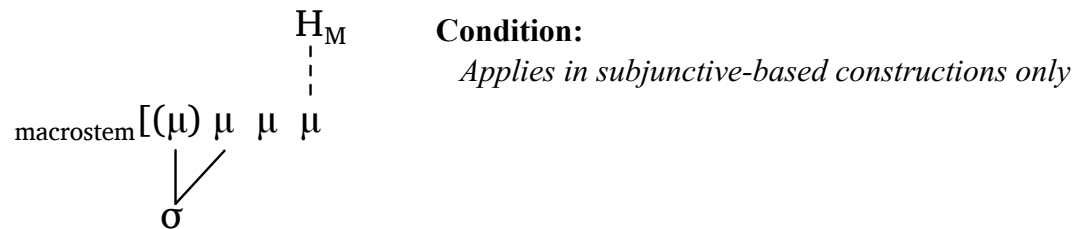
<u>/H/ Verbs</u>			
	<i>Subj</i>		<i>Macrostem</i>
OPsx0	a	{	[CV(V)CV(C)Ṽ]}
OPsx1	a	{CV	[CṼ(V)CVCV]}
OPsx2	a	{CV-Ṽ	[CV(V)CVCV]}

<u>/Ø/ Verbs</u>			
	<i>Subj</i>		<i>Macrostem</i>
OPsx0	a	{	[CV(V)CV(C)Ṽ]}
OPsx1	a	{CV	[CV(C)ṼCV]}
OPsx2	a	{CV-Ṽ	[CV(C)ṼCV]}

The observation that macrostem initial Hs are not realized receives the same analysis as it does in Pattern 2. Namely, *Initial Lowering* (103) lowers Hs initial within the macrostem, causing the leftmost object prefix H in forms with object prefixes and root Hs in forms without object prefixes to fail to surface.

We turn next to the observation that the melodic H, when it surfaces, consistently surfaces on the second mora beyond the initial syllable of the macrostem in all forms, regardless of the verb's tonal class and the presence of object prefixes (this claim will be qualified shortly to accommodate forms with very short macrostems). As a starting point, we may formulate a rule of *Subjunctive Melodic H Assignment* as in (151) below.

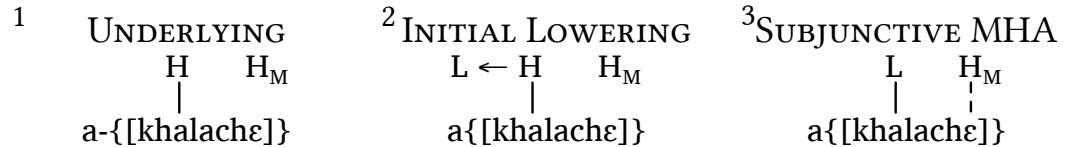
(151) SUBJUNCTIVE MELODIC H ASSIGNMENT (PRELIMINARY)



The rule above, in combination with *Initial Lowering*, accounts for the position of the melodic H in both /H/ and /Ø/ verbs, with and without object prefixes. Below, I derive

one /H/ verb (152) and one /Ø/ verb (153), illustrating how these two rules work together to produce identical surface patterns in verbs of both tonal classes.

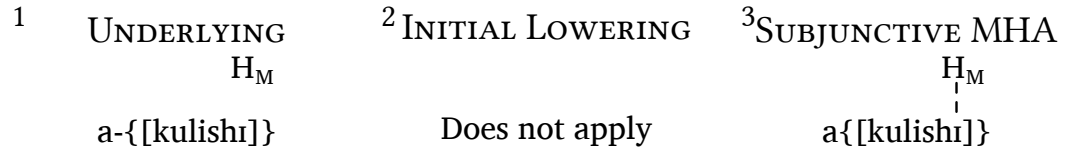
(152) Derivation: a{[khalachɛ]} 'let him/her cut'



⁴ MEEUSSEN'S RULE

Does not apply

(153) Derivation: a{[kulishi]} 'let him/her name'

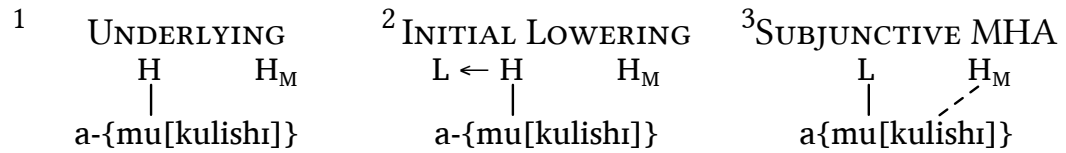


⁴ MEEUSSEN'S RULE

Does not apply

When an object prefix is present, the melodic H is again assigned to the second mora after the initial syllable of the macrostem by *Subjunctive MHA*. The derivation in (154) shows how *Initial Lowering* and *Subjunctive MHA* successfully apply to generate the surface tonal pattern of a verb form with three short stem syllables.

(154) Derivation: a{mu[kulishɪ]} ‘let him/her name him/her’

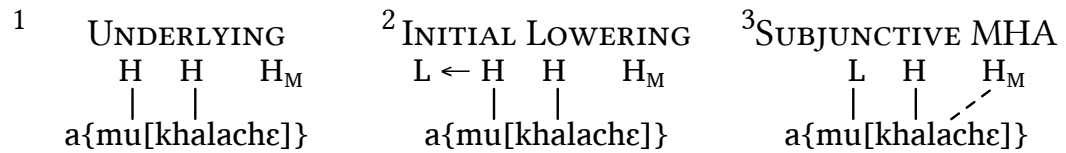


⁴ MEEUSSEN'S RULE

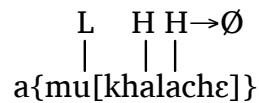
Does not apply

All of the same rules apply in /H/ verbs, even *Subjunctive MHA*. The failure of the melodic H to surface in /H/ verbs when an object prefix is present is attributed to *Meeussen's Rule*: the melodic H is first assigned to the mora immediately following the root H by *Subjunctive MHA*, only to later be deleted by *Meeussen's Rule*.

(155) Derivation: a{mu[kálachɛ]} ‘let him/her cut him/her’



⁴ MEEUSSEN'S RULE



The failure of the melodic H to be assigned to the above forms may also be analyzed as resulting from a requirement that the mora preceding the target of *Subjunctive MHA* be toneless—the same requirement imposed upon *Default MHA*. The present work acknowledges the descriptive adequacy of both approaches, though deletion by *Meeussen's Rule* is advocated on the assumption that the requirement of tonelessness unnecessarily adds complexity to the formal statement of *Subjunctive MHA*.

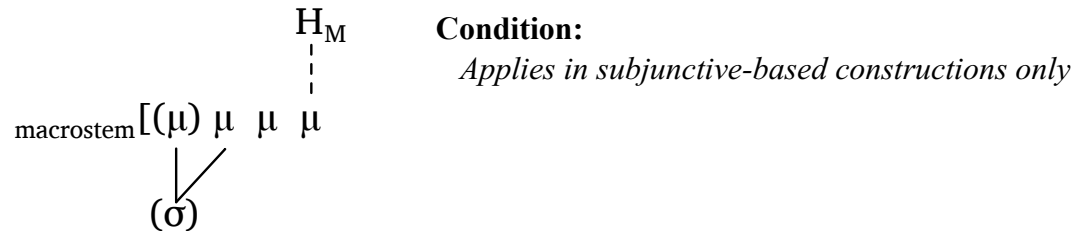
The rule of *Subjunctive MHA* as stated formally in (151) requires two syllables in the macrostem—three if the second syllable is short. This rule needs to be revised in order to account for the verb forms with mono- and disyllabic macrostems repeated in (156).

(156) Short Subjunctive C-Initial /Ø/ ‘let him/her...’

Subj	Stem	Gloss
a	{[kúí]}	‘fall’
a	{[leshé]}	‘leave’ [SB]
a	{[reeβé]}	‘ask’

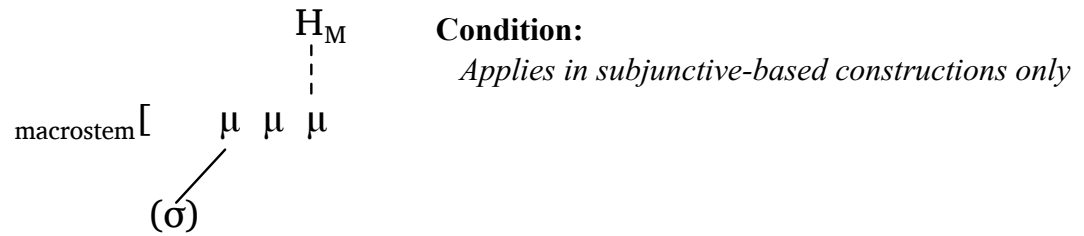
In disyllabic stems, there is no second mora beyond the initial syllable. Instead the initial mora of the macrostem is followed by a single mora. In monosyllabic stems, there is only the initial syllable of the macrostem. The original formulation of *Subjunctive MHA* (151) would not apply in such forms, as the structural description of the rule is not met. To accommodate these shorter stems, I invoke parenthesis notation as shown in the final formulation of *Subjunctive MHA* in (157).

(157) SUBJUNCTIVE MELODIC H ASSIGNMENT (FINAL)



The second largest extension of the rule (158) accounts for disyllabic stems with long initial syllables, as derived in (159).

(158) SUBJUNCTIVE MELODIC H ASSIGNMENT (2ND LARGEST EXTENSION)

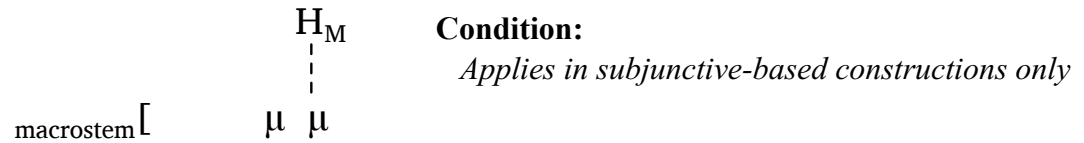


(159) Derivation: a{[reeβɛ]} ‘let him/her ask’

1	UNDERLYING	2 INITIAL LOWERING	3 SUBJUNCTIVE MHA
	H_M		H_M
	a{[reeβɛ]}	Does not apply	a{[reeβɛ]}

The smallest extension of the rule (160), accounts for disyllabic stems with short initial syllables as well as monosyllabic stems.

(160) SUBJUNCTIVE MELODIC H ASSIGNMENT (SMALLEST EXTENSION)



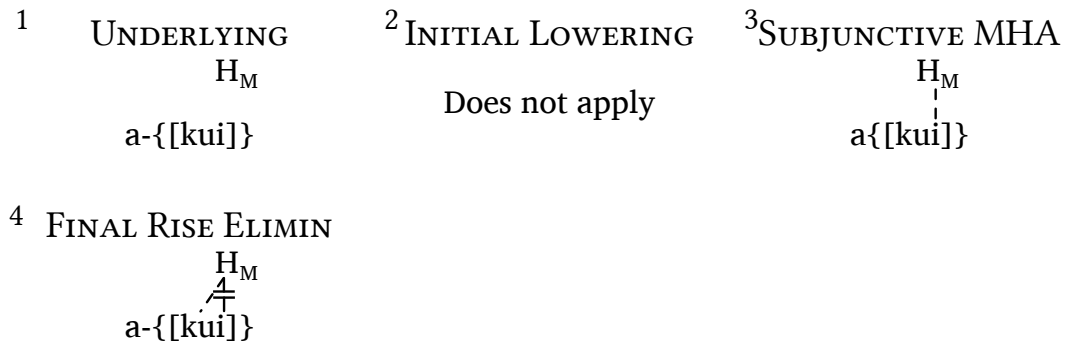
As shown in (161), the melodic H is assigned directly to its surface position on the FV in disyllabic stems with short initial syllables.

(161) Derivation: a{[leshɛ]} ‘let him/her leave (behind)’

1	UNDERLYING	2 INITIAL LOWERING	3 SUBJUNCTIVE MHA
	H_M		H_M
	a{[leshɛ]}	Does not apply	a{[leshɛ]}

The melodic H is first assigned to the FV in monosyllabic stems by the smallest extension of *Subjunctive MHA* (160). The melodic H then shifts left to the initial mora of the long final syllable via *Final Rise Elimination*.

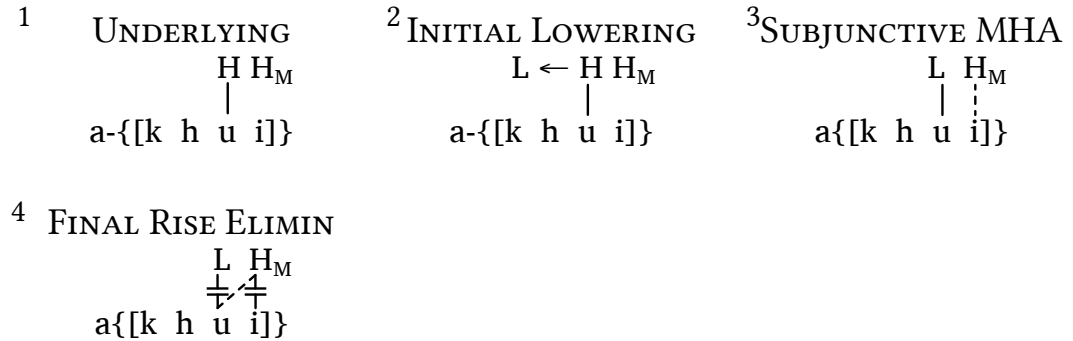
(162) Derivation: a{[kúi]} ‘let him/her fall’



In monosyllabic /H/ verbs, the melodic H surfaces on the initial mora of the stem—the same position as the underlying root H. In disyllabic and longer stems, the root H is lowered by *Initial Lowering*. Next, the melodic H is assigned to the FV by the smallest extension of *Subjunctive MHA* (160). Finally, the melodic H shifts to the initial mora of the stem by *Final Rise Elimination*.

Final Rise Elimination does not require that the mora to which it shifts a H be toneless. I assume that a tone assigned to a mora already bearing another tone will replace the previously linked tone—this in contrast to other conceivable scenarios in which either *Final Rise Elimination* fails to apply, or the targeted mora bears both tones.

(163) Derivation: a{[khúi]} ‘let him pay dowry’



2.3.1.2 Subjunctive: Phrase Medially

The tonal properties of the Subjunctive are unaffected by the verb's position within its phrase. Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement. In each case, the stem tonal properties are the same as the pre-pausal counterparts.

(164) Subjunctive Phrase Medially ‘let him/her...(for him/her)’

/H/ Stems	No OP	a[ré] ‘mú’yáyí	‘bury the boy’
		a[ré] muundu	‘bury somebody’
		a[khalaché] ‘mú’yáyí	‘cut the boy’
		a[khalaché] muundu	‘cut somebody’
	One OP	a-mu[ré] ‘mú’yáyí	‘bury the boy’
		a-mu[ré] muundu	‘bury somebody’
/Ø/ Stems	No OP	a-mu[khálache] mú’yáyí	‘cut the boy’
		a-mu[khálache] muundu	‘cut somebody’
		a[tsí] ‘mú’yáyí	‘go for the boy’
		a[tsí] muundu	‘go for somebody’
	No OP	a[seebulí] ‘mú’yáyí	‘say goodbye to the boy’

	a[seebulí] muundu	‘say goodbye to somebody’
One OP	a-mu[tsí] ‘mú’yáyí	‘go for the boy’
	a-mu[tsí] muundu	‘go for somebody’
	a-mu[seébulí] mú’yáyí	‘say goodbye to the boy’
	a-mu[seébulí] muundu	‘say goodbye to somebody’

2.3.1.3 Subjunctive: Impact of Subject Choice

Data were not elicited to test for the influence of subject choice in the tonal properties of subjunctives. However, it is reported in §2.3.1.5 that the Crastinal Future, another context in which the pattern described above manifests, does not show evidence of subject induced tonal effects.

2.3.1.4 Subjunctive: Passives

In verbs long enough to accommodate both the melodic H and the passive H, both are realized; this includes any verb in which the melodic H is realized prior to the final syllable. In all shorter stems, the expected position of the melodic and passive Hs are the same, and only one H surfaces.

(165) Subjunctive: Passives ‘let him/her be...’ [SB]

/H/ Stems		/Ø/ Stems	
a[khalak-ú-i]	‘cut’	a[lakhuú ¹ l-ú-i]	‘released’
a[tsuunzuú ¹ n-ú-i]	‘sucked’	a[kalushí ¹ tsíl-ú-i]	‘returned for’

The available passive data for the Subjunctive is consistent with the analysis of passive H assignment developed thus far. The melodic H is realized in each of the above forms, and, provided that the verb stem is capable of accommodating both Hs, both surface.

The tonal properties of Subjunctives with both an object prefix and the passive suffix is unknown. The analysis predicts that /Ø/ verbs, because they realize a melodic H on the second stem mora, should also realize the passive H. On the other hand, /H/ verbs do not realize the melodic H when an object prefix is present. Given this, the analysis developed in §2.2.1.6 predicts that the passive H would not be realized in such forms. I hope to test this prediction in future work.

2.3.1.5 Pattern 3: Other Verbal Contexts

The tonal pattern of the Subjunctive characterizes the subjunctive-based Crastinal Future as well, in both the affirmative and negative. In these contexts, as in the Subjunctive, the melodic H is realized on the second mora beyond the initial syllable of the macrostem in the absence of any object prefixes. When an object prefix is present, /H/ verbs do not realize the melodic H, and /Ø/ verbs realize the melodic H on the second stem mora.

The Crastinal Future and the Crastinal Future Negative similarly interact with phrasal position and passivization in the same way as the Subjunctive. That is, the tonal properties of the verb are the same whether in phrase final or phrase-medial position, and the passive suffix realizes a H provided the verbal stem is of sufficient length to express both the melodic and passive H.

(166) Other Pattern 3 Verbal Contexts

- | | |
|------------------------------|-----------------------|
| a. Crastinal Future | ni-SP[ROOT-ε] |
| b. Crastinal Future Negative | ni-SP[ROOT-ε] tá(awe) |

For each of the tenses listed in (166), both /H/ and /Ø/ verbs realize the melodic H on the second mora beyond the initial syllable of the macrostem when no object prefix is present,

as shown in (167) and (168), respectively. Additionally, the root H is not realized due to *Initial Lowering*.

(167) Morphologically Simple /H/ Stems [SB]³⁹

	Part	Subj	Stem	Neg
Crast Fut	na-	a	{[khalaché]}	
	na-	a	{[khong'oóndε]}	
Crast Fut Neg	na-	a	{[khalaché]}	ʼtá
	na-	a	{[khong'oóndε]}	tá

(168) Morphologically Simple /Ø/ Stems [SB]

	Part	Subj	Stem	Neg
Crast Fut	na-	a	{[kulishí]}	
	na-	a	{[lakhúúlɪ]}	
Crast Fut Neg	na-	a	{[kulishí]}	ʼtá
	na-	a	{[lakhúúlɪ]}	tá

As in the Subjunctive, the H contributed by a single object prefix fails to surface, while the root H re-emerges in /H/ stems. The melodic H continues to be realized on the second mora beyond the initial syllable of the macrostem, which is incidentally also the second mora of the stem, in /Ø/ verbs. In /H/ verbs, the melodic H does not surface.

³⁹The examples included in the current section use **-khálak-** ‘cut’ and **-khóng'oond-** ‘knock’ to illustrate the properties of /H/ verbs, and **-kulix-** ‘name’ and **-lakhuul-** ‘release’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the tenses discussed in this section is the following: Crastinal Future - ‘s/he will...’; Crastinal Future Negative - ‘s/he will not...’.

(169) /H/ Stems with an Object Prefix [SB]

	Part	Subj	Obj	Stem	Neg
Crast Fut	na-	a	{mu	[khálachɛ]}	
	na-	a	{mu	[khóng'oondɛ]}	
Crast Fut Neg	na-	a	{mu	[khálachɛ]}	tá
	na-	a	{mu	[khóng'oondɛ]}	tá

(170) /Ø/ Stems with an Object Prefix [SB]

	Part	Subj	Obj	Stem	Neg
Crast Fut	na-	a	{mu	[kulíshɪ]}	
	na-	a	{mu	[lakhúulɪ]}	
Crast Fut Neg	na-	a	{mu	[kulíshɪ]}	tá
	na-	a	{mu	[lakhúulɪ]}	tá

As in the Subjunctive, the Crastinal Future and the Crastinal Future Negative have identical tonal properties phrase-medially as they do phrase finally. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyí** 'boy', and a toneless noun **muundu** 'person/somebody'.

(171) Tenses Like the Subjunctive Phrase Medially [SB]

Crast Fut	/H/	na-a[khalaché] 'mú'yáyí
		na-a[khalaché] muundu
	/Ø/	na-a[lakhuúlɪ] mú'yáyí
		na-a[lakhuúlɪ] muundu
Crast Fut Neg	/H/	na-a[khalaché] 'mú'yáyí tá
		na-a[khalaché] muundu tá
	/Ø/	na-a[lakhuúlɪ] mú'yáyí tá
		na-a[lakhuúlɪ] muundu tá

The somewhat limited dataset in (172) show no evidence of subject-induced tonal alternations in Pattern 3. These data are from in the Crastinal Future.

(172) Subject Choice in the Crastinal Future /H/ ‘...will bring’ [SB]

	Singular	Plural
1st Person	ne-e[ndeerÉ]	ni-khu[leerÉ]
2nd Person	nu-u[leerÉ]	ni-mu[leerÉ]
3rd Person	na-a[leerÉ]	ni-βa[leerÉ]

Finally, the passive suffix realizes its H in the Crastinal Future and Crastinal Future Negative so long as the stem is long enough to accommodate the melodic H in the penultimate syllable of the stem or earlier, just as in the Subjunctive.

(173) /H/ & /Ø/ Stems with the Passive Suffix ‘s/he will (not) be...’ [SB]

Crast Fut	/H/	na-a[khalak-ú-i]	‘cut’
		na-a[tsuunzuú ¹ n-ú-i]	‘sucked’
	/Ø/	na-a[lakhuú ¹ l-ú-i]	‘released’
		na-a[kalushítsil-ú-i]	‘returned for’
Crast Fut Neg	/H/	na-a[khalak-w-í] ¹ tá	‘cut’
		na-a[tsuunzuú ¹ n-w-í] ¹ tá	‘sucked’
	/Ø/	na-a[lakhuú ¹ l-w-í] ¹ tá	‘released’
		na-a[kalushí ¹ tsíl-w-í] ¹ tá	‘returned for’

2.4 Pattern 4: The initial mora pattern

The Remote Past and the Remote Past Negative take a fourth pattern. Pattern 4 is characterized by a melodic H which targets the initial mora of the macrostem.⁴⁰

2.4.1 Pattern 4: Remote Past

The tonal properties of the Remote Past are detailed in this section. The Remote Past is marked by the tense prefix **aa-**, and the FV **-a**. In addition, in all forms lacking object prefixes, a melodic H surfaces on the initial mora of the stem regardless of the verb's tonal class.

As shown in (174), /H/ verbs have a H on the initial stem mora.

(174) Remote Past C-Initial /H/ 's/he...'

Subj	Tns	Stem	Gloss
y-	aa	{[khúa]}	'paid dowry'
y-	aa	{[béka]}	'shaved'
y-	aa	{[téekha]}	'cooked'
y-	aa	{[khálaka]}	'cut'
y-	aa	{[kálaanga]}	'fried'
y-	aa	{[sáanditsa]}	'thanked'
y-	aa	{[tsúunzuuna]}	'sucked'
y-	aa	{[βóyong'ana]}	'went around'

Before vowel-initial stems, one mora of the tense prefix is deleted. The remaining mora assimilates to the quality of the initial vowel of the root.

⁴⁰I thank Michael Marlo for improving the analysis of melodic H assignment in Pattern 4.

(175) Remote Past V-Initial /H/ 's/he...'

Subj	Tns	Stem	Gloss
y-	i	{[íra]}	'killed'
y-	o	{[ónoŋna]}	'spoiled'
y-	a	{[ábukhany:a]}	'separated'

In this context, the contrast between /H/ and /Ø/ verbs is neutralized. As (176) and (177) show, /Ø/ verbs also have a H on the initial mora of the stem.

(176) Remote Past C-Initial /Ø/ 's/he...'

Subj	Tns	Stem	Gloss
y-	aa	{[kúa]}	'fell'
y-	aa	{[lékha]}	'left'
y-	aa	{[réeβa]}	'asked'
y-	aa	{[sósana]}	'resembled'
y-	aa	{[lákhua]}	'released'
y-	aa	{[séeβula]}	'said goodbye (to)'
y-	aa	{[kálushitsa]}	'returned' [SB]
y-	aa	{[sínjilitsa]}	'made stand'
y-	aa	{[séβulukhaŋ:a]}	'scattered'

(177) Remote Past V-Initial /Ø/ 's/he...'

Subj	Tns	Stem	Gloss
y-	e	[énya]	'wanted'
y-	e	[éyela]	'wiped for'
y-	i	[íluula]	'winnowed'
y-	a	[ámbakhana]	'refused'

2.4.1.1 Remote Past with Object Prefixes

A single object prefix surfaces H, when present. In /H/ verbs, there is no H on the stem.

(178) Remote Past C-Initial /H/ + OP 's/he...him/her' [JI]⁴¹

Subj	Tns	Obj	Stem	Gloss
y-	aa	{mú	[raa]}	'buried'
y-	aa	{mú	[βeka]}	'shaved'
y-	aa	{mú	[leera]}	'brought'
y-	aa	{mú	[khalaka]}	'cut'
y-	aa	{mú	[βoolitsa]}	'seduced'
y-	aa	{mú	[βoyong'ana]}	'went around'

(179) Remote Past V-Initial /H/ + OP 's/he...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aa	{mwí	[ira]}	'killed'
y-	aa	{mwó	[onony:a]}	'spoiled'
y-	aa	{mwá	[abukhany:a]}	'separated'

In /Ø/ verbs, the melodic H surfaces on the first and second moras of the stem, rather than just the initial as in /Ø/ verbs without an object prefix.

(180) Remote Past C-Initial /Ø/ + OP 's/he...him/her'⁴²

Subj	Tns	Obj	Stem	Gloss
y-	aa	{mú	[¹ tsía]}	'went (for)'
y-	aa	{mú	[¹ lékhá]}	'left'
y-	aa	{mú	[¹ lóónda]}	'followed'
y-	aa	{mú	[¹ kúlíkha]}	'named'
y-	aa	{mú	[¹ sééβula]}	'said goodbye'
y-	aa	{mú	[¹ kálúshila]}	'defended'

⁴¹SB's productions of these data all pattern like the segmentally identical Habitual (§2.8).

⁴²There are some inconsistencies in the primary consultants' productions of these forms, varying between many tonal variants (e.g., JI produced in one instance the form **y-aa{mú [¹lékha]}** 's/he left him/her' rather than the expected **y-aa{mú [¹lékhá]}**. These transcriptions better reflect the productions of the speakers who participated in my study of micro-variation, who consistently produced these forms with a melodic H on the second stem mora.

(181) Remote Past V-Initial /Ø/ + OP 's/he...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aa	{mwé	[¹ ényá]}	'wanted'
y-	aa	{mwé	[¹ éyéla]}	'wiped for'
y-	aa	{mwá	[¹ ámbákhana]}	'refused'

The tonal properties of Remote Future forms with a 1st sg object prefix are the same as forms with a CV- object prefix: the object prefix itself is H, with the result that the pre-stem syllable has a rising tone. In /H/ verbs, the stem is all L (182), while /Ø/ verbs are H through the first two stem moras (183). One mora contributed by the tense prefix is deleted.

(182) Remote Past C-Initial /H/ + OP_{1sg} 's/he...(for) me'

Subj	Tns	Obj	Stem	Gloss
y-	a	{á	[khua]}	'paid dowry'
y-	a	{á	[mbeka]}	'shaved'
y-	a	{á	[ndeera]}	'brought'
y-	a	{á	[khalaka]}	'cut'
y-	a	{á	[mboolitsa]}	'seduced'
y-	a	{á	[mboyong'ana]}	'went around'

(183) Remote Past C-Initial /Ø/ + OP_{1sg} 's/he...me'

Subj	Tns	Obj	Stem	Gloss
y-	a	{á	[¹ ndékhá]	'left'
y-	a	{á	[¹ nóónda]	'followed'
y-	a	{á	[¹ ngúlíkha]	'named' [SB]
y-	a	{á	[¹ sééβula]	'said goodbye (to)'
y-	a	{á	[¹ lákhúula]	'released'
y-	a	{á	[¹ ngálúhkap:a]	'turned over'

When CV- and 1st sg object prefixes appear together in the Remote Past, a falling tone surfaces on the pre-stem syllable. In /H/ verbs, the stem surfaces all L, while /Ø/ verbs in the same context surface with a H on the first two moras of the stem and the pre-stem mora.

(184) Remote Past C-Initial /H/ + OP + OP_{1sg} 's/he...him/her for me'

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	aa	{mú-	u	[ndeela]}	'buried'
y-	aa	{mú-	u	[mbechela]}	'shaved'
y-	aa	{mú-	u	[ndeerela]}	'brought'
y-	aa	{mú-	u	[khalachila]}	'cut'

(185) Remote Past C-Initial /Ø/ + OP + OP_{1sg} 's/he...him/her for me' [SB]

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	aa	{mú-	¹ ú	[nzííla]}	'went (for)'
y-	aa	{mú-	¹ ú	[ndéshéla]}	'left'
y-	aa	{mú-	¹ ú	[nóóndela]}	'followed'
y-	aa	{mú-	¹ ú	[ndákhúulila]}	'released'

The Remote Past has the following core tonal properties: (i) both /H/ and /Ø/ verbs surface with a H on the initial mora of the stem in forms lacking object prefixes, (ii) only /Ø/ verbs realize a melodic H in forms involving object prefixes, and (iii) that melodic H is realized on the first two moras of the stem, rather than just the first.

In addition, the tonal properties of object prefixes in the Remote Past differ considerably from the tonal properties of object prefixes in other contexts inflected with a melodic H. In particular, rather than surfacing L, a single object prefix will surface H, and the pre-stem syllable surfaces with a falling tone, rather than rising tone, when the verb form has two object prefixes.

The properties of the Remote Past are summarized schematical in (186). As before, the position of underlying Hs is underlined, and the melodic H, when it appears, is indicated with double underlining.

(186) A Schematic Representation of the Remote Past's Tonal Properties

<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-aa	{	[C \acute{V} (V)CVCV]}
OPsx1	y-aa	{C \acute{V}	[C \bar{V} (V)CVCV]}
OPsx2	y-aa	{C \bar{V} -V	[C \bar{V} (V)CVCV]}

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-aa	{	[C \acute{V} (V)CVCV]}
OPsx1	y-aa	{C \acute{V}	[1 C \bar{V} (C) \acute{V} CV]}
OPsx2	y-aa	{C \bar{V} - $^1\acute{V}$	[C \bar{V} (C) \bar{V} CV]}

While the tonal patterns of the Remote Past (and the Remote Past Negative, §2.4.1.5) are a surface exception to the otherwise general observation that Hs are not realized initially within the macrostem in constructions inflected with a melodic H, I argue that *Initial Lowering* applies in all contexts inflected with a melodic H, including the Remote Past. The general approach is to posit a rule *Macrostem-Initial Melodic H Assignment* (henceforth *M-Initial MHA*), which follows *Initial Lowering* in the derivation and targets the macrostem initial mora for melodic H assignment. In this approach, I propose that the Remote Past contributes two melodic Hs.⁴³

(187) MACROSTEM INITIAL MELODIC H ASSIGNMENT

$\begin{array}{c} \text{(T) } H_M \\ \downarrow \swarrow \\ \text{macrostem } [\mu] \end{array}$	Condition: <i>Applies in the Remote Past (Negative) only</i>
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The tonal properties of the Remote Past in forms without object prefixes are simply derived with *Initial Lowering* followed by *M-Initial MHA*. In /H/ verbs (e.g., y-aa{ [khálaka] }

⁴³I analyze Patterns 6 (§2.6) and 7 (§2.7) as having two melodic Hs as well.

‘s/he cut’), though the root H is lowered first by *Initial Lowering*, the melodic H is assigned to the same position by *M-Initial MHA*.

I analyze the Hs that surface on object prefixes as melodic Hs. Though object prefixes are /H/, the underlying Hs are lowered by *Initial Lowering*. Subsequently, *M-Initial MHA* applies to repopulate the object prefix with a melodic H. In /H/ verbs, *Meeussen’s Rule* then deletes the root H.

(188) Derivation, /H/ Rem. Past + OP: y-aa{mú[khalaka]} ‘s/he cut him/her’⁴⁴

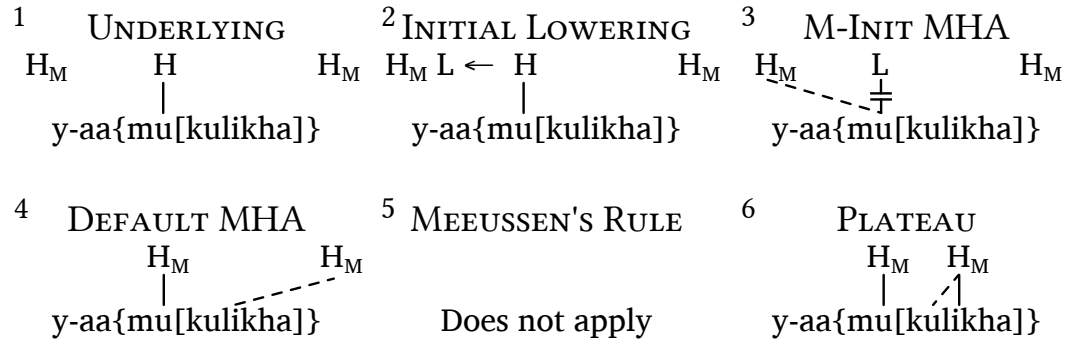
1	UNDERLYING	2 INITIAL LOWERING	3 M-INIT MHA
	H _M H H H _M	H _M L ← H H H _M	H _M L H H _M
	y-aa{mu[khalaka]}	y-aa{mu[khalaka]}	y-aa{mu[khalaka]}
4	DEFAULT MHA	5 MEEUSSEN’S RULE	6 PLATEAU
		H _M H → Ø H _M	
	Does not apply	y-aa{mu[khalaka]}	Does not apply

A second melodic H is assigned to the second stem mora in /Ø/ verbs by *Default MHA*. The second melodic H then spreads left onto the stem-initial mora via *Plateau*.

⁴⁴There is no evidence that Hs which remain floating after all the rules posited in this work have applied have any effect. If it pleases the reader, s/he may assume that a rule of Stray Erasure (Steriade 1982, Harris 1983, Kim 1984, Itô 1986) applies to delete extraneous floating Hs before the form enters the phonetic component.

In derivations involving two melodic Hs, I assume that melodic Hs have no ordering relationship with tones already associated to tone bearing units. I sometimes represent melodic Hs to the left of object prefix and root Hs, and sometimes to the right. This is not intended as a claim about an ordering relationship between melodic Hs and object prefix and root Hs. Instead, melodic Hs appearing to the left are represented in this position because a melodic H assignment rule targets the initial mora of the macrostem, as in Pattern 4, or because representing a melodic H which will not be assigned during the course of the derivation in this position saves space.

(189) Derivation, /Ø/ Rem. Past + OP: y-aa{mú[⁺kúlíkha]} ‘s/he named him/her’

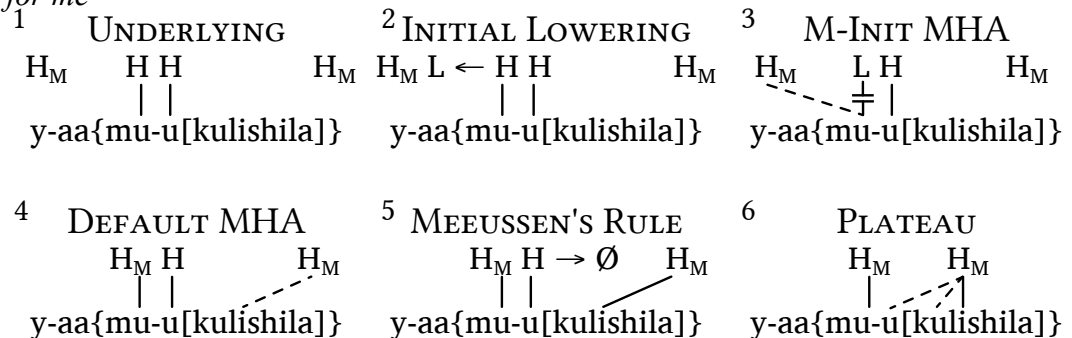


The introduction of a second melodic H in /Ø/ verbs with an object prefix raises the following issue: why does only one melodic H surface in verbs without an object prefix?

The observation that both /H/ and /Ø/ verbs realize the melodic H on the initial mora of the stem, rather than the second, can be taken as an indication that *M-Initial MHA* precedes *Default MHA* in the derivation. If we assume this, it is easy to explain the failure of the second melodic H to be assigned to the second stem mora as resulting from the condition on *Default MHA* that the target be preceded by a toneless mora.

In /Ø/ verbs with two object prefixes, *Plateau* extends the melodic H span even onto the pre-stem mora.

(190) Derivation, /Ø/ Rem. Past + OPx2: y-aa{mú-⁺ú[kúlíshila]} ‘s/he named him/her for me’



In /H/ verbs, *Initial Lowering* lowers the /H/ of the leftmost object prefix. *M-Initial MHA* then replaces the resultant L with a melodic H. The H of the second object prefix and the root H are deleted by *Meeussen's Rule*, which applies iteratively from right to left (as in Pattern 1, §2.1.1.1). *Default MHA* does not assign the second melodic H to the second stem mora in /H/ verbs because of the condition which prevents the rule from applying if its target is preceded by a tone bearing mora; at the relevant time, the mora preceding the target of *Default MHA* is occupied by the root H.

(191) Derivation, /H/ Rem. Past + OPx2: y-aa{mú-u[ndeela]} 's/he buried him/her for

1	UNDERLYING	2 INITIAL LOWERING	3 M-INIT MHA
	$\begin{array}{ccccc} H_M & & H & H & H \\ & & & & \\ y-aa\{\mu u-u[ndeela]\} \end{array}$	$\begin{array}{ccccccc} H_M & L & \leftarrow & H & H & H & H_M \\ & & & & & & \\ y-aa\{\mu u-u[ndeela]\} \end{array}$	$\begin{array}{ccccccc} H_M & & L & H & H & & H_M \\ & & & & & & \\ y-aa\{\mu u-u[ndeela]\} \end{array}$
4	DEFAULT MHA	5 MEEUSSEN'S RULE	6 MEEUSSEN'S RULE
	Does not apply	$\begin{array}{ccccccc} H_M & H & & H \rightarrow \emptyset & & H_M \\ & & & & & \\ y-aa\{\mu u-u[ndeela]\} \end{array}$	$\begin{array}{ccccccc} H_M & H \rightarrow \emptyset & & & & H_M \\ & & & & & \\ y-aa\{\mu u-u[ndeela]\} \end{array}$

Plateau does not apply following the iterative application of *Meeussen's Rule*.

2.4.1.2 Remote Past: Phrase Medially

The tonal properties of the Remote Past are unaffected by the verb's position within its phrase. *H Tone Anticipation* does not spread the H of H-toned complements onto the stem, as it does in parallel tonally uninflected contexts such as the Near Future (§2.1.1.2). Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement. In each case, the stem tonal properties are the same as the pre-pausal counterparts.

(192) Remote Past Phrase Medially ‘s/he...(for him/her)’

/H/ Stems	No OP	y-aa[rá] ‘mú’yáyí	‘buried the boy’
		y-aa[rá] muundu	‘buried somebody’
	One OP	y-aa[khálaka] mú’yáyí	‘cut the boy’
		y-aa[khálaka] muundu	‘cut somebody’
/Ø/ Stems	No OP	y-aa-mú[reela] mú’yáyí	‘buried the boy’
		y-aa-mú[reela] muundu	‘buried somebody’
	One OP	y-aa-mú[khalaka] mú’yáyí	‘cut the boy’
		y-aa-mú[khalaka] muundu	‘cut somebody’
	No OP	y-aa[tsyá] ‘mú’yáyí	‘went for the boy’
		y-aa[tsyá] muundu	‘went for somebody’
	One OP	y-aa-mú[‘tsííla] mú’yáyí	‘went for the boy’
		y-aa-mú[‘tsííla] muundu	‘went for somebody’
	One OP	y-aa-mú[‘sééβula] mú’yáyí	‘said goodbye to the boy’
		y-aa-mú[‘sééβula] muundu	‘said goodbye to somebody’

2.4.1.3 Remote Past: Impact of Subject Choice

Neither tonal class exhibits tonal alternations conditioned by the choice of subject.

(193) Subject Choice in the Remote Past /H/ ‘...brought’ [SB]

	Singular	Plural
1 st Person	n-aa[léera]	khw-aa[léera]
2 nd Person	w-aa[léera]	mw-aa[léera]
3 rd Person	y-aa[léera]	β-aa[léera]

(194) Subject Choice in the Remote Past /Ø/ ‘...asked’ [SB]

	Singular	Plural
1st Person	n-aa[réeβa]	khw-aa[réeβa]
2nd Person	w-aa[réeβa]	mw-aa[réeβa]
3rd Person	y-aa[réeβa]	β-aa[réeβa]

2.4.1.4 Remote Past: Passives

Passive Hs surface in the Remote Past, as illustrated in (195). The passive H spans from the second stem mora through the penult in both /H/ and /Ø/ verbs.

(195) Remote Past: Passives ‘s/he was...’ [SB]

/H/ Stems		/Ø/ Stems	
y-aa[khá ¹ lák-ú-a]	‘cut’	y-aa[lá ¹ khúúl-ú-a]	‘released’
y-aa[tsú ¹ únzúún-ú-a]	‘sucked’	y-aa[ká ¹ lúshíts-ú-a]	‘returned’

The tonal properties of the data in (195) is expect given the analysis of passives developed to this point. The H in stem initial position in /H/ verbs without an object prefix (cf. **y-aa[khá¹lák-ú-a]** ‘he cut’) is indeed a melodic H, rather than the root H. Recall from 2.2.1.6 that the passive H is licensed if the following two conditions are met: (i) the verb appears in a context inflected with a melodic H and (ii) the melodic H is realized on the stem *or* the verb appears in a tense with the perfective suffix. The Remote Past forms in (195) all satisfy condition (i) and the first clause of condition (ii)

The formulation of *M-Initial MHA*, reproduced in (187), ensures that the melodic H is assigned to the initial mora while simultaneously delinking the root H. If *M-Initial MHA* were prevented from applying by the root H in /H/ verbs without an object prefix, the conditions of *Passive H Assignment* would not be satisfied. My analysis would therefore incorrectly predict that the passive H is not realized in this context.

2.4.1.5 Pattern 4: Other Verbal Contexts

The Remote Past's negative counterpart is the only other context characterized by the particular tonal properties of Pattern 4.

(196) Other Pattern 4 Verbal Contexts

a. Remote Past Negative

SP-aa[ROOT-a] tá(awe)

As in the Remote Past, the Remote Past Negative realizes a melodic H on the (macro)stem-initial mora in both /H/ and /Ø/ verbs in the absence of any object prefixes. The melodic H continues to be assigned to the macrostem-initial mora in constructions with object prefixes, and /Ø/ verbs with object prefixes realize an additional melodic H on the second stem mora which spreads left via *Plateau*. Furthermore, the verb's position within its phrase does not influence stem tone in the Remote Past Negative, and passive Hs are licensed in verbs from both tonal classes.

Observe below that both /H/ and /Ø/ verbs realize the melodic H on the initial mora of the (macro)stem when no object prefix is present.

(197) Morphologically Simple /H/ Stems [SB]⁴⁵

	Subj	Tns	Stem	Neg
Rem Past Neg	y-	aa	{[khálaka]}	tá
	y-	aa	{[khóng'oonda]}	tá

⁴⁵The examples included in the current section use **-khálak-** 'cut' and **-khóng'oond-** 'knock' to illustrate the properties of /H/ verbs, and **-kulix-** 'name' and **-lakhuul-** 'release' as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the Remote Past Negative is 's/he did not...'.

(198) Morphologically Simple /Ø/ Stems [SB]

	Subj	Tns	Stem	Neg
Rem Past Neg	y-	aa	{[kúlikha]}	tá
	y-	aa	{[lákhuula]}	tá

As in the affirmative, the melodic H is assigned to the macrostem-initial mora by *M-Initial MHA* in both tonal classes. The macrostem-initial H causes the root H to delete via *Meeussen's Rule*, but a second melodic H is assigned to the second stem mora in /Ø/ verbs by *Default MHA*. The second melodic H then spreads left in /Ø/ verbs to the stem-initial mora via *Plateau*.

(199) /H/ Stems with an Object Prefix [SB]

	Subj	Tns	Obj	Stem	Neg
Rem Past Neg	y-	aa	{mú	[khalaka]}	tá
	y-	aa	{mú	[khong'oonda]}	tá

(200) /Ø/ Stems with an Object Prefix [SB]

	Subj	Tns	Obj	Stem	Neg
Rem Past Neg	y-	aa	{mú	[^h kúlíkha]}	tá
	y-	aa	{mú	[^h lákhuúla]}	tá

As in the affirmative, the Remote Past Negative is unaffected by the verb's position within the phrase. The tonal melody persists, and complement Hs are not anticipated into the verb stem. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyi** 'boy', and a toneless noun **muundu** 'person/somebody'.

(201) Tenses Like the Remote Past Phrase Medially [SB]

Rem Past Neg	/H/	y-aa[khálaka] mú'yáyí
		y-a[khálaka] muundu
	/Ø/	y-aa[lákhúula] mú'yáyí
		y-aa[lákhúula] muundu

No Remote Past Negative data is available that directly bears on whether the choice of subject impacts stem tone in this context, though data from the affirmative Remote Past (§2.4.1.3) suggest that no subject-induced tonal alternations should be expected here.

Finally, observe that the passive suffix realizes its H in the Remote Past Negative.

(202) /H/ & /Ø/ Stems with the Passive Suffix 's/he was not...' [SB]

Rem Past Neg	/H/	y-aa[khá'lák-w-á] 'tá	'cut'
		y-aa[tsú'únzúún-w-á] 'tá	'sucked'
	/Ø/	y-aa[lá'khúúl-w-á] 'tá	'released'
		y-aa[ká'lúshítsíl-w-á] 'tá	'returned for'

2.5 Pattern 5: The third / final vowel patterns

Pattern 5 groups three similar but distinct tonal melodies. The Present and related constructions select Pattern 5a. In Pattern 5a, all moras of the third stem syllable are H in /H/ verbs and the second stem mora is H in /Ø/ verbs. The Indefinite Future takes Pattern 5b. /Ø/ verbs have a H on the second stem mora this sub-pattern as well, but /H/ verbs are H on the FV instead of the third syllable. Finally, the Conditional selects Pattern 5c. Pattern 5c is similar to Pattern 5b, but different in several important ways. One notable difference is that subject prefixes are H in Pattern 5c, but not in Pattern 5b.

The choice to subsume these three melodies under a single primary pattern is motivated primarily by the following considerations: (i) the surface tonal properties of these melodies are identical in many paradigms, (ii) all the melodies exhibit *Initial Lowering* and interact with the resulting L in ways that other melodies do not, (iii) the Present (5a) and the Indefinite Future (5b) both lose the melodic H in a phrase-medial context (though the Conditional (5c) does not) and (iv) there is speaker-internal variation with respect to which melody is selected for the Present and Indefinite Future, with the Indefinite Future forms occasionally taking on the properties of the Present.⁴⁶

⁴⁶Many other Luhya varieties have the same melody for both the Present and Indefinite Future (Khayo, Marlo 2009b; Tura, Marlo 2008b; Nyala-West, Marlo 2007; Bukusu, Mutonyi 2000; Marachi, Marlo 2007; Wanga, Ebarb et al. in press; Tachoni, Odden 2009; Logoori, Leung 1991). These constructions also share the same core tonal properties in Tiriki, but they differ with respect to their behavior phrase-medially (Marlo in prep).

2.5.1 Pattern 5a: Present

In this section, I use data from the Present to illustrate the tonal properties of Pattern 5a. The Present is not marked by any tense prefix, but takes the imperfective **-aang** suffix and the FV **-a**. Tonally, the Present is marked by a melodic H which surfaces on the second stem mora in /Ø/ stems and the third stem syllable in /H/ stems.

As shown in (203), /H/ verbs have a H on the third stem syllable. In verbs with just three syllables,⁴⁷ the penult also has a rise (if the initial syllable is short) or a level H (if the initial syllable is long).⁴⁸

(203) Present C-Initial /H/ ‘s/he...’

Subj	Stem	Gloss
a-	{[βekaángá]}	‘shaves’
a-	{[reetsáángá]}	‘buries’
a-	{[teekháángá]}	‘cooks’
a-	{[khalakáángá]}	‘cuts’
a-	{[kalaangáángá]}	‘fries’
a-	{[boolitsáángá]}	‘seduces’
a-	{[boyong’ánáángá]}	‘goes around’

In most longer stems, the melodic H surfaces just on the third syllable of the stem, but exceptionally long verbs like **a{[boyong’ánáángá]}** ‘s/he goes around’ show that the following mora can be H as well.

Vowel-initial stems also have a H on the third syllable. When considering the longer two data, bear in mind that the geminate nasals derive from an intermediate representation

⁴⁷Aspects of the morphology preclude the appearance of mono- and disyllabic stem shapes. The imperfective suffix **-aang** adds a syllable, and monosyllabic roots additionally take a semantically null stem extender **-ets/-its** (Marlo 2006).

⁴⁸There is some variation, both within and between speakers, with respect to whether the melodic H is realized on both the final and penultimate syllable in trisyllabic stems or just the penult. Speakers appear to favor productions with the melodic H on both syllables, but it is not uncommon for the final syllable a sharp falling contour that is atypical of short final syllables with a H.

in which a high front vowel intervenes between two nasals, e.g. **y**{[onoɲíɲáanga]} for ‘s/he spoils’.

(204) Present V-Initial /H/ ‘s/he...’

Subj	Stem	Gloss
y-	{[iraángá]} ⁴⁹	‘kills’
y-	{[onoɲí:áanga]}	‘spoils’
y-	{[abukháɲí:aanga]}	‘separates’

/Ø/ stems realize a melodic H on the second stem mora regardless of the size of the verb stem. Additionally, the melodic H spreads one mora to the right via *Pre-Penultimate Doubling* (113) when at least one mora intervenes between the second and penultimate moras of the stem.

(205) Present C-Initial /Ø/ ‘s/he...’

Subj	Stem	Gloss
a-	{[lekháanga]}	‘leaves’
a-	{[kwiítsáanga]}	‘falls’
a-	{[reéβáanga]}	‘asks’
a-	{[kulíkháanga]}	‘names’ [SB]
a-	{[lakhúúlaanga]}	‘releases’
a-	{[seéβúlaanga]}	‘says goodbye (to)’
a-	{[kalúshítsaanga]}	‘returns’ [SB]

⁴⁹Jl produced this form with a clear rising tone on the second syllable, as transcribed, though SB’s production seems to have a level H.

(206) Present V-Initial /Ø/ 's/he...'

Subj	Stem	Gloss
y-	{[enyáanga]}	'wants'
y-	{[eyélaanga]}	'wipes for'
y-	{[ambákhánaanga]}	'refuses'
y-	{[elélélitsaanga]}	'hangs up (s.t.)'

2.5.1.1 Present with Object Prefixes

When an object prefix is present in /H/ verbs, the object prefix is L, the root H is on the initial mora, and the melodic H spans the second mora through the third syllable.

(207) Present C-Initial /H/ + OP 's/he...him/her'

Subj	Obj	Stem	Gloss
a-	{mu	[ré'étsáángá]}	'buries'
a-	{mu	[bé'káángá]}	'shaves'
a-	{mu	[lé'éráángá]}	'brings'
a-	{mu	[khá'lákáángá]}	'cuts'
a-	{mu	[βó'ólítsáángá]}	'seduces'
a-	{mu	[βó'yóng'áángá]}	'goes around'

(208) Present V-Initial /H/ + OP 's/he...him/her'

Subj	Obj	Stem	Gloss
a-	{mw	[íí'ráángá]}	'kills'
a-	{mw	[oó'nóp:áángá]}	'spoils'
a-	{mw	[aá'βúkháp:aanga]}	'separates'

In /Ø/ verbs, the object prefix is L and the melodic H surfaces on the second stem mora.

(209) Present C-Initial /Ø/ + OP 's/he...him/her'

Subj	Obj	Stem	Gloss
a-	{mu	[tsiítsaanga]}	'goes (for)'
a-	{mu	[lekháanga]}	'leaves'
a-	{mu	[loóndaanga]}	'follows'
a-	{mu	[kulíkhaanga]}	'names'
a-	{mu	[lakhúulaanga]}	'releases'
a-	{mu	[seeéβúlaanga]}	'says goodbye'
a-	{mu	[kalúshítsaanga]}	'returns' [SB]

(210) Present V-Initial /Ø/ + OP 's/he...him/her'

Subj	Obj	Stem	Gloss
a-	{mw	[eenyáanga]}	'kills'
a-	{mw	[eeyélaanga]}	'spoils'
a-	{mw	[aambákhánaanga]}	'separates'
a-	{mw	[eeléélitsaanga]}	'holds hangingly'

When a second object prefix is added to /H/ verbs, the long pre-stem syllable bears a rising tone and a downstepped level H spans the first through the third stem syllables, except in stems with more than four syllables, in which the H spans into the fourth syllable.

(211) Present C-Initial /H/ + OP + OP_{1sg} 's/he...him/her for me'

Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
a-	{mu-	ú	[¹ ndééláángá]}	'buries'
a-	{mu-	ú	[¹ mbéchéláángá]}	'shaves'
a-	{mu-	ú	[¹ ndééréláángá]}	'brings'
a-	{mu-	ú	[¹ mbóólítsíláanga]}	'seduces'
a-	{mu-	ú	[¹ mbóhólólélaanga]}	'unties'

In /Ø/ verbs, the downstepped H on the stem spans from the first mora through the third mora, except when the third mora is the second half of a long second syllable. In this case, the melodic H spans only through the second stem mora.

(212) Present C-Initial /Ø/ + OP + OP_{1sg} 's/he...him/her for me' [SB]

Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
a-	{mu-	ú	[¹ nzíílaanga]}	'goes (for)'
a-	{mu-	ú	[¹ ndéshélaanga]}	'leaves'
a-	{mu-	ú	[¹ nóóndélaanga]}	'follows'
a-	{mu-	ú	[¹ ndákhúulilaanga]}	'releases'

The core properties of the melody characterizing the Present may be summarized as follows: (i) underlying macrostem-initial Hs fail to surface, (ii) the melodic H surfaces on the second stem mora in /Ø/ verbs, (iii) the melodic H surfaces on all moras of the third syllable in /H/ verbs, (iv) the melodic H spreads leftward through the second stem syllable in /H/ verbs with a single object prefix, and (v) the melodic H spreads leftward through the initial syllable of the stem in /H/ verbs with two object prefixes. These properties are summarized schematically in the following display. In addition to these properties, I will offer an analysis of the fact that the melodic H spreads left into the second stem syllable in trisyllabic /H/ stems, even when no object prefix is present.

(213) A Schematic Representation of the Present's Tonal Properties

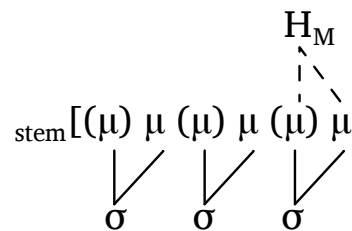
<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-li	{	[CVCVCV́(V́)CV]}
OPsx1	a-li-	{CV	[ĆV́ĆV́(V́)CV]}
OPsx2	a-li-	{CV-́	[CVCVCV́(V́)CV]}

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-li	{	[CV(C)V́CV]}
OPsx1	a-li-	{CV	[CV(C)V́CV]}
OPsx2	a-li-	{CV-́	[¹ ĆV́(C)V́CV]}

That macrostem-initial Hs fail to surface is accounted for as in previously discussed melodies via *Initial Lowering* (103).

Two rules of melodic H assignment are invoked in the analysis of the tonal properties of verbs in the Present: *Third Syllable MHA* and *Default MHA* (102). *Third Syllable MHA* follows *Default MHA* in the derivation. This ordering captures the fact that, while the melodic H is assigned directly to the second mora in forms involving /Ø/ verbs, assignment by *Default MHA* is blocked in /H/ verbs owing to the condition on *Default MHA* that the target of melodic H assignment be preceded by a toneless mora. The melodic H is then assigned in /H/ verbs by the later applying *Third Syllable MHA*, formalized below.

(214) THIRD SYLLABLE MELODIC H ASSIGNMENT



Condition:

Applies in present-based constructions only

The tonal properties of all /Ø/ verbs and /H/ verbs with more than three syllables are accounted for by *Third Syllable MHA*, *Default MHA*, and *Pre-Penultimate Doubling* (113).

In /H/ verbs, *Third Syllable MHA* assigns the melodic H to the third syllable of the stem. The melodic H then doubles onto the next mora so long as it precedes the penultimate mora by *Pre-Penultimate Doubling*.

(215) Derivation, /H/ Present: a{[boyong'ánaanga]} 's/he goes around'

1	UNDERLYING H a{[boyong'anaanga]}	2	INITIAL LOWERING L ← H a{[boyong'anaanga]}
3	DEFAULT MHA Does not apply	4	THIRD σ MHA L a{[boyong'anaanga]} ----- H _M
5	PRE-PENULT DOUBLING L H _M a{[boyong'anaanga]}	6	MEEUSSEN'S RULE Does not apply

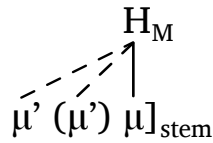
In /Ø/ verbs, the melodic H is assigned by *Default MHA*, bleeding *Third Syllable MHA*. The melodic H then spreads to the right by *Pre-Penultimate Doubling*.

(216) Derivation, /Ø/ Present: a{[reéβaanga]} 's/he asks'

1	UNDERLYING H _M a{[reéβaanga]}	2	INITIAL LOWERING Does not apply
3	DEFAULT MHA H _M ----- a{[reéβaanga]}	4	THIRD σ MHA Does not apply
5	PRE-PENULT DOUBLING H _M a{[reéβaanga]}	6	MEEUSSEN'S RULE Does not apply

Trisyllabic /H/ stems, in which the melodic H spreads left to the penultimate syllable, motivate an additional rule of leftward spreading, *Final Spread*.

(217) FINAL SPREAD

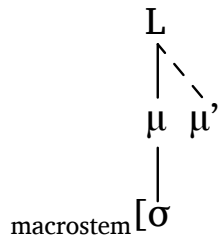
**Condition:**

Applies in present-based constructions only

The melodic H spreads through both moras of the penultimate syllable in /H/ stems with long initial syllables, e.g. **a{[teekháángá]}** ‘s/he cooks’. The melodic H spreads only through the rightmost mora of the penult in /H/ stems with short initial syllables, e.g. **a{[bekaángá]}** ‘s/he shaves’. The rule posited above does not predict this difference by itself.

The present work analyzes this difference as arising from a rule of *L Spread II*, which spreads the Ls that result from *Initial Lowering* onto the peninitial (second) mora. The result of *L Spread II* is that the first two moras of trisyllabic stems are L before the melodic H.⁵⁰

(218) L SPREAD II



The formulation of *Final Spread* in (217) calls for a toneless target. The full extension of *Final Spread* applies when the initial span of two L moras generated by *L Spread II* is fully contained within the first syllable, as it is when the initial syllable of the stem is long. One

⁵⁰Note that this is the second rule posited which spreads a L; the first was introduced in the analysis of subject-induced tonal effects in the lexical pattern, whereby L-toned 1st and 2nd person subjects conditioned the lowering of root and object prefix Hs. While *L Spread I* iteratively spreads prefixal Ls up to and including the stem-initial mora, *L Spread II* spreads just macrostem-initial Ls onto a toneless peninitial mora

form like this is derived in (219); *Default MHA* and *Pre-Penultimate Doubling*, which do not apply in this case, are excluded for space.

(219) Derivation, /H/ Trisyllabic Present: a{[reetsáángá]} 's/he asks'

1	UNDERLYING H H _M a{[reetsaanga]}	2	INITIAL LOWERING L ← H H _M a{[reetsaanga]}
3	THIRD σ MHA L H _M / a{[reetsaanga]}	4	MEEUSSEN'S RULE Does not apply
5	L SPREAD II L H _M \ a{[reetsaanga]}	6	FINAL SPREAD L H _M \ / a{[reetsaanga]}

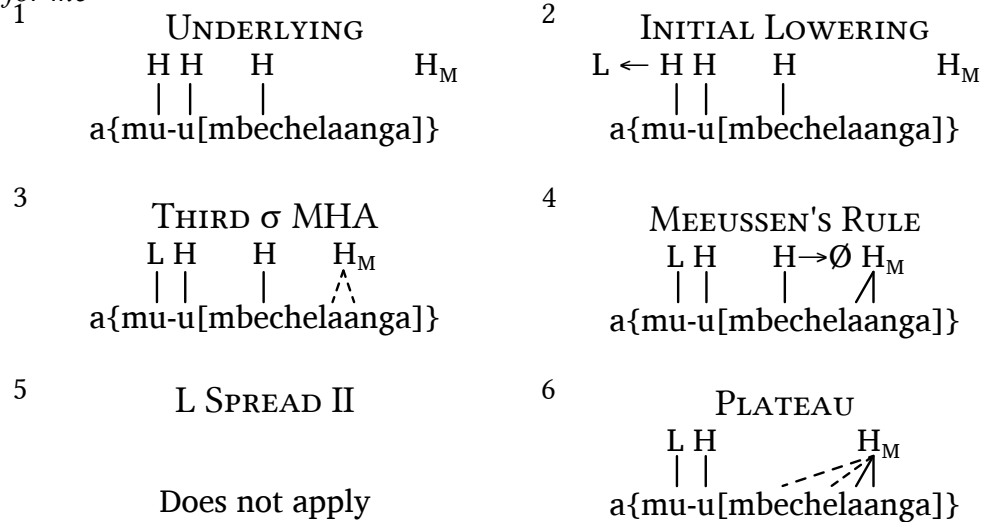
When the initial syllable is short, *L Spread II* results in an initial L span which extends into the penultimate syllable. This prevents the full extension of *Final Spread* from applying, so instead the smaller extension of *Final Spread* spreads the melodic H onto just the second mora of the long penultimate syllable, creating a rise. This is shown in (220).

(220) Derivation, /H/ Trisyllabic Present: $a\{[\beta eka\acute{a}ng\acute{a}]\}$'s/he shaves'

1	<p>UNDERLYING</p> <p style="text-align: center;">H H_M</p> <p style="text-align: center;"> </p> <p style="text-align: center;">$a\{[\beta eka\acute{a}ng\acute{a}]\}$</p>	2	<p>INITIAL LOWERING</p> <p style="text-align: center;">L ← H H_M</p> <p style="text-align: center;"> </p> <p style="text-align: center;">$a\{[\beta eka\acute{a}ng\acute{a}]\}$</p>
3	<p>THIRD σ MHA</p> <p style="text-align: center;">L H_M</p> <p style="text-align: center;"> /</p> <p style="text-align: center;">$a\{[\beta eka\acute{a}ng\acute{a}]\}$</p>	4	<p>MEEUSSEN'S RULE</p> <p style="text-align: center;">Does not apply</p>
5	<p>L SPREAD II</p> <p style="text-align: center;">L H_M</p> <p style="text-align: center;"> </p> <p style="text-align: center;">$a\{[\beta eka\acute{a}ng\acute{a}]\}$</p>	6	<p>FINAL SPREAD</p> <p style="text-align: center;">L H_M</p> <p style="text-align: center;"> /</p> <p style="text-align: center;">$a\{[\beta eka\acute{a}ng\acute{a}]\}$</p>

Finally, recall that the melodic H surfaces not only on the third stem syllable in /H/ verbs with object prefixes, but also on the second syllable, as in $a\{mu\ [\beta \acute{e}'ka\acute{a}ng\acute{a}]\}$'s/he shaves him/her', and even the initial syllable, as in $a\{mu\text{-}\acute{u}\ [\text{'}mb\acute{e}ch\acute{e}l\acute{a}ng\acute{a}]\}$'s/he shaves him/her for me'. Both instances may be analyzed as outcomes of a rule of *Plateau*, as originally formalized in (68). The non-applying rule *Final Spread* is omitted from this derivation.

(221) Derivation, /H/ Present OPx2: a{mu-ú[‘mbéchéláánga]} ‘s/he shaves him/her for me’



2.5.1.2 Present: Phrase Medially

The melodic H is lost in the Present when the verb is non-final within the phrase. Compare, for example phrase-final a{ [kulíkháanga] } ‘s/he names’ and a{ [kulikhaanga] } **muundu** ‘s/he names someone’. Interestingly, the effect of *Initial Lowering* persists in a phrase-medial context, cf. /H/-toned a{ [khalakáánga] } ‘s/he cuts’ and a{ [khalakaanga] } **muundu** ‘s/he cuts somebody’.

Additionally, *H Tone Anticipation* spreads the H from H-toned complements onto the verbal stem. This H appears to spread a greater distance in /Ø/ verbs than it does in /H/ verbs, though the left edge of the span is unclear in both cases, so the transcriptions in (222) should be considered approximations only and verified for accuracy once *H Tone Anticipation* in Idakho is better understood.⁵¹

⁵¹ Though the left edge of the H span is fuzzy, it is very clear that the melodic H is lost phrase-medially and that post-verbal Hs spread into the verb stem by *H Tone Anticipation*. The disclaimers here regarding the left edge of H spans resulting from *H Tone Anticipation* do not also apply to the left edge of H spans resulting from *Final Spread*. The left edge of spreading is very clear in cases of *Final Spread*.

In /H/ verbs, the span of the complement H extends to and includes the peninitial or post-peninitial mora in forms without an object prefix. In verbs with especially long stems, the left edge of the H-span more clearly ends at the third stem mora. When an object prefix is present, the complement H spreads leftwards up to and including the second stem syllable.

In /Ø/ verbs, the span extends onto the stem-initial syllable or beyond, perhaps even reaching onto the subject prefix. The span may even reach the subject prefix in forms with an object prefix, though in the transcriptions below, the left edge of the span is given a conservative estimate as terminating at the stem-initial syllable.

Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement.

(222) Present Phrase Medially 's/he...(for him/her)'

/H/ Stems	No OP	a{[reetsaangá]} mú'yáyi	'buries the boy'
		a{[reetsaanga]} muundu	'buries somebody'
	One OP	a{[boyong'ánaángá]} mú'yáyi	'goes around the boy'
		a{[boyong'anaanga]} muundu	'goes around somebody'
/Ø/ Stems	No OP	a{mu[réetsáángá]} mú'yáyi	'buries the boy'
		a{mu[réetsaanga]} muundu	'buries somebody'
	One OP	a{mu[βó'yóng'ánaángá]} mú'yáyi	'goes around the boy'
		a{mu[βóyong'anaanga]} muundu	'goes around somebody'
/Ø/ Stems	No OP	a{[tsíítsaángá]} mú'yáyi	'goes for the boy'
		a{[tsiitsaanga]} muundu	'goes for somebody'
	One OP	a{[sééβúláángá]} mú'yáyi	'says goodbye to the boy'
		a{[seeβulaanga]} muundu	'says goodbye to somebody'

One OP	a{mu[tsíitsáángá]}	mú'yáyí	'goes for the boy'
	a{mu[tsiitsaanga]}	muundu	'goes for somebody'
	a{mu[sééβúláángá]}	mú'yáyí	'says goodbye to the boy'
	a{mu[seeβulaanga]}	muundu	'says goodbye to somebody'

2.5.1.3 Present: Impact of Subject Choice

The choice of subject has no impact on the verbal tone properties of verbs in the Present. /H/ and /Ø/ stems lacking an object prefix are realized the same whether the subject is 1st, 2nd, or 3rd person. /H/ stems surface with a melodic H on the FV, while /Ø/ stems realize the melodic H on the second stem mora.

(223) Subject Choice in the Present /H/ '...bring(s)' [SB]

	Singular	Plural
1 st Person	{[ndeeráángá]}	khu{[leeráángá]}
2 nd Person	u{[leeráángá]}	mu{[leeráángá]}
3 rd Person	a{[leeráángá]}	βa{[leeráángá]}

(224) Subject Choice in the Present /Ø/ '...ask(s)' [SB]

	Singular	Plural
1 st Person	{[ndeéβáanga]}	khu{[reéβáanga]}
2 nd Person	u{[reéβáanga]}	mu{[reéβáanga]}
3 rd Person	a{[reéβáanga]}	βa{[reéβáanga]}

The effect of subject choice in Present forms with an object prefix was only tested in /Ø/ verbs, which do not exhibit any subject-induced tonal alternations.

(225) Subject Choice in the Present /Ø/ + OP ‘...ask(s) him/her’ [SB]

	Singular	Plural
1st Person	{mu[reéβáanga]}	khu{mu[reéβáanga]}
2nd Person	u{mu[reéβáanga]}	mu{mu[reéβáanga]}
3rd Person	a{mu[reéβáanga]}	βa{mu[reéβáanga]}

2.5.1.4 Present: Passives

My corpus of passive data show that the passive suffix variably realizes a H in the Present. The melodic H surfaces in its expected position in both verb types (third syllable in /H/ verbs, second mora in /Ø/ verbs), and the passive H, when present, is realized on the penultimate mora of the long final syllable and spreads left via *Plateau*. In §2.5.1.5, I suggest that phonological factors do not determine whether the passive H surfaces in the Present and other Pattern 5a constructions, this instead being an area of free variation.

(226) Present: Passives ‘s/he is being...’ [SB]

/H/ Stems		/Ø/ Stems	
a[khalakwáá’ng-ú-a]	‘cut’	a[lakhúú’lwááng-ú-a]	‘released’
a[tsuunzuunwáá’ng-ú-a]	‘sucked’	a[kalúshítswaang-u-a]	‘returned’

In the Present, the passive is doubly marked segmentally: the passive suffix **-u/w** is realized both before and after the imperfective suffix **-aang**. While the passive H surfaces near both instances of the segmental morpheme, the passive H as being assigned to the penultimate mora of the long final syllable by *Passive H Assignment* as formalized in (126). The passive H may then approximate the leftmost instance of the segmental morpheme via *Plateau*.

There is an unfortunate gap in the data that would have provided an informative test of the analysis of passive H assignment developed in this thesis (particularly as discussed in reference to Pattern 2a data in §2.2.1.6). My corpus does not include phrase-medial data for Present forms involving the passive suffix. Given that the melodic H fails to surface

in phrase-medial Present forms, my analysis of passives predicts that the passive H would also not surface. I hope to test this prediction in later work.

2.5.1.5 Pattern 5a: Other Verbal Contexts

Several other morphologically related verbal contexts share the tonal melody that characterizes the Present. Each of the contexts listed in (227) below exhibits *Initial Lowering*, and takes a melodic H which targets the second stem mora (/Ø/ verbs) or all moras of the third syllable (/H/ verbs) in the basic case. Additionally, the choice of verbal subject does not impact stem tone and the melodic H is lost when in phrase-medial forms. In this section, I also discuss complications in Pattern 5a constructions with respect to whether the passive H is realized.

(227) Other Pattern 5a Verbal Contexts

- | | |
|------------------------|-----------------------------------|
| a. Present Negative | SP[ROOT(-its)-aang-a] tá(awe) |
| b. Persistent | SP-shi[ROOT(-its)-aang-a] |
| c. Persistent Negative | SP-shi[ROOT(-its)-aang-a] tá(awe) |

The melodic H is realized on all moras of the third syllable in /H/ verbs and on the second stem mora in /Ø/ Pattern 5a constructions. The H of the negative particle **tá(awe)** spreads left onto the FV via *Plateau* when the melodic H surfaces on the penultimate syllable, as in the Present Negative and Persistent Negative /H/ examples in (228) below. It is also noteworthy that the negative **tá(awe)** does not create the environment for *Phrase-Medial H Deletion*.

(228) Morphologically Simple /H/ Stems⁵²

	Subj	Tns	Stem	Neg
Pres Neg	a-	Ø	{[khalakáá'ngá]}	tá(awe)
Pers	a-	shi	{[khalakáánga]}	
Pers Neg	a-	shi	{[khalakáá'ngá]}	tá(awe)

(229) Morphologically Simple /Ø/ Stems

	Subj	Tns	Stem	Neg
Pres Neg	a-	Ø	{[lakhúulaanga]}	tá(awe)
Pers	a-	shi	{[lakhúulaanga]}	
Pers Neg	a-	shi	{[lakhúulaanga]}	tá(awe)

A single object prefix H will not surface, but the presence of the object prefix pushes the root H in /H/ verbs out of macrostem-initial position. The root H therefore surfaces on the initial mora of the stem in /H/ verbs. The emergence of the root H in /H/ verbs also creates the environment for the melodic H to spread left via *Plateau* onto the peninitial mora of the stem.

(230) /H/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Pres Neg	a-	Ø	{mu	[khá'lákáá'ngá]}	tá(awe)
Pers	a-	shi	{mu	[khá'lákáánga]}	
Pers Neg	a-	shi	{mu	[khá'lákáá'ngá]}	tá(awe)

As in forms without an object prefix, the melodic H surfaces on the second stem mora in /Ø/ verbs

⁵²The examples included in the current section use **-khálak-** 'cut' and **-lakhuul-** 'release' as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the verbal contexts discussed in this section is the following: Present Negative - 's/he is not...'; Persistent - 's/he is still...', and Persistent Negative - 's/he is not still...'.

(231) /Ø/ Stems with an Object Prefix

	Subj	Tns	Obj	Stem	Neg
Pres Neg	a-	Ø	{mu	[lakhúulaanga]}	tá(awe)
Pers	a-	shi	{mu	[lakhúulaanga]}	
Pers Neg	a-	shi	{mu	[lakhúulaanga]}	tá(awe)

As in the Present, the Present Negative and Persistent contexts lose the melodic H phrase-medially. Examples are provided below of a /H/ verb **-khálak-** ‘cut’ and /Ø/ verb **-lakhuul-** ‘release’ before a H-toned noun, **mú’yáyí** ‘boy’, and a toneless noun **muundu** ‘person / somebody’. The H of the H-toned complement **mú’yáyí** spreads left via *H Tone Anticipation* onto the post-peninitial syllable of /H/ stems⁵³ and the initial syllable (or beyond) of /Ø/ stems.

(232) Verbal Contexts Like the Present Phrase Medially

Pres Neg	/H/	a[khalakáángá] mú’yáyí tá(awe)
	/Ø/	a[khalakaanga] muundu tá(awe)
Pers	/H/	a-shi[khalakáángá] mú’yáyí a-shi[khalakaanga] muundu
	/Ø/	a-shi[lákhúúláángá] mú’yáyí a-shi[lakhuulaanga] muundu
Pers Neg	/H/	a-shi[khalakáángá] mú’yáyí ‘tá(awe) a-shi[khalakáángá] múúndú tá(awe)
	/Ø/	a-shi[lákhúúláángá] mú’yáyí tá(awe) a-shi[lákhúúláángá] múúndú tá(awe)

⁵³ This characterization of the leftward extent of *H Tone Anticipation* is much more apparent in the productions of JI than in those of SB.

No data concerning the impact of subject choice on the stem tone of the verbal contexts under consideration in this section are currently available.

Passives are a locus of much variation in Idakho. My analysis of passive Hs, as developed in reference to the tonal melodies described earlier in the thesis (see §2.2.1.6), predicts that each of the Present and Present-related forms in (233)-(236) will realize the passive H on the penult and all moras to the right of the melodic H. However, the data show that several verb forms do not have H on the passive, despite meeting the criteria for passive H assignment (appearing in a context that takes a melodic H and realizing that melodic H on the verb).

(233) Present: Passives ‘*s/he is being...*’ [SB; repeated from (226)]

/H/ Stems

a[khalakwáá'ng-ú-a] ‘cut’

a[tsuunzuunwáá'ng-ú-a] ‘sucked’

/Ø/ Stems

a[lakhú'úlwááng-ú-a] ‘released’

a[kalúshítswaang-u-a] ‘returned’

(234) Present Negative: Passives ‘*s/he is not being...*’ [SB]

/H/ Stems

a[khalakwáá'ng-w-á] tá ‘cut’

a[tsuunzuunwáá'ng-w-á] tá ‘sucked’

/Ø/ Stems

a[lakhúulwaang-w-a] tá ‘released’

a[kalúshítswaang-w-a] tá ‘returned’

(235) Persistent: Passives '*s/he is still being...*' [SB]

/H/ Stems

a-shi[khalakwááng-u-a] 'cut'

a-shi[tsuunzuunwááng-u-a] 'sucked'

/Ø/ Stems

a-shi[lakhú'úlwááng-ú-a] 'released'

a-shi[kalúshí'tswááng-ú-a] 'returned'

(236) Persistent Negative: Passives '*s/he is not still being...*' [SB]

/H/ Stems

a-shi[khalakwáá'ng-w-á] 'tá 'cut'

a-shi[tsuunzuunwáá'ng-w-á] 'tá 'sucked'

/Ø/ Stems

a-shi[lakhúulwaang-w-a] tá 'released'

a-shi[kalúshítswaang-w-a] tá 'returned'

My corpus of Pattern 5a passive data is limited to 1-2 productions of each of the forms appearing in (233)-(236), spoken by a single speaker (SB). What is striking about the distribution of passive Hs in these data is the lack of correspondence between constructions. This suggests that forms with and without the passive H are in free variation with one another and that the presence of the passive H is not predicted by phonological features of the verb form.

In SB's productions of the Present data, the passive H surfaced in both /H/ verbs, but only one /Ø/ verb. None of his Present Negative productions realized the passive H. In the Persistent, tokens of the /Ø/ verbs express the passive H, but not /H/ verbs. The inverse was true of his Persistent Negative productions, with /H/ verbs expressing the passive H, but not /Ø/ verbs.⁵⁴

⁵⁴The final syllable is H in Present Negative and Persistent Negative /H/ verbs, though this is because of *Plateau*, which spreads the H of negative *tá* left. The lack of downstep between the final syllable and *tá* supports this interpretation.

The variation observed above in the Present and related verbal contexts is unusual among the passive data elicited for this study, and it is not clear at this time what the reason for this variation is. In future work, I will explore the possibility that the occasional failure of the passive H to surface in the above forms is related to a larger pattern of variation in the form of the Present and related contexts. In particular, ‘s/he cuts, s/he is cutting’ may be expressed either in full as in **a [khalakáánga]** or with the final syllable truncated as in **a [khalakáá]**.⁵⁵ If the loss of the final syllable results in the failure of the passive H to surface in truncated forms, the failure of the passive H to surface in some non-truncated forms may be analyzed as an extension of the truncated pattern. This data type with truncated passives is not available at this time.

⁵⁵It is not clear what conditions truncation in the Present and related contexts. Speakers offered contradictory judgements regarding a potential aspectual contrast (habitual vs. progressive). In Tiriki, the truncation may be conditioned by phrase position, where the truncated form is selected phrase-medially (Marlo, p.c.). The prompts that I presented to the speakers involving the present tense verbs in phrase-medial position included the final syllable. No speaker explicitly rejected the prompts, though one speaker spontaneously switched to truncated variants mid-paradigm in one instance. I asked if he preferred the truncated form. His response indicated that both forms are acceptable.

2.5.2 Pattern 5b: Indefinite Future

The present section details the tonal properties of Pattern 5b, exhibited by the Indefinite Future and the Indefinite Future Negative. The Indefinite Future is marked by the toneless **li-** prefix, the FV **-a**, and a melodic H which surfaces on the second stem mora in /Ø/ stems and the FV in /H/ stems. Because of the formal similarity between Pattern 5a and 5b, the analysis of the Indefinite Future will be given in tandem with the description.

The Pattern 5b melodic H in /H/ verbs interacts with prosodic properties of the verb stem. In stems comprised of three or more moras, the melodic H is realized on the final mora of the stem. However, in bimoraic stems, which include both CVV and CVCV stems, the melodic H does not surface.

(237) Indefinite Future C-Initial /H/ ‘s/he will...’

Subj	Tns	Stem	Gloss
a-	li	{[khua]}	‘pay dowry’
a-	li	{[βeka]}	‘shave’
a-	li	{[teekhá]}	‘cook’
a-	li	{[khalaká]}	‘cut’
a-	li	{[kalaangá]}	‘fry’
a-	li	{[βoolitsá]}	‘seduce’
a-	li	{[βoyong’aná]}	‘go around’

The transcriptions of vowel initial /H/ verbs in the Indefinite Future are based on JI’s productions. In all forms, the FV bears the melodic H, and it surfaces verb finally even in short verbs like **a-li [irá]** ‘s/he will kill’, despite the morphological stem being bimoraic.

(238) Indefinite Future V-Initial /H/ ‘s/he will...’ [JI]

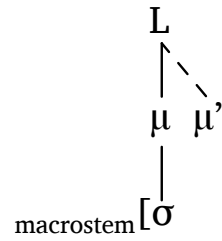
Subj	Tns	Stem	Gloss
a-	li	{[irá]}	‘kill’
a-	li	{[onop:á]}	‘spoil’
a-	li	{[aβukhap:á]}	‘separates’

SB’s productions of vowel-initial Indefinite Future /Ø/ verbs differ from JI’s. He produced very long verbs such as **a-li [aβukháp:a]** ‘s/he will scatter’ with a melodic H on the third stem syllable, rather than on the final. The productions with long stems seem to have been produced with Pattern 5a, the melody described in the preceding section (§2.5.1) exemplified by the Present.

The unexpected behavior of long vowel-initial /H/ verbs does not appear to be a tonal alternation conditioned by the initial segment of the morphological stem; rather, it is a case of free variation whereby the Indefinite Future may take either Pattern 5a or Pattern 5b. This is consistent with comparative evidence from other Luhya varieties, in which the Present and the Indefinite Future both take a single melody closer in character to Idakho’s Pattern 5b (as noted in the introduction of §2.5), and the observation that some diachronic changes in Luhya verbal tone systems advance first in vowel initial verbs (see Ch. 3).

The H on the FV of the bimoraic stem is also a surprise, given the data presented above for consonant-initial verb stems. Here, one might expect for the root H to lower, with the resultant L spreading right via *L Spread II* thereby blocking melodic H assignment. I analyze the unexpected melodic H in ‘s/he will kill’ by stipulating that Hs lowered through *Initial Lowering* only spread left via *L Spread II* when the L is aligned with the left edge of its syllable. *L Spread II* is reproduced in (239).

(239) L SPREAD II



The melodic H surfaces on the second stem mora of /Ø/ verbs with bimoraic stems or longer. Monosyllabic stems have a fall.

(240) Indefinite Future C-Initial /Ø/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	li	{[kúa]}	'fall'
a-	li	{[lekhá]}	'leave'
a-	li	{[reéβa]}	'ask'
a-	li	{[kulíkha]}	'name' [SB]
a-	li	{[lakhúula]}	'release'
a-	li	{[seéβula]}	'say goodbye (to)'
a-	li	{[kalúshitsa]}	'return' [SB]

Vowel-initial /Ø/ verbs also have a H on the second mora.

(241) Indefinite Future V-Initial /Ø/ 's/he will...'

Subj	Tns	Stem	Gloss
a-	li	{[enyá]}	'want'
a-	li	{[eyéla]}	'wipe for'
a-	li	{[ambákhana]}	'refuse'
a-	li	{[eléelitsa]}	'hang up (s.t.)'

2.5.2.1 Indefinite Future with Object Prefixes

The root H surfaces *in situ* in Indefinite Future forms which include one object prefix. Additionally, the melodic H surfaces on the final vowel and all preceding syllables through the peninitial as a level downstepped H span. The object prefix surfaces L.

The above characterization applies to the productions of SB and the overwhelming majority of Idakholand residents I interviewed. JI's productions appear to have the properties of Present and Indefinite Future forms in the Tiriki variety of Idakho, i.e.: with a H, the root H, on the initial stem mora and a melodic H which spans the remainder of the stem through the penult (Marlo in prep).

(242) Indefinite Future C-Initial /H/ + OP 's/he will...him/her'

Subj	Tns	Obj	Stem	Gloss
a-	li	{mu	[ráa]}	'pay dowry (for)'
a-	li	{mu	[bé'ká]}	'bite'
a-	li	{mu	[lé'érá]}	'bring'
a-	li	{mu	[khá'láká]}	'cut'
a-	li	{mu	[βó'ólítsá]}	'seduce'
a-	li	{mu	[βó'yóng'áná]}	'descend for'

In /Ø/ stems, the melodic H is realized on the second stem mora except in monosyllabic stem, which realize a fall. As usual, the H of the object prefix does not surface.

(243) Indefinite Future C-Initial /Ø/ + OP ‘s/he will...him/her/them₈’

Subj	Tns	Obj	Stem	Gloss
a-	li	{mu	[tsía]}	‘go (for)’
a-	li	{mu	[lekhá]}	‘leave’
a-	li	{mu	[loónda]}	‘follow’
a-	li	{mu	[kulíkha]}	‘name’
a-	li	{mu	[seéβula]}	‘say goodbye’
a-	li	{mu	[kalúshitsa]}	‘return’
a-	li	{βi	[seβúlúkhaɲ:a]}	‘scatter’

The productions of both primary consultants diverge from the characterization of Pattern 5b developed thus far in forms with two object prefixes. The expected pattern would be a rise on the pre-stem syllable in combination with a downstepped melodic H which spans the full length of the stem in /H/ verbs or through the second stem mora in /Ø/ verbs. JI has the expected rise, but has different patterns of stem tone. SB’s productions are missing the pre-stem rise but have stem tone patterns that are consistent with the preceding description of Pattern 5b.

JI’s productions include a rise on the pre-stem syllable, as expected, but surface with a downstepped H span across all but the final stem syllables in /H/ verbs, e.g., **a-li{mu-ú[‘mbéchéla]}** ‘s/he will shave him/her for me’. In /Ø/ verbs, the melodic H is absent, e.g. **a-li{mu-ú[ndeshela]}** ‘s/he will leave him/her for me’.⁵⁶ JI’s productions are consistent with his preference for the Tiriki pattern in the Indefinite Future.

The stem tone properties of SB’s productions are identical to Indefinite Future forms with a single object prefix. That is, the pre-stem syllable is L, the root H is realized *in situ*, and the melodic H surfaces as a downstepped H which spans from the second stem mora through the FV, e.g., **a-li{mu-u[mbé‘chélá]}** ‘s/he will shave him/her for me’. In /Ø/ verbs, the pre-stem syllable is again L and the melodic H surfaces on the second stem mora.

⁵⁶JI’s never produces the second mora melodic H in /Ø/ verb forms with two object prefixes.

The unexpected tonal properties of the consultants' productions of these verb forms were not recognized early enough to solicit judgments about the possibility of the tonal variant that my analysis predicts. Appendix A.1.11 includes additional verified transcriptions of SB producing Indefinite Future forms with two object prefixes.

The core properties of the tonal melody that characterizes the Indefinite Future are as follows: (i) underlying macrostem-initial Hs fail to surface, (ii) the melodic H surfaces on the second stem mora in /Ø/ verbs, (iii) the melodic H surfaces on the final syllable in /H/ stems, and (iv) the melodic H spreads leftward through the second stem syllable in /H/ verbs with an object. These properties are summarized schematically in the following display.

(244) A Schematic Representation of the Indefinite Future's Tonal Properties

<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-li	{	[CVCVC [̃]]
OPsx1	a-li-	{CV	[C [̃] V [̃] C [̃] V [̃]]

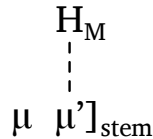
<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	a-li	{	[CV(C) [̃] CV]
OPsx1	a-li-	{CV	[CV(C) [̃] CV]

The first observation—namely, that macrostem-initial Hs fail to surface—is accounted for by the now familiar rule of *Initial Lowering*.

Two rules of melodic H assignment are invoked in the analysis of the tonal properties of verbs in the Indefinite Future: *Final MHA* and *Default MHA*. *Final MHA* follows *Default MHA* in the derivation. This means that the melodic H is assigned directly to the second mora in forms involving /Ø/ verbs. The melodic H is not assigned to the same position in /H/ verbs owing to the condition on *Default MHA* that the target of melodic H assignment be preceded by a toneless mora.

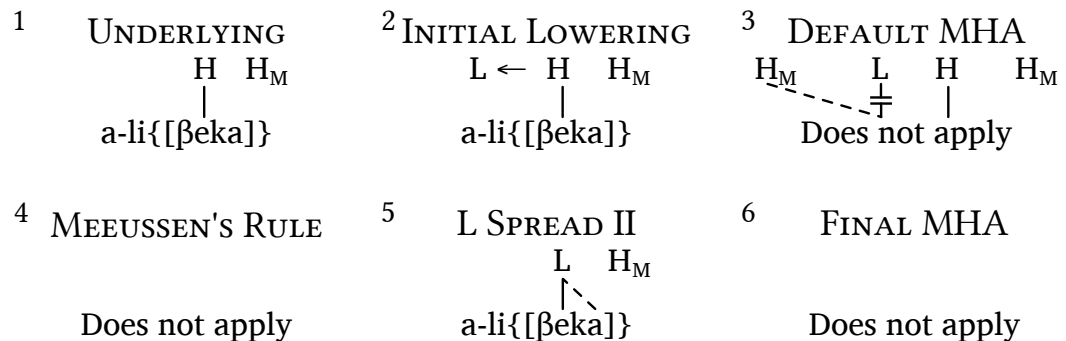
The melodic H in /H/ verbs is instead assigned to the final mora of the stem via *Final MHA*, as formalized in (245). *Final MHA* require that the target of melodic H assignment is toneless. This feature of the rule will be justified shortly.

(245) FINAL MELODIC H ASSIGNMENT



The two smallest stem shapes, CVV and CVCV, fail to realize the melodic H in /H/ stems in the Indefinite Future. I argue that this failure is the result of the rule *L Spread II*—first introduced in the analysis of Pattern 5a, §2.5.1. *L Spread II* spreads the Ls that result from *Initial Lowering* onto the peninitial mora. *Final MHA* fails to apply in bimoraic stems because the target of *Final MHA* bears a L.

(246) Derivation, /H/ CVCV Indefinite Future: a-li{[βeka]} ‘s/he will shave’

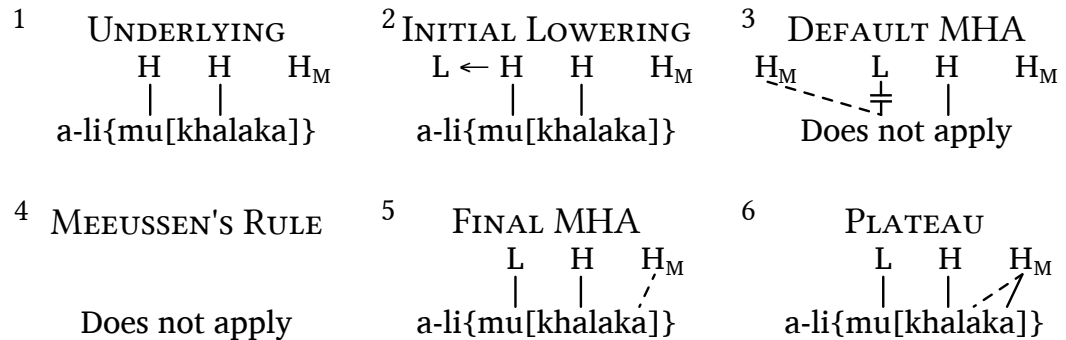


An alternative analysis in which *Final MHA* requires that the mora preceding its target be toneless can account for the facts of /H/ Indefinite Future verbs without an object prefix. However, that approach fails because it makes incorrect predictions about /H/ bimoraic

stems in forms with an object prefix. In particular, it predicts ***a-li-mu**[lúma] ‘s/he will bite him/her’, rather than the attested **a-li-mu**[lú’má] .

The melodic H surfaces not only on the FV in /H/ verbs with an object prefix, but also on all preceding syllables through the second stem syllable. This is the outcome of *Plateau* (68).

(247) Derivation, /H/ Indefinite Future + OP: a-li{mu[khá‘láká]} ‘s/he will cut him/her’



L Spread II is omitted from the derivation above because it does not apply. It does not apply because the potential target of *L Spread II*—the second mora of the macrostem—bears the root H.

2.5.2.2 Indefinite Future: Phrase Medially

As in the Present (Pattern 5a, §2.5.1.2), the melodic H is lost in the Indefinite Future when the verb is not final within the phrase. The effects of Initial Lowering persist in a phrase-medial context. Additionally, *H Tone Anticipation* spreads the H from H-toned complements onto the verbal stem. The complement H appears to spread a greater distance in /Ø/ verbs than it does in /H/ verbs, though the left edge of the span is unclear in both cases. In /Ø/ verbs, the span extends onto the stem-initial syllable or beyond, while in /H/

verbs, the span ends at the peninitial or post-peninitial syllable. The complement H will not spread onto short /H/ stems.

Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement.

(248) Indefinite Future Phrase Medially ‘s/he will...*(for him/her)*’

/H/ Stems	No OP	a-li{[ra]} mú'yáyi	‘bury the boy’
		a-li{[ra]} muundu	‘bury somebody’
	One OP	a-li{[khalaká]} mú'yáyi	‘cut the boy’
		a-li{[khalaka]} muundu	‘cut somebody’
/Ø/ Stems	No OP	a-li{mu[réelá]} mú'yáyi	‘bury the boy’
		a-li{mu[réela]} muundu	‘bury somebody’
	One OP	a-li{mu[khá'láchilá]} mú'yáyi	‘cut the boy’
		a-li{mu[khá'láchilá]} muundu	‘cut somebody’
	No OP	a-li{[tsíílá]} mú'yáyi	‘go for the boy’
		a-li{[tsiila]} muundu	‘go for somebody’
	One OP	a-li{[séébúlílá]} mú'yáyi	‘say goodbye to the boy’
		a-li{[seebulila]} muundu	‘say goodbye to somebody’
	No OP	a-li{mu[tsyá]} mú'yáyi	‘go for the boy’
		a-li{mu[tsya]} muundu	‘go for somebody’
	One OP	a-li{mu[sééβúlá]} mú'yáyi	‘say goodbye to the boy’
		a-li{mu[seeβula]} muundu	‘say goodbye to somebody’

2.5.2.3 Indefinite Future: Impact of Subject Choice

The choice of subject has no impact on the verbal tone properties of verbs in the Indefinite Future. /H/ and /Ø/ stems lacking an object prefix are realized the same whether

the subject is 1st, 2nd, or 3rd person. /H/ stems surface with a H on the FV, while /Ø/ stems realize the melodic H on the second stem mora.

(249) Subject Choice in the Indefinite Future /H/ ‘...will bring’ [SB]

	Singular	Plural
1st Person	nɪ-li{[leerá]}	khu-li{[leerá]}
2nd Person	u-li{[leerá]}	mu-li{[leerá]}
3rd Person	a-li{[leerá]}	βa-li{[leerá]}

(250) Subject Choice in the Indefinite Future /Ø/ ‘...will ask’ [SB]

	Singular	Plural
1st Person	nɪ-li{[reéβa]}	khu-li{[reéβa]}
2nd Person	u-li{[reéβa]}	mu-li{[reéβa]}
3rd Person	a-li{[reéβa]}	βa-li{[reéβa]}

Indefinite Future forms with an object prefix are similarly unaffected by varying the subject of the verb. /H/ verbs realize the root H and a melodic H which spans from the second syllable through the FV, and /Ø/ verbs surface with just a melodic H on the second stem mora.

(251) Subject Choice in the Indefinite Future /H/ + OP ‘...will bring him/her’ [SB]

	Singular	Plural
1st Person	nɪ-li{mu[léerá]}	khu-li{mu[léerá]}
2nd Person	u-li{mu[léerá]}	mu-li{mu[léerá]}
3rd Person	a-li{mu[léerá]}	βa-li{mu[léerá]}

(252) Subject Choice in the Indefinite Future /Ø/ + OP ‘...will ask him/her’ [SB]

	Singular	Plural
1st Person	ni-li{mu[reéβa]}	khu-li{mu[reéβa]}
2nd Person	u-li{mu[reéβa]}	mu-li{mu[reéβa]}
3rd Person	a-li{mu[reéβa]}	βa-li{mu[reéβa]}

2.5.2.4 Indefinite Future: Passives

The passive suffix contributes a H in Indefinite Future. This can be seen clearly in /Ø/ verbs with stems exceeding three moras.

(253) Indefinite Future: Passives ‘s/he will be...’ [SB]

/H/ Stems		/Ø/ Stems	
a-li{[khalak-ú-a]}	‘cut’	a-li{[lakhúul-ú-a]}	‘released’
a-li{[tsuunzuun-ú-a]}	‘sucked’	a-li{[kalú’shíts-ú-a]}	‘returned’

The positions where the passive H and the melodic H are expected in /H/ verbs is the same: the final syllable of the stem. The passive H would be assigned directly to the penultimate mora of the long final syllable, and the melodic H would be assigned to the final mora by *Final MHA*, later shifted to the penultimate mora by *Final Rise Elimination*. Only one H appears in the forms in (253). I analyze that H as the melodic H.

2.5.2.5 Pattern 5b: Other Verbal Contexts

The Indefinite Future Negative is the only other construction that selects the melody that characterizes the Indefinite Future affirmative. The Indefinite Future Negative exhibits *Initial Lowering*, which lowers macrostem-initial Hs, and is marked by a melodic H which targets the second stem mora (/Ø/ verbs) or the FV (/H/ verbs). As well, the choice of verbal subject does not impact stem tone and the melodic H is lost when Indefinite Future Negative

forms are not final within the phrase. Finally, the passive H is realized on the final syllable in /Ø/ stems when the passive suffix is present.

(254) Other Pattern 5b Verbal Contexts

a. Indefinite Future Negative

SP-li[ROOT-a]

Observe that the melodic H is realized on the FV in /H/ verbs and on the second stem mora in /Ø/ verbs in the most morphologically simple forms.

(255) Morphologically Simple /H/ Stems ‘s/he will not...’ [SB]⁵⁷

	Subj	Tns	Stem	Neg
Indef Fut Neg	a-	li	{[khalaká]}	tá

(256) Morphologically Simple /Ø/ Stems ‘s/he will not...’

	Subj	Tns	Stem	Neg
Indef Fut Neg	a-	li	{[lakhúula]}	tá(awe)

The absence of downstep between the melodic H and the H of the negative marker **tá** is unexpected considering that in all the data presented to this point, **tá(awe)** has been downstepped related to stem-final melodic Hs. See §2.8 on the Habitual, another construction that has mysterious patterns of downstep. While it is more common for productions to include the melodic H, JI and others who participated in the survey within Idakholand appear to have a free tonal variant without a melodic H on the stem at all, instead surfacing with the same stem tone patterns as phrase-medial forms followed by a H-toned word H span. This may indicate that the status of **tá(awe)** as a trigger (or not) for *Phrase-Medial Melodic H Deletion* is in flux.

⁵⁷The examples included in the current section use **-khálak-** ‘cut’ and **-lakhүүл-** ‘release’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the Indefinite Future is ‘s/he will...’.

As in the Indefinite Future, the H contributed by a single object prefix fails to surface, but the presence of the object prefix pushes the root H out of macrostem-initial position, allowing it to re-emerge in /H/ stems. The melodic H continues to be realized on the second stem mora in /Ø/ stems.

(257) /H/ Stems with an Object Prefix ‘s/he will not...him/her’

	Subj	Tns	Obj	Stem	Neg
Indef Fut Neg	a-	li	{mu	[khá‘láká]}	tá(awe)

(258) /Ø/ Stems with an Object Prefix ‘s/he will not...him/her’

	Subj	Tns	Obj	Stem	Neg
Indef Fut Neg	a-	li-	{mu	[lakhúula]}	tá(awe)

The study’s consultants tended not to downstep the H of the negative particle tá(awe) in /H/ verbs, instead more commonly, though not exclusively, producing the negative H at or slightly above the pitch of the FV. Note that the same is not true of cases in which the melodic H surfaces on the FV in /Ø/ verbs. That is, in CV(V) and CVCV /Ø/ stems, the melodic H is realized on the FV, and the H of the negative particle tá(awe) is downstepped relative to the melodic H. Again, it seems as though the consultants are in some cases treating **tá(awe)** as a bonafide word capable of triggering *Phrase-Medial Melodic H Deletion*.

As in the Indefinite Future, the Indefinite Future Negative loses the melodic H phrase-medially. Examples are provided below of a /H/ verb -khálak- ‘cut’ and /Ø/ verb -lakhuul- ‘release’ before a H-toned noun, **mú’yáyí** ‘boy’, and a toneless noun **muundu** ‘person/somebody’. The H of the H-toned complement **mú’yáyí** spreads left via *H Tone Anticipation* onto the post-peninitial syllable of /H/ stems and the initial syllable (or beyond) of /Ø/ stems.

(259) Verbal Contexts Like the Indefinite Future Phrase Medially

Indef Fut Neg	/H/	a-li{[khalaká]} mú'yáyí tá(awe)
		a-li{[khalaká]} múúndú tá(awe)
	/Ø/	a-li{[lakhúúlá]} mú'yáyí tá(awe)
		a-li{[lakhúúlá]} múúndú tá(awe)

No data concerning the impact of subject choice on the stem tone of Indefinite Future Negative forms is available.

Finally, the passive suffix realizes its H in the /Ø/, but not /H/, Indefinite Future Negative verbs as well.

(260) /H/ & /Ø/ Stems with the Passive Suffix

Indef Fut Neg	a-li{[khalak-w-á]} 'tá
	a-li{[lakhúul-w-á]} 'tá

Note that there is downstep in the passives in (260). These forms are crucially different from the cases discussed above in which no downstep is observed in that the final syllable is underlyingly bimoraic here, with one mora contributed by the passive suffix, the other from the FV. The passive H in /Ø/ verbs is assigned directly to the penultimate mora of the final syllable, while the melodic H is assigned to the final mora first, then shifted to the penultimate mora by *Final Rise Elimination*. I analyze downstep in these cases as resulting from a rule, *Default L Insertion*, assigning a L tone to the toneless final mora prior to the final syllable shortening via *Non-Final Shortening*. Downstep occurs in the above case, then, because of the floating L that intervenes between the H on the final syllable of the verb and the negative H.

2.5.3 Pattern 5c: Conditional

The tonal properties of the Conditional pattern closely with those of the Indefinite Future, with the notable difference that the Conditional does not lose its melodic H in a phrase-medial context. The Conditional is marked by the **ni-** particle, the FV **-a**, and a melodic H which surfaces on the second stem mora in /Ø/ verbs and the FV in /H/ verbs. The **ni-** particle does not occupy the typical position of a tense prefix. Instead, it surfaces to the left of subject prefixes, which exceptionally bear a H in the Conditional. Because of the many formal similarities with Pattern 5b, the description and analysis of this construction will be given in tandem.

As in the Indefinite Future, the melodic H does not surface in /H/ verbs in bimoraic stems. In all longer stems, a downstepped level H spans the full length of the stem.

(261) Conditional C-Initial /H/ ‘if s/he...’

Part	Subj	Stem	Gloss
na-	á	{[khua]}	‘pays dowry’
na-	á	{[βeka]}	‘shaves’
na-	á	{[‘téékhá]}	‘cooks’
na-	á	{[‘kháláká]}	‘cuts’
na-	á	{[‘káláángá]}	‘fries’
na-	á	{[‘βóólítsá]}	‘seduces’
na-	á	{[‘βóyóng’áná]}	‘goes around’

The root H is lowered by *Initial Lowering*. In forms with bimoraic stems, the resultant L spreads to the final mora by *L Spread II*, thereby blocking *Final MHA*. *Final MHA* applies in longer stems, assigning the melodic H to the final mora of the stem. Because of the subject prefix H on the pre-stem syllable, the melodic H then spreads left through the initial syllable of the stem via *Plateau*.

The vowel-initial data largely conform with the generalizations noted above concerning consonant-initial stems. In particular, the melodic H is assigned to and spreads left from the FV.

(262) Conditional V-Initial /H/ ‘if s/he...’

Part	Subj	Stem	Gloss
ni-	yí	{[¹ írá]}	‘kills’
ni-	yó	{[¹ ónón:á]}	‘spoils’
ni-	yá	{[¹ áβúkhná:á]}	‘separates’

The melodic H on the FV in the form **ni-yí**{[¹írá] ‘if s/he kills’ is somewhat unexpected given that bimoraic stems in C-initial stems do not realize the melodic H. However, the Conditional data is consistent with the parallel Indefinite Future form: **a-li**[irá] ‘s/he will kill’. As in the Indefinite Future, I argue that *L Spread II* does not apply in vowel-initial stems. *Final MHA* is therefore not blocked from applying in ‘if s/he kills’.

The melodic H appears on the first two stem moras in /Ø/ verbs.

(263) Conditional C-Initial /Ø/ ‘if s/he...’⁵⁸

Part	Subj	Stem	Gloss
na-	á	{[¹ kúa]}	‘falls’
na-	á	{[¹ lékhá]}	‘leaves’
na-	á	{[¹ rééβa]}	‘asks’
na-	á	{[¹ kúlíkha]}	‘names’ [SB]
na-	á	{[¹ lakhúula]}	‘releases’
na-	á	{[¹ sééβula]}	‘says goodbye (to)’
na-	á	{[¹ kálúshitsa]}	‘returns’ [SB]
na-	á	{[¹ síinjílitsa]}	‘makes stand’ [SB]
na-	á	{[¹ séβúlúkhn:a]}	‘scatters’ [SB]

⁵⁸The melodic H in this context is often pronounced at the same pitch level as the H of the subject prefix (i.e. with no downstep). The reason is not known.

The melodic H is assigned to the second stem mora by *Default MHA*, then spreads left by *Plateau*.

Vowel-initial stems also realize the melodic H as a downstepped H span on the first two stem moras, as shown in (264).

(264) Conditional V-Initial /Ø/ ‘if s/he...’

Part	Subj	Stem	Gloss
ni-	yé	{[¹ ényá]}	‘wants’
ni-	yé	{[¹ éyéla]}	‘wipes for’
ni-	yá	{[¹ ámbákhana]}	‘refuses’

2.5.3.1 Conditional with Object Prefixes

As in the Indefinite Future, the root H surfaces *in situ* in Conditional forms with one object prefix, and the melodic H surfaces on the peninitial through the final moras as a level downstepped H span. Because the subject prefix is H, the root H spreads onto the object prefix via *Plateau*.

(265) Conditional C-Initial /H/ + OP ‘if s/he...him/her’⁵⁹

Part	Subj	Obj	Stem	Gloss
na-	á	{ ¹ mú	[khúa]}	‘pays dowry (for)’
na-	á	{ ¹ mú	[bé ¹ ká]}	‘bites’
na-	á	{ ¹ mú	[lé ¹ érá]}	‘brings’
na-	á	{ ¹ mú	[khá ¹ láká]}	‘cuts’
na-	á	{ ¹ mú	[bó ¹ ólítsá]}	‘seduces’
na-	á	{ ¹ mú	[khó ¹ ng’óóndá]}	‘knocks’
na-	á	{ ¹ mú	[bó ¹ yóng’áná]}	‘goes around’

⁵⁹Note that one of the project’s primary consultants (JI) applies the optional *Plateau* rule considerably more frequently than the other (SB), particularly when the root H and initial docking position of the melodic H on the FV are separated by two or more syllables.

In /Ø/ stems, the melodic H is realized on the second stem mora, just as in forms with no object prefix. As usual, the H of the object prefix does not surface, though the melodic H spreads left onto the stem-initial mora and the object prefix via *Plateau*.

(266) Conditional C-Initial /Ø/ + OP ‘if s/he...him/her/them_{CI8}’

Part	Subj	Obj	Stem	Gloss
na-	á	{‘mú	[tsía]}	‘goes (for)’
na-	á	{‘mú	[lékhá]}	‘leaves’
na-	á	{‘mú	[lóónda]}	‘follows’
na-	á	{‘mú	[kúlíkha]}	‘names’
na-	á	{‘mú	[sééβula]}	‘says goodbye’
na-	á	{‘mú	[kálúshitsa]}	‘returns’
na-	á	{‘βí	[séβúlúkhaɲ:a]}	‘scatters’

The expected suite of changes are observed when a second object prefix is added. In both /H/ and /Ø/ verbs, the long pre-stem syllable realizes a level ⁴H following the H of the subject prefix: the macrostem-initial object prefix H is lowered by *Initial Lowering*, and the H of the second object prefix surfaces *in situ* and spreads left via *Plateau*. Immediately following the H of the second object prefix, the root H is deleted by *Meeussen’s Rule*. The melodic H surfaces in its expected position in both verb types: /H/ verbs take a H on the FV; /Ø/ verbs take a H on the second stem mora. In both cases, the melodic H spreads left through the initial stem syllable via *Plateau*.

(267) Conditional C-Initial /H/ + OP + OP_{1sg} 'if s/he...him/her for me'

Part	Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
na-	á-	{ ¹ mú-	ú	[¹ ndéélá]}	'buries'
na-	á-	{ ¹ mú-	ú	[¹ mbéchélá]}	'shaves'
na-	á-	{ ¹ mú-	ú	[¹ ndéérélá]}	'brings'
na-	á-	{ ¹ mú-	ú	[¹ mbóólítsílá]}	'seduces'
na-	á-	{ ¹ mú-	ú	[¹ mbóhólólélá]}	'unties'

(268) Conditional C-Initial /Ø/ + OP + OP_{1sg} 'if s/he...him/her for me' [SB]

Part	Subj	Obj _{CV}	Obj _{1sg}	Stem	Gloss
na-	á-	{ ¹ mú-	ú	[¹ nzííla]}	'goes (for)'
na-	á-	{ ¹ mú-	ú	[¹ ndéshéla]}	'leaves'
na-	á-	{ ¹ mú-	ú	[¹ nóóndela]}	'follows'
na-	á-	{ ¹ mú-	ú	[¹ ndákhúulila]}	'releases'
na-	á-	{ ¹ mú-	ú	[¹ síínjílitsila]}	'makes stand'

In summary, the core tonal properties of the Conditional are the following: (i) underlying macrostem-initial Hs fail to surface, (ii) the melodic H surfaces on the second stem mora in /Ø/ verbs, (iii) the melodic H surfaces on the final syllable in /H/ verbs, (iv) underlying (or intermediate representations which include) HØ(Ø₀)H and HL(LØ₀)H sequences are realized as H¹H(H₀)H and (v) root Hs in verb forms with an object prefix shift to the second mora of long stem-initial syllables. These properties are summarized schematically in the following display.

(269) A Schematic Representation of the Conditional's Tonal Properties

<u>/H/ Verbs</u>			
	<i>Part + Subj</i>		<i>Macrostem</i>
OPsx0	na-á	{	[CVCVCV́]}
OPsx1	na-á	{ĆV́	[C(V́)V́ ⁺ ĆV́ĆV́]}
OPsx2	na-á	{ ⁺ ĆV́ĆV́	[⁺ ĆV́ĆV́ĆV́]}

<u>/Ø/ Verbs</u>			
	<i>Part + Subj</i>		<i>Macrostem</i>
OPsx0	na-á	{	[⁺ ĆV́(C)V́CV]}
OPsx1	na-á	{ĆV́	[ĆV́(C)V́CV]}
OPsx2	na-á	{ ⁺ ĆV́ĆV́	[⁺ ĆV́(C)V́CV]}

Because of the high degree of formal similarity between the Conditional and other Pattern 5 melody sub-types, the analysis of the generalizations noted in (269) and the preceding paragraph has been given in tandem with the relevant description.

2.5.3.2 Conditional: Phrase Medially

The Conditional is distinct from other Pattern 5 contexts in that nonfinality within the phrase does not condition the loss of the melodic H and *H Tone Anticipation* does not spread post-verbal Hs onto the verb stem. Instead, /H/ verbs realize (i) the melodic H on the FV in all forms and (ii) the root H in forms containing an object prefix. /Ø/ verbs take a melodic H on the second stem mora, which spreads left via *Plateau* and doubles onto the following mora via *Pre-Penultimate Doubling*. Note that, because *Pre-Penultimate Doubling* is sensitive to the position of the H targeted for spreading within the phrase, rather than position within the verb, the rule applies even when it does not in parallel phrase-final forms, cf. **na-á**{⁺sééβula} ‘if s/he says goodbye’ and **na-á**{⁺mú [tsííla]} ‘if s/he goes for him/her’.

Four pairs of /H/ and /Ø/ verbs are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement *mú'yáyí* 'boy', while the second involves a toneless complement *muundu* 'somebody'.

(270) Conditional Phrase Medially *'if s/he...(for him/her)'*⁶⁰

/H/ Stems	No OP	na-á{[ra]} <i>mú'yáyí</i>	'buries the boy'
		na-á{[ra]} <i>muundu</i>	'buries somebody'
	One OP	na-á{[khalaká]} <i>'mú'yáyí</i>	'cuts the boy'
		na-á{[khalaká]} <i>muundu</i>	'cuts somebody'
/Ø/ Stems	No OP	na-á{'mú[réé'lá]} <i>'mú'yáyí</i>	'buries the boy'
		na-á{'mú[réé'lá]} <i>muundu</i>	'buries somebody'
	One OP	na-á{'mú[khá'láchílá]} <i>'mú'yáyí</i>	'cuts the boy'
		na-á{'mú[khá'láchílá]} <i>muundu</i>	'cuts somebody'
	No OP	na-á{['tsyá]} <i>'mú'yáyí</i>	'goes for the boy'
		na-á{['tsyá]} <i>muundu</i>	'goes for somebody'
	One OP	na-á{['séébúla]} <i>mú'yáyí</i>	'says goodbye to the boy'
		na-á{['séébúla]} <i>muundu</i>	'says goodbye to somebody'
	No OP	na-á{'mú[tsíílá]} <i>'mú'yáyí</i>	'goes for the boy'
		na-á{'mú[tsíílá]} <i>muundu</i>	'goes for somebody'
	One OP	na-á{'mú[sééβúlila]} <i>mú'yáyí</i>	'says goodbye to the boy'
		na-á{'mú[sééβúlila]} <i>muundu</i>	'says goodbye to somebody'

⁶⁰Jl's productions of /Ø/ verbs with an object prefix mysteriously included a downstepped H spanning from the second through the final syllable even when a toneless noun followed the verb, despite there being no indication of a melodic H targeting the final vowel in parallel phrase final productions in either consultants' speech. SB's productions were as expected and as transcribed.

2.5.3.3 Conditional: Impact of Subject Choice

Data was unfortunately not elicited to test whether the Conditional exhibits subject-induced tonal alternations.

2.5.3.4 Conditional: Passives

The passive suffix predictably contributes a H in the Conditional, though this is evident only in /Ø/ stems of sufficient length. In /H/ verbs, the melodic H surface on the penultimate mora of the long final syllable. It is first assigned to the final mora by *Final MHA* and later shifted to the penultimate mora by *Final Rise Elimination*. The passive suffix contributes a H in the /Ø/ Conditional forms below because they satisfy the criteria whereby passive Hs are licensed: (i) the Conditional is a context inflected with a melodic H and (ii) the melodic H surfaces on the verb stem (§2.2.1.6).

(271) Conditional: Passives ‘*if s/he is...*’ [SB]

/H/ Stems

a-li[khalak-ú-a]

‘cut’

a-li[tsuunzuun-ú-a]

‘sucked’

/Ø/ Stems

a-li[lakhú⁺úl-ú-a]

‘released’

a-li[kalú⁺shíts-ú-a]

‘returned’

2.5.4 Summary of Pattern 5

Though the tonal melodies comprising Pattern 5 are distinct, the basic surface tone patterns of most verbs exhibiting these melodies are shared among all three Pattern 5 subtypes: /H/ verbs have a melodic H near or at the right edge of the verb stem, /Ø/ verbs take a melodic H on the second stem mora, and *Initial Lowering* applies throughout. Finally, these three melodies together motivate a rule *L Spread II*, which influences the realization of melodic Hs in shorter stems.

The Present and the Indefinite Future further share in common the loss of the melodic H in a phrase-medial context. There is a high degree of overlap in the surface tonal properties of these two contexts, such that it is only evident that the Present targets the third stem syllable, while the Indefinite Future targets the FV for melodic H assignment in uncommonly long stems. It seems likely that this similarity between the melodies of the Present and Indefinite Future tenses is responsible for the synchronic intra-speaker variation noted in §2.5.2, whereby forms inflected for the Indefinite Future optionally take the melody associated with the Present.

The tonal properties of the Indefinite Future are nearly identical to those of the Conditional, with two exceptions. The following are true of the Conditional, but not the Indefinite Future: (i) subject prefixes are H and (ii) the melodic H is not lost phrase-medially.

2.6 Pattern 6: The Imperative patterns

Imperatives exhibit a unique tonal melody with two melodic Hs: one on the final vowel, and a second in /Ø/ verbs on the first or second stem mora. In addition, Imperatives motivate a rightward spreading rule, which is unique to the imperative contexts.

2.6.1 Pattern 6: Imperative_{sg}

The Imperative_{sg} illustrates the properties of Pattern 6. The Imperative_{sg} has no overt inflection preceding the macrostem, and in forms without an object prefix, the FV **-a** is selected.

In this pattern, /H/ verbs have a H just on the FV. As in Patterns 5b and 5c (§2.5.2-2.5.3)—other contexts with melodic H on the FV—bimoraic /H/ verbs do not accommodate the melodic H on the FV.

(272) Imperative_{sg} C-Initial /H/ ‘...!’

Stem	Gloss
{[khua]}	‘pay dowry’
{[βeka]}	‘shave’
{[teekhá]}	‘cook’
{[khalaká]}	‘cut’
{[kalaangá]}	‘fry’
{[saanditsá]}	‘thank’
{[βoyong’aná]}	‘go around’

Note that the same pattern obtains in V-Initial /H/ stems, which are realized with an epenthetic glide word initially.

(273) Imperative_{sg} V-Initial /H/ ‘...!’

Stem	Gloss
{[yira]}	‘kill’
{[yononyinyá]}	‘spoil’
{[yabukhanyinyá]}	‘separate’

In (274) and (275), we see that /Ø/ verbs one level H spanning from beginning of the stem through the penultimate mora and a second ⁴H on the FV.

(274) Imperative_{sg} C-Initial /Ø/ ‘...!’

Stem	Gloss
{[kúa]}	‘fall’
{[lé ⁴ khá]}	‘leave’
{[réé ⁴ bá]}	‘ask’
{[lóó ⁴ ndá]}	‘follow’
{[kúlí ⁴ khá]}	‘name’
{[lákhúú ⁴ lá]}	‘release’
{[séébú ⁴ lá]}	‘say goodbye’
{[kálúshí ⁴ tsá]}	‘return’ [SB]

(275) Imperative_{sg} V-Initial /Ø/ ‘...!’

Stem	Gloss
{[yé ⁴ nyá]}	‘want’
{[yéyé ⁴ lá]}	‘wipe for’
{[yílúú ⁴ lá]}	‘winnow’
{[yámbákhá ⁴ ná]}	‘refuse’

2.6.1.1 Imperative_{sg} with Object Prefixes

One salient difference between Imperative_{sg} constructions with and without object prefixes is that, in the forms with an object prefix, a harmonizing front vowel **-i/-ɪ/-e** is selected for the FV—a characteristic of the Subjunctive—rather than **-a**. One further difference is that rightward spreading from the initial mora of the stem is not observed in forms

with an object prefix; instead, the second melodic H appears on the second stem mora in /Ø/ verbs.

When a CV- object prefix is present, /H/ verbs realize the root H in addition to a melodic H spanning from the peninitial mora through the FV. A novel feature of /H/ verbs in the Imperative is that root Hs are realized as a rising tone if the initial syllable is long; this in contrast to the observation that the root H, when it surfaces, does so on the stem-initial mora in all non-imperative contexts. The melodic H assigned to the FV spreads left up to the stem-initial H, after which it is downstepped.

(276) Imperative_{sg} C-Initial /H/ + OP ‘...him/her!’

Obj	Stem	Gloss
{mu	[réɛ]}	‘bury’
{mu	[βé ⁺ ché]}	‘shave’
{mu	[leé ⁺ ré]}	‘bring’
{mu	[khá ⁺ láché]}	‘cut’ [JI]
{mu	[βoó ⁺ lítsí]}	‘seduce’ [JI]
{mu	[βó ⁺ yóng’áné]}	‘go around’

(277) Imperative_{sg} V-Initial /H/ + OP ‘...him/her!’

Obj	Stem	Gloss
{mwi	[í ⁺ rí]}	‘kill’
{mwo	[ó ⁺ nón:í]}	‘spoil’
{mwa	[á ⁺ βúkháp:í]}	‘separate’

A considerable amount of variation is observed in /Ø/ stems with object prefixes. The variation centers on whether the H near the left edge surfaces on the final mora of the initial syllable or on the second stem mora. In forms containing long initial syllables, the generalizations overlap. They differ only with respect to forms with short initial syllables: in one case, /Ø/ verbs with an object prefix will realize the H on the initial syllable, and in the other, the H will surface on the second syllable.

For the purposes of the analysis developed below, it is assumed that forms which realize the left edge H on the second stem mora are basic, though it appears as though there is a change in progress whereby the /Ø/ stems are taking on the pattern of the /H/ stems in which the left edge H shifts only in heavy initial syllables. Two factors which may be contributing to variation in this context are: (i) the unusual parallelism between root H and melodic H position in long initial syllables and (ii) the rule of melodic H assignment that targets the initial mora of the stem in /Ø/ without object prefixes.

In stems of sufficient length, the melodic H assigned to the FV will spread left onto the post-peninitial mora via *Plateau*.

(278) Imperative_{sg} C-Initial /Ø/ + OP ‘...*him/her!*’⁶¹

Obj	Stem	Gloss
{mu	[tsíi]}	‘go (for)’
{mu	[leshé]}	‘leave’ [SB]
{mu	[loó ⁺ dé]}	‘follow’
{mu	[kulí ⁺ shí]}	‘cut’ [SB]
{mu	[seé ⁺ βúlí]}	‘say goodbye (to)’
{mu	[kalú ⁺ kháp:í]}	‘turn over’

In /Ø/ V-Initial stems with an object prefix, both SB and JI prefer the pattern which characterizes /H/ V-Initial stems: the melodic H on the left edge surfaces on the first mora of the stem, rather than the second. See §3 for discussion of additional instances of diachronic change in which vowel-initial stems neutralize the lexical contrast in advance of C-Initial stems.

⁶¹JI favors realizing the left-edge melodic H on the initial stem syllable when it is short, rather than on the second stem syllable.

(279) Imperative_{sg} V-Initial /Ø/ + OP ‘...him/her!’

Obj	Stem	Gloss
{mwe	[é ⁺ nyé]}	‘kill’
{mwo	[ó ⁺ nón:í]}	‘spoil’
{mwa	[á ⁺ βúkháp:í]}	‘separate’

Imperative_{sg} forms with a 1st sg object prefix exhibit the same tonal properties as forms with a CV- object prefix, as shown below. Curiously, the verb selects the FV **-a**, rather than **-i/-I/-ε**.

(280) Imperative_{sg} C-Initial /H/ + OP_{1sg} ‘...me!’⁶²

Obj	Stem	Gloss
{m	[bé ⁺ ká]}	‘shave’
{n	[deé ⁺ rá]}	‘bring’ ⁶³
{Ø	[khá ⁺ láká]}	‘cut’ [JI]
{m	[boó ⁺ lítsá]}	‘seduce’ [JI]
{m	[bó ⁺ yóng’áná]}	‘go around’

(281) Imperative_{sg} C-Initial /Ø/ + OP_{1sg} ‘...me!’⁶⁴

Obj	Stem	Gloss
{n	[dé ⁺ khá]}	‘leave’
{n	[doó ⁺ dá]}	‘follow’
{n	[gulí ⁺ khá]}	‘cut’
{Ø	[seé ⁺ βúlá]}	‘say goodbye (to)’
{n	[galú ⁺ kháp:á]}	‘turn over’

In forms with two object prefixes, the pre-stem syllable surfaces with a rising tone. The root H fails to surface in /H/ stems, but /Ø/ verbs realize the melodic H on the first two

⁶²Monosyllabic roots are treated differently, making use of morphology close in form to subjunctives, selecting the 2nd sg subject prefix **u-** and a front FV, cf. **u[ríi]** ‘fear me!’.

⁶³The speaker was able to produce this form as it appears, though SB pointed out afterwards that it gives an impossible meaning, possibly for reasons of deixis.

⁶⁴Both SB and JI applied only the pattern associated with /H/ verbs, i.e., shifting to the second stem mora only when it is contained within the initial syllable.

stem moras. Both verb classes realize the melodic H on the FV, which spreads leftward via *Plateau* where possible.⁶⁵

(282) Imperative_{sg} C-Initial /H/ + OP + OP_{1sg} ‘...him/her for me!’

Obj _{CV}	Obj _{1sg}	Stem	Gloss
{mu-}	ú	[‘ndéélé}]	‘bury’
{mu-}	ú	[‘mbéchélé}]	‘shave’
{mu-}	ú	[‘ndéérélé}]	‘bring’
{mu-}	ú	[‘kháláchílf}]	‘cut’

(283) Imperative_{sg} C-Initial /Ø/ + OP + OP_{1sg} ‘...him/her for me!’ [SB]

Obj _{CV}	Obj _{1sg}	Stem	Gloss
{mu-}	ú	[‘nzíí‘lí}]	‘go (for)’
{mu-}	ú	[‘ndéshé‘lé}]	‘leave’
{mu-}	ú	[‘nóó‘ndélé}]	‘follow’
{mu-}	ú	[‘ngúlí‘shílf}]	‘name’

The principal properties of the Imperative_{sg} are summarized schematically in (284) below. Forms without object prefixes fail to realize the lexical H but do realize a melodic H on the FV in both /H/ and /Ø/ verbs. In addition, /Ø/ verbs realize an additional melodic H which spans from the initial mora through the penultimate mora. In forms with object prefixes, macrostem-initial Hs fail to surface. When just one object prefix is present, /H/ verbs realize the root H and a melodic H spanning across the remaining stem syllables, and /Ø/ verbs realize a H on the second stem mora and a second H spanning across all moras to the right of the first melodic H. In forms with two object prefixes the H of the innermost object prefix surfaces, resulting in a rising tone on the pre-stem syllable. /H/ verbs realize a single span across the full length of the verb stem, while /Ø/ verbs realize two H spans: one comprising the first two moras of the stem and another comprising the rest of the stem.

⁶⁵Note that JI, who produces /Ø/ stems with the /H/ stem pattern, does not realize the left-edge H in /Ø/ stems with two object prefixes.

(284) A Schematic Representation of the Tonal Properties of the Imperative_{sg}

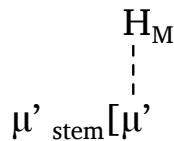
<u>/H/ Verbs</u>		
	<i>Obj</i>	<i>Stem</i>
OPsx0	{	[CVCVCV́]}
OPsx1	{CV	[C(V)V́CVCV́]}
OPsx2	{CV-́	[́CVCVCV́]}

<u>/Ø/ Verbs</u>		
	<i>Obj</i>	<i>Stem</i>
OPsx0	{	[CVCV́CVCV́]}
OPsx1	{CV	[CV(C)V́CVCV́]}
OPsx2	{CV-́	[́CVC(C)V́CVCV́]}

Below, I offer an analysis of the Imperative_{sg} that unifies constructions with and without object prefixes. The broad approach of the analysis is to describe the tonal patterns of Imperative_{sg} constructions in terms of three distinct melodic H assignment rules targeting the first, second, and final moras of the stem, along with two spreading rules which generate H spans emanating from the melodic Hs. The analysis additionally exploits *Initial Lowering*.

Among the rules alluded to above, two are unique to affirmative imperative constructions: *Initial MHA* and *Rightward Spread*. *Initial MHA* assigns a melodic H to the initial mora of the stem, and *Rightward Spread* subsequently spreads melodic Hs in stem-initial position iteratively rightward.

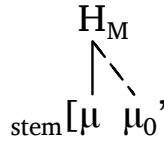
(285) INITIAL MELODIC H ASSIGNMENT



Condition:

Applies in affirmative imperative constructions only

(286) RIGHTWARD SPREAD

**Condition:**

Applies in affirmative imperative constructions only

Because the analysis of the imperatives is complex, all but one of the rules relevant to imperative constructions are included in each of the derivations to follow. *L Spread II* is omitted because the role it serves in accounting for the failure of the melodic H to surface in /H/ CVV and CVCV stems in the imperative is the same as its role in the Indefinite Future, as detailed in §2.5.2.1, and illustrated in (246).⁶⁶

In /Ø/ verbs, the derivation proceeds in the following steps: (i) one melodic H is assigned to the initial mora of the stem via *Initial MHA* (285), (ii) a second melodic H is assigned to the FV via *Final MHA* (245), and the leftmost melodic H spreads iteratively right through the penult via an Imperative-specific rule of *Rightward Spread* (286). Note that *Rightward Spread* crucially applies before *Plateau* to capture the fact that the leftmost melodic H should spread rightward rather than the rightmost melodic H leftward.

⁶⁶In the Indefinite Future, *L Spread II* spreads the output L of *Initial Lowering* onto the second mora. This L blocks *Final MHA* from assigning the melodic H to the FV in bimoraic, C-initial stems. In bimoraic *V-initial* stems, *L Spread II* does not apply because the output L of *Initial Lowering* is not aligned with the left edge of a syllable boundary, as in **a-li{[irá]}** ‘s/he will kill’.

The fact that the same vowel-initial root takes on the C-initial pattern (i.e. no H on bimoraic stems) in the Imperative_{sg} context confirms this analysis. Though /H/ verbs in both the Indefinite Future and the Imperative_{sg} are assigned a melodic H through the same mechanisms (*Initial Lowering*, *L Spread II*, and *Final MHA*), these two constructions differ with respect to whether the verb ‘kill’ realizes a H on the FV. In the Indefinite Future it does, as shown in the preceding paragraph, and in the Imperative_{sg}, it does not, as in **{[yira]}** ‘kill!’. The epenthetic glide in the Imperative_{sg} creates the environment for *L Spread II* to apply by aligning the output L of *Initial Lowering* with a syllable boundary. The application of *L Spread II* bleeds *Final MHA*.

(287) Derivation, /Ø/ Imperative_{sg}: {[kúlí'khá]} 'name!'

1	UNDERLYING H _M H _M {[kulikha]}	2 INITIAL LOWERING Does not apply	3 INITIAL MHA H _M H _M - - - {[kulikha]}
4	DEFAULT MHA Does not apply	5 MEEUSSEN'S RULE Does not apply	6 FINAL MHA H _M H _M - - - {[kulikha]}
7	RIGHT SPREAD H _M H _M - - - {[kulikha]}	8 HEAVY SHIFT Does not apply	9 PLATEAU Does not apply

In trimoraic and longer stems (cf. {[**khalaká**]} 'cut!'), /H/ verbs realize a melodic H on the FV only. The absence of a second melodic H spanning throughout the remainder of the verb stem is built into the formal statement of *Initial MHA* as given in (285): this rule of melodic H assignment requires that the target mora be toneless. Regardless of this rule's ordering relationship with *Initial Lowering*, the initial mora of the stem will be toned and so block the application of *Initial MHA*.

(288) Derivation, /H/ Imperative_{sg}: {[khalaká]} ‘cut!’

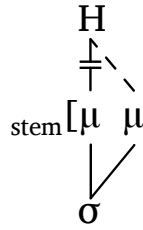
1	UNDERLYING H _M H H _M {[khalaka]}	2 INITIAL LOWERING H _M H→L H _M {[khalaka]}	3 INITIAL MHA Does not apply
4	DEFAULT MHA Does not apply	5 MEEUSSEN'S RULE Does not apply	6 FINAL MHA H _M L H _M / {[khalaka]}
7	RIGHT SPREAD Does not apply	8 HEAVY SHIFT Does not apply	9 PLATEAU Does not apply

Imperative_{sg} forms with object prefixes require further elaboration of the analysis developed thus far. All verbs realize one melodic H on the FV, which arrives at this position via *Final MHA*. An additional shifting rule is recruited to account for tonal properties near the left stem boundary.

Note that the root H surfaces in forms with object prefixes, but does not spread by *Rightward Spread*. The statement of the rule given in (286) captures this observation by specifying that only melodic Hs are targeted for *Rightward Spread*.

Instead, the root H is affected by a rule, *Heavy Shift*, which shifts the root H to the second stem mora only within a long initial syllable. When the initial syllable is short, the root H surfaces *in situ*. I formulate the rule in (289).

(289) HEAVY SHIFT

**Condition:**

Applies in affirmative imperative constructions only

We next turn to the question of why the leftmost melodic H of /Ø/ verbs is not assigned to the stem-initial and spread right in forms with an object prefix, as it is in forms without. Instead, the leftmost melodic H surfaces on the second stem mora. In this context, the H of the object prefix is lowered via *Initial Lowering* and one melodic H is assigned to the FV by *Final MHA*; because *Initial MHA* requires that the mora preceding the target be toneless, *Initial MHA* fails to apply. This leaves the second melodic H free to be assigned to the stem by the later applying *Default MHA*, which targets the second mora of the stem. *Plateau* then applies to spread the melodic H on the FV leftward until the resulting span abuts with the leftmost melodic H on the second stem mora.

(290) Derivation, /Ø/ Imperative_{sg} + OP: {mu[see⁴βulɪ]} ‘say goodbye to him/her!’

1	UNDERLYING H H _M H _M {mu[seeβulɪ]}	2 INITIAL LOWERING L ← H H _M H _M {mu[seeβulɪ]}	3 INITIAL MHA Does not apply
4	DEFAULT MHA L H _M H _M {mu[seeβulɪ]}	5 MEEUSSEN'S RULE Does not apply	6 FINAL MHA L H _M H _M {mu[seeβulɪ]}
7	RIGHT SPREAD Does not apply	8 HEAVY SHIFT Does not apply	9 PLATEAU L H _M H _M {mu[seeβulɪ]}

Most of the properties of /H/ stems involving two object prefixes are straightforwardly derived from the analysis presented thus far. The right edge melodic H surfaces on the FV as a result of *Final MHA*. That the pre-stem syllable realizes a rise, rather than a fall, follows from the ordering of *Initial Lowering* before *Meeussen's Rule* (as discussed with reference to Pattern 2a, §2.2.1.1). I attribute the failure of the root H to be realized in forms with short stem-initial syllables to the application of *Meeussen's Rule*, which deletes the root H immediately following the H of the innermost object prefix.

What remains to be explained, then, is the failure of the root H to be realized in forms with long stem-initial syllables, in which the root H could plausibly escape deletion by *Meeussen's Rule* by shifting to the second stem mora via *Heavy Shift*. That the root H does not surface in this case indicates that *Meeussen's Rule* precedes *Heavy Shift* in the derivation.

(291) Derivation, /H/ Imperative_{sg} + OPx2: {mu[seé⁺βúlí]} 'say goodbye to him/her!'

1	UNDERLYING	2 INITIAL LOWERING	3 INITIAL MHA
H _M	H H H H _M	H _M L←H H H H _M	
	{mu-u[ndeelɛ]}	{mu-u[ndeelɛ]}	Does not apply
4	DEFAULT MHA	5 MEEUSSEN'S RULE	6 FINAL MHA
		H _M L H H→∅ H _M	H _M L H H _M
	Does not apply	{mu-u[ndeelɛ]}	{mu-u[ndeelɛ]}
7	RIGHT SPREAD	8 HEAVY SHIFT	9 PLATEAU
			H _M L H H _M
	Does not apply	Does not apply	{mu-u[ndeelɛ]}

2.6.1.2 Imperative_{sg}: Phrase Medially

Imperatives exhibit an unusual pattern in which constructions which include an object prefix retain the melodic H, while it is lost in constructions without an object prefix. *Initial Lowering* remains in force in both cases. Recall that the melodic H targeting the second mora of the stem will double onto a pre-penultimate syllable within the phrase.

Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement **mú'yáyí** 'boy', while the second involves a toneless complement **muundu** 'somebody'.

(292) Imperative_{sg} Phrase Medially '...(for him/her)!'

/H/ Stems	No OP	{[ra]} mú'yáyí	'bury the boy'
		{[ra]} muundu	'bury somebody'
	One OP	{[khalaká]} mú'yáyí	'cut the boy'
		{[khalaka]} muundu	'cut somebody'
/Ø/ Stems	No OP	{mu[βé'chélé]} 'mú'saatsa	'bury the man'
		{mu[βé'chélé]} muundu	'bury somebody'
	One OP	{mu[khá'láchílí]} 'mú'yáyí	'cut the boy'
		{mu[khá'láchílí]} muundu	'cut somebody'
	No OP	{[tsyá]} mú'yáyí	'go for the boy'
		{[tsya]} muundu	'go for somebody'
	No OP	{[sééβúlá]} mú'yáyí	'say goodbye to the boy'
		{[seeβula]} muundu	'say goodbye to somebody'
	One OP	{mu[tsiílí]} 'músáatsa	'go for the man' [SB]
		{mu[tsiílí]} muundu	'go for somebody' [SB]
	One OP	{mu[seéβú'lílí]} 'mú'yáyí	'say goodbye to the boy' [SB]
		mu[seéβú'lílí]} muundu	'say goodbye to somebody' [SB]

2.6.1.3 Imperative_{sg}: Impact of Subject Choice

The Imperative_{sg} does not take a subject prefix, and the Imperative_{pl} takes only the 2nd plural subject prefix. Thus, we cannot test the choice of subject prefix in the Imperative_{sg}.

2.6.1.4 Imperative_{sg}: Passives

The tonal properties of Imperative_{sg} forms are the nearly identical with and without the passive suffix. Both tonal classes have a H on the final syllable, and /Ø/ verbs have an additional H spanning all preceding syllables of the stem. One difference is that, because the passive suffix adds a mora to the final syllable and *Final Rise Elimination* renders final rises as falling tones, Imperative_{sg} forms have a falling contour rather than a level H on the final syllable.

(293) Imperative_{sg}: Passives ‘be...!’ [SB]

/H/ Stems

{[khalak-ú-a]}

‘cut’

{[tsúúnzúún-ú-a]}⁶⁷

‘sucked’

/Ø/ Stems

y-a{[lákhuú‘l-ú-a]}

‘released’

y-a{[kálúshí‘ts-ú-a]}

‘returned’

2.6.1.5 Pattern 6: Other Verbal Contexts

The tonal properties of the Imperative_{pl} are identical to those of its singular counterpart. In particular, the Imperative_{pl} takes two melodic Hs: one targeting the FV in all verbs, and an additional melodic H in /Ø/ verbs that surfaces either as a span on all stem moras preceding the FV or on the second mora of the stem, depending on whether an object prefix is present. Additionally, while phrase-medial Imperative_{pl} forms without any object

⁶⁷The one token of this type was produced unexpectedly with a H span terminating at the passive suffix, as though the passive H had undergone *Leftward Spread*, a rule used in the analysis of the Hesternal Perfective (§2.7) and the Habitual (§2.8).

prefixes lose all melodic Hs, melodic Hs are retained phrase-medially if an object prefix is present.

The Imperative_{pl} selects the FV **-i** and takes no subject prefix.

(294) Other Pattern 6 Verbal Contexts

- a. Imperative_{pl} [ROOT-i]

In /H/ verbs without an object prefix, a melodic H is assigned to the FV, and the root H is not realized due to *Initial Lowering*. /Ø/ verbs also take a melodic H on the FV, but also assign a rightward spreading melodic H to the stem-initial mora.

(295) Morphologically Simple /H/ Stems [SB]⁶⁸

	Stem
Imperative_{pl}	{[khalachí]}
	{[βoyong'aní]}

(296) Morphologically Simple /Ø/ Stems [SB]

	Stem
Imperative_{pl}	{[kúlí'shí]}
	{[kálúshí'tsí]}

When an object prefix is present, the H it contributes fails to be realized. The root H surfaces on the initial mora, and the melodic H on the FV spreads left onto the peninitial mora via *Plateau*. /Ø/ verbs take melodic Hs on the second and final moras of the stem, the latter of which spreads left again by *Plateau*.

⁶⁸The examples included in the current section use **-khálak-** ‘cut’ and **-βóyong'an-** ‘go around’ to illustrate the properties of /H/ verbs, and **-kulix-** ‘name’ and **-kalushits-** ‘return’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the Imperative_{pl} is ‘...!’.

(297) /H/ Stems with an Object Prefix [SB]

	Obj	Stem
Imperative_{pl}	{mu	[khá ¹ láchí]}
	{mu	[βó ¹ yóng'ání]}

(298) /Ø/ Stems with an Object Prefix [SB]

	Obj	Stem
Imperative_{pl}	{mu	[kúlí ¹ shí]}
	{mu	[kálú ¹ shítsí]}

Melodic Hs are deleted phrase-medially in the Imperative_{pl} only in verb forms lacking an object prefix. *Initial Lowering* is in effect, and *H Tone Anticipation* spreads post-verbal Hs onto the verb stem. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyí** 'boy', and a toneless noun **muundu** 'person/somebody'.

(299) Imperative_{pl} Phrase Medially '...(for him/her)!'

/H/ Stems	{[βoolítsí]} mú'yáyí	'seduce the boy'
	{[βoolítsili]} muundu	'seduce somebody'
/H/ Stems	{mu[βoó ¹ lítsí]} 'mú'yáyí	'seduce the boy'
	{mu[βoó ¹ lítsí]} muundu	'seduce somebody'
/Ø/ Stems	{[kálúshítsí]} mú'saatsa	'return the man'
	{[kalushitsi]} muundu	'return somebody'
/Ø/ Stems	{mu[kalúshí ¹ tsí]} 'mú'yáyí	'return the boy'
	{mu[kalúshí ¹ tsí]} muundu	'return somebody'

Because the choice of subject is restricted to 2nd pl, there is no data available relating to the effect of subject choice on the tonal properties of the Imperative_{pl}.

The Imperatives pattern together with respect to the passive H. In /H/ verbs, the final syllable realizes a fall, while /Ø/ verbs have a final fall as well as a melodic H spanning from the initial to the penultimate syllable.

(300) /H/ & /Ø/ Stems with the Passive Suffix ‘do not be...!’ [SB]

Imperative_{pl}	/H/	{[khalak-ú-i]}	‘cut’
		{[tsuunzuun-ú-i]}	‘sucked’
	/Ø/	{[lákhuú ⁺ l-ú-i]}	‘released’
		{[kálúshí ⁺ ts-ú-i]}	‘returned’

2.7 Pattern 7: The second mora and final vowel pattern

In the Hesternal Perfective, both /H/ and /Ø/ verbs surface with a melodic H on the FV. In addition, /Ø/ verbs realize a second melodic H on the second stem mora. *Initial Lowering*, as usual, lowers macrostem-initial Hs, and a rule of leftward spreading which creates long H spans across the length of the verb.

2.7.1 Pattern 7: Hesternal Perfective

The Hesternal Perfective is presented as representative of the tonal properties of Pattern 7. The Hesternal Perfective is marked by the toneless tense prefix **a-**, the perfective suffix **-ile**—the complicated allomorphy of which is described in §1.3.3—and two melodic Hs.

In /H/ verbs, the root H does not surface. Instead, /H/ verbs realize a melodic H which spans the full length of the verb stem. As is typical with H spans in Idakho, JI produces his with a strong crescendo effect throughout the verb stem, with the pitch increasing with each subsequent syllable, while SB's spans characteristically exhibit a sharp increase in pitch on the final syllable.

(301) Hesternal Perfective C-Initial /H/ 's/he...' ⁶⁹

Subj	Tns	Stem	Gloss
y	a	{[khwéélé]}	'paid dowry'
y	a	{[béchí]}	'shaved'
y	a	{[téeshí]}	'cooked'
y	a	{[khálááché]}	'cut'
y	a	{[káláánjí]}	'fried'
y	a	{[βóólíítsí]}	'thanked'
y	a	{[tsúúnzúúní]}	'sucked'
y	a	{[βóyóng'ááné]}	'went around'

An epenthetic glide appears at the beginning of /H/ verbs with V-initial stems. These forms also surface all H on the stem.

(302) Hesternal Perfective V-Initial /H/ 's/he...'

Subj	Tns	Stem	Gloss
y-	a	{[yírí]}	'killed'
y-	a	{[yónón:í]}	'spoiled'
y-	a	{[yábúkháp:í]}	'separated'

/Ø/ verbs are characterized by two H spans on the verb stem. The first spans across the first two or three moras of the stem, while the second surfaces on the remainder of the stem. The initial span extends into the third stem mora in two cases: (i) when the second stem mora is the first mora in a long syllable or (ii) when the third mora belongs to a syllable preceding the penult. Bimoraic stems (second example in (303)) surface with a single H spanning both moras.

⁶⁹The left edge of the H span optionally extends into the pre-stem syllable, e.g. **y-á{[khwéélé]}** 's/he paid dowry'.

(303) Hesternal Perfective C-Initial /Ø/ ‘s/he...’

Subj	Tns	Stem	Gloss
y-	a	{[kwíí ¹ lí]}	‘fell’
y-	a	{[lékhí]}	‘left’
y-	a	{[réé ¹ βí]}	‘asked’
y-	a	{[kúlíí ¹ shí]}	‘named’ [SB]
y-	a	{[séé ¹ βúúí]}	‘said goodbye (to)’
y-	a	{[kálú ¹ shíítsí]}	‘returned’ [SB]
y-	a	{[síínjí ¹ líítsí]}	‘made stand’
y-	a	{[séβúú ¹ khápníí]}	‘scattered’

The same generalizations that apply to C-initial stems apply to V-initial stems.

(304) Hesternal Perfective V-Initial /Ø/ ‘s/he...’

Subj	Tns	Stem	Gloss
y-	a	[yényí]	‘wanted’
y-	a	[yéyéé ¹ lé]	‘wiped for’
y-	a	[yílúú ¹ lí]	‘winnowed’
y-	a	[yámbá ¹ khááné]	‘refused’

The transcriptions in (303) only characterize SB’s productions of /Ø/ verbs in the Hesternal Perfective. JI has only one H, which spans the entire stem, just like /H/ verbs, e.g. **y-a{[kálu¹shíítsí]}** ‘s/he returned’.

2.7.1.1 Hesternal Perfective with Object Prefixes

The root H surfaces in /H/ verbs with an object prefix, while the H of the object prefix itself does not. In addition, a melodic H spans the remainder of the verb stem.

⁷⁰CVCVVCV stems have two tonal variants in free variation with one another. In addition to the pattern exhibited by this datum, CVCVVCV stems may alternatively be realized with a fall on the second syllable, e.g. **y-a{[lákhu¹úí]}** ‘s/he released’.

(305) Hesternal Perfective C-Initial /H/ + OP 's/he...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	á	{mu	[ré ¹ élé]}	'buried'
y-	á	{mu	[bé ¹ chí]}	'shaved'
y-	a	{mu	[lé ¹ érí]}	'brought'
y-	a	{mu	[khá ¹ lááché]}	'cut'
y-	a	{mu	[βó ¹ ólíítsí]}	'seduced'
y-	a	{mu	[βó ¹ yóng'ááné]}	'went around'

(306) Hesternal Perfective V-Initial /H/ + OP 's/he...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	a	{mwi	[í ¹ rí]}	'killed'
y-	a	{mwo	[ó ¹ nónyíínyí]}	'spoiled'
y-	a	{mwa	[á ¹ βúkhányíínyí]}	'separated'

Again the H of the object prefix fails to surface in /Ø/ verbs; as in forms without an object prefix, two melodic H spans surface on the verb stem: one across the first two or three moras, the other across the remainder of the stem.

(307) Hesternal Perfective C-Initial /Ø/ + OP 's/he...him/her'⁷¹

Subj	Tns	Obj	Stem	Gloss
y-	a	{mu	[tsí ¹ lí]}	'went (for)'
y-	a	{mu	[léshí]}	'left'
y-	a	{mu	[lóó ¹ ndí]}	'followed'
y-	a	{mu	[kúlí ¹ shí]}	'named' [SB]
y-	a	{mu	[séé ¹ βúúlí]}	'said goodbye'
y-	a	{mu	[kálú ¹ shíítsí]}	'returned' [SB]
y-	a	{mu	[séβúúlú ¹ khányíínyí]}	'scattered'

⁷¹ The transcriptions included here are representative of the unique tonal patterns that only appear in the Hesternal Perfective, though there is noteworthy intra- and inter-speaker variation. SB and many of the Idakholand residents I surveyed commonly produced a tonal variant in which the melodic H on the FV did not surface, realizing just the first H span, e.g. y-a{βi[séβúúlúkhanyínyí]} 's/he scattered them₈'. JI and some of the other Idakholand residents I surveyed commonly produced a tonal variant lacking the melodic H on the second stem mora, such that /Ø/ verbs both with and without object prefixes were produced with the tonal properties characterizing /H/ verbs without object prefixes, i.e. with a single H spanning the full length of the stem, as in y-a{mu[seeβuulí]} 's/he said goodbye to him/her'.

The tokens in my corpus of vowel-initial /Ø/ Hesternal Perfective verbs with an object prefix do not follow the generalizations which hold true of consonant-initial /Ø/ verbs. Both speakers produce an internally consistent pattern in this context, but each produces a different pattern.

SB applies the pattern described above for /H/ vowel-initial verbs, surfacing with a H on the stem initial mora and a downstepped H span on the remainder of the stem.

(308) Hesternal Perfective V-Initial /Ø/ + OP ‘s/he...him/her/it₁₄’ [SB]

Subj	Tns	Obj	Stem	Gloss
y-	a	{mwe	[é'nyí]}	‘wanted’
y-	a	{mwe	[é'yéélé]}	‘wiped for’
y-	a	{βwi	[í'lúúlí]}	‘winnowed’
y-	a	{mwa	[á'mbákhááné]}	‘refused’

I propose that the SB’s data constitute one of several instantiations within Luhya of a diachronic pressure to replace tonal patterns which weakly signal the left morphological stem boundary with tonal patterns that more clearly demarcate the boundary. This hypothesis is the topic of Ch. 3.

JI produces a pattern with only a single melodic H span throughout the full length of the stem. JI’s behavior is simply a reflection of JI’s preference for inflecting Hesternal Perfective /Ø/ verbs with a melodic H on the FV only—a preference which prevails even in consonant-initial stems.

(309) Hesternal Perfective V-Initial /Ø/ + OP ‘s/he...him/her/it₁₄’ [JI]

Subj	Tns	Obj	Stem	Gloss
y-	a	{mwe	[ényí]}	‘wanted’
y-	a	{mwe	[éyéélé]}	‘wiped for’
y-	a	{βwi	[ílúúlí]}	‘winnowed’
y-	a	{mwa	[ámábákhááné]}	‘refused’

The tonal properties of Hesternal Perfective verb forms involving 1st sg object prefixes are identical to those involving CV- object prefixes.

(310) Hesternal Perfective C-Initial /H/ + OP_{1sg} ‘s/he...me’

Subj	Tns	Obj	Stem	Gloss
y-	a	{a	[rí ¹ ílí]}	‘feared’ [SB]
y-	a	{a	[mbé ¹ chí]}	‘shaved’
y-	a	{a	[ndé ¹ éri]}	‘brought’
y-	a	{a	[khá ¹ lááché]}	‘cut’
y-	a	{a	[mbó ¹ ólíítsí]}	‘seduced’
y-	a	{a	[mbó ¹ yóng ¹ ááné]}	‘went around’

(311) Hesternal Perfective C-Initial /Ø/ + OP_{1sg} ‘s/he...me’ [SB]

Subj	Tns	Obj	Stem	Gloss
y-	a	{a	[síé ¹ lé]}	‘ground’
y-	a	{a	[ndéshí]}	‘left’
y-	a	{a	[nóó ¹ nde]}	‘followed’
y-	a	{a	[ngúlí ¹ shí]}	‘named’
y-	a	{a	[séé ¹ βúúlí]}	‘said goodbye (to)’
y-	a	{a	[ngálú ¹ kháp:í]}	‘returned’
y-	a	{a	[sínjí ¹ líítsí]}	‘make stand’

In Hesternal Perfective forms involving both a CV- and a 1st sg object prefix, a rising tone surfaces on the pre-stem syllable. In /H/ verbs, a single level H span surfaces across the full length of the verb stem, while /Ø/ verbs again realize two melodic H spans with the same positional characteristics as Hesternal Perfective /Ø/ verb forms with fewer object prefixes.

(312) Hesternal Perfective C-Initial /H/ + OP + OP_{1sg} 's/he...him/her for me' [JI]⁷²

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	a	{mu-	ú	[¹ mbéchéélé]}	'shaved'
y-	a	{mu-	ú	[¹ ndééléélé]}	'buried/brought'
y-	á	{mu-	ú	[¹ kháláchíílf]}	'cut'

(313) Hesternal Perfective C-Initial /Ø/ + OP + OP_{1sg} 's/he...him/her for me' [SB]

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	á	{mu-	ú	[¹ ngálú ¹ shíílf]}	'named'
y-	a	{mu-	ú	[¹ ndákhú ¹ úíílf]}	'released'
y-	a	{mu-	ú	[¹ mbóómbé ¹ lítsíílf]}	'released'

The notable features of the tonal melody characterizing the Hesternal Perfective are the following: (i) underlying macrostem-initial Hs fail to surface, (ii) /H/ and /Ø/ verbs realize a melodic H which spans from the FV throughout much of the stem, and (iii) /Ø/ verbs realize an additional melodic H span across the first 2-3 moras of the stem. These properties are summarized schematically in the following display. As elsewhere, the position of underlying Hs is indicated with a single underline, and the melodic H, when it appears, is indicated with double underlining.

⁷²SB mysteriously produced these forms with a H on the initial mora of the stem and a downstepped level H span from the second stem mora through the FV, cf. **y-a{mu-u [khá¹láchíílf]}** 's/he cut him/her for me'. Despite this curiosity, he produced vowel-initial /H/ verbs with two object prefixes with the expected pattern, i.e. a rise on the pre-stem syllable followed by a downstepped melodic H spanning the full length of the verb.

(314) A Schematic Representation of the Hesternal Perfective's Tonal Properties

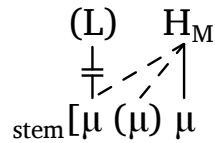
<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-a	{	[C [́] V [́] C [́] V [́] C [́] V [́]]
OPsx1	y-a	{CV	[C [́] V [́] (V [́])C [́] V [́] C [́] V [́]]
OPsx2	y-a	{CV- <u>V</u>	[[́] C [́] V [́] C [́] V [́] C [́] V [́]]

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-a	{	[C [́] V [́] (C)V [́] ⁺ C [́] V [́] C [́] V [́]]
OPsx1	y-a	{CV	[C [́] V [́] (C)V [́] ⁺ C [́] V [́] C [́] V [́]]
OPsx2	y-a	{CV- <u>V</u>	[C [́] V [́] (C)V [́] ⁺ C [́] V [́] C [́] V [́]]

The melodic H spanning the entire length of /H/ verb stems may be derived in three steps:

(i) *Initial Lowering* (103) lowers the root H, (ii) *Final MHA* (245) assigns a melodic H to the FV, and (iii) a rule of *Leftward Spread* iteratively spreads the melodic H left up until the left stem boundary.

(315) LEFTWARD SPREAD

**Condition:**

Applies in Hesternal Perfective constructions only






This analysis, which accounts for the surface tone patterns of /H/ verbs of any stem shape, is modeled in the following derivation.

(316) Derivation, /H/ Hest. Perf.: y-a{[khálaáché]} 's/he cut'

<p>1 UNDERLYING</p> <p>H_M H H_M</p> <p>y-a{[khalaache]}</p>	<p>2 INITIAL LOWERING</p> <p>H_M H→L H_M</p> <p>y-a{[khalaache]}</p>	<p>3 DEFAULT MHA</p> <p>Does not apply</p>
<p>4 MEEUSSEN'S RULE</p> <p>Does not apply</p>	<p>5 FINAL MHA</p> <p>H_M L H_M</p> <p>y-a{[khalaache]}</p>	<p>6 LEFT SPREAD</p> <p>H_M L H_M</p> <p>y-a{[khalaache]}</p>
<p>7 PRE-PENULT DOUB</p> <p>Does not apply</p>	<p>8 (FALL ELIMIN)</p> <p>Does not apply</p>	<p>9 PLATEAU</p> <p>Does not apply</p>

The basic tone pattern in /Ø/ may be derived in a similar manner, except that in the case of /Ø/ verbs, a second melodic H assignment rule is operative. *Final MHA* and *Default MHA* (102) apply to assign melodic Hs to the FV and the second stem mora, respectively. Subsequently, both melodic Hs undergo leftward spreading via *Plateau* and *Leftward Spread*, again respectively.

(317) Derivation, /Ø/ Hest. Perf.: y-a{[séé'βúúlí]} 's/he said goodbye'

¹ UNDERLYING  y-a{[seeβuulí]}	² INITIAL LOWERING Does not Apply	³ DEFAULT MHA  y-a{[seeβuulí]}
⁴ MEEUSSEN'S RULE Does not apply	⁵ FINAL MHA  y-a{[seeβuulí]}	⁶ LEFT SPREAD  y-a{[seeβuulí]}
⁷ PRE-PENULT DOUB Does not apply	⁸ (FALL ELIMIN) Does not apply	⁹ PLATEAU  y-a{[seeβuulí]}

There are two cases in which the initial melodic H span extends through the third stem mora: in uncommonly long stems and when the second mora of the stem is the first mora of a long second syllable.

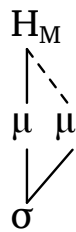
The leftmost melodic H in long /Ø/ verbs may shift to the right by one mora when eligible for *Pre-Penultimate Doubling*, as in y-a{[séβúúlú'kháǵííní]} 's/he scattered'. That downstep occurs between the third and fourth moras, rather than the second and third, indicates that *Pre-Penultimate Doubling* precedes *Plateau* in the derivation.

(318) Derivation, /Ø/ Hest. Perf.: y-a{[sínjɪ́lɪ́tsɪ]} ‘s/he made stand’

1	UNDERLYING H _M H _M y-a{[siinjiliitsɪ]}	2 INITIAL LOWERING Does not Apply	3 DEFAULT MHA H _M H _M y-a{[siinjiliitsɪ]}
4 MEEUSSEN'S RULE Does not apply	5 FINAL MHA H _M H _M y-a{[siinjiliitsɪ]}	6 LEFT SPREAD H _M H _M y-a{[siinjiliitsɪ]}	
7 PRE-PENULT DOUB H _M H _M y-a{[siinjiliitsɪ]}	8 (FALL ELIMIN) Does not apply	9 PLATEAU H _M H _M y-a{[siinjiliitsɪ]}	

When the second mora of the stem is also the first mora of a long second stem syllable, an optional rule of *Fall Elimination*⁷³ spreads the melodic H linked to the first of mora of a long second syllable onto the following mora.

(319) FALL ELIMINATION (OPTIONAL)



Condition:

Applies in Hesternal Perfective constructions only

Again, this rightward spreading rule takes precedence, applying before the melodic H on the FV spreads left via *Plateau*. The present analysis assumes that *Fall Elimination* applies to an intermediate representation which will have undergone *Default MHA* and *Leftward Spread*.

⁷³Within Luhya, *Fall Elimination* is also attested in Marachi (Marlo 2007) and Wanga (Ebarb et al. in press).

(320) Derivation, /Ø/ Hest. Perf.: y-a{[kúlíʃí]} ‘s/he named’

1	UNDERLYING H _M H _M y-a{[kuliishi]}	2 INITIAL LOWERING Does not Apply	3 DEFAULT MHA H _M H _M y-a{[kuliishi]}
4 MEEUSSEN'S RULE Does not apply	5 FINAL MHA H _M H _M y-a{[kuliishi]}	6 LEFT SPREAD H _M H _M y-a{[kuliishi]}	
7 PRE-PENULT DOUB Does not apply	8 (FALL ELIMIN) H _M H _M y-a{[kuliishi]}	9 PLATEAU Does not apply	

The root H predictably is realized in Hesternal Perfective forms with an object prefix. While the H of the object prefix itself is lowered, the root H is shielded from *Initial Lowering*. The melodic H on the FV spreads left onto the second mora of the stem.

(321) Derivation, /H/ Hest. Perf. + OP: y-a{mu[kháʃlááché]} ‘s/he cut him/her’

1	UNDERLYING H _M H H H _M y-a{mu[khalaachε]}	2 INITIAL LOWERING H _M L←H H H _M y-a{mu[khalaachε]}	3 DEFAULT MHA Does not apply
4 MEEUSSEN'S RULE Does not apply	5 FINAL MHA H _M L H H _M y-a{mu[khalaachε]}	6 LEFT SPREAD Does not apply	
7 PRE-PENULT DOUB Does not apply	8 (FALL ELIMIN) Does not apply	9 PLATEAU H _M L H H _M y-a{mu[khalaachε]}	

When two object prefixes are present, the root H is again lost; in this case, the root H is deleted via *Meeussen's Rule*, clearing the way for the melodic H to spread through the initial mora of the stem.

(322) Derivation, /H/ Hest. Perf. + OPx2: y-a{mu-ú[⁺kháláchíílí]} 's/he cut him/her for me'

¹	UNDERLYING	² INITIAL LOWERING	³ DEFAULT MHA
H _M	H H H	H _M H _M L←H H H	H _M
	y-a{mu-u[khalachiilí]}	y-a{mu-u[khalachiilí]}	Does not apply
⁴	MEEUSSEN'S RULE	⁵ FINAL MHA	⁶ LEFT SPREAD
H _M	L H H→∅	H _M H _M L H	H _M H _M L H
	y-a{mu-u[khalachiilí]}	y-a{mu-u[khalachiilí]}	y-a{mu-u[khaláchíílí]}
⁷	PRE-PENULT DOUB	⁸ (FALL ELIMIN)	⁹ PLATEAU
	Does not apply	Does not apply	Does not apply

Object prefixes do not influence stem tone in /Ø/ Hesternal Perfective verbs. The same analysis illustrated in (317) and (318) derive the stem tone properties of all /Ø/ verbs, and the regular application of *Initial Lowering* predicts the observed tonal properties of the pre-stem syllable.

2.7.1.2 Hesternal Perfective: Phrase Medially

In the Hesternal Perfective, all melodic Hs are lost in phrase-medial position. *Initial Lowering* remains in force, but the verb stem only bears a H if it spreads left onto the verb from the post-verbal word via *H Tone Anticipation*. Here as elsewhere, the leftward extent of the H span is difficult to identify, though the root H, lowered or not, does appear to limit spreading in /H/ verbs.

Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement **mú'yáyí** 'boy', while the second involves a toneless complement **muundu** 'somebody'.

(323) Hesternal Perfective Phrase Medially 's/he... (for him/her)'

/H/ Stems	No OP	y-a{[reelɛ]} mú'yáyí	'buried the boy'
		y-a{[reelɛ]} muundu	'buried somebody'
	One OP	y-a{[khalaaché]} mú'yáyí	'cut the boy'
		y-a{[khalaachɛ]} muundu	'cut somebody'
/Ø/ Stems	No OP	y-a{mu[ré'éléélɛ]} mú'yáyí	'buried/brought the boy'
		y-a{mu[réeleelɛ]} muundu	'buried/brought somebody'
	One OP	y-a{mu[khá'láchíílí]} mú'yáyí	'cut the boy'
		y-a{mu[khálachiilí]} muundu	'cut somebody'
	No OP	y-a{[tsíílí]} mú'yáyí	'went for the boy'
		y-a{[tsiili]} muundu	'went for somebody'
	One OP	y-a{[sééβúúlí]} mú'yáyí	'said goodbye to the boy'
		y-a{[seeβuulí]} muundu	'said goodbye to somebody'
	No OP	y-a{mu[tsíílííí]} mú'yáyí	'went for the boy'
		y-a{mu[tsiiliilí]} muundu	'went for somebody'
	One OP	y-a{mu[sééβúúlííí]} mú'yáyí	'said goodbye to the boy'
		y-a{mu[seeβuliilí]} muundu	'said goodbye to somebody'

2.7.1.3 Hesternal Perfective: Impact of Subject Choice

Data was not elicited to test for the influence of subject choice in Hesternal Perfective stem tone.

2.7.1.4 Hesternal Perfective: Passives

The stem tone properties of Hesternal Perfective are the same both with and without the passive suffix with one exception. The final syllable is long with a fall in passive forms, but short with a level H in non-passive forms. In /H/ verbs, the root H is lowered by *Initial Lowering*. The melodic H is assigned to the FV by *Final MHA*, shifts to the penult by *Final Rise Elimination*, then spreads left by *Leftward Spread*. /Ø/ verbs realize take melodic Hs on the second and final stem moras. After *Final Rise Elimination* shifts the rightmost H, both Hs spread left. The melodic H assigned to the second stem mora in **y-a{[lákhuú¹l-ú-i]}** ‘s/he was released’ spreads to the second mora of the long syllable via *Fall Elimination* (319).

(324) Hesternal Perfective: Passives ‘s/he was...’ [SB]

/H/ Stems

y-a{[kháláách-ú-i]}

‘cut’

y-a{[tsúúnzúún-ú-i]}

‘sucked’

/Ø/ Stems

y-a{[lákhuú¹l-ú-i]}

‘released’

y-a{[kálú¹shííts-ú-i]}

‘returned for’

2.7.1.5 Pattern 7: Other Verbal Contexts

The tonal properties of the Hesternal Perfective Negative are identical to those of its affirmative counterpart. In particular, the Hesternal Perfective Negative takes two melodic Hs: both tonal classes of verbs realize one on the FV and /Ø/ verbs realize a second melodic H on the second mora of the stem. Additionally, the Hesternal Perfective Negative loses both melodic Hs phrase-medially.

The Hesternal Perfective and its negative counterpart differ only in that the latter includes the H-toned negative element **tá**, which is downstepped relative to the melodic H on the FV.

(325) Other Pattern 7 Verbal Contexts

- a. Hesternal Perfective Negative SP-a[ROOT-ile] tá(awe)

Melodic Hs are assigned to the FV in /H/ verbs and to the FV and the second stem mora in /Ø/ verbs; all melodic Hs spread left via *Leftward Spread* (315) up until the left stem boundary or a preceding H. The root H is not realized due to *Initial Lowering*.

(326) Morphologically Simple /H/ Stems [SB]⁷⁴

	Subj	Tns	Stem	Neg
Hest Perf Neg	y-	a	{[khá lá ách é]}	‘tá
	y-	a	{[βó yóng’ á án é]}	‘tá

(327) Morphologically Simple /Ø/ Stems [SB]⁷⁵

	Subj	Tns	Stem	Neg
Hest Perf Neg	y-	a	{[kú lí ‘shí]}	‘tá
	y-	a	{[ká lú shí ‘ítsí]}	‘tá

When an object prefix is present, the root H surfaces on the initial mora, and the melodic H on the FV spreads left onto the peninitial mora. Stem tone in /Ø/ verbs both with and without an object prefix is identical.

(328) /H/ Stems with an Object Prefix [SB]

	Subj	Tns	Obj	Stem	Neg
Hest Perf Neg	y-	a	{mu	[khá ‘lá ách é]}	‘tá
	y-	a	{mu	[βó ‘yóng’ á án é]}	‘tá

⁷⁴The examples included in the current section use **-khá lak-** ‘cut’ and **-βó yong’an-** ‘go around’ to illustrate the properties of /H/ verbs, and **-kulix-** ‘name’ and **-kalushits-** ‘return’ as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the Hesternal Perfective Negative is ‘s/he did not...’.

⁷⁵Most of SB’s productions of /Ø/ verbs in this context do exhibit downstep between the FV and the H of the negative element **tá**. It is unclear at this time why downstep is so infrequently observed in these forms. The same unexpected behavior is not also observed in /H/ verbs.

(329) /Ø/ Stems with an Object Prefix [SB]

	Subj	Tns	Obj	Stem	Neg
Hest Perf Neg	y-	a	{mu	[kúlíí'shí]}	ʼtá
	y-	a	{mu	[kálúshí'ítsí]}	ʼtá

Melodic Hs are deleted phrase-medially in the Hesternal Perfective Negative. *Initial Lowering* is in effect, and *H Tone Anticipation* spreads post-verbal Hs onto the verb stem. It is unclear how far *H Tone Anticipation* spreads the H of the negative element tá into the verb stem. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyí** 'boy', and a toneless noun **muundu** 'person/somebody'.

(330) Constructions Like the Hesternal Perfective Phrase Medially [SB]

	/H/	y-a[khalaaché]	ʼmú'yáyí tá
		y-a[khalaché]	múúndú tá
Hest Perf Neg			
	/Ø/	y-a[kúlííshí]	mú'yáyí tá
		y-a[kúlííshí]	múúndú tá

It is noteworthy that the negative element **tá(awe)** does not trigger deletion of the melodic Hs, though post-verbal complements do.

As with the affirmative Hesternal Perfective, there is no data available relating to the effect of subject choice on the tonal properties of the Hesternal Perfective Negative.

As in the affirmative, the Hesternal Perfective Negative has the same stem tone properties with and without a passive suffix, except that there is no final fall in the Hesternal Perfective Negative, because the finally syllable shortens by *Non-Final Shortening*.

(331) /H/ & /Ø/ Stems with the Passive Suffix 's/he was not...' [SB]

Hest Perf Neg	/H/	y-a[kháláách-w-í]	‘tá	‘cut’
		y-a[tsúúnzúún-w-í]	‘tá	‘sucked’
	/Ø/	y-a[lákhúú‘l-w-í]	‘tá	‘released’
		y-a[kálúshí‘íts-w-í]	‘tá	‘returned’

2.8 Pattern 8: The first through final pattern

The Habitual and the Habitual Negative exhibit the properties of Pattern 8. The basic tonal melody associated with this pattern is expressed as a H across the full length of the verb stem in both /H/ and /Ø/ verbs.

2.8.1 Pattern 8: Habitual⁷⁶

The tonal properties of Pattern 8 will be described with reference to the Habitual in this section. The Habitual is marked by the FV **-a**, the tense prefix **aá-**, and a melodic H which surfaces on all moras of the stem; the lexical contrast is neutralized in forms lacking any object prefixes.

The following display illustrates that /H/ verbs realize the H of the tense prefix *in situ* and a downstepped level H across the full length of the stem.

⁷⁶The same tonal and segmental morphology can also render stative and perfective readings.

(332) Habitual C-Initial /H/ 's/he is ever/always...' ⁷⁷

Subj	Tns	Stem	Gloss
y-	aá	{[^h ng'úa]}	'drinking'
y-	aá	{[^h βéká]}	'shaving'
y-	aá	{[^h téékhé]}	'cooking'
y-	aá	{[^h kháláká]}	'cutting'
y-	aá	{[^h káláángá]}	'frying'
y-	aá	{[^h βóólítsá]}	'seducing'
y-	aá	{[^h tsúúnzúúná]}	'sucking'
y-	aá	{[^h βóyóng'áná]}	'going around'

(333) Habitual V-Initial /H/ 's/he is ever/always...'

Subj	Tns	Stem	Gloss
y-	aá	{[^h yírá]}	'killing'
y-	aá	{[^h yónón:á]}	'spoiling'
y-	aá	{[^h yábúkhány:á]}	'separating'

/Ø/ verbs have identical tonal properties in this context—a H tense prefix, followed by a downstepped H on all stem vowels.

⁷⁷Jl often produces a variant of this pattern in which the H span (in verbs from both tonal classes) terminates on the penult, rather than the final.

(334) Habitual C-Initial /Ø/ 's/he is ever/always...'

Subj	Tns	Stem	Gloss
y-	aá	{[^h kúa]}	'falling'
y-	aá	{[^h lékhá]}	'leaving' [SB]
y-	aá	{[^h rééβá]}	'asking'
y-	aá	{[^h kúlíkhá]}	'naming' [SB]
y-	aá	{[^h lákhúúlá]}	'releasing'
y-	aá	{[^h sééβúlá]}	'saying goodbye (to)'
y-	aá	{[^h kálúshítsá]}	'returning' [SB]
y-	aá	{[^h síinjílítsá]}	'making stand'
y-	aá	{[^h sééβúlúkháp:á]}	'scattering'

(335) Habitual V-Initial /Ø/ 's/he is ever/always...'

Subj	Tns	Stem	Gloss
y-	aá	{[^h yényá]}	'wanting'
y-	aá	{[^h yílúúlá]}	'winnowing'
y-	aá	{[^h yámbákháná]}	'refusing'
y-	aá	{[^h yéléélítsá]}	'hanging s.t. up'

2.8.1.1 Habitual with Object Prefixes

When an object prefix is present, the root H surfaces *in situ* and the melodic H span extends through the remainder of the stem. While the object prefix surfaces H, note the absence of downstep between the object prefix and the root.

(336) Habitual C-Initial /H/ + OP 's/he is ever/always...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ¹ mú	[ráa]}	'burying'
y-	aá	{ ¹ mú	[bé ¹ ká]}	'shaving'
y-	aá	{ ¹ mú	[lé ¹ érá]}	'bringing'
y-	aá	{ ¹ mú	[khá ¹ láká]}	'cutting'
y-	aá	{ ¹ mú	[βó ¹ ólítsá]}	'seducing'
y-	aá	{ ¹ mú	[βó ¹ yóng'áná]}	'going around'

(337) Habitual V-Initial /H/ + OP 's/he is ever/always...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ¹ mwí	[í'ra]}	'killing'
y-	aá	{ ¹ mwó	[ó ¹ nóny:á]}	'spoiling'
y-	aá	{ ¹ mwá	[á ¹ búkhány:á]}	'separating'

In /Ø/ stems, the tense prefix surfaces H as expected, and the melodic H spans from the object prefix through the FV.

(338) Habitual C-Initial /Ø/ + OP 's/he is ever/always...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ¹ mú	[tsía]}	'going (for)'
y-	aá	{ ¹ mú	[lékhá]}	'leaving'
y-	aá	{ ¹ mú	[lóondá]}	'following'
y-	aá	{ ¹ mú	[kúlíkhá]}	'naming'
y-	aá	{ ¹ mú	[sééβúlá]}	'saying goodbye'
y-	aá	{ ¹ mú	[kálúshítsá]}	'returning' [SB]

(339) Habitual V-Initial /Ø/ + OP 's/he is ever/always...him/her'

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ¹ mwé	[ényá]}	'wanting'
y-	aá	{ ¹ mwé	[éyéla]}	'wiping for'
y-	aá	{ ¹ mwá	[ámbákháná]}	'refusing'

The tonal properties of Habitual forms involving 1st sg object prefixes are identical to those involving CV- object prefixes. Both tonal classes realize the H of the tense prefix as expected. In /H/ verbs, a second H spans across the object prefix and stem-initial mora, and a third H spans throughout the remainder of the stem. /Ø/ verbs have instead a single H spanning from the object prefix through the FV.

(340) Habitual C-Initial /H/ + OP_{1sg} 's/he is ever/always...me'⁷⁸

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ⁺ á	[khúa]}	'paying dowry (for)'
y-	aá	{ ⁺ á	[mbé ⁺ ká]}	'shaving'
y-	aá	{ ⁺ á	[ndé ⁺ érá]}	'bringing'
y-	aá	{ ⁺ á	[khá ⁺ láká]}	'cutting'
y-	aá	{ ⁺ á	[mbó ⁺ ólítsá]}	'seducing'
y-	aá	{ ⁺ á	[mbó ⁺ yóng'áná]}	'going around'

(341) Habitual C-Initial /Ø/ + OP_{1sg} 's/he is ever/always...me'

Subj	Tns	Obj	Stem	Gloss
y-	aá	{ ⁺ á	[sía]	'grinding' [SB]
y-	aá	{ ⁺ á	[ndékhá]	'leaving'
y-	aá	{ ⁺ á	[nóóndá]	'following'
y-	aá	{ ⁺ á	[ngúlíkhá]	'naming' [SB]
y-	aá	{ ⁺ á	[sééβúlá]	'saying goodbye (to)'
y-	aá	{ ⁺ á	[ngálúshítsá]	'returning' [SB]

As in previous Habitual forms, nearly the entire word is H in forms which combine a CV- object prefix and a 1st sg object prefix. Downstep is observed following the tense prefix and the second object prefix.

⁷⁸The length of the [aá⁺á] sequence before the stem varies, but measures at between approximately 170-270 ms. A typical long (bimoraic) syllable is ~100-160 ms, and a typical short (monomoraic) syllable is ~50-100 ms. These are estimated ranges only.

(342) Habitual C-Initial /H/ + OP + OP_{1sg} ‘s/he is ever/always...him/her for me’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	aá	{‘mú-	ú	[‘ndéélá]}	‘burying’
y-	aá	{‘mú-	ú	[‘mbéchélá]}	‘shaving’
y-	aá	{‘mú-	ú	[‘ndéérélá]}	‘bringing’
y-	aá	{‘mú-	ú	[‘kháláchílá]}	‘cutting’

(343) Habitual C-Initial /Ø/ + OP + OP_{1sg} ‘s/he is ever/always...him/her for me’

Subj	Tns	Obj _{CV}	Obj _{1sg}	Stem	Gloss
y-	aá	{‘mú-	ú	[‘nzíílá]}	‘going (for)’
y-	aá	{‘mú-	ú	[‘ndéshélá]}	‘leaving’ [SB]
y-	aá	{‘mú-	ú	[‘nóóndélá]}	‘following’
y-	aá	{‘mú-	ú	[‘ndákhúúlílá]}	‘releasing’

The following are the core tonal properties of the Habitual: (i) underlying macrostem-initial Hs fail to surface, (ii) the pre-stem syllable has a rise, (iii) verbs from either tonal class without an object prefix and with two object prefixes have a single H which spans the full length of the stem, and (iv) /H/ verbs with an object prefix have a H on the initial mora followed by a downstepped H on the rest of the stem. The H span in /Ø/ verbs with an object prefix extends even onto the pre-stem syllable. These properties are summarized schematically in (344). As before, the position of underlying Hs is indicated with a single underline, and the melodic H is indicated with double underlining.

(344) A Schematic Representation of the Habitual's Tonal Properties

<u>/H/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-aá	{	[⁺ C [̣] V [̣] C [̣] V [̣] C [̣] V [̣]]
OPsx1	y-aá	{ ⁺ C [̣] V [̣]	[C [̣] V [̣] ⁺ (V [̣])C [̣] V [̣] C [̣] V [̣]]
OPsx2	y-aá	{ ⁺ C [̣] V [̣] -V [̣]	[⁺ C [̣] V [̣] C [̣] V [̣] C [̣] V [̣]]

<u>/Ø/ Verbs</u>			
	<i>Subj + Tns</i>		<i>Macrostem</i>
OPsx0	y-aá	{	[⁺ C [̣] V [̣] C [̣] V [̣] C [̣] V [̣]]
OPsx1	y-aá	{ ⁺ C [̣] V [̣]	[C [̣] V [̣] C [̣] V [̣] C [̣] V [̣]]
OPsx2	y-aá	{ ⁺ C [̣] V [̣] -V [̣]	[⁺ C [̣] V [̣] C [̣] V [̣] C [̣] V [̣]]

The level H span across the entire verb stem in both /H/ and /Ø/ verbs is accounted for via the following steps: the root H is lowered via *Initial Lowering* (103), a melodic H is assigned to the FV via *Final MHA* (245), and the melodic H spreads onto the initial stem mora via *Leftward Spread* (315). Note that this is the same analysis offered for the Hesternal Perfective in §2.7.1.1, except that *Default MHA* exceptionally does not apply in the Habitual, and the construction contributes only a single melodic H.⁷⁹

(345) Derivation, /H/ Habitual: y-aá{[⁺kháláká]} 's/he is always/ever cutting'

1	UNDERLYING	2 INITIAL LOWERING	3 MEEUSSEN'S RULE
	H H H _M	H H→L H _M	
	y-aa{[khalaka]}	y-aa{[khalaka]}	Does not apply

4	FINAL MHA	5 LEFT SPREAD	6 PLATEAU
	H L H _M	H L H _M	
	/	/	
	y-aa{[khalaka]}	y-aa{[khalaka]}	Does not apply

⁷⁹If *Default MHA* were to apply in this context, it would assign the melodic H to the second stem mora before *Final MHA* has a chance to apply.

(346) Derivation, /Ø/ Habitual: y-aá{[¹kúlíkhá]} ‘s/he is always/ever naming’

1	UNDERLYING	2 INITIAL LOWERING	3 MEEUSSEN'S RULE
		Does not apply	Does not apply
4	FINAL MHA	5 LEFT SPREAD	6 PLATEAU
			Does not apply

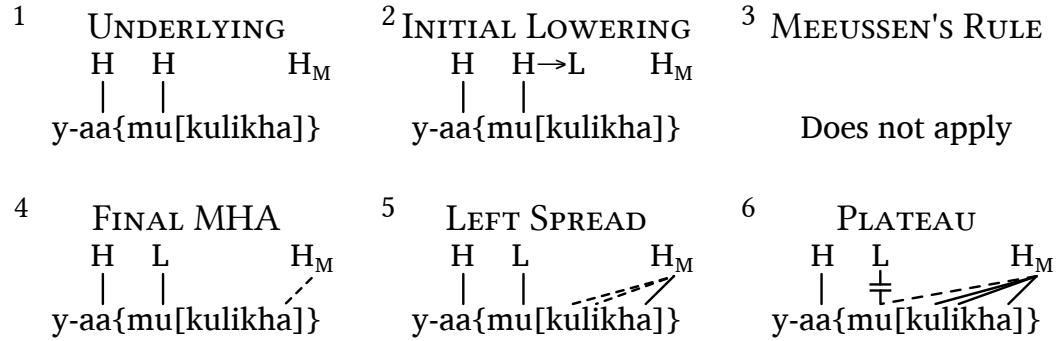
Turning now to forms with object prefixes, one observes downstep following the tense prefix and, in /H/ verbs, the stem-initial mora as well. I analyze these forms in the following manner: the H of the object prefix is lowered by *Initial Lowering*, but the object prefix surfaces H anyway due to the leftward spreading of the root H via *Plateau* (68). The melodic H, first assigned to the FV, also spreads left via *Leftward Spread*.

(347) Derivation, /H/ Habitual + OP: y-aá{¹mú[khá¹láká]} ‘s/he is always/ever cutting him/her’

1	UNDERLYING	2 INITIAL LOWERING	3 MEEUSSEN'S RULE
			Does not apply
4	FINAL MHA	5 LEFT SPREAD	6 PLATEAU
		Does not apply	

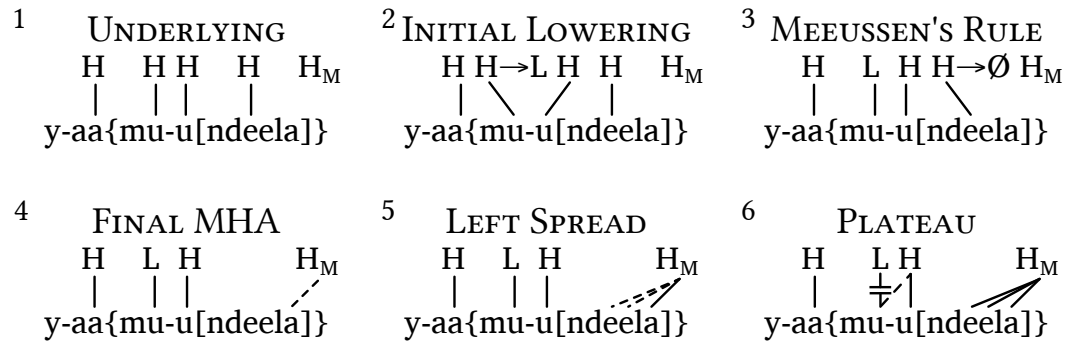
The analysis of /Ø/ verbs is similar, except that there is no root H on the initial mora of the stem to occasion a second instance of downstep.

- (348) Derivation, /Ø/ Habitual + OP: y-aá{¹mú[kúlíkhá]} 's/he is always/ever naming him/her'

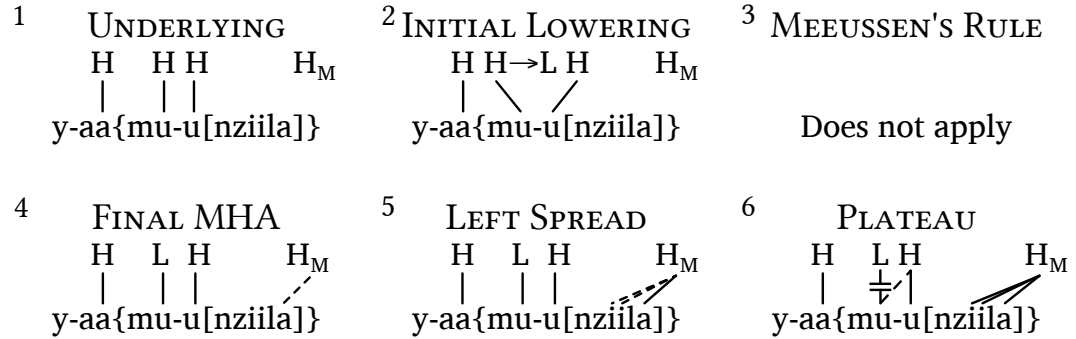


Stem tone patterns in /H/ and /Ø/ verbs with two object prefixes are identical because the root H is deleted by *Meeussen's Rule* following the H of the second object prefix.

- (349) Derivation, /H/ Habitual + OPx2: y-aá{¹mú-ú[¹ndéélá]} 's/he is always/ever burying him/her for me'



(350) Derivation, /Ø/ Habitual + OPx2: y-aá{⁺mú-ú[⁺nzíílá]} ‘s/he is always/ever going for him/her for me’



2.8.1.2 Habitual: Phrase Medially

The melodic H is lost phrase-medially in the Habitual. Despite the deletion of the melodic H, the stem tone properties of Habitual verb forms in a phrase-medial context are often the same as they are phrase-finally when the verb is followed by a H-toned word—*H Tone Anticipation* spreads post verbal Hs onto the stem. The leftward extent of the resulting H span might be limited in forms in which the root H is lowered by *Initial Lowering*.

Four pairs of /H/ and /Ø/ stems are provided below, half with and half without an object prefix. For each pair, the first member involves a H-toned complement, while the second involves a toneless complement. In each case, the stem tonal properties are the same as the pre-pausal counterparts.

(351) Habitual Phrase Medially ‘*s/he is ever/always...(for him/her)*’

/H/ Stems	No OP	y-aá{[‘rá] mú’yáyí}	‘burying the boy’
		y-aá{[ra] muundu}	‘burying somebody’
	One OP	y-aá{[khalaká] mú’yáyí}	‘cutting the boy’
		y-aá{[khalaka] muundu}	‘cutting somebody’
	One OP	y-aá{‘mú[ré’élá] mú’yáyí}	‘burying the boy’
		y-aá{‘mú[réela] muundu}	‘burying somebody’
/Ø/ Stems	No OP	y-aá{‘mú[khá’láchílá] mú’yáyí}	‘cutting the boy’
		y-aá{‘mú[khálachila] muundu}	‘cutting somebody’
	No OP	y-aá{[‘tsyá] mú’yáyí}	‘going for the boy’
		y-aá{[tsya] muundu}	‘going for somebody’
	One OP	y-aá{[‘sééβúlá] mú’yáyí}	‘saying goodbye to the boy’
		y-aá{[seeβula] muundu}	‘saying goodbye to somebody’
	One OP	y-aá{‘mú[tsíílá] mú’yáyí}	‘going for the boy’
		y-aá{mu[tsiila] muundu}	‘going for somebody’
	One OP	y-aá{‘mú[sééβúlílá] mú’yáyí}	‘saying goodbye to the boy’
		y-aá{mu[seeβulila] muundu}	‘saying goodbye to somebody’

2.8.1.3 Habitual: Impact of Subject Choice

The Habitual does not exhibit any subject-induced tonal alternations; verb stem tone is the same for all subjects.

(352) Subject Choice in the Habitual /H/ ‘*...am/are ever/always drunk (-ng’u-)*’ / ‘*...is/are married (-teekh-)*’ [SB]

	Singular	Plural
1 st Person	n-aá{[‘ng’úa]}	khw-aá{[‘ng’úa]}
2 nd Person	w-aá{[‘téékhá]}	mw-aá{[‘léérá]}
3 rd Person	y-aá{[‘téékhá]}	β-aá{[‘léérá]}

(353) Subject Choice in the Habitual /Ø/ ‘...is/are ever/always asking’ [SB]

	Singular	Plural
1st Person	n-aá{[‘rééβá]}	khw-aá{[‘rééβá]}
2nd Person	w-aá{[‘rééβá]}	mw-aá{[‘rééβá]}
3rd Person	y-aa{[‘rééβá]}	β-aá{[‘rééβá]}

The data below illustrate that forms with an object prefix are similarly unaffected by the choice of subject.

(354) Subject Choice in the Habitual /H/ + OP ‘...is/are ever/always cooking for him/her’ [SB]

	Singular	Plural
2nd Person	w-aá{‘mú[té‘éshéla]}	mw-aá{‘mú[té‘éshéla]}
3rd Person	y-aá{‘mú[té‘éshéla]}	β-aá{‘mú[té‘éshéla]}

(355) Subject Choice in the Habitual /Ø/ + OP ‘...is/are ever/always asking him/her’ [SB]

	Singular	Plural
1st Person	n- aá{‘mú[rééβá]}	khw-aá{‘mú[rééβá]}
2nd Person	w-aá{‘mú[rééβá]}	mw-aá{‘mú[rééβá]}
3rd Person	y-aá{‘mú[rééβá]}	β-aá{‘mú[rééβá]}

2.8.1.4 Habitual: Passives

Except for the fact that Habitual forms with passives have a final fall on a long final syllable where Habitual forms without passives have a level H on a short final syllable, the tonal properties of Habitual forms are identical with and without the passive suffix.

(356) Habitual: Passives ‘s/he is ever/always being...’ [SB]

/H/ Stems	/Ø/ Stems
_____ ⁸⁰	y-aá[‘lákhúúl-ú-a] ‘released’
y-aá[‘tsúúnzúún-ú-a] ‘sucked’	y-aá[‘kálúshíts-ú-a] ‘returned for’

The data in (356) are consistent with the analysis of passive H distribution developed in §2.2.1.6. The melodic H is first assigned to the FV via *Final MHA* (245), thereby licensing the passive H. *Passive H Assignment* (126) then assigns the passive H to the penultimate mora within the final syllable, feeding *Meeussen’s Rule* (44). Finally, the passive H spreads as far as it can via *Leftward Spread* (315).

2.8.1.5 Pattern 8: Other Verbal Contexts

The surface tone pattern of Habitual Negative verb forms are identical to those of the affirmative. In the Habitual Negative, the melodic H surfaces across the full length of the verb stem in both /H/ and /Ø/ verbs, with /H/ verbs also expressing the root H in constructions involving an object prefix.

Additionally, the Habitual Negative similarly shares tonal properties with parallel affirmative forms in phrase-medial position and when passivized. Despite these similarities, there is a large degree of overlap between the surface tonal patterns predicted by an analysis which assumes that a melodic H is assigned in the Habitual Negative via the same mechanisms through which the Habitual derives its surface tonal properties and an analysis in which the negative marker **tá** is sufficient to trigger phrase-medial deletion of the melodic H, only to generate identical stem tone patterns via *H Tone Anticipation* (48). The present work remains agnostic regarding the best analysis of the Habitual Negative.

⁸⁰SB produced, probably mistakenly, the tonal pattern associated with the segmentally identical Remote Past (§2.4.1.4) for this form: **y-aa[khá‘lák-ú-a]** ‘s/he was cut’.

(357) Other Pattern 8 Verbal Contexts

- a. Habitual Negative SP-aá[ROOT-a] tá(awe)

As shown below, both /H/ and /Ø/ verbs surface with a H spanning the full length of the verb stem, just as in the affirmative.

(358) Morphologically Simple /H/ Stems [SB]⁸¹

	Subj	Tns	Stem	Neg
Hab Neg	y-	aá	{['kháláká]}	tá
	y-	aá	{['khóng'óondá]}	tá

(359) Morphologically Simple /Ø/ Stems [SB]

	Subj	Tns	Stem	Neg
Hab Neg	y-	aá	{['kúlíshá]}	tá
	y-	aá	{['lákhuúlá]}	tá

Initial Lowering is useful in accounting for the failure of the root H to surface, though the surface stem tone properties may be derived in either of two ways: (i) a melodic H is assigned to the FV via *Final MHA*, in turn spreading left via *Leftward Spread* or (ii) the negative marker **tá** triggers phrase-medial deletion of the melodic H, then spreads its H left via *H Tone Anticipation*.

Indeed, the absence of downstep between the FV of the verb and the negative marker **tá** favors the latter approach. It is common for **tá** to be downstepped relative to word final melodic Hs (e.g. Pattern 2a: **a-kha**{**[lekhá]**} '**tá** 'let him/her not leave (behind)'), making it unusual that it is not observed in this case if the H span is, in fact, a melodic H span. On the other hand, the absence of downstep follows naturally from an analysis in which the

⁸¹The examples included in the current section use **-khálak-** 'cut' and **-khóng'oond-** 'knock' to illustrate the properties of /H/ verbs, and **-kulix-** 'name' and **-lakhuul-** 'release' as representative of /H/ and /Ø/ verbal roots, respectively. The basic gloss for the Habitual Negative is 's/he is not ever/always...ing'.

FV and **tá** are associated to the same H, as would result from the H of the negative marker undergoing *H Tone Anticipation*.

However, assuming that the H span appearing on the verb stem originates on the negative marker comes with its own set of challenges. First, we learned from Pattern 5a (§2.5.1.5) that the negative marker appears not to be sufficient to trigger phrase-medial melodic H deletion, even in contexts like the Present, where a full DP complement clearly triggers deletion of the melodic H: compare **a{[sééβúlaanga]}** ‘s/he is saying bye’ and **a{[seeβulaanga]}** **muundu** ‘s/he is saying bye to someone’. Additionally, Pattern 5b (§2.5.2.5) showed that there are contexts in which the H of the negative marker is not down-stepped even when following a H that is unambiguously inflectional, e.g. **a-li{[khalaká]}** ‘**tá**’ s/he will not cut’.

As in the Habitual, the H contributed by a single object prefix fails to surface, while the root H re-emerges in /H/ stems, spreading left through the object prefix via *Plateau*. The melodic (or negative) H continues to be realized on all other moras of the macrostem.

(360) /H/ Stems with an Object Prefix [SB]

	Subj	Tns	Obj	Stem	Neg
Hab Neg	y-	aá	{‘mú	[khá‘láká]}	tá
	y-	aá	{‘mú	[khó‘ng’óóndá]}	tá

(361) /Ø/ Stems with an Object Prefix [SB]

	Part	Subj	Obj	Stem	Neg
Hab Neg	y-	aá	{‘mú	[kúlíkhá]}	tá
	y-	aá	{‘mú	[lákhuúla]}	tá

Though the stem tone properties of the Habitual Negative forms in a phrase-medial context are again identical to parallel affirmative forms, the argument for phrase-position induced

deletion of the melodic H in this context is stronger than in verbs followed only by *tá*; while there is some precedent for lack of downstep between a melodic H and the negative marker *tá*, there are no cases in which post-verbal complements with an initial H (e.g. **mú'yáyí** 'boy') are not downstepped following a verb-final melodic H. Furthermore, verbs in the affirmative Habitual unambiguously lose the melodic H phrase-medially; it would not be surprising that the Habitual Negative patterns with the Habitual in this respect. Examples are provided below of both /H/ and /Ø/ stems before a H-toned noun, **mú'yáyí** 'boy', and a toneless noun **muundu** 'person/somebody'.

(362) Constructions Like the Habitual Phrase Medially [SB]

Hab Neg	/H/	y-aá[⁺ kháláká] mú'yáyí tá
		y-aá[⁺ kháláká] múúndú tá
	/Ø/	y-aá[⁺ lákhúúlá] mú'yáyí tá
		y-aá[⁺ lákhúúlá] múúndú tá

An analysis of the above forms may take the following form: the melodic H is deleted in a phrase-final context and *H Tone Anticipation* applies liberally, spreading the Hs of H-toned complements as far left as they can reach. The H of the negative marker spreads onto the initial mora of the stem, even through an underlyingly toneless complement.

There is no data available relating to the effect of subject choice on the tonal properties of the Habitual Negative.

Finally, observe that Habitual Negative forms with the passive suffix have precisely the same tonal properties as those without: both /H/ and /Ø/ verbs surface with a H spanning the full length of the verb stem, and the H of the negative marker is not downstepped.

(363) /H/ & /Ø/ Stems with the Passive Suffix ‘s/he is not ever/always being...’ [SB]

Hab Neg	/H/	y-aá[⁺ khálák-w-á] tá	‘cut’
		y-aá[⁺ tsúúnzúún-w-á] tá	‘sucked’
	/Ø/	y-aá[⁺ lákhúúl-w-á] tá	‘released’
		y-aá[⁺ kálúshíts-w-á] tá	‘returned for’

The lack of downstep is particularly interesting in the above data because such forms derive from intermediate representations which include a final fall on the final syllable. Recall that the final syllable is underlyingly bimoraic in the above forms, with one mora being contributed by the passive and a second by the FV. The final syllable is ultimately shortened before the negative marker due to *Non-Final Shortening* (cf. y-aá{[⁺khálákúa]} ‘s/he is always/ever being cut’).

2.9 Summary of Tonal Melodies

The preceding description identifies 8 primary Patterns. Among these, some further divide into sub-Patterns. Sub-Patterns differ from one another to varying degrees, with Patterns 1a and 1b and Patterns 2a and 2b differing only with respect to the tone of subject or tense prefixes. Patterns 5a, 5b, and 5c are distinct in more significant ways: (i) Pattern 5a constructions assign a melodic H to the third stem syllable, while Patterns 5b and 5c target the FV, and (ii) the melodic H is lost phrase-medially in Patterns 5a and 5b, but retained in Pattern 5c constructions.

Melodic Hs target a number of positions. Describing the position targeted requires reference to prosodic and morphological constituents at multiple hierarchical levels: both the mora and the syllable, and the stem boundary and the macrostem boundary. Targeted positions are as summarized in (29), reproduced below.

(364) Targets of Melodic H Assignment

a. Initial mora of the stem	Pattern 6
b. Second mora of the stem	Patterns 2, 4, 5, 6, 7
c. All moras of the third syllable of the stem	Pattern 5a
d. Final mora of the stem	Patterns 5b, 5c, 6, 7, 8
e. Initial mora of the macrostem	Pattern 4
f. 2 nd mora after the initial syllable of the macrostem	Pattern 3

Up to two melodic Hs may appear on the verb. Following the construction-specific assignment of melodic Hs to the verb, underlying and inflectional Hs are subject to a number of general and construction-specific tonal rules, listed in (365) below in the order in which they apply. Not all ordering relationships are crucial.

(365) Rule	Pattern Restrictions
INITIAL LOWERING (103)	Requires a H _M
MACROSTEM-INITIAL MHA (187)	Pattern 4
INITIAL MHA (285)	Pattern 6
DEFAULT MHA (102)	Not Pattern 8
PINBALL Shift (133)	Pattern 2b
MEEUSSEN'S RULE (44)	
L SPREAD I (54)	(Pattern 1a?)
L SPREAD II (218)	Patterns 5 & 6
FINAL SPREAD (217)	Pattern 5a
FINAL MHA (245)	Patterns 5b, 5c, 6, & 7
FINAL RISE ELIMINATION (107)	
NON-FINAL SHORTENING (103)	
SUBJUNCTIVE MHA (157)	Pattern 3
THIRD SYLLABLE MHA (214)	Pattern 5a
PRE-PENULTIMATE DOUBLING (113)	
HEAVY Shift (289)	Pattern 6
RIGHTWARD SPREAD (286)	Pattern 6
(FALL ELIMINATION) (319)	Pattern 7
PASSIVE H ASSIGNMENT (126)	Requires a H _M ; Complex
LEFTWARD SPREAD (315)	Pattern 7 & 8
PLATEAU (68)	Not Pattern 2b
H TONE ANTICIPATION (48)	

Passive H Assignment is designated as having 'Complex' pattern restrictions. The passive suffix **-u^H** realizes a H under conditions which are not predicted by Pattern membership. To surface H, the passive suffix must appear in a context inflected with a melodic H (not Pattern 1). In addition, the verb form must satisfy one of the following conditions, either (i) a melodic H surfaces on the verb stem or (ii) the verb form includes the perfective suffix.

Finally, the following display summarizes the pattern membership of all constructions discussed in the preceding description. An asterisk denotes constructions in which melodic Hs are lost phrase-medially. The affirmative Imperatives have the unusual property that melodic Hs are lost phrase-medially only in forms without object prefixes.

(366) Idakho Tonal Melodies: Summary

Pattern 1a (§2.1.1)

Near Future	/H/	a-la{[kálaanga]}	‘s/he will fry’
	/Ø/	a-la{[lakhuula]}	‘s/he will release’
Near Future	/H/	a-la{[ká‘láángá]} tá	‘s/he will not fry’
Neg	/Ø/	a-la{[lákhúúlá]} tá	‘s/he will not release’
Perfect	/H/	a-a{[kálaanji]}	‘s/he has fried’
	/Ø/	a-a{[lakhuuli]}	‘s/he has released’
Perfect	/H/	a-a{[ká‘láánjí]} tá	‘s/he has not fried’
Neg	/Ø/	a-a{[lákhúúlí]} tá	‘s/he has not released’
Infinitive	/H/	khu{[kálaanga]}	‘to fry’
	/Ø/	khu{[lakhuula]}	‘to release’

Pattern 1b (§2.1.2)

Imm. Past	/H/	y-á‘khá{[kálaanga]}	‘s/he just fried’
	/Ø/	y-ákha{[lakhuula]}	‘s/he just released’
Imm. Past	/H/	y-á‘khá{[ká‘láángá]} tá	‘s/he just fried’
Neg	/Ø/	y-á‘khá{[lákhúúlá]} tá	‘s/he just released’
Rem. Future	/H/	y-á‘khá{[kálaanje]}	‘s/he just fried’
	/Ø/	y-ákha{[lakhuule]}	‘s/he just released’
Rem. Future	/H/	y-á‘khá{[ká‘láánjé]} tá	‘s/he just fried’
Neg	/Ø/	y-á‘khá{[lákhúúlé]} tá	‘s/he just released’

Pattern 2a (§2.2.1)

Subjunctive	/H/	a-kha{[kalaanga]} tá	‘let him/her not fry!’
Neg	/Ø/	a-kha{[lakhúula]} tá	‘let him/her not release!’
Imperative _{sg}	/H/	u-kha{[kalaanga]} tá	‘do not fry!’
Neg	/Ø/	u-kha{[lakhúula]} tá	‘do not release!’
Imperative _{pl}	/H/	mu-kha{[kalaanji]} tá	‘do not seduce!’
Neg	/Ø/	mu-kha{[lakhúuli]} tá	‘do not name!’
Hod. Perf.	/H/	a{[kalaanji]}	‘s/he fried’
	/Ø/	a{[lakhúuli]}	‘s/he released’
Hod. Perf.	/H/	a{[kalaanji]} tá	‘s/he did not fry’
Neg	/Ø/	a{[lakhúuli]} tá	‘s/he did not release’
Future	/H/	sh-a{[khalaka]} tá	‘s/he will not cut’
Neg	/Ø/	sh-a{[kulíkha]} tá	‘s/he will not name’
Present	/H/	shi{[ndumulaa]} tá	‘I do not hit’
Neg	/Ø/	shi{[nomólómaa]} tá	‘I do not talk’

Pattern 2b (§2.2.2)

Conditional	/H/	na-á-kha{[kalaka]}	tá	‘if s/he does not cut’
Neg	/Ø/	na-á-kha{[kulíkha]}	tá	‘if s/he does not name’

Pattern 3 (§2.3)

Subjunctive	/H/	a{[kalaánje]}		‘let him/her fry’
	/Ø/	a{[seeβulí]}		‘let him/her say goodbye’
Crast. Fut.	/H/	na-a{[kalaánje]}		‘s/he will fry’
	/Ø/	na-a{[seeβulí]}		‘s/he will say goodbye’
Crast. Fut.	/H/	na-a{[kalaánje]}	tá	‘s/he will not fry’
Neg	/Ø/	na-a{[kalushítsi]}	tá	‘s/he will not return’

Pattern 4 (§2.4)

Rem. Past	/H/	y-aa{[βóolitsa]}		‘s/he seduced’
	/Ø/	y-aa{[kúlikha]}		‘s/he named’
Rem. Past	/H/	y-aa{[βóolitsa]}	tá	‘s/he did not seduce’
Neg	/Ø/	y-aa{[kúlikha]}	tá	‘s/he did not name’

Pattern 5a (§2.5.1)

*Present	/H/	a{[βoolitsáánga]}		‘s/he is seducing’
	/Ø/	a{[kulíkhaanga]}		‘s/he is naming’
*Present	/H/	a{[βoolitsáánga]}	tá	‘s/he is not seducing’
Neg	/Ø/	a{[kulíkhaanga]}	tá	‘s/he is not naming’
*Persistent	/H/	a-shi{[βoolitsáánga]}		‘s/he is still seducing’
	/Ø/	a-shi{[kulíkhaanga]}		‘s/he is still naming’
*Persistent	/H/	a-shi{[βoolitsáánga]}	tá	‘s/he is not still seducing’
Neg	/Ø/	a-shi{[kulíkháanga]}	tá	‘s/he is not still naming’

Pattern 5b (§2.5.2)

*Indef. Fut.	/H/	a-li{[βoolitsá]}		‘s/he will seduce’
	/Ø/	a-li{[kulíkha]}		‘s/he will name’
*Indef. Fut.	/H/	a-li{[βoolitsá]}	‘tá	‘s/he will not seduce’
Neg	/Ø/	a-li{[kulíkha]}	tá	‘s/he will not name’

Pattern 5c (§2.5.3)

Conditional	/H/	na-á{[‘βóólítsá]}		‘if s/he seduces’
	/Ø/	na-á{[‘kúlikha]}		‘if s/he names’

Pattern 6 (§2.6)

(*)Imperative _{sg}	/H/	{[βoolítsá]}	‘seduce!’
	/Ø/	{[kúlí‘khá]}	‘name!’
(*)Imperative _{pl}	/H/	{[βoolítsí]}	‘seduce!’
	/Ø/	{[kúlí‘shí]}	‘name!’

Pattern 7 (§2.7)

*Hest. Perf.	/H/	y-a{[βóolíítsí]}	‘s/he seduced’
	/Ø/	y-a{[lákhú‘úlí]}	‘s/he released’
*Hest. Perf. Neg	/H/	y-a{[βóolíítsí]} tá	‘s/he did not seduce’
	/Ø/	y-a{[lákhú‘úlí]} tá	‘s/he did not release’

Pattern 8 (§2.8)

*Habitual	/H/	y-aá{[‘βóolítsá]}	‘s/he always seduces’
	/Ø/	y-aá{[‘sééβúlá]}	‘s/he always says bye’
*Habitual Neg	/H/	y-aá{[‘βóolítsá]} tá	‘s/he doesn’t always seduce’
	/Ø/	y-aá{[‘sééβúlá]} tá	‘s/he doesn’t always say bye’

The Path to Predictability

The present chapter seeks to trace the course of a diachronic re-analysis of the lexical contrast between */H/ vs. */Ø/ verbs reconstructed to Proto-Bantu (Stevick 1969) within the Luhya cluster of languages. In so doing, the chapter highlights a number of factors that catalyzed re-analysis of the lexical contrast and motivated associated tonal developments. A speaker preference for the position of morphological boundaries to be prosodically well-cued is identified as playing a central role in shaping the course of transitioning from a ‘conservative’ verbal tone system to a ‘predictable’ one.

Tonal melodies are commonly an exponent of tense, aspect, and mood in Bantu. Among the many factors which may influence the realization of tone in a particular verb form is the lexical class to which a verbal root belongs. Most contemporary Bantu languages may be characterized as ‘conservative’, maintaining the historical /H/ vs. /Ø/ contrast reconstructed for Proto-Bantu and a set of morpho-syntactic contexts in which this contrast is directly revealed. In Idakho (Bantu, Kenya, ida, JE411) infinitives, for example, /H/ verbs realize a H on the stem-initial mora while /Ø/ verbs surface all L. The only H appearing in the infinitival forms in (367) is contributed by the verbal root.

(367) Lexical contrast preserved in conservative languages: *Idakho*

*/H/			*/Ø/
xu[léera]	‘to bring’	xu[reeβa]	‘to bring’
xu[βúkula]	‘to take’	xu[lomaloma]	‘to talk’
xu[βóyong’ana]	‘to go around’	xu[kaβuluxaɲ:a]	‘to separate’

Not all contemporary Bantu languages have inherited the historical contrast as one between /H/ and /Ø/ verbs as in *Idakho*. Marlo (2008a, 2009a, 2013b:153-156) develops a typology of Bantu verbal tone systems based on reflexes of the Proto-Bantu */H/ vs. */Ø/ contrast, in which he identifies ‘conservative’, ‘predictable’, and ‘reversive’ verbal tone systems all within *Luhya*.

‘Predictable’ systems, in the sense of Odden (1989), have lost the lexical contrast; these languages have a single lexical tone class. An associated property of ‘predictable’ systems is the lack any morpho-syntactic context uninflected with a tonal melody. Cognate forms of the *Idakho* data above have strikingly different tonal properties in the *Nyala-West* variety of *Luhya*. *Nyala-West* infinitives are produced with an inflectional H spanning from the second stem syllable through the final.

(368) Lexical contrast lost in predictable languages: *Nyala-West*

Marlo (2007), Ebarb et al. (in prep)

*/H/			*/Ø/
o-xú[reerá]	‘to bring’	o-xú[reeβá]	‘to bring’
o-xú[βukúlá]	‘to take’	o-xú[lomálómá]	‘to talk’
o-xú[βodóxáná]	‘to go around’	o-xú[kaβúlá]	‘to separate’

‘Reversive’ verbal tone systems are intermediate between ‘conservative’ and ‘predictable’: they maintain a contrast between two lexical tone classes, as in ‘conservative’ systems, but lack a morpho-syntactic context in which verbs are uninflected with a tonal melody.

Additionally, details of the tonal melodies often suggest that the language has undergone a reanalysis whereby the lexical contrast is one between /L/ and /Ø/ verbs (hence, ‘reversive’). In (369), it can be seen that */Ø/ verbs in an historically uninflected context have an inflectional H spanning the entire verb stem, while */H/ verbs are all H on the stem except on the initial syllable, where the root L is expressed.

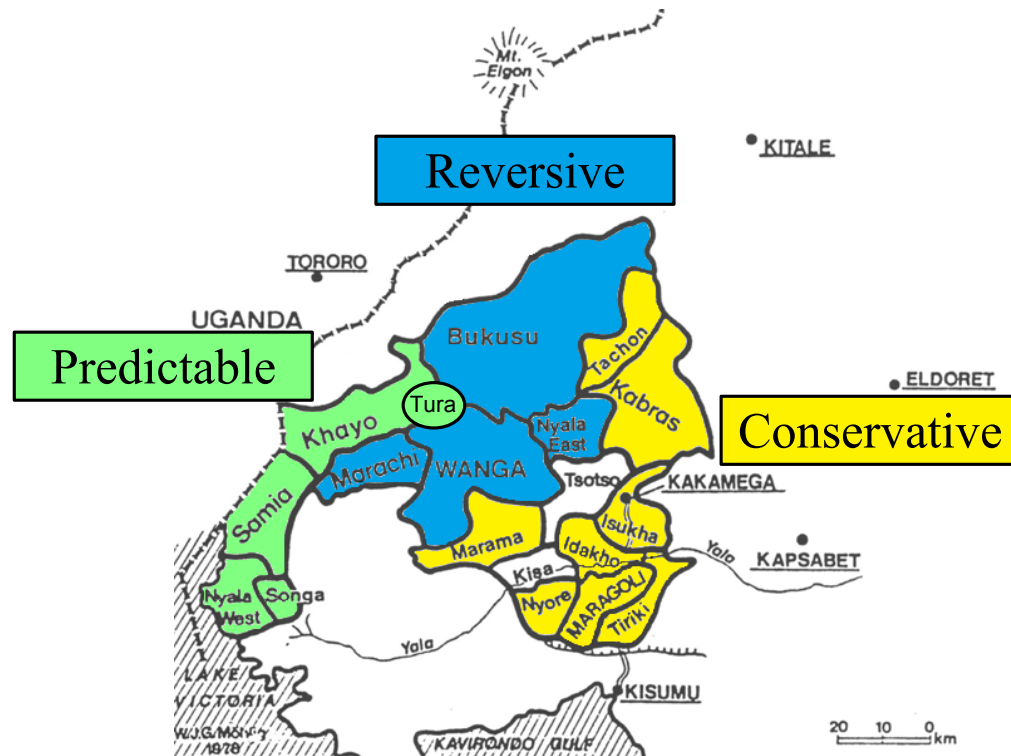
(369) Lexical contrast re-analyzed in reversive languages: *Nyala-East*

*/H/		*/Ø/	
o-xú[leechá]	‘to bring’	o-xú[chééβá]	‘to bring’
o-xú[xamáchá]	‘to take’	o-xú[láxúúlá]	‘to talk’
o-xú[wotoóxáná]	‘to go around’	o-xú[kíngúúlírá]	‘to separate’

Note that the term ‘reversive’ refers only to the reversal of historically /H/ verbal roots into synchronically /L/. With the exception of certain tense prefixes, this reversal appears not to have had consequences for the tonal specifications of other morphemes.

‘Conservative’ verbal tone systems are widespread within Bantu, and ‘predictable’ systems are well attested in parts of Kenya, the DRC, and Tanzania (Odden 1989, Marlo 2013b). Reversive languages are not as well attested or discussed (consult Marlo (2013b:154-156) for a concise summary of research on ‘reversive’ systems). The Luhya macrolanguage spoken in western Kenya is special in having multiple examples of all three types of verbal tone systems, while most macrolanguages have only one or two types. As the map in (370) shows, ‘conservative’ varieties are located to the east, and ‘predictable’ varieties to the west. Tonally intermediate ‘reversive’ system are also geographically intermediate. Comparing the synchronic systems of Luhya varieties from east to west sheds light on how the transition to from ‘conservative’ to ‘predictable’ system types must have progressed.

(370) Luhya dialect map; Reproduced from (7)



The present study is motivated by the research questions in (371), which have been asked in various forms and explored to varying degrees in a series of talks given by Michael Marlo in 2008a, 2009a, 2011b (with David Odden), and 2013a.

- (371) a. What is the correspondence between conservative, reversible, and predictable melodies?
 b. Why does every verbal context become inflected with a tonal melody?
 c. Why is the lexical contrast re-analyzed as between /L/ and /Ø/?
 d. Why is the lexical contrast neutralized?

The central thesis of the chapter is that tonal developments within Luhya have been guided by a speaker preference for prosodically well-cued morphological boundaries—a natural preference within the context of a linguistic system in which a heavy inflectional burden is borne by verbal tone melodies necessarily defined with reference to morphological bound-

aries. §3.1 seeks to demonstrate the role this preference has played in the extension of tonal melodies into historically uninflected contexts and §3.2 documents its role in the loss of the lexical contrast between */H/ and */Ø/ classes of verbs. §3.3 concludes.

3.1 Extension of Tonal Melodies into Historically Uninflected Contexts

Like infinitives, verbs in the Near Future are not inflected with a tonal melody in conservative varieties, but are so inflected in reversionary and predictable varieties. The present section argues that the introduction of tonal melodies in constructions like the Near Future, for which there is no historical precedence of tonal inflection, proceeded in a series of steps; a crucial first among these steps was driven forward by a preference for clear prosodic demarcation of morphological boundaries.

The argument will proceed as follows: first, I will describe the basic tonal properties of verbs in the Near Future across several conservative, reversionary, and predictable Luhya varieties. Second, I will sketch a proposal for the sequence of tonal developments which led to the predictable systems of western Luhya. I will then show how data from a context inflected with a melodic H, the Present tense, help explain the transition from one stage of development to the next.

In all conservative varieties, the root H surfaces on the initial syllable of the stem in */H/ verbs. Toneless verbs, on the other hand, surface all L. In Nyore and Logoori, the root H spreads leftward onto the tense prefix.

(372) The Near Future in tonally conservative varieties: ‘*s/he / they / we will...*’

Tiriki: Marlo (in prep); Tachoni: Odden (2009); Logoori: Leung (1991)				
	*/H/		*/Ø/	
Idakho	a-la[xálaka]	‘cut’	a-la[kulixa]	‘name’
	a-la[βóyong’ana]	‘go around’	a-la[kalushitsa]	‘return’
Tiriki	a-la[xálaka]	‘cut’	a-la[valitsa]	‘count’
	a-la[βóyong’ana]	‘go around’	a-la[kaluxana]	‘turn around’
Tachoni	baa-la[béka]	‘cut’	baa-la[lima]	‘cultivate’
	baa-la[téexa]	‘go around’	baa-la[chiinga]	‘carry’
Nyore	a-lá[xámara]	‘grab’	a-la[kulixa]	‘name’
	a-lá[xálaanga]	‘fry’	a-la[kiinguula]	‘raise up’
Logoori	a-rá[véga]	‘shave’	ku-ra[saamba]	‘burn’
	ku-rá[kálaga]	‘cut’	ku-ra[guriza]	‘sell’

The same context in reversive systems has a similar tonal profile, except that an inflectional H surfaces on the verb stem as well. In historically */H/ verbs, synchronically /L/, the inflectional H surfaces from the second through the final syllable; the inflectional H occupies all syllables of the stem in */Ø/ verbs.

In Wanga and Marachi, the tonal class of the verb predicts the surface tone of the tense prefix: in */H/ verbs it is L, in */Ø/ verbs, it is H. Both tonal classes are H throughout the entire stem, but */H/ verbs have downstep between the first and second syllables.

In the Nyala-East and Bukusu varieties, the tense prefix is always H. */H/ verbs are L on the initial syllable of the stem, but H on all other syllables. */Ø/ verbs have a level H which spans the entire stem.

(373) The Near Future in tonally reversionary varieties: ‘s/he will...’

Wanga: Ebarb et al. (in press); Marachi: Marlo (2007); Bukusu: Mutonyi (2000)				
	*/H/		*/Ø/	
Wanga	a-la[xó ¹ lólá]	‘cough’	a-lá[pú ¹ rúxá]	‘name’
Marachi	a-la[βú ¹ kúlá]	‘take’	a-lá[βákálá]	‘spread to dry’
	a-la[βó ¹ dóxáná]	‘go around’	a-lá[lómálómá]	‘turn around’
Nyala-E	a-lá[siindíxá]	‘push’	a-lá[kúlíxá]	‘name’
	a-lá[paangúlúlá]	‘disarrange’	a-lá[kííngúlúlá]	‘raise up’
Bukusu ¹	a-lá[βukúlá]	‘take’	a-la[lima]	‘cultivate’
	a-lá[xalákílá]	‘cut for’	a-la[kalama]	‘look up’

Finally, Near Future forms in predictable varieties are invariably inflected with an inflectional H span from the second through the final stem syllable in both historically */H/ and */Ø/ verbs.

(374) The Near Future in tonally predictable varieties: ‘s/he / will...’

Nyala-West: Marlo (2007); Khayo: Marlo (2009b); Tura: Marlo (2008b)					
*/H/			*/Ø/		
Nyala-W	a-ná[βukúlá]	‘take’	a-ná[kulá]	‘buy’	
	a-ná[siindíxá]	‘push’	a-ná[reeβá]	‘ask’	
Khayo	a-ná[βukúlá]	‘take’	a-ná[reeβá]	‘ask’	
	a-ná[fuuníxá]	‘cover’	a-ná[burúxá]	‘fly’	
Tura	a-lá[βukúlá]	‘take’	a-lá[βakálá]	‘set out to dry’	
	a-lá[xaráángá]	‘fry’			

The first step in the transition to predictability begins with the observation that, although conservative varieties do not inflect the Near Future with a tonal melody, they all attest a rule of *H Tone Anticipation* (48) which, in certain circumstances, generates stem tone patterns that are strikingly similar to those found in the same context in reversionary varieties (Marlo 2008a, 2009a; Marlo & Odden 2011b).

¹A tonal melody is not realized in */Ø/ Near Future forms without an object prefix in Bukusu, but will when there is an object prefix: a-lá{lu [kálámá]} ‘s/he will look up’ (Mutonyi 2000:224).

H Tone Anticipation is a cross-linguistically rare rule of leftward spreading by which H-toned post-verbal elements may spread onto the verb stem, as exemplified in the Tiriki data below. The H from **mulína** ‘friend’ and **kálaha** ‘slowly’ spread onto the verb; through the initial stem syllable in */Ø/ verbs, through the second stem syllable in */H/ verbs.

(375) H TONE ANTICIPATION in tonally conservative varieties: ‘s/he will...’

Tiriki: Marlo (2012, in prep)

*/H/			*/Ø/
a-la[rhúmula]	‘beat a farmer’	a-la[moloma]	‘talk quickly’
mulimi		vwaangu	
a-la[rhú ⁴ múlá]	‘beat a friend’	a-la[mólómá]	‘talk slowly’
múlína		kálaha	

One route by which a verbal tone system of the conservative type may develop into a system of the predictable type is sketched below.

Beginning from the Tiriki situation as depicted in (372) and (375), the first step is to innovate a rule whereby the root H spreads onto the tense prefix **la-**. This is the synchronic situation in Logoori (and likely Nyore as well).

(376) LEFTWARD DOUBLING in a tonally conservative variety: ‘they will...’

Logoori: Marlo & Odden (2011a)

*/H/					*/Ø/
va-rá[vé ⁴ gá]	gáráha	‘shave slowly’	va-rá[mórómá]	gáráha	‘talk quickly’

Leftward Doubling spreading root Hs onto the tense prefix in combination with *H Tone Anticipation* (48) spreading post-verbal Hs onto the tense prefix in */Ø/ verbs² allows such forms to eventually be re-analyzed as including a H-toned tense prefix **lá-** and a tonal

²In this respect, *H Tone Anticipation* in Logoori appears to differ from the same rule in Tiriki. In the Logoori, post-verbal Hs spread all the way through the tense prefix, but stops at the left edge of the stem in Tiriki.

melody which surfaces throughout most or all of the stem. Shortly, I will show how this reanalysis proceeds. Following this, I will argue that this re-analysis is reinforced or even primed by the emergence of a new tonal pattern in the Present tense, which comes to be inflected with a melodic H on the second syllable through the final in */H/ verbs and a melodic H from the initial syllable through the final in */Ø/ verbs.

Reanalyzing the forms in (376) above as involving a H-toned tense prefix and a melodic H as described above necessitates a concomitant re-analysis of downstep after the initial syllable in */H/ verbs. If one assumes that the tense prefix is toneless and the H span on the stem is not inflectional (assumptions which reflect the synchronic properties of conservative systems), downstep after the initial syllable is the natural outcome of spreading one H across several L-toned moras up until it abuts a phonologically distinct H via *H Tone Anticipation*. The root H spreads left onto the tense prefix by an innovative rule. No downstep is observed in */Ø/ verbs, in which the post-verbal H spreads clear onto the tense prefix, unimpeded by a lexical H tone.

Though no contemporary reversive system exhibits exactly this pattern, I hypothesize that the predictable tonal systems passed through a stage of development at which the surface stem tone patterns in (376) could be observed in Near Future forms both phrase-medially as well as phrase-finally. In such a system, the H spans in Near Future forms must be analyzed as inflectional. *H Tone Anticipation* cannot generate the H spans from the second and initial syllables through the final in */H/ and */Ø/ verbs, respectively, in phrase-final forms because there is no following H-toned word.

(377) Hypothetical next stage, the initial state of reversiveness: ‘*s/he will...*’

$\ast/H/$ $\ast/\emptyset/$
 a-lá[khá‘láká] (...) ‘cuts’ a-lá[kúlíkhá] (...) ‘names’

I argue that in $\ast/\emptyset/$ verbs, the observation that the tense prefix is H necessitates re-analyzing tense prefixes as underlyingly $/H/$. Tonal melodies in Luhya do not target positions outside of the macrostem, and pattern-specific spreading rules never result in H spans that extend beyond the left stem boundary—a generalization that notably does not apply to *H Tone Anticipation* in Logoori, as shown in (376). Once the H spanning the full length of the stem in $\ast/\emptyset/$ verbs is re-analyzed as inflectional, the H on the tense prefix may, and perhaps must, be re-analyzed as contributed by the tense prefix itself.

Once the tense prefix is analyzed as $/H/$, accounting for the pattern of downstep in $\ast/H/$ verbs requires a concomitant re-analysis of the lexical contrast as one between $/L/$ vs. $/\emptyset/$, rather than $/H/$ vs. $/\emptyset/$, if one assumes that downstep is observed only when a floating L intervenes between distinct phonological Hs.

The melodic H spans appearing in Near Future forms may be analyzed as triggering lowering of the root H via *Initial Lowering* (103)—an effect which is observed within conservative Luhya in tonally inflected constructions.³ At this stage of development, there are no contexts in which the root H itself manages to surface. Rather than assuming that root Hs are invariably lowered in all contexts (which lack object prefixes), it is simpler to assume that historically $/H/$ verbs are in fact synchronically $/L/$.

Downstep in $\ast/H/$ verbs at the hypothesized stage may be analyzed in the following way. The principles of melodic H assignment generate a melodic H span from the second

³*Initial Lowering* may be unique to Idakho, with other Bantu languages within and outside of Luhya deriving similar tonal patterns through *Reverse Meeussen’s Rule*, which deletes Hs before an adjacent H. See Ebarb et al. (in press) for some discussion how these rules play a role in Luhya tonology.

stem syllable through the final. The H of the tense prefix **lá-** then spreads onto the initial syllable of the stem via a rule *Prefix Spread*, delinking the root L in the process. Downstep is observed between the H span of the tense prefix and that of the melodic H in this case because of the floating L that intervenes between the two. Downstep is not observed in */Ø/ verbs because no floating L intervenes between the H of the tense prefix on the pre-stem syllable and the melodic H which spans from the initial syllable through the final.

The next step in the transition to predictability is one at which, as in the previous stage, the tense prefix is H-toned **lá-** and the melodic H surfaces on the second stem syllable through the final in historically /H/, but synchronically /L/, verbs and on the initial syllable of the stem through the final in */Ø/ verbs. The difference is that the tense prefix H does not shift onto the stem-initial syllable at this stage. This is the synchronic situation in Nyala-East.

(378) No PREFIXAL SPREAD in a tonally reversive variety: ‘s/he will...’

Nyala-East

*/H/

a-lá[siindíxá] ‘push’

*/Ø/

a-lá[kúlíxá] ‘name’

The final step in the transition to predictability in the Near Future is the neutralization of the lexical contrast. In all of Luhya’s documented predictable varieties, the melody has neutralized in favor of the pattern associated with */H/ verbs, namely: melodic H on the second stem syllable through the final. This is shown in the Tura data below.

(379) Neutralizing the lexical contrast in a tonally predictable variety: ‘s/he will...’

Tura: Marlo (2008b)

*/H/

a-lá[fuuníxá] ‘cover’

*/Ø/

a-lá[βakálá] ‘set out to dry’

The development of tonal properties in the Near Future in the transition from tonal conservativeness to predictability is summarized below.

(380) Summary: From no melody to σ 2-FV ‘s/he / they will...’

Stage 1 H Tone Anticipation (*Tiriki*, conservative)

a-la[rhú ⁺ múlá] múlína	a-la[mólómá] múlína
‘beat a friend’	‘talk to a friend’

Stage 2 Hs spread onto the tense prefix (*Logoori*, conservative)

va-rá[vé ⁺ gá] gáráha	va-rá[mólómá] gáráha
‘shave slowly’	‘talk slowly’

Stage 3 Extend pattern to phrase-final verbs, *la- > lá- (Hypothetical, reversion)

a-lá[khá ⁺ láká]	a-lá[kúlíxá]
‘cut’	‘name’

Stage 4 Lose Prefixal Spreading (*Nyala-East*, reversion)

a-lá[siindíxá]	a-lá[kúlíxá]
‘push’	‘name’

Stage 5 Neutralize the lexical contrast (*Tura*, predictable)

a-lá[fuuníxá]	a-lá[βakálá]
‘cover’	‘set to dry’

The central thesis of this chapter helps to motivate the transition between Stages 2 and 3. That is, a preference for prosodically well-cued morphological boundaries has catalyzed the extension of a stem tone pattern found only in phrase-medial forms in which the verb is followed by a H-toned word to other environments. These other environments include

both phrase-final forms as well as phrase-medial forms in which the verb is followed by a toneless word.

I argue that the extension of the $\sigma 2$ -FV / $\sigma 1$ -FV pattern did not begin as a tonal melody in the Near Future nor in any other historically uninflected constructions. Instead, I propose that this melody first emerged as such in the Present.⁴

The Present tense is marked in Tiriki by a melodic H that targets the second stem syllable through the penult in /H/ verbs and the second stem mora in /Ø/ verbs. In addition, it is characterized by lowering of the root H in forms lacking an object prefix.

(381) The Present in tonally conservative varieties, Phrase-Final: ‘s/he is...’

Tiriki (Marlo in prep): */H/, H_M on $\sigma 3$; */Ø/, H_M on $\mu 2$

*/H/		*/Ø/
a[voyóng’ánaánga]	‘going around’	a[cheéndaanga] ‘walking’

The Present in tonally conservative varieties like Tiriki has the unusual property whereby the melodic H is lost phrase-medially. *Initial Lowering* is triggered by the presence of a melodic H. Though its trigger is lost phrase-medially, the effects of *Initial Lowering* persist phrase-medially, and the H of post-verbal words spreads onto the stem via *H Tone Anticipation*. Note that spreading terminates immediately right of the lowered root H in */H/ verbs rather than extending onto the stem-initial mora as in */Ø/ verbs.

⁴In Idakho, the generalizations asserted herein regarding the Present tense apply just as much to affirmative imperatives lacking object prefixes (Pattern 6, §2.6), Indefinite Future and Indefinite Future Negative forms (Pattern 5b, §2.5.2), and other constructions related to the present (Pattern 5a, §2.5.1).

- (382) The Present in tonally conservative varieties, Phrase-Medial: ‘*s/he is...quickly (vwaangu) / slowly (kálaha)*’

Tiriki (Marlo in prep)

***/H/**

***/Ø/**

a[voyong’anaa] vwaangu	‘going around’	a[cheendaa] vwaangu	‘walking’
a[voyóng’ánaá] kálaha	‘going around’	a[chééndáá] kálaha	‘walking’

In combination with the Present’s lowering of the root H, the loss of the melodic H in phrase-medial forms creates a scenario in which there is no tonal cue for the stem boundary in either tonal class. This is the case in particular when the post-verbal word is toneless.

The tonal pattern associated with phrase-medial forms followed by a H-toned word generalizes to all phrase-medial forms. I argue that this is because doing so improves the prosodic cuing of the left morphological stem boundary in phrase-medial forms followed by toneless words, in which there is no H whose position can be described with reference to the verb stem.

This gives rise to situations like what is found synchronically in Marachi. Marachi realizes one tonal pattern in all phrase-final forms, but another in all phrase-medial forms, regardless of the tonal properties of the following word. Note that the pattern characterizing phrase-medial forms is the same as described above for Present tense verbs followed by a H-toned word in Tiriki.

- (383) The Present in (one) tonally reversive variety: ‘*s/he is...*’

Marachi (Marlo 2007)

***/H/**

***/Ø/**

a[karáंगाanga]	‘frying’	a[léxúúlaanga]	‘releasing’
a[karáángáángá]...	‘frying...’	a[léxúúláángá]...	‘releasing...’

The contrast between phrase-medial and phrase-final forms is subsequently leveled in favor of the phrase-medial pattern. This is the synchronic situation in the reversive Nyala-East

variety. Note that the thesis of this chapter does not offer an explanation for why the phrase-medial pattern is generalized to phrase-final forms rather than the reverse.

(384) The Present in (one) tonally reversible variety: ‘*s/he is...*’

Nyala-East

***/H/**

a[xamácháángá] ‘taking’
a[xamácháángá]... ‘taking...’

***/Ø/**

a[lóóndáángá] ‘following’
a[lóóndáángá]... ‘following...’

Once the surface stem tone properties of ***/H/** and ***/Ø/** verbs described above are analyzed as a bona fide tonal melody, as it has been in Nyala-East, the final step is then to extend the novel tonal melodies into historically uninflected contexts like the Near Future. The H spans on ***/H/** and ***/Ø/** verb stems that result from anticipating post verbal Hs onto the verb stem are re-analyzed as expressing the same tonal melody exhibited by the Present. The result is hypothetical Stage 3 proposed in (380) above and repeated below.

(385) Hypothesized Stage 3 ‘*s/he is cutting / naming*’

***/H/**

a-lá [xá↓láká]

Tense Prefix H

Inflectional H

***/Ø/**

a-lá [kúlíxá]

Tense Prefix H

Inflectional H

Above, I have argued that a preference for prosodically well-cued morphological boundaries played a crucial role in re-analyzing the surface tonal patterns of Present tense verbs followed by H-toned words as an inflectional tonal melody. This set the stage for parallel stem tone patterns in historically uninflected contexts like the Near Future to be re-analyzed in the same way.

In the following section, I will show how the same preference is contributing to the loss of the lexical contrast between */H/ and */Ø/ within Luhya.

3.2 Loss of the Lexical Contrast

The present section describes two cases in which the Proto-Bantu lexical contrast between */H/ and */Ø/ verbs has been neutralized in vowel-initial stems. In one case, neutralization favors the tonal pattern associated with */H/ verbs; the other neutralizes in favor of the tonal pattern associated with */Ø/. It will be argued that a preference for clear prosodic cues of morphological boundaries accounts for the direction of the neutralization in each case.

As a corollary to the above, I argue that the proffered analysis correctly predicts that the neutralization should have originated in vowel-initial stems. The corollary is based upon the premise that morphological segmentation is made easier when morphological boundaries align with syllable boundaries (or, conversely, that morphological segmentation is made more difficult when morphological boundaries do not align with syllable boundaries). The premise is supported in the work of Downing (1998a, 1998b, 1999, 2006, 2009b) and Marlo (2014), in which numerous examples of exceptional patterns of morphology and phonology in onsetless syllables are attributed to morpho-prosodic misalignment, particularly in the areas of reduplication and tone.

The first case involves an asymmetry in the ratio between vowel-initial verbs that realize the tonal pattern associated with */H/ verbs and those which realize the melody associated with */Ø/ verbs in historically uninflected constructions. Marlo (2007:42, fn15; 2009a) observed the following asymmetry in the lexicon of the reversive Marachi variety.

(386) Lexical asymmetries in Marachi

- a. Some */Ø/ verbs are variably produced with the */H/ pattern.
- b. Some */Ø/ verbs are categorically produced with the */H/ pattern.
- c. All vowel-initial */Ø/ roots longer than -VC- take the */H/ pattern

The observations above inspire the following questions: (i) why should */Ø/ verbs be taking on the */H/ pattern?, and (ii) why is it that vowel-initial roots are disproportionately affected?

The asymmetry in vowel-initial roots appears to be emerging in the tonally conservative varieties as well. The table below reports tallies of the number of synchronically /H/ and /Ø/ vowel-initial verbs I identified during my 2012-2013 fieldwork. The figures represented here are based on vocabulary lists generated using a compilation, appended in Marlo (2013b:215-230), of approximately 700 Proto-Bantu reconstructions as elicitation prompts. The compilation includes 46 */H/ and 37 */Ø/ reconstructions for *j initial roots, from whence many of Luhya's synchronically vowel-initial roots descend.⁵

(387) /H/ vs. /Ø/ asymmetry in conservative Luhya vowel-initial verbs

	Idakho		Nyore		Kabras		Marama	
	/H/	/Ø/	/H/	/Ø/	/H/	/Ø/	/H/	/Ø/
C-Initial	209	194	202	210	177	192	172	190
V-Initial	53	22	59	14	51	35	40	27

⁵Morphology may be playing a larger role in this transition than the present work recognizes. In Idakho, /Ø/ vowel-initial verbs reliably surface all L in most tonally uninflected contexts (such as in Infinitives and the Near Future). However, the same verbs are all invariably produced with a H on the initial mora of the stem in the Perfect—this despite the fact that consonant-initial /Ø/ verbs consistently surface all L in the same context (cf. §2.1.1.5).

The figures above show an even distribution between /H/ and /Ø/ in verbs with consonant initial verb roots. Contrastively, in verbs with vowel-initial roots, that ratio is strongly skewed in favor of /H/.

Consider that in contexts not inflected by a tonal melody, phrase-final /Ø/ verbs do not have any tonal cues signaling the position of the left stem boundary. On the other hand, /H/ verbs have a strong prosodic cue of that boundary, surfacing with a H on the initial mora of the stem.⁶

(388) Prosodic cuing in conservative varieties: Near Future ‘*s/he will...*’

Idakho

*/H/

a-la[xálaka] ‘cut’

a-la[áβuxap:a] ‘separate’

*/Ø/

a-la[kulixa] ‘name’

a-la[ambaxana] ‘refuse’

I argue that the need for a clear cue of stem boundary position is greater in /Ø/ vowel-initial stems than in consonant-initial verbs because, in the vowel-initial stems, the left edge of the morphological stem does not coincide with a syllable boundary. Consequently, the tonal pattern associated with /H/ verbs is extended to /Ø/ verbs to better cue the stem boundary position.

Analyzing the gradual neutralization of the lexical contrast as described above provides for a unified account of two relatable observations: (i) the neutralization favors the pattern associated with /H/ verbs and (ii) vowel-initial stems are the first to exhibit the asymmetry.

The second case of diachronic change in vowel-initial verbs relates to asymmetric patterns of free variation in the conservative Marama variety. In Marama, the Present

⁶Idakho is noteworthy in allowing rising tones in forms like a-la[áβuxap:a] ‘s/he will separate’. In Logoori, parallel forms would be produced with a level H as the result of a regular phonological rule whereby rising tones are eliminated (Leung 1991, Marlo & Odden 2011a).

Negative is inflected with a tonal melody characterized by lowering of the root H and an inflectional H span aligned with the left stem boundary in /Ø/ verbs.

(389) C-Initial Tonal Patterns in Marama: Present Negative ‘*s/he is not...*’

*/H/		*/Ø/	
sh-a[βukulaanga] tá	‘taking’	sh-a[kúlíxaanga] tá	‘naming’
sh-a[teeshelaanga] tá	‘cooking for’	sh-a[sééβúlaanga] tá	‘saying bye’

The Present Negative is tonally stable in verbs with consonant-initial roots, but there is an asymmetric pattern of variation in vowel-initial verbs. The */H/ vowel-initial verbs may take the surface tonal pattern associated with either tonal class, but */Ø/ verbs are invariantly produced with the historically appropriate tonal pattern.

(390) V-Initial Tonal Patterns in Marama: Present Negative ‘*s/he is not...*’

*/H/			*/Ø/
shy-a[akáánilaanga] tá	‘meeting’	shy-e[eyáánga] tá	‘wanting’
~shy-a[akaanilaanga] tá		(*shy-e[eyaanga] tá)	

I analyze the asymmetry above as extending the tonal pattern associated with */Ø/ to */H/ verbs. This is done because the tonal pattern associated with */Ø/ verbs provides a prosodic cue of stem boundary position, while the pattern associated with */H/ verbs does not.

The analysis above again provides a unified account of two relatable observations: (i) the neutralization favors the pattern associated with /Ø/ verbs, unlike the previous case, and (ii) vowel-initial stems are the first to exhibit the asymmetry.

In addition to extending to verbs with /H/ vowel-initial roots, the pattern associated with */Ø/ verbs subsequently generalized to consonant /H/ verbs in the predictable varieties.

(391) The Present Negative in tonally predictable varieties:

Nyala-West: Marlo (2007); Khayo: Marlo (2009b); Tura: Marlo (2008b)

Nyala-W	si-xu[paangúlula]	‘we are not disarranging’
Khayo	sy-áa[siindíxa]	‘s/he is not pushing’
Tura	sí-βa[fuundíxa]	‘they are not knotting’

In most conservative varieties other than Marama, /Ø/ verbs take a melodic H either on the second stem mora or on both the first and second stem moras in the Present Negative. In consonant-initial stems, the melodic H surfaces on the second stem syllable in these varieties only when the initial syllable is long, cf. Idakho: **sh-a[kulíxa]** **tá** ‘s/he is not naming’ vs. **sh-a[seeéβula]** **tá** ‘s/he is not saying goodbye’. However, the melodic H invariably surfaces on the second stem mora in vowel-initial stems, even in Idakho: **a-khe[eyéla]** **tá** ‘let him/her not wipe for’.⁷ While

The observation that all known predictable Luhya varieties have cognate melodies that, as in Marama, invariably target the second stem syllable reinforces the notion that this tonal change within Luhya is emanating from verb forms with vowel-initial roots, morpho-prosodically misaligned as they are.

In this section, I have argued that two cases of diachronic change in vowel-initial stems within Luhya may be analyzed as extending tonal melodies where doing so enhances prosodic cuing of the left stem boundary.

⁷This verb form is from the Subjunctive Negative, rather than the Present Negative. My corpus of Idakho data does not include vowel-initial data for the version of the Present Negative that takes the relevant tonal melody, but the Subjunctive Negative selects the same tonal melody and so serves as a suitable substitution.

3.3 Summary

In this chapter, I have traced the course of how several surface tonal patterns have developed in the transition from ‘conservative’ Luhya varieties to ‘predictable’. In §3.1 I explain how tonal melodies emerged in contexts not historically inflected with a tonal melody, and in §3.2, I identify vowel-initial verb roots as catalysts in the neutralization of the lexical contrast. I argue that aspects of both phenomena may be analyzed as extending tonal melodies to novel contexts in the service of better signalling morphological boundaries.

Conclusions

Luhya verbal tone systems are complex. One of their striking features is the rich variety of positions targeted for melodic H assignment, and describing those positions frequently requires reference to multiple levels of morphological and prosodic structure. Given the complexity of Luhya verbal tone systems, it may not be particularly surprising that some Luhya varieties have developed in such a way as to enhance synchronicity between the morphological and phonological component. This dissertation has endeavored to provide extensive, novel documentation of Idakho verbal tone (Chapter 2) and account for a suite of diachronic changes evidenced in the diversity within the Luhya macrolanguage.

In Chapter 2 I show that Idakho has a particularly rich system of verbal tone inflection, exhibiting 12 distinct tonal melodies which may be organized into 8 broad primary patterns. Each pattern is distinguished by the number of melodic H tones contributed by the morpho-syntactic context (0, 1 or 2) and the set of tonal rules it motivates, some of which may be construction specific. For an overview of the tonal melodies and their basic properties, refer to §1.5.

In addition, Idakho attests several notable phenomena of broad general interest, some of which relate to the licensing of passive Hs, the loss of melodic Hs in phrase-medial position, subject-induced lowering of lexical Hs, and the tonal effects of prefixal negation markers.

Passive Hs are licensed only under disjunctively defined conditions (§2.2.2.4). Passive Hs may surface in contexts inflected with a melodic H either when the melodic H

ultimately surfaces on the verb stem as well or, failing that, when the perfective suffix is present. The available passive data relating to Present tense forms may be at odds with this characterization, because passive Hs are expected to surface in this context, but do so only as one of two free tonal variants, the second of which excludes the passive H. It also remains unknown at this time how the phrase-medial deletion of melodic Hs in a particular set of constructions interacts with the licensing of passive Hs. The relevant constructions include those exhibiting the properties of Patterns 5a-b (§2.5.1-2.5.2) and, in forms with an object prefix, Pattern 6 (§2.6.1).

An additional issue in Idakho verbal tone that merits continued investigation is the exceptional lowering of root and object prefix Hs following first and second person subject prefixes in several constructions not inflected with a tonal melody. §2.1.1.3 proffers an analysis in which first and second person subject prefixes underlyingly bear a L which spreads rightward through the initial mora of the stem. This approach may be descriptively adequate, though additional data is needed to decide between this and other plausible analyses.

Finally, during the course of my study, I identified two constructions in which negation may be expressed either with or without a prefixal marker: **shi-** in the Near Future (cf. fn 9) and **kha-** in the Subjunctive (§2.3.1.4). In both cases, the presence of the negative marker correlates with a shift to a default tonal melody (in particular, Pattern 2a:§2.2.1). It remains to be seen if prefixal negative markers are optional in other negative contexts and whether the presence of the negative prefix always correlates with a shift to the default melody.

In Chapter 3, I demonstrate how a preference for strong prosodic cuing of morphological boundaries, the left stem boundary in particular, motivates a suite of historical

developments within Luhya. In particular, I implicate this preference in the extension of tonal melodies into contexts with no historical precedence for tonal inflection (§3.1) and the neutralization of the contrast between */H/ and */Ø/ verbs reconstructed for Proto-Bantu.

A

Idakho Verbal Tone Questionnaire

Appendix A is composed of three parts: the primary verbal tone questionnaire which informs the overwhelming majority of the preceding description in Chapter 2, and two pilot surveys. The first surveys the tonal influence that two enclitics exert on verbal forms, and the second very briefly surveys the properties of each of the constructions considered in the primary questionnaire when passivized and relativized and when put in interrogative contexts. Both of the primary consultants for the study responded to the primary questionnaire, while only SB responded to the latter two surveys.

This appendix is included as a reference for the companion audio archive. With support from Pomona College, the audio archive may currently be downloaded freely via <https://pomona.box.com/s/wqjx59t87opqg94qdbhf>. The audio files contained therein are named according to the following convention: "Speaker Name_Paradigm #_Repetition #.wav". Below, paradigm numbers are indicated in parentheses before each set of verbal forms. In the archive, repetition numbers are only indicated if the relevant paradigm was recorded multiple times.

A.1 Primary Questionnaire

The questionnaire below serves as the primary basis for the preceding description of Idakho verbal tone. The version presented below differs from the version presented to the study's consultants in several ways, which are articulated presently.

The questionnaire presented to the study's consultants includes only one verbal form prompt per line, with full glosses appearing to the right as shown in (16). To conserve space, the questionnaire prompts below are presented in two columns, wherever possible, with a gloss only for the root appearing to the right of each prompt. Additionally, especially long glosses have been simplified or reduced, for example: what appeared as 'ask repeatedly' in the administered questionnaire appears below as 'ask (iter)', just as 'bend to one's will' in the administered questionnaire appears simply as 'bend' below. Finally, many morpheme boundaries appear in the administered questionnaire, but are excluded below.

The transcriptions for each construction largely reflect the characterization provided in Chapter 2, however other tonal variants are not represented except when they constitute a clearly more common variant. The preceding description, which acknowledges many such tonal variants, may be consulted for some discussion of how such variants may be derived from or are related to the tonal melodies characterized as "basic" above. Furthermore, transcriptions of phrase-medial forms may be inconsistent with respect to whether *Pre-Penultimate Doubling* will apply when doing so would spread a melodic H onto a mora immediately preceding a post-verbal element with an initial H; such forms merit further verification.

Phrase-medial prompts include one of three post-verbal words: **mú'yáyi** 'boy', **musáatsa** 'man', and **muundu** 'person'. Forms with each of these post-verbal words

were presented separately during consultant interviews, but they are collapsed into a single prompt in this appendix, e.g. **ala [béka] mú'yáyi/músáatsa/muundu**. The effects of *H Tone Anticipation* are not represented in the collapsed prompts.

The verb forms presented below are representative of those appearing in the version of the questionnaire presented to SB. There are a number of regular differences between the version of the questionnaire presented to SB and that presented to JI. For instance, JI prefers **khu [kalukhitsa]** for 'to return' and **táawe** for the negative particle, while SB prefers **khu [kalushitsa]** and **tá**, respectively, among other differences.

Researchers using the appendix as a data source should also note the following: First, three items regularly appear in paradigms of the wrong lexical class, in particular, those meaning 'admire', 'smack', and 'belch'. Each of these appear to involve /Ø/ roots with a lexicalized reflexive object prefix, though their semantics are idiosyncratic and no longer transparently reflexive. These were erroneously included in paradigms involving /H/ vowel-initial roots. Second, long word-final syllables are not represented as such. Instead, the language community's somewhat standard orthographic conventions are adhered to throughout, and so the distinction between, for example **ala{ [khúa] }** 's/he will pay dowry' (bimoraic) and **ala{ [khwá] }** 'tá' 's/he will not pay dowry' (monomoraic) is not represented. Third, [b] and [β] are both represented orthographically simply as , though the distribution of these two allophones are predictable. In particular, [b] appears before nasals, while [β] appears elsewhere. Additionally, the root <lingakanyinya>, meaning 'crumple', is almost always reduced to **[lingaɲ:a]**.

Finally, forms which combine the verb meaning 'grind' with the third person singular object prefix convey a strange meaning, whose interpretation would have to be metaphorical and may not be immediately understood. It occurs to me now that it may have been

better to simply substitute the third person singular object prefix for the Class 14 prefix, which may refer to readily grindable things, e.g., **βusi** ‘flour’ and **βulé** ‘millet’.

A.1.1 Near Future: Pattern 1a

(1) /H/ C-Initial ‘s/he will...’

ala[rá]	‘bury’	ala[ng’wá]	‘drink’
ala[lía]	‘eat’	ala[khwá]	‘pay dowry’
ala[lúma]	‘bite’	ala[béka]	‘shave’
ala[téekha]	‘cook’	ala[léera]	‘bring’
ala[khálaka]	‘cut’	ala[kálaanga]	‘fry’
ala[sítaaka]	‘accuse’	ala[bóolitsa]	‘seduce’
ala[saatsila]	‘betray’	ala[sáanditsa]	‘thank’
ala[khóng’oonda]	‘knock’	ala[bóholola]	‘untie’
ala[bóyong’ana]	‘go around’	ala[ng’óng’oolitsa]	‘tease’
ala[língakanyinya]	‘crumple’		

(2) /H/ V-Initial ‘s/he will...’

al[iíra]	‘kill’	al[iíkoomba]	‘admire’
al[iísiaka]	‘smack’	al[iíkobola]	‘belch’
al[oónonyinya]	‘spoil’	al[aábukhanyinya]	‘separate’

(3) /Ø/ C-Initial ‘s/he will...’

ala[tsia]	‘go’	ala[kwa]	‘fall’
ala[lekha]	‘leave’	ala[reeba]	‘ask’
ala[loonda]	‘follow’	ala[sosana]	‘resemble’
ala[homoola]	‘massage’	ala[lakhuula]	‘release’
ala[seebula]	‘say bye’	ala[hoombelitsa]	‘comfort’
ala[kalushitsa]	‘return’	ala[siinjilitsa]	‘make stand’
ala[reebareeba]	‘ask (iter)’	ala[kalukhanyinya]	‘turn over’
ala[sebulukhanyinya]	‘scatter’		

(4) /Ø/ V-Initial 's/he will...'

al[eenya]	'want'	al[eeyela]	'wipe for'
al[iiluula]	'winnow'	al[aambakhana]	'refuse'
al[eelelitsa]	'hang up'		

(5) /H/ C-Initial + OP 's/he will...him/her'

alamú[ra]	'bury'	alamú[khwa]	'pay dowry'
alamú[beka]	'shave'	alamú[leera]	'bring'
alamú[khalaka]	'cut'	alamú[sitaaka]	'accuse'
alamú[boolitsa]	'seduce'	alamú[khong'oonda]	'knock'
alamú[tsuunzuuna]	'suck'	alamú[boholola]	'untie'
alamú[boyong'ana]	'go around'	alamú[ng'ong'oolitsa]	'tease'
alamú[lingakanyinya]	'bend'		

(6) /H/ V-Initial + OP 's/he will...him/her'

alamw[íira]	'kill'	alamw[íikoomba]	'admire'
alamw[íisiaka]	'smack'	alamw[óononyinya]	'spoil'
alamw[áabukhanyinya]	'separate'		

(7) /Ø/ C-Initial + OP 's/he will...him/her {mu-} / them {ba-}'

alamú[tsia]	'go for'	alamú[lekha]	'leave'
alamú[loonda]	'follow'	alamú[chimila]	'hold'
alamú[lakhuula]	'release'	alamú[seebula]	'say bye to'
alamú[hoombelitsa]	'comfort'	alamú[kalushitsa]	'return'
alamú[siinjilitsa]	'make...stand'	alamú[reebareeba]	'ask (iter)'
alamú[kalukhanyinya]	'turn...over'	alabá[sebulukhanyinya]	'scatter'

(8) /Ø/ V-Initial + OP 's/he will...him/her {mw-} / it₁₄ {bw-}'

alamw[éenyá]	‘want’	alamw[éeyela]	‘wipe for’
alabw[íiluula]	‘winnow’	alamw[áambakhana]	‘refuse’
alamw[éeleelitsa]	‘hang...up’		

(9) /H/ C-Initial + OP_{1sg} ‘s/he will...me’

alaá[ria]	‘fear’	alaá[khwa]	‘pay dowry’
alaá[mbeka]	‘shave’	alaá[ndeera]	‘bring’
alaá[khalaka]	‘cut’	alaá[sitaaka]	‘accuse’
alaá[mboolitsa]	‘seduce’	alaá[khong’oonda]	‘knock’
alaá[ndzuunzuuna]	‘suck’	alaá[mboholola]	‘untie’
alaá[mboyong’ana]	‘go around’	alaá[ng’ong’oolitsa]	‘tease’
alaá[ningakanyinya]	‘bend’		

(10) /H/ V-Initial + OP_{1sg} ‘s/he will...me’

alaá[nzira]	‘kill’	alaá[nzikoomba]	‘admire’
alaá[nzisiaka]	‘smack’	alaá[nzononyinya]	‘spoil’
alaá[nzabukhanyinya]	‘separate’		

(11) /Ø/ C-Initial + OP_{1sg} ‘s/he will...me’

alaá[ndekha]	‘leave’	alaá[noonda]	‘follow’
alaá[njimila]	‘hold’	alaá[ndakhuula]	‘release’
alaá[seebula]	‘say bye to’	alaá[mboombelitsa]	‘comfort’
alaá[siinjilitsa]	‘make...stand’	alaá[ndeebandeeba]	‘ask (iter)’
alaá[ngalukhanyinya]	‘turn...over’		

(12) /Ø/ V-Initial + OP_{1sg} ‘s/he will...me’

alaá[nzenya]	‘want’	alaá[nzeyela]	‘wipe for’
alaá[nyambakhana]	‘refuse’	alaá[nzeleelitsa]	‘carry...hanging’

(13) /H/ C-Initial + OP_{refl} 's/he will...him/herself'

alií[ra]	'bury'	alií[khwa]	'pay dowry'
alií[beka]	'shave'	alií[suunga]	'hang'
alií[khalaka]	'cut'	alií[sitaaka]	'accuse'
alií[saanditsa]	'thank'	alií[khong'oonda]	'knock'
alií[boholola]	'untie'		

(14) /H/ V-Initial + OP_{refl} 's/he will...him/herself'

alií[yira]	'kill'	alií[yikoomba]	'admire'
alií[yisiaka]	'smack'	alií[yononyinya]	'spoil'
alií[yabukhanyinya]	'separate'		

(15) /Ø/ C-Initial + OP_{refl} 's/he will...him/herself'

alií[kama]	'shelter'	alií[siinga]	'bathe'
alií[kulikha]	'name'	alií[naabula]	'undress'
alií[lakhuula]	'release'	alií[hoombelitsa]	'comfort'
alií[siinjilitsa]	'make...stand'	alií[reebareeba]	'ask (iter)'
alií[kalukhanyinya]	'turn...over'		

(16) /Ø/ V-Initial + OP_{refl} 's/he will...him/herself'

alií[yenya]	'want'	alií[yeyela]	'wipe for'
alií[yambakhana]	'refuse'	alií[yeleelitsa]	'carry...hanging'

(17) /H/ C-Initial + OP + OP_{1sg} 's/he will...him/her for me'

alamúu[ndeela]	'bury'	alamúu[mbechela]	'shave'
alamúu[ndeerela]	'bring'	alamúu[khalachila]	'cut'
alamúu[sitaachila]	'accuse'	alamúu[mboolitsila]	'seduce'

alamúu[mbohololela] ‘untie’

(18) /H/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

alamúu[nzirila]	‘kill’	alamúu[nzechitsila]	‘admire’
alamúu[nzisiachila]	‘smack’	alamúu[nzononyinyila]	‘spoil’
alamúu[nzabukhanyinyila]	‘separate’		

(19) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

alamúu[nziila]	‘go for’	alamúu[ndeshela]	‘leave’
alamúu[noondela]	‘follow’	alamúu[ngulishila]	‘name’
alamúu[ndakhuulila]	‘release’	alamúu[seebulila]	‘say bye to’
alamúu[mboombelitsila]	‘comfort’	alamúu[siinjilitsila]	‘make...stand’

(20) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-}for me’

alamúu[nzeyela]	‘wipe’	alakúu[nzashitsila]	‘light for’
alabúu[nziluulila]	‘refuse’	alalúu[nzitsulitsila]	‘fill’
alakúu[nzeleelitsila]	‘hang’		

(21) /H/ C-Initial Phrase-Medial ‘s/he will...the man {musáatsa} /

the boy {mú⁺yáyi} / someone {muundu}’

ala[rá]	musáatsa/mú ⁺ yáyi/muundu	‘bury’
ala[béka]	musáatsa/mú ⁺ yáyi/muundu	‘shave’
ala[léera]	musáatsa/mú ⁺ yáyi/muundu	‘bring’
ala[khálaka]	musáatsa/mú ⁺ yáyi/muundu	‘cut’
ala[sítaaka]	musáatsa/mú ⁺ yáyi/muundu	‘accuse’
ala[bóolitsa]	musáatsa/mú ⁺ yáyi/muundu	‘seduce’
ala[khóng’oonda]	musáatsa/mú ⁺ yáyi/muundu	‘knock’
ala[bóholola]	musáatsa/mú ⁺ yáyi/muundu	‘untie’
ala[búkaanila]	musáatsa/mú ⁺ yáyi/muundu	‘meet’
ala[ng’óng’oolitsa]	musáatsa/mú ⁺ yáyi/muundu	‘tease’

(22) /Ø/ C-Initial Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu}'

ala[tsia]	musáatsa/mú ⁺ yáyí/muundu	'go for'
ala[lekha]	musáatsa/mú ⁺ yáyí/muundu	'leave'
ala[loonda]	musáatsa/mú ⁺ yáyí/muundu	'follow'
ala[kulikha]	musáatsa/mú ⁺ yáyí/muundu	'name'
ala[lakhuula]	musáatsa/mú ⁺ yáyí/muundu	'release'
ala[seebula]	musáatsa/mú ⁺ yáyí/muundu	'say bye to'
ala[hoombelitsa]	musáatsa/mú ⁺ yáyí/muundu	'comfort'
ala[kalushitsa]	musáatsa/mú ⁺ yáyí/muundu	'return'
ala[siinjilitsa]	musáatsa/mú ⁺ yáyí/muundu	'make...stand'
ala[reebareeba]	musáatsa/mú ⁺ yáyí/muundu	'ask (iter)'
ala[kalukhanyinya]	musáatsa/mú ⁺ yáyí/muundu	'turn...over'

(23) /H/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu} for him/her'

alamú[reela]	musáatsa/mú ⁺ yáyí/muundu	'bury'
alamú[bechela]	musáatsa/mú ⁺ yáyí/muundu	'shave'
alamú[leerela]	musáatsa/mú ⁺ yáyí/muundu	'bring'
alamú[khalachila]	musáatsa/mú ⁺ yáyí/muundu	'cut'
alamú[sitaachila]	musáatsa/mú ⁺ yáyí/muundu	'accuse'
alamú[boolitsila]	musáatsa/mú ⁺ yáyí/muundu	'seduce'
alamú[khong'oondela]	musáatsa/mú ⁺ yáyí/muundu	'knock'
alamú[bohoholela]	musáatsa/mú ⁺ yáyí/muundu	'untie'
alamú[bukaanila]	musáatsa/mú ⁺ yáyí/muundu	'meet'
alamú[ng'ong'oolitsila]	musáatsa/mú ⁺ yáyí/muundu	'tease'
alamú[lingakanyinyila]	musáatsa/mú ⁺ yáyí/muundu	'bend'

(24) /Ø/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu} for him/her'

alamú[tsiila]	musáatsa/mú ⁺ yáyí/muundu	'go for'
alamú[leshela]	musáatsa/mú ⁺ yáyí/muundu	'leave'
alamú[loondela]	musáatsa/mú ⁺ yáyí/muundu	'follow'
alamú[kulishila]	musáatsa/mú ⁺ yáyí/muundu	'name'
alamú[lakhuulila]	musáatsa/mú ⁺ yáyí/muundu	'release'

alamú[seebulila]	musáatsa/mú'yáyí/muundu	'say bye to'
alamú[hoombelitsila]	musáatsa/mú'yáyí/muundu	'comfort'
alamú[kalushitsila]	musáatsa/mú'yáyí/muundu	'return'
alamú[siinjilitsila]	musáatsa/mú'yáyí/muundu	'make...stand'
alamú[reebareebela]	musáatsa/mú'yáyí/muundu	'ask (iter)'
alamú[kalukhanyinyila]	musáatsa/mú'yáyí/muundu	'turn...over'

(25) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her for me'

alamúu[ndeela]	musáatsa/mú'yáyí/muundu	'bury'
alamúu[mbechela]	musáatsa/mú'yáyí/muundu	'shave'
alamúu[ndeerela]	musáatsa/mú'yáyí/muundu	'bring'
alamúu[khalachila]	musáatsa/mú'yáyí/muundu	'cut'
alamúu[sitaachila]	musáatsa/mú'yáyí/muundu	'accuse'
alamúu[mboolitsila]	musáatsa/mú'yáyí/muundu	'seduce'
alamúu[mbohololela]	musáatsa/mú'yáyí/muundu	'untie'

(26) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her for me'

alamúu[nziila]	musáatsa/mú'yáyí/muundu	'go for'
alamúu[ndeshela]	musáatsa/mú'yáyí/muundu	'leave'
alamúu[noondela]	musáatsa/mú'yáyí/muundu	'follow'
alamúu[ngulishila]	musáatsa/mú'yáyí/muundu	'name'
alamúu[ndakhuulila]	musáatsa/mú'yáyí/muundu	'release'
alamúu[seebulila]	musáatsa/mú'yáyí/muundu	'say bye to'
alamúu[mboombelitsila]	musáatsa/mú'yáyí/muundu	'comfort'
alamúu[siinjilitsila]	musáatsa/mú'yáyí/muundu	'make...stand'

A.1.2 Near Future Negative: Pattern 1a

(27) /H/ C-Initial 's/he will not...'

ala[rá]	'tá	'bury'	ala[ng'wá]	tá	'drink'
ala[líá]	'tá	'eat'	ala[lú'má]	tá	'bite'

ala[bé'ká] tá	'shave'	ala[té'ékhá] tá	'cook'
ala[lé'érá] tá	'bring'	ala[khá'láká] tá	'cut'
ala[ká'láángá] tá	'fry'	ala[sí'tááká] tá	'accuse'
ala[bó'ólítsá] tá	'seduce'	ala[sá'ándítsá] tá	'thank'
ala[tsú'únzúúná] tá	'suck'	ala[bó'hólólá] tá	'untie'
ala[bó'yóng'áná] tá	'go around'	ala[ng'ó'ng'óólítsá] tá	'tease'
ala[lí'ngákányínyá] tá	'crumple'		

(28) /H/ V-Initial 's/he will not...'

al[ií'rá] tá	'kill'	al[ií'kóómbá] tá	'admire'
al[ií'síáká] tá	'smack'	al[ií'kóbólá] tá	'belch'
al[oó'nónýnýá] tá	'spoil'	al[aá'búkhányínyá] tá	'separate'

(29) /Ø/ C-Initial 's/he will not...'

ala[tsiá] tá	'go'	ala[kwá] tá	'fall'
ala[lékhá] tá	'leave'	ala[réébá] tá	'ask'
ala[lóóndá] tá	'follow'	ala[sósáná] tá	'resemble'
ala[hómóólá] tá	'massage'	ala[lákhúúlá] tá	'release'
ala[séébúlá] tá	'say bye'	ala[hóómbélítsá] tá	'comfort'
ala[kálúshítsá] tá	'return'	ala[síínjílítsá] tá	'make stand'
ala[réébáréébá] tá	'ask (iter)'	ala[kálúkhányínyá] tá	'turn over'
ala[sébúlúkhányínyá] tá	'scatter'		

(30) /Ø/ V-Initial 's/he will not...'

al[eényá] tá	'want'	al[eéyéla] tá	'wipe for'
al[iílúúlá] tá	'winnow'	al[aámbákháná] tá	'refuse'
al[eéleélítsá] tá	'hang up'		

(31) /H/ C-Initial + OP 's/he will not...him/her'

alamú[¹ rá] tá	‘bury’	alamú[¹ khwá] tá	‘pay dowry’
alamú[¹ béká] tá	‘shave’	alamú[¹ léérá] tá	‘bring’
alamú[¹ kháláká] tá	‘cut’	alamú[¹ sítááká] tá	‘accuse’
alamú[¹ bóólítsá] tá	‘seduce’	alamú[¹ tsúúnzúúná] tá	‘suck’
alamú[¹ bóhólólá] tá	‘untie’	alamú[¹ búkáánílá] tá	‘meet’
alamú[¹ ng’óng’óólítsá] tá	‘tease’	alamú[¹ língákányínyá] tá	‘bend’

(32) /H/ V-Initial + OP ‘s/he will not...him/her’

alamw[í ¹ írá] tá	‘kill’	alamw[í ¹ íkóómbá] tá	‘admire’
alamw[í ¹ ísíáká] tá	‘smack’	alamw[ó ¹ ónónyínyá] tá	‘spoil’
alamw[á ¹ ábúkhányínyá] tá	‘separate’		

(33) /Ø/ C-Initial + OP ‘s/he will not...him/her {mu-} / them {ba-}’

alamú[¹ tsiá] tá	‘go for’
alamú[¹ lékhá] tá	‘leave’
alamú[¹ lóóndá] tá	‘follow’
alamú[¹ kúlíkhá] tá	‘name’
alamú[¹ lákhuúlá] tá	‘release’
alamú[¹ séébúlá] tá	‘say bye to’
alamú[¹ hóómbélítsá] tá	‘comfort’
alamú[¹ kálúshítsá] tá	‘return’
alamú[¹ síínjílítsá] tá	‘make...stand’
alamú[¹ réébáréébá] tá	‘ask (iter)’
alamú[¹ kálúkhányínyá] tá	‘turn...over’
alabá[¹ sébúlúkhányínyá] tá	‘scatter’

(34) /Ø/ V-Initial + OP ‘s/he will not...him/her {mw-} / it₁₄ {bw-}’

alamw[é ¹ ényá] tá	‘want’	alamw[é ¹ éyelá] tá	‘wipe for’
alabw[í ¹ ílúúlá] tá	‘winnow’	alamw[á ¹ ámbákháná] tá	‘refuse’
alamw[é ¹ éleélítsá] tá	‘hang...up’		

(35) /H/ C-Initial + OP_{1sg} 's/he will not...me'

alaá['ríá] tá	'fear'	alaá['khwá] tá	'pay dowry'
alaá['mbéká] tá	'shave'	alaá['ndéérá] tá	'bring'
alaá['kháláká] tá	'cut'	alaá['sítááká] tá	'accuse'
alaá['mbóólítsá] tá	'seduce'	alaá['tsúúnzúúná] tá	'suck'
alaá['mbóhólólá] tá	'untie'	alaá['búkáánílá] tá	'meet'
alaá['ng'óng'óólítsá] tá	'tease'	alaá['nínkáányínyá] tá	'bend'

(36) /H/ V-Initial + OP_{1sg} 's/he will not...me'

alaá['nzírá] tá	'kill'	alaá['nzíkóómbá] tá	'admire'
alaá['nzísíáká] tá	'smack'	alaá['nzónónyínyá] tá	'spoil'
alaá['nzábúkhányínyá] tá	'separate'		

(37) /Ø/ C-Initial + OP_{1sg} 's/he will not...me'

alaá['ndékhá] tá	'leave'	alaá['nóóndá] tá	'follow'
alaá['ngúlíkhá] tá	'name'	alaá['ndákhúúlá] tá	'release'
alaá['séébúlá] tá	'say bye to'	alaá['mbóómbélítsá] tá	'comfort'
alaá['síinjílítsá] tá	'make...stand'	alaá['ndéébándéébá] tá	'ask (iter)'
alaá['ngálúkhányínyá] tá	'turn...over'		

(38) /Ø/ V-Initial + OP_{1sg} 's/he will not...me'

alaá['nzényá] tá	'want'	alaá['nzéyé] tá	'wipe for'
alaá['nyámbákháná] tá	'refuse'	alaá['nzéléélítsá] tá	'carry...hanging'

(39) /H/ C-Initial + OP_{refl} 's/he will not...him/herself'

alií['rá] tá	'bury'	alií['khwá] tá	'pay dowry'
alií['béká] tá	'shave'	alií['súúngá] tá	'hang'
alií['kháláká] tá	'cut'	alií['sítááká] tá	'accuse'

alií[⁺sáándítsá] tá ‘thank’ alií[⁺khóng’óóndá] tá ‘knock’
 alií[⁺bóhólólá] tá ‘untie’

(40) /H/ V-Initial + OP_{refl} ‘s/he will not...him/herself’

alií[⁺yírá] tá ‘kill’ alií[⁺yíkóómbá] tá ‘admire’
 alií[⁺yísíáká] tá ‘smack’ alií[⁺yónónyínyá] tá ‘spoil’
 alií[⁺yábúkhányínyá] tá ‘separate’

(41) /Ø/ C-Initial + OP_{refl} ‘s/he will not...him/herself’

alií[⁺lékhá] tá ‘leave’ alií[⁺sííngá] tá ‘bathe’
 alií[⁺kúlíkhá] tá ‘name’ alií[⁺náábúlá] tá ‘undress’
 alií[⁺lákhúúlá] tá ‘release’ alií[⁺hóómbélítsá] tá ‘comfort’
 alií[⁺síínjílítsá] tá ‘make...stand’ alií[⁺réébáréébá] tá ‘ask (iter)’
 alií[⁺kálúkhányínyá] tá ‘turn...over’

(42) /Ø/ V-Initial + OP_{refl} ‘s/he will not...him/herself’

alií[⁺yényá] tá ‘want’ alií[⁺yéyé] tá ‘wipe for’
 alií[⁺yámbákháná] tá ‘refuse’ alií[⁺yéléélítsá] tá ‘carry...hanging’

(43) /H/ C-Initial + OP + OP_{1sg} ‘s/he will not...him/her for me’

alamú⁺ú[ndéélá] tá ‘bury’ alamú⁺ú[mbéchélá] tá ‘shave’
 alamú⁺ú[ndéérélá] tá ‘bring’ alamú⁺ú[kháláchílá] tá ‘cut’
 alamú⁺ú[sítááchílá] tá ‘accuse’ alamú⁺ú[mbóólítsílá] tá ‘seduce’
 alamú⁺ú[mbóhólólélá] tá ‘untie’

(44) /H/ V-Initial + OP + OP_{1sg} ‘s/he will not...him/her for me’

alamú⁺ú[nzírílá] tá ‘kill’

alamú'ú[nzéchétsílá] tá	'admire'
alamú'ú[nzísíáchílá] tá	'smack'
alamú'ú[nzónónyínyílá] tá	'spoil'
alamú'ú[nzábúkhányínyílá] tá	'separate'

(45) /Ø/ C-Initial + OP + OP_{1sg} 's/he will not...him/her for me'

alamú'ú[nzílílá] tá	'go for'
alamú'ú[ndéshélá] tá	'leave'
alamú'ú[nóóndélá] tá	'follow'
alamú'ú[ngúlíshílá] tá	'name'
alamú'ú[ndákhúúlílá] tá	'release'
alamú'ú[séébúílílá] tá	'say bye to'
alamú'ú[mbóómbélítsílá] tá	'comfort'
alamú'ú[síínjílítsílá] tá	'make...stand'

(46) /Ø/ V-Initial + OP + OP_{1sg} 's/he will not...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-}for me'

alamú'ú[nyényélá] tá	'want'	alamú'ú[nzéyéélá] tá	'wipe'
alakú'ú[nzáshítsílá] tá	'light'	alabú'ú[nzílúúlílá] tá	'fill'
alalú'ú[nzítsúlítsílá] tá	'fill'	alakú'ú[nzéléélítsílá] tá	'hang'

(47) /H/ C-Initial Phrase-Medial 's/he will not...the man {musáatsa} /
the wife {mukháli} / the boy {mú'yáyi} / someone {muundu}'

ala[rá] musáatsa/mú'yáyi/muundu tá	'bury'
ala[khwá] mukháli)/muundu tá	'pay dowry'
ala[béka] musáatsa/mú'yáyi/muundu tá	'shave'
ala[léera] musáatsa/mú'yáyi/muundu tá	'bring'
ala[khálaka] musáatsa/mú'yáyi/muundu tá	'cut'
ala[sítaaka] musáatsa/mú'yáyi/muundu tá	'accuse'
ala[bóolitsa] musáatsa/mú'yáyi/muundu tá	'seduce'
ala[tsúunzuuna] musáatsa/mú'yáyi/muundu tá	'suck'
ala[bóholola] musáatsa/mú'yáyi/muundu tá	'untie'
ala[búkaanila] musáatsa/mú'yáyi/muundu tá	'meet'
ala[ng'óng'oolitsa] musáatsa/mú'yáyi/muundu tá	'tease'

alamú[seebulila]	musáatsa/mú'yáyi/muundu tá	'say bye to'
alamú[hoombelitsila]	musáatsa/mú'yáyi/muundu tá	'comfort'
alamú[kalushitsila]	musáatsa/mú'yáyi/muundu tá	'return'
alamú[siinjilitsila]	musáatsa/mú'yáyi/muundu tá	'make...stand'
alamú[reebareebela]	musáatsa/mú'yáyi/muundu tá	'ask (iter)'
alamú[kalukhanyinyila]	musáatsa/mú'yáyi/muundu tá	'turn...over'

(51) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her for me'

alamúu[ndeela]	musáatsa/mú'yáyi/muundu tá	'bury'
alamúu[mbechela]	musáatsa/mú'yáyi/muundu tá	'shave'
alamúu[ndeerela]	musáatsa/mú'yáyi/muundu tá	'bring'
alamúu[khalachila]	musáatsa/mú'yáyi/muundu tá	'cut'
alamúu[sitaachila]	musáatsa/mú'yáyi/muundu tá	'accuse'
alamúu[mboolitsila]	musáatsa/mú'yáyi/muundu tá	'seduce'
alamúu[mbohololela]	musáatsa/mú'yáyi/muundu tá	'untie'

(52) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her for me'

alamúu[nziila]	musáatsa/mú'yáyi/muundu tá	'go for'
alamúu[ndeshela]	musáatsa/mú'yáyi/muundu tá	'leave'
alamúu[noondela]	musáatsa/mú'yáyi/muundu tá	'follow'
alamúu[ngulishila]	musáatsa/mú'yáyi/muundu tá	'name'
alamúu[ndakhuulila]	musáatsa/mú'yáyi/muundu tá	'release'
alamúu[seebulila]	musáatsa/mú'yáyi/muundu tá	'say bye to'
alamúu[mboombelitsila]	musáatsa/mú'yáyi/muundu tá	'comfort'
alamúu[siinjilitsila]	musáatsa/mú'yáyi/muundu tá	'make...stand'

A.1.3 Remote Past: Pattern 4

(53) /H/ C-Initial 's/he...'

yaa[rá]	'buried'	yaa[ng'wá]	'drank'
yaa[lía]	'ate'	yaa[khwá]	'paid dowry'

yaa[lúma]	‘bit’	yaa[béka]	‘shaved’
yaa[téekha]	‘cooked’	yaa[léera]	‘brought’
yaa[khálaka]	‘cut’	yaa[kálaanga]	‘fried’
yaa[sítaaka]	‘accused’	yaa[bóolitsa]	‘seduced’
yaa[sáanditsa]	‘thanked’	yaa[tsúunzuuna]	‘sucked’
yaa[bóholola]	‘untied’	yaa[bóyong’ana]	‘went around’
yaa[ng’óng’oolitsa]	‘teased’	yaa[língakanyinya]	‘crumpled’

(54) /H/ V-Initial ‘s/he...’

y[iíra]	‘killed’	y[ií’kóómba]	‘admired’
y[ií’síáka]	‘smacked’	y[ií’kóbóla]	‘belched’
y[oónonyinya]	‘spoiled’	y[aábukhanyinya]	‘separated’

(55) /Ø/ C-Initial ‘s/he...’

yaa[tsía]	‘went’	yaa[kwá]	‘fell’
yaa[lékha]	‘left’	yaa[réeba]	‘asked’
yaa[lóonda]	‘followed’	yaa[sósana]	‘resembled’
yaa[hómoola]	‘massaged’	yaa[lákhua]	‘released’
yaa[séebula]	‘said bye’	yaa[hóombelitsa]	‘comforted’
yaa[kálushitsa]	‘returned’	yaa[síinjilitsa]	‘made stand’
yaa[réebareeba]	‘asked (iter)’	yaa[kálukhanyinya]	‘turned over’
yaa[sébulukhanyinya]	‘scattered’		

(56) /Ø/ V-Initial ‘s/he...’

y[eénya]	‘wanted’	y[aáshitsa]	‘lit’
y[iíluula]	‘winnowed’	y[aámbakhana]	‘refused’
y[eéleelitsa]	‘hung up’		

(57) /H/ C-Initial + OP ‘s/he...him/her’

yaamú[ra]	‘buried’	yaamú[khwa]	‘paid dowry’
yaamú[beka]	‘shaved’	yaamú[leera]	‘brought’
yaamú[khalaka]	‘cut’	yaamú[sitaaka]	‘accused’
yaamú[boolitsa]	‘seduced’	yaamú[tsuunzuuna]	‘sucked’
yaamú[boholola]	‘untied’	yaamú[bukaanila]	‘met’
yaamú[ng’ong’oolitsa]	‘teased’	yaamú[lingakanyinya]	‘bent’

(58) /H/ V-Initial + OP ‘s/he...him/her’

yaamw[íira]	‘killed’	yaamw[í‘íkóómba]	‘admired’
yaamw[í‘ísíáka]	‘smacked’	yaamw[óononyinya]	‘spoiled’
yaamw[áabukhanyinya]	‘separated’		

(59) /Ø/ C-Initial + OP ‘s/he...him/her {mu-} / them {ba-}’

yaamú[‘tsíá]	‘went for’
yaamú[‘lékhá]	‘left’
yaamú[‘lóónda]	‘followed’
yaamú[‘kúlíkha]	‘named’
yaamú[‘lákhuúla]	‘released’
yaamú[‘séébula]	‘said bye to’
yaamú[‘hóómbélitsa]	‘comforted’
yaamú[‘kálúshitsa]	‘returned’
yaamú[‘síínjílitsa]	‘made...stand’
yaamú[‘réébáreeba]	‘asked (iter)’
yaamú[‘kálúkhányinya]	‘turned...over’
yaabá[‘sébulúkhanyinya]	‘scattered’

(60) /Ø/ V-Initial + OP ‘s/he...him/her {mw-} / it₁₄ {bw-}’

yaamw[é‘ényá]	‘wanted’	yaamw[é‘éyéla]	‘wiped for’
yaabw[í‘ílúula]	‘winnowed’	yaamw[á‘ámákhana]	‘refused’
yaamw[é‘éléelitsa]	‘hung...up’		

(61) /H/ C-Initial + OP_{1sg} 's/he...me'

yaá[ria]	'feared'	yaá[khwa]	'paid dowry'
yaá[mbeka]	'shaved'	yaá[ndeera]	'brought'
yaá[khalaka]	'cut'	yaá[sitaaka]	'accused'
yaá[mboolitsa]	'seduced'	yaá[ndzuunzuuna]	'sucked'
yaá[mboholola]	'untied'	yaá[mboyong'ana]	'went around'
yaá[mbukaanila]	'met'	yaá[ng'ong'oolitsa]	'teased'
yaá[ningakanyinya]	'bent'		

(62) /H/ V-Initial + OP_{1sg} 's/he...me'

yaá[nzira]	'killed'	yaa[nzí'kóómba]	'admired'
yaa[nzí'síáka]	'smacked'	yaá[nzononyinya]	'spoiled'
yaá[nzabukhanyinya]	'separated'		

(63) /Ø/ C-Initial + OP_{1sg} 's/he...me'

yaá['ndékhá]	'left'	yaá['nóónda]	'followed'
yaá['ngúlíkha]	'named'	yaá['ndákhúula]	'released'
yaá['séébula]	'said bye to'	yaá['mbóómbélitsa]	'comforted'
yaá['sínjílitsa]	'made...stand'	yaá['ndéébándeeba]	'asked (iter)'
yaá['ngálúkhányinya]	'turned...over'		

(64) /Ø/ V-Initial + OP_{1sg} 's/he...me'

yaá['nzényá]	'wanted'	yaá['nzéyéla]	'wiped for'
yaá['nyámbákhana]	'refused'	yaá['nzéléelitsa]	'carried...hanging'

(65) /H/ C-Initial + OP_{refl} 's/he...him/herself'

yií[ra]	'buried'	yií[khwa]	'paid dowry'
yií[beka]	'shaved'	yií[suunga]	'hung'

yií[khalaka]	‘cut’	yií[sitaaka]	‘accused’
yií[saanditsa]	‘thanked’	yií[khong’oonda]	‘knocked’
yií[boholola]	‘untied’		

(66) /H/ V-Initial + OP_{refl} ‘s/he...him/herself’

yií[yira]	‘killed’	yií[‘yíkóómba]	‘admired’
yií[‘yísíáka]	‘smacked’	yií[yononyinya]	‘spoiled’
yií[yabukhanyinya]	‘separated’		

(67) /Ø/ C-Initial + OP_{refl} ‘s/he...him/herself’

yií[‘lékhá]	‘left’	yií[‘síínga]	‘bathed’
yií[‘kúlíkha]	‘named’	yií[‘náábula]	‘undressed’
yií[‘lákhuúla]	‘released’	yií[‘hóómbélitsa]	‘comforted’
yií[‘síínjílitsa]	‘made...stand’	yií[‘réébáreeba]	‘asked (iter)’
yií[‘kálúkhányinya]	‘turned...over’		

(68) /Ø/ V-Initial + OP_{refl} ‘s/he...him/herself’

yií[yaala]	‘exposed’	yií[‘yéyá]	‘wiped’
yií[‘yéyéla]	‘wiped for’	yií[‘yámbákhana]	‘despised’
yií[‘yéléelitsa]	‘hung’		

(69) /H/ C-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yaamúu[ndeela]	‘buried’	yaamúu[mbechela]	‘shaved’
yaamúu[ndeerela]	‘brought’	yaamúu[khalachila]	‘cut’
yaamúu[sitaachila]	‘accused’	yaamúu[mboolitsila]	‘seduced’
yaamúu[mbohololela]	‘untied’		

(70) /H/ V-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yaamúu[nzirila]	‘killed’	yaamúu[nzechitsila]	‘admired’
yaamú ⁺ ú[nzísíáchila]	‘smacked’	yaamúu[nzononyinyila]	‘spoiled’
yaamúu[nzabukhanyinyila]	‘separated’		

(71) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yaamú ⁺ ú[nzííla]	‘went for’	yaamú ⁺ ú[ndéshéla]	‘left’
yaamú ⁺ ú[nóóndela]	‘followed’	yaamú ⁺ ú[ngúlíshila]	‘named’
yaamú ⁺ ú[ndákhúulila]	‘released’	yaamú ⁺ ú[séébúlila]	‘said bye to’
yaamú ⁺ ú[mbóómbélitsila]	‘comforted’	yaamú ⁺ ú[síínjílitsila]	‘made...stand’

(72) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

yaabú ⁺ ú[nzáííla]	‘displayed’	yaakú ⁺ ú[nzáshítsila]	‘lit’
yaabú ⁺ ú[nzílúulila]	‘winnowed’	yaalú ⁺ ú[nzítsúlitsila]	‘filled’
yaakú ⁺ ú[nzéléelitsila]	‘hung’		

(73) /H/ C-Initial Phrase-Medial ‘s/he...the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu}’

yaa[rá]	musáatsa/mú ⁺ yáyi/muundu	‘buried’
yaa[béka]	musáatsa/mú ⁺ yáyi/muundu	‘shaved’
yaa[léera]	musáatsa/mú ⁺ yáyi/muundu	‘brought’
yaa[khálaka]	musáatsa/mú ⁺ yáyi/muundu	‘cut’
yaa[sítaaka]	musáatsa/mú ⁺ yáyi/muundu	‘accused’
yaa[bóolitsa]	musáatsa/mú ⁺ yáyi/muundu	‘seduced’
yaa[tsúunzuuna]	musáatsa/mú ⁺ yáyi/muundu	‘sucked’
yaa[bóholola]	musáatsa/mú ⁺ yáyi/muundu	‘untied’
yaa[búkaanila]	musáatsa/mú ⁺ yáyi/muundu	‘met’
yaa[ng’óng’oolitsa]	musáatsa/mú ⁺ yáyi/muundu	‘teased’

(74) /Ø/ C-Initial Phrase-Medial ‘s/he...the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu}’

yaa[tsía] musáatsa/mú'yáyí/muundu	'went for'
yaa[lékha] musáatsa/mú'yáyí/muundu	'left'
yaa[lóonda] musáatsa/mú'yáyí/muundu	'followed'
yaa[kúlikha] musáatsa/mú'yáyí/muundu	'named'
yaa[lákhula] musáatsa/mú'yáyí/muundu	'released'
yaa[séebula] musáatsa/mú'yáyí/muundu	'said bye to'
yaa[kálushitsa] musáatsa/mú'yáyí/muundu	'returned'
yaa[siinjilitsa] musáatsa/mú'yáyí/muundu	'made...stand'
yaa[réebareeba] musáatsa/mú'yáyí/muundu	'asked (iter)'
yaa[kálukhanyinya] musáatsa/mú'yáyí/muundu	'turned...over'

(75) /H/ C-Initial +OP Phrase-Medial 's/he...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

yaamú[reela] musáatsa/mú'yáyí/muundu	'buried'
yaamú[bechela] musáatsa/mú'yáyí/muundu	'shaved'
yaamú[leerela] musáatsa/mú'yáyí/muundu	'brought'
yaamú[khalachila] musáatsa/mú'yáyí/muundu	'cut'
yaamú[sitaachila] musáatsa/mú'yáyí/muundu	'accused'
yaamú[boolitsila] musáatsa/mú'yáyí/muundu	'seduced'
yaamú[tsuunzuunila] musáatsa/mú'yáyí/muundu	'sucked'
yaamú[bohololela] musáatsa/mú'yáyí/muundu	'untied'
yaamú[bukaanila] musáatsa/mú'yáyí/muundu	'met'
yaamú[ng'ong'oolitsila] musáatsa/mú'yáyí/muundu	'teased'

(76) /Ø/ C-Initial +OP Phrase-Medial 's/he...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

yaamú[⁺ tsíílá] musáatsa/mú'yáyí/muundu	'went for'
yaamú[⁺ léshélá] musáatsa/mú'yáyí/muundu	'left'
yaamú[⁺ lóóndéla] musáatsa/mú'yáyí/muundu	'followed'
yaamú[⁺ kúlíshíla] musáatsa/mú'yáyí/muundu	'named'
yaamú[⁺ lák húulila] musáatsa/mú'yáyí/muundu	'released'
yaamú[⁺ séébúlila] musáatsa/mú'yáyí/muundu	'said bye to'
yaamú[⁺ réébáreebela] musáatsa/mú'yáyí/muundu	'asked (iter)'

(77) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the man {musáatsa} /

the boy {mú⁺yáyi} / someone {muundu} for him/her for me'

yaamúu[ndeela]	musáatsa/mú ⁺ yáyi/muundu	'buried'
yaamúu[mbechela]	musáatsa/mú ⁺ yáyi/muundu	'shaved'
yaamúu[ndeerela]	musáatsa/mú ⁺ yáyi/muundu	'brought'
yaamúu[khalachila]	musáatsa/mú ⁺ yáyi/muundu	'cut'
yaamúu[sitaachila]	musáatsa/mú ⁺ yáyi/muundu	'accused'
yaamúu[mboolitsila]	musáatsa/mú ⁺ yáyi/muundu	'seduced'
yaamúu[mbohololela]	musáatsa/mú ⁺ yáyi/muundu	'untied'

(78) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the man {musáatsa} /

the boy {mú⁺yáyi} / someone {muundu} for him/her for me'

yaamú ⁺ ú[nzíílá]	musáatsa/mú ⁺ yáyi/muundu	'went for'
yaamú ⁺ ú[ndéshélá]	musáatsa/mú ⁺ yáyi/muundu	'left'
yaamú ⁺ ú[nóóndéla]	musáatsa/mú ⁺ yáyi/muundu	'followed'
yaamú ⁺ ú[ngúlíshíla]	musáatsa/mú ⁺ yáyi/muundu	'named'
yaamú ⁺ ú[ndákhúulila]	musáatsa/mú ⁺ yáyi/muundu	'released'
yaamú ⁺ ú[séébúlila]	musáatsa/mú ⁺ yáyi/muundu	'said bye to'
yaamú ⁺ ú[mbóómbélitsila]	musáatsa/mú ⁺ yáyi/muundu	'comforted'
yaamú ⁺ ú[sínjílitsila]	musáatsa/mú ⁺ yáyi/muundu	'made...stand'

A.1.4 Remote Past Negative: Pattern 4

(79) /H/ C-Initial 's/he did not...'

yaa[rá] 'tá	'bury'	yaa[ng'wá] 'tá	'drink'
yaa[khwá] 'tá	'pay dowry'	yaa[líá] 'tá	'eat'
yaa[lúma] tá	'bite'	yaa[béka] tá	'shave'
yaa[téekha] tá	'cook'	yaa[léera] tá	'bring'
yaa[khálaka] tá	'cut'	yaa[kálaanga] tá	'fry'
yaa[sítaaka] tá	'accuse'	yaa[bóolitsa] tá	'seduce'
yaa[sáanditsa] tá	'thank'	yaa[khóng'oonda] tá	'knock'
yaa[tsúunzuuna] tá	'suck'	yaa[boholola] tá	'untie'
yaa[bóyong'ana] tá	'go around'	yaa[ng'óng'oolitsa] tá	'tease'
yaa[língakanyinya] tá	'crumple'		

(80) /H/ V-Initial 's/he did not...'

y[iíra] tá	'kill'	y[ií'kóómba] tá	'admire'
y[ií'síáka] tá	'smack'	y[ií'kóbóla] tá	'belch'
y[oónonyinya] tá	'spoil'	y[aábukhanyinya] tá	'separate'

(81) /Ø/ C-Initial 's/he did not...'

yaa[tsiá] 'tá	'go'	yaa[kwá] 'tá	'fall'
yaa[lékha] tá	'leave'	yaa[réeba] tá	'ask'
yaa[lóonda] tá	'follow'	yaa[kúlikha] tá	'name'
yaa[sósana] tá	'resemble'	yaa[hómoola] tá	'massage'
yaa[lákhua] tá	'release'	yaa[séebula] tá	'say bye'
yaa[hóombelitsa] tá	'comfort'	yaa[kálushitsa] tá	'return'
yaa[síinjilitsa] tá	'make stand'	yaa[réebareeba] tá	'ask (iter)'
yaa[kálukhanyinya] tá	'turn over'	yaa[sébulukhanyinya] tá	'scatter'

(82) /Ø/ V-Initial 's/he did not...'

y[eénya] tá	'want'	y[aáshitsa] tá	'light'
y[iíluula] tá	'winnow'	y[aámbakhana] tá	'refuse'
y[eéleelitsa] tá	'hang up'		

(83) /H/ C-Initial + OP 's/he did not...him/her'

yaamú[ra] tá	'bury'	yaamú[beka] tá	'shave'
yaamú[leera] tá	'bring'	yaamú[khalaka] tá	'cut'
yaamú[sitaaka] tá	'accuse'	yaamú[boolitsa] tá	'seduce'
yaamú[khong'oonda] tá	'knock'	yaamú[tsuunzuuna] tá	'suck'
yaamú[boholola] tá	'untie'	yaamú[boyong'ana] tá	'go around'
yaamú[ng'ong'oolitsa] tá	'tease'	yaamú[lingakanyinya] tá	'bend'

(84) /H/ V-Initial + OP 's/he did not...him/her'

yaamw[íira] tá	'kill'	yaamw[í'íkóómba] tá	'admire'
yaamw[í'ísíáka] tá	'smack'	yaamw[óononyinya] tá	'spoil'
yaamw[áabukhanyinya] tá	'separate'		

(85) /Ø/ C-Initial + OP 's/he did not...him/her {mu-} / them {ba-}'

yaamú['tsíá] 'tá	'go for'
yaamú['lékhá] 'tá	'leave'
yaamú['lóónda] tá	'follow'
yaamú['kúlíkha] tá	'name'
yaamú['lákhuúla] tá	'release'
yaamú['séébula] tá	'say bye to'
yaamú['hóómbélitsa] tá	'comfort'
yaamú['kálúshitsa] tá	'return'
yaamú['síinjílitsa] tá	'make...stand'
yaamú['réébáreeba] tá	'ask (iter)'
yaamú['kálúkhányinya] tá	'turn...over'
yaabá['sébulúkhanyinya] tá	'scatter'

(86) /Ø/ V-Initial + OP 's/he did not...him/her {mw-} / it₁₄ {bw-}'

yaamw[é'ényá] 'tá	'want'	yaamw[é'éyéla] tá	'wipe for'
yaabw[í'ílúula] tá	'winnow'	yaamw[á'ámbákhana] tá	'refuse'
yaamw[é'éléelitsa] tá	'hang...up'		

(87) /H/ C-Initial + OP_{1sg} 's/he did not...me'

yaá[ria] tá	'fear'	yaá[mbeka] tá	'shave'
yaá[ndeera] tá	'bring'	yaá[khalaka] tá	'cut'
yaá[sitaaka] tá	'accuse'	yaá[mboolitsa] tá	'seduce'
yaá[ndzuunzuuna] tá	'suck'	yaá[mboholola] tá	'untie'
yaá[mboyong'ana] tá	'go around'	yaá[ng'ong'oolitsa] tá	'tease'
yaá[ningakanyinya] tá	'bend'		

(88) /H/ V-Initial + OP_{1sg} 's/he did not...me'

yaá[nzira] tá	'kill'	yaa[nzí'kóómba] tá	'admire'
yaa[nzí'síáka] tá	'smack'	yaá[nzononyinya] tá	'spoil'
yaá[nzabukhanyinya] tá	'separate'		

(89) /Ø/ C-Initial + OP_{1sg} 's/he did not...me'

yaá['ndékhá] 'tá	'leave'	yaá['nóónda] tá	'follow'
yaá['ngúmíla] tá	'hold'	yaá['ndákhúula] tá	'release'
yaá['séébula] tá	'say bye to'	yaá['mbóómbélitsa] tá	'comfort'
yaá['síínjílitsa] tá	'make...stand'	yaá['ndéébándeeba] tá	'ask (iter)'
yaá['ngálúkhányinya] tá	'turn...over'		

(90) /Ø/ V-Initial + OP_{1sg} 's/he did not...me'

yaá['nzényá] 'tá	'want'	yaá['nzéyéla] tá	'wipe for'
yaá['nyámábákhana] tá	'refuse'	yaá['nzéléelitsa] tá	'carry...hanging'

(91) /H/ C-Initial + OP_{refl} 's/he did not...him/herself'

yií[ra] tá	'bury'	yií[beka] tá	'shave'
yií[suunga] tá	'hang'	yií[khalaka] tá	'cut'
yií[sitaaka] tá	'accuse'	yií[saanditsa] tá	'thank'
yií[tsuunzuuna] tá	'suck'	yií[boholola] tá	'untie'

(92) /H/ V-Initial + OP_{refl} 's/he did not...him/herself'

yií[yira] tá	'kill'	yií['yíkóómba] tá	'admire'
yií['yísíáka] tá	'smack'	yií[yononyinya] tá	'spoil'
yií[yabukhanyinya] tá	'separate'		

(93) /Ø/ C-Initial + OP_{refl} 's/he did not...him/herself'

yií['lékhá] 'tá	'leave'	yií['síínga] tá	'bathe'
yií['kúlíkha] tá	'name'	yií['náábula] tá	'undress'
yií['lákhuúla] tá	'release'	yií['hóómbélitsa] tá	'comfort'
yií['síínjílitsa] tá	'make...stand'	yií['réébáreeba] tá	'ask (iter)'
yií['kálúkhányinya] tá	'turn...over'		

(94) /Ø/ V-Initial + OP_{refl} 's/he did not...him/herself'

yií['yéyá] 'tá	'wipe'	yií['yéyéla] 'tá	'wipe for'
yií['yámbákhana] tá	'despise'	yií['yéléelitsa] tá	'hang'

(95) /H/ C-Initial + OP + OP_{1sg} 's/he did not...him/her for me'

yaamúu[ndeela] tá	'bury'	yaamúu[mbechela] tá	'shave'
yaamúu[ndeerela] tá	'bring'	yaamúu[khalachila] tá	'cut'
yaamúu[sitaachila] tá	'accuse'	yaamúu[mboolitsila] tá	'seduce'
yaamúu[mbohololela] tá	'untie'		

(96) /H/ V-Initial + OP + OP_{1sg} 's/he did not...him/her for me'

yaamúu[nzirila] tá	'kill'
yaamúu[nzechitsila] tá	'admire'
yaamú'ú[nzísíáchila] tá	'smack'
yaamúu[nzononyinyila] tá	'spoil'
yaamúu[nzabukhanyinyila] tá	'separate'

(97) /Ø/ C-Initial + OP + OP_{1sg} 's/he did not...him/her for me'

yaamú'ú[nzíla] tá	'go for'
yaamú'ú[ndéshéla] tá	'leave'

yaamú ⁺ ú[nóóndéla] tá	‘follow’
yaamú ⁺ ú[ngúlíshíla] tá	‘name’
yaamú ⁺ ú[ndákhúulila] tá	‘release’
yaamú ⁺ ú[séébúlila] tá	‘say bye to’
yaamú ⁺ ú[mbóómbélitsila] tá	‘comfort’
yaamú ⁺ ú[síínjílitsila] tá	‘make...stand’

(98) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he did not...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

yaabú ⁺ ú[nzáílíla] tá	‘display’	yaakú ⁺ ú[nzáshítsíla] tá	‘light’
yaabú ⁺ ú[nzílúulila] tá	‘winnow’	yaalú ⁺ ú[nzítsúlítsila] tá	‘fill’
yaakú ⁺ ú[nzéleélitsila] tá	‘hang’		

(99) /H/ C-Initial Phrase-Medial ‘s/he did not...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu}’

yaa[rá] musáatsa/mú ⁺ yáyí/muundu tá	‘bury’
yaa[béka] musáatsa/mú ⁺ yáyí/muundu tá	‘shave’
yaa[léera] musáatsa/mú ⁺ yáyí/muundu tá	‘bring’
yaa[khálaka] musáatsa/mú ⁺ yáyí/muundu tá	‘cut’
yaa[sítaaka] musáatsa/mú ⁺ yáyí/muundu tá	‘accuse’
yaa[bóolitsa] musáatsa/mú ⁺ yáyí/muundu tá	‘seduce’
yaa[tsúunzuuna] musáatsa/mú ⁺ yáyí/muundu tá	‘suck’
yaa[bóholola] musáatsa/mú ⁺ yáyí/muundu tá	‘untie’
yaa[bóyong’ana] musáatsa/mú ⁺ yáyí/muundu tá	‘go around’
yaa[ng’óng’oolitsa] musáatsa/mú ⁺ yáyí/muundu tá	‘tease’

(100) /Ø/ C-Initial Phrase-Medial ‘s/he did not...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu}’

yaa[tsía] musáatsa/mú ⁺ yáyí/muundu tá	‘go for’
yaa[lékha] musáatsa/mú ⁺ yáyí/muundu tá	‘leave’
yaa[lóonda] musáatsa/mú ⁺ yáyí/muundu tá	‘follow’
yaa[kúlikha] musáatsa/mú ⁺ yáyí/muundu tá	‘name’
yaa[lákhuala] musáatsa/mú ⁺ yáyí/muundu tá	‘release’
yaa[séebula] musáatsa/mú ⁺ yáyí/muundu tá	‘say bye to’
yaa[kálushitsa] musáatsa/mú ⁺ yáyí/muundu tá	‘return’

yaa[síinjilita]	musáatsa/mú'yáyi/muundu tá	'make...stand'
yaa[réebareeba]	musáatsa/mú'yáyi/muundu tá	'ask (iter)'
yaa[kálukhanyinya]	musáatsa/mú'yáyi/muundu tá	'turn...over'

(101) /H/ C-Initial +OP Phrase-Medial 's/he did not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her'

yaamú[reela]	musáatsa/mú'yáyi/muundu tá	'bury'
yaamú[bechela]	musáatsa/mú'yáyi/muundu tá	'shave'
yaamú[leerela]	musáatsa/mú'yáyi/muundu tá	'bring'
yaamú[khalachila]	musáatsa/mú'yáyi/muundu tá	'cut'
yaamú[sitaachila]	musáatsa/mú'yáyi/muundu tá	'accuse'
yaamú[boolitsila]	musáatsa/mú'yáyi/muundu tá	'seduce'
yaamú[tsuunzuunila]	musáatsa/mú'yáyi/muundu tá	'suck'
yaamú[bohololela]	musáatsa/mú'yáyi/muundu tá	'untie'
yaamú[boyong'anila]	musáatsa/mú'yáyi/muundu tá	'go around'
yaamú[ng'ong'oolitsila]	musáatsa/mú'yáyi/muundu tá	'tease'

(102) /Ø/ C-Initial +OP Phrase-Medial 's/he did not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her'

yaamú[⁺ tsííla]	musáatsa/mú'yáyi/muundu tá	'go for'
yaamú[⁺ léshéla]	musáatsa/mú'yáyi/muundu tá	'leave'
yaamú[⁺ lóondéla]	musáatsa/mú'yáyi/muundu tá	'follow'
yaamú[⁺ kúlíshíla]	musáatsa/mú'yáyi/muundu tá	'name'
yaamú[⁺ lákhuulila]	musáatsa/mú'yáyi/muundu tá	'release'
yaamú[⁺ séébúlila]	musáatsa/mú'yáyi/muundu tá	'say bye to'
yaamú[⁺ réébáreebela]	musáatsa/mú'yáyi/muundu tá	'ask (iter)'

(103) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he did not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her for me'

yaamúu[ndeela]	musáatsa/mú'yáyi/muundu tá	'bury'
yaamúu[mbechela]	musáatsa/mú'yáyi/muundu tá	'shave'
yaamúu[ndeerela]	musáatsa/mú'yáyi/muundu tá	'bring'
yaamúu[khalachila]	musáatsa/mú'yáyi/muundu tá	'cut'
yaamúu[sitaachila]	musáatsa/mú'yáyi/muundu tá	'accuse'
yaamúu[mboolitsila]	musáatsa/mú'yáyi/muundu tá	'seduce'

yaamúú[mbohololela] musáatsa/mú'yáyi/muundu tá 'untie'

(104) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he did not...the man {musáatsa} /
the boy {mú'yáyi} / someone {muundu} for him/her for me'

yaamúú[nzíla]	musáatsa/mú'yáyi/muundu tá	'go for'
yaamúú[ndéshéla]	musáatsa/mú'yáyi/muundu tá	'leave'
yaamúú[nóóndéla]	musáatsa/mú'yáyi/muundu tá	'follow'
yaamúú[ngúlíshíla]	musáatsa/mú'yáyi/muundu tá	'name'
yaamúú[ndákhúulila]	musáatsa/mú'yáyi/muundu tá	'release'
yaamúú[séébúlila]	musáatsa/mú'yáyi/muundu tá	'say bye to'
yaamúú[mbóómbélitsila]	musáatsa/mú'yáyi/muundu tá	'comfort'
yaamúú[síínjílitsila]	musáatsa/mú'yáyi/muundu tá	'make...stand'

A.1.5 Immediate Past: Pattern 1b

(105) /H/ C-Initial 's/he just...'

yá'khá[rá]	'buried'	yá'khá[ng'wá]	'drank'
yá'khá[khwá]	'paid dowry'	yá'khá[lía]	'ate'
yá'khá[lúma]	'bit'	yá'khá[béka]	'shaved'
yá'khá[téekha]	'cooked'	yá'khá[léera]	'brought'
yá'khá[khálaka]	'cut'	yá'khá[kálaanga]	'fried'
yá'khá[sítaaka]	'accused'	yá'khá[bóolitsa]	'seduced'
yá'khá[sáanditsa]	'thanked'	yá'khá[tsúunzuuna]	'sucked'
yá'khá[bóholola]	'untied'	yá'khá[bóyong'ana]	'went around'
yá'khá[ng'óng'oolitsa]	'teased'	yá'khá[língakanyinya]	'crumpled'

(106) /H/ V-Initial 's/he just...'

yá'kh[ííra]	'killed'	yá'kh[ííkoomba]	'admired'
yá'kh[íísiaka]	'smacked'	yá'kh[ííkobola]	'belched'
yá'kh[óónonyinya]	'spoiled'	yá'kh[áábukhanyinya]	'separated'

(107) /Ø/ C-Initial 's/he just...'

yákha[tsia]	'went'	yákha[kwa]	'fell'
yákha[lekha]	'left'	yákha[reeba]	'asked'
yákha[loonda]	'followed'	yákha[kulikha]	'named'
yákha[homoola]	'massaged'	yákha[lakhuula]	'released'
yákha[seebula]	'said bye'	yákha[hoombelitsa]	'comforted'
yákha[kalushitsa]	'returned'	yákha[siinjilitsa]	'made stand'
yákha[reebareeba]	'asked (iter)'	yákha[kalukhanyinya]	'turned over'
yákha[sebulukhanyinya]	'scattered'		

(108) /Ø/ V-Initial 's/he just...'

yákh[eenya]	'wanted'	yákh[aashitsa]	'lit'
yákh[iiluula]	'winnowed'	yákh[aambakhana]	'refused'
yákh[eeleelitsa]	'hung up'		

(109) /H/ C-Initial + OP 's/he just...him/her'

yá ⁺ khámú[ra]	'buried'	yá ⁺ khámú[beka]	'shaved'
yá ⁺ khámú[leera]	'brought'	yá ⁺ khámú[khalaka]	'cut'
yá ⁺ khámú[sitaaka]	'accuse'	yá ⁺ khámú[boolitsa]	'seduced'
yá ⁺ khámú[tsuunzuuna]	'sucked'	yá ⁺ khámú[boholola]	'untied'
yá ⁺ khámú[bukaanila]	'met'	yá ⁺ khámú[ng'ong'oolitsa]	'teased'
yá ⁺ khámú[lingakanyinya]	'bent'		

(110) /H/ V-Initial + OP 's/he just...him/her'

yá ⁺ khámw[íira]	'killed'	yá ⁺ khámw[íikoomba]	'admired'
yá ⁺ khámw[íisiaka]	'smacked'	yá ⁺ khámw[óononyinya]	'spoiled'
yá ⁺ khámw[áabukhanyinya]	'separated'		

(111) /Ø/ C-Initial + OP 's/he just...him/her {mu-} / them_{2/10} {ba-/tsi-}'

yá ⁴ khámú[tsia]	‘went for’
yá ⁴ khámú[lekha]	‘left’
yá ⁴ khámú[loonda]	‘followed’
yá ⁴ khámú[kulikha]	‘named’
yá ⁴ khámú[lakhuula]	‘released’
yá ⁴ khámú[seebula]	‘said bye to’
yá ⁴ khámú[hoombelitsa]	‘comforted’
yá ⁴ khámú[kalushitsa]	‘returned’
yá ⁴ khámú[siinjilitsa]	‘made...stand’
yá ⁴ khámú[reebareeba]	‘asked (iter)’
yá ⁴ khámú[kalukhanyinya]	‘turned...over’
yá ⁴ khátsí[sebulukhanyinya]	‘scattered’
yá ⁴ khábá[sebulukhanyinya]	‘scattered’

(112) /Ø/ V-Initial + OP ‘s/he just...him/her {mw-} / it_{3/14} {kw-/bw-}’

yá ⁴ khámw[éenya]	‘wanted’	yá ⁴ khákw[áashitsa]	‘lit’
yá ⁴ khábw[íluula]	‘winnowed’	yá ⁴ khámw[áambakhana]	‘refused’
yá ⁴ khámw[éeleelitsa]	‘hung...up’		

(113) /H/ C-Initial + OP_{1sg} ‘s/he just...me’

yá ⁴ kháá[ria]	‘feared’	yá ⁴ kháá[mbeka]	‘shaved’
yá ⁴ kháá[ndeera]	‘brought’	yá ⁴ kháá[khalaka]	‘cut’
yá ⁴ kháá[sitaaka]	‘accused’	yá ⁴ kháá[mboolitsa]	‘seduced’
yá ⁴ kháá[ndzuunzuuna]	‘sucked’	yá ⁴ kháá[mboholola]	‘untied’
yá ⁴ kháá[mboyong’ana]	‘went around’	yá ⁴ kháá[ng’ong’oolitsa]	‘teased’
yá ⁴ kháá[ningakanyinya]	‘bent’		

(114) /H/ V-Initial + OP_{1sg} ‘s/he just...me’

yá ⁴ kháá[nzira]	‘killed’	yá ⁴ kháá[nzikoomba]	‘admired’
yá ⁴ kháá[nzisiaka]	‘smacked’	yá ⁴ kháá[nzononyinya]	‘spoiled’
yá ⁴ kháá[nzabukhanyinya]	‘separated’		

(115) /Ø/ C-Initial + OP_{1sg} 's/he just...me'

yá ⁴ kháá[ndekha]	'left'
yá ⁴ kháá[noonda]	'followed'
yá ⁴ kháá[ngulikha]	'named'
yá ⁴ kháá[ndakhuula]	'released'
yá ⁴ kháá[seebula]	'said bye to'
yá ⁴ kháá[mboombelitsa]	'comforted'
yá ⁴ kháá[siinjilitsa]	'made...stand'
yá ⁴ kháá[ndeebandeeba]	'asked (iter)'
yá ⁴ kháá[ngalukhanyinya]	'turned...over'

(116) /Ø/ V-Initial + OP_{1sg} 's/he just...me'

yá ⁴ kháá[nzenya]	'wanted'	yá ⁴ kháá[nzeyela]	'wiped for'
yá ⁴ kháá[nyambakhana]	'refused'	yá ⁴ kháá[nzeleelitsa]	'carried...hanging'

(117) /H/ C-Initial + OP_{refl} 's/he just...him/herself'

yá ⁴ khíí[ra]	'buried'	yá ⁴ khíí[beka]	'shaved'
yá ⁴ khíí[suunga]	'hung'	yá ⁴ khíí[khalaka]	'cut'
yá ⁴ khíí[sitaaka]	'accused'	yá ⁴ khíí[saanditsa]	'thanked'
yá ⁴ khíí[tsuunzuuna]	'sucked'	yá ⁴ khíí[boholola]	'untied'

(118) /H/ V-Initial + OP_{refl} 's/he just...him/herself'

yá ⁴ khíí[yira]	'killed'	yá ⁴ khíí[yikoomba]	'admired'
yá ⁴ khíí[yisiaka]	'smacked'	yá ⁴ khíí[yononyinya]	'spoiled'
yá ⁴ khíí[yabukhanyinya]	'separated'		

(119) /Ø/ C-Initial + OP_{refl} 's/he just...him/herself'

yá ⁴ khíí[kama]	‘sheltered’	yá ⁴ khíí[siinga]	‘bathed’
yá ⁴ khíí[kulikha]	‘named’	yá ⁴ khíí[naabula]	‘undressed’
yá ⁴ khíí[lakhuula]	‘released’	yá ⁴ khíí[hoombelitsa]	‘comforted’
yá ⁴ khíí[siinjilitsa]	‘made...stand’	yá ⁴ khíí[reebareeba]	‘asked (iter)’
yá ⁴ khíí[kalukhanyinya]	‘turned...over’		

(120) /Ø/ V-Initial + OP_{refl} ‘s/he just...him/herself’

yá ⁴ khíí[yeya]	‘wiped’	yá ⁴ khíí[yeyela]	‘wiped for’
yá ⁴ khíí[yambakhana]	‘despised’	yá ⁴ khíí[yeleelitsa]	‘hung’

(121) /H/ C-Initial + OP + OP_{1sg} ‘s/he just...him/her for me’

yá ⁴ khámúu[ndeela]	‘buried’	yá ⁴ khámúu[mbechela]	‘shaved’
yá ⁴ khámúu[ndeerela]	‘brought’	yá ⁴ khámúu[khalachila]	‘cut’
yá ⁴ khámúu[sitaachila]	‘accused’	yá ⁴ khámúu[mboolitsila]	‘seduced’
yá ⁴ khámúu[mbohoololela]	‘untied’		

(122) /H/ V-Initial + OP + OP_{1sg} ‘s/he just...him/her for me’

yá ⁴ khámúu[nzirila]	‘killed’
yá ⁴ khámúu[nzechitsila]	‘admired’
yá ⁴ khámúu[nzisiachila]	‘smacked’
yá ⁴ khámúu[nzononyinyila]	‘spoiled’
yá ⁴ khámúu[nzabukhanyinyila]	‘separated’

(123) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he just...him/her for me’

yá ⁴ khámúu[nziila]	‘went for’
yá ⁴ khámúu[ndeshela]	‘left’
yá ⁴ khámúu[noondela]	‘followed’
yá ⁴ khámúu[ngulishila]	‘named’
yá ⁴ khámúu[ndakhuulila]	‘released’

yá ⁴ khámúu[seebulila]	‘said bye to’
yá ⁴ khámúu[mboombelitsila]	‘comforted’
yá ⁴ khámúu[siinjilitsila]	‘made...stand’

(124) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he just...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

yá ⁴ khábúu[nzalila]	‘displayed’	yá ⁴ khákúu[nzashitsila]	‘lit’
yá ⁴ khábúu[nzilulila]	‘winnowed’	yá ⁴ khálúu[nzitsulitsila]	‘filled’
yá ⁴ khákúu[nzeleelitsila]	‘hung’		

(125) /H/ C-Initial Phrase-Medial ‘s/he just...the man {musáatsa} /
the boy {mú⁴yáyí} / someone {muundu}’

yá ⁴ khá[rá]	musáatsa/mú ⁴ yáyí/muundu	‘buried’
yá ⁴ khá[béka]	musáatsa/mú ⁴ yáyí/muundu	‘shaved’
yá ⁴ khá[léera]	musáatsa/mú ⁴ yáyí/muundu	‘brought’
yá ⁴ khá[khálaka]	musáatsa/mú ⁴ yáyí/muundu	‘cut’
yá ⁴ khá[sítaaka]	musáatsa/mú ⁴ yáyí/muundu	‘accused’
yá ⁴ khá[bóolitsa]	musáatsa/mú ⁴ yáyí/muundu	‘seduced’
yá ⁴ khá[tsúunzuuna]	musáatsa/mú ⁴ yáyí/muundu	‘sucked’
yá ⁴ khá[bóholola]	musáatsa/mú ⁴ yáyí/muundu	‘untied’
yá ⁴ khá[bóyong’ana]	musáatsa/mú ⁴ yáyí/muundu	‘went around’
yá ⁴ khá[ng’óng’oolitsa]	musáatsa/mú ⁴ yáyí/muundu	‘teased’

(126) /Ø/ C-Initial Phrase-Medial ‘s/he just...the man {musáatsa} /
the boy {mú⁴yáyí} / someone {muundu}’

yákha[tsia]	musáatsa/mú ⁴ yáyí/muundu	‘went for’
yákha[lekha]	musáatsa/mú ⁴ yáyí/muundu	‘left’
yákha[loonda]	musáatsa/mú ⁴ yáyí/muundu	‘followed’
yákha[kulikha]	musáatsa/mú ⁴ yáyí/muundu	‘named’
yákha[lakhuula]	musáatsa/mú ⁴ yáyí/muundu	‘released’
yákha[seebula]	musáatsa/mú ⁴ yáyí/muundu	‘said bye’
yákha[kalushitsa]	musáatsa/mú ⁴ yáyí/muundu	‘returned’
yákha[reebareeba]	musáatsa/mú ⁴ yáyí/muundu	‘asked (iter)’
yákha[kalukhanyinya]	musáatsa/mú ⁴ yáyí/muundu	‘turned...over’

the boy {mú⁺yáyí} / someone {muundu} for him/her for me'

yá ⁺ khámúu[nziila]	musáatsa/mú ⁺ yáyí/muundu	'went for'
yá ⁺ khámúu[ndeshela]	musáatsa/mú ⁺ yáyí/muundu	'left'
yá ⁺ khámúu[noondela]	musáatsa/mú ⁺ yáyí/muundu	'followed'
yá ⁺ khámúu[ngulishila]	musáatsa/mú ⁺ yáyí/muundu	'named'
yá ⁺ khámúu[ndakhuulila]	musáatsa/mú ⁺ yáyí/muundu	'released'

A.1.6 Immediate Past Negative: Pattern 1b

(131) /H/ C-Initial 's/he did not just...'

yá ⁺ khá[rá]	ʔtá	'bury'
yá ⁺ khá[ng'wá]	ʔtá	'drink'
yá ⁺ khá[khwá]	ʔtá	'pay dowry'
yá ⁺ khá[líá]	ʔtá	'eat'
yá ⁺ khá[lú ⁺ má]	tá	'bite'
yá ⁺ khá[bé ⁺ ká]	tá	'shave'
yá ⁺ khá[té ⁺ ékhá]	tá	'cook'
yá ⁺ khá[lé ⁺ érá]	tá	'bring'
yá ⁺ khá[khá ⁺ láká]	tá	'cut'
yá ⁺ khá[ká ⁺ láángá]	tá	'fry'
yá ⁺ khá[sí ⁺ tááká]	tá	'accuse'
yá ⁺ khá[bó ⁺ ólítsá]	tá	'seduce'
yá ⁺ khá[sá ⁺ ándítsá]	tá	'thank'
yá ⁺ khá[tsú ⁺ únzúúná]	tá	'suck'
yá ⁺ khá[bó ⁺ hólólá]	tá	'untie'
yá ⁺ khá[bó ⁺ yóng'áná]	tá	'go around'
yá ⁺ khá[ng'ó ⁺ ng'óólítsá]	tá	'tease'
yá ⁺ khá[lí ⁺ ngákányínyá]	tá	'crumple'

(132) /Ø/ C-Initial 's/he did not just...'

yá ⁺ khá[tsíá]	tá	'go'
yá ⁺ khá[kwá]	tá	'fall'
yá ⁺ khá[lékhá]	tá	'leave'
yá ⁺ khá[réébá]	tá	'ask'

yá ⁺ khá[lóóndá] tá	‘follow’
yá ⁺ khá[kúlíkhá] tá	‘name’
yá ⁺ khá[hómóólá] tá	‘massage’
yá ⁺ khá[lákhúúlá] tá	‘release’
yá ⁺ khá[séébúlá] tá	‘say bye’
yá ⁺ khá[hóómbélítsá] tá	‘comfort’
yá ⁺ khá[kálúshítsá] tá	‘return’
yá ⁺ khá[síinjílítsá] tá	‘make stand’
yá ⁺ khá[réébáréébá] tá	‘ask (iter)’
yá ⁺ khá[kálúkhányínyá] tá	‘turn over’
yá ⁺ khá[sébúlúkhányínyá] tá	‘scatter’

(133) /H/ C-Initial + OP ‘s/he did not just...him/her’

yá ⁺ khámú[⁺ rá] tá	‘bury’
yá ⁺ khámú[⁺ béká] tá	‘shave’
yá ⁺ khámú[⁺ léérá] tá	‘bring’
yá ⁺ khámú[⁺ kháláká] tá	‘cut’
yá ⁺ khámú[⁺ sítááká] tá	‘accuse’
yá ⁺ khámú[⁺ bóólítsá] tá	‘seduce’
yá ⁺ khámú[⁺ tsúúnzúúná] tá	‘suck’
yá ⁺ khámú[⁺ bóhólólá] tá	‘untie’
yá ⁺ khámú[⁺ bóyóng’áná] tá	‘go around’
yá ⁺ khámú[⁺ ng’óng’óólítsá] tá	‘tease’
yá ⁺ khámú[⁺ língákányínyá] tá	‘bend’

(134) /Ø/ C-Initial + OP ‘s/he did not just...him/her {mu-} / them_{2/10} {ba-/tsi-}’

yá ⁺ khámú[⁺ tsíá] ⁺ tá	‘go for’
yá ⁺ khámú[⁺ lékhá] ⁺ tá	‘leave’
yá ⁺ khámú[⁺ lóóndá] tá	‘follow’
yá ⁺ khámú[⁺ kúlíkhá] tá	‘name’
yá ⁺ khámú[⁺ lákhúúlá] tá	‘release’
yá ⁺ khámú[⁺ séébúlá] tá	‘say bye to’
yá ⁺ khámú[⁺ hóómbélítsá] tá	‘comfort’
yá ⁺ khámú[⁺ kálúshítsá] tá	‘return’
yá ⁺ khámú[⁺ síinjílítsá] tá	‘make...stand’

yá⁺khámú⁺[⁺réébáréébá] tá ‘ask (iter)’
 yá⁺khámú⁺[⁺kálúkhányínyá] tá ‘turn...over’

(135) /H/ C-Initial + OP + OP_{1sg} ‘s/he did not just...him/her for me’

yá ⁺ khámú ⁺ ú[ndéélá] tá	‘bury’	yá ⁺ khámú ⁺ ú[mbéchélá] tá	‘shave’
yá ⁺ khámú ⁺ ú[ndéérélá] tá	‘bring’	yá ⁺ khámú ⁺ ú[kháláchílá] tá	‘cut’
yá ⁺ khámú ⁺ ú[sítááchílá] tá	‘accuse’	yá ⁺ khámú ⁺ ú[mbóólítsílá] tá	‘seduce’
yá ⁺ khámú ⁺ ú[mbóhólólélá] tá	‘untie’		

(136) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he did not just...him/her for me’

yá ⁺ khámú ⁺ ú[nzíílá] tá	‘go for’
yá ⁺ khámú ⁺ ú[ndéshélá] tá	‘leave’
yá ⁺ khámú ⁺ ú[nóóndélá] tá	‘follow’
yá ⁺ khámú ⁺ ú[ngúlíshílá] tá	‘name’
yá ⁺ khámú ⁺ ú[ndákhúúlílá] tá	‘release’
yá ⁺ khámú ⁺ ú[séébúlílá] tá	‘say bye to’
yá ⁺ khámú ⁺ ú[mbóómbélítsílá] tá	‘comfort’
yá ⁺ khámú ⁺ ú[síinjílítsílá] tá	‘make...stand’

(137) /H/ C-Initial Phrase-Medial ‘s/he did not just...the man {musáatsa} /
 the boy {mú⁺yáyi} / someone {muundu}’

yá ⁺ khá[rá] musáatsa/mú ⁺ yáyi/muundu tá	‘bury’
yá ⁺ khá[béka] musáatsa/mú ⁺ yáyi/muundu tá	‘shave’
yá ⁺ khá[léera] musáatsa/mú ⁺ yáyi/muundu tá	‘bring’
yá ⁺ khá[khálaka] musáatsa/mú ⁺ yáyi/muundu tá	‘cut’
yá ⁺ khá[sítaaka] musáatsa/mú ⁺ yáyi/muundu tá	‘accuse’
yá ⁺ khá[bóolitsa] musáatsa/mú ⁺ yáyi/muundu tá	‘seduce’
yá ⁺ khá[tsúunzuuna] musáatsa/mú ⁺ yáyi/muundu tá	‘suck’
yá ⁺ khá[bóholola] musáatsa/mú ⁺ yáyi/muundu tá	‘untie’
yá ⁺ khá[bóyong’ana] musáatsa/mú ⁺ yáyi/muundu tá	‘go around’
yá ⁺ khá[ng’óng’oolitsa] musáatsa/mú ⁺ yáyi/muundu tá	‘tease’

yákha[tsia] musáatsa/mú'yáyi/muundu tá	'go for'
yákha[lekha] musáatsa/mú'yáyi/muundu tá	'leave'
yákha[reeba] musáatsa/mú'yáyi/muundu tá	'ask'
yákha[loonda] musáatsa/mú'yáyi/muundu tá	'follow'
yákha[kulikha] musáatsa/mú'yáyi/muundu tá	'name'
yákha[lakhuula] musáatsa/mú'yáyi/muundu tá	'release'
yákha[seebula] musáatsa/mú'yáyi/muundu tá	'say bye to'
yákha[kalushitsa] musáatsa/mú'yáyi/muundu tá	'return'
yákha[reebareeba] musáatsa/mú'yáyi/muundu tá	'ask (iter)'
yákha[kalukhanyinya] musáatsa/mú'yáyi/muundu tá	'turn...over'

yá'khámú[reela]	musáatsa/mú'yáyí/muundu tá	'bury'
yá'khámú[bechela]	musáatsa/mú'yáyí/muundu tá	'shave'
yá'khámú[leerela]	musáatsa/mú'yáyí/muundu tá	'bring'
yá'khámú[khalachila]	musáatsa/mú'yáyí/muundu tá	'cut'
yá'khámú[sitaachila]	musáatsa/mú'yáyí/muundu tá	'accuse'
yá'khámú[boolitsila]	musáatsa/mú'yáyí/muundu tá	'seduce'
yá'khámú[tsuunzuunila]	musáatsa/mú'yáyí/muundu tá	'suck'
yá'khámú[bohologo]	musáatsa/mú'yáyí/muundu tá	'untie'
yá'khámú[boyong'anila]	musáatsa/mú'yáyí/muundu tá	'go around'
yá'khámú[ng'ong'oolitsila]	musáatsa/mú'yáyí/muundu tá	'tease'

yá'khámú[tsiila] musáatsa/mú'yáyi/muundu tá	'go for'
yá'khámú[leshela] musáatsa/mú'yáyi/muundu tá	'leave'
yá'khámú[loondela] musáatsa/mú'yáyi/muundu tá	'follow'
yá'khámú[kulishila] musáatsa/mú'yáyi/muundu tá	'name'
yá'khámú[lakhuulila] musáatsa/mú'yáyi/muundu tá	'release'
yá'khámú[seebulila] musáatsa/mú'yáyi/muundu tá	'say bye to'
yá'khámú[kalushitsila] musáatsa/mú'yáyi/muundu tá	'return'
yá'khámú[reebareebela] musáatsa/mú'yáyi/muundu tá	'ask (iter)'
yá'khámú[kalukhanyinyila] musáatsa/mú'yáyi/muundu tá	'turn...over'

- (141) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he did not just...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu} for him/her for me’
 yá⁺khámúu[ndeela] musáatsa/mú⁺yáyí/muundu tá ‘bury’
 yá⁺khámúu[mbechela] musáatsa/mú⁺yáyí/muundu tá ‘shave’
 yá⁺khámúu[ndeerela] musáatsa/mú⁺yáyí/muundu tá ‘bring’
 yá⁺khámúu[sitaachila] musáatsa/mú⁺yáyí/muundu tá ‘accuse’
 yá⁺khámúu[mbohololela] musáatsa/mú⁺yáyí/muundu tá ‘untie’

- (142) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he did not just...the man {musáatsa} /
the boy {mú⁺yáyí} / someone {muundu} for him/her for me’
 yá⁺khámúu[nziila] musáatsa/mú⁺yáyí/muundu tá ‘go for’
 yá⁺khámúu[ndeshela] musáatsa/mú⁺yáyí/muundu tá ‘leave’
 yá⁺khámúu[noondela] musáatsa/mú⁺yáyí/muundu tá ‘follow’
 yá⁺khámúu[ngulishila] musáatsa/mú⁺yáyí/muundu tá ‘name’
 yá⁺khámúu[ndakhuulila] musáatsa/mú⁺yáyí/muundu tá ‘release’

A.1.7 Remote Future: Pattern 1b [JI]¹

- (143) /H/ C-Initial ‘s/he will...’

yá ⁺ khá[ré]	‘bury’	yá ⁺ khá[ng’wí]	‘drink’
yá ⁺ khá[khwí]	‘pay dowry’	yá ⁺ khá[lí]	‘eat’
yá ⁺ khá[lúmɛ]	‘bite’	yá ⁺ khá[béche]	‘shave’
yá ⁺ khá[téeshɛ]	‘cook’	yá ⁺ khá[léere]	‘bring’
yá ⁺ khá[khálache]	‘cut’	yá ⁺ khá[kálaangɛ]	‘fry’
yá ⁺ khá[sítaache]	‘accuse’	yá ⁺ khá[bóolitse]	‘seduce’
yá ⁺ khá[sáanditse]	‘thank’	yá ⁺ khá[tsúunzuunɛ]	‘suck’
yá ⁺ khá[bóholole]	‘untie’	yá ⁺ khá[bóyong’ane]	‘go around’
yá ⁺ khá[ng’óng’oolitse]	‘tease’	yá ⁺ khá[shíling’anyinyɛ]	‘silence’

¹There are two segmentally similar forms: (i) the Remote Future, which takes H-toned **ákha-**, the FV **-ɛ**, and the Pattern 1b melody and (ii) a type of future perfective, which takes toneless **akha-**, the perfective suffix **-ile** (§1.3.3), and the Pattern 2a melody. It was taxing for SB to consistently produce one of these constructions within a single paradigm; ultimately we moved past this construction and its negative counterpart to more effectively use our time together. The transcriptions below reflect the tonal properties of the productions of JI, who consistently produced just the Remote Future.

(144) /H/ V-Initial 's/he will...'

yá ⁴ kh[ííri]	'kill'	yá ⁴ kh[ííkoombɛ]	'admire'
yá ⁴ kh[íísiachɛ]	'smack'	yá ⁴ kh[ííkobolɛ]	'belch'
yá ⁴ kh[óónonyinyɛ]	'spoil'	yá ⁴ kh[áábukhanyinyɛ]	'separate'

(145) /Ø/ C-Initial 's/he will...'

yákha[tsi]	'go'	yákha[kwi]	'fall'
yákha[leshe]	'leave'	yákha[reebɛ]	'ask'
yákha[loondɛ]	'follow'	yákha[kumilɛ]	'hold'
yákha[sasanɛ]	'resemble'	yákha[homoolɛ]	'massage'
yákha[lakhuulɛ]	'release'	yákha[seebulɛ]	'say bye'
yákha[hoombelitɛ]	'comfort'	yákha[kalukhitɛ]	'return'
yákha[siinjilitɛ]	'make stand'	yákha[rootsarootɛ]	'poke (iter)'
yákha[kalukhanyinyɛ]	'turn over'	yákha[sabulukhanyinyɛ]	'scatter'

(146) /Ø/ V-Initial 's/he will...'

yákh[eenyɛ]	'want'	yákh[aakhitɛ]	'light'
yákh[aabaarɛ]	'grope'	yákh[aambakhane]	'refuse'
yákh[eeleelitɛ]	'hang up'		

(147) /H/ C-Initial + OP 's/he will...him/her'

yá ⁴ khámú[rɛ]	'bury'	yá ⁴ khámú[beche]	'shave'
yá ⁴ khámú[leerɛ]	'bring'	yá ⁴ khámú[khalache]	'cut'
yá ⁴ khámú[sitaache]	'accuse'	yá ⁴ khámú[boolitɛ]	'seduce'
yá ⁴ khámú[tsuunzuunɛ]	'suck'	yá ⁴ khámú[bohoolɛ]	'untie'
yá ⁴ khámú[boyong'anɛ]	'go around'	yá ⁴ khámú[ng'ong'oolitɛ]	'tease'
yá ⁴ khámú[shiling'anyinyɛ]	'silence'		

(148) /H/ V-Initial + OP 's/he will...him/her'

yá ⁴ khámw[íire]	'kill'	yá ⁴ khámw[íikoombe]	'admire'
yá ⁴ khámw[íisiache]	'smack'	yá ⁴ khámw[óononyinye]	'spoil'
yá ⁴ khámw[áabukhanyinye]	'separate'		

(149) /Ø/ C-Initial + OP 's/he will...him/her {mu-} / them₁₀ {tsi-}'

yá ⁴ khámú[tsi]	'go for'
yá ⁴ khámú[leshe]	'leave'
yá ⁴ khámú[loonde]	'follow'
yá ⁴ khámú[kumile]	'hold'
yá ⁴ khámú[lakhuule]	'release'
yá ⁴ khámú[seebule]	'say bye to'
yá ⁴ khámú[hoombelitse]	'comfort'
yá ⁴ khámú[kalukhitse]	'return'
yá ⁴ khámú[siinjilitse]	'make...stand'
yá ⁴ khámú[rootsarootse]	'poke (iter)'
yá ⁴ khámú[kalukhanyinye]	'turn...over'
yá ⁴ khátsí[sabulukhanyinye]	'scatter'

(150) /Ø/ V-Initial + OP 's/he will...him/her {mw-} / it_{3/14} {kw-/bw-}'

yá ⁴ khámw[éenyε]	'want'	yá ⁴ khákw[áakhitse]	'light'
yá ⁴ khábw[íiluule]	'winnow'	yá ⁴ khámw[aabaare]	'grobe'
yá ⁴ khámw[áambakhanε]	'refuse'	yá ⁴ khámw[éeleelitse]	'hold...hanging'

(151) /H/ C-Initial + OP_{1sg} 's/he will...me'

yá ⁴ kháá[ndi]	'fear'	yá ⁴ kháá[mbeche]	'shave'
yá ⁴ kháá[ndeere]	'bring'	yá ⁴ kháá[khalache]	'cut'
yá ⁴ kháá[sitaache]	'accuse'	yá ⁴ kháá[mboolitse]	'seduce'
yá ⁴ kháá[ndzuunzuune]	'suck'	yá ⁴ kháá[mboholole]	'untie'
yá ⁴ kháá[mboyong'ane]	'go around'	yá ⁴ kháá[ng'ong'oolitse]	'tease'
yá ⁴ kháá[shiling'anyinye]	'bend'		

(152) /H/ V-Initial + OP_{1sg} 's/he will...me'

yá ⁺ kháá[nzire]	'kill'	yá ⁺ kháá[nzikoombe]	'admire'
yá ⁺ kháá[nzisiache]	'smack'	yá ⁺ kháá[nzononyinye]	'spoil'
yá ⁺ kháá[nzabukhanyinye]	'separate'		

(153) /Ø/ C-Initial + OP_{1sg} 's/he will...me'

yá ⁺ kháá[ndeshε]	'leave'
yá ⁺ kháá[noonde]	'follow'
yá ⁺ kháá[ngumile]	'hold'
yá ⁺ kháá[ndakhuule]	'release'
yá ⁺ kháá[seebule]	'say bye to'
yá ⁺ kháá[mboombelitse]	'comfort'
yá ⁺ kháá[siinjilitse]	'make...stand'
yá ⁺ kháá[rootsarootse]	'poke (iter)'
yá ⁺ kháá[ngalukhanyinye]	'turn...over'

(154) /Ø/ V-Initial + OP_{1sg} 's/he will...me'

yá ⁺ kháá[nzenye]	'want'	yá ⁺ kháá[nzeyele]	'wipe for'
yá ⁺ kháá[nzabaare]	'grope'	yá ⁺ kháá[nyambakhanε]	'refuse'
yá ⁺ kháá[nzeleelitse]	'carry...hanging'		

(155) /H/ C-Initial + OP_{refl} 's/he will...him/herself'

yá ⁺ khíí[rε]	'bury'	yá ⁺ khíí[beche]	'shave'
yá ⁺ khíí[suunje]	'hang'	yá ⁺ khíí[khalache]	'cut'
yá ⁺ khíí[sitaache]	'accuse'	yá ⁺ khíí[saanditse]	'thank'
yá ⁺ khíí[tsuunzuune]	'suck'	yá ⁺ khíí[boholole]	'untie'

(156) /H/ V-Initial + OP_{refl} 's/he will...him/herself'

yá ⁴ khíí[yire]	‘kill’	yá ⁴ khíí[yikoombe]	‘admire’
yá ⁴ khíí[yisiache]	‘smack’	yá ⁴ khíí[yononyinye]	‘spoil’
yá ⁴ khíí[yabukhanyinye]	‘separate’		

(157) /Ø/ C-Initial + OP_{refl} ‘s/he will...him/herself’

yá ⁴ khíí[leshe]	‘leave’	yá ⁴ khíí[siinje]	‘bathe’
yá ⁴ khíí[kumile]	‘hold’	yá ⁴ khíí[naabule]	‘undress’
yá ⁴ khíí[lakhuule]	‘release’	yá ⁴ khíí[hoombelitse]	‘comfort’
yá ⁴ khíí[siinjilitse]	‘make...stand’	yá ⁴ khíí[rootsarootse]	‘poke (iter)’
yá ⁴ khíí[kalukhanyinye]	‘turn...over’		

(158) /Ø/ V-Initial + OP_{refl} ‘s/he will...him/herself’

yá ⁴ khíí[yale]	‘expose’	yá ⁴ khíí[yeyele]	‘wipe for’
yá ⁴ khíí[yabaare]	‘grope’	yá ⁴ khíí[yambakhanε]	‘despise’
yá ⁴ khíí[yeleelitse]	‘hang’		

(159) /H/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

yá ⁴ khámúu[ndeelε]	‘bury’	yá ⁴ khámúu[mbechele]	‘shave’
yá ⁴ khámúu[ndeelele]	‘bring’	yá ⁴ khámúu[khalachile]	‘cut’
yá ⁴ khámúu[sitaachile]	‘accuse’	yá ⁴ khámúu[mboolitsile]	‘seduce’
yá ⁴ khámúu[mbohoholele]	‘untie’		

(160) /H/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

yá ⁴ khámúu[nzirile]	‘kill’
yá ⁴ khámúu[nzechitsile]	‘admire’
yá ⁴ khámúu[nzisiachile]	‘smack’
yá ⁴ khámúu[nzononyinyile]	‘spoil’
yá ⁴ khámúu[nzabukhanyinyile]	‘separate’

(161) /Ø/ C-Initial + OP + OP_{1sg} 's/he will...him/her for me'

yá ⁺ khámúu[nziile]	'go for'
yá ⁺ khámúu[ndeshele]	'leave'
yá ⁺ khámúu[noondele]	'follow'
yá ⁺ khámúu[ngumilile]	'hold'
yá ⁺ khámúu[ndakhuulile]	'release'
yá ⁺ khámúu[seebulile]	'say bye to'
yá ⁺ khámúu[mboombelitsile]	'comfort'
yá ⁺ khámúu[siinjilitsile]	'make...stand'

(162) /Ø/ V-Initial + OP + OP_{1sg} 's/he will...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me'

yá ⁺ khábúu[nzalile]	'display'	yá ⁺ khákúu[nzakhitsile]	'light'
yá ⁺ khábúu[nziluulile]	'winnow'	yá ⁺ khálúu[nzitsulitsile]	'fill'
yá ⁺ khákúu[nzeleelitsile]	'hang'		

(163) /H/ C-Initial Phrase-Medial 's/he will...the man {musáatsa} /
the girl {mukháana} / the boy {mú⁺yáyi} / someone {muundu}'

yá ⁺ khá[ré]	musáatsa/mú ⁺ yáyi/muundu	'bury'
yá ⁺ khá[béche]	musáatsa/mú ⁺ yáyi/muundu	'shave'
yá ⁺ khá[léere]	musáatsa/mú ⁺ yáyi/muundu	'bring'
yá ⁺ khá[khálache]	musáatsa/mú ⁺ yáyi/muundu	'cut'
yá ⁺ khá[sítaache]	musáatsa/mú ⁺ yáyi/muundu	'accuse'
yá ⁺ khá[bóolitse]	mukháana/mú ⁺ yáyi/muundu	'seduce'
yá ⁺ khá[tsúunzuune]	musáatsa/mú ⁺ yáyi/muundu	'suck'
yá ⁺ khá[bóholole]	musáatsa/mú ⁺ yáyi/muundu	'untie'
yá ⁺ khá[bóyong'ane]	musáatsa/mú ⁺ yáyi/muundu	'go around'

(164) /Ø/ C-Initial Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu}'

yákha[tsi]	musáatsa/mú ⁺ yáyi/muundu	'go for'
yákha[leshe]	musáatsa/mú ⁺ yáyi/muundu	'leave'
yákha[loonde]	musáatsa/mú ⁺ yáyi/muundu	'follow'

yákha[kumile]	musáatsa/mú'yáyí/muundu	'hold'
yákha[lakhuule]	musáatsa/mú'yáyí/muundu	'release'
yákha[seebule]	musáatsa/mú'yáyí/muundu	'say bye to'
yákha[kalukhitse]	musáatsa/mú'yáyí/muundu	'return'
yákha[roostarootse]	musáatsa/mú'yáyí/muundu	'poke (iter)'

(165) /H/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /
the girl / {mukháana} / the boy {mú'yáyí} / someone {muundu} for him/her'

yá'khámú[rɛ]	musáatsa/mú'yáyí/muundu	'bury'
yá'khámú[beche]	musáatsa/mú'yáyí/muundu	'shave'
yá'khámú[leere]	musáatsa/mú'yáyí/muundu	'bring'
yá'khámú[khalache]	musáatsa/mú'yáyí/muundu	'cut'
yá'khámú[sitaache]	musáatsa/mú'yáyí/muundu	'accuse'
yá'khámú[boolitse]	mukáana/mú'yáyí/muundu	'seduce'
yá'khámú[tsoonzuune]	musáatsa/mú'yáyí/muundu	'suck'
yá'khámú[bohoolole]	musáatsa/mú'yáyí/muundu	'untie'
yá'khámú[boyong'ane]	musáatsa/mú'yáyí/muundu	'go around'
yá'khámú[shiling'anyinye]	musáatsa/mú'yáyí/muundu	'silence'

(166) /Ø/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

yá'khámú[tsi]	musáatsa/mú'yáyí/muundu	'go for'
yá'khámú[leshe]	musáatsa/mú'yáyí/muundu	'leave'
yá'khámú[loonde]	musáatsa/mú'yáyí/muundu	'follow'
yá'khámú[kumile]	musáatsa/mú'yáyí/muundu	'hold'
yá'khámú[lakhuule]	musáatsa/mú'yáyí/muundu	'release'
yá'khámú[seebule]	musáatsa/mú'yáyí/muundu	'say bye to'
yá'khámú[kalukhitse]	musáatsa/mú'yáyí/muundu	'return'
yá'khámú[rootsarootse]	musáatsa/mú'yáyí/muundu	'poke (iter)'

(167) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her for me'

yá'khámú[ndeele]	musáatsa/mú'yáyí/muundu	'bury'
yá'khámú[mbechele]	musáatsa/mú'yáyí/muundu	'shave'
yá'khámú[ndeelele]	musáatsa/mú'yáyí/muundu	'bring'

yá ⁺ khámúu[khalachile]	musáatsa/mú ⁺ yáyi/muundu	‘cut’
yá ⁺ khámúu[sitaachile]	musáatsa/mú ⁺ yáyi/muundu	‘accuse’
yá ⁺ khámúu[mbohoholele]	musáatsa/mú ⁺ yáyi/muundu	‘untie’

(168) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he will...the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu} for him/her for me’

yá ⁺ khámúu[nziile]	musáatsa/mú ⁺ yáyi/muundu	‘go for’
yá ⁺ khámúu[ndeshele]	musáatsa/mú ⁺ yáyi/muundu	‘leave’
yá ⁺ khámúu[noondele]	musáatsa/mú ⁺ yáyi/muundu	‘follow’
yá ⁺ khámúu[ngumilile]	musáatsa/mú ⁺ yáyi/muundu	‘hold’
yá ⁺ khámúu[ndakhuulile]	musáatsa/mú ⁺ yáyi/muundu	‘release’
yá ⁺ khámúu[seebulile]	musáatsa/mú ⁺ yáyi/muundu	‘say bye to’

A.1.8 Remote Future Negative: Pattern 1b [JI]²

(169) /H/ C-Initial ‘s/he will not...’

yá ⁺ khá[ngwí]	‘drink’	yá ⁺ khá[bé ⁺ ché]	‘shave’
yá ⁺ khá[lé ⁺ éré]	‘bring’	yá ⁺ khá[khá ⁺ láché]	‘cut’
yá ⁺ khá[sí ⁺ tááché]	‘accuse’	yá ⁺ khá[bó ⁺ ólítsé]	‘seduce’
yá ⁺ khá[tsú ⁺ únzúúné]	‘suck’	yá ⁺ khá[bó ⁺ hólólé]	‘untie’
yá ⁺ khá[bó ⁺ yóng’áné]	‘go around’	yá ⁺ khá[ng’ó ⁺ ng’óólítsé]	‘tease’

(170) /Ø/ C-Initial ‘s/he will not...’

yá ⁺ khá[tsí]	‘go’	yá ⁺ khá[leshé]	‘leave’
yá ⁺ khá[réébé]	‘ask’	yá ⁺ khá[kúmílé]	‘hold’
yá ⁺ khá[sásáné]	‘resemble’	yá ⁺ khá[lákhúúlé]	‘release’
yá ⁺ khá[séébúlé]	‘say bye’	yá ⁺ khá[kálúkhítsé]	‘return’
yá ⁺ khá[róótséróótsé]	‘poke (iter)’	yá ⁺ khá[kálúkhányínyé]	‘turn over’

²This section of the questionnaire reflects JI’s productions rather than SB’s. See fn 1. For considerations of space, the negative element is written as **tá**, though JI preferred **táawe**, as it was presented to him and as he produced the it.

(171) /H/ C-Initial + OP 's/he will not...him/her'

yá ⁺ khámú[⁺ ré] tá	'bury'
yá ⁺ khámú[⁺ béché] tá	'shave'
yá ⁺ khámú[⁺ lééré] tá	'bring'
yá ⁺ khámú[⁺ kháláché] tá	'cut'
yá ⁺ khámú[⁺ sítááché] tá	'accuse'
yá ⁺ khámú[⁺ bóólítsé] tá	'seduce'
yá ⁺ khámú[⁺ tsúúnzúúné] tá	'suck'
yá ⁺ khámú[⁺ bóhólólé] tá	'untie'
yá ⁺ khámú[⁺ bóyóng'áné] tá	'go around'
yá ⁺ khámú[⁺ ng'óng'óólítsé] tá	'tease'
yá ⁺ khámú[⁺ shíling'ányínyé] tá	'silence'

(172) /Ø/ C-Initial + OP 's/he will not...him/her {mu-} / them_{2/10} {ba-/tsi-}'

yá ⁺ khámú[⁺ tsí] 'tá	'go for'
yá ⁺ khámú[⁺ léshé] 'tá	'leave'
yá ⁺ khámú[⁺ lóóndé] tá	'follow'
yá ⁺ khámú[⁺ kúmílé] tá	'hold'
yá ⁺ khámú[⁺ lákhuúlé] tá	'release'
yá ⁺ khámú[⁺ séébúlé] tá	'say bye to'
yá ⁺ khámú[⁺ kálúkhítsé] tá	'return'
yá ⁺ khámú[⁺ síinjílítsé] tá	'make...stand'
yá ⁺ khámú[⁺ róótséróótsé] tá	'poke (iter)'
yá ⁺ khámú[⁺ kálúkhányínyé] tá	'turn...over'

(173) /H/ C-Initial + OP + OP_{1sg} 's/he will not...him/her for me'

yá ⁺ khámú ⁺ ú[ndéélé] tá	'bury'	yá ⁺ khámú ⁺ ú[mbéchélé] tá	'shave'
yá ⁺ khámú ⁺ ú[ndéélélé] tá	'bring'	yá ⁺ khámú ⁺ ú[kháláchílé] tá	'cut'
yá ⁺ khámú ⁺ ú[sítááchílé] tá	'accuse'	yá ⁺ khámú ⁺ ú[mbóólítsílé] tá	'seduce'
yá ⁺ khámú ⁺ ú[mbóhólólélé] tá	'untie'		

(174) /Ø/ C-Initial + OP + OP_{1sg} 's/he will not...him/her for me'

yá ⁺ khámú ⁺ ú[nzíílé] tá	'go for'
yá ⁺ khámú ⁺ ú[ndéshélé] tá	'leave'
yá ⁺ khámú ⁺ ú[nóóndélé] tá	'follow'
yá ⁺ khámú ⁺ ú[ngúmíílél] tá	'hold'
yá ⁺ khámú ⁺ ú[ndákhúúlílél] tá	'release'
yá ⁺ khámú ⁺ ú[séébúílél] tá	'say bye to'
yá ⁺ khámú ⁺ ú[sínjílítsílé] tá	'make...stand'

(175) /H/ C-Initial Phrase-Medial 's/he will not...the man {musáatsa} / the girl {mukháana} / the wife {mukháli} / the boy {mú⁺yáyi} / someone {muundu}'

yá ⁺ khá[ré] musáatsa/mú ⁺ yáyi/muundu tá	'bury'
yá ⁺ khá[béche] musáatsa/mú ⁺ yáyi/muundu tá	'shave'
yá ⁺ khá[léere] musáatsa/mú ⁺ yáyi/muundu tá	'bring'
yá ⁺ khá[khálache] musáatsa/mú ⁺ yáyi/muundu tá	'cut'
yá ⁺ khá[sítaache] musáatsa/mú ⁺ yáyi/muundu tá	'accuse'
yá ⁺ khá[bóolitse] mukháana/mú ⁺ yáyi/muundu tá	'seduce'
yá ⁺ khá[tsúunzuune] musáatsa/mú ⁺ yáyi/muundu tá	'suck'
yá ⁺ khá[bóholole] musáatsa/mú ⁺ yáyi/muundu tá	'untie'
yá ⁺ khá[bóyong'ane] musáatsa/mú ⁺ yáyi/muundu tá	'go around'

(176) /Ø/ C-Initial Phrase-Medial 's/he will not...the man {musáatsa} / the boy {mú⁺yáyi} / someone {muundu}'

yákha[tsi] musáatsa/mú ⁺ yáyi/muundu tá	'go for'
yákha[leshe] musáatsa/mú ⁺ yáyi/muundu tá	'leave'
yákha[loonde] musáatsa/mú ⁺ yáyi/muundu tá	'follow'
yákha[kumile] musáatsa/mú ⁺ yáyi/muundu tá	'hold'
yákha[lakhuule] musáatsa/mú ⁺ yáyi/muundu tá	'release'
yákha[seebule] musáatsa/mú ⁺ yáyi/muundu tá	'say bye to'
yákha[kalukhitse] musáatsa/mú ⁺ yáyi/muundu tá	'return'
yákha[rootserootse] musáatsa/mú ⁺ yáyi/muundu tá	'poke (iter)'

(177) /H/ C-Initial +OP Phrase-Medial 's/he will not...the man {musáatsa} the girl {mukháana} / the boy {mú⁺yáyi} / someone {muundu} for him/her'

yá ⁴ khámú[rɛ]	musáatsa/mú ⁴ yáyí/muundu tá	‘bury’
yá ⁴ khámú[beche]	musáatsa/mú ⁴ yáyí/muundu tá	‘shave’
yá ⁴ khámú[leere]	musáatsa/mú ⁴ yáyí/muundu tá	‘bring’
yá ⁴ khámú[khalache]	musáatsa/mú ⁴ yáyí/muundu tá	‘cut’
yá ⁴ khámú[sitaache]	musáatsa/mú ⁴ yáyí/muundu tá	‘accuse’
yá ⁴ khámú[boolitse]	mukháana/mú ⁴ yáyí/muundu tá	‘seduce’
yá ⁴ khámú[tsuunzuune]	musáatsa/mú ⁴ yáyí/muundu tá	‘suck’
yá ⁴ khámú[boholole]	musáatsa/mú ⁴ yáyí/muundu tá	‘untie’
yá ⁴ khámú[boyong’ane]	musáatsa/mú ⁴ yáyí/muundu tá	‘go around’

(178) /Ø/ C-Initial +OP Phrase-Medial ‘s/he will not...the man {musáatsa} /
the boy {mú⁴yáyí} / someone {muundu} for him/her’

yá ⁴ khámú[tsi]	musáatsa/mú ⁴ yáyí/muundu tá	‘go for’
yá ⁴ khámú[leshe]	musáatsa/mú ⁴ yáyí/muundu tá	‘leave’
yá ⁴ khámú[loonde]	musáatsa/mú ⁴ yáyí/muundu tá	‘follow’
yá ⁴ khámú[kumile]	musáatsa/mú ⁴ yáyí/muundu tá	‘hold’
yá ⁴ khámú[lakhuule]	musáatsa/mú ⁴ yáyí/muundu tá	‘release’
yá ⁴ khámú[seebule]	musáatsa/mú ⁴ yáyí/muundu tá	‘say bye to’
yá ⁴ khámú[kalukhitse]	musáatsa/mú ⁴ yáyí/muundu tá	‘return’
yá ⁴ khámú[rootserootsele]	musáatsa/mú ⁴ yáyí/muundu tá	‘poke (iter)’

(179) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he will not...the man {musáatsa} /
the boy {mú⁴yáyí} / someone {muundu} for him/her for me’

yá ⁴ khámú[ndeele]	musáatsa/mú ⁴ yáyí/muundu tá	‘bury’
yá ⁴ khámú[mbechele]	musáatsa/mú ⁴ yáyí/muundu tá	‘shave’
yá ⁴ khámú[ndeelele]	musáatsa/mú ⁴ yáyí/muundu tá	‘bring’
yá ⁴ khámú[khalachile]	musáatsa/mú ⁴ yáyí/muundu tá	‘cut’
yá ⁴ khámú[sitaachile]	musáatsa/mú ⁴ yáyí/muundu tá	‘accuse’
yá ⁴ khámú[mbohololele]	musáatsa/mú ⁴ yáyí/muundu tá	‘untie’

(180) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he will not...the man {musáatsa} /
the boy {mú⁴yáyí} / someone {muundu} for him/her for me’

yá ⁴ khámú[nziile]	musáatsa/mú ⁴ yáyí/muundu tá	‘go for’
yá ⁴ khámú[ndeshele]	musáatsa/mú ⁴ yáyí/muundu tá	‘leave’
yá ⁴ khámú[noondele]	musáatsa/mú ⁴ yáyí/muundu tá	‘follow’

yá ⁴ khámúu[ngumililɛ]	musáatsa/mú ⁴ yáyí/muundu tá	‘hold’
yá ⁴ khámúu[ndakhuulilɛ]	musáatsa/mú ⁴ yáyí/muundu tá	‘release’
yá ⁴ khámúu[seebulilɛ]	musáatsa/mú ⁴ yáyí/muundu tá	‘say bye to’

A.1.9 Present: Pattern 5a³

(181) /H/ C-Initial ‘s/he is...’

a[reetsáángá]	‘burying’
a[ng’weetsáángá]	‘drinking’
a[khweetsáángá]	‘paying dowry’
a[liitsáángá]	‘eating’
a[lumaángá]	‘biting’
a[bekaángá]	‘shaving’
a[teekháángá]	‘cooking’
a[leeráángá]	‘bringing’
a[khalakáángá]	‘cutting’
a[kalaangáángá]	‘frying’
a[sitaakáángá]	‘accusing’
a[boolitsáángá]	‘seducing’
a[saanditsáángá]	‘thanking’
a[tsuunzuunáángá]	‘sucking’
a[boholóláángá]	‘untying’
a[boyong’ánáángá]	‘going around’
a[ng’ong’oolítsáángá]	‘teasing’
a[linga(ka)nyínyáángá]	‘crumpling’

(182) /H/ V-Initial ‘s/he is...’

y[iraángá]	‘killing’	y[ikóómbáángá]	‘admiring’
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³The Present, along with other Pattern 5a constructions, is the locus of much variation in Idakho. The transcriptions below reflect only the tonal variants described as basic in §2.5.1. In addition, all Present and Present-based verb forms have segmental variants in which the imperfective suffix **-anga** is truncated, so that the final syllable is long, e.g., a[khweetsáá] ‘s/he is paying dowry’. It is unclear at this point what conditions truncation of the imperfective suffix and if it corresponds to a semantic contrast (present progressive vs. simple present).

y[isíákáanga]	‘smacking’	y[ikobóláanga]	‘belching’
y[ononyínyáanga]	‘spoiling’	y[abukhányínyaanga]	‘separating’

(183) /Ø/ C-Initial ‘s/he is...’

a[tsiítsaanga]	‘going’
a[kwiítsaanga]	‘falling’
a[lekháanga]	‘leaving’
a[reébáanga]	‘asking’
a[loóndáanga]	‘following’
a[kulíkháanga]	‘naming’
a[homóolaanga]	‘massaging’
a[lakhúulaanga]	‘releasing’
a[seébúlaanga]	‘saying bye’
a[hoómbélitsaanga]	‘comforting’
a[kalúshítsaanga]	‘returning’
a[sínjílitsaanga]	‘making stand’
a[reébáreebaanga]	‘asking (iter)’
a[kalúkhányinyaanga]	‘turning over’
a[sebúlúkhanyinyaanga]	‘scattering’

(184) /Ø/ V-Initial ‘s/he is...’

y[enyáanga]	‘wanting’	y[eyélaanga]	‘wiping for’
y[ilúulaanga]	‘winnowing’	y[ambákhánaanga]	‘refusing’
y[eléelitsaanga]	‘hanging up’		

(185) /H/ C-Initial + OP ‘s/he is...him/her’

amu[ré ¹ étsáángá]	‘burying’
amu[bé ¹ káángá]	‘shaving’
amu[lé ¹ éráángá]	‘bringing’
amu[khá ¹ lákáángá]	‘cutting’
amu[sí ¹ táákáángá]	‘accusing’
amu[bó ¹ ólítsáángá]	‘seducing’

amu[tsú'únzúúnáánga]	'sucking'
amu[bó'hólóláanga]	'untying'
amu[bó'yóng'ánáanga]	'going around'
amu[ng'ó'ng'óólítsáanga]	'teasing'
amu[lí'ngá(ka)nyínyáanga]	'bending'

(186) /H/ V-Initial + OP 's/he is...him/her'

amw[ií'ráánga]	'killing'	amw[ií'kóómbáánga]	'admiring'
amw[ií'síákáánga]	'smacking'	amw[oó'nónyínyáanga]	'spoiling'
amw[aá'búkhányinyaanga]	'separating'		

(187) /Ø/ C-Initial + OP 's/he is...him/her {mu-} / them₈ {bi-}'

amu[tsiítsaanga]	'going for'
amu[lekháanga]	'leaving'
amu[loóndáanga]	'following'
amu[kulíkháanga]	'naming'
amu[lakhúulaanga]	'releasing'
amu[seébúlaanga]	'saying bye to'
amu[hoómbélitsaanga]	'comforting'
amu[kalúshítsaanga]	'returning'
amu[siínjílitsaanga]	'making...stand'
amu[reébáreebaanga]	'asking (iter)'
amu[kalúkhányinyaanga]	'turning...over'
abi[sebúlúkhanyinyaanga]	'scattering'

(188) /Ø/ V-Initial + OP 's/he is...him/her {mw-} / it₁₄ {bw-}'

amw[eenyáanga]	'wanting'	amw[eeyélaanga]	'lighting'
abw[iilúulaanga]	'winnowing'	amw[aambákhánaanga]	'refusing'
amw[eeléelitsaanga]	'hanging...up'		

(189) /H/ C-Initial + OP_{1sg} 's/he is...me'

aa[ndí ⁺ ítsáángá]	'fearing'
aa[mbé ⁺ káángá]	'shaving'
aa[ndé ⁺ éráángá]	'bringing'
aa[khá ⁺ lákáángá]	'cutting'
aa[sí ⁺ táákáángá]	'accusing'
aa[mbó ⁺ ólítsáángá]	'seducing'
aa[ndzú ⁺ únzúúnáángá]	'sucking'
aa[mbó ⁺ hólóláángá]	'untying'
aa[mbó ⁺ yóng'ánáángá]	'going around'
aa[ng'ó ⁺ ng'óólítsáángá]	'teasing'
aa[ní ⁺ ngá(ká)nyínyáángá]	'bending'

(190) /H/ V-Initial + OP_{1sg} 's/he is...me'

aa[nzí ⁺ ráángá]	'killing'	aa[nzí ⁺ kóómbaanga]	'admiring'
aa[nzí ⁺ síákaanga]	'smacking'	aa[nzó ⁺ nónyínyáángá]	'spoiling'
aa[nzá ⁺ búkhányínyaanga]	'separating'		

(191) /Ø/ C-Initial + OP_{1sg} 's/he is...me'

aa[ndekháanga]	'leaving'
aa[noóndáanga]	'following'
aa[ngulíkháanga]	'naming'
aa[ndakhúulaanga]	'releasing'
aa[seébúlaanga]	'saying bye to'
aa[mboómbélitsaanga]	'comforting'
aa[síinjílitsaanga]	'making...stand'
aa[ndeébándeebaanga]	'asking (iter)'
aa[ngalúkhányinyaanga]	'turning...over'

(192) /Ø/ V-Initial + OP_{1sg} 's/he is...me'

aa[nzenyáanga]	'wanting'	aa[nzeyélaanga]	'wiping for'
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aa[nyambákhánaanga] ‘refusing’ aa[nzeléelitsaanga] ‘carrying...hanging’

(193) /H/ C-Initial + OP_{refl} ‘s/he is...him/herself’

yii[ré'étsáángá]	‘burying’	yii[bé'káángá]	‘shaving’
yii[sú'úngáángá]	‘hanging’	yii[khá'lákáángá]	‘cutting’
yii[sí'táákáángá]	‘accusing’	yii[sá'ándítsáángá]	‘thanking’
yii[tsú'únzúúnáángá]	‘sucking’	yii[bó'hólóláángá]	‘untying’

(194) /H/ V-Initial + OP_{refl} ‘s/he is...him/herself’

yii[yí'ráángá]	‘killing’	yii[yí'kóómbáángá]	‘admiring’
yii[yí'síákáángá]	‘smacking’	yii[yó'nónyínyáángá]	‘spoiling’
yii[yá'búkhányínyaanga]	‘separating’		

(195) /Ø/ C-Initial + OP_{refl} ‘s/he is...him/herself’

yii[lekháanga]	‘leaving’
yii[siíngáanga]	‘bathing’
yii[kulíkháanga]	‘naming’
yii[naábúlaanga]	‘undressing’
yii[lakhúulaanga]	‘releasing’
yii[hoómbélitsaanga]	‘comforting’
yii[siínjílitsaanga]	‘making...stand’
yii[reébáreebaanga]	‘asking (iter)’
yii[kalúkhányinyaanga]	‘turning...over’

(196) /Ø/ V-Initial + OP_{refl} ‘s/he is...him/herself’

yii[yaláanga]	‘exposing’	yii[yeyéláanga]	‘wiping for’
yii[yambákhánaanga]	‘despising’	yii[yeléelitsaanga]	‘hanging’

(197) /H/ C-Initial + OP + OP_{1sg} 's/he is...him/her for me'

amuú['ndééláángá]	'burying'
amuú['mbéchéláángá]	'shaving'
amuú['ndééréláángá]	'bringing'
amuú['kháláchíláángá]	'cutting'
amuú['sítááchíláángá]	'accusing'
amuú['mbóólítsíláángá]	'seducing'
amuú['mbóhólólélaanga]	'untying'

(198) /H/ V-Initial + OP + OP_{1sg} 's/he is...him/her for me'

amuú['nzíríláángá]	'killing'
amuú['nzéchítsíláángá]	'admiring'
amuú['nzísíáchíláángá]	'smacking'
amuú['nzónónyínyílaanga]	'spoiling'
amuú['nzábúkhányínyilaanga]	'separating'

(199) /Ø/ C-Initial + OP + OP_{1sg} 's/he is...him/her for me'

amuú['nzííláanga]	'going for'
amuú['ndéshéláanga]	'leaving'
amuú['nóóndélaanga]	'following'
amuú['ngúlíshílaanga]	'naming'
amuú['ndákhúulilaanga]	'releasing'
amuú['séébúlilaanga]	'saying bye to'
amuú['mbóómbélitsilaanga]	'comforting'
amuú['sínjílitsilaanga]	'making...stand'

(200) /Ø/ V-Initial + OP + OP_{1sg} 's/he is...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me'

amuú['nzéyélaanga]	'wiping for'	akuú[nzáshítsílaanga]	'lighting'
abuú['nzílúulilaanga]	'winnowing'	aluú[nzítsúlitsilaanga]	'filling'
akuú[nzéléelitsilaanga]	'hanging'		

A.1.10 Present Negative: Pattern 5a⁴

(207) /H/ C-Initial 's/he is not...'

a[reetsáángá] 'tá	'burying'
a[ng'weetsáángá] 'tá	'drinking'
a[khweetsáángá] 'tá	'paying dowry'
a[liitsáángá] 'tá	'eating'
a[lumaángá] 'tá	'biting'
a[bekaángá] 'tá	'shaving'
a[teekháángá] 'tá	'cooking'
a[leeráángá] 'tá	'bringing'
a[khalakáá'ngá] tá	'cutting'
a[kalaangáá'ngá] tá	'frying'
a[sitaakáá'ngá] tá	'accusing'
a[boolitsáá'ngá] tá	'seducing'
a[saanditsáá'ngá] tá	'thanking'
a[tsuunzuunáá'ngá] tá	'sucking'
a[boholólá'ángá] tá	'untying'
a[boyong'áná'ángá] tá	'going around'
a[ng'ong'oolítsá'ángá] tá	'teasing'
a[linga(ka)nyínyá'ángá] tá	'crumpling'

(208) /H/ V-Initial 's/he is not...'

y[iraángá] 'tá	'killing'	y[ikoómbá'ángá] tá	'admiring'
y[isiáká'ángá] tá	'smacking'	y[ikobólá'ángá] tá	'belching'
y[ononyínyá'ángá] tá	'spoiling'	y[abukhányí'nyáángá] tá	'separating'

(209) /Ø/ C-Initial 's/he is not...'

a[tsií'tsáángá] tá	'going'
a[kwií'tsáángá] tá	'falling'

⁴The Present Negative, along with other Pattern 5a constructions, is the locus of much variation in Idakho. The transcriptions below reflect only the tonal variants described as basic in §2.5.1.

a[lekhá'ángá] tá	'leaving'
a[reébá'ángá] tá	'asking'
a[loóndá'ángá] tá	'following'
a[kulíkhá'ángá] tá	'naming'
a[homó'óláángá] tá	'massaging'
a[lakhú'úláángá] tá	'releasing'
a[seébú'láángá] tá	'saying bye'
a[hoómbé'lítsáángá] tá	'comforting'
a[kalúshí'tsáángá] tá	'returning'
a[siínjí'lítsáángá] tá	'making stand'
a[reébá'reébaángá] tá	'asking (iter)'
a[kalúkhá'nyínyáángá] tá	'turning over'
a[sebúlú'khányínyáángá] tá	'scattering'

(210) /Ø/ V-Initial 's/he is not...'

y[enyá'ángá] tá	'wanting'	y[eyéla'ángá] tá	'wiping for'
y[ilú'úláángá] tá	'winnowing'	y[ambákhá'náángá] tá	'refusing'
y[elé'élítsáángá] tá	'hanging up'		

(211) /H/ C-Initial + OP 's/he is not...him/her'

amu[ré'étsáángá] 'tá	'burying'
amu[bé'káángá] 'tá	'shaving'
amu[lé'éraángá] 'tá	'bringing'
amu[khá'lákáá'ngá] tá	'cutting'
amu[sí'táákáá'ngá] tá	'accusing'
amu[bó'ólítsáá'ngá] tá	'seducing'
amu[tsú'únzúúnáá'ngá] tá	'sucking'
amu[bó'hólólá'ángá] tá	'untying'
amu[bó'yóng'áná'ángá] tá	'going around'
amu[ng'ó'ng'óólítsá'ángá] tá	'teasing'
amu[lí'ngá(ka)nyínyá'ángá] tá	'bending'

(212) /H/ V-Initial + OP 's/he is not...him/her'

amw[ií'ráángá] 'tá	'killing'
amw[ií'kóómbáá'ngá] tá	'admiring'
amw[ií'siákáá'ngá] tá	'smacking'
amw[oó'nónyínyá'ángá] tá	'spoiling'
amw[aa'búkhányí'nyáángá] tá	'separating'

(213) /Ø/ C-Initial + OP 's/he is not...him/her {mu-} / them₈ {bi-}'

amu[tsií'tsáángá] tá	'going for'
amu[lekhá'ángá] tá	'leaving'
amu[loóndá'ángá] tá	'following'
amu[kulíkhá'ángá] tá	'naming'
amu[lakhú'úláángá] tá	'releasing'
amu[seébú'láángá] tá	'saying bye to'
amu[hoómbé'lítsáángá] tá	'comforting'
amu[kalúshí'tsáángá] tá	'returning'
amu[siínjí'lítsáángá] tá	'making...stand'
amu[reébá'reébáángá] tá	'asking (iter)'
amu[kalúkhá'nyínyáángá] tá	'turning...over'
abi[sebúlú'khányínyáángá] tá	'scattering'

(214) /Ø/ V-Initial + OP 's/he is not...him/her {mw-} / it₁₄ {bw-}'

amw[eenyá'ángá] tá	'wanting'	amw[eeyéla'ángá] tá	'lighting'
abw[iilú'úláángá] tá	'winnowing'	amw[aambákhá'náángá] tá	'refusing'
amw[eelé'élítsáángá] tá	'hanging...up'		

(215) /H/ C-Initial + OP_{1sg} 's/he is not...me'

aa[ndí'ítsáángá] 'tá	'fearing'
aa[mbé'káángá] 'tá	'shaving'
aa[ndé'éráángá] 'tá	'bringing'
aa[khá'lákáá'ngá] tá	'cutting'
aa[sí'táákáá'ngá] tá	'accusing'

aa[mbó'ólítsáá'ngá] tá	'seducing'
aa[ndzú'únzúúnáá'ngá] tá	'sucking'
aa[mbó'hólólá'ángá] tá	'untying'
aa[mbó'yóng'áná'ángá] tá	'going around'
aa[ng'ó'ng'óólítsá'ángá] tá	'teasing'
aa[ní'ngá(ká)nyínyá'ángá] tá	'bending'

(216) /H/ V-Initial + OP_{1sg} 's/he is not...me'

aa[nzí'ráángá] 'tá	'killing'
aa[nzí'kóómbáá'ngá] tá	'admiring'
aa[nzí'síákáá'ngá] tá	'smacking'
aa[nzó'nónyínyá'ángá] tá	'spoiling'
aa[nzá'búkhányí'nyáángá] tá	'separating'

(217) /Ø/ C-Initial + OP_{1sg} 's/he is not...me'

aa[ndekhá'ángá] tá	'leaving'
aa[noóndá'ángá] tá	'following'
aa[ngulíkhá'ángá] tá	'naming'
aa[ndakhú'úláángá] tá	'releasing'
aa[seébúl'áángá] tá	'saying bye to'
aa[mboómbé'lítsáángá] tá	'comforting'
aa[síínjí'lítsáángá] tá	'making...stand'
aa[ndeébá'ndéébáángá] tá	'asking (iter)'
aa[ngalúkhá'nyínyáángá] tá	'turning...over'

(218) /Ø/ V-Initial + OP_{1sg} 's/he is not...me'

aa[nzenyá'ángá] tá	'wanting'
aa[nzeyé'lá'ángá] tá	'wiping for'
aa[nyambákhá'náángá] tá	'refusing'
aa[nzelé'élítsáángá] tá	'carrying...hanging'

(219) /H/ C-Initial + OP_{refl} 's/he is not...him/herself'

yii[ré'étsáángá] 'tá	'burying'	yii[bé'káángá] 'tá	'shaving'
yii[sú'úngáángá] 'tá	'hanging'	yii[khá'lákáángá] tá	'cutting'
yii[sí'táákáángá] tá	'accusing'	yii[sá'ándítsáángá] tá	'thanking'
yii[tsú'únzúúnáángá] tá	'sucking'	yii[bó'hólóláángá] tá	'untying'

(220) /H/ V-Initial + OP_{refl} 's/he is not...him/herself'

yii[yí'ráángá] 'tá	'killing'
yii[yí'kóómbáángá] tá	'admiring'
yii[yí'síákáángá] tá	'smacking'
yii[yó'nónyínyáángá] tá	'spoiling'
yii[yá'búkhányí'nyáángá] tá	'separating'

(221) /Ø/ C-Initial + OP_{refl} 's/he is not...him/herself'

yii[lekhá'ángá] tá	'leaving'
yii[sííngá'ángá] tá	'bathing'
yii[kulíkhá'ángá] tá	'naming'
yii[naábú'láángá] tá	'undressing'
yii[lakhú'úláángá] tá	'releasing'
yii[hoómbé'lítsáángá] tá	'comforting'
yii[síínjí'lítsáángá] tá	'making...stand'
yii[reébá'reébáángá] tá	'asking (iter)'
yii[kalúkhá'nyínyáángá] tá	'turning...over'

(222) /Ø/ V-Initial + OP_{refl} 's/he is not...him/herself'

yii[yalá'ángá] tá	'exposing'	yii[yeyé'lá'ángá] tá	'wiping for'
yii[yambákhá'náángá] tá	'despising'	yii[yelé'élítsáángá] tá	'hanging'

(223) /H/ C-Initial + OP + OP_{lsg} 's/he is not...him/her for me'

amuú[¹ ndééláángá] tá	‘burying’
amuú[¹ mbéchéláá ¹ ngá] tá	‘shaving’
amuú[¹ ndééréláá ¹ ngá] tá	‘bringing’
amuú[¹ kháláchílá ¹ ángá] tá	‘cutting’
amuú[¹ sítááchílá ¹ ángá] tá	‘accusing’
amuú[¹ mbóólítsílá ¹ ángá] tá	‘seducing’
amuú[¹ mbóhólólé ¹ láángá] tá	‘untying’

(224) /H/ V-Initial + OP + OP_{1sg} ‘s/he is not...him/her for me’

amuú[¹ nzírláá ¹ ngá] tá	‘killing’
amuú[¹ nzéchétsílá ¹ ángá] tá	‘admiring’
amuú[¹ nzísíáchíláá ¹ ngá] tá	‘smacking’
amuú[¹ nzónónyínyí ¹ láángá] tá	‘spoiling’
amuú[¹ nzábúkhányí ¹ nyíláángá] tá	‘separating’

(225) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he is not...him/her for me’

amuú[¹ nzírlá ¹ ángá] tá	‘going for’
amuú[¹ ndéshélá ¹ ángá] tá	‘leaving’
amuú[¹ nóóndé ¹ láángá] tá	‘following’
amuú[¹ ngúlíshí ¹ láángá] tá	‘naming’
amuú[¹ ndákhú ¹ úlíláángá] tá	‘releasing’
amuú[¹ séébú ¹ líláángá] tá	‘saying bye to’
amuú[¹ mbóómbé ¹ lítsíláángá] tá	‘comforting’
amuú[¹ sínjí ¹ lítsíláángá] tá	‘making...stand’

(226) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he is not...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

amuú[¹ nzéyé ¹ lá ¹ ángá] tá	‘wiping for’
akuú[nzáshítsí ¹ láángá] tá	‘lighting’
abuú[¹ nzílu ¹ úlíláángá] tá	‘winnowing’
aluú[nzítsúlí ¹ tsíláángá] tá	‘filling’
akuú[nzélé ¹ élítsíláángá] tá	‘hanging’

A.1.11 Indefinite Future: Pattern 5b

(233) /H/ C-Initial 's/he will...'

ali[ra]	'bury'	ali[ng'wa]	'drink'
ali[khwa]	'eat'	ali[lia]	'pay dowry'
ali[luma]	'bite'	ali[beka]	'shave'
ali[teekhá]	'cook'	ali[leerá]	'bring'
ali[khalaká]	'cut'	ali[kalaangá]	'fry'
ali[sitaaká]	'accuse'	ali[boolitsá]	'seduce'
ali[saanditsá]	'thank'	ali[khong'oondá]	'knock'
ali[bohololá]	'untie'	ali[boyong'aná]	'go around'
ali[ng'ong'oolitsá]	'tease'	ali[lingakanyinyá]	'crumple'

(234) /H/ V-Initial 's/he will...'⁵

al[iirá]	'kill'	al[iikoómba]	'admire'
al[iisiáka]	'smack'	al[iikobóla]	'belch'
al[iononyínya]	'spoil'	al[iabukhanyínya]	'separate'

(235) /Ø/ C-Initial 's/he will...'

ali[tsía]	'go'	ali[kwá]	'fall'
ali[lekhá]	'leave'	ali[reéba]	'ask'
ali[loónnda]	'follow'	ali[kumíla]	'hold'
ali[kulíkha]	'name'	ali[homóola]	'massage'
ali[lakhúula]	'release'	ali[seébula]	'say bye'
ali[hoómbélitsa]	'comfort'	ali[kalúshitsa]	'return'
ali[síinjílitsa]	'make stand'	ali[reébáreeba]	'ask (iter)'
ali[kalúkhányinya]	'turn over'	ali[sebúlúkhanyinya]	'scatter'

(236) /Ø/ V-Initial 's/he will...'

⁵SB's productions of these forms reflect the properties of Pattern 5a (§2.5.1) rather than Pattern 5b (§2.5.2).

al[ienyá]	‘want’	al[ieyéla]	‘wipe for’
al[iilúula]	‘winnow’	al[iambákhana]	‘refuse’
al[ieléelitsa]	‘hang up’		

(237) /H/ C-Initial + OP ‘s/he will...him/her’

alimu[rá]	‘bury’	alimu[bé ⁺ ká]	‘shave’
alimu[lé ⁺ érá]	‘bring’	alimu[khá ⁺ láká]	‘cut’
alimu[sí ⁺ tááká]	‘accuse’	alimu[bó ⁺ ólítsá]	‘seduce’
alimu[khó ⁺ ng’óóndá]	‘knock’	alimu[bó ⁺ hólólá]	‘untie’
alimu[bó ⁺ yóng’áná]	‘go around’	alimu[ng’ó ⁺ ng’óólítsá]	‘tease’
alimu[lí ⁺ ngákányínyá]	‘bend’		
balimu[rá]	‘buried’	balimu[bé ⁺ ká]	‘shave’
balimu[lé ⁺ érá]	‘bring’	balimu[khá ⁺ láká]	‘cut’
balimu[sí ⁺ tááká]	‘accuse’	balimu[bó ⁺ ólítsá]	‘seduce’
balimu[khó ⁺ ng’óóndá]	‘knock’	balimu[bó ⁺ hólólá]	‘untie’
balimu[bó ⁺ yóng’áná]	‘go around’	balimu[ng’ó ⁺ ng’óólítsá]	‘tease’
balimu[lí ⁺ ngákányínyá]	‘bend’		

(238) /H/ V-Initial + OP ‘s/he will...him/her’

alimw[ií ⁺ rá]	‘kill’	alimw[ií ⁺ kóómbá]	‘admire’
alimw[ií ⁺ síáká]	‘smack’	alimw[oó ⁺ nónyínyá]	‘spoil’
alimw[aá ⁺ búkhányínyá]	‘separate’	alimw[ií ⁺ rílá]	‘kill for’

(239) /Ø/ C-Initial + OP ‘s/he will...him/her {mu-} / them₈ {bi-}’

alimu[tsía]	‘go for’
alimu[lekhá]	‘leave’
alimu[loónda]	‘follow’
alimu[kulíkha]	‘name’
alimu[lakhúula]	‘release’
alimu[seébula]	‘say bye to’

alimu[hoómbélitsa]	‘comfort’
alimu[kalúshitsa]	‘return’
alimu[siínjílitsa]	‘make...stand’
alimu[reébáreeba]	‘ask (iter)’
alimu[kalúkhányinya]	‘turn...over’
alibi[sebúlúkhanyinya]	‘scatter’

(240) /Ø/ V-Initial + OP ‘s/he will...him/her {mw-} / it₁₄ {bw-}’

alimw[eenyá]	‘want’	alimw[eeyéla]	‘wipe for’
alibw[iilúula]	‘winnow’	alimw[aambákhana]	‘refuse’
alimw[eeléelitsa]	‘carry...hanging’		

(241) /H/ C-Initial + OP_{1sg} ‘s/he will...me’

alii[ría]	‘fear’	alii[mbé‘ká]	‘shave’
alii[ndé‘érá]	‘bring’	alii[khá‘láká]	‘cut’
alii[sí‘tááká]	‘accuse’	alii[mbó‘ólítsá]	‘seduce’
alii[khó‘ng’óóndá]	‘knock’	alii[mbó‘hólólá]	‘untie’
alii[mbó‘yóng’áná]	‘go around’	alii[ng’ó‘ng’óólítsá]	‘tease’
alii[ní‘ngákányínyá]	‘bend’		

(242) /H/ V-Initial + OP_{1sg} ‘s/he will...me’

alii[nzí‘rá]	‘kill’	alii[nzí‘kóómbá]	‘admire’
alii[nzí‘síáká]	‘smack’	alii[nzó‘nónyínyá]	‘spoil’
alii[nzá‘búkhányínyá]	‘separate’	alii[nzí‘rílá]	‘kill for’

(243) /Ø/ C-Initial + OP_{1sg} ‘s/he will...me’

alii[sía]	‘grind’	alii[ndekhá]	‘leave’
alii[noónnda]	‘follow’	alii[ngulíkha]	‘name’
alii[ndakhúula]	‘release’	alii[seébula]	‘say bye to’

alii[mboómbélitsa]	‘comfort’	alii[síinjílitsa]	‘make...stand’
alii[ndeébándeeba]	‘ask (iter)’	alii[ngalúkhányinya]	‘turn...over’

(244) /Ø/ V-Initial + OP_{1sg} ‘s/he will...me’

alii[nzenyá]	‘want’	alii[nzeyéla]	‘wipe for’
alii[nyambákhana]	‘refuse’	alii[nzeléelitsa]	‘carry...hanging’

(245) /H/ C-Initial + OP_{refl} ‘s/he will...him/herself’

alii[rá]	‘bury’	alii[bé‘ká]	‘shave’
alii[sú‘úngá]	‘hang’	alii[khá‘láká]	‘cut’
alii[sí‘tááká]	‘accuse’	alii[sá‘ándítsá]	‘thank’
alii[khó‘ng’óóndá]	‘knock’	alii[bó‘hólólá]	‘untie’

(246) /H/ V-Initial + OP_{refl} ‘s/he will...him/herself’

alii[yí‘rá]	‘kill’	alii[yí‘kóómbá]	‘admire’
alii[yí‘síáká]	‘smack’	alii[yó‘nónyínyá]	‘spoil’
alii[yá‘búkhányínyá]	‘separate’	alii[yí‘rílá]	‘kill for’

(247) /Ø/ C-Initial + OP_{refl} ‘s/he will...him/herself’

alii[sía]	‘grind’	alii[lekhá]	‘leave’
alii[siínga]	‘bathe’	alii[kulíkha]	‘name’
alii[naábula]	‘undress’	alii[lakhúula]	‘release’
alii[hoómbélitsa]	‘comfort’	alii[síinjílitsa]	‘make...stand’
alii[reébáreeba]	‘ask (iter)’	alii[kalúkhányinya]	‘turn...over’

(248) /Ø/ V-Initial + OP_{refl} ‘s/he will...him/herself’

alii[yenyá]	‘want’	alii[yeyéla]	‘wipe for’
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alii[yambákhana] ‘refuse’ alii[yeléelitsa] ‘hang...up’

(249) /H/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

alimuu[ndé ⁺ élá]	‘bury’	alimuu[mbé ⁺ chélá]	‘shave’
alimuu[ndé ⁺ érélá]	‘bring’	alimuu[khá ⁺ láchílá]	‘cut’
alimuu[sí ⁺ tááchílá]	‘accuse’	alimuu[mbó ⁺ ólítsílá]	‘seduce’
alimuu[mbó ⁺ hólólélá]	‘untie’		

(250) /H/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

alimuu[nzí ⁺ rílá]	‘kill’	alimuu[nzé ⁺ chítsílá]	‘admire’
alimuu[nzí ⁺ síáchílá]	‘smack’	alimuu[nzó ⁺ nónyínyílá]	‘spoil’
alimuu[nzá ⁺ búkhányínyílá]	‘separate’		

(251) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

alimuu[nziíla]	‘go for’	alimuu[ndeshéla]	‘leave’
alimuu[noóndela]	‘follow’	alimuu[ngulíshila]	‘name’
alimuu[ndakhúulila]	‘release’	alimuu[seébúlila]	‘say bye to’
alimuu[mboómbélitsila]	‘comfort’	alimuu[siínjílitsila]	‘make...stand’

(252) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

alimuu[nzeyéla]	‘wipe’	alikuu[nzashítsila]	‘light’
alibuu[nzilúulila]	‘winnow’	aliluu[nzitsúlitsila]	‘fill’
alikuu[nzeléelitsila]	‘hang’		

(253) /H/ C-Initial Phrase-Medial ‘s/he will...the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu}’

ali[ra] musáatsa/mú ⁺ yáyi/muundu	‘bury’
ali[beka] musáatsa/mú ⁺ yáyi/muundu	‘shave’

ali[leera]	musáatsa/mú'yáyí/muundu	'bring'
ali[khalaka]	musáatsa/mú'yáyí/muundu	'cut'
ali[sitaaka]	musáatsa/mú'yáyí/muundu	'accuse'
ali[boolitsa]	musáatsa/mú'yáyí/muundu	'seduce'
ali[khong'oonda]	musáatsa/mú'yáyí/muundu	'knock'
ali[boholola]	musáatsa/mú'yáyí/muundu	'untie'
ali[boyong'ana]	musáatsa/mú'yáyí/muundu	'go around'
ali[lingakanyinya]	musáatsa/mú'yáyí/muundu	'bend'

(254) /Ø/ C-Initial Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu}'

ali[tsia]	musáatsa/mú'yáyí/muundu	'go for'
ali[lekha]	musáatsa/mú'yáyí/muundu	'leave'
ali[loonda]	musáatsa/mú'yáyí/muundu	'follow'
ali[kulikha]	musáatsa/mú'yáyí/muundu	'name'
ali[lakhuula]	musáatsa/mú'yáyí/muundu	'release'
ali[seebula]	musáatsa/mú'yáyí/muundu	'say bye to'
ali[kalushitsa]	musáatsa/mú'yáyí/muundu	'return'
ali[reebareeba]	musáatsa/mú'yáyí/muundu	'ask (iter)'
ali[kalukhanyinya]	musáatsa/mú'yáyí/muundu	'turn...over'

(255) /H/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

alimu[réela]	musáatsa/mú'yáyí/muundu	'bury'
alimu[béchela]	musáatsa/mú'yáyí/muundu	'shave'
alimu[léerela]	musáatsa/mú'yáyí/muundu	'bring'
alimu[khálachila]	musáatsa/mú'yáyí/muundu	'cut'
alimu[sítaachila]	musáatsa/mú'yáyí/muundu	'accuse'
alimu[bóolitsila]	musáatsa/mú'yáyí/muundu	'seduce'
alimu[khóng'oondela]	musáatsa/mú'yáyí/muundu	'knock'
alimu[bóhololela]	musáatsa/mú'yáyí/muundu	'untie'
alimu[bóyong'anila]	musáatsa/mú'yáyí/muundu	'go around'
alimu[língakanyinyila]	musáatsa/mú'yáyí/muundu	'bend'

(256) /Ø/ C-Initial +OP Phrase-Medial 's/he will...the man {musáatsa} /

the boy {mú⁺yáyi} / someone {muundu} for him/her'

alimu[tsiila]	musáatsa/mú ⁺ yáyi/muundu	'go for'
alimu[leshela]	musáatsa/mú ⁺ yáyi/muundu	'leave'
alimu[loondela]	musáatsa/mú ⁺ yáyi/muundu	'follow'
alimu[kulishila]	musáatsa/mú ⁺ yáyi/muundu	'name'
alimu[lakhuulila]	musáatsa/mú ⁺ yáyi/muundu	'release'
alimu[seebulila]	musáatsa/mú ⁺ yáyi/muundu	'say bye to'
alimu[kalushitsila]	musáatsa/mú ⁺ yáyi/muundu	'return'
alimu[reebareebela]	musáatsa/mú ⁺ yáyi/muundu	'ask (iter)'
alimu[kalukhanyinyila]	musáatsa/mú ⁺ yáyi/muundu	'turn...over'

(257) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...*the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu} for him/her for me*⁶

alimuu[ndéela]	musáatsa/mú ⁺ yáyi/muundu	'bury'
alimuu[mbéchela]	musáatsa/mú ⁺ yáyi/muundu	'shave'
alimuu[ndéerela]	musáatsa/mú ⁺ yáyi/muundu	'bring'
alimuu[khálachila]	musáatsa/mú ⁺ yáyi/muundu	'cut'
alimuu[sítaachila]	musáatsa/mú ⁺ yáyi/muundu	'accuse'
alimuu[mbólitsila]	musáatsa/mú ⁺ yáyi/muundu	'seduce'
alimuu[mbólololela]	musáatsa/mú ⁺ yáyi/muundu	'untie'

(258) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...*the man {musáatsa} /
the boy {mú⁺yáyi} / someone {muundu} for him/her for me*

alimuu[nziila]	musáatsa/mú ⁺ yáyi/muundu	'go for'
alimuu[ndeshela]	musáatsa/mú ⁺ yáyi/muundu	'leave'
alimuu[noondela]	musáatsa/mú ⁺ yáyi/muundu	'follow'
alimuu[ngulishila]	musáatsa/mú ⁺ yáyi/muundu	'name'
alimuu[ndakhuulila]	musáatsa/mú ⁺ yáyi/muundu	'release'
alimuu[seebulila]	musáatsa/mú ⁺ yáyi/muundu	'say bye to'
alimuu[mboombelitsila]	musáatsa/mú ⁺ yáyi/muundu	'comfort'
alimuu[siinjilitsila]	musáatsa/mú ⁺ yáyi/muundu	'make...stand'

⁶SB noted during the interview that it is possible to produce the forms in this and the following paradigm with a rise on the pre-stem syllable, as expected, though to do so introduces uncertainty as to whether the subject of the verb will be available to carry out the action or whether the action will be take place. It is the pronunciation that I believe accurately reflects the tonal properties of what I have identified here as the Indefinite Future, though it is worth acknowledging that there is the possibility of contrasting the speaker's level of confidence that the action will take place via manipulations of tone.

A.1.12 Indefinite Future Negative: Pattern 5b

(259) /H/ C-Initial 's/he will not...'

ali[ra] tá	'bury'	ali[ng'wa] tá	'drink'
ali[khwa] tá	'eat'	ali[lia] tá	'pay dowry'
ali[luma] tá	'bite'	ali[beka] tá	'shave'
ali[teekhá] 'tá	'cook'	ali[leerá] 'tá	'bring'
ali[khalaká] 'tá	'cut'	ali[kalaangá] 'tá	'fry'
ali[sitaaká] 'tá	'accuse'	ali[boolitsá] 'tá	'seduce'
ali[saanditsá] 'tá	'thank'	ali[khong'oondá] 'tá	'knock'
ali[bohololá] 'tá	'untie'	ali[boyong'aná] 'tá	'go around'
ali[ng'ong'oolitsá] 'tá	'tease'	ali[lingakanyinyá] 'tá	'crumple'

(260) /Ø/ C-Initial 's/he will not...'

ali[tsiá] 'tá	'go'	ali[kwá] 'tá	'fall'
ali[lekhá] 'tá	'leave'	ali[reéba] tá	'ask'
ali[loónda] tá	'follow'	ali[kulíkha] tá	'name'
ali[homóola] tá	'massage'	ali[lakhúula] tá	'release'
ali[seébúla] tá	'say bye'	ali[hoómbélitsa] tá	'comfort'
ali[kalúshítsa] tá	'return'	ali[siínjílitsa] tá	'make stand'
ali[reébáreeba] tá	'ask (iter)'	ali[kalúkhányinya] tá	'turn over'
ali[sebúlúkhanyinya] tá	'scatter'		

(261) /H/ C-Initial + OP 's/he will not...him/her'

alimu[rá] 'tá	'bury'	alimu[bé'ká] 'tá	'shave'
alimu[lé'érá] 'tá	'bring'	alimu[khá'láká] 'tá	'cut'
alimu[sí'tááká] 'tá	'accuse'	alimu[bó'ólítsá] 'tá	'seduce'
alimu[khó'ng'óondá] 'tá	'knock'	alimu[bó'hólólá] 'tá	'untie'
alimu[bó'yóng'aná] 'tá	'go around'	alimu[ng'ó'ng'óólítsá] 'tá	'tease'
alimu[lí'ngákányínyá] 'tá	'bend'		

(262) /Ø/ C-Initial + OP 's/he will not...him/her {mu-} / them₈ {bi-}'

alimu[tsíá] 'tá	'go for'
alimu[lekhá] 'tá	'leave'
alimu[loónda] tá	'follow'
alimu[kulíkha] tá	'name'
alimu[lakhúula] tá	'release'
alimu[seébúla] tá	'say bye to'
alimu[hoómbélitsa] tá	'comfort'
alimu[kalúshítsa] tá	'return'
alimu[siínjílitsa] tá	'make...stand'
alimu[reébáreeba] tá	'ask (iter)'
alimu[kalúkhányinya] tá	'turn...over'
alibi[sebúlúkhanyinya] tá	'scatter'

(263) /H/ C-Initial + OP + OP_{1sg} 's/he will not...him/her for me'

alimuu[ndé'élá] 'tá	'bury'	alimuu[mbé'chélá] 'tá	'shave'
alimuu[ndé'érelá] 'tá	'bring'	alimuu[khá'láchílá] 'tá	'cut'
alimuu[sí'tááchílá] 'tá	'accuse'	alimuu[mbó'ólítsílá] 'tá	'seduce'
alimuu[mbó'hólólélá] 'tá	'untie'		

(264) /Ø/ C-Initial + OP + OP_{1sg} 's/he will not...him/her for me'

alimuu[nziíla] tá	'go for'	alimuu[ndeshéla] tá	'leave'
alimuu[noóndéla] tá	'follow'	alimuu[ngulíshíla] tá	'name'
alimuu[ndakhúulila] tá	'release'	alimuu[seébúlila] tá	'say bye to'
alimuu[mboómbélitsila] tá	'comfort'	alimuu[siínjílitsila] tá	'make...stand'

(265) /H/ C-Initial Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu}'

ali[ra] musáatsa/mú'yáyí/muundu	'bury'
ali[beka] musáatsa/mú'yáyí/muundu tá	'shave'
ali[leera] musáatsa/mú'yáyí/muundu tá	'bring'
ali[khalaka] musáatsa/mú'yáyí/muundu tá	'cut'

ali[sitaaka]	musáatsa/mú'yáyí/muundu tá	'accuse'
ali[boolitsa]	musáatsa/mú'yáyí/muundu tá	'seduce'
ali[khong'oonda]	musáatsa/mú'yáyí/muundu tá	'knock'
ali[boholola]	musáatsa/mú'yáyí/muundu tá	'untie'
ali[boyong'ana]	musáatsa/mú'yáyí/muundu tá	'go around'
ali[lingakanyinya]	musáatsa/mú'yáyí/muundu tá	'bend'

(266) /Ø/ C-Initial Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu}'

ali[tsia]	musáatsa/mú'yáyí/muundu tá	'go for'
ali[lekha]	musáatsa/mú'yáyí/muundu tá	'leave'
ali[loonda]	musáatsa/mú'yáyí/muundu tá	'follow'
ali[kulikha]	musáatsa/mú'yáyí/muundu tá	'name'
ali[lakhuula]	musáatsa/mú'yáyí/muundu tá	'release'
ali[seebula]	musáatsa/mú'yáyí/muundu tá	'say bye to'
ali[kalushitsa]	musáatsa/mú'yáyí/muundu tá	'return'
ali[reebareeba]	musáatsa/mú'yáyí/muundu tá	'ask (iter)'
ali[kalukhanyinya]	musáatsa/mú'yáyí/muundu tá	'turn...over'

(267) /H/ C-Initial +OP Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

alimu[réela]	musáatsa/mú'yáyí/muundu tá	'bury'
alimu[béchela]	musáatsa/mú'yáyí/muundu tá	'shave'
alimu[léerela]	musáatsa/mú'yáyí/muundu tá	'bring'
alimu[khálachila]	musáatsa/mú'yáyí/muundu tá	'cut'
alimu[sítaachila]	musáatsa/mú'yáyí/muundu tá	'accuse'
alimu[bóolitsila]	musáatsa/mú'yáyí/muundu tá	'seduce'
alimu[tsúunzuunila]	musáatsa/mú'yáyí/muundu tá	'suck'
alimu[bóhololela]	musáatsa/mú'yáyí/muundu tá	'untie'
alimu[bóyong'anila]	musáatsa/mú'yáyí/muundu tá	'go around'
alimu[língakanyinyila]	musáatsa/mú'yáyí/muundu tá	'bend'

(268) /Ø/ C-Initial +OP Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her'

alimu[siela]	musáatsa/mú'yáyí/muundu tá	'grind'
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alimu[leshela]	musáatsa/mú'yáyí/muundu tá	'leave'
alimu[loondela]	musáatsa/mú'yáyí/muundu tá	'follow'
alimu[kulishila]	musáatsa/mú'yáyí/muundu tá	'name'
alimu[lakhuulila]	musáatsa/mú'yáyí/muundu tá	'release'
alimu[seebulila]	musáatsa/mú'yáyí/muundu tá	'say bye to'
alimu[kalushitsila]	musáatsa/mú'yáyí/muundu tá	'return'
alimu[reebareebela]	musáatsa/mú'yáyí/muundu tá	'ask (iter)'
alimu[kalukhanyinyila]	musáatsa/mú'yáyí/muundu tá	'turn...over'

(269) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her for me'

alimuu[ndéela]	musáatsa/mú'yáyí/muundu tá	'bury'
alimuu[mbéchela]	musáatsa/mú'yáyí/muundu tá	'shave'
alimuu[ndéerela]	musáatsa/mú'yáyí/muundu tá	'bring'
alimuu[khálachila]	musáatsa/mú'yáyí/muundu tá	'cut'
alimuu[sítaachila]	musáatsa/mú'yáyí/muundu tá	'accuse'
alimuu[mbóolitsila]	musáatsa/mú'yáyí/muundu tá	'seduce'
alimuu[mbóhololela]	musáatsa/mú'yáyí/muundu tá	'untie'

(270) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the man {musáatsa} /
the boy {mú'yáyí} / someone {muundu} for him/her for me'

alimuu[nziila]	musáatsa/mú'yáyí/muundu tá	'go for'
alimuu[ndeshela]	musáatsa/mú'yáyí/muundu tá	'leave'
alimuu[noondela]	musáatsa/mú'yáyí/muundu tá	'follow'
alimuu[ngulishila]	musáatsa/mú'yáyí/muundu tá	'name'
alimuu[ndakhuulila]	musáatsa/mú'yáyí/muundu tá	'release'
alimuu[seebulila]	musáatsa/mú'yáyí/muundu tá	'say bye to'

A.1.13 Imperative_{sg}: Pattern 6

(271) /H/ C-Initial '...!'

[ra]	'bury'	[ng'wa]	'drink'
[khwa]	'eat'	[lia]	'pay dowry'

[luma]	‘bite’	[beka]	‘shave’
[teekhá]	‘cook’	[leerá]	‘bring’
[khalaká]	‘cut’	[kalaangá]	‘fry’
[sitaaká]	‘accuse’	[boolitsá]	‘seduce’
[saanditsá]	‘thank’	[khong’oondá]	‘knock’
[bohólólá]	‘untie’	[boyong’aná]	‘go around’
[ng’ong’oolitsá]	‘tease’	[lingakanyinyá]	‘crumple’

(272) /H/ V-Initial ‘...!’

[yira]	‘kill’	[yikoó ⁺ mbé]	‘admire’
[yisiá ⁺ ché]	‘smack’	[yikobó ⁺ lé]	‘belch’
[yononyinyá]	‘spoil’	[yabukhanyinyá]	‘separate’

(273) /Ø/ C-Initial ‘...!’

[tsía]	‘go’	[kwá]	‘fall’
[lé ⁺ khá]	‘leave’	[réé ⁺ bá]	‘ask’
[lóó ⁺ ndá]	‘follow’	[kúmí ⁺ lá]	‘hold’
[kúlí ⁺ khá]	‘name’	[hómóó ⁺ lá]	‘massage’
[lákhuú ⁺ lá]	‘release’	[séébú ⁺ lá]	‘say bye’
[hóómbélí ⁺ tsá]	‘comfort’	[kálúshí ⁺ tsá]	‘return’
[sínjílí ⁺ tsá]	‘make stand’	[réébárée ⁺ bá]	‘ask (iter)’
[kálúkhányí ⁺ nyá]	‘turn over’	[sébulúkhányí ⁺ nyá]	‘scatter’

(274) /Ø/ V-Initial ‘...!’

[yé ⁺ nyá]	‘want’	[yéyé ⁺ lá]	‘wipe for’
[yílúú ⁺ lá]	‘winnow’	[yámbákhá ⁺ ná]	‘refuse’
[yéléélí ⁺ tsá]	‘hang up’		

(275) /H/ C-Initial + OP ‘...him/her!’

mu[ré]	‘bury’	mu[bé ⁺ ché]	‘shave’
mu[leé ⁺ ré]	‘bring’	mu[khá ⁺ láché]	‘cut’
mu[sí ⁺ tááché]	‘accuse’	mu[boó ⁺ lítsí]	‘seduce’
mu[khó ⁺ ng’óóndé]	‘knock’	mu[bó ⁺ hólólé]	‘untie’
mu[bó ⁺ yóng’áné]	‘go around’	mu[ng’ó ⁺ ng’óólítsí]	‘tease’
mu[lí ⁺ ngákányínyí]	‘bend’		

(276) /H/ V-Initial + OP ‘...him/her!’

mw[ií ⁺ rí]	‘kill’	mw[ií ⁺ kóó ⁺ mbé]	‘admire’
mw[ií ⁺ síá ⁺ ché]	‘smack’	mw[oó ⁺ nónyínyí]	‘spoil’
mw[aá ⁺ búkhányínyí]	‘separate’		

(277) /Ø/ C-Initial + OP ‘...him/her {mu-} / them₈ {bi-}!’

mu[tsí]	‘go for’
mu[leshé]	‘leave’
mu[loó ⁺ ndé]	‘follow’
mu[kulí ⁺ shí]	‘name’
mu[lá ⁺ khúúlí]	‘release’
mu[seé ⁺ búlí]	‘say bye to’
mu[hoómbé ⁺ lítsí]	‘comfort’
mu[kalú ⁺ shítsí]	‘return’
mu[síínjí ⁺ lítsí]	‘make...stand’
mu[reébé ⁺ reébé]	‘ask (iter)’
mu[kalúkhá ⁺ nyínyí]	‘turn...over’
bi[sebúlú ⁺ khányínyí]	‘scatter’

(278) /Ø/ V-Initial + OP ‘...him/her {mw-} / it₁₄ {bw-}!’

mw[eé ⁺ nyé]	‘want’	mw[eé ⁺ yélé]	‘wipe for’
bw[ií ⁺ lúúlí]	‘winnow’	mw[aá ⁺ mbákháné]	‘refuse’
mw[eé ⁺ léélítsí]	‘carry...hanging’		

(279) /H/ C-Initial + OP_{1sg} ‘...me!’

u[rí]	‘fear’	[mbé ⁺ ká]	‘shave’
[(ndeé ⁺ rá]	‘bring’ ⁷	[khá ⁺ láká]	‘cut’
[sí ⁺ tááká]	‘accuse’	[mboó ⁺ lítsá]	‘seduce’
[khó ⁺ ng’óóndá]	‘knock’	[mbó ⁺ hólólá]	‘untie’
[bó ⁺ yóng’áná]	‘go around’	[ng’ó ⁺ ng’óólítsá]	‘tease’
[ní ⁺ ngákányínyá]	‘bend’		

(280) /H/ V-Initial + OP_{1sg} ‘...me!’

[nzí ⁺ rá]	‘kill’	[nzí ⁺ kóómbá]	‘admire’
[nzí ⁺ síáché]	‘smack’	[nzó ⁺ nónyínyá]	‘spoil’
[nzá ⁺ búkhányínyá]	‘separate’		

(281) /Ø/ C-Initial + OP_{1sg} ‘...me!’

[(sía]	‘grind’)	[ndé ⁺ khá]	‘leave’
[noó ⁺ ndá]	‘follow’	[ngú ⁺ líkhá]	‘name’
[ndá ⁺ khúúlá]	‘release’	[seé ⁺ búlá]	‘say bye to’
[mboómbé ⁺ lítsá]	‘comfort’	[síínjí ⁺ lítsá]	‘make...stand’
[ndeébá ⁺ ndéébá]	‘ask (iter)’	[ngalúkhá ⁺ nyínyá]	‘turn...over’

(282) /Ø/ V-Initial + OP_{1sg} ‘...me!’

[nzé ⁺ nyá]	‘want’	[nzé ⁺ yélá]	‘wipe for’
[nyá ⁺ mbákháná]	‘refuse’	[nzé ⁺ léélítsá]	‘carry...hanging’

(283) /H/ C-Initial + OP_{refl} ‘...yourself!’

yi[ré]	‘bury’	yi[bé ⁺ ché]	‘shave’
yi[suú ⁺ njǐ]	‘hang’	yi[khá ⁺ láché]	‘cut’

⁷This is meaningless due to problems of deixis.

yi[sí'tááché]	'accuse'	yi[saá'ndítsí]	'thank'
yi[khó'ng'óondé]	'knock'	yi[bó'hóólólé]	'untie'
yi[khú'píkhúpílí]	'knock'		

(284) /H/ V-Initial + OP_{refl} '...yourself!'

yi[yí'rí]	'kill'	yi[yí'kóómbé]	'admire'
yi[yí'síáché]	'smack'	yi[yó'nónyínyí]	'spoil'
yi[yá'búkhányínyí]	'separate'		

(285) /Ø/ C-Initial + OP_{refl} '...yourself!'

yi[sí]	'grind'	yi[leshé]	'leave'
yi[sí'njí]	'bathe'	yi[kulí'shí]	'name'
yi[naá'búlí]	'undress'	yi[lakhú'úlí]	'release'
yi[hoómbé'lítsí]	'comfort'	yi[síínjí'lítsí]	'make...stand'
yi[reébé'reébé]	'ask (iter)'	yi[kalúkhá'nyínyí]	'turn...over'

(286) /Ø/ V-Initial + OP_{refl} '...yourself!'

yi[yá'lé]	'spread'	yi[yé'yélé]	'wipe for'
yi[yá'mbákháné]	'refuse'	yi[yé'léélítsí]	'hang...up'

(287) /H/ C-Initial + OP + OP_{1sg} '...him/her for me!'

muú['ndéélé]	'bury'	muú['mbéchélé]	'shave'
muú['ndéérélé]	'bring'	muú['kháláchílí]	'cut'
muú['sítááchílí]	'accuse'	muú['mbóólítsílí]	'seduce'
muú['mbóhóólólélé]	'untie'		

(288) /H/ V-Initial + OP + OP_{1sg} '...him/her for me!'

muú[⁺ nzíííí]	‘kill’	muú[⁺ nzéchítsííí]	‘admire’
muú[⁺ nzísíáchííí]	‘smack’	muú[⁺ nzónónyínyííí]	‘spoil’
muú[⁺ nzábúkhányínyííí]	‘separate’		

(289) /Ø/ C-Initial + OP + OP_{1sg} ‘...him/her for me!’

muú[⁺ nzíííí]	‘go for’	muú[⁺ ndéshéííí]	‘leave’
muú[⁺ nóóííí]	‘follow’	muú[⁺ ngúííí]	‘name’
muú[⁺ ndákhúííí]	‘release’	muú[⁺ séébúííí]	‘say bye to’
muú[⁺ mbóómbéííí]	‘comfort’	muú[⁺ síínjííí]	‘make...stand’

(290) /Ø/ V-Initial + OP + OP_{1sg} ‘...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me!’

muú[⁺ nzéyéííí]	‘wipe’	kuú[⁺ nzáshííí]	‘light’
buú[⁺ nzííí]	‘winnow’	luú[⁺ nzítsúííí]	‘fill’
kuú[⁺ nzéléííí]	‘hang’		

(291) /H/ C-Initial Phrase-Medial ‘...the man {musáatsa} /
someone {muundu}!’

[ra] musáatsa/muundu	‘bury’
[beka] musáatsa/muundu	‘shave’
[leera] musáatsa/muundu	‘bring’
[khalaka] musáatsa/muundu	‘cut’
[sitaaka] musáatsa/muundu	‘accuse’
[boolitsa] musáatsa/muundu	‘seduce’
[khong’oonda] musáatsa/muundu	‘knock’
[boholola] musáatsa/muundu	‘untie’
[boyong’ana] musáatsa/muundu	‘go around’
[lingakanyinya] musáatsa/muundu	‘bend’

(292) /Ø/ C-Initial Phrase-Medial ‘...the man {musáatsa} /
someone {muundu}!’

[tsia] musáatsa/muundu	‘go for’
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[lekha] musáatsa/muundu	‘leave’
[loonda] musáatsa/muundu	‘follow’
[kulikha] musáatsa/muundu	‘name’
[lakhula] musáatsa/muundu	‘release’
[seebula] musáatsa/muundu	‘say bye to’
[kalushitsa] musáatsa/muundu	‘return’
[reebareeba] musáatsa/muundu	‘ask (iter)’
[kalukhanyinya] musáatsa/muundu	‘turn...over’

(293) /H/ C-Initial +OP Phrase-Medial ‘...*the man* {musáatsa} /
someone {muundu} for him/her!’

mu[reé ¹ lélé] musáatsa/muundu	‘bury’
mu[bé ¹ chélé] musáatsa/muundu	‘shave’
mu[leé ¹ rélé] musáatsa/muundu	‘bring’
mu[khá ¹ láchílí] musáatsa/muundu	‘cut’
mu[sí ¹ tááchílí] musáatsa/muundu	‘accuse’
mu[boó ¹ lítsílí] musáatsa/muundu	‘seduce’
mu[khó ¹ ng’óóndélé] musáatsa/muundu	‘knock’
mu[bó ¹ hólólélé] musáatsa/muundu	‘untie’
mu[bó ¹ yóng’ánílí] musáatsa/muundu	‘go around’

(294) /Ø/ C-Initial +OP Phrase-Medial ‘...*the man* {musáatsa} /
someone {muundu} for him/her!’⁸

mu[tsií ¹ lí] musáatsa/muundu	‘go for’
mu[leshé ¹ lé] musáatsa/muundu	‘leave’
mu[loóndé ¹ lé] musáatsa/muundu	‘follow’
mu[kulíshí ¹ lí] musáatsa/muundu	‘name’
mu[lakhú ¹ úlílí] musáatsa/muundu	‘release’
mu[seébú ¹ lílí] musáatsa/muundu	‘say bye to’
mu[kalúshí ¹ tsílí] musáatsa/muundu	‘return’
mu[reébé ¹ réébélé] musáatsa/muundu	‘ask (iter)’

(295) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘...*the man* {musáatsa} /

⁸The first recording of this paradigm, with musáatsa ‘the man’, were produced as subjunctives rather than imperatives.

someone {muundu} for him/her for me!

muú[⁺ ndéélé] musáatsa/muundu	‘bury’
muú[⁺ mbéchélé] musáatsa/muundu	‘shave’
muú[⁺ ndéérélé] musáatsa/muundu	‘bring’
muú[⁺ kháláchílí] musáatsa/muundu	‘cut’
muú[⁺ sítááchílí] musáatsa/muundu	‘accuse’
muú[⁺ mbóólítsílí] musáatsa/muundu	‘seduce’

(296) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘...the man {musáatsa} /
someone {muundu} for him/her for me!’

muú[⁺ nzíí ⁺ lí] musáatsa/muundu	‘go for’
muú[⁺ ndéshé ⁺ lé] musáatsa/muundu	‘leave’
muú[⁺ nóóndé ⁺ lé] musáatsa/muundu	‘follow’
muú[⁺ ngúlíshí ⁺ lí] musáatsa/muundu	‘name’
muú[⁺ ndákhú ⁺ úlílí] musáatsa/muundu	‘release’
muú[⁺ séébú ⁺ lílí] musáatsa/muundu	‘say bye to’

A.1.14 Imperative_{sg} Negative: Pattern 2a

(297) /H/ C-Initial ‘do not...!’

ukha[ra] tá	‘bury’	ukha[beka] tá	‘shave’
ukha[leera] tá	‘bring’	ukha[khalaka] tá	‘cut’
ukha[sitaaka] ⁺ tá	‘accuse’	ukha[boolitsa] ⁺ tá	‘seduce’
ukha[khong’oonda] ⁺ tá	‘knock’	ukha[boholola] ⁺ tá	‘untie’
ukha[boyong’ana] ⁺ tá	‘go around’		

(298) /Ø/ C-Initial ‘do not...!’

ukha[tsiá] ⁺ tá	‘go’	ukha[lekhá] ⁺ tá	‘leave’
ukha[loónnda] tá	‘follow’	ukha[kumíla] tá	‘hold’
ukha[kulíkha] tá	‘name’	ukha[lakhúula] tá	‘release’
ukha[seébúla] tá	‘say bye’	ukha[kalúshítsa] tá	‘return’
ukha[reébáreeba] tá	‘ask (iter)’	ukha[kalúkhányinya] tá	‘turn over’

(299) /H/ C-Initial + OP 'do not...him/her!'

ukhamu[rá] 'tá	'bury'	ukhamu[béka] tá	'shave'
ukhamu[léera] tá	'bring'	ukhamu[khálaka] tá	'cut'
ukhamu[sítaaka] tá	'accuse'	ukhamu[bóolitsa] tá	'seduce'
ukhamu[khóng'oonda] tá	'knock'	ukhamu[bóholola] tá	'untie'
ukhamu[bóyong'ana] tá	'go around'		

(300) /Ø/ C-Initial + OP 'do not...him/her!'

ukhamu[tsíá] 'tá	'go for'
ukhamu[lekhá] 'tá	'leave'
ukhamu[loónda] tá	'follow'
ukhamu[kulíkha] tá	'name'
ukhamu[lakhúula] tá	'release'
ukhamu[seébúla] tá	'say bye to'
ukhamu[kalúshítsa] tá	'return'
ukhamu[reébáreeba] tá	'ask (iter)'
ukhamu[kalúkhányinya] tá	'turn...over'

(301) /H/ C-Initial + OP + OP_{1sg} 'do not...him/her for me!'

ukhamuú[ndeela] 'tá	'bury'	ukhamuú[mbechela] 'tá	'shave'
ukhamuú[ndeerela] 'tá	'bring'	ukhamuú[khalachila] 'tá	'cut'
ukhamuú[sitaachila] 'tá	'accuse'	ukhamuú[mboolitsila] 'tá	'seduce'
ukhamuú[mbohololela] 'tá	'untie'		

(302) /Ø/ C-Initial + OP + OP_{1sg} 'do not...him/her for me!'

ukhamuú['nzííla] tá	'go for'
ukhamuú['ndéshéla] tá	'leave'
ukhamuú['nóóndéla] tá	'follow'
ukhamuú['ngúlíshíla] tá	'name'
ukhamuú['ndákhúulila] tá	'release'

ukhamuú[⁺ séébúlila] tá	‘say bye to’
ukhamuú[⁺ mbóómbélitsila] tá	‘comfort’
ukhamuú[⁺ síinjílitsila] tá	‘make...stand’

(303) /H/ C-Initial Phrase-Medial ‘do not...the boy {mú⁺yáyí} /
someone {muundu}!’

ukha[ra] mú ⁺ yáyí/muundu	‘bury’
ukha[beka] mú ⁺ yáyí/muundu tá	‘shave’
ukha[leera] mú ⁺ yáyí/muundu tá	‘bring’
ukha[khalaka] mú ⁺ yáyí/muundu tá	‘cut’
ukha[sitaaka] mú ⁺ yáyí/muundu tá	‘accuse’
ukha[boolitsa] mú ⁺ yáyí/muundu tá	‘seduce’
ukha[khong’oonda] mú ⁺ yáyí/muundu tá	‘knock’
ukha[boholola] mú ⁺ yáyí/muundu tá	‘untie’
ukha[boyong’ana] mú ⁺ yáyí/muundu tá	‘go around’

(304) /Ø/ C-Initial Phrase-Medial ‘do not...the boy {mú⁺yáyí} /
someone {muundu}!’

ukha[tsiá] ‘mú ⁺ yáyí/muundu tá	‘go for’
ukha[lekhá] ‘mú ⁺ yáyí/muundu tá	‘leave’
ukha[loóndá] ‘mú ⁺ yáyí/muundu tá	‘follow’
ukha[kulíkhá] ‘mú ⁺ yáyí/muundu tá	‘name’
ukha[lakhúula] mú ⁺ yáyí/muundu tá	‘release’
ukha[seébúla] mú ⁺ yáyí/muundu tá	‘say bye to’
ukha[kalúshítsa] mú ⁺ yáyí/muundu tá	‘return’
ukha[reébáreeba] mú ⁺ yáyí/muundu tá	‘ask (iter)’
ukha[kalúkhányinya] mú ⁺ yáyí/muundu tá	‘turn...over’

(305) /H/ C-Initial +OP Phrase-Medial ‘do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her!’

ukhamu[réela] mú ⁺ yáyí/muundu tá	‘bury’
ukhamu[béchela] mú ⁺ yáyí/muundu tá	‘shave’
ukhamu[léerela] mú ⁺ yáyí/muundu tá	‘bring’
ukhamu[khálachila] mú ⁺ yáyí/muundu tá	‘cut’
ukhamu[sítaachila] mú ⁺ yáyí/muundu tá	‘accuse’

ukhamu[bóolitsila] mú'yáyí/muundu tá	'seduce'
ukhamu[khóng'oondela] mú'yáyí/muundu tá	'knock'
ukhamu[bóhololela] mú'yáyí/muundu tá	'untie'
ukhamu[bóyong'anila] mú'yáyí/muundu tá	'go around'

(306) /Ø/ C-Initial +OP Phrase-Medial 'do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her!'

ukhamu[tsiílá] 'mú'yáyí/muundu tá	'grind'
ukhamu[leshélá] 'mú'yáyí/muundu tá	'leave'
ukhamu[loóndéla] mú'yáyí/muundu tá	'follow'
ukhamu[kulíshíla] mú'yáyí/muundu tá	'name'
ukhamu[lakhúulila] mú'yáyí/muundu tá	'release'
ukhamu[seébúlila] mú'yáyí/muundu tá	'say bye to'
ukhamu[kalúshítsila] mú'yáyí/muundu tá	'return'
ukhamu[reébáreebela] mú'yáyí/muundu tá	'ask (iter)'

(307) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 'do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me!'⁹

ukhamuú[ndeela] mú'yáyí/muundu tá	'bury'
ukhamuú[mbechela] mú'yáyí/muundu tá	'shave'
ukhamuú[ndeerela] mú'yáyí/muundu tá	'bring'
ukhamuú[khalachila] mú'yáyí/muundu tá	'cut'
ukhamuú[sitaachila] mú'yáyí/muundu tá	'accuse'
ukhamuú[mboolitsila] mú'yáyí/muundu tá	'seduce'

(308) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me!'

ukhamuú['nzíílá] 'mú'yáyí/muundu tá	'go for'
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⁹The first recording of this set, which includes a toneless pre-stem syllable and a H on the initial mora of the stem, is a command whereby the speaker instructs the hearer not engage in an activity under some implied, hypothetical future circumstances. With the expected and transcribed pattern, the speaker instructs the hearer to cease an activity that he or she is currently engaged in. This appears to be part of a larger pattern, explored in somewhat greater depth in the elicitation of Imperative plural forms (Appendix A.1.17), in which one tonal variant conveys instructions which relate to the present moment while another conveys instructions which relate also to actions which should, or should not, take place in the future.

ukhamuú[⁺ ndéshéla]	⁺ mú'yáyi/muundu tá	'leave'
ukhamuú[⁺ nóóndéla]	mú'yáyi/muundu tá	'follow'
ukhamuú[⁺ ngúlíshíla]	mú'yáyi/muundu tá	'name'
ukhamuú[⁺ ndákhúulila]	mú'yáyi/muundu tá	'release'
ukhamuú[⁺ séébúlila]	mú'yáyi/muundu tá	'say bye to'

A.1.15 Crastinal Future: Pattern 3

(309) /H/ C-Initial 's/he will...'

naa[ré]	'bury'	naa[ng'wí]	'drink'
naa[khwí]	'eat'	naa[lí]	'pay dowry'
naa[lumí]	'bite'	naa[beché]	'shave'
naa[teeshé]	'cook'	naa[leeré]	'bring'
naa[khalaché]	'cut'	naa[kalaánje]	'fry'
naa[sitaáche]	'accuse'	naa[boolitsí]	'seduce'
naa[saanditsí]	'thank'	naa[khong'oónde]	'knock'
naa[boholóle]	'untie'	naa[boyong'áne]	'go around'
naa[boyoóng'ane]	'be confused'	naa[ng'ong'oólitsi]	'tease'
naa[ling(ak)anyínyi]	'crumple'		

(310) /H/ V-Initial 's/he will...'

niy[irí]	'kill'	niy[ikoómbé]	'admire'
niy[isiáche]	'smack'	niy[ikobóle]	'belch'
niy[ononyínyi]	'spoil'	niy[abukhányinyi]	'separate'

(311) /Ø/ C-Initial 's/he will...'

naa[tsí]	'go'	naa[kwí]	'fall'
naa[leshé]	'leave'	naa[reebé]	'ask'
naa[loondé]	'follow'	naa[kumilí]	'hold'
naa[kulishí]	'name'	naa[homoóle]	'massage'
naa[lakhuúli]	'release'	naa[seebulí]	'say bye'

naa[hoombelítsɪ]	‘comfort’	naa[kalushítsɪ]	‘return’
naa[siinjilítsɪ]	‘make stand’	naa[reebaréebɛ]	‘ask (iter)’
naa[kalukhányinyɪ]	‘turn over’	naa[sebulúkhányinyɪ]	‘scatter’

(312) /Ø/ V-Initial ‘s/he will...’

niy[enyé]	‘want’	niy[eyelé]	‘wipe for’
niy[iluúlɪ]	‘winnow’	niy[ambakháne]	‘refuse’
niy[eleélitsɪ]	‘hang up’		

(313) /H/ C-Initial + OP ‘s/he will...him/her’

naamu[ré]	‘bury’	naamu[béche]	‘shave’
naamu[léere]	‘bring’	naamu[khálache]	‘cut’
naamu[sítaache]	‘accuse’	naamu[bóolitsɪ]	‘seduce’
naamu[khóng’oondɛ]	‘knock’	naamu[bóhololɛ]	‘untie’
naamu[bóyong’anɛ]	‘go around’	naamu[ng’óng’oolitsɪ]	‘tease’
naamu[língakanyinyɪ]	‘bend’		

(314) /H/ V-Initial + OP ‘s/he will...him/her’

naamw[iírɪ]	‘kill’	naamw[ií’kóómbɛ]	‘admire’
naamw[ií’síáche]	‘smack’	naamw[oónonyinyɪ]	‘spoil’
naamw[aábukhanyinyɪ]	‘separate’		

(315) /Ø/ C-Initial + OP ‘s/he will...him/her {mu-} / them₈ {bi-}’

naamu[tsí]	‘go for’
naamu[leshé]	‘leave’
naamu[loónde]	‘follow’
naamu[kulíshɪ]	‘name’
naamu[lakhúulɪ]	‘release’
naamu[seébulɪ]	‘say bye to’

naamu[hoómbélitsɪ]	‘comfort’
naamu[kalúshitsɪ]	‘return’
naamu[síinjílitsɪ]	‘make...stand’
naamu[reébéreebɛ]	‘ask (iter)’
naamu[kalúkhányinyɪ]	‘turn...over’
naabi[sebúlúkhanyinyɪ]	‘scatter’

(316) /Ø/ V-Initial + OP ‘s/he will...him/her {mw-} / it₁₄ {bw-}’

naamw[eenyé]	‘want’	naamw[eeyéle]	‘wipe for’
naabw[iilúulɪ]	‘winnow’	naamw[aambákhanɛ]	‘refuse’
naamw[eeléelitsɪ]	‘carry...hanging’		

(317) /H/ C-Initial + OP_{1sg} ‘s/he will...me’

naa[rí]	‘fear’	naa[mbéche]	‘shave’
naa[ndéere]	‘bring’	naa[khálache]	‘cut’
naa[sítaache]	‘accuse’	naa[mbóolitsɪ]	‘seduce’
naa[khóng’oondɛ]	‘knock’	naa[mbóholole]	‘untie’
naa[mbóyong’ane]	‘go around’	naa[ng’óng’oolitsɪ]	‘tease’
naa[níngakanyinyɪ]	‘bend’		

(318) /H/ V-Initial + OP_{1sg} ‘s/he will...me’

naa[nzíɪ]	‘kill’	naa[nzí ⁴ kóómbɛ]	‘admire’
naa[nzí ⁴ síache]	‘smack’	naa[nzónonyinyɪ]	‘spoil’
naa[nzábukhanyinyɪ]	‘separate’		

(319) /Ø/ C-Initial + OP_{1sg} ‘s/he will...me’

naa[sí]	‘grind’	naa[ndeshé]	‘leave’
naa[noóndɛ]	‘follow’	naa[ngulíshɪ]	‘name’
naa[ndakhúulɪ]	‘release’	naa[seébulɪ]	‘say bye to’

naa[mboómbélitsɪ]	‘comfort’	naa[siínjílitsɪ]	‘make...stand’
naa[ndeébéndeēbɛ]	‘ask (iter)’	naa[ngalúkhányinyɪ]	‘turn...over’

(320) /Ø/ V-Initial + OP_{1sg} ‘s/he will...me’

naa[nzenyé]	‘want’	naa[nzeyéɛ]	‘wipe for’
naa[nyambákhanɛ]	‘refuse’	naa[nzeléélitsɪ]	‘carry...hanging’

(321) /H/ C-Initial + OP_{refl} ‘s/he will...yourself’

niyii[ré]	‘bury’	niyii[béche]	‘shave’
niyii[súunjɪ]	‘hang’	niyii[khálachɛ]	‘cut’
niyii[sítaachɛ]	‘accuse’	niyii[sáanditsɪ]	‘thank’
niyii[khóng’oondɛ]	‘knock’	niyii[bóhololɛ]	‘untie’

(322) /H/ V-Initial + OP_{refl} ‘s/he will...yourself’

niyii[yírɪ]	‘kill’	niyii[yí’kóómbɛ]	‘admire’
niyii[yí’síachɛ]	‘smack’	niyii[yónonyinyɪ]	‘spoil’
niyii[yábukhanyinyɪ]	‘separate’		

(323) /Ø/ C-Initial + OP_{refl} ‘s/he will...yourself’

niyii[sí]	‘grind’	niyii[leshé]	‘leave’
niyii[siínjɪ]	‘bathe’	niyii[kulíshɪ]	‘name’
niyii[naábulɪ]	‘undress’	niyii[lakhúulɪ]	‘release’
niyii[hoómbélitsɪ]	‘comfort’	niyii[siínjílitsɪ]	‘make...stand’
niyii[reébéreebɛ]	‘ask (iter)’	niyii[kalúkhányinyɪ]	‘turn...over’

(324) /Ø/ V-Initial + OP_{refl} ‘s/he will...yourself’

niyii[yalɛ]	‘expose’	niyii[yeyéɛ]	‘wipe for’
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niyii[yambákhanɛ] ‘refuse’ niyii[yeléelitsɪ] ‘hang...up’

(325) /H/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

naamuú[ndeeɛ]	‘bury’	naamuú[mbecheɛ]	‘shave’
naamuú[ndeereɛ]	‘bring’	naamuú[khalachilɪ]	‘cut’
naamuú[sitaachilɪ]	‘accuse’	naamuú[mboolitsilɪ]	‘seduce’
naamuú[mbohoholeɛ]	‘untie’		

(326) /H/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

naamuú[nzirilɪ]	‘kill’	naamuú[nzechitsilɪ]	‘admire’
naamuú[‘nzísíáchilɪ]	‘smack’	naamuú[nzononyinyilɪ]	‘spoil’
naamuú[nzabukhanyinyilɪ]	‘separate’		

(327) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he will...him/her for me’

naamuú[‘zíɪɪ]	‘go for’	naamuú[‘ndéshéɛ]	‘leave’
naamuú[‘nóóndeɛ]	‘follow’	naamuú[‘ngúlíshilɪ]	‘name’
naamuú[‘ndákhúulilɪ]	‘release’	naamuú[‘séébúlilɪ]	‘say bye to’
naamuú[‘hóómbélitsɪ]	‘comfort’	naamuú[‘sínjílitsilɪ]	‘make...stand’

(328) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he will...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me’

naamuú[‘nzéyéɛ]	‘wipe’	naakuú[‘nzáshítsilɪ]	‘light’
naabuú[‘nzílúulilɪ]	‘winnow’	naakuú[‘nzéleelitsilɪ]	‘hang’

(329) /H/ C-Initial Phrase-Medial ‘s/he will...the boy {mú⁺yáyɪ} /
someone {muundu}’

naa[ré]	‘mú ⁺ yáyɪ/muundu	‘bury’
naa[beché]	‘mú ⁺ yáyɪ/muundu	‘shave’
naa[leéré]	‘mú ⁺ yáyɪ/muundu	‘bring’

naa[khalaché] 'mú'yáyí/muundu	'cut'
naa[sitaáché] 'mú'yáyí/muundu	'accuse'
naa[boolitsí] 'mú'yáyí/muundu	'seduce'
naa[khong'oóndé] 'mú'yáyí/muundu	'knock'
naa[boholóle] 'mú'yáyí/muundu	'untie'
naa[boyong'áne] 'mú'yáyí/muundu	'go around'
naa[ling(ak)anyínyí] 'mú'yáyí/muundu	'bend'

(330) /Ø/ C-Initial Phrase-Medial 's/he will...the boy {mú'yáyí} /
someone {muundu}'

naa[tsí] 'mú'yáyí/muundu	'go for'
naa[leshé] 'mú'yáyí/muundu	'leave'
naa[loondé] 'mú'yáyí/muundu	'follow'
naa[kulishí] 'mú'yáyí/muundu	'name'
naa[lakhuúli] 'mú'yáyí/muundu	'release'
naa[seebulí] 'mú'yáyí/muundu	'say bye to'
naa[kalushítsi] 'mú'yáyí/muundu	'return'
naa[reeberéebé] 'mú'yáyí/muundu	'ask (iter)'
naa[kalukhányinyí] 'mú'yáyí/muundu	'turn...over'

(331) /H/ C-Initial +OP Phrase-Medial 's/he will...the boy {mú'yáyí} /
someone {muundu} for him/her'

naamu[réele] 'mú'yáyí/muundu	'bury'
naamu[béchele] 'mú'yáyí/muundu	'shave'
naamu[léerele] 'mú'yáyí/muundu	'bring'
naamu[khálachili] 'mú'yáyí/muundu	'cut'
naamu[sítaachili] 'mú'yáyí/muundu	'accuse'
naamu[bóolitsili] 'mú'yáyí/muundu	'seduce'
naamu[khóng'oondele] 'mú'yáyí/muundu	'knock'
naamu[bóhololele] 'mú'yáyí/muundu	'untie'
naamu[bóyong'anili] 'mú'yáyí/muundu	'go around'
naamu[língakanyinyili] 'mú'yáyí/muundu	'bend'

(332) /Ø/ C-Initial +OP Phrase-Medial 's/he will...the boy {mú'yáyí} /
someone {muundu} for him/her'

naamu[tsííí] 'mú'yáyí/muundu	'go for'
naamu[leshélé] 'mú'yáyí/muundu	'leave'
naamu[loóndéle] 'mú'yáyí/muundu	'follow'
naamu[kulíshíí] 'mú'yáyí/muundu	'name'
naamu[lakhúulí] 'mú'yáyí/muundu	'release'
naamu[seébúílí] 'mú'yáyí/muundu	'say bye to'
naamu[kalúshítsí] 'mú'yáyí/muundu	'return'
naamu[reébéreebele] 'mú'yáyí/muundu	'ask (iter)'
naamu[kalúkhányinyí] 'mú'yáyí/muundu	'turn...over'

(333) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...the boy {mú'yáyí} /
someone {muundu} for him/her for me'

naamuú[ndeele] 'mú'yáyí/muundu	'bury'
naamuú[mbechele] 'mú'yáyí/muundu	'shave'
naamuú[ndeerele] 'mú'yáyí/muundu	'bring'
naamuú[khalachí] 'mú'yáyí/muundu	'cut'
naamuú[sitaachí] 'mú'yáyí/muundu	'accuse'
naamuú[mboolítsí] 'mú'yáyí/muundu	'seduce'
naamuú[mbohololele] 'mú'yáyí/muundu	'untie'

(334) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will...the boy {mú'yáyí} /
someone {muundu} for him/her for me'

naamuú['nzííí] 'mú'yáyí/muundu	'go for'
naamuú['ndéshélé] 'mú'yáyí/muundu	'leave'
naamuú['nóóndéle] 'mú'yáyí/muundu	'follow'
naamuú['ngúlíshíí] 'mú'yáyí/muundu	'name'
naamuú['ndákhúulí] 'mú'yáyí/muundu	'release'
naamuú['séébúílí] 'mú'yáyí/muundu	'say bye to'

A.1.16 Crastinal Future Negative: Pattern 3

(335) /H/ C-Initial 's/he will not...'

naa[ré] 'tá	'bury'	naa[ng'wí] 'tá	'drink'
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naa[khwí] 'tá	'eat'	naa[lí] 'tá	'pay dowry'
naa[lumí] 'tá	'bite'	naa[beché] 'tá	'shave'
naa[teeshé] 'tá	'cook'	naa[leeré] 'tá	'bring'
naa[khalaché] 'tá	'cut'	naa[kalaánjɛ] tá	'fry'
naa[sitaáche] tá	'accuse'	naa[boolitsí] 'tá	'seduce'
naa[saanditsí] 'tá	'thank'	naa[khong'oónde] tá	'knock'
naa[boholóle] tá	'untie'	naa[boyong'áne] tá	'go around'
naa[ng'ong'oólitsí] tá	'tease'	naa[ling(ak)anyínyí] tá	'crumple'

(336) /Ø/ C-Initial 's/he will not...'

naa[tsí] 'tá	'go'	naa[kwí] 'tá	'fall'
naa[leshé] 'tá	'leave'	naa[reebé] 'tá	'ask'
naa[loondé] 'tá	'follow'	naa[kumilí] 'tá	'hold'
naa[kulishí] 'tá	'name'	naa[homoóle] tá	'massage'
naa[lakhuúli] tá	'release'	naa[seebulí] 'tá	'say bye'
naa[hoombelítsí] tá	'comfort'	naa[kalushítsí] tá	'return'
naa[siinjilítsí] tá	'make stand'	naa[reebaréebɛ] tá	'ask (iter)'
naa[kalukhányínyí] tá	'turn over'	naa[sebulúkhányínyí] tá	'scatter'

(337) /H/ C-Initial + OP 's/he will not...him/her'

naamu[ré] 'tá	'bury'	naamu[béche] tá	'shave'
naamu[léere] tá	'bring'	naamu[khálache] tá	'cut'
naamu[sítaache] tá	'accuse'	naamu[bóolitsí] tá	'seduce'
naamu[khóng'oonde] tá	'knock'	naamu[bóholole] tá	'untie'
naamu[bóyong'ane] tá	'go around'	naamu[ng'óng'oolitsí] tá	'tease'
naamu[língakanyínyí] tá	'bend'		

(338) /Ø/ C-Initial + OP 's/he will not...him/her {mu-} / them₈ {bi-}'

naamu[tsí] 'tá	'go for'
naamu[leshé] 'tá	'leave'
naamu[loónde] tá	'follow'
naamu[kulíshí] tá	'name'

naamu[lakhúulɪ] tá	‘release’
naamu[seébúɪɪ] tá	‘say bye to’
naamu[hoómbélitsɪ] tá	‘comfort’
naamu[kalúshítsɪ] tá	‘return’
naamu[síinjílitsɪ] tá	‘make...stand’
naamu[reébéreebɛ] tá	‘ask (iter)’
naamu[kalúkhányinyɪ] tá	‘turn...over’
naabi[sebúlúkhanyinyɪ] tá	‘scatter’

(339) /H/ C-Initial + OP + OP_{1sg} ‘s/he will not...him/her for me’

naamuú[ndeeɛ] tá	‘bury’	naamuú[mbecheɛ] tá	‘shave’
naamuú[ndeereɛ] tá	‘bring’	naamuú[khalachilɪ] tá	‘cut’
naamuú[sitaachilɪ] tá	‘accuse’	naamuú[mboolitsilɪ] tá	‘seduce’
naamuú[mbohólóleɛ] tá	‘untie’		

(340) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he will not...him/her for me’

naamuú[‘zíɪɪ] ‘tá	‘go for’	naamuú[‘ndéshélé] ‘tá	‘leave’
naamuú[‘nóóndéɛ] tá	‘follow’	naamuú[‘ngúlíshíli] tá	‘name’
naamuú[‘ndákhúulilɪ] tá	‘release’	naamuú[‘séébúɪɪlɪ] tá	‘say bye to’
naamuú[‘hoómbélitsɪ] tá	‘comfort’	naamuú[‘síinjílitsilɪ] tá	‘make...stand’

(341) /H/ C-Initial Phrase-Medial ‘s/he will not...the boy {mú‘yáyɪ} /
someone {muundu}’

naa[ré] ‘mú‘yáyɪ/muundu tá	‘bury’
naa[beché] ‘mú‘yáyɪ/muundu tá	‘shave’
naa[leeré] ‘mú‘yáyɪ/muundu tá	‘bring’
naa[khalaché] ‘mú‘yáyɪ/muundu tá	‘cut’
naa[sitaáche] ‘mú‘yáyɪ/muundu tá	‘accuse’
naa[boolitsí] ‘mú‘yáyɪ/muundu tá	‘seduce’
naa[khong’oónde] ‘mú‘yáyɪ/muundu tá	‘knock’
naa[bohólóle] ‘mú‘yáyɪ/muundu tá	‘untie’
naa[boyong’áne] ‘mú‘yáyɪ/muundu tá	‘go around’
naa[líng(ak)anyínyɪ] ‘mú‘yáyɪ/muundu tá	‘bend’

(342) /Ø/ C-Initial Phrase-Medial 's/he will not...the boy {mú⁺yáyí} /
 someone {muundu}'

naa[tsí] 'mú'yáyí/muundu tá	'go for'
naa[leshé] 'mú'yáyí/muundu tá	'leave'
naa[loondé] 'mú'yáyí/muundu tá	'follow'
naa[kulishí] 'mú'yáyí/muundu tá	'name'
naa[lakhuúli] 'mú'yáyí/muundu tá	'release'
naa[seebulí] 'mú'yáyí/muundu tá	'say bye to'
naa[kalushítsi] 'mú'yáyí/muundu tá	'return'
naa[reeberébe] 'mú'yáyí/muundu tá	'ask (iter)'
naa[kalukhányinyi] 'mú'yáyí/muundu tá	'turn...over'

(343) /H/ C-Initial +OP Phrase-Medial 's/he will not...the boy {mú⁺yáyí} /
 someone {muundu} for him/her'

naamu[réele] 'mú'yáyí/muundu tá	'bury'
naamu[béchele] 'mú'yáyí/muundu tá	'shave'
naamu[léerele] 'mú'yáyí/muundu tá	'bring'
naamu[khálachili] 'mú'yáyí/muundu tá	'cut'
naamu[sítaachili] 'mú'yáyí/muundu tá	'accuse'
naamu[bóolitsili] 'mú'yáyí/muundu tá	'seduce'
naamu[khóng'oondele] 'mú'yáyí/muundu tá	'knock'
naamu[bóhololele] 'mú'yáyí/muundu tá	'untie'
naamu[bóyong'anili] 'mú'yáyí/muundu tá	'go around'
naamu[língakanyinyili] 'mú'yáyí/muundu tá	'bend'

(344) /Ø/ C-Initial +OP Phrase-Medial 's/he will not...the boy {mú⁺yáyí} /
 someone {muundu} for him/her'

naamu[tsiíli] 'mú'yáyí/muundu tá	'go for'
naamu[leshéle] 'mú'yáyí/muundu tá	'leave'
naamu[loóndéle] 'mú'yáyí/muundu tá	'follow'
naamu[kulíshili] 'mú'yáyí/muundu tá	'name'
naamu[lakhúulili] 'mú'yáyí/muundu tá	'release'
naamu[seébúli] 'mú'yáyí/muundu tá	'say bye to'
naamu[kalúshítsili] 'mú'yáyí/muundu tá	'return'
naamu[reéberébele] 'mú'yáyí/muundu tá	'ask (iter)'

naamu[kalúkhányinyilí] mú'yáyí/muundu tá 'turn...over'

(345) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the boy {mú'yáyí} /
someone {muundu} for him/her for me'

naamuú[ndeele]	mú'yáyí/muundu tá	'bury'
naamuú[mbechele]	mú'yáyí/muundu tá	'shave'
naamuú[ndeerele]	mú'yáyí/muundu tá	'bring'
naamuú[khalachilí]	mú'yáyí/muundu tá	'cut'
naamuú[sitaachilí]	mú'yáyí/muundu tá	'accuse'
naamuú[mboolitsilí]	mú'yáyí/muundu tá	'seduce'
naamuú[mbohólólele]	mú'yáyí/muundu tá	'untie'

(346) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he will not...the boy {mú'yáyí} /
someone {muundu} for him/her for me'

naamuú['nziílí]	'mú'yáyí/muundu tá	'go for'
naamuú['ndéshéle]	'mú'yáyí/muundu tá	'leave'
naamuú['nóóndéle]	'mú'yáyí/muundu tá	'follow'
naamuú['ngúlíshílí]	'mú'yáyí/muundu tá	'name'
naamuú['ndákhúulilí]	'mú'yáyí/muundu tá	'release'
naamuú['séébúlilí]	'mú'yáyí/muundu tá	'say bye to'

A.1.17 Imperative_{pl}: Pattern 6

(347) /H/ C-Initial '...!'

[ri]	'bury'	[ng'wi]	'drink'
[khwi]	'eat'	[li]	'pay dowry'
[lumi]	'bite'	[bechi]	'shave'
[teeshí]	'cook'	[leerí]	'bring'
[khalachí]	'cut'	[kalaanjí]	'fry'
[sitaachí]	'accuse'	[boolitsí]	'seduce'
[saanditsí]	'thank'	[khong'oondí]	'knock'
[bohólolí]	'untie'	[boyong'aní]	'go around'
[ng'ong'oolitsí]	'tease'	[lingakanyinyí]	'crumple'

(348) /H/ V-Initial ‘...!’

[yiri]	‘kill’	[yikoó ⁺ mbí]	‘admire’
[yisiá ⁺ chí]	‘smack’	[yikobó ⁺ lí]	‘belch’
[yononyinyí]	‘spoil’	[yabukhanyinyí]	‘separate’

(349) /Ø/ C-Initial ‘...!’

[tsí]	‘go’	[kwí]	‘fall’
[lé ⁺ shí]	‘leave’	[réé ⁺ bí]	‘ask’
[lóó ⁺ ndí]	‘follow’	[kúmí ⁺ lí]	‘hold’
[kúlí ⁺ shí]	‘name’	[hómóó ⁺ lí]	‘massage’
[lákhúú ⁺ lí]	‘release’	[séébú ⁺ lí]	‘say bye’
[hóómbélí ⁺ tsí]	‘comfort’	[kálúshí ⁺ tsí]	‘return’
[sínjílí ⁺ tsí]	‘make stand’	[réébárée ⁺ bí]	‘ask (iter)’
[kálúkhányí ⁺ nyí]	‘turn over’	[sébulúkhányí ⁺ nyí]	‘scatter’

(350) /Ø/ V-Initial ‘...!’

[yé ⁺ nyí]	‘want’	[yéyé ⁺ lí]	‘wipe for’
[yílúú ⁺ lí]	‘winnow’	[yámbákhá ⁺ ní]	‘refuse’
[yéléélí ⁺ tsí]	‘hang up’		

(351) /H/ C-Initial + OP ‘...him/her!’

mu[rí]	‘bury’	mu[bé ⁺ chí]	‘shave’
mu[leé ⁺ rí]	‘bring’	mu[khá ⁺ láchí]	‘cut’
mu[sí ⁺ tááchí]	‘accuse’	mu[boó ⁺ lítsí]	‘seduce’
mu[khó ⁺ ng’óóndí]	‘knock’	mu[bó ⁺ hólólí]	‘untie’
mu[bó ⁺ yóng’ání]	‘go around’	mu[ng’ó ⁺ ng’óólítsí]	‘tease’
mu[lí ⁺ ngákányínyí]	‘bend’		

(352) /H/ V-Initial + OP ‘...*him/her!*’

mw[íí ⁺ rí]	‘kill’	mw[íí ⁺ kóómbí]	‘admire’
mw[íí ⁺ síáchí]	‘smack’	mw[oó ⁺ nónyínyí]	‘spoil’
mw[aá ⁺ búkhányínyí]	‘separate’		

(353) /Ø/ C-Initial + OP ‘...*him/her {mu-} / them₈ {bi-}!*’

mu[tsí]	‘go for’
mu[leshí]	‘leave’
mu[loó ⁺ ndí]	‘follow’
mu[kulí ⁺ shí]	‘name’
mu[lakhú ⁺ úlí]	‘release’
mu[seé ⁺ búlí]	‘say bye to’
mu[hoómbé ⁺ lítsí]	‘comfort’
mu[kalú ⁺ shítsí]	‘return’
mu[síínjí ⁺ lítsí]	‘make...stand’
mu[reébí ⁺ réébí]	‘ask (iter)’
mu[kalúkhá ⁺ nyínyí]	‘turn...over’
bi[sebúlú ⁺ khányínyí]	‘scatter’

(354) /Ø/ V-Initial + OP ‘...*him/her {mw-} / it₁₄ {bw-}!*’¹⁰

mw[eenyí]	‘want’	mw[eeyé ⁺ lí]	‘wipe for’
bw[iílú ⁺ úlí]	‘winnow’	mw[aambá ⁺ khání]	‘refuse’
mw[eelé ⁺ élítsí]	‘carry...hanging’		

(355) /H/ C-Initial + OP_{1sg} ‘...*me!*’

[ríi]	‘fear’	[mbé ⁺ chí]	‘shave’
[(ndeé ⁺ rí]	‘bring’)	[khá ⁺ láchí]	‘cut’
[sí ⁺ tááchí]	‘accuse’	[mboó ⁺ lítsí]	‘seduce’

¹⁰The file names of paradigms (354-359) indicate whether the productions contained within the file reflect instructions which apply just to the present moment (e.g., Burula, Sylvester_354_now.wav) or instructions which should be taken as rules to live by (e.g., Burula, Sylvester_354_now_and_forever.wav).

[khó'ng'óóndí]	'knock'	[mbó'hólólí]	'untie'
[bó'yóng'ání]	'go around'	[ng'ó'ng'óólítsí]	'tease'
[ní'ngákányínyí]	'bend'		

(356) /H/ V-Initial + OP_{1sg} '...me!'

[nzí'rí]	'kill'	[nzí'kóó'mbí]	'admire'
[nzí'síá'chí]	'smack'	[nzó'nónyínyí]	'spoil'
[nzá'búkhányínyí]	'separate'		

(357) /Ø/ C-Initial + OP_{1sg} '...me!'¹¹

[ndeshí]	'leave'	[noó'ndí]	'follow'
[ngulí'shí]	'name'	[ndakhú'úlí]	'release'
[seé'búlí]	'say bye to'	[mboómbé'lítsí]	'comfort'
[siínjí'lítsí]	'make...stand'	[ndeébí'ndeébí]	'ask (iter)'
[ngalúkhá'nyínyí]	'turn...over'		

(358) /Ø/ V-Initial + OP_{1sg} '...me!'

[nzenyí]	'want'	[nzeyé'lí]	'wipe for'
[nyambá'khání]	'refuse'	[nzélé'élítsí]	'carry...hanging'

(359) /H/ C-Initial + OP_{refl} '...yourselves!'

yi[rí]	'bury'	yi[bé'chí]	'shave'
yi[suú'njí]	'hang'	yi[khá'láchí]	'cut'
yi[sí'tááchí]	'accuse'	yi[saá'ndítsí]	'thank'
yi[khó'ng'óóndí]	'knock'	yi[bó'hólólí]	'untie'

¹¹My notes for this paradigm indicate that the file "Burula, Sylvester_356_now_2.wav" may include productions of 'admire me!' and 'smack me!' which reflect the "now and forever" meaning, rather than the announced "now" meaning.

(360) /H/ V-Initial + OP_{refl} ‘...*yourselves!*’

yi[yí‘rí]	‘kill’	yi[yikoó‘mbí]	‘admire’
yi[yisiá‘chí]	‘smack’	yi[yó‘nónyínyí]	‘spoil’
yi[yá‘búkhányínyí]	‘separate’		

(361) /Ø/ C-Initial + OP_{refl} ‘...*yourselves!*’

yi[leshí]	‘leave’	yi[sií‘njí]	‘bathe’
yi[kulí‘shí]	‘name’	yi[naá‘búlí]	‘undress’
yi[lakhú‘úlí]	‘release’	yi[hoómbé‘lítsí]	‘comfort’
yi[siínjí‘lítsí]	‘make...stand’	yi[reébí‘réébí]	‘ask (iter)’
yi[kalúkhá‘nyínyí]	‘turn...over’		

(362) /Ø/ V-Initial + OP_{refl} ‘...*yourselves!*’

yi[yalí]	‘spread’	yi[yeyé‘lí]	‘wipe for’
yi[yambá‘khání]	‘refuse’	yi[yelé‘élítsí]	‘hang...up’

(363) /H/ C-Initial + OP + OP_{1sg} ‘...*him/her for me!*’

muú[‘ndéélí]	‘bury’	muú[‘mbéchélí]	‘shave’
muú[‘ndéérélí]	‘bring’	muú[‘kháláchílí]	‘cut’
muú[‘sítááchílí]	‘accuse’	muú[‘mbóólítsílí]	‘seduce’
muú[‘mbóhólólélí]	‘untie’		

(364) /H/ V-Initial + OP + OP_{1sg} ‘...*him/her for me!*’

muú[‘nzírílí]	‘kill’	muú[‘nzéchítsílí]	‘admire’
muú[‘nzísíá‘chílí]	‘smack’	muú[‘nzónónyínyílí]	‘spoil’
muú[‘nzábúkhányínyílí]	‘separate’		

(365) /Ø/ C-Initial + OP + OP_{1sg} ‘...him/her for me!’

muú[‘nzíí‘lí]	‘go for’	muú[‘ndéshé‘lí]	‘leave’
muú[‘nóó‘ndélí]	‘follow’	muú[‘ngúlí‘shílí]	‘name’
muú[‘ndákhú‘úlílí]	‘release’	muú[‘séébú‘lílí]	‘say bye to’
muú[‘mbóómbé‘lítsílí]	‘comfort’	muú[‘síínjí‘lítsílí]	‘make...stand’

(366) /Ø/ V-Initial + OP + OP_{1sg} ‘...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me!’

muú[‘nzéyé‘lí]	‘wipe’	kuú[‘nzáshí‘tsílí]	‘light’
buú[‘nzílú‘úlílí]	‘winnow’	luú[‘nzítsú‘lítsílí]	‘fill’
kuú[‘nzélé‘élítsílí]	‘hang’		

(367) /H/ C-Initial Phrase-Medial ‘...the boy {mú‘yáyí} /
someone {muundu}!’

[ri] mú‘yáyí/muundu	‘bury’
[bechi] mú‘yáyí/muundu	‘shave’
[leeri] mú‘yáyí/muundu	‘bring’
[khalachi] mú‘yáyí/muundu	‘cut’
[sitaachi] mú‘yáyí/muundu	‘accuse’
[boolitsi] mú‘yáyí/muundu	‘seduce’
[khong’oondi] mú‘yáyí/muundu	‘knock’
[bohololi] mú‘yáyí/muundu	‘untie’
[boyong’ani] mú‘yáyí/muundu	‘go around’
[lingakanyinyi] mú‘yáyí/muundu	‘bend’

(368) /Ø/ C-Initial Phrase-Medial ‘...the boy {mú‘yáyí} /
someone {muundu}!’

[tsi] mú‘yáyí/muundu	‘go for’
[leshi] mú‘yáyí/muundu	‘leave’
[loondi] mú‘yáyí/muundu	‘follow’
[kulishi] mú‘yáyí/muundu	‘name’
[lakuuli] mú‘yáyí/muundu	‘release’
[seebuli] mú‘yáyí/muundu	‘say bye to’

[kalushitsi]	mú'yáyí/muundu	'return'
[reebireebi]	mú'yáyí/muundu	'ask (iter)'
[kalukhanyinyi]	mú'yáyí/muundu	'turn...over'

(369) /H/ C-Initial +OP Phrase-Medial '...the boy {mú'yáyí} /
someone {muundu} for him/her!'

mu[reé'lí]	mú'yáyí/muundu	'bury'
mu[bé'chélí]	mú'yáyí/muundu	'shave'
mu[leé'rélí]	mú'yáyí/muundu	'bring'
mu[khá'láchílí]	mú'yáyí/muundu	'cut'
mu[sí'tááchílí]	mú'yáyí/muundu	'accuse'
mu[boó'lítsílí]	mú'yáyí/muundu	'seduce'
mu[khó'ng'óóndélí]	mú'yáyí/muundu	'knock'
mu[bó'hólólélí]	mú'yáyí/muundu	'untie'
mu[bó'yóng'ánílí]	mú'yáyí/muundu	'go around'
mu[ng'ó'ng'óólítsílí]	mú'yáyí/muundu	'tease'
mu[lí'ngákányínyílí]	mú'yáyí/muundu	'bend'

(370) /Ø/ C-Initial +OP Phrase-Medial '...the boy {mú'yáyí} /
someone {muundu} for him/her!'

mu[tsií'lí]	mú'yáyí/muundu	'go for'
mu[leshé'lí]	mú'yáyí/muundu	'leave'
mu[loóndé'lí]	mú'yáyí/muundu	'follow'
mu[kulíshí'lí]	mú'yáyí/muundu	'name'
mu[lakhú'úlílí]	mú'yáyí/muundu	'release'
mu[seébú'lílí]	mú'yáyí/muundu	'say bye to'
mu[kalúshí'tsílí]	mú'yáyí/muundu	'return'
mu[reébí'reébélí]	mú'yáyí/muundu	'ask (iter)'
mu[kalúkhá'nyínyílí]	mú'yáyí/muundu	'turn...over'

(371) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial '...the boy {mú'yáyí} /
someone {muundu} for him/her for me!'

muú['ndéélí]	mú'yáyí/muundu	'bury'
muú['mbéchélí]	mú'yáyí/muundu	'shave'
muú['ndéérélí]	mú'yáyí/muundu	'bring'

muú[⁺ sítááchílí]	⁺ mú'yáyí/muundu	'accuse'
muú[⁺ mbóólítsílí]	⁺ mú'yáyí/muundu	'seduce'
muú[⁺ mbóhólólélí]	⁺ mú'yáyí/muundu	'untie'

(372) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial '*...the boy {mú⁺yáyí} / someone {muundu} for him/her for me!*'

muú[⁺ nzíí'lí]	⁺ mú'yáyí/muundu	'go for'
muú[⁺ ndéshé'lí]	⁺ mú'yáyí/muundu	'leave'
muú[⁺ nóóndé'lí]	⁺ mú'yáyí/muundu	'follow'
muú[⁺ ngúlíshí'lí]	⁺ mú'yáyí/muundu	'name'
muú[⁺ ndákhú'úlílí]	⁺ mú'yáyí/muundu	'release'
muú[⁺ séébú'lí]	⁺ mú'yáyí/muundu	'say bye to'

A.1.18 Imperative_{pl} Negative: Pattern 2a

(373) /H/ C-Initial '*do not...!*'

mukha[ri]	tá	'bury'
mukha[ng'wi]	tá	'drink'
mukha[khwi]	tá	'pay dowry'
mukha[li]	tá	'eat'
mukha[lumi]	tá	'bite'
mukha[bechi]	tá	'shave'
mukha[teeshi]	tá	'cook'
mukha[leeri]	tá	'bring'
mukha[khalachi]	tá	'cut'
mukha[kalaanji]	tá	'fry'
mukha[sitaachi]	⁺ tá	'accuse'
mukha[boolitsi]	⁺ tá	'seduce'
mukha[saanditsi]	⁺ tá	'thank'
mukha[khong'oondi]	⁺ tá	'knock'
mukha[bohololi]	⁺ tá	'untie'
mukha[boyong'ani]	⁺ tá	'go around'
mukha[ng'ong'oolitsi]	⁺ tá	'tease'
mukha[lingakanyinyi]	⁺ tá	'crumple'

(374) /Ø/ C-Initial 'do not...!'

mukha[tsí] 'tá	'go'
mukha[kwí] 'tá	'fall'
mukha[leshí] 'tá	'leave'
mukha[reébi] tá	'ask'
mukha[loóndi] tá	'follow'
mukha[kumíli] tá	'hold'
mukha[kulíshi] tá	'name'
mukha[homóoli] tá	'massage'
mukha[lakhúuli] tá	'release'
mukha[seébuli] tá	'say bye'
mukha[hoómbélitsi] tá	'comfort'
mukha[kalúshítsi] tá	'return'
mukha[síinjílitsi] tá	'make stand'
mukha[reébireebi] tá	'turn over'
mukha[kalúkhányinyi] tá	'turn over'
mukha[sebúlúkhanyinyi] tá	'scatter'

(375) /H/ C-Initial + OP 'do not...him/her!'

mukhamu[rí] 'tá	'bury'
mukhamu[béchi] tá	'shave'
mukhamu[léeri] tá	'bring'
mukhamu[khálachi] tá	'cut'
mukhamu[sítaachi] tá	'accuse'
mukhamu[bóolitsi] tá	'seduce'
mukhamu[khóng'oondi] tá	'knock'
mukhamu[bóhololi] tá	'untie'
mukhamu[bóyong'ani] tá	'go around'
mukhamu[ng'óng'oolitsi] tá	'tease'
mukhamu[língakanyinyi] tá	'bend'

(376) /Ø/ C-Initial + OP 'do not...him/her {mu-} / them₈ {bi-}!'

mukhamu[tsí] 'tá	'go for'
mukhamu[leshí] 'tá	'leave'
mukhamu[loóndi] tá	'follow'
mukhamu[kulíshi] tá	'name'
mukhamu[lakhúuli] tá	'release'
mukhamu[seébúli] tá	'say bye to'
mukhamu[hoómbélitsi] tá	'comfort'
mukhamu[kalúshítsi] tá	'return'
mukhamu[siínjílitsi] tá	'make...stand'
mukhamu[reébíreebi] tá	'ask (iter)'
mukhamu[kalúkhányinyi] tá	'turn...over'
mukhabi[sebúlúkhanyinyi] tá	'scatter'

(377) /H/ C-Initial + OP + OP_{1sg} 'do not...him/her for me!'

mukhamuú[ndeeli] 'tá	'bury'	mukhamuú[mbecheli] 'tá	'shave'
mukhamuú[ndeereli] 'tá	'bring'	mukhamuú[khalachili] 'tá	'cut'
mukhamuú[sitaachili] 'tá	'accuse'	mukhamuú[mboolitsili] 'tá	'seduce'
mukhamuú[mbohololeli] 'tá	'untie'		

(378) /Ø/ C-Initial + OP + OP_{1sg} 'do not...him/her for me!'

mukhamuú['nzíli] tá	'go for'
mukhamuú['ndéshéli] tá	'leave'
mukhamuú['nóóndéli] tá	'follow'
mukhamuú['ngúlíshíli] tá	'name'
mukhamuú['ndákhúulili] tá	'release'
mukhamuú['séébúlili] tá	'say bye to'
mukhamuú['mbóómbélitsili] tá	'comfort'
mukhamuú['síínjílitsili] tá	'make...stand'

(379) /H/ C-Initial Phrase-Medial 'do not...the boy {mú[↑]yáyí} /

someone {muundu}!'

mukha[ri] mú'yáyí/muundu	'bury'
mukha[bechi] mú'yáyí/muundu tá	'shave'

mukha[leeri] mú'yáyí/muundu tá	'bring'
mukha[khalachi] mú'yáyí/muundu tá	'cut'
mukha[sitaachi] mú'yáyí/muundu tá	'accuse'
mukha[boolitsi] mú'yáyí/muundu tá	'seduce'
mukha[khong'oondi] mú'yáyí/muundu tá	'knock'
mukha[bohooli] mú'yáyí/muundu tá	'untie'
mukha[boyong'ani] mú'yáyí/muundu tá	'go around'

(380) /Ø/ C-Initial Phrase-Medial 'do not...the boy {mú'yáyí} /
someone {muundu}!'

mukha[tsí] 'mú'yáyí/muundu tá	'go for'
mukha[leshí] 'mú'yáyí/muundu tá	'leave'
mukha[loóndí] 'mú'yáyí/muundu tá	'follow'
mukha[kulíshí] 'mú'yáyí/muundu tá	'name'
mukha[lakhúuli] mú'yáyí/muundu tá	'release'
mukha[seébúli] mú'yáyí/muundu tá	'say bye to'
mukha[kalúshítsi] mú'yáyí/muundu tá	'return'
mukha[reébíreebi] mú'yáyí/muundu tá	'ask (iter)'
mukha[kalúkhányinyi] mú'yáyí/muundu tá	'turn...over'

(381) /H/ C-Initial +OP Phrase-Medial 'do not...the boy {mú'yáyí} /
someone {muundu} for him/her!'

mukhamu[réeli] mú'yáyí/muundu tá	'bury'
mukhamu[bécheli] mú'yáyí/muundu tá	'shave'
mukhamu[léereli] mú'yáyí/muundu tá	'bring'
mukhamu[khálachili] mú'yáyí/muundu tá	'cut'
mukhamu[sítaachili] mú'yáyí/muundu tá	'accuse'
mukhamu[bóolitsili] mú'yáyí/muundu tá	'seduce'
mukhamu[khóng'oondeli] mú'yáyí/muundu tá	'knock'
mukhamu[bóhololeli] mú'yáyí/muundu tá	'untie'
mukhamu[bóyong'anili] mú'yáyí/muundu tá	'go around'
mukhamu[ng'óng'oolitsili] mú'yáyí/muundu tá	'tease'
mukhamu[língakanyinyili] mú'yáyí/muundu tá	'bend'

(382) /Ø/ C-Initial +OP Phrase-Medial 'do not...the boy {mú'yáyí} /

	<i>someone {muundu} for him/her!</i>
mukhamu[tsííli] 'mú'yáyí/muundu tá	'grind'
mukhamu[leshéíli] 'mú'yáyí/muundu tá	'leave'
mukhamu[loóndéli] 'mú'yáyí/muundu tá	'follow'
mukhamu[kulíshíli] 'mú'yáyí/muundu tá	'name'
mukhamu[lakhúulili] 'mú'yáyí/muundu tá	'release'
mukhamu[seébúli] 'mú'yáyí/muundu tá	'say bye to'
mukhamu[kalúshítsili] 'mú'yáyí/muundu tá	'return'
mukhamu[reébíreebeli] 'mú'yáyí/muundu tá	'ask (iter)'
mukhamu[kalúkhányinyili] 'mú'yáyí/muundu tá	'turn...over'

(383) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 'do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me!'

mukhamuú[ndeeli] 'mú'yáyí/muundu tá	'bury'
mukhamuú[mbecheli] 'mú'yáyí/muundu tá	'shave'
mukhamuú[ndeereli] 'mú'yáyí/muundu tá	'bring'
mukhamuú[sitaachili] 'mú'yáyí/muundu tá	'accuse'
mukhamuú[mboolitsili] 'mú'yáyí/muundu tá	'seduce'
mukhamuú[mbohololeli] 'mú'yáyí/muundu tá	'untie'

(384) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'do not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me!'

mukhamuú['nzííli] 'mú'yáyí/muundu tá	'go for'
mukhamuú['ndéshéíli] 'mú'yáyí/muundu tá	'leave'
mukhamuú['nóóndéli] 'mú'yáyí/muundu tá	'follow'
mukhamuú['ngúlíshíli] 'mú'yáyí/muundu tá	'name'
mukhamuú['ndákhúulili] 'mú'yáyí/muundu tá	'release'
mukhamuú['séébúli] 'mú'yáyí/muundu tá	'say bye to'

A.1.19 Subjunctive: Pattern 3

(385) /H/ C-Initial 'let him/her...'

a[ré]	'bury'	a[ng'wí]	'drink'
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a[khwí]	‘eat’	a[lí]	‘pay dowry’
a[lumí]	‘bite’	a[beché]	‘shave’
a[teeshé]	‘cook’	a[leeré]	‘bring’
a[khalaché]	‘cut’	a[kalaánje]	‘fry’
a[sitaáchε]	‘accuse’	a[boolitsí]	‘seduce’
a[saanditsí]	‘thank’	a[khong’oóndé]	‘knock’
a[boholóε]	‘untie’	a[boyong’ánε]	‘go around’
a[ng’ong’oólitsɪ]	‘tease’	a[ling(ak)anyínyɪ]	‘crumple’

(386) /H/ V-Initial ‘let him/her...’

y[irɪ]	‘kill’	y[ikóómbε]	‘admire’
y[isíáchε]	‘smack’	y[ikobóε]	‘belch’
y[ononyínyɪ]	‘spoil’	y[abukhányinyɪ]	‘separate’

(387) /Ø/ C-Initial ‘let him/her...’

a[tsí]	‘go’	a[kwí]	‘fall’
a[leshé]	‘leave’	a[reebé]	‘ask’
a[loondé]	‘follow’	a[kumilí]	‘hold’
a[kulishí]	‘name’	a[homoóε]	‘massage’
a[lakhuúlɪ]	‘release’	a[seebulí]	‘say bye’
a[hoombelítsɪ]	‘comfort’	a[kalushítsɪ]	‘return’
a[siinjilítsɪ]	‘make stand’	a[reebaréε]	‘ask (iter)’
a[kalukhányinyɪ]	‘turn over’	a[sebulúkhányinyɪ]	‘scatter’

(388) /Ø/ V-Initial ‘let him/her...’

y[enyé]	‘want’	y[eyelé]	‘wipe for’
y[iluúlɪ]	‘winnow’	y[ambakháne]	‘refuse’
y[eleélitsɪ]	‘hang up’		

(389) /H/ C-Initial + OP ‘let him/her...him/her’

amu[rɛ]	‘bury’	amu[béchɛ]	‘shave’
amu[léerɛ]	‘bring’	amu[khálachɛ]	‘cut’
amu[sítaachɛ]	‘accuse’	amu[bóolitsɪ]	‘seduce’
amu[khóng’oondɛ]	‘knock’	amu[bóhololɛ]	‘untie’
amu[bóyong’anɛ]	‘go around’	amu[ng’óng’oolitsɪ]	‘tease’
amu[língakanyinyɪ]	‘bend’		

(390) /H/ V-Initial + OP ‘let him/her...him/her’

amw[iírɪ]	‘kill’	amw[ií‘kóómbɛ]	‘admire’
amw[ií‘síachɛ]	‘smack’	amw[oónonyinyɪ]	‘spoil’
amw[aábukhanyinyɪ]	‘separate’		

(391) /Ø/ C-Initial + OP ‘let him/her...him/her {mu-} / them₈ {bi-}’

amu[tsí]	‘go for’
amu[leshé]	‘leave’
amu[loóndɛ]	‘follow’
amu[kulíshɪ]	‘name’
amu[lakhúulɪ]	‘release’
amu[seébulɪ]	‘say bye to’
amu[hoómbélitsɪ]	‘comfort’
amu[kalúshitsɪ]	‘return’
amu[siínjílitsɪ]	‘make...stand’
amu[reébéreebɛ]	‘ask (iter)’
amu[kalúkhányinyɪ]	‘turn...over’
abi[sebúlúkhaninyɪ]	‘scatter’

(392) /Ø/ V-Initial + OP ‘let him/her...him/her {mw-} / it₁₄ {bw-}’

amw[eenyé]	‘want’	amw[eeyéɛ]	‘wipe for’
abw[iilúulɪ]	‘winnow’	amw[aambákhanɛ]	‘refuse’
amw[eeléelitsɪ]	‘carry...hanging’		

(393) /H/ C-Initial + OP_{1sg} 'let him/her...me'

aa[rí]	'fear'	aa[mbéche]	'shave'
aa[ndéere]	'bring'	aa[khálache]	'cut'
aa[sítaache]	'accuse'	aa[mbóolitsi]	'seduce'
aa[khóng'oonde]	'knock'	aa[mbóholole]	'untie'
aa[mbóyong'ane]	'go around'	aa[ng'óng'oolitsi]	'tease'
aa[níngakanyinyi]	'bend'		

(394) /H/ V-Initial + OP_{1sg} 'let him/her...me'

aa[nzíri]	'kill'	aa[nzí'kóómbé]	'admire'
aa[nzí'síáche]	'smack'	aa[nzónonyinyi]	'spoil'
aa[nzábukhanyinyi]	'separate'		

(395) /Ø/ C-Initial + OP_{1sg} 'let him/her...me'

aa[sí]	'grind'	aa[ndeshé]	'leave'
aa[noónde]	'follow'	aa[ngulíshi]	'name'
aa[ndakhúuli]	'release'	aa[seébuli]	'say bye to'
aa[mboómbélitsi]	'comfort'	aa[síinjílitsi]	'make..stand'
aa[ndeébéndebe]	'ask (iter)'	aa[ngalúkhányinyi]	'turn...over'

(396) /Ø/ V-Initial + OP_{1sg} 'let him/her...me'

aa[nzenyé]	'want'	aa[nzeyéle]	'wipe for'
aa[nyambákhané]	'refuse'	aa[nzeléelitsi]	'carry...hanging'

(397) /H/ C-Initial + OP_{refl} 'let him/her...yourself'

yii[ré]	'bury'	yii[béche]	'shave'
yii[súunjí]	'hang'	yii[khálache]	'cut'

yii[sítaachɛ]	‘accuse’	yii[sáanditsɪ]	‘thank’
yii[khóng’oondɛ]	‘knock’	yii[bóhololɛ]	‘untie’

(398) /H/ V-Initial + OP_{refl} ‘let him/her...yourself’

yii[yírɪ]	‘kill’	yii[yí’kóómbɛ]	‘admire’
yii[yí’síáchɛ]	‘smack’	yii[yónonyinyɪ]	‘spoil’
yii[yábukhanyinyɪ]	‘separate’		

(399) /Ø/ C-Initial + OP_{refl} ‘let him/her...yourself’

yii[sí]	‘grind’	yii[leshé]	‘leave’
yii[sínjɪ]	‘bathe’	yii[kulíshɪ]	‘name’
yii[naábulɪ]	‘undress’	yii[lakhúulɪ]	‘release’
yii[hoómbélitsɪ]	‘comfort’	yii[sínjílitsɪ]	‘make...stand’
yii[reébéreebɛ]	‘ask (iter)’	yii[kalúkhányinyɪ]	‘turn...over’

(400) /Ø/ V-Initial + OP_{refl} ‘let him/her...yourself’

yii[yalé]	‘expose’	yii[yeyéɛ]	‘wipe for’
yii[yambákhanɛ]	‘refuse’	yii[yeléelitsɪ]	‘hang...up’

(401) /H/ C-Initial + OP + OP_{1sg} ‘let him/her...him/her for me’

amuú[ndeeɛ]	‘bury’	amuú[mbecheɛ]	‘shave’
amuú[ndeereɛ]	‘bring’	amuú[khalachilɪ]	‘cut’
amuú[sitaachilɪ]	‘accuse’	amuú[mboolitsilɪ]	‘seduce’
amuú[mbohoololeɛ]	‘untie’		

(402) /H/ V-Initial + OP + OP_{1sg} ‘let him/her...him/her for me’

amuú[nzirilɪ]	‘kill’	amuú[nzechitsilɪ]	‘admire’
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amuú[⁺nzísiáchilɪ] ‘smack’ amuú[nzononyinyilɪ] ‘spoil’
 amuú[nzabukhanyinyilɪ] ‘separate’

(403) /Ø/ C-Initial + OP + OP_{1sg} ‘let him/her...him/her for me’

amuú[⁺ síéle]	‘grind’	amuú[⁺ nzíílɪ]	‘go for’
amuú[⁺ ndéshéle]	‘leave’	amuú[⁺ nóóndele]	‘follow’
amuú[⁺ ngúlíshilɪ]	‘name’	amuú[⁺ ndákhúulilɪ]	‘release’
amuú[⁺ séébúlilɪ]	‘say bye to’	amuú[⁺ hóómbélitsɪ]	‘comfort’
amuú[⁺ síínjí ⁺ lítsílí]	‘make...stand’		

(404) /Ø/ V-Initial + OP + OP_{1sg} ‘let him/her...him/her {mu-} / it_{3/14} {ku-/bu-} for me’

amuú[⁺ nzéyéle]	‘wipe’	akuú[⁺ nzáshítsilɪ]	‘light’
abuú[⁺ nzílúulilɪ]	‘winnow’	akuú[⁺ nzéleélitsilɪ]	‘hang’

(405) /H/ C-Initial Phrase-Medial ‘let him/her...the boy {mú⁺yáyí} /
 someone {muundu}’

a[ré]	‘mú ⁺ yáyí/muundu	‘bury’
a[beché]	‘mú ⁺ yáyí/muundu	‘shave’
a[leeré]	‘mú ⁺ yáyí/muundu	‘bring’
a[khalaché]	‘mú ⁺ yáyí/muundu	‘cut’
a[sitaáche]	‘mú ⁺ yáyí/muundu	‘accuse’
a[boolitsí]	‘mú ⁺ yáyí/muundu	‘seduce’
a[khong’oónde]	‘mú ⁺ yáyí/muundu	‘knock’
a[boholóle]	‘mú ⁺ yáyí/muundu	‘untie’
a[boyong’áne]	‘mú ⁺ yáyí/muundu	‘go around’
a[ling(ak)anyínyɪ]	‘mú ⁺ yáyí/muundu	‘bend’

(406) /Ø/ C-Initial Phrase-Medial ‘let him/her...the boy {mú⁺yáyí} /
 someone {muundu}’

a[tsí]	‘mú ⁺ yáyí/muundu	‘go for’
a[leshé]	‘mú ⁺ yáyí/muundu	‘leave’

a[loondé]	‘mú’yáyí/muundu	‘follow’
a[kulishí]	‘mú’yáyí/muundu	‘name’
a[lakhuúli]	mú’yáyí/muundu	‘release’
a[seebulí]	‘mú’yáyí/muundu	‘say bye to’
a[kalushítsi]	mú’yáyí/muundu	‘return’
a[siinjílitsi]	mú’yáyí/muundu	‘make stand’
a[reeberéebɛ]	mú’yáyí/muundu	‘ask (iter)’
a[kalukhányinyi]	mú’yáyí/muundu	‘turn...over’

(407) /H/ C-Initial +OP Phrase-Medial ‘let him/her...the boy {mú’yáyí} /
someone {muundu} for him/her’

amu[ré]	mú’yáyí/muundu	‘bury’
amu[béche]	mú’yáyí/muundu	‘shave’
amu[léere]	mú’yáyí/muundu	‘bring’
amu[khálache]	mú’yáyí/muundu	‘cut’
amu[sítaache]	mú’yáyí/muundu	‘accuse’
amu[bóolitsi]	mú’yáyí/muundu	‘seduce’
amu[khóng’oondɛ]	mú’yáyí/muundu	‘knock’
amu[bóholole]	mú’yáyí/muundu	‘untie’
amu[bóyong’ane]	mú’yáyí/muundu	‘go around’
amu[ng’óng’oolitsi]	mú’yáyí/muundu	‘tease’

(408) /Ø/ C-Initial +OP Phrase-Medial ‘let him/her...the boy {mú’yáyí} /
someone {muundu} for him/her’

amu[tsí]	‘mú’yáyí/muundu	‘go for’
amu[leshé]	‘mú’yáyí/muundu	‘leave’
amu[loóndɛ]	mú’yáyí/muundu	‘follow’
amu[kulíshi]	mú’yáyí/muundu	‘name’
amu[lakhúuli]	mú’yáyí/muundu	‘release’
amu[seébúli]	mú’yáyí/muundu	‘say bye to’
amu[kalúshítsi]	mú’yáyí/muundu	‘return’
amu[siínjílitsi]	mú’yáyí/muundu	‘make...stand’
amu[reébéreebɛ]	mú’yáyí/muundu	‘ask (iter)’
amu[kalúkhányinyi]	mú’yáyí/muundu	‘turn...over’

(409) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 'let him/her...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me'

amuú[ndeele] mú'yáyí/muundu	'bury'
amuú[mbechele] mú'yáyí/muundu	'shave'
amuú[ndeerele] mú'yáyí/muundu	'bring'
amuú[khalachilí] mú'yáyí/muundu	'cut'
amuú[sitaachilí] mú'yáyí/muundu	'accuse'
amuú[mboolitsilí] mú'yáyí/muundu	'seduce'
amuú[mbohoololele] mú'yáyí/muundu	'untie'

(410) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'let him/her...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me'

amuú['nzíílí] 'mú'yáyí/muundu	'go for'
amuú['ndéshéle] 'mú'yáyí/muundu	'leave'
amuú['nóóndéle] mú'yáyí/muundu	'follow'
amuú['ngúlíshílí] mú'yáyí/muundu	'name'
amuú['ndákhúulilí] mú'yáyí/muundu	'release'
amuú['séébúlilí] mú'yáyí/muundu	'say bye to'
amuú['sínjílitsilí] mú'yáyí/muundu	'make...stand'

A.1.20 Subjunctive Negative: Pattern 2a

(411) /H/ C-Initial 'let him/her not...'

akha[ra] tá	'bury'	akha[ng'wa] tá	'drink'
akha[khwa] tá	'eat'	akha[lia] tá	'pay dowry'
akha[luma] tá	'bite'	akha[beka] tá	'shave'
akha[teekha] tá	'cook'	akha[leera] tá	'bring'
akha[khalaka] tá	'cut'	akha[kalaanga] tá	'fry'
akha[sitaaka] tá	'accuse'	akha[boolitsa] tá	'seduce'
akha[saanditsa] tá	'thank'	akha[khong'oonda] tá	'knock'
akha[bohoolola] tá	'untie'	akha[boyong'ana] tá	'go around'
akha[ng'ong'oolitsa] tá	'tease'	akha[lingakanyinya] tá	'crumple'

(412) /H/ V-Initial 'let him/her not...'

akh[iira] tá	'kill'	akh[iikoó'mbá] tá	'admire'
akh[iisiá'ká] tá	'smack'	akh[iikobó'lá] tá	'belch'
akh[oononyinya] tá	'spoil'	akh[aabukhanyinya] tá	'separate'

(413) /Ø/ C-Initial 'let him/her not...'

akha[tsiá] 'tá	'go'	akha[kwá] 'tá	'fall'
akha[lekhá] 'tá	'leave'	akha[reéba] tá	'ask'
akha[loónda] tá	'follow'	akha[kumíla] tá	'hold'
akha[kulíkha] tá	'name'	akha[homóola] tá	'massage'
akha[lakhúula] tá	'release'	akha[seébúla] tá	'say bye'
akha[hoómbélitsa] tá	'comfort'	akha[kalúshitsa] tá	'return'
akha[síinjílitsa] tá	'make stand'	akha[reébáreeba] tá	'ask (iter)'
akha[kalúkhányinya] tá	'turn over'	akha[sebúlúkhanyinya] tá	'scatter'

(414) /Ø/ V-Initial 'let him/her not...'

akh[eenyá] 'tá	'want'	akh[eeyéla] tá	'wipe for'
akh[iilúula] tá	'winnow'	akh[aambákhána] tá	'refuse'
akh[eeléelitsa] tá	'hang up'		

(415) /H/ C-Initial + OP 'let him/her not...him/her'

akhamu[rá] 'tá	'bury'	akhamu[béka] tá	'shave'
akhamu[léera] tá	'bring'	akhamu[khálaka] tá	'cut'
akhamu[sítaaka] tá	'accuse'	akhamu[bóolitsa] tá	'seduce'
akhamu[khóng'oonda] tá	'knock'	akhamu[bóholola] tá	'untie'
akhamu[bóyong'ana] tá	'go around'	akhamu[ng'óng'oolitsa] tá	'tease'
akhamu[língakanyinya] tá	'bend'		

(416) /H/ V-Initial + OP 'let him/her not...him/her'

akhamw[iíra] tá	‘kill’	akhamw[ií ⁺ kóómba] tá	‘admire’
akhamw[ií ⁺ síáka] tá	‘smack’	akhamw[oónonyinya] tá	‘spoil’
akhamw[aábukhanyinya] tá	‘separate’		

(417) /Ø/ C-Initial + OP ‘let him/her not...him/her {mu-} / them₈ {bi-}’

akhamu[tsíá] ‘tá	‘go for’
akhamu[lekhá] ‘tá	‘leave’
akhamu[loónda] tá	‘follow’
akhamu[kulíkha] tá	‘name’
akhamu[lakhúula] tá	‘release’
akhamu[seébúla] tá	‘say bye to’
akhamu[hoómbélitsa] tá	‘comfort’
akhamu[kalúshitsa] tá	‘return’
akhamu[siínjílitsa] tá	‘make...stand’
akhamu[reébáreeba] tá	‘ask (iter)’
akhamu[kalúkhányinya] tá	‘turn...over’
akhabi[sebúlúkanyinya] tá	‘scatter’

(418) /Ø/ V-Initial + OP ‘let him/her not...him/her {mw-} / it₁₄ {bw-}’

akhamw[eenyá] ‘tá	‘want’	akhamw[eeyéla] tá	‘wipe for’
akhabw[iilúula] tá	‘winnow’	akhamw[aambákhana] tá	‘refuse’
akhamw[eeléelitsa] tá	‘carry...hanging’		

(419) /H/ C-Initial + OP_{1sg} ‘let him/her not...me’

akhaa[ríá] ‘tá	‘fear’	akhaa[mbéka] tá	‘shave’
akhaa[ndéera] tá	‘bring’	akhaa[khálaka] tá	‘cut’
akhaa[sítaaka] tá	‘accuse’	akhaa[mbóolitsa] tá	‘seduce’
akhaa[khóng’oonda] tá	‘knock’	akhaa[mbóholola] tá	‘untie’
akhaa[mbóyong’ana] tá	‘go around’	akhaa[ng’óng’oolitsa] tá	‘tease’
akhaa[níngakanyinya] tá	‘bend’		

(420) /H/ V-Initial + OP_{1sg} 'let him/her not...me'

akhaa[nzíra] tá	'kill'	akhaa[nzí'kóómba] tá	'admire'
akhaa[nzí'síáka] tá	'smack'	akhaa[nzónonyinya] tá	'spoil'
akhaa[nzábukhanyinya] tá	'separate'		

(421) /Ø/ C-Initial + OP_{1sg} 'let him/her not...me'

akhaa[síá] 'tá	'grind'	akhaa[ndekhá] 'tá	'leave'
akhaa[noónda] tá	'follow'	akhaa[ngulíkha] tá	'name'
akhaa[ndakhúula] tá	'release'	akhaa[seébúla] tá	'say bye to'
akhaa[mboómbélitsa] tá	'comfort'	akhaa[siínjílitsa] tá	'make..stand'
akhaa[ndeébándeeba] tá	'ask (iter)'	akhaa[ngalúkhányinya] tá	'turn...over'

(422) /Ø/ V-Initial + OP_{1sg} 'let him/her not...me'

akhaa[nzenyá] 'tá	'want'	akhaa[nzeyéla] tá	'wipe for'
akhaa[nyambákhana] tá	'refuse'	akhaa[nzeléelitsa] tá	'carry...hanging'

(423) /H/ C-Initial + OP_{refl} 'let him/her not...him/herself'

akhii[rá] 'tá	'bury'	akhii[béka] tá	'shave'
akhii[súunga] tá	'hang'	akhii[khálaka] tá	'cut'
akhii[sítaaka] tá	'accuse'	akhii[sáanditsa] tá	'thank'
akhii[khóng'oonda] tá	'knock'	akhii[bóholola] tá	'untie'

(424) /H/ V-Initial + OP_{refl} 'let him/her not...him/herself'

akhii[yíra] tá	'kill'	akhii[yí'kóómba] tá	'admire'
akhii[yí'síáka] tá	'smack'	akhii[yónonyinya] tá	'spoil'
akhii[yábukhanyinya] tá	'separate'		

(425) /Ø/ C-Initial + OP_{refl} 'let him/her not...him/herself'

akhii[síá] 'tá	'grind'	akhii[lekhá] 'tá	'leave'
akhii[sínga] tá	'bathe'	akhii[kulíkha] tá	'name'
akhii[naábúla] tá	'undress'	akhii[lakhúula] tá	'release'
akhii[hoómbélitsa] tá	'comfort'	akhii[síinjílitsa] tá	'make...stand'
akhii[reébáreeba] tá	'ask (iter)'	akhii[kalúkhányinya] tá	'turn...over'

(426) /Ø/ V-Initial + OP_{refl} 'let him/her not...him/herself'

akhii[yalá] 'tá	'expose'	akhii[yeyéla] tá	'wipe for'
akhii[yambákhana] tá	'refuse'	akhii[yeléełitsa] tá	'hang...up'

(427) /H/ C-Initial + OP + OP_{1sg} 'let him/her not...him/her for me'

akhamuu[ndéela] tá	'bury'	akhamuu[mbéchela] tá	'shave'
akhamuu[ndéerela] tá	'bring'	akhamuu[khálachila] tá	'cut'
akhamuu[sítaachila] tá	'accuse'	akhamuu[mbóolitsila] tá	'seduce'
akhamuu[mbóhololela] tá	'untie'		

(428) /H/ V-Initial + OP + OP_{1sg} 'let him/her not...him/her for me'

akhamuu[nzířila] tá	'kill'
akhamuu[nzéchitsila] tá	'admire'
akhamuu[nzí'síáchila] tá	'smack'
akhamuu[nzónonyinyila] tá	'spoil'
akhamuu[nzábukhanyinyila] tá	'separate'

(429) /Ø/ C-Initial + OP + OP_{1sg} 'let him/her not...him/her for me'

akhamuu[nziíla] tá	'go for'
akhamuu[ndeshéla] tá	'leave'

akhamuu[noóndéla] tá	‘follow’
akhamuu[ngulíshíla] tá	‘name’
akhamuu[ndakhúulila] tá	‘release’
akhamuu[seébúlila] tá	‘say bye to’
akhamuu[mboómbélitsila] tá	‘comfort’
akhamuu[síínjílitsila] tá	‘make...stand’

(430) /Ø/ V-Initial + OP + OP_{1sg} ‘let him/her not...him/her {mu-} / it_{3/14} {ku-/bu-} for me’

akhamuu[nzeyéla] tá	‘wipe’	akhakuu[nzashítsila] tá	‘light’
akhabuu[nzilúulila] tá	‘winnow’	akhakuu[nzeléelitsila] tá	‘hang’

(431) /H/ C-Initial Phrase-Medial ‘let him/her not...the boy {mú⁺yáyí} / someone {muundu}’

akha[ra] mú ⁺ yáyí/muundu tá	‘bury’
akha[beka] mú ⁺ yáyí/muundu tá	‘shave’
akha[leera] mú ⁺ yáyí/muundu tá	‘bring’
akha[khalaka] mú ⁺ yáyí/muundu tá	‘cut’
akha[sitaaka] mú ⁺ yáyí/muundu tá	‘accuse’
akha[boolitsa] mú ⁺ yáyí/muundu tá	‘seduce’
akha[khong’oonda] mú ⁺ yáyí/muundu tá	‘knock’
akha[boholola] mú ⁺ yáyí/muundu tá	‘untie’
akha[boyong’ana] mú ⁺ yáyí/muundu tá	‘go around’
akha[lingakanyinya] mú ⁺ yáyí/muundu tá	‘bend’

(432) /Ø/ C-Initial Phrase-Medial ‘let him/her not...the boy {mú⁺yáyí} / someone {muundu}’

akha[tsíá] ‘mú ⁺ yáyí/muundu tá	‘go for’
akha[lekhá] ‘mú ⁺ yáyí/muundu tá	‘leave’
akha[loónda] mú ⁺ yáyí/muundu tá	‘follow’
akha[kulíkha] mú ⁺ yáyí/muundu tá	‘name’
akha[lakhúula] mú ⁺ yáyí/muundu tá	‘release’
akha[seébúla] mú ⁺ yáyí/muundu tá	‘say bye to’
akha[kalúshítsa] mú ⁺ yáyí/muundu tá	‘return’
akha[síínjílitsa] mú ⁺ yáyí/muundu tá	‘make...stand’

akha[reébáreeba] mú'yáyí/muundu tá 'ask (iter)'
 akha[kalúkhányinya] mú'yáyí/muundu tá 'turn...over'

(433) /H/ C-Initial +OP Phrase-Medial 'let him/her not...the boy {mú⁺yáyí} /
 someone {muundu} for him/her'

akhamu[rá] 'mú'yáyí/muundu tá 'bury'
 akhamu[béka] mú'yáyí/muundu tá 'shave'
 akhamu[léera] mú'yáyí/muundu tá 'bring'
 akhamu[khálaka] mú'yáyí/muundu tá 'cut'
 akhamu[sítaaka] mú'yáyí/muundu tá 'accuse'
 akhamu[bóolitsa] mú'yáyí/muundu tá 'seduce'
 akhamu[khóng'oonda] mú'yáyí/muundu tá 'knock'
 akhamu[bóholola] mú'yáyí/muundu tá 'untie'
 akhamu[bóyong'ana] mú'yáyí/muundu tá 'go around'
 akhamu[ng'óng'oolitsa] mú'yáyí/muundu tá 'tease'

(434) /Ø/ C-Initial +OP Phrase-Medial 'let him/her not...the boy {mú⁺yáyí} /
 someone {muundu} for him/her'

akhamu[tsíá] 'mú'yáyí/muundu tá 'go for'
 akhamu[lekhá] 'mú'yáyí/muundu tá 'leave'
 akhamu[loónda] mú'yáyí/muundu tá 'follow'
 akhamu[kulíkha] mú'yáyí/muundu tá 'name'
 akhamu[lakhúula] mú'yáyí/muundu tá 'release'
 akhamu[seébúla] mú'yáyí/muundu tá 'say bye to'
 akhamu[kalúshítsa] mú'yáyí/muundu tá 'return'
 akhamu[síínjílitsa] mú'yáyí/muundu tá 'make...stand'
 akhamu[reébáreeba] mú'yáyí/muundu tá 'ask (iter)'
 akhamu[kalúkhányinya] mú'yáyí/muundu tá 'turn...over'

(435) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 'let him/her not...the boy {mú⁺yáyí} /
 someone {muundu} for him/her for me'

akhamuu[ndéela] mú'yáyí/muundu tá 'bury'
 akhamuu[mbéchela] mú'yáyí/muundu tá 'shave'
 akhamuu[ndéerela] mú'yáyí/muundu tá 'bring'
 akhamuu[khálachila] mú'yáyí/muundu tá 'cut'

akhamuu[sítaachila] mú'yáyí/muundu tá	'accuse'
akhamuu[mbóolitsila] mú'yáyí/muundu tá	'seduce'
akhamuu[mbóhololela] mú'yáyí/muundu tá	'untie'

(436) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'let him/her not...the boy {mú'yáyí} / someone {muundu} for him/her for me'

akhamuu[nzííla] mú'yáyí/muundu tá	'go for'
akhamuu[ndeshéla] mú'yáyí/muundu tá	'leave'
akhamuu[noóndéla] mú'yáyí/muundu tá	'follow'
akhamuu[ngulíshíla] mú'yáyí/muundu tá	'name'
akhamuu[ndakhúulila] mú'yáyí/muundu tá	'release'
akhamuu[seébúlila] mú'yáyí/muundu tá	'say bye to'
akhamuu[síínjílitsila] mú'yáyí/muundu tá	'make...stand'

A.1.21 Hesternal Perfective: Pattern 7

(437) /H/ C-Initial 's/he...'

ya[réélé]	'buried'	ya[ng'wéélé]	'drank'
ya[khwéélé]	'ate'	ya[lííí]	'paid dowry'
ya[lúmí]	'bit'	ya[béchí]	'shaved'
ya[tééshí]	'cooked'	ya[léérí]	'brought'
ya[khálááché]	'cut'	ya[káláánjí]	'fried'
ya[sítááchí]	'accused'	ya[bóólíítsí]	'seduced'
ya[sáándíítsí]	'thanked'	ya[khóng'óóndí]	'knocked'
ya[bóhólóólé]	'untied'	ya[bóyóng'ááné]	'went around'
ya[ng'óng'óólíítsí]	'teased'	ya[líng(ák)ányíínyí]	'crumpled'
wa[ng'wéélé]	'(you) drank'		

(438) /H/ V-Initial 's/he...'

ya[yírí]	'killed'	ya[yikóómbí]	'admired'
ya[yisíáchí]	'smacked'	ya[yikóbó'ólé]	'belched'
ya[yónónyínyí]	'spoiled'	ya[yábúkhányínyí]	'separated'

(439) /Ø/ C-Initial 's/he...'

ya[tsíí'lí]	'went'	ya[kwíí'lí]	'fell'
ya[léshí]	'left'	ya[réé'bí]	'asked'
ya[lóó'ndí]	'followed'	ya[kúmíí'lí]	'held'
ya[kúlíí'shí]	'named'	ya[hómó'ólí]	'massaged'
ya[lákhú'úlí]	'released'	ya[séé'búúlí]	'said bye'
ya[hóómbé'líítsí]	'comforted'	ya[kálú'shíítsí]	'returned'
ya[sínj'í'líítsí]	'made stand'	ya[réébí'reébí]	'asked (iter)'
ya[kálúkhá'nyíínyí]	'turned over'	ya[sébúlú'khányíínyí]	'scattered'

(440) /Ø/ V-Initial 's/he...'

ya[yényí]	'wanted'	ya[yéyéé'lé]	'wiped for'
ya[yílúú'lí]	'winnowed'	ya[yámbá'khááné]	'refused'
ya[yéléé'líítsí]	'hung up'		

(441) /H/ C-Initial + OP 's/he...him/her'

yamu[ré'élé]	'buried'	yamu[bé'chí]	'shaved'
yamu[lé'érí]	'brought'	yamu[khá'lááché]	'cut'
yamu[sí'tááchí]	'accused'	yamu[bó'ólíítsí]	'seduced'
yamu[khó'ng'óóndí]	'knocked'	yamu[bó'hólóólé]	'untied'
yamu[bó'yóng'ááné]	'went around'	yamu[ng'ó'ng'óólíítsí]	'teased'
yamu[lí'ngákányíínyí]	'bent'		

(442) /H/ V-Initial + OP 's/he...him/her'

yamw[ií'rí]	'killed'	yamw[ií'kóómbí]	'admired'
yamw[ií'síáchí]	'smacked'	yamw[oó'nónyíínyí]	'spoiled'
yamw[aá'búkhányíínyí]	'separated'		

(443) /Ø/ C-Initial + OP 's/he...him/her {mu-} / them_s {bi-}'

yamu[tsí'lí]	'went for'
yamu[léshí]	'left'
yamu[lóó'ndí]	'followed'
yamu[kúlí'íshí]	'named'
yamu[lákhú'úlí]	'released'
yamu[séé'búúlí]	'said bye to'
yamu[hóómbé'líítsí]	'comforted'
yamu[kálú'shíítsí]	'returned'
yamu[síínjí'líítsí]	'made...stand'
yamu[réébí'reébí]	'asked (iter)'
yamu[kálúkhá'nyíínyí]	'turned...over'
yabi[sébúlú'khányíínyí]	'scattered'

(444) /Ø/ V-Initial + OP 's/he...him/her {mw-} / it₁₄ {bw-}'

yamw[eé'nyí]	'wanted'	yamw[eé'yéélé]	'wiped for'
yabw[íí'lúúlí]	'winnowed'	yamw[aá'mbákhááné]	'refused'
yamw[eé'léélíítsí]	'carried...hanging'		

(445) /H/ C-Initial + OP_{1sg} 's/he...me'

yaa[rí'ílí]	'feared'	yaa[mbé'chí]	'shaved'
yaa[ndé'éí]	'brought'	yaa[khá'lááché]	'cut'
yaa[sí'tááchí]	'accused'	yaa[mbó'ólíítsí]	'seduced'
yaa[khó'ng'óóndí]	'knocked'	yaa[mbó'hólóólé]	'untied'
yaa[mbó'yóng'ááné]	'went around'	yaa[ng'ó'ng'óólíítsí]	'teased'
yaa[ní'ngákányíínyí]	'bent'		

(446) /H/ V-Initial + OP_{1sg} 's/he...me'

yaa[nzí'rí]	'killed'	yaa[nzí'kóó'mbí]	'admired'
yaa[nzí'síá'chí]	'smacked'	yaa[nzó'nónyíínyí]	'spoiled'
yaa[nzá'búkhányíínyí]	'separated'		

(447) /Ø/ C-Initial + OP_{1sg} 's/he...me'

yaa[síé'lé]	'ground'	yaa[ndéshí]	'left'
yaa[nóó'ndí]	'followed'	yaa[ngúlíí'shí]	'named'
yaa[ndákhú'úlí]	'released'	yaa[séé'búúlí]	'said bye to'
yaa[mbóómbé'líítsí]	'comforted'	yaa[síínjí'líítsí]	'made...stand'
yaa[ndéébí'ndéébí]	'asked (iter)'	yaa[ngálúkhá'nyíínyí]	'turned...over'

(448) /Ø/ V-Initial + OP_{1sg} 's/he...me'

yaa[nzényí]	'wanted'	yaa[nzéyé'élé]	'wiped for'
yaa[nyámbákhá'áné]	'refused'	yaa[nzélé'élíítsí]	'carried...hanging'

(449) /H/ C-Initial + OP_{refl} 's/he...him/herself'

yayi[ré'élé]	'buried'	yayi[bé'chí]	'shaved'
yayi[sú'únjí]	'hung'	yayi[khá'lááché]	'cut'
yayi[sí'tááchí]	'accused'	yayi[sá'ándíítsí]	'thanked'
yayi[khó'ng'óóndí]	'knocked'	yayi[bó'hólóólé]	'untied'

(450) /H/ V-Initial + OP_{refl} 's/he...him/herself'

yayi[yí'rí]	'killed'	yayi[yí'kóó'mbí]	'admired'
yayi[yí'síá'chí]	'smacked'	yayi[yó'nónyíínyí]	'spoiled'
yayi[yá'búkhányíínyí]	'separated'		

(451) /Ø/ C-Initial + OP_{refl} 's/he...him/herself'

yayi[síé'lé]	'ground'	yayi[léshí]	'left'
yayi[sí'njí]	'bathed'	yayi[kúlíí'shí]	'named'
yayi[náá'búúlí]	'undressed'	yayi[lákhú'úlí]	'released'
yayi[hóómbé'líítsí]	'comforted'	yayi[síínjí'líítsí]	'made...stand'

yayi[réébí⁺réébí] ‘asked (iter)’ yayi[kálúkhá⁺nyíínyí] ‘turned...over’

(452) /Ø/ V-Initial + OP_{refl} ‘s/he...him/herself’

yayi[yálí] ‘exposed’ yayi[yéyéé⁺lé] ‘wiped for’
 yayi[yámbákhá⁺áné] ‘refused’ yayi[yélé⁺élíítsí] ‘hung...up’

(453) /H/ C-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yamuu[ndé⁺éléélé] ‘buried’ yamuu[mbé⁺chéélé] ‘shaved’
 yamuu[ndé⁺éréélé] ‘brought’ yamuu[khá⁺láchíí] ‘cut’
 yamuu[sí⁺tááchíí] ‘accused’ yamuu[mbó⁺ólítsíí] ‘seduced’
 yamuu[mbó⁺hólóléélé] ‘untied’

(454) /H/ V-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yamuú[⁺nzíííí] ‘killed’ yamuú[⁺nzéchítsíí] ‘admired’
 yamuú[⁺nzísíá⁺chííí] ‘smacked’ yamuú[⁺nzónónyínyííí] ‘spoiled’
 yamuú[⁺nzábúkhányínyííí] ‘separated’

(455) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he...him/her for me’

yamuú[⁺nzíííí] ‘went for’ yamuú[⁺ndéshé⁺élé] ‘went for’
 yamuú[⁺nóóndé⁺élé] ‘left’ yamuú[⁺ngúlíshí⁺ííí] ‘followed’
 yamuú[⁺ndákhú⁺úlííí] ‘named’ yamuú[⁺séébú⁺lííí] ‘released’
 yamuú[⁺mbóómbé⁺lítsííí] ‘said bye to’ yamuú[⁺síínjí⁺lítsííí] ‘comforted’

(456) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he...him/her {mu-} / it_{3/14} {ku-/bu-} for me’

yamuú[⁺nzéyéé⁺lé] ‘wiped’ yakuú[⁺nzáshítsí⁺ííí] ‘lit’
 yabuú[⁺nzílú⁺úlííí] ‘winnowed’ yakuú[⁺nzélé⁺élítsííí] ‘hung’

(457) /H/ C-Initial Phrase-Medial 's/he...the boy {mũ[↑] yáyi} /
 someone {muundu}'

ya[reele] mú'yáyí/muundu	'buried'
ya[bechi] mú'yáyí/muundu	'shaved'
ya[leeri] mú'yáyí/muundu	'brought'
ya[khalaache] mú'yáyí/muundu	'cut'
ya[sitaachi] mú'yáyí/muundu	'accused'
ya[booliitsi] mú'yáyí/muundu	'seduced'
ya[khong'oondi] mú'yáyí/muundu	'knocked'
ya[bohooloole] mú'yáyí/muundu	'untied'
ya[boyong'aane] mú'yáyí/muundu	'went around'

(458) /Ø/ C-Initial Phrase-Medial 's/he...the boy {mú[↓]yáyi} / the man {musáatsa} /
the cook {mutéeshi} / someone {muundu}'

ya[tsiili] mú'yáyi/musáatsa/mutéeshi/muundu	'went for'
ya[leshi] mú'yáyi/musáatsa/mutéeshi/muundu	'left'
ya[loondi] mú'yáyi/musáatsa/mutéeshi/muundu	'followed'
ya[kuliishi] mú'yáyi/musáatsa/mutéeshi/muundu	'named'
ya[lakhuuli] mú'yáyi/musáatsa/mutéeshi/muundu	'released'
ya[seebuuli] mú'yáyi/musáatsa/mutéeshi/muundu	'said bye to'
ya[kalushiitsi] mú'yáyi/musáatsa/mutéeshi/muundu	'returned'
ya[reebireebi] mú'yáyi/musáatsa/mutéeshi/muundu	'asked (iter)'
ya[kalukhanyinyi] mú'yáyi/musáatsa/mutéeshi/muundu	'turned...over'

(459) /H/ C-Initial +OP Phrase-Medial 's/he...the boy {mú[↑]yáyi} /
someone {muundu} for him/her'

yamu[réelele]	mú'yáyi/muundu	'buried'
yamu[bécheele]	mú'yáyi/muundu	'shaved'
yamu[léereele]	mú'yáyi/muundu	'brought'
yamu[khálachiilɪ]	mú'yáyi/muundu	'cut'
yamu[sítaachiilɪ]	mú'yáyi/muundu	'accused'
yamu[bóolitsiilɪ]	mú'yáyi/muundu	'seduced'
yamu[khóng'oondeele]	mú'yáyi/muundu	'knocked'
yamu[bóhololeele]	mú'yáyi/muundu	'untied'
yamu[bóyong'aniilɪ]	mú'yáyi/muundu	'went around'

- (460) /Ø/ C-Initial +OP Phrase-Medial 's/he...the boy {mú⁺yáyí} /
 someone {muundu} for him/her'
- | | |
|---------------------------------------|-----------------|
| yamu[tsiiliilɪ] mú'yáyí/muundu | 'went for' |
| yamu[lesheelɛ] mú'yáyí/muundu | 'left' |
| yamu[loondeelɛ] mú'yáyí/muundu | 'followed' |
| yamu[kulishiilɪ] mú'yáyí/muundu | 'named' |
| yamu[lakhuuliilɪ] mú'yáyí/muundu | 'released' |
| yamu[seebuliilɪ] mú'yáyí/muundu | 'said bye to' |
| yamu[kalushitsiilɪ] mú'yáyí/muundu | 'returned' |
| yamu[reebireebi] mú'yáyí/muundu | 'asked (iter)' |
| yamu[kalukhanyinyiilɪ] mú'yáyí/muundu | 'turned...over' |

- (461) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the boy {mú⁺yáyí} /
 someone {muundu} for him/her for me'
- | | |
|------------------------------------|-----------|
| yamuú[ndeeleelɛ] mú'yáyí/muundu | 'buried' |
| yamuú[mbecheelɛ] mú'yáyí/muundu | 'shaved' |
| yamuú[ndeereelɛ] mú'yáyí/muundu | 'brought' |
| yamuú[khalachiilɪ] mú'yáyí/muundu | 'cut' |
| yamuú[sitaachiilɪ] mú'yáyí/muundu | 'accused' |
| yamuú[mboolitsiilɪ] mú'yáyí/muundu | 'seduced' |
| yamuú[mbohololeelɛ] mú'yáyí/muundu | 'untied' |

- (462) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the boy {mú⁺yáyí} /
 someone {muundu} for him/her for me'
- | | |
|--------------------------------------|----------------|
| yamuú[nziiliilɪ] mú'yáyí/muundu | 'went for' |
| yamuú[ndesheelɛ] mú'yáyí/muundu | 'left' |
| yamuú[noondeelɛ] mú'yáyí/muundu | 'followed' |
| yamuú[ngulishiilɪ] mú'yáyí/muundu | 'named' |
| yamuú[ndakhuuliilɪ] mú'yáyí/muundu | 'released' |
| yamuú[seebuliilɪ] mú'yáyí/muundu | 'said bye to' |
| yamuú[siinjilitsiilɪ] mú'yáyí/muundu | 'made...stand' |

A.1.22 Hesternal Perfective Negative: Pattern 7

(463) /H/ C-Initial 's/he did not...'

ya[réélé] 'tá	'bury'	ya[ng'wéélé] 'tá	'drink'
ya[khwéélé] 'tá	'eat'	ya[líílí] 'tá	'pay dowry' ¹²
ya[lúmí] 'tá	'bite'	ya[béchí] 'tá	'shave'
ya[tééshí] 'tá	'cook'	ya[léérí] 'tá	'bring'
ya[khálááché] 'tá	'cut'	ya[káláánjí] 'tá	'fry'
ya[sítááchí] 'tá	'accuse'	ya[bóólíítsí] 'tá	'seduce'
ya[sáándíítsí] 'tá	'thank'	ya[khóng'óondí] 'tá	'knock'
ya[bóhólóólé] 'tá	'untie'	ya[bóyóng'ááné] 'tá	'go around'
ya[ng'óng'óólíítsí] 'tá	'tease'	ya[líng(ák)ányíínyí] 'tá	'crumple'

(464) /Ø/ C-Initial 's/he did not...'¹³

ya[tsíí'lí] 'tá	'go'	ya[kwíí'lí] 'tá	'fall'
ya[léshí] 'tá	'leave'	ya[réé'bí] 'tá	'ask'
ya[lóó'ndí] 'tá	'follow'	ya[kúmíí'lí] 'tá	'hold'
ya[kúlíí'shí] 'tá	'name'	ya[hómó'óólí] 'tá	'massage'
ya[lákhú'úlí] 'tá	'release'	ya[séébú'úlí] 'tá	'say bye'
ya[hóómbé'líítsí] 'tá	'comfort'	ya[kálúshí'ítsí] 'tá	'return'
ya[síínjí'líítsí] 'tá	'make stand'	ya[réébi'reébi] 'tá	'ask (iter)'
ya[kálúkhá'nyíínyí] 'tá	'turn over'	ya[sébúlú'khányíínyí] 'tá	'scatter'

(465) /H/ C-Initial + OP 's/he did not...him/her'

yamu[ré'élé] 'tá	'bury'	yamu[bé'chí] 'tá	'shave'
yamu[lé'érí] 'tá	'bring'	yamu[khá'lááché] 'tá	'cut'
yamu[sí'tááchí] 'tá	'accuse'	yamu[bó'óólíítsí] 'tá	'seduce'
yamu[khóng'óondí] 'tá	'knock'	yamu[bó'hólóólé] 'tá	'untie'

¹²The first recording of this paradigm includes a production of the segmentally identical form meaning to 's/he did not cry' ya[liili] tá, from the /Ø/ disyllabic verb, khu[liila] 'to cry'.

¹³While the negative element tá is transcribed as realizing a downstepped H, few of Burula's productions appear to be produced in this way. Instead, tá appears often to be incorporated into the latter H span of the verb, e.g., ya[lákhú'úlí] tá.

yamu[bó'yóng'ááné] 'tá 'go around' yamu[ng'ó'ng'óólítsí] 'tá 'tease'
 yamu[lí'ngákányínyí] 'tá 'bend'

(466) /Ø/ C-Initial + OP 's/he did not...him/her {mu-} / them_s {bi-}'

yamu[tsí'lí] 'tá 'go for'
 yamu[léshí] 'tá 'leave'
 yamu[lóó'ndí] 'tá 'follow'
 yamu[kúlí'shí] 'tá 'name'
 yamu[lákhú'úlí] 'tá 'release'
 yamu[séé'búúlí] 'tá 'say bye to'
 yamu[hóómbé'líítsí] 'tá 'comfort'
 yamu[kálú'shíítsí] 'tá 'return'
 yamu[síínjílíítsí] 'tá 'make...stand'
 yamu[réébí'réebí] 'tá 'ask (iter)'
 yamu[kálúkhá'nyínyí] 'tá 'turn...over'
 yabi[sébúlú'khányínyí] 'tá 'scatter'

(467) /H/ C-Initial + OP + OP_{1sg} 's/he did not...him/her for me'

yamuu[ndé'éléélé] 'tá 'bury' yamuu[mbé'chéélé] 'tá 'shave'
 yamuu[ndé'ééréélé] 'tá 'bring' yamuu[khá'láchíílí] 'tá 'cut'
 yamuu[sí'tááchíílí] 'tá 'accuse' yamuu[mbó'ólítsíílí] 'tá 'seduce'
 yamuu[mbó'hóóléléélé] 'tá 'untie'

(468) /Ø/ C-Initial + OP + OP_{1sg} 's/he did not...him/her for me'

yamuú['nzíílí'ílí] 'tá 'go for' yamuú['ndéshé'élé] 'tá 'go for'
 yamuú['nóóndé'élé] 'tá 'leave' yamuú['ngúlíshí'ílí] 'tá 'follow'
 yamuú['ndákhú'úlíílí] 'tá 'name' yamuú['séébú'líílí] 'tá 'release'
 yamuú['mbóómbé'lítsíílí] 'tá 'say bye to' yamuú['síínjílíítsíílí] 'tá 'comfort'

(469) /H/ C-Initial Phrase-Medial 's/he did not...the boy {mú'yáyi} /

	<i>someone {muundu}</i>
ya[reele] mú'yáyí/muundu tá	'bury'
ya[bechi] mú'yáyí/muundu tá	'shave'
ya[leeri] mú'yáyí/muundu tá	'bring'
ya[khalaache] mú'yáyí/muundu tá	'cut'
ya[sitaachi] mú'yáyí/muundu tá	'accuse'
ya[booliitsi] mú'yáyí/muundu tá	'seduce'
ya[khong'oondi] mú'yáyí/muundu tá	'knock'
ya[bohooloe] mú'yáyí/muundu tá	'untie'
ya[boyong'aane] mú'yáyí/muundu tá	'go around'

(470) /Ø/ C-Initial Phrase-Medial 's/he did not...the boy {mú'yáyí} /
someone {muundu}

ya[tsiili] mú'yáyí/muundu tá	'go for'
ya[leshi] mú'yáyí/muundu tá	'leave'
ya[loondi] mú'yáyí/muundu tá	'follow'
ya[kuliishi] mú'yáyí/muundu tá	'name'
ya[lakhuuli] mú'yáyí/muundu tá	'release'
ya[seebuuli] mú'yáyí/muundu tá	'say bye to'
ya[kalushiitsi] mú'yáyí/muundu tá	'return'
ya[reebireebi] mú'yáyí/muundu tá	'ask (iter)'
ya[kalukhanyiinyi] mú'yáyí/muundu tá	'turn...over'

(471) /H/ C-Initial +OP Phrase-Medial 's/he did not...the boy {mú'yáyí} /
someone {muundu} for him/her

yamu[réeelele] mú'yáyí/muundu tá	'bury'
yamu[bécheele] mú'yáyí/muundu tá	'shave'
yamu[léereele] mú'yáyí/muundu tá	'bring'
yamu[khálachiili] mú'yáyí/muundu tá	'cut'
yamu[sítaachiili] mú'yáyí/muundu tá	'accuse'
yamu[bóolitsiili] mú'yáyí/muundu tá	'seduce'
yamu[khóng'oondeele] mú'yáyí/muundu tá	'knock'
yamu[bóhololeele] mú'yáyí/muundu tá	'untie'
yamu[bóyong'aniili] mú'yáyí/muundu tá	'go around'

yamu[tsiiliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'go for'
yamu[lesheelɛ]	mú'yáyɪ/musáatsa/muundu tá	'leave'
yamu[loondeelɛ]	mú'yáyɪ/musáatsa/muundu tá	'follow'
yamu[kulishiilɪ]	mú'yáyɪ/musáatsa/muundu tá	'name'
yamu[lakhuuliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'release'
yamu[seebuliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'say bye to'
yamu[kalushitsiilɪ]	mú'yáyɪ/musáatsa/muundu tá	'return'
yamu[reebireebi]	mú'yáyɪ/musáatsa/muundu tá	'ask (iter)'
yamu[kalukhanyinyiilɪ]	mú'yáyɪ/musáatsa/muundu tá	'turn...over'

yamuu[ndeeleele]	mú'yáyi/muundu tá	'bury'
yamuu[mbecheele]	mú'yáyi/muundu tá	'shave'
yamuu[ndeereele]	mú'yáyi/muundu tá	'bring'
yamuu[khalachiilí]	mú'yáyi/muundu tá	'cut'
yamuu[sitaachiilí]	mú'yáyi/muundu tá	'accuse'
yamuu[mboolitsiilí]	mú'yáyi/muundu tá	'seduce'
yamuu[mbohololeele]	mú'yáyi/muundu tá	'untie'

yamuú[nziiliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'go for'
yamuú[ndesheeɛ]	mú'yáyɪ/musáatsa/muundu tá	'leave'
yamuú[noondeeɛ]	mú'yáyɪ/musáatsa/muundu tá	'follow'
yamuú[ngulishiilɪ]	mú'yáyɪ/musáatsa/muundu tá	'name'
yamuú[ndakhuuliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'release'
yamuú[seebuliilɪ]	mú'yáyɪ/musáatsa/muundu tá	'say bye to'
yamuú[siinjilitsiilɪ]	mú'yáyɪ/musáatsa/muundu tá	'make...stand'

A.1.23 Perfect (3rd Sg): Pattern 1a¹⁴

(475) /H/ C-Initial 's/he has...'

aa[réele]	'buried'	aa[ng'wéele]	'drunk'
aa[khwéele]	'eaten'	aa[líli]	'paid dowry'
aa[lúmi]	'bitten'	aa[béchi]	'shaved'
aa[téeshi]	'cooked'	aa[léeri]	'brought'
aa[khálaache]	'cut'	aa[kálaanji]	'fried'
aa[sítaachi]	'accused'	aa[bóoliitsi]	'seduced'
aa[sáandiitsi]	'thanked'	aa[khóng'oondi]	'knocked'
aa[bóholoolé]	'untied'	aa[bóyong'aané]	'gone around'
aa[ng'óng'ooliitsi]	'teased'	aa[líng(ak)anyinyi]	'crumpled'

(476) /H/ V-Initial 's/he has...'

y[ííri]	'killed'	y[iíkoombi]	'admired'
y[iísiachi]	'smacked'	y[iíkooolé]	'belched'
y[oónonyinyi]	'spoiled'	y[aábukhanyinyi]	'separated'

(477) /Ø/ C-Initial 's/he has...'

aa[tsiili]	'gone'	aa[kwiili]	'fallen'
aa[leshi]	'left'	aa[reebi]	'asked'
aa[loondi]	'followed'	aa[kumiili]	'held'
aa[kuliishi]	'named'	aa[homooli]	'massaged'
aa[lakhuuli]	'released'	aa[seebuuli]	'said bye'
aa[hoombeliitsi]	'comforted'	aa[kalushiitsi]	'returned'
aa[siinjiliitsi]	'made stand'	aa[reebireebi]	'asked (iter)'
aa[kalukhanyinyi]	'turned over'	aa[sebulukhanyinyi]	'scattered'

¹⁴These forms may be produced with either a- or u- as the third person singular subject prefix. On the basis of a few unrecorded tokens, it appears that the decision to use one subject prefix or the other has no impact on the tonal properties of the verb.

(478) /Ø/ V-Initial 's/he has...'

y[eényi]	'wanted'	y[eéyeelɛ]	'wiped for'
y[ifluuli]	'winnowed'	y[aámbakhaanɛ]	'refused'
y[eéleeliitsɪ]	'hung up'		

(479) /H/ C-Initial + OP 's/he has...him/her'

aamú[reele]	'buried'	aamú[bechi]	'shaved'
aamú[leeri]	'brought'	aamú[khalaache]	'cut'
aamú[sitaachi]	'accused'	aamú[booliitsɪ]	'seduced'
aamú[khong'oondi]	'knocked'	aamú[bohooloolɛ]	'untied'
aamú[boyong'aanɛ]	'gone around'	aamú[ng'ong'ooliitsɪ]	'teased'
aamú[lingakanyiinyɪ]	'bent'		

(480) /H/ V-Initial + OP 's/he has...him/her'

aamw[íiri]	'killed'	aamw[íikoombi]	'admired'
aamw[íisiachi]	'smacked'	aamw[óononyiinyɪ]	'spoiled'
aamw[áabukhanyiinyɪ]	'separated'		

(481) /Ø/ C-Initial + OP 's/he has...him/her {mu-} / them₈ {bi-}'

aamú[tsiili]	'gone for'
aamú[leshi]	'left'
aamú[loondi]	'followed'
aamú[kuliishɪ]	'named'
aamú[lakhuuli]	'released'
aamú[seebuulɪ]	'said bye to'
aamú[hoombeliitsɪ]	'comforted'
aamú[kalushiitsɪ]	'returned'
aamú[siinjiliitsɪ]	'made...stand'
aamú[reebireebi]	'asked (iter)'
aamú[kalukhanyiinyɪ]	'turned...over'
aabí[sebulukhanyiinyɪ]	'scattered'

(482) /Ø/ V-Initial + OP 's/he has...him/her {mw-} / it₁₄ {bw-}'

aamw[éenyi]	'wanted'	aamw[éeyeele]	'wiped for'
aabw[íluuli]	'winnowed'	aamw[áambakhaane]	'refused'
aamw[éeleeliitsɪ]	'carried...hanging'		

(483) /H/ C-Initial + OP_{1sg} 's/he has...me'

aá[riili]	'feared'	aá[mbechi]	'shaved'
aá[ndeeri]	'brought'	aá[khalaache]	'cut'
aá[sitaachi]	'accused'	aá[mbooliitsɪ]	'seduced'
aá[khong'oondi]	'knocked'	aá[mbohooloole]	'untied'
aá[mboyong'aane]	'gone around'	aá[ng'ong'ooliitsɪ]	'teased'
aá[ningakanyiinyɪ]	'bent'		

(484) /H/ V-Initial + OP_{1sg} 's/he has...me'

aá[nziri]	'killed'	aá[nzikoombi]	'admired'
aá[nzisiachi]	'smacked'	aá[nzononyiinyɪ]	'spoiled'
aá[nzabukhanyiinyɪ]	'separated'		

(485) /Ø/ C-Initial + OP_{1sg} 's/he has...me'

aá[siele]	'ground'	aá[ndeshi]	'left'
aá[noondi]	'followed'	aá[nguliishi]	'named'
aá[ndakhuuli]	'released'	aá[seebuuli]	'said bye to'
aá[mboombeliitsɪ]	'comforted'	aá[siinjiliitsɪ]	'made..stand'
aá[ndeebindeebi]	'asked (iter)'	aá[ngalukhanyiinyɪ]	'turned...over'

(486) /Ø/ V-Initial + OP_{1sg} 's/he has...me'

aá[nzenyi]	'wanted'	aá[nzeyeele]	'wiped for'
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aá[nyambakhaanɛ] ‘refused’ aá[nzeleeliitsɪ] ‘carried...hanging’

(487) /H/ C-Initial + OP_{refl} ‘s/he has...him/herself’

yií[reele]	‘buried’	yií[bechi]	‘shaved’
yií[suunji]	‘hung’	yií[khalaacheɛ]	‘cut’
yií[sitaachi]	‘accused’	yií[saandiitsɪ]	‘thanked’
yií[khong’oondi]	‘knocked’	yií[bohoolooleɛ]	‘untied’

(488) /H/ V-Initial + OP_{refl} ‘s/he has...him/herself’

yií[yiri]	‘killed’	yií[yikoombi]	‘admired’
yií[yisiachi]	‘smacked’	yií[yononyiinyɪ]	‘spoiled’
yií[yabukhanyiinyɪ]	‘separated’		

(489) /Ø/ C-Initial + OP_{refl} ‘s/he has...him/herself’

yií[siele]	‘ground’	yií[leshi]	‘left’
yií[siinji]	‘bathed’	yií[kuliishɪ]	‘named’
yií[naabuuli]	‘undressed’	yií[lakhuuli]	‘released’
yií[hoombeliitsɪ]	‘comforted’	yií[siinjiliitsɪ]	‘made...stand’
yií[reebireebi]	‘asked (iter)’	yií[kalukhanyiinyɪ]	‘turned...over’

(490) /Ø/ V-Initial + OP_{refl} ‘s/he has...him/herself’

yií[yali]	‘exposed’	yií[yeyeeleɛ]	‘wiped for’
yií[yambakhaanɛ]	‘refused’	yií[yeleeliitsɪ]	‘hung...up’

(491) /H/ C-Initial + OP + OP_{1sg} ‘s/he has...him/her for me’

aamúu[ndeeleleɛ]	‘buried’	aamúu[mbecheeleɛ]	‘shaved’
aamúu[ndeereleɛ]	‘brought’	aamúu[khalachiilɪ]	‘cut’

aamúu[sitaachiilɪ] ‘accused’ aamúu[mboolitsiilɪ] ‘seduced’
 aamúu[mbohoololeeɛ] ‘untied’

(492) /H/ V-Initial + OP + OP_{1sg} ‘s/he has...him/her for me’

aamúu[nziiriilɪ] ‘killed’ aamúu[nzechitsiilɪ] ‘admired’
 aamúu[nzisiachiilɪ] ‘smacked’ aamúu[nzononyinyiilɪ] ‘spoiled’
 aamúu[nzabukhanyinyiilɪ] ‘separated’

(493) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he has...him/her for me’

aamúu[nziiliilɪ] ‘gone for’ aamúu[ndesheelɛ] ‘gone for’
 aamúu[noondeelɛ] ‘left’ aamúu[ngulishiilɪ] ‘followed’
 aamúu[ndakhuuliilɪ] ‘named’ aamúu[seebuliilɪ] ‘released’
 aamúu[mboombelitsiilɪ] ‘said bye to’ aamúu[siinjilitsiilɪ] ‘comforted’

(494) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he has...him/her {mu-} / it_{3/14} {ku-/bu-} for me’

aamúu[nzeyeelɛ] ‘wiped’ aakúu[nzashitsiilɪ] ‘lit’
 aabúu[nziluuliilɪ] ‘winnowed’ aakúu[nzélélitsiilɪ] ‘hung’

(495) /H/ C-Initial Phrase-Medial ‘s/he has...the boy {mú⁺yáyɪ} /
 someone {muundu}’

aa[réelɛ] mú⁺yáyɪ/muundu ‘buried’
 aa[béchi] mú⁺yáyɪ/muundu ‘shaved’
 aa[léeri] mú⁺yáyɪ/muundu ‘brought’
 aa[khálaacheɛ] mú⁺yáyɪ/muundu ‘cut’
 aa[sítaachi] mú⁺yáyɪ/muundu ‘accused’
 aa[bóoliitsɪ] mú⁺yáyɪ/muundu ‘seduced’
 aa[khóng’oondi] mú⁺yáyɪ/muundu ‘knocked’
 aa[bóholoolɛ] mú⁺yáyɪ/muundu ‘untied’
 aa[bóyong’aaneɛ] mú⁺yáyɪ/muundu ‘gone around’

(496) /Ø/ C-Initial Phrase-Medial 's/he has...the boy {mú⁺yáyí} /
the man {musáatsa} / someone {muundu}'

aa[tsiili]	mú'yáyí/musáatsa/muundu	'gone for'
aa[leshi]	mú'yáyí/musáatsa/muundu	'left'
aa[loondi]	mú'yáyí/musáatsa/muundu	'followed'
aa[kuliishi]	mú'yáyí/musáatsa/muundu	'named'
aa[lakhuuli]	mú'yáyí/musáatsa/muundu	'released'
aa[seebuuli]	mú'yáyí/musáatsa/muundu	'said bye to'
aa[kalushiitsi]	mú'yáyí/musáatsa/muundu	'returned'
aa[reebireebi]	mú'yáyí/musáatsa/muundu	'asked (iter)'

(497) /H/ C-Initial +OP Phrase-Medial 's/he has...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

aamú[reelele]	mú'yáyí/muundu	'buried'
aamú[becheele]	mú'yáyí/muundu	'shaved'
aamú[leereele]	mú'yáyí/muundu	'brought'
aamú[khalachiili]	mú'yáyí/muundu	'cut'
aamú[sitaachiili]	mú'yáyí/muundu	'accused'
aamú[boolitsiili]	mú'yáyí/muundu	'seduced'
aamú[khong'oondeele]	mú'yáyí/muundu	'knocked'
aamú[bohololeele]	mú'yáyí/muundu	'untied'
aamú[boyong'aniili]	mú'yáyí/muundu	'gone around'

(498) /Ø/ C-Initial +OP Phrase-Medial 's/he has...the boy {mú⁺yáyí} /
the man {musáatsa} / someone {muundu} for him/her'

aamú[tsiiliili]	mú'yáyí/musáatsa/muundu	'gone for'
aamú[lesheele]	mú'yáyí/musáatsa/muundu	'left'
aamú[loondeele]	mú'yáyí/musáatsa/muundu	'followed'
aamú[kulishiili]	mú'yáyí/musáatsa/muundu	'named'
aamú[lakhuuliili]	mú'yáyí/musáatsa/muundu	'released'
aamú[seebuliili]	mú'yáyí/musáatsa/muundu	'said bye to'
aamú[kalushitsiili]	mú'yáyí/musáatsa/muundu	'returned'
aamú[reebereele]	mú'yáyí/musáatsa/muundu	'asked (iter)'

(499) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he has...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me’

aamúu[ndeelele] mú'yáyí/muundu	‘buried’
aamúu[mbecheele] mú'yáyí/muundu	‘shaved’
aamúu[ndeerele] mú'yáyí/muundu	‘brought’
aamúu[khalachiilí] mú'yáyí/muundu	‘cut’
aamúu[sitaachiilí] mú'yáyí/muundu	‘accused’
aamúu[mboolitsiilí] mú'yáyí/muundu	‘seduced’
aamúu[mbohoololele] mú'yáyí/muundu	‘untied’

(500) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he has...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me’

aamúu[nziiliilí] mú'yáyí/muundu	‘gone for’
aamúu[ndesheele] mú'yáyí/muundu	‘left’
aamúu[noondeele] mú'yáyí/muundu	‘followed’
aamúu[ngulishiilí] mú'yáyí/muundu	‘named’
aamúu[ndakhuuliilí] mú'yáyí/muundu	‘released’
aamúu[seebuliilí] mú'yáyí/muundu	‘said bye to’
aamúu[siinjilitsiilí] mú'yáyí/muundu	‘made...stand’

A.1.24 Perfect Negative (3rd Sg): Pattern 1a

(501) /H/ C-Initial ‘s/he has not...’

aa[ré'élé] tá	‘buried’	aa[ng'wé'élé] tá	‘drunk’
aa[khwé'élé] tá	‘eaten’	aa[lí'ílí] tá	‘paid dowry’
aa[lú'mí] tá	‘bitten’	aa[bé'chí] tá	‘shaved’
aa[té'éshí] tá	‘cooked’	aa[lé'éri] tá	‘brought’
aa[khá'lááché] tá	‘cut’	aa[ká'láánjí] tá	‘fried’
aa[sí'tááchí] tá	‘accused’	aa[bó'ólíítsí] tá	‘seduced’
aa[sá'ándíítsí] tá	‘thanked’	aa[khó'ng'óóndí] tá	‘knocked’
aa[bó'hólóólé] tá	‘untied’	aa[bó'yóng'ááné] tá	‘gone around’
aa[ng'ó'ng'óólíítsí] tá	‘teased’	aa[lí'ng(ák)ányínyí] tá	‘crumpled’

(502) /H/ V-Initial 's/he has not...'

y[íí'rí] tá	'killed'	y[íí'kóómbí] tá	'admired'
y[íí'síáchí] tá	'smacked'	y[íí'kóbóólé] tá	'belched'
y[oó'nónyíínyí] tá	'spoiled'	y[aá'búkhányíínyí] tá	'separated'

(503) /Ø/ C-Initial 's/he has not...'

aa[tsííí] tá	'gone'	aa[kwííí] tá	'fallen'
aa[léshí] tá	'left'	aa[réébí] tá	'asked'
aa[lóóndí] tá	'followed'	aa[kúmííí] tá	'held'
aa[kúlííshí] tá	'named'	aa[hómóólí] tá	'massaged'
aa[lákhúúlí] tá	'released'	aa[séébúúlí] tá	'said bye'
aa[hóómbéíítsí] tá	'comforted'	aa[kálúshíítsí] tá	'returned'
aa[sínjílíítsí] tá	'made stand'	aa[réébíréeíbí] tá	'asked (iter)'
aa[kálúkhányíínyí] tá	'turn over'	aa[sébúlúkhányíínyí] tá	'scattered'

(504) /Ø/ V-Initial 's/he has not...'

y[eé'nyí] tá	'wanted'	y[eé'yéélé] tá	'wiped for'
y[íí'lúúlí] tá	'winnowed'	y[aá'mbákhááné] tá	'refused'
y[eé'léélíítsí] tá	'hung up'		

(505) /H/ C-Initial + OP 's/he has not...him/her'

aamú['réélé] tá	'buried'	aamú['béchí] tá	'shaved'
aamú['léérí] tá	'brought'	aamú['khálááché] tá	'cut'
aamú['sítááchí] tá	'accused'	aamú['bóólíítsí] tá	'seduced'
aamú['khóng'óóndí] tá	'knocked'	aamú['bóhólóólé] tá	'untied'
aamú['bóyóng'ááné] tá	'gone around'	aamú['ng'óng'óólíítsí] tá	'teased'
aamú['línkáányíínyí] tá	'bent'		

(506) /Ø/ C-Initial + OP 's/he has not...him/her {mu-} / them₈ {bi-}'

aamú[⁺ tsííí] tá	‘gone for’
aamú[⁺ léshí] tá	‘left’
aamú[⁺ lóóndí] tá	‘followed’
aamú[⁺ kúúíshí] tá	‘named’
aamú[⁺ lákhuúúí] tá	‘released’
aamú[⁺ séébúúí] tá	‘said bye to’
aamú[⁺ hóómbéíítsí] tá	‘comforted’
aamú[⁺ kálúshíítsí] tá	‘returned’
aamú[⁺ síínjílíítsí] tá	‘made...stand’
aamú[⁺ réebíréébí] tá	‘asked (iter)’
aamú[⁺ kálúkhányíínyí] tá	‘turned...over’
aabí[⁺ sébúúkhányíínyí] tá	‘scattered’

(507) /H/ C-Initial + OP + OP_{1sg} ‘s/he has not...him/her for me’

aamú ⁺ ú[ndéélelé] tá	‘buried’	aamú ⁺ ú[mbéchéélelé] tá	‘shaved’
aamú ⁺ ú[ndéérélelé] tá	‘brought’	aamú ⁺ ú[kháláchííí] tá	‘cut’
aamú ⁺ ú[sítaáchííí] tá	‘accused’	aamú ⁺ ú[mbóólítsííí] tá	‘seduced’
aamú ⁺ ú[mbóhóólólelé] tá	‘untied’		

(508) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he has not...him/her for me’

aamú ⁺ ú[nzííííí] tá	‘gone for’	aamú ⁺ ú[ndéshéélelé] tá	‘gone for’
aamú ⁺ ú[nóóndéélelé] tá	‘left’	aamú ⁺ ú[ngúlíshííí] tá	‘followed’
aamú ⁺ ú[ndákhúúííí] tá	‘named’	aamú ⁺ ú[séébúííí] tá	‘released’
aamú ⁺ ú[mbóómbéíítsííí] tá	‘said bye to’	aamú ⁺ ú[síínjílítsííí] tá	‘comforted’

(509) /H/ C-Initial Phrase-Medial ‘s/he has not...the boy {mú⁺yáyí} /
someone {muundu}’

aa[réele] mú ⁺ yáyí/muundu tá	‘bury’
aa[béchi] mú ⁺ yáyí/muundu tá	‘shave’
aa[léeri] mú ⁺ yáyí/muundu tá	‘bring’
aa[khálaache] mú ⁺ yáyí/muundu tá	‘cut’
aa[sítaachi] mú ⁺ yáyí/muundu tá	‘accuse’

aa[bóoliitsi]	mú'yáyí/muundu tá	'seduce'
aa[khóng'oondi]	mú'yáyí/muundu tá	'knock'
aa[bóholoole]	mú'yáyí/muundu tá	'untie'
aa[bóyong'aane]	mú'yáyí/muundu tá	'go around'

(510) /Ø/ C-Initial Phrase-Medial 's/he has not...the boy {mú⁺yáyí} /
someone {muundu}'

aa[tsiili]	mú'yáyí/muundu tá	'go for'
aa[leshi]	mú'yáyí/muundu tá	'leave'
aa[loondi]	mú'yáyí/muundu tá	'follow'
aa[kuliishi]	mú'yáyí/muundu tá	'name'
aa[lakhuuli]	mú'yáyí/muundu tá	'release'
aa[seebuuli]	mú'yáyí/muundu tá	'say bye to'
aa[kalushiitsi]	mú'yáyí/muundu tá	'return'
aa[reebireebi]	mú'yáyí/muundu tá	'ask (iter)'

(511) /H/ C-Initial +OP Phrase-Medial 's/he has not...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

aamú[reelele]	mú'yáyí/muundu tá	'bury'
aamú[becheele]	mú'yáyí/muundu tá	'shave'
aamú[leereele]	mú'yáyí/muundu tá	'bring'
aamú[khalachiili]	mú'yáyí/muundu tá	'cut'
aamú[sitaachiili]	mú'yáyí/muundu tá	'accuse'
aamú[boolitsiili]	mú'yáyí/muundu tá	'seduce'
aamú[khong'oondeele]	mú'yáyí/muundu tá	'knock'
aamú[bohoololeele]	mú'yáyí/muundu tá	'untie'
aamú[boyong'aniili]	mú'yáyí/muundu tá	'go around'

(512) /Ø/ C-Initial +OP Phrase-Medial 's/he has not...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

aamú[tsiiliili]	mú'yáyí/muundu tá	'go for'
aamú[lesheele]	mú'yáyí/muundu tá	'leave'
aamú[loondeele]	mú'yáyí/muundu tá	'follow'
aamú[kulishiili]	mú'yáyí/muundu tá	'name'
aamú[lakhuuliili]	mú'yáyí/muundu tá	'release'

aamú[seebuliilɪ]	mú'yáyɪ/muundu tá	'say bye to'
aamú[kalushitsiilɪ]	mú'yáyɪ/muundu tá	'return'
aamú[reebɛreebeelɛ]	mú'yáyɪ/muundu tá	'ask (iter)'

(513) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he has not...the boy {mú[↑]yáyɪ} /
someone {muundu} for him/her for me'

aamúu[ndeeleelɛ]	mú'yáyɪ/muundu tá	'bury'
aamúu[mbecheelɛ]	mú'yáyɪ/muundu tá	'shave'
aamúu[ndeereelɛ]	mú'yáyɪ/muundu tá	'bring'
aamúu[khalachiilɪ]	mú'yáyɪ/muundu tá	'cut'
aamúu[sitaachiilɪ]	mú'yáyɪ/muundu tá	'accuse'
aamúu[mboolitsiilɪ]	mú'yáyɪ/muundu tá	'seduce'
aamúu[mbohoolleelɛ]	mú'yáyɪ/muundu tá	'untie'

(514) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he has not...the boy {mú[↑]yáyɪ} /
someone {muundu} for him/her for me'

aamúu[nziiliilɪ]	mú'yáyɪ/muundu tá	'go for'
aamúu[ndesheelɛ]	mú'yáyɪ/muundu tá	'leave'
aamúu[noondeelɛ]	mú'yáyɪ/muundu tá	'follow'
aamúu[ngulishiilɪ]	mú'yáyɪ/muundu tá	'name'
aamúu[ndakhuuliilɪ]	mú'yáyɪ/muundu tá	'release'
aamúu[seebuliilɪ]	mú'yáyɪ/muundu tá	'say bye to'
aamúu[siinjilitsiilɪ]	mú'yáyɪ/muundu tá	'make...stand'

A.1.25 Perfect (2nd Sg): Pattern 1a

(515) /H/ C-Initial 'you have...'

uu[reele]	'buried'	uu[ng'weele]	'drunk'
uu[khweele]	'eaten'	uu[liili]	'paid dowry'
uu[lumi]	'bitten'	uu[bechi]	'shaved'
uu[teeshi]	'cooked'	uu[leeri]	'brought'
uu[khalaachɛ]	'cut'	uu[kalaanji]	'fried'
uu[sitaachi]	'accused'	uu[booliitsi]	'seduced'

uu[saandiitsɪ]	‘thanked’	uu[khong’oondi]	‘knocked’
uu[bohooloɛ]	‘untied’	uu[boyong’aane]	‘gone around’
uu[ng’ong’ooliitsɪ]	‘teased’	uu[ling(ak)anyiinyɪ]	‘crumpled’

(516) /H/ V-Initial ‘you have...’

w[iiri]	‘killed’	w[iikoombi]	‘admired’
w[iisiachi]	‘smacked’	w[iikoboole]	‘belched’
w[oononyiinyɪ]	‘spoiled’	w[aabukhanyiinyɪ]	‘separated’

(517) /Ø/ C-Initial ‘you have...’

uu[tsili]	‘gone’	uu[kwiili]	‘fallen’
uu[leshi]	‘left’	uu[reebi]	‘asked’
uu[loondi]	‘followed’	uu[kumiilɪ]	‘held’
uu[kuliishɪ]	‘named’	uu[homooli]	‘massaged’
uu[lakhuuli]	‘released’	uu[seebuulɪ]	‘said bye’
uu[hoombeliitsɪ]	‘comforted’	uu[kalushiitsɪ]	‘returned’
uu[siinjiliitsɪ]	‘made stand’	uu[reebireebi]	‘asked (iter)’
uu[kalukhanyiinyɪ]	‘turned over’	uu[sebulukhanyiinyɪ]	‘scattered’

(518) /Ø/ V-Initial ‘you have...’

w[eenyi]	‘wanted’	w[eeyeelɛ]	‘wiped for’
w[iiluuli]	‘winnowed’	w[aambakhaane]	‘refused’
w[eeleeliitsɪ]	‘hung up’		

(519) /H/ C-Initial + OP ‘you have...him/her’

uumu[reele]	‘buried’	uumu[bechi]	‘shaved’
uumu[leeri]	‘brought’	uumu[khalaache]	‘cut’
uumu[sitaachi]	‘accused’	uumu[booliitsɪ]	‘seduced’
uumu[khong’oondi]	‘knocked’	uumu[bohooloɛ]	‘untied’

uumu[boyong'aanɛ] 'gone around' uumu[ng'ong'ooliitsɪ] 'teased'
uumu[lingakanyiinyɪ] 'bent'

(520) /H/ V-Initial + OP 'you have...him/her'

uumw[iiri] 'killed' uumw[iikoombi] 'admired'
uumw[iisiachi] 'smacked' uumw[oononyiinyɪ] 'spoiled'
uumw[aabukhanyiinyɪ] 'separated'

(521) /Ø/ C-Initial + OP 'you have...him/her {mu-} / them₈ {bi-}'

uumu[tsiili] 'gone for'
uumu[leshi] 'left'
uumu[loondi] 'followed'
uumu[kuliishɪ] 'named'
uumu[lakhuuli] 'released'
uumu[seebuuli] 'said bye to'
uumu[hoombeliitsɪ] 'comforted'
uumu[kalushiitsɪ] 'returned'
uumu[siinjiliitsɪ] 'made...stand'
uumu[reebireebi] 'asked (iter)'
uumu[kalukhanyiinyɪ] 'turned...over'
uubi[sebulukhanyiinyɪ] 'scattered'

(522) /Ø/ V-Initial + OP 'you have...him/her {mw-} / it₁₄ {bw-}'

uumw[eenyi] 'wanted' uumw[eeyeelɛ] 'wiped for'
uubw[iiluuli] 'winnowed' uumw[aambakhaanɛ] 'refused'
uumw[eeleeliitsɪ] 'carried...hanging'

(523) /H/ C-Initial + OP_{1sg} 'you have...me'

uu[riili] 'feared' uu[mbechi] 'shaved'

uu[ndeeri]	‘brought’	uu[khalaache]	‘cut’
uu[sitaachi]	‘accused’	uu[mbooliitsɪ]	‘seduced’
uu[khong’oondi]	‘knocked’	uu[mbohoolooɛ]	‘untied’
uu[mboyong’aane]	‘gone around’	uu[ng’ong’ooliitsɪ]	‘teased’
uu[ningakanyiinyɪ]	‘bent’		

(524) /H/ V-Initial + OP_{1sg} ‘you have...me’

uu[nziri]	‘killed’	uu[nzikoombi]	‘admired’
uu[nzisiachi]	‘smacked’	uu[nzononyiinyɪ]	‘spoiled’
uu[nzabukhanyiinyɪ]	‘separated’		

(525) /Ø/ C-Initial + OP_{1sg} ‘you have...me’

uu[siele]	‘ground’	uu[ndeshi]	‘left’
uu[noondi]	‘followed’	uu[nguliishi]	‘named’
uu[ndakhuuli]	‘released’	uu[seebuuli]	‘said bye to’
uu[mboombeliitsɪ]	‘comforted’	uu[siinjiliitsɪ]	‘made..stand’
uu[ndeebindeebi]	‘asked (iter)’	uu[ngalukhanyiinyɪ]	‘turned...over’

(526) /Ø/ V-Initial + OP_{1sg} ‘you have...me’

uu[nzenyi]	‘wanted’	uu[nzeyeeɛ]	‘wiped for’
uu[nyambakhaane]	‘refused’	uu[nzeleeliitsɪ]	‘carried...hanging’

(527) /H/ C-Initial + OP_{refl} ‘you have...him/herself’

wii[reele]	‘buried’	wii[bechi]	‘shaved’
wii[suunji]	‘hung’	wii[khalaache]	‘cut’
wii[sitaachi]	‘accused’	wii[saandiitsɪ]	‘thanked’
wii[khong’oondi]	‘knocked’	wii[bohoolooɛ]	‘untied’

(528) /H/ V-Initial + OP_{refl} 'you have...him/herself'

wii[yiri]	'killed'	wii[yikoombi]	'admired'
wii[yisiachi]	'smacked'	wii[yononyiinyi]	'spoiled'
wii[yabukhanyinyi]	'separated'		

(529) /Ø/ C-Initial + OP_{refl} 'you have...him/herself'

wii[siele]	'ground'	wii[leshi]	'left'
wii[siinji]	'bathed'	wii[kuliishi]	'named'
wii[naabuuli]	'undressed'	wii[lakhuuli]	'released'
wii[hoombeliitsi]	'comforted'	wii[siinjiliitsi]	'made...stand'
wii[reebireebi]	'asked (iter)'	wii[kalukhanyinyi]	'turned...over'

(530) /Ø/ V-Initial + OP_{refl} 'you have...him/herself'

wii[yali]	'exposed'	wii[yeyeele]	'wiped for'
wii[yambakhaane]	'refused'	wii[yeleeliitsi]	'hung...up'

(531) /H/ C-Initial + OP + OP_{1sg} 'you have...him/her for me'

uumuu[ndeelele]	'buried'	uumuu[mbecheele]	'shaved'
uumuu[ndeerele]	'brought'	uumuu[khalachiili]	'cut'
uumuu[sitaachiili]	'accused'	uumuu[mboolitsiili]	'seduced'
uumuu[mbohoololele]	'untied'		

(532) /H/ V-Initial + OP + OP_{1sg} 'you have...him/her for me'

uumuu[nziiriili]	'killed'	uumuu[nzechitsiili]	'admired'
uumuu[nzisiachiili]	'smacked'	uumuu[nzononyinyiili]	'spoiled'
uumuu[nzabukhanyinyiili]	'separated'		

(533) /Ø/ C-Initial + OP + OP_{1sg} 'you have...him/her for me'

uumuu[nziiliilɪ]	'gone for'	uumuu[ndesheelɛ]	'gone for'
uumuu[noondeelɛ]	'left'	uumuu[ngulishiilɪ]	'followed'
uumuu[ndakhuuliilɪ]	'named'	uumuu[seebuliilɪ]	'released'
uumuu[mboombelitsiilɪ]	'said bye to'	uumuu[siinjilitsiilɪ]	'comforted'

(534) /Ø/ V-Initial + OP + OP_{1sg} 'you have...him/her {mu-} / it_{3/14} {ku-/bu-} for me'

uumuu[nzeyeeɛ]	'wiped'	uukuu[nzashitsiilɪ]	'lit'
uubuu[nziluuliilɪ]	'winnowed'	uukuu[nzélélitsiilɪ]	'hung'

(535) /H/ C-Initial Phrase-Medial 'you have...the boy {mú⁺yáyɪ} / someone {muundu}'

uu[reele]	mú ⁺ yáyɪ/muundu	'buried'
uu[bechi]	mú ⁺ yáyɪ/muundu	'shaved'
uu[leeri]	mú ⁺ yáyɪ/muundu	'brought'
uu[khalaacheɛ]	mú ⁺ yáyɪ/muundu	'cut'
uu[sitaachi]	mú ⁺ yáyɪ/muundu	'accused'
uu[booliitsɪ]	mú ⁺ yáyɪ/muundu	'seduced'
uu[khong'oondi]	mú ⁺ yáyɪ/muundu	'knocked'
uu[bohooloɛ]	mú ⁺ yáyɪ/muundu	'untied'
uu[boyong'aane]	mú ⁺ yáyɪ/muundu	'gone around'

(536) /Ø/ C-Initial Phrase-Medial 'you have...the boy {mú⁺yáyɪ} / the man {musáatsa} / someone {muundu}'

uu[tsiili]	mú ⁺ yáyɪ/musáatsa/muundu	'gone for'
uu[leshi]	mú ⁺ yáyɪ/musáatsa/muundu	'left'
uu[loondi]	mú ⁺ yáyɪ/musáatsa/muundu	'followed'
uu[kuliishɪ]	mú ⁺ yáyɪ/musáatsa/muundu	'named'
uu[lakhuuli]	mú ⁺ yáyɪ/musáatsa/muundu	'released'
uu[seebuulɪ]	mú ⁺ yáyɪ/musáatsa/muundu	'said bye to'
uu[kalushiitsɪ]	mú ⁺ yáyɪ/musáatsa/muundu	'returned'
uu[reebireebi]	mú ⁺ yáyɪ/musáatsa/muundu	'asked (iter)'

(537) /H/ C-Initial +OP Phrase-Medial ‘you have...the boy {mú⁺yáyí} /
someone {muundu} for him/her’

uumu[reeleelɛ]	mú ⁺ yáyí/muundu	‘buried’
uumu[becheelɛ]	mú ⁺ yáyí/muundu	‘shaved’
uumu[leereelɛ]	mú ⁺ yáyí/muundu	‘brought’
uumu[khalachiilɪ]	mú ⁺ yáyí/muundu	‘cut’
uumu[sitaachiilɪ]	mú ⁺ yáyí/muundu	‘accused’
uumu[boolitsiilɪ]	mú ⁺ yáyí/muundu	‘seduced’
uumu[khong’oondeelɛ]	mú ⁺ yáyí/muundu	‘knocked’
uumu[bohololeelɛ]	mú ⁺ yáyí/muundu	‘untied’
uumu[boyong’aniilɪ]	mú ⁺ yáyí/muundu	‘gone around’

(538) /Ø/ C-Initial +OP Phrase-Medial ‘you have...the boy {mú⁺yáyí} /
the man {musáatsa} / someone {muundu} for him/her’

uumu[tsiiliilɪ]	mú ⁺ yáyí/musáatsa/muundu	‘gone for’
uumu[lesheelɛ]	mú ⁺ yáyí/musáatsa/muundu	‘left’
uumu[loondeelɛ]	mú ⁺ yáyí/musáatsa/muundu	‘followed’
uumu[kulishiilɪ]	mú ⁺ yáyí/musáatsa/muundu	‘named’
uumu[lakhuuliilɪ]	mú ⁺ yáyí/musáatsa/muundu	‘released’
uumu[seebuliilɪ]	mú ⁺ yáyí/musáatsa/muundu	‘said bye to’
uumu[kalushitsiilɪ]	mú ⁺ yáyí/musáatsa/muundu	‘returned’
uumu[reebɛreebeelɛ]	mú ⁺ yáyí/musáatsa/muundu	‘asked (iter)’

(539) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘you have...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me’

uumuu[ndeeleelɛ]	mú ⁺ yáyí/muundu	‘buried’
uumuu[mbecheelɛ]	mú ⁺ yáyí/muundu	‘shaved’
uumuu[ndeereelɛ]	mú ⁺ yáyí/muundu	‘brought’
uumuu[khalachiilɪ]	mú ⁺ yáyí/muundu	‘cut’
uumuu[sitaachiilɪ]	mú ⁺ yáyí/muundu	‘accused’
uumuu[mboolitsiilɪ]	mú ⁺ yáyí/muundu	‘seduced’
uumuu[mbohololeelɛ]	mú ⁺ yáyí/muundu	‘untied’

(540) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘you have...the boy {mú⁺yáyí} /

		<i>someone {muundu} for him/her for me</i>
uumuu[nziiliilɪ] mú'yáyɪ/muundu		'gone for'
uumuu[ndesheelɛ] mú'yáyɪ/muundu		'left'
uumuu[noondeelɛ] mú'yáyɪ/muundu		'followed'
uumuu[ngulishiilɪ] mú'yáyɪ/muundu		'named'
uumuu[ndakhuuliilɪ] mú'yáyɪ/muundu		'released'
uumuu[seebuliilɪ] mú'yáyɪ/muundu		'said bye to'
uumuu[siinjilitsiilɪ] mú'yáyɪ/muundu		'made...stand'

A.1.26 Perfect Negative (2nd Sg): Pattern 1a

(541) /H/ C-Initial 'you have not...'

uu[réélɛ] tá	'buried'	uu[ng'wéélɛ] tá	'drunk'
uu[khwéélɛ] tá	'eaten'	uu[líílɪ] tá	'paid dowry'
uu[lúmɪ] tá	'bitten'	uu[béchɪ] tá	'shaved'
uu[téeshɪ] tá	'cooked'	uu[léérɪ] tá	'brought'
uu[khálááchɛ] tá	'cut'	uu[káláánjɪ] tá	'fried'
uu[sítááchɪ] tá	'accused'	uu[bóólíítsɪ] tá	'seduced'
uu[sáándíítsɪ] tá	'thanked'	uu[khóng'óóndɪ] tá	'knocked'
uu[bóhólóólɛ] tá	'untied'	uu[bóyóng'áánɛ] tá	'gone around'
uu[ng'óng'óólíítsɪ] tá	'teased'	uu[líng(ák)ányíínyɪ] tá	'crumpled'

(542) /Ø/ C-Initial 'you have not...'

uu[tsíílɪ] tá	'gone'	uu[kwíílɪ] tá	'fallen'
uu[léshɪ] tá	'left'	uu[réébɪ] tá	'asked'
uu[lóóndɪ] tá	'followed'	uu[kúmíílɪ] tá	'held'
uu[kúlííshɪ] tá	'named'	uu[hómóólɪ] tá	'massaged'
uu[lákhúúlɪ] tá	'released'	uu[séébúúlɪ] tá	'said bye'
uu[hóómbélíítsɪ] tá	'comforted'	uu[kálúshíítsɪ] tá	'returned'
uu[síínjílíítsɪ] tá	'made stand'	uu[réébíréébɪ] tá	'asked (iter)'
uu[kálúkhányíínyɪ] tá	'turn over'	uu[sébúlúkhányíínyɪ] tá	'scattered'

(543) /H/ C-Initial + OP 'you have not...him/her'

uumu[réélé] tá	'buried'	uumu[béchí] tá	'shaved'
uumu[léérí] tá	'brought'	uumu[khálááché] tá	'cut'
uumu[sítááchí] tá	'accused'	uumu[bóólíítsí] tá	'seduced'
uumu[khóng'óóndí] tá	'knocked'	uumu[bóhólóólé] tá	'untied'
uumu[bóyóng'ááné] tá	'gone around'	uumu[ng'óng'óólíítsí] tá	'teased'
uumu[língákányíínyí] tá	'bent'		

(544) /Ø/ C-Initial + OP 'you have not...him/her {mu-} / them_s {bi-}'

uumu[tsíílí] tá	'gone for'
uumu[léshí] tá	'left'
uumu[lóóndí] tá	'followed'
uumu[kúlííshí] tá	'named'
uumu[lákhúúlí] tá	'released'
uumu[séébúúlí] tá	'said bye to'
uumu[hóómbélíítsí] tá	'comforted'
uumu[kálúshíítsí] tá	'returned'
uumu[síínjílíítsí] tá	'made...stand'
uumu[réébíréébí] tá	'asked (iter)'
uumu[kálúkhányíínyí] tá	'turned...over'
uubi[sébúlúkhányíínyí] tá	'scattered'

(545) /H/ C-Initial + OP + OP_{1sg} 'you have not...him/her for me'

uumuu[ndééléélé] tá	'buried'	uumuu[mbéchéélé] tá	'shaved'
uumuu[ndééréélé] tá	'brought'	uumuu[kháláchíílí] tá	'cut'
uumuu[sítááchíílí] tá	'accused'	uumuu[mbóólíítsíílí] tá	'seduced'
uumuu[mbóhólóóléélé] tá	'untied'		

(546) /Ø/ C-Initial + OP + OP_{1sg} 'you have not...him/her for me'

uumuu[nzíílíílí] tá	'gone for'	uumuu[ndéshéélé] tá	'gone for'
uumuu[nóóndéélé] tá	'left'	uumuu[ngúlíshíílí] tá	'followed'

uumuu[ndákhúúlííí] tá	‘named’	uumuu[séébúíííí] tá	‘released’
uumuu[mbóómbélíííí] tá	‘said bye to’	uumuu[sínjílíííí] tá	‘comforted’

(547) /H/ C-Initial Phrase-Medial ‘you have not...the boy {mú⁺yáyí} /
someone {muundu}’

uu[reele] mú’yáyí/muundu tá	‘bury’
uu[bechi] mú’yáyí/muundu tá	‘shave’
uu[leeri] mú’yáyí/muundu tá	‘bring’
uu[khalaache] mú’yáyí/muundu tá	‘cut’
uu[sitaachi] mú’yáyí/muundu tá	‘accuse’
uu[booliitsi] mú’yáyí/muundu tá	‘seduce’
uu[khong’oondi] mú’yáyí/muundu tá	‘knock’
uu[bohooloe] mú’yáyí/muundu tá	‘untie’
uu[boyong’aane] mú’yáyí/muundu tá	‘go around’

(548) /Ø/ C-Initial Phrase-Medial ‘you have not...the boy {mú⁺yáyí} /
someone {muundu}’

uu[tsiili] mú’yáyí/muundu tá	‘go for’
uu[leshi] mú’yáyí/muundu tá	‘leave’
uu[loondi] mú’yáyí/muundu tá	‘follow’
uu[kuliishi] mú’yáyí/muundu tá	‘name’
uu[lakhuuli] mú’yáyí/muundu tá	‘release’
uu[seebuuli] mú’yáyí/muundu tá	‘say bye to’
uu[kalushiitsi] mú’yáyí/muundu tá	‘return’
uu[reebireebi] mú’yáyí/muundu tá	‘ask (iter)’

(549) /H/ C-Initial +OP Phrase-Medial ‘you have not...the boy {mú⁺yáyí} /
someone {muundu} for him/her’

uumu[reeleele] mú’yáyí/muundu tá	‘bury’
uumu[becheele] mú’yáyí/muundu tá	‘shave’
uumu[leereele] mú’yáyí/muundu tá	‘bring’
uumu[khalachiili] mú’yáyí/muundu tá	‘cut’
uumu[sitaachiili] mú’yáyí/muundu tá	‘accuse’
uumu[boolitsiili] mú’yáyí/muundu tá	‘seduce’
uumu[khong’ondeele] mú’yáyí/muundu tá	‘knock’

uumu[bohololeeɛ] mú'yáyí/muundu tá	'untie'
uumu[boyong'aniilɪ] mú'yáyí/muundu tá	'go around'

(550) /Ø/ C-Initial +OP Phrase-Medial 'you have not...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

uumu[tsiiliilɪ] mú'yáyí/muundu tá	'go for'
uumu[lesheeeɛ] mú'yáyí/muundu tá	'leave'
uumu[loondeeeɛ] mú'yáyí/muundu tá	'follow'
uumu[kulishiilɪ] mú'yáyí/muundu tá	'name'
uumu[lakhuuliilɪ] mú'yáyí/muundu tá	'release'
uumu[seebuliilɪ] mú'yáyí/muundu tá	'say bye to'
uumu[kalushitsiilɪ] mú'yáyí/muundu tá	'return'
uumu[reebereeeɛ] mú'yáyí/muundu tá	'ask (iter)'

(551) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 'you have not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me'

uumuu[ndeeleeɛ] mú'yáyí/muundu tá	'bury'
uumuu[mbecheeeɛ] mú'yáyí/muundu tá	'shave'
uumuu[ndeereeeɛ] mú'yáyí/muundu tá	'bring'
uumuu[khalachiilɪ] mú'yáyí/muundu tá	'cut'
uumuu[sitaachiilɪ] mú'yáyí/muundu tá	'accuse'
uumuu[mboolitsiilɪ] mú'yáyí/muundu tá	'seduce'
uumuu[mbohololeeɛ] mú'yáyí/muundu tá	'untie'

(552) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'you have not...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me'

uumuu[nziiliilɪ] mú'yáyí/muundu tá	'go for'
uumuu[ndesheeeɛ] mú'yáyí/muundu tá	'leave'
uumuu[noondeeeɛ] mú'yáyí/muundu tá	'follow'
uumuu[ngulishiilɪ] mú'yáyí/muundu tá	'name'
uumuu[ndakhuuliilɪ] mú'yáyí/muundu tá	'release'
uumuu[seebuliilɪ] mú'yáyí/muundu tá	'say bye to'
uumuu[siinjilitsiilɪ] mú'yáyí/muundu tá	'make...stand'

A.1.27 Hodiernal Perfective: Pattern 2a

(553) /H/ C-Initial 's/he...'

a[reele]	'buried'	a[ng'weele]	'drank'
a[khweele]	'ate'	a[liili]	'paid dowry'
a[lumi]	'bit'	a[bechi]	'shaved'
a[teeshi]	'cooked'	a[leeri]	'brought'
a[khalaache]	'cut'	a[kalaanji]	'fried'
a[sitaachi]	'accused'	a[booliitsɪ]	'seduced'
a[saandiitsɪ]	'thanked'	a[khong'oondi]	'knocked'
a[bohooloole]	'untied'	a[boyong'aane]	'went around'
a[ng'ong'ooliitsɪ]	'teased'	a[ling(ak)anyiinyɪ]	'crumpled'

(554) /H/ V-Initial 's/he...'

y[iiri]	'killed'	y[iikoómbi]	'admired'
y[iisiáchi]	'smacked'	y[iikobóole]	'belched'
y[oononyiinyɪ]	'spoiled'	y[aabukhanyiinyɪ]	'separated'

(555) /Ø/ C-Initial 's/he...'

a[tsííli]	'went'	a[kwííli]	'fell'
a[leshí]	'left'	a[reébi]	'asked'
a[loóndi]	'followed'	a[kumíilɪ]	'held'
a[kulíishɪ]	'named'	a[homóoli]	'massaged'
a[lakhúuli]	'released'	a[seébúulɪ]	'said bye'
a[hoómbéliitsɪ]	'comforted'	a[kalúshíitsɪ]	'returned'
a[síínjliitsɪ]	'made stand'	a[reébíreebi]	'asked (iter)'
a[kalúkhányiinyɪ]	'turned over'	a[sebúlúkhanyiinyɪ]	'scattered'

(556) /Ø/ V-Initial 's/he...'

y[eenyí]	'wanted'	y[eeyéele]	'wiped for'
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y[iilúuli] ‘winnowed’ y[aambákhaane] ‘refused’
 y[eeléliitsɪ] ‘hung up’

(557) /H/ C-Initial + OP ‘s/he...him/her’

amu[réele]	‘buried’	amu[béchi]	‘shaved’
amu[léeri]	‘brought’	amu[khálaache]	‘cut’
amu[sítaachi]	‘accused’	amu[bóoliitsɪ]	‘seduced’
amu[khóng’oondi]	‘knocked’	amu[bóholoolɛ]	‘untied’
amu[bóyong’aane]	‘went around’	amu[ng’óng’ooliitsɪ]	‘teased’
amu[língakanyiinyɪ]	‘bent’		

(558) /H/ V-Initial + OP ‘s/he...him/her’

amw[iíri]	‘killed’	amw[ií‘kóómbi]	‘admired’
amw[ií‘síachi]	‘smacked’	amw[oónonyiinyɪ]	‘spoiled’
amw[aábukhanyiinyɪ]	‘separated’		

(559) /Ø/ C-Initial + OP ‘s/he...him/her {mu-} / them₈ {bi-}’

amu[tsííli]	‘went for’
amu[leshí]	‘left’
amu[loóndi]	‘followed’
amu[kulíishi]	‘named’
amu[lakhúuli]	‘released’
amu[seébúuli]	‘said bye to’
amu[hoómbéliitsɪ]	‘comforted’
amu[kalúshíitsɪ]	‘returned’
amu[síínjiliitsɪ]	‘made...stand’
amu[reébíreebi]	‘asked (iter)’
amu[kalúkhányiinyɪ]	‘turned...over’
abi[sebúlúkhananyiinyɪ]	‘scattered’

(560) /Ø/ V-Initial + OP 's/he...him/her {mw-} / it₁₄ {bw-}'

amw[eenyí]	'wanted'	amw[eeyéle]	'wiped for'
abw[iilúuli]	'winnowed'	amw[aambákhaanɛ]	'refused'
amw[eeléliitsɪ]	'carried...hanging'		

(561) /H/ C-Initial + OP_{1sg} 's/he...me'

aa[ríili]	'feared'	aa[mbéchi]	'shaved'
aa[ndéeri]	'brought'	aa[khálaache]	'cut'
aa[sítaachi]	'accused'	aa[mbóoliitsɪ]	'seduced'
aa[khóng'oondi]	'knocked'	aa[mbóholoolɛ]	'untied'
aa[mbóyong'aanɛ]	'went around'	aa[ng'óng'ooliitsɪ]	'teased'
aa[níngakanyiinyɪ]	'bent'		

(562) /H/ V-Initial + OP_{1sg} 's/he...me'

aa[nzíri]	'killed'	aa[nzí'kóómbi]	'admired'
aa[nzí'síachi]	'smacked'	aa[nzónonyiinyɪ]	'spoiled'
aa[nzábukhanyiinyɪ]	'separated'		

(563) /Ø/ C-Initial + OP_{1sg} 's/he...me'

aa[siéle]	'ground'	aa[ndeshí]	'left'
aa[noóndi]	'followed'	aa[ngulíishɪ]	'named'
aa[ndakhúuli]	'released'	aa[seébúulɪ]	'said bye to'
aa[mboómbéliitsɪ]	'comforted'	aa[siínjiliitsɪ]	'made..stand'
aa[ndeébíndeebi]	'asked (iter)'	aa[ngalúkhányiinyɪ]	'turned...over'

(564) /Ø/ V-Initial + OP_{1sg} 's/he...me'

aa[nzenyí]	'wanted'	aa[nzeyéle]	'wiped for'
aa[nyambákhaanɛ]	'refused'	aa[nzeléliitsɪ]	'carried...hanging'

(565) /H/ C-Initial + OP_{refl} 's/he...him/herself'

yii[réele]	'buried'	yii[béchi]	'shaved'
yii[súunji]	'hung'	yii[khálaache]	'cut'
yii[sítaachi]	'accused'	yii[sáandiitsɪ]	'thanked'
yii[khóng'oondi]	'knocked'	yii[bóholoole]	'untied'

(566) /H/ V-Initial + OP_{refl} 's/he...him/herself'

yii[yíri]	'killed'	yii[yí'kóómbi]	'admired'
yii[yí'síáchi]	'smacked'	yii[yónonyiinyɪ]	'spoiled'
yii[yábukhanyiinyɪ]	'separated'		

(567) /Ø/ C-Initial + OP_{refl} 's/he...him/herself'

yii[siéle]	'ground'	yii[leshí]	'left'
yii[siínji]	'bathed'	yii[kulíishɪ]	'named'
yii[naábuulɪ]	'undressed'	yii[lakhúuli]	'released'
yii[hoómbéliitsɪ]	'comforted'	yii[síínjiliitsɪ]	'made...stand'
yii[reébíreebi]	'asked (iter)'	yii[kalúkhányiinyɪ]	'turned...over'

(568) /Ø/ V-Initial + OP_{refl} 's/he...him/herself'

yii[yalí]	'exposed'	yii[yeyéele]	'wiped for'
yii[yambákhaane]	'refused'	yii[yeléeliitsɪ]	'hung...up'

(569) /H/ C-Initial + OP + OP_{1sg} 's/he...him/her for me'

amuú[ndeelele]	'buried'	amuú[mbecheele]	'shaved'
amuú[ndeerele]	'brought'	amuú[khalachiilɪ]	'cut'
amuú[sitaachiilɪ]	'accused'	amuú[mboolitsiilɪ]	'seduced'
amuú[mbohoololee]	'untied'		

(570) /H/ V-Initial + OP + OP_{1sg} 's/he...him/her for me'

amuú[nziiriilɪ]	'killed'	amuú[nzechitsiilɪ]	'admired'
amuú['nzísíáchiilɪ]	'smacked'	amuú[nzononyinyiilɪ]	'spoiled'
amuú[nzabukhanyinyiilɪ]	'separated'		

(571) /Ø/ C-Initial + OP + OP_{1sg} 's/he...him/her for me'

amuú['nzíliilɪ]	'went for'	amuú['ndéshéelɛ]	'went for'
amuú['nóóndeelɛ]	'left'	amuú['ngúlíshiilɪ]	'followed'
amuú['ndákhúuliilɪ]	'named'	amuú['séébúliilɪ]	'released'
amuú['mbóómbélitsiilɪ]	'said bye to'	amuú['sínjílitsiilɪ]	'comforted'

(572) /Ø/ V-Initial + OP + OP_{1sg} 's/he...him/her {mu-} / it_{3/14} {ku-/bu-} for me'

amuú['nzéyéelɛ]	'wiped'	akuú['nzáshítsiilɪ]	'lit'
abuú['nzílúuliilɪ]	'winnowed'	akuú['nzéleelitsiilɪ]	'hung'

(573) /H/ C-Initial Phrase-Medial 's/he...the boy {mú⁺yáyɪ} /
someone {muundu}'

a[reele] mú'yáyɪ/muundu	'buried'
a[bechi] mú'yáyɪ/muundu	'shaved'
a[leeri] mú'yáyɪ/muundu	'brought'
a[khalaache] mú'yáyɪ/muundu	'cut'
a[sitaachi] mú'yáyɪ/muundu	'accused'
a[booliitsɪ] mú'yáyɪ/muundu	'seduced'
a[khong'oondi] mú'yáyɪ/muundu	'knocked'
a[bohooloole] mú'yáyɪ/muundu	'untied'
a[boyong'aane] mú'yáyɪ/muundu	'went around'

(574) /Ø/ C-Initial Phrase-Medial 's/he...the boy {mú⁺yáyɪ} /
someone {muundu}'

a[tsííli] mú'yáyí/muundu	'went for'
a[leshí] 'mú'yáyí/muundu	'left'
a[loóndi] mú'yáyí/muundu	'followed'
a[kulíishi] mú'yáyí/muundu	'named'
a[lakhúuli] mú'yáyí/muundu	'released'
a[seébúuli] mú'yáyí/muundu	'said bye to'
a[kalúshíitsi] mú'yáyí/muundu	'returned'
a[reébíreebi] mú'yáyí/muundu	'asked (iter)'

(575) /H/ C-Initial +OP Phrase-Medial 's/he...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

amu[réeelele] mú'yáyí/muundu	'buried'
amu[bécheele] mú'yáyí/muundu	'shaved'
amu[léereele] mú'yáyí/muundu	'brought'
amu[khálachiili] mú'yáyí/muundu	'cut'
amu[sítaachiili] mú'yáyí/muundu	'accused'
amu[bóolitsiili] mú'yáyí/muundu	'seduced'
amu[khóng'oondeele] mú'yáyí/muundu	'knocked'
amu[bóhololeele] mú'yáyí/muundu	'untied'
amu[bóyong'aniili] mú'yáyí/muundu	'went around'

(576) /Ø/ C-Initial +OP Phrase-Medial 's/he...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

amu[tsiífiili] mú'yáyí/muundu	'went for'
amu[leshéele] mú'yáyí/muundu	'left'
amu[loóndéele] mú'yáyí/muundu	'followed'
amu[kulíshíili] mú'yáyí/muundu	'named'
amu[lakhúuliili] mú'yáyí/muundu	'released'
amu[seébúuliili] mú'yáyí/muundu	'said bye to'
amu[kalúshítsiili] mú'yáyí/muundu	'returned'
amu[reébéreebeele] mú'yáyí/muundu	'asked (iter)'

(577) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the boy {mú⁺yáyí} /
someone {muundu} for him/her for me'

amuú[ndeelele] mú'yáyí/muundu	'buried'
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amuú[mbecheele] mú'yáyí/muundu	'shaved'
amuú[ndeereele] mú'yáyí/muundu	'brought'
amuú[khalachiilí] mú'yáyí/muundu	'cut'
amuú[sitaachiilí] mú'yáyí/muundu	'accused'
amuú[mboolitsiilí] mú'yáyí/muundu	'seduced'
amuú[mbohoololeele] mú'yáyí/muundu	'untied'

(578) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he...the boy {mú'yáyí} /
someone {muundu} for him/her for me'

amuú['nzííliilí] mú'yáyí/muundu	'went for'
amuú['ndéshéele] mú'yáyí/muundu	'left'
amuú['nóóndéele] mú'yáyí/muundu	'followed'
amuú['ngúlíshíilí] mú'yáyí/muundu	'named'
amuú['ndákhúuliilí] mú'yáyí/muundu	'released'
amuú['séébúliilí] mú'yáyí/muundu	'said bye to'
amuú['sínjílitsiilí] mú'yáyí/muundu	'made...stand'

A.1.28 Hodiernal Perfective Negative: Pattern 2a

(579) /H/ C-Initial 's/he did not...'

a[reele] tá	'bury'	a[ng'weele] tá	'drink'
a[khweele] tá	'eat'	a[liili] tá	'pay dowry'
a[lumi] tá	'bite'	a[bechi] tá	'shave'
a[teeshi] tá	'cook'	a[leeri] tá	'bring'
a[khalaache] tá	'cut'	a[kalaanji] tá	'fry'
a[sitaachi] tá	'accuse'	a[booliitsi] tá	'seduce'
a[saandiitsi] tá	'thank'	a[khong'oondi] tá	'knock'
a[bohoolole] tá	'untie'	a[boyong'aane] tá	'go around'
a[ng'ong'ooliitsi] tá	'tease'	a[ling(ak)anyiinyi] tá	'crumple'

(580) /H/ V-Initial 's/he did not...'

y[iiri] tá	'kill'	y[iikoó'mbí] tá	'admire'
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y[iisiá ⁺ chí] tá	‘smack’	y[iikobó ⁺ ólé] tá	‘belch’
y[oó ⁺ nónyínyí] tá	‘spoil’)	y[aá ⁺ búkhányínyí] tá	‘separate’

(581) /Ø/ C-Initial ‘s/he did not...’

a[tsííli] tá	‘go’	a[kwiíli] tá	‘fall’
a[leshí] tá	‘leave’	a[reébi] tá	‘ask’
a[loóndi] tá	‘follow’	a[kumíli] tá	‘hold’
a[kulíishi] tá	‘name’	a[homóoli] tá	‘massage’
a[lakhúuli] tá	‘release’	a[seébúuli] tá	‘say bye’
a[hoómbéliitsi] tá	‘comfort’	a[kalúshíitsi] tá	‘return’
a[síinjliitsi] tá	‘make stand’	a[reébíreebi] tá	‘ask (iter)’
a[kalúkhányiinyi] tá	‘turn over’	a[sebúlúkhanyiinyi] tá	‘scatter’

(582) /Ø/ V-Initial ‘s/he did not...’

y[eenyí] ‘tá	‘want’	y[eeyéelē] tá	‘wipe for’
y[iilúuli] tá	‘winnow’	y[aambákhaanē] tá	‘refuse’
y[eeléliitsi] tá	‘hang up’		

(583) /H/ C-Initial + OP ‘s/he did not...him/her’

amu[réele] tá	‘bury’	amu[béchi] tá	‘shave’
amu[léeri] tá	‘bring’	amu[khálaachē] tá	‘cut’
amu[sítaachi] tá	‘accuse’	amu[bóoliitsi] tá	‘seduce’
amu[khóng’oondi] tá	‘knock’	amu[bóholoolē] tá	‘untie’
amu[bóyong’aanē] tá	‘go around’	amu[ng’óng’ooliitsi] tá	‘tease’
amu[língakanyiinyi] tá	‘bend’		

(584) /Ø/ C-Initial + OP ‘s/he did not...him/her {mu-} / them_s {bi-}’

amu[tsííli] tá	‘go for’
amu[leshí] ‘tá	‘leave’

amu[loóndi] tá	‘follow’
amu[kulíishi] tá	‘name’
amu[lakhúuli] tá	‘release’
amu[seébúuli] tá	‘say bye to’
amu[hoómbéliitsi] tá	‘comfort’
amu[kalúshíitsi] tá	‘return’
amu[síinjíliitsi] tá	‘make...stand’
amu[reébíreebi] tá	‘ask (iter)’
amu[kalúkhányiinyi] tá	‘turn...over’
abi[sebúlúkhanyinyi] tá	‘scatter’

(585) /H/ C-Initial + OP + OP_{1sg} ‘s/he did not...him/her for me’

amuú[ndeeleele] tá	‘bury’	amuú[mbecheele] tá	‘shave’
amuú[ndeereele] tá	‘bring’	amuú[khalachiili] tá	‘cut’
amuú[sitaachiili] tá	‘accuse’	amuú[mboolitsiili] tá	‘seduce’
amuú[mbohoololeele] tá	‘untie’		

(586) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he did not...him/her for me’

amuú[‘nzííliili] tá	‘go for’	amuú[‘ndéshéele] tá	‘go for’
amuú[‘nóóndéele] tá	‘leave’	amuú[‘ngúlíshíili] tá	‘follow’
amuú[‘ndákhúuliili] tá	‘name’	amuú[‘séébúliili] tá	‘release’
amuú[‘mbóómbéliitsiili] tá	‘say bye to’	amuú[‘síinjíliitsiili] tá	‘comfort’

(587) /H/ C-Initial Phrase-Medial ‘s/he did not...the boy {mú⁺yáyi} /
someone {muundu}’¹⁵

a[reele] mú ⁺ yáyi/muundu tá	‘bury’
a[bechi] mú ⁺ yáyi/muundu tá	‘shave’
a[leeri] mú ⁺ yáyi/muundu tá	‘bring’
a[khalaache] mú ⁺ yáyi/muundu tá	‘cut’
a[sitaachi] mú ⁺ yáyi/muundu tá	‘accuse’
a[booliitsi] mú ⁺ yáyi/muundu tá	‘seduce’

¹⁵The first recording of this paradigm includes productions of the Perfect Negative. The second recording should be consulted for productions which represent the Hodiernal Perfective Negative.

a[khong'oondi]	mú'yáyí/muundu tá	'knock'
a[bohooloole]	mú'yáyí/muundu tá	'untie'
a[boyong'aane]	mú'yáyí/muundu tá	'go around'

(588) /Ø/ C-Initial Phrase-Medial 's/he did not...the boy {mú⁺yáyí} /
someone {muundu}'

a[tsííli]	mú'yáyí/muundu tá	'go for'
a[leshí]	ʰmú'yáyí/muundu tá	'leave'
a[loóndi]	mú'yáyí/muundu tá	'follow'
a[kulíishi]	mú'yáyí/muundu tá	'name'
a[lakhúuli]	mú'yáyí/muundu tá	'release'
a[seébúuli]	mú'yáyí/muundu tá	'say bye to'
a[kalúshíitsi]	mú'yáyí/muundu tá	'return'
a[reébíreebi]	mú'yáyí/muundu tá	'ask (iter)'

(589) /H/ C-Initial +OP Phrase-Medial 's/he did not...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

amu[réeelele]	mú'yáyí/muundu tá	'bury'
amu[bécheele]	mú'yáyí/muundu tá	'shave'
amu[léereele]	mú'yáyí/muundu tá	'bring'
amu[khálachiili]	mú'yáyí/muundu tá	'cut'
amu[sítaachiili]	mú'yáyí/muundu tá	'accuse'
amu[bóolitsiili]	mú'yáyí/muundu tá	'seduce'
amu[khóng'oondeele]	mú'yáyí/muundu tá	'knock'
amu[bóhololeele]	mú'yáyí/muundu tá	'untie'
amu[bóyong'aniili]	mú'yáyí/muundu tá	'go around'

(590) /Ø/ C-Initial +OP Phrase-Medial 's/he did not...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

amu[tsíííli]	ʰmú'yáyí/muundu tá	'go for'
amu[leshéele]	ʰmú'yáyí/muundu tá	'leave'
amu[loóndéele]	mú'yáyí/muundu tá	'follow'
amu[kulíshíili]	mú'yáyí/muundu tá	'name'
amu[lakhúuliili]	mú'yáyí/muundu tá	'release'
amu[seébúuliili]	mú'yáyí/muundu tá	'say bye to'

amu[kalúshítsiilɪ] mú'yáyɪ/muundu tá 'return'
 amu[reébéreebeelɛ] mú'yáyɪ/muundu tá 'ask (iter)'

(591) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he did not...the boy {mú'yáyɪ} /
 someone {muundu} for him/her for me'

amuú[ndeeleelɛ] mú'yáyɪ/muundu tá 'bury'
 amuú[mbecheelɛ] mú'yáyɪ/muundu tá 'shave'
 amuú[ndeereelɛ] mú'yáyɪ/muundu tá 'bring'
 amuú[khalachiilɪ] mú'yáyɪ/muundu tá 'cut'
 amuú[sitaachiilɪ] mú'yáyɪ/muundu tá 'accuse'
 amuú[mboolitsiilɪ] mú'yáyɪ/muundu tá 'seduce'
 amuú[mbohoololeelɛ] mú'yáyɪ/muundu tá 'untie'

(592) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he did not...the boy {mú'yáyɪ} /
 someone {muundu} for him/her for me'

amuú['nzíílɪlɪ] mú'yáyɪ/muundu tá 'go for'
 amuú['ndéshéelɛ] mú'yáyɪ/muundu tá 'leave'
 amuú['nóóndéelɛ] mú'yáyɪ/muundu tá 'follow'
 amuú['ngúlíshíilɪ] mú'yáyɪ/muundu tá 'name'
 amuú['ndákhúuliilɪ] mú'yáyɪ/muundu tá 'release'
 amuú['séébúliilɪ] mú'yáyɪ/muundu tá 'say bye to'
 amuú['sínjílitsiilɪ] mú'yáyɪ/muundu tá 'make...stand'

A.1.29 Conditional: Pattern 5c

(593) /H/ C-Initial 'if s/he...'

naá[ra]	'buries'	naá[ng'wa]	'drinks'
naá[khwa]	'eats'	naá[lia]	'pays dowry'
naá[luma]	'bites'	naá[beka]	'shaves'
naá['téékhá]	'cooks'	naá['léérá]	'brings'
naá['kháláká]	'cuts'	naá['káláángá]	'fries'
naá['sítááká]	'accuses'	naá['bóólítsá]	'seduces'
naá['sáándítsá]	'thanks'	naá['khóng'óóndá]	'knocks'

naá[⁺ bóhólólá]	‘unties’	naá[⁺ bóyóng’áná]	‘goes around’
naá[⁺ ng’óng’óólítsá]	‘teases’	naá[⁺ língákányínyá]	‘crumples’
naá[⁺ khóng’óóndá], khuliikula		‘if s/he knocks, we will open (the door)’	
khuliikula naá[⁺ khóng’óóndá]		‘we will open (the door) if s/he knocks’	

(594) /H/ V-Initial ‘if s/he...’

niy[í ⁺ irá]	‘kills’	niy[í ⁺ íkóómba]	‘admires’
niy[í ⁺ isiáka]	‘smacks’	niy[í ⁺ íkóbóla]	‘belches’
niy[ó ⁺ ónónyínyá]	‘spoils’	niy[á ⁺ ábúkhányínyá]	‘separates’

(595) /Ø/ C-Initial ‘if s/he...’

naá[⁺ tsía]	‘goes’	naá[⁺ kwá]	‘falls’
naá[⁺ lékhá]	‘leaves’	naá[⁺ rééba]	‘asks’
naá[⁺ lóónda]	‘follows’	naá[⁺ kúmíla]	‘holds’
naá[⁺ kúlíkha]	‘names’	naá[⁺ hómóola]	‘massages’
naá[⁺ lákhúula]	‘releases’	naá[⁺ séébula]	‘says bye’
naá[⁺ hóómbélitsa]	‘comforts’	naá[⁺ kálúshitsa]	‘returns’
naá[⁺ síinjílitsa]	‘makes stand’	naá[⁺ réébáreeba]	‘asks (iter)’
naá[⁺ kálúkhányinya]	‘turns over’	naá[⁺ sébúlúkhanyinya]	‘scatters’

(596) /Ø/ V-Initial ‘if s/he...’

niy[é ⁺ ényá]	‘wants’	niy[é ⁺ éyéla]	‘wipes for’
niy[í ⁺ ílúúla]	‘winnows’	niy[á ⁺ ámábákhana]	‘refuses’
niy[é ⁺ éléélitsa]	‘hangs up’	niy[í ⁺ íkóómba]	‘admires’

(597) /H/ C-Initial + OP ‘if s/he...him/her’

naá ⁺ mú[rá]	‘buries’	naá ⁺ mú[bé ⁺ ká]	‘shaves’
naá ⁺ mú[lé ⁺ érá]	‘brings’	naá ⁺ mú[khá ⁺ láká]	‘cuts’

naá'mú[sí'tááká]	'accuses'	naá'mú[bó'ólítsá]	'seduces'
naá'mú[khó'ng'óóndá]	'knocks'	naá'mú[bó'hólólá]	'unties'
naá'mú[bó'yóng'áná]	'goes around'	naá'mú[ng'ó'ng'óólítsá]	'teases'
naá'mú[lí'ngákányínyá]	'bends'		

(598) /H/ V-Initial + OP 'if s/he...him/her'

naá'mw[íí'rá]	'kills'	naá'mw[íí'kóómbá]	'admires'
naá'mw[íí'síáká]	'smacks'	naá'mw[óó'nónyínyá]	'spoils'
naá'mw[áá'búkhányínyá]	'separates'		

(599) /Ø/ C-Initial + OP 'if s/he...him/her {mu-}'

naá'mú[tsía]	'goes for'
naá'mú[lékhá]	'leaves'
naá'mú[lóónda]	'follows'
naá'mú[kúlíkha]	'names'
naá'mú[lákhúula]	'releases'
naá'mú[séébula]	'says bye to'
naá'mú[hóómbélitsa]	'comforts'
naá'mú[kálúshitsa]	'returns'
naá'mú[síínjílitsa]	'makes...stand'
naá'mú[réébáreeba]	'asks (iter)'
naá'mú[kálúkhányinya]	'turns...over'
naá'mú[sébúlúkhanyinya]	'scatters'

(600) /Ø/ V-Initial + OP 'if s/he...him/her {mw-} / it₁₄ {bw-}'

naá'mw[éényá]	'wants'	naá'mw[ééyéla]	'wipes for'
naá'bw[íílúula]	'winnows'	naá'mw[áámbákhana]	'refuses'
naá'mw[ééléelitsa]	'carries...hanging'		

(601) /H/ C-Initial + OP_{1sg} 'if s/he...me'

naá[⁺ rí ⁺ á]	‘fears’	naá[⁺ mbé ⁺ ká]	‘shaves’
naá[⁺ ndé ⁺ érá]	‘brings’	naá[⁺ khá ⁺ láká]	‘cuts’
naá[⁺ sí ⁺ tááká]	‘accuses’	naá[⁺ mbó ⁺ ólítsá]	‘seduces’
naá[⁺ khó ⁺ ng’óóndá]	‘knocks’	naá[⁺ mbó ⁺ hólólá]	‘unties’
naá[⁺ mbó ⁺ yóng’áná]	‘goes around’	naá[⁺ ng’ó ⁺ ng’óólítsá]	‘teases’
naá[⁺ ní ⁺ ngákányínyá]	‘bends’		

(602) /H/ V-Initial + OP_{1sg} ‘if s/he...me’

naá[⁺ nzí ⁺ rá]	‘kills’	naá[⁺ nzí ⁺ kóómbá]	‘admires’
naá[⁺ nzí ⁺ síáká]	‘smacks’	naá[⁺ nzó ⁺ nónyínyá]	‘spoils’
naá[⁺ nzá ⁺ búkhányínyá]	‘separates’		

(603) /Ø/ C-Initial + OP_{1sg} ‘if s/he...me’

naá[⁺ sía]	‘grinds’	naá[⁺ ndékhá]	‘leaves’
naá[⁺ nóónda]	‘follows’	naá[⁺ ngúlíkha]	‘names’
naá[⁺ ndákhúula]	‘releases’	naá[⁺ séébula]	‘says bye to’
naá[⁺ mbóómbélitsa]	‘comforts’	naá[⁺ síinjílitsa]	‘makes...stand’
naá[⁺ ndéébándeeba]	‘asks (iter)’	naá[⁺ ngálúkhányinya]	‘turns...over’

(604) /Ø/ V-Initial + OP_{1sg} ‘if s/he...me’

naá[⁺ nzényá]	‘wants’	naá[⁺ nzéyéla]	‘wipes for’
naá[⁺ nyámbákhana]	‘refuses’	naá[⁺ nzéleélitsa]	‘carries...hanging’

(605) /H/ C-Initial + OP_{refl} ‘if s/he...him/herself’

niyí ⁺ í[rá]	‘buries’	niyí ⁺ í[bé ⁺ ká]	‘shaves’
niyí ⁺ í[sú ⁺ úngá]	‘hangs’	niyí ⁺ í[khá ⁺ láká]	‘cuts’
niyí ⁺ í[sí ⁺ tááká]	‘accuses’	niyí ⁺ í[sá ⁺ ándítsá]	‘thanks’
niyí ⁺ í[khó ⁺ ng’óóndá]	‘knocks’	niyí ⁺ í[bó ⁺ hólólá]	‘unties’

(606) /H/ V-Initial + OP_{refl} 'if s/he...him/herself'

niyí'í[yí'rá]	'kills'	niyí'í[yí'kóómbá]	'admires'
niyí'í[yí'síáká]	'smacks'	niyí'í[yó'nónyínyá]	'spoils'
niyí'í[yá'búkhányínyá]	'separates'		

(607) /Ø/ C-Initial + OP_{refl} 'if s/he...him/herself'

niyí'í[sía]	'grinds'	niyí'í[lékhá]	'leaves'
niyí'í[síínga]	'bathes'	niyí'í[kúlíkha]	'names'
niyí'í[náábula]	'undresses'	niyí'í[lákhúula]	'releases'
niyí'í[hóómbélitsa]	'comforts'	niyí'í[síínjílitsa]	'makes...stand'
niyí'í[réébáreeba]	'asks (iter)'	niyí'í[kálúkhányinya]	'turns...over'

(608) /Ø/ V-Initial + OP_{refl} 'if s/he...him/herself'

niyí'í[yálá]	'exposes'	niyí'í[yéyéla]	'wipes for'
niyí'í[yámbákhana]	'refuses'	niyí'í[yéléelitsa]	'hangs...up'

(609) /H/ C-Initial + OP + OP_{1sg} 'if s/he...him/her for me'

naá'múú['ndé'élá]	'buries'	naá'múú['mbé'chélá]	'shaves'
naá'múú['ndé'érelá]	'brings'	naá'múú['khá'láchílá]	'cuts'
naá'múú['sí'tááchílá]	'accuses'	naá'múú['mbó'ólítsílá]	'seduces'
naá'múú['mbó'hólólélá]	'unties'		

(610) /H/ V-Initial + OP + OP_{1sg} 'if s/he...him/her for me'

naá'múú['nzí'rílá]	'kills'
naá'múú['nzé'chítsílá]	'admires'
naá'múú['nzí'síáchílá]	'smacks'
naá'múú['nzó'nónyínyílá]	'spoils'

naá'múú['nzá'búkhányínyílá] 'separates'

(611) /Ø/ C-Initial + OP + OP_{1sg} 'if s/he...him/her for me'

naá'múú['nzííla]	'goes for'	naá'múú['ndéshéla]	'leaves'
naá'múú['nóóndela]	'follows'	naá'múú['ngúlíshila]	'names'
naá'múú['ndákhúulila]	'releases'	naá'múú['séébúlila]	'says bye to'
naá'múú['mbóómbélitsila]	'comforts'	naá'múú['sínjílitsila]	'makes...stand'

(612) /Ø/ V-Initial + OP + OP_{1sg} 'if s/he...him/her {mu-} / it_{3/14/11} {ku-/bu-/lu-} for me'

naá'múú['nzéyéla]	'wipes'	naá'kúú['nzáshítsila]	'lights'
naá'búú['nzílúulila]	'winnows'	naá'kúú['nzéléelitsila]	'hangs'

(613) /H/ C-Initial Phrase-Medial 'if s/he...the boy {mú'yáyí} /
someone {muundu}'

naá[ra] mú'yáyí/muundu	'buries'
naá[beka] mú'yáyí/muundu	'shaves'
naá['léérá] 'mú'yáyí/muundu	'brings'
naá['kháláká] 'mú'yáyí/muundu	'cuts'
naá['sítááká] 'mú'yáyí/muundu	'accuses'
naá['bóólítsá] 'mú'yáyí/muundu	'seduces'
naá['khóng'óóndá] 'mú'yáyí/muundu	'knocks'
naá['bóhólólá] 'mú'yáyí/muundu	'unties'
naá['bóyóng'áná] 'mú'yáyí/muundu	'goes around'

(614) /Ø/ C-Initial Phrase-Medial 'if s/he...the boy {mú'yáyí} /
someone {muundu}'

naá['tsíá] 'mú'yáyí/muundu	'goes for'
naá['lékhá] 'mú'yáyí/muundu	'leaves'
naá['lóónda] mú'yáyí/muundu	'follows'
naá['kúlíkha] mú'yáyí/muundu	'names'
naá['lákhuúla] mú'yáyí/muundu	'releases'

naá[⁺ séébúla] mú'yáyí/muundu	'says bye to'
naá[⁺ kálúshítsa] mú'yáyí/muundu	'returns'
naá[⁺ réébáreeba] mú'yáyí/muundu	'asks (iter)'
naá[⁺ kálúkhányinya] mú'yáyí/muundu	'turns...over'

(615) /H/ C-Initial +OP Phrase-Medial *'if s/he...the boy {mú⁺yáyí} / someone {muundu} for him/her'*

naá'mú[ré'élá] 'mú'yáyí/muundu	'buries'
naá'mú[bé'chélá] 'mú'yáyí/muundu	'shaves'
naá'mú[lé'érélá] 'mú'yáyí/muundu	'brings'
naá'mú[khá'láchílá] 'mú'yáyí/muundu	'cuts'
naá'mú[sí'tááchílá] 'mú'yáyí/muundu	'accuses'
naá'mú[bó'ólítsílá] 'mú'yáyí/muundu	'seduces'
naá'mú[khó'ng'óóndélá] 'mú'yáyí/muundu	'knocks'
naá'mú[bó'hólólélá] 'mú'yáyí/muundu	'unties'
naá'mú[bó'yóng'ánílá] 'mú'yáyí/muundu	'goes around'

(616) /Ø/ C-Initial +OP Phrase-Medial *'if s/he...the boy {mú⁺yáyí} / someone {muundu} for him/her'*

naá'mú[tsííla] mú'yáyí/muundu	'goes for'
naá'mú[léshéla] mú'yáyí/muundu	'leaves'
naá'mú[lóóndéla] mú'yáyí/muundu	'follows'
naá'mú[kúlíshíla] mú'yáyí/muundu	'names'
naá'mú[lákhúulila] mú'yáyí/muundu	'releases'
naá'mú[séébúlila] mú'yáyí/muundu	'says bye to'
naá'mú[kálúshítsila] mú'yáyí/muundu	'returns'
naá'mú[réébáreebela] mú'yáyí/muundu	'asks (iter)'

(617) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial *'if s/he...the boy {mú⁺yáyí} / someone {muundu} for him/her for me'*

naá'múú[⁺ ndéélá] 'mú'yáyí/muundu	'buries'
naá'múú[⁺ mbéchélá] 'mú'yáyí/muundu	'shaves'
naá'múú[⁺ ndéérélá] 'mú'yáyí/muundu	'brings'
naá'múú[⁺ kháláchílá] 'mú'yáyí/muundu	'cuts'
naá'múú[⁺ sítááchílá] 'mú'yáyí/muundu	'accuses'

naá'múú['mbóólítsílá] 'mú'yáyi/muundu 'seduces'
 naá'múú['mbóhólólélá] 'mú'yáyi/muundu 'unties'

(618) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 'if s/he...the boy {mú'yáyi} /
 someone {muundu} for him/her for me'

naá'múú['nzííla] mú'yáyi/muundu 'goes for'
 naá'múú['ndéshéla] mú'yáyi/muundu 'leaves'
 naá'múú['nóóndéla] mú'yáyi/muundu 'follows'
 naá'múú['ngúlíshíla] mú'yáyi/muundu 'names'
 naá'múú['ndákhúulila] mú'yáyi/muundu 'releases'
 naá'múú['séébúlila] mú'yáyi/muundu 'says bye to'
 naá'múú['síínjílitsila] mú'yáyi/muundu 'makes...stand'

A.1.30 Conditional Negative: Pattern 2b

(619) /H/ C-Initial 'if s/he does not...'

naákha[ra] tá	'bury'	naákha[ng'wa] tá	'drink'
naákha[khwa] tá	'eat'	naákha[lia] tá	'pay dowry'
naákha[luma] tá	'bite'	naákha[beka] tá	'shave'
naákha[teekha] tá	'cook'	naákha[leera] tá	'bring'
naákha[khalaka] tá	'cut'	naákha[kalaanga] tá	'fry'
naákha[sitaaka] tá	'accuse'	naákha[boolitsa] tá	'seduce'
naákha[saanditsa] tá	'thank'	naákha[khong'oonda] tá	'knock'
naákha[boholola] tá	'untie'	naákha[boyong'ana] tá	'go around'
naákha[ng'ong'oolitsa] tá	'tease'	naákha[lingakanyinya] tá	'crumple'

(620) /Ø/ C-Initial 'if s/he does not...'

naákha[tsiá] 'tá	'go'	naákha[kwá] 'tá	'fall'
naákha[lekhá] 'tá	'leave'	naákha[reéba] tá	'ask'
naákha[loónda] tá	'follow'	naákha[kumíla] tá	'hold'
naákha[kulíkha] tá	'name'	naákha[homóola] tá	'massage'
naákha[lakhúula] tá	'release'	naákha[seébúla] tá	'say bye'

naákha[hoómbélitsa] tá	‘comfort’	naákha[kalúshitsa] tá	‘return’
naákha[síinjílitsa] tá	‘make stand’	naákha[reébáreeba] tá	‘ask (iter)’
naákha[kalúkhányinya] tá	‘turn over’	naákha[sebúlúkhanyinya] tá	‘scatter’

(621) /H/ C-Initial + OP ‘if s/he does not...him/her’

naákhamu[rá] ‘tá	‘bury’	naákhamu[béka] tá	‘shave’
naákhamu[léera] tá	‘bring’	naákhamu[khálaka] tá	‘cut’
naákhamu[sítaaka] tá	‘accuse’	naákhamu[bóolitsa] tá	‘seduce’
naákhamu[khóng’oonda] tá	‘knock’	naákhamu[bóholola] tá	‘untie’
naákhamu[bóyong’ana] tá	‘go around’	naákhamu[ng’óng’oolitsa] tá	‘tease’
naákhamu[língakanyinya] tá	‘bend’		

(622) /Ø/ C-Initial + OP ‘if s/he does not...him/her {mu-} / them₈ {bi-}’

naákhamu[tsiá] ‘tá	‘go for’
naákhamu[lekhá] ‘tá	‘leave’
naákhamu[loónda] tá	‘follow’
naákhamu[kulíkha] tá	‘name’
naákhamu[lakhúula] tá	‘release’
naákhamu[seébúla] tá	‘say bye to’
naákhamu[hoómbélitsa] tá	‘comfort’
naákhamu[kalúshitsa] tá	‘return’
naákhamu[síinjílitsa] tá	‘make...stand’
naákhamu[reébáreeba] tá	‘ask (iter)’
naákhamu[kalúkhányinya] tá	‘turn...over’
naákhamu[sebúlúkhanyinya] tá	‘scatter’

(623) /H/ C-Initial + OP + OP_{1sg} ‘if s/he does not...him/her for me’

naákhamuú[ndeelá] ‘tá	‘bury’	naákhamuú[mbechelá] ‘tá	‘shave’
naákhamuú[ndeerelá] ‘tá	‘bring’	naákhamuú[khalachilá] ‘tá	‘cut’
naákhamuú[sitaachilá] ‘tá	‘accuse’	naákhamuú[mboolitsilá] ‘tá	‘seduce’
naákhamuú[mbohoololélá] ‘tá	‘untie’		

(624) /Ø/ C-Initial + OP + OP_{1sg} 'if s/he does not...him/her for me'

naákhamuú['nzííla] tá	'go for'
naákhamuú['ndéshéla] tá	'leave'
naákhamuú['nóóndéla] tá	'follow'
naákhamuú['ngúlíshíla] tá	'name'
naákhamuú['ndákhúulila] tá	'release'
naákhamuú['séébúlila] tá	'say bye to'
naákhamuú['mbóómbélitsila] tá	'comfort'
naákhamuú['sínjílitsila] tá	'make...stand'

(625) /H/ C-Initial Phrase-Medial 'if s/he does not...the boy {mú⁺yáyí} /
someone {muundu}'

naákha[ra] mú'yáyí/muundu tá	'bury'
naákha[beka] mú'yáyí/muundu tá	'shave'
naákha[leera] mú'yáyí/muundu tá	'bring'
naákha[khalaka] mú'yáyí/muundu tá	'cut'
naákha[sitaaka] mú'yáyí/muundu tá	'accuse'
naákha[boolitsa] mú'yáyí/muundu tá	'seduce'
naákha[khong'oonda] mú'yáyí/muundu tá	'knock'
naákha[boholola] mú'yáyí/muundu tá	'untie'
naákha[boyong'ana] mú'yáyí/muundu tá	'go around'

(626) /Ø/ C-Initial Phrase-Medial 'if s/he does not...the boy {mú⁺yáyí} /
someone {muundu}'

naákha[tsiá] 'mú'yáyí/muundu tá	'go for'
naákha[lekhá] 'mú'yáyí/muundu tá	'leave'
naákha[loónda] mú'yáyí/muundu tá	'follow'
naákha[kulíkha] mú'yáyí/muundu tá	'name'
naákha[lakhúula] mú'yáyí/muundu tá	'release'
naákha[seébúla] mú'yáyí/muundu tá	'say bye to'
naákha[kalúshítsa] mú'yáyí/muundu tá	'return'
naákha[reébáreeba] mú'yáyí/muundu tá	'ask (iter)'
naákha[kalúkhányinya] mú'yáyí/muundu tá	'turn...over'

(627) /H/ C-Initial +OP Phrase-Medial *'if s/he does not...the boy {mú⁺yáyí} /*
someone {muundu} for him/her'

naákhamu[reela]	mú'yáyí/muundu tá	'bury'
naákhamu[béchela]	mú'yáyí/muundu tá	'shave'
naákhamu[léerela]	mú'yáyí/muundu tá	'bring'
naákhamu[khálachila]	mú'yáyí/muundu tá	'cut'
naákhamu[sítaachila]	mú'yáyí/muundu tá	'accuse'
naákhamu[bóolitsila]	mú'yáyí/muundu tá	'seduce'
naákhamu[khóng'oondela]	mú'yáyí/muundu tá	'knock'
naákhamu[bóhololela]	mú'yáyí/muundu tá	'untie'
naákhamu[bóyong'anila]	mú'yáyí/muundu tá	'go around'

(628) /Ø/ C-Initial +OP Phrase-Medial *'if s/he does not...the boy {mú⁺yáyí} /*
someone {muundu} for him/her'

naákhamu[tsííla]	mú'yáyí/muundu tá	'go for'
naákhamu[leshéla]	mú'yáyí/muundu tá	'leave'
naákhamu[loóndela]	mú'yáyí/muundu tá	'follow'
naákhamu[kulíshila]	mú'yáyí/muundu tá	'name'
naákhamu[lakhúulila]	mú'yáyí/muundu tá	'release'
naákhamu[seébúlila]	mú'yáyí/muundu tá	'say bye to'
naákhamu[kalúshítsila]	mú'yáyí/muundu tá	'return'
naákhamu[reébáreebela]	mú'yáyí/muundu tá	'ask (iter)'

(629) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial *'if s/he does not...the boy {mú⁺yáyí} /*
someone {muundu} for him/her for me'

naákhamuú[ndeelá]	'mú'yáyí/muundu tá	'bury'
naákhamuú[mbechelá]	'mú'yáyí/muundu tá	'shave'
naákhamuú[ndeerelá]	'mú'yáyí/muundu tá	'bring'
naákhamuú[khalachilá]	'mú'yáyí/muundu tá	'cut'
naákhamuú[sitaachilá]	'mú'yáyí/muundu tá	'accuse'
naákhamuú[mboolitsilá]	'mú'yáyí/muundu tá	'seduce'
naákhamuú[mbohololelá]	'mú'yáyí/muundu tá	'untie'

(630) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial *'if s/he does not...the boy {mú⁺yáyí} /*

		<i>someone {muundu} for him/her for me'</i>
naákhamuú['nzííla]	mú'yáyí/muundu tá	'go for'
naákhamuú['ndéshéla]	mú'yáyí/muundu tá	'leave'
naákhamuú['nóóndéla]	mú'yáyí/muundu tá	'follow'
naákhamuú['ngúlíshíla]	mú'yáyí/muundu tá	'name'
naákhamuú['ndákhúulila]	mú'yáyí/muundu tá	'release'
naákhamuú['séébúlila]	mú'yáyí/muundu tá	'say bye to'
naákhamuú['síínjílitsila]	mú'yáyí/muundu tá	'make...stand'

A.1.31 Persistent: Pattern 5a¹⁶

(631) /H/ C-Initial 's/he is still...'

ashi[reetsáángá]	'burying'
ashi[ng'weetsáángá]	'drinking'
ashi[khweetsáángá]	'paying dowry'
ashi[liitsáángá]	'eating'
ashi[lumaángá]	'biting'
ashi[bekaángá]	'shaving'
ashi[teekháángá]	'cooking'
ashi[leeráángá]	'bringing'
ashi[khalakáángá]	'cutting'
ashi[kalaangáángá]	'frying'
ashi[sitaakáángá]	'accusing'
ashi[boolitsáángá]	'seducing'
ashi[saanditsáángá]	'thanking'
ashi[khong'oondáángá]	'knocking'
ashi[boholóláángá]	'untying'
ashi[boyong'ánáángá]	'going around'
ashi[ng'ong'oolítsáángá]	'teasing'
ashi[linga(ka)nyínyáángá]	'crumpling'

(632) /H/ V-Initial 's/he is still...'

¹⁶The Persistent, along with other Pattern 5a constructions, is the locus of much variation in Idakho. The transcriptions below reflect only the tonal variants described as basic in §2.5.1.

ash[iiraángá]	‘killing’	ash[iikóómbáanga]	‘admiring’
ash[iisíákáanga]	‘smacking’	ash[iikobóláanga]	‘belching’
ash[oononyínyáanga]	‘spoiling’	ash[aabukhányínyaanga]	‘separating’

(633) /Ø/ C-Initial ‘s/he is still...’

ashi[tsiítsaanga]	‘going’
ashi[kwiítsaanga]	‘falling’
ashi[lekháanga]	‘leaving’
ashi[reébáanga]	‘asking’
ashi[loóndáanga]	‘following’
ashi[kumíláanga]	‘holding’
ashi[kulíkháanga]	‘naming’
ashi[homóolaanga]	‘massaging’
ashi[lakhúulaanga]	‘releasing’
ashi[seébúlaanga]	‘saying bye’
ashi[hoómbélitsaanga]	‘comforting’
ashi[kalúshítsaanga]	‘returning’
ashi[siínjílitsaanga]	‘making stand’
ashi[reébáreebaanga]	‘asking (iter)’
ashi[kalúkhányinyaanga]	‘turning over’
ashi[sebúlúkhanyinyaanga]	‘scattering’

(634) /Ø/ V-Initial ‘s/he is still...’

ash[eenyáanga]	‘wanting’	ash[eeyéláanga]	‘wiping for’
ash[iilúulaanga]	‘winnowing’	ash[aambákhánaanga]	‘refusing’
ash[eeléelitsaanga]	‘hanging up’		

(635) /H/ C-Initial + OP ‘s/he is still...him/her’

ashimu[ré ^h étsáángá]	‘burying’
ashimu[bé ^h káángá]	‘shaving’
ashimu[lé ^h éráángá]	‘bringing’

ashimu[khá'lákáánga]	'cutting'
ashimu[sí'táákáánga]	'accusing'
ashimu[bó'ólítsáánga]	'seducing'
ashimu[khó'ng'óóndáánga]	'knocking'
ashimu[bó'hólóláánga]	'untying'
ashimu[bó'yóng'ánáánga]	'going around'
ashimu[ng'ó'ng'óólítsáánga]	'teasing'
ashimu[lí'ngá(ka)nyínyáánga]	'bending'

(636) /H/ V-Initial + OP 's/he is still...him/her'

ashimw[ií'ráángá]	'killing'
ashimw[ií'kóómbáánga]	'admiring'
ashimw[ií'síákáánga]	'smacking'
ashimw[oó'nónyínyáánga]	'spoiling'
ashimw[aá'búkhányínyaanga]	'separating'

(637) /Ø/ C-Initial + OP 's/he is still...him/her {mu-} / them₈ {bi-}'

ashimu[tsiítsaanga]	'going for'
ashimu[lekháanga]	'leaving'
ashimu[loóndáanga]	'following'
ashimu[kulíkháanga]	'naming'
ashimu[lakhúulaanga]	'releasing'
ashimu[seébúlaanga]	'saying bye to'
ashimu[hoómbélitsaanga]	'comforting'
ashimu[kalúshítsaanga]	'returning'
ashimu[sínjílitsaanga]	'making...stand'
ashimu[reébáreebaanga]	'asking (iter)'
ashimu[kalúkhányinyaanga]	'turning...over'
abi[sebúlúkhanyinyaanga]	'scattering'

(638) /Ø/ V-Initial + OP 's/he is still...him/her {mw-} / it₁₄ {bw-}'

ashimw[eenyáanga]	'wanting'
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ashimw[eeyélaanga]	‘lighting’
ashibw[iilúulaanga]	‘winnowing’
ashimw[aambákhánaanga]	‘refusing’
ashimw[eelélitsaanga]	‘hanging...up’

(639) /H/ C-Initial + OP_{1sg} ‘s/he is still...me’

ashii[rí‘ítsáángá]	‘fearing’
ashii[mbé‘káángá]	‘shaving’
ashii[ndé‘éráángá]	‘bringing’
ashii[khá‘lákáángá]	‘cutting’
ashii[sí‘táákáángá]	‘accusing’
ashii[mbó‘ólítsáángá]	‘seducing’
ashii[khó‘ng’óóndáángá]	‘knocking’
ashii[mbó‘hólóláángá]	‘untying’
ashii[mbó‘yóng’ánáángá]	‘going around’
ashii[ng’ó‘ng’óólítsáángá]	‘teasing’
ashii[ní‘ngá(ká)nyínyáángá]	‘bending’

(640) /H/ V-Initial + OP_{1sg} ‘s/he is still...me’

ashii[nzí‘ráángá]	‘killing’
ashii[nzí‘kóómbaanga]	‘admiring’
ashii[nzí‘síákaanga]	‘smacking’
ashii[nzó‘nónyínyáángá]	‘spoiling’
ashii[nzá‘búkhányínyáanga]	‘separating’

(641) /Ø/ C-Initial + OP_{1sg} ‘s/he is still...me’

ashii[siétsáanga]	‘grinding’
ashii[ndekháanga]	‘leaving’
ashii[noóndáanga]	‘following’
ashii[ngulíkháanga]	‘naming’
ashii[ndakhúulaanga]	‘releasing’
ashii[seébúlaanga]	‘saying bye to’

ashii[mboómbélitsaanga]	‘comforting’
ashii[síinjílitsaanga]	‘making...stand’
ashii[ndeébándeebaanga]	‘asking (iter)’
ashii[ngalúkhányinyaanga]	‘turning...over’

(642) /Ø/ V-Initial + OP_{1sg} ‘s/he is still...me’

ashii[nzenyáanga]	‘wanting’
ashii[nzeyélaanga]	‘wiping for’
ashii[nyambákhánaanga]	‘refusing’
ashii[nzeléelitsaanga]	‘carrying...hanging’

(643) /H/ C-Initial + OP_{refl} ‘s/he is still...him/herself’

ashii[ré‘étsáángá]	‘burying’	ashii[bé‘káángá]	‘shaving’
ashii[sú‘úngáángá]	‘hanging’	ashii[khá‘lákáángá]	‘cutting’
ashii[sí‘táákáángá]	‘accusing’	ashii[sá‘ándítsáángá]	‘thanking’
ashii[khó‘ng’óóndáángá]	‘knocking’	ashii[bó‘hólóláanga]	‘untying’

(644) /H/ V-Initial + OP_{refl} ‘s/he is still...him/herself’

ashii[yí‘ráángá]	‘killing’	ashii[yí‘kóómbáángá]	‘admiring’
ashii[yí‘síákáángá]	‘smacking’	ashii[yó‘nónýínyáanga]	‘spoiling’
ashii[yá‘búkhányínyaanga]	‘separating’		

(645) /Ø/ C-Initial + OP_{refl} ‘s/he is still...him/herself’

ashii[siétsaanga]	‘grinding’
ashii[lekháanga]	‘leaving’
ashii[siíngáanga]	‘bathing’
ashii[kulíkháanga]	‘naming’
ashii[naábúlaanga]	‘undressing’
ashii[lakhúulaanga]	‘releasing’

ashii[hoómbélitsaanga]	‘comforting’
ashii[síinjílitsaanga]	‘making...stand’
ashii[reébáreebaanga]	‘asking (iter)’
ashii[kalúkhányinyaanga]	‘turning...over’

(646) /Ø/ V-Initial + OP_{refl} ‘s/he is still...him/herself’

ashii[yaláanga]	‘exposing’	ashii[yeyéláanga]	‘wiping for’
ashii[yambákhánaanga]	‘despising’	ashii[yeléelitsaanga]	‘hanging’

(647) /H/ C-Initial + OP + OP_{1sg} ‘s/he is still...him/her for me’

ashimuú[‘ndééláángá]	‘burying’
ashimuú[‘mbéchéláángá]	‘shaving’
ashimuú[‘ndééréláángá]	‘bringing’
ashimuú[‘kháláchíláanga]	‘cutting’
ashimuú[‘sítááchíláanga]	‘accusing’
ashimuú[‘mbóólítsíláanga]	‘seducing’
ashimuú[‘mbóhólólélaanga]	‘untying’

(648) /H/ V-Initial + OP + OP_{1sg} ‘s/he is still...him/her for me’

ashimuú[‘nzíráángá]	‘killing’
ashimuú[‘nzéchítsíláanga]	‘admiring’
ashimuú[‘nzísíáchíláángá]	‘smacking’
ashimuú[‘nzónónýínyílaanga]	‘spoiling’
ashimuú[‘nzábúkhányínyilaanga]	‘separating’

(649) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he is still...him/her for me’

ashimuú[‘nzííláanga]	‘going for’
ashimuú[‘ndéshéláanga]	‘leaving’
ashimuú[‘nóóndélaanga]	‘following’

ashimuú[⁺ ngúlíshílaanga]	‘naming’
ashimuú[⁺ ndákhúulilaanga]	‘releasing’
ashimuú[⁺ séébúlilaanga]	‘saying bye to’
ashimuú[⁺ mbóómbélitsilaanga]	‘comforting’
ashimuú[⁺ síínjílitsilaanga]	‘making...stand’

(650) /Ø/ V-Initial + OP + OP_{1sg} ‘s/he is still...him/her {mu-} / it_{3/14} {ku-/bu-} for me’

ashimuú[⁺ nzéyélaanga]	‘wiping for’	ashikuú[nzáshítsílaanga]	‘lighting’
ashibuú[⁺ nzílúulilaanga]	‘winnowing’	ashikuú[nzéleelitsilaanga]	‘hanging’

(651) /H/ C-Initial Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
someone {muundu}’

ashi[reetsaanga]	mú ⁺ yáyí/muundu	‘burying’
ashi[bekaanga]	mú ⁺ yáyí/muundu	‘shaving’
ashi[leeraanga]	mú ⁺ yáyí/muundu	‘bringing’
ashi[khalakaanga]	mú ⁺ yáyí/muundu	‘cutting’
ashi[sitaakaanga]	mú ⁺ yáyí/muundu	‘accusing’
ashi[boolitsaanga]	mú ⁺ yáyí/muundu	‘seducing’
ashi[khong’oondaanga]	mú ⁺ yáyí/muundu	‘sucking’
ashi[bohololaanga]	mú ⁺ yáyí/muundu	‘untying’
ashi[boyong’anaanga]	mú ⁺ yáyí/muundu	‘going around’

(652) /Ø/ C-Initial Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
someone {muundu}’

ashi[tsiitsaanga]	mú ⁺ yáyí/muundu	‘going for’
ashi[lekhaanga]	mú ⁺ yáyí/muundu	‘leaving’
ashi[loondaanga]	mú ⁺ yáyí/muundu	‘following’
ashi[kulikhaanga]	mú ⁺ yáyí/muundu	‘naming’
ashi[lakhuulaanga]	mú ⁺ yáyí/muundu	‘releasing’
ashi[seebulaanga]	mú ⁺ yáyí/muundu	‘saying bye’
ashi[kalushitsaanga]	mú ⁺ yáyí/muundu	‘returning’
ashi[reebareebaanga]	mú ⁺ yáyí/muundu	‘asking (iter)’

(653) /H/ C-Initial +OP Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
 someone {muundu} for him/her’

ashimu[réelaanga] mú'yáyí/muundu	‘burying’
ashimu[béchelaanga] mú'yáyí/muundu	‘shaving’
ashimu[léerelaanga] mú'yáyí/muundu	‘bringing’
ashimu[khálachilaanga] mú'yáyí/muundu	‘cutting’
ashimu[sítaachilaanga] mú'yáyí/muundu	‘accusing’
ashimu[bóolitsilaanga] mú'yáyí/muundu	‘seducing’
ashimu[khóng'oondelaanga] mú'yáyí/muundu	‘sucking’
ashimu[bóhololelaanga] mú'yáyí/muundu	‘untying’
ashimu[bóyong'anilaanga] mú'yáyí/muundu	‘going around’

(654) /Ø/ C-Initial +OP Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
 someone {muundu} for him/her’

ashimu[tsiilaanga] mú'yáyí/muundu	‘going for’
ashimu[leshelaanga] mú'yáyí/muundu	‘leaving’
ashimu[loondelaanga] mú'yáyí/muundu	‘following’
ashimu[kulishilaanga] mú'yáyí/muundu	‘naming’
ashimu[lakhuulilaanga] mú'yáyí/muundu	‘releasing’
ashimu[seebulilaanga] mú'yáyí/muundu	‘saying bye to’
ashimu[kalushitsilaanga] mú'yáyí/muundu	‘returning’
ashimu[reebareebelaanga] mú'yáyí/muundu	‘asking (iter)’

(655) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
 someone {muundu} for him/her for me’

ashimuú[ndeelaanga] mú'yáyí/muundu	‘buring’
ashimuú[mbechelaanga] mú'yáyí/muundu	‘shaving’
ashimuú[ndeerelaanga] mú'yáyí/muundu	‘bringing’
ashimuú[khalachilaanga] mú'yáyí/muundu	‘cutting’
ashimuú[sitaachilaanga] mú'yáyí/muundu	‘accusing’
ashimuú[mboolitsilaanga] mú'yáyí/muundu	‘seducing’
ashimuú[mbohoololelaanga] mú'yáyí/muundu	‘untying’

(656) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial ‘s/he is still...the boy {mú⁺yáyí} /
 someone {muundu} for him/her for me’

ashimuú[nziilaanga] mú'yáyí/muundu	'going for'
ashimuú[ndeshelaanga] mú'yáyí/muundu	'leaving'
ashimuú[noondelaanga] mú'yáyí/muundu	'following'
ashimuú[ngulishilaanga] mú'yáyí/muundu	'naming'
ashimuú[ndakhuulilaanga] mú'yáyí/muundu	'releasing'
ashimuú[seebulilaanga] mú'yáyí/muundu	'saying bye to'

A.1.32 Persistent Negative: Pattern 5a¹⁷

(657) /H/ C-Initial 's/he is not still...'

ashi[reetsáángá] 'tá	'burying'
ashi[ng'weetsáángá] 'tá	'drinking'
ashi[khweetsáángá] 'tá	'paying dowry'
ashi[liitsáángá] 'tá	'eating'
ashi[lumaángá] 'tá	'biting'
ashi[bekaángá] 'tá	'shaving'
ashi[teekháángá] 'tá	'cooking'
ashi[leeráángá] 'tá	'bringing'
ashi[khalakáá'ngá] tá	'cutting'
ashi[kalaangáá'ngá] tá	'frying'
ashi[sitaakáá'ngá] tá	'accusing'
ashi[boolitsáá'ngá] tá	'seducing'
ashi[saanditsáá'ngá] tá	'thanking'
ashi[khong'oondáá'ngá] tá	'knocking'
ashi[boholólá'ángá] tá	'untying'
ashi[boyong'áná'ángá] tá	'going around'
ashi[ng'ong'oolítsá'ángá] tá	'teasing'
ashi[linga(ka)nyínyá'ángá] tá	'crumpling'

(658) /Ø/ C-Initial 's/he is not still...'

ashi[tsií'tsáángá] tá	'going'
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¹⁷The Persistent Negative, along with other Pattern 5a constructions, is the locus of much variation in Idakho. The transcriptions below reflect only the tonal variants described as basic in §2.5.1.

ashi[kwií ⁺ tsáángá] tá	‘falling’
ashi[lekhá ⁺ ángá] tá	‘leaving’
ashi[reébá ⁺ ángá] tá	‘asking’
ashi[loóndá ⁺ ángá] tá	‘following’
ashi[kumílá ⁺ ángá] tá	‘holding’
ashi[kulíkhá ⁺ ángá] tá	‘naming’
ashi[homó ⁺ óláángá] tá	‘massaging’
ashi[lakhú ⁺ úláángá] tá	‘releasing’
ashi[seébú ⁺ láángá] tá	‘saying bye’
ashi[hoómbé ⁺ lítsáángá] tá	‘comforting’
ashi[kalúshí ⁺ tsáángá] tá	‘returning’
ashi[siínjí ⁺ lítsáángá] tá	‘making stand’
ashi[reébá ⁺ reébáángá] tá	‘asking (iter)’
ashi[kalúkhá ⁺ nyínyáángá] tá	‘turning over’
ashi[sebulú ⁺ khányínyáángá] tá	‘scattering’

(659) /H/ C-Initial + OP ‘s/he is not still...him/her’

ashimu[ré ⁺ étsáángá] ‘tá	‘burying’
ashimu[bé ⁺ káángá] ‘tá	‘shaving’
ashimu[lé ⁺ éráángá] ‘tá	‘bringing’
ashimu[khá ⁺ lákáá ⁺ ngá] tá	‘cutting’
ashimu[sí ⁺ táákáá ⁺ ngá] tá	‘accusing’
ashimu[bó ⁺ ólítsáá ⁺ ngá] tá	‘seducing’
ashimu[khó ⁺ ng’óóndáá ⁺ ngá] tá	‘knocking’
ashimu[bó ⁺ hólólá ⁺ ángá] tá	‘untying’
ashimu[bó ⁺ yóng’áná ⁺ ángá] tá	‘going around’
ashimu[ng’ó ⁺ ng’óólítsá ⁺ ángá] tá	‘teasing’
ashimu[lí ⁺ ngá(ka)nyínyá ⁺ ángá] tá	‘bending’

(660) /Ø/ C-Initial + OP ‘s/he is not still...him/her {mu-} / them₈ {bi-}’

ashimu[tsií ⁺ tsáángá] tá	‘going for’
ashimu[lekhá ⁺ ángá] tá	‘leaving’
ashimu[loóndá ⁺ ángá] tá	‘following’
ashimu[kulíkhá ⁺ ángá] tá	‘naming’
ashimu[lakhú ⁺ úláángá] tá	‘releasing’

ashimu[seébú ¹ láángá] tá	‘saying bye to’
ashimu[hoómbé ¹ lítsáángá] tá	‘comforting’
ashimu[kalúshí ¹ tsáángá] tá	‘returning’
ashimu[síínjí ¹ lítsáángá] tá	‘making...stand’
ashimu[reébá ¹ reébáángá] tá	‘asking (iter)’
ashimu[kalúkhá ¹ nyínyáángá] tá	‘turning...over’
ashibi[sebúlú ¹ khányínyáángá] tá	‘scattering’

(661) /H/ C-Initial + OP + OP_{1sg} ‘s/he is not still...him/her for me’

ashimuú[¹ ndééláángá] tá	‘burying’
ashimuú[¹ mbéchéláá ¹ ngá] tá	‘shaving’
ashimuú[¹ ndééréláá ¹ ngá] tá	‘bringing’
ashimuú[¹ kháláchílá ¹ ángá] tá	‘cutting’
ashimuú[¹ sítááchílá ¹ ángá] tá	‘accusing’
ashimuú[¹ mbóólítsílá ¹ ángá] tá	‘seducing’
ashimuú[¹ mbóhólólé ¹ láángá] tá	‘untying’

(662) /Ø/ C-Initial + OP + OP_{1sg} ‘s/he is not still...him/her for me’

ashimuú[¹ nzíílá ¹ ángá] tá	‘going for’
ashimuú[¹ ndéshélá ¹ ángá] tá	‘leaving’
ashimuú[¹ nóóndé ¹ láángá] tá	‘following’
ashimuú[¹ ngúlíshí ¹ láángá] tá	‘naming’
ashimuú[¹ ndákhú ¹ úlíláángá] tá	‘releasing’
ashimuú[¹ seébú ¹ líláángá] tá	‘saying bye to’
ashimuú[¹ mbóómbé ¹ lítsíláángá] tá	‘comforting’
ashimuú[¹ síínjí ¹ lítsíláángá] tá	‘making...stand’

(663) /H/ C-Initial Phrase-Medial ‘s/he is not still...the boy {mú¹yáyí} /
someone {muundu}’

ashi[reetsaanga] mú ¹ yáyí/muundu tá	‘burying’
ashi[bekaanga] mú ¹ yáyí/muundu tá	‘shaving’
ashi[leeraanga] mú ¹ yáyí/muundu tá	‘bringing’
ashi[khalakaanga] mú ¹ yáyí/muundu tá	‘cutting’

ashi[sitaakaanga] mú'yáyí/muundu tá	'accusing'
ashi[boolitsaanga] mú'yáyí/muundu tá	'seducing'
ashi[khong'oondaanga] mú'yáyí/muundu tá	'knocking'
ashi[bohololaanga] mú'yáyí/muundu tá	'untying'
ashi[boyong'anaanga] mú'yáyí/muundu tá	'going around'

(664) /Ø/ C-Initial Phrase-Medial 's/he is not still...the boy {mú⁺yáyí} /
someone {muundu}'

ashi[tsiitsaanga] mú'yáyí/muundu tá	'going for'
ashi[lekhaanga] mú'yáyí/muundu tá	'leaving'
ashi[loondaanga] mú'yáyí/muundu tá	'following'
ashi[kulikhaanga] mú'yáyí/muundu tá	'naming'
ashi[lakhuulaanga] mú'yáyí/muundu tá	'releasing'
ashi[seebulaanga] mú'yáyí/muundu tá	'saying bye to'
ashi[kalushitsaanga] mú'yáyí/muundu tá	'returning'
ashi[reebareebaanga] mú'yáyí/muundu tá	'asking (iter)'

(665) /H/ C-Initial +OP Phrase-Medial 's/he is not still...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

ashimu[réelaanga] mú'yáyí/muundu tá	'burying'
ashimu[béchelaanga] mú'yáyí/muundu tá	'shaving'
ashimu[léerelaanga] mú'yáyí/muundu tá	'bringing'
ashimu[khálachilaanga] mú'yáyí/muundu tá	'cutting'
ashimu[sítaachilaanga] mú'yáyí/muundu tá	'accusing'
ashimu[bóolitsilaanga] mú'yáyí/muundu tá	'seducing'
ashimu[khóng'oondelaanga] mú'yáyí/muundu tá	'knocking'
ashimu[bóhololelaanga] mú'yáyí/muundu tá	'untying'
ashimu[bóyong'anilaanga] mú'yáyí/muundu tá	'going around'

(666) /Ø/ C-Initial +OP Phrase-Medial 's/he is not still...the boy {mú⁺yáyí} /
someone {muundu} for him/her'

ashimu[tsiitsaanga] mú'yáyí/muundu tá	'going for'
ashimu[lekhaanga] mú'yáyí/muundu tá	'leaving'
ashimu[loondaanga] mú'yáyí/muundu tá	'following'
ashimu[kulikhaanga] mú'yáyí/muundu tá	'naming'

ashimu[lakhuulaanga]	mú'yáyí/muundu tá	'releasing'
ashimu[seebulaanga]	mú'yáyí/muundu tá	'saying bye to'
ashimu[kalushitsaanga]	mú'yáyí/muundu tá	'returning'
ashimu[reebareebaanga]	mú'yáyí/muundu tá	'asking (iter)'

(667) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is not still...the boy {mú'yáyí} / someone {muundu} for him/her for me'

ashimuú[ndeelaanga]	mú'yáyí/muundu tá	'buring'
ashimuú[mbechelaanga]	mú'yáyí/muundu tá	'shaving'
ashimuú[ndeerelaanga]	mú'yáyí/muundu tá	'bringing'
ashimuú[khalachilaanga]	mú'yáyí/muundu tá	'cutting'
ashimuú[sitaachilaanga]	mú'yáyí/muundu tá	'accusing'
ashimuú[mboolitsilaanga]	mú'yáyí/muundu tá	'seducing'
ashimuú[mbohololelaanga]	mú'yáyí/muundu tá	'untying'

(668) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is not still...the boy {mú'yáyí} / someone {muundu} for him/her for me'

ashimuú[nziilaanga]	mú'yáyí/muundu tá	'going for'
ashimuú[ndeshelaanga]	mú'yáyí/muundu tá	'leaving'
ashimuú[noondelaanga]	mú'yáyí/muundu tá	'following'
ashimuú[ngulishilaanga]	mú'yáyí/muundu tá	'naming'
ashimuú[ndakhuulilaanga]	mú'yáyí/muundu tá	'releasing'
ashimuú[seebulilaanga]	mú'yáyí/muundu tá	'saying bye to'

A.1.33 Habitual: Pattern 8

(669) /H/ C-Initial 's/he is ever/always...'

yaá['rá]	'burying'	yaá['ng'wá]	'drinking'
yaá['líá]	'eating'	yaá['lúmá]	'biting'
yaá['béká]	'shaving'	yaá['téékhá]	'cooking'
yaá['léérá]	'bringing'	yaá['kháláká]	'cutting'
yaá['káláángá]	'frying'	yaá['sítááká]	'accusing'
yaá['bóólítsá]	'seducing'	yaá['sáándítsá]	'thanking'

yaá[⁺ tsúúnzúúná]	‘sucking’	yaá[⁺ bóhólólá]	‘untying’
yaá[⁺ bóyóng’áná]	‘going around’	yaá[⁺ ng’óng’óólítsá]	‘teasing’
yaá[⁺ línkáányínyá]	‘crumpling’		

(670) /H/ V-Initial ‘s/he is ever/always...’

yaá[⁺ yírá]	‘killing’	yaá[⁺ yíkóómbá]	‘admiring’
yaá[⁺ yísíáká]	‘smacking’	yaá[⁺ yíkóbólá]	‘belching’
yaá[⁺ yónónyínyá]	‘spoiling’	yaá[⁺ yábúkhányínyá]	‘separating’

(671) /Ø/ C-Initial ‘s/he is ever/always...’

yaá[⁺ tsíá]	‘going’	yaá[⁺ kwá]	‘falling’
yaá[⁺ lékhá]	‘leaving’	yaá[⁺ réébá]	‘asking’
yaá[⁺ lóóndá]	‘following’	yaá[⁺ kúmílá]	‘holding’
yaá[⁺ kúlíkhá]	‘naming’	yaá[⁺ hómóólá]	‘massaging’
yaá[⁺ lákhuúlá]	‘releasing’	yaá[⁺ séébúlá]	‘saying bye’
yaá[⁺ hóómbélítsá]	‘comforting’	yaá[⁺ kálúshítsá]	‘returning’
yaá[⁺ síínjílítsá]	‘making stand’	yaá[⁺ réébáréébá]	‘asking (iter)’
yaá[⁺ kálúkhányínyá]	‘turning over’	yaá[⁺ sébúlúkhányínyá]	‘scattering’

(672) /Ø/ V-Initial ‘s/he is ever/always...’

yaá[⁺ yényá]	‘wanting’	yaá[⁺ yéyéla]	‘wiping for’
yaá[⁺ yílúúlá]	‘winnowing’	yaá[⁺ yámbákháná]	‘refusing’
yaá[⁺ yéléélítsá]	‘hanging up’	yaá[⁺ yíkóómbá]	‘admiring’

(673) /H/ C-Initial + OP ‘s/he is ever/always...him/her’

yaá ⁺ mú[rá]	‘burying’	yaá ⁺ mú[khúá]	‘paying dowry’
yaá ⁺ mú[bé ⁺ ká]	‘shaving’	yaá ⁺ mú[lé ⁺ érá]	‘bringing’
yaá ⁺ mú[khá ⁺ láká]	‘cutting’	yaá ⁺ mú[sí ⁺ tááká]	‘accusing’
yaá ⁺ mú[bó ⁺ óólítsá]	‘seducing’	yaá ⁺ mú[khó ⁺ ng’óóndá]	‘knocking’

yaá'mú[bó'hólólá]	'untying'	yaá'mú[bó'yóng'áná]	'going around'
yaá'mú[ng'ó'ng'óólítsá]	'teasing'	yaá'mú[lí'ngákányínyá]	'bending'

(674) /H/ V-Initial + OP 's/he is ever/always...him/her'

yaá'mw[íí'rá]	'killing'	yaá'mw[íí'kóómbá]	'admiring'
yaá'mw[íí'siáká]	'smacking'	yaá'mw[óó'nónyínyá]	'spoiling'
yaá'mw[áá'búkhányínyá]	'separating'		

(675) /Ø/ C-Initial + OP 's/he is ever/always...him/her {mu-}'

yaá'mú[tsía]	'going for'
yaá'mú[lékhá]	'leaving'
yaá'mú[lóóndá]	'following'
yaá'mú[kúlíkhá]	'naming'
yaá'mú[lákhúúlá]	'releasing'
yaá'mú[séébúlá]	'saying bye to'
yaá'mú[hóómbélítsá]	'comforting'
yaá'mú[kálúshítsá]	'returning'
yaá'mú[síinjílítsá]	'making...stand'
yaá'mú[réébáréébá]	'asking (iter)'
yaá'mú[kálúkhányínyá]	'turning...over'
yaá'mú[sébúlúkhányínyá]	'scattering'

(676) /Ø/ V-Initial + OP 's/he is ever/always...him/her {mw-} / it₁₄ {bw-}'

yaá'mw[éényá]	'wanting'	yaá'mw[ééyéla]	'wiping for'
yaá'bw[íílúúlá]	'winnowing'	yaá'mw[áámbákháná]	'refusing'
yaá'mw[ééleélítsá]	'carrying...hanging'		

(677) /H/ C-Initial + OP_{1sg} 's/he is ever/always...me'

yaá'á[rí'á]	'fearing'	yaá'á[khwá]	'paying dowry'
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yaá'á[mbé'ká]	'shaving'	yaá'á[ndé'érá]	'bringing'
yaá'á[khá'láká]	'cutting'	yaá'á[sí'tááká]	'accusing'
yaá'á[mbó'ólítsá]	'seducing'	yaá'á[khó'ng'óóndá]	'knocking'
yaá'á[mbó'hólólá]	'untying'	yaá'á[mbó'yóng'áná]	'going around'
yaá'á[ng'ó'ng'óólítsá]	'teasing'	yaá'á[ní'ngákányínyá]	'bending'

(678) /H/ V-Initial + OP_{1sg} 's/he is ever/always...me'

yaá'á[nzí'rá]	'killing'	yaá'á[nzí'kóómbá]	'admiring'
yaá'á[nzí'síáká]	'smacking'	yaá'á[nzó'nónyínyá]	'spoiling'
yaá'á[nzá'búkhányínyá]	'separating'		

(679) /Ø/ C-Initial + OP_{1sg} 's/he is ever/always...me'

yaá'á[síá]	'grinding'	yaá'á[ndékhá]	'leaving'
yaá'á[nóóndá]	'following'	yaá'á[ngúlíkhá]	'naming'
yaá'á[ndákhúúlá]	'releasing'	yaá'á[séébúúlá]	'saying bye to'
yaá'á[mbóómbélítsá]	'comforting'	yaá'á[síínjílítsá]	'making..stand'
yaá'á[ndéébándéébá]	'asking (iter)'	yaá'á[ngálúkhányínyá]	'turning...over'

(680) /Ø/ V-Initial + OP_{1sg} 's/he is ever/always...me'

yaá'á[nzényá]	'wanting'	yaá'á[nzéyéélá]	'wiping for'
yaá'á[nyámbákháná]	'refusing'	yaá'á[nzéléélítsá]	'carrying...hanging'

(681) /H/ C-Initial + OP_{refl} 's/he is ever/always...him/herself'

yaá'yí[rá]	'killing'	yaá'yí[khwá]	'paying dowry'
yaá'yí[bé'ká]	'shaving'	yaá'yí[sú'úngá]	'hanging'
yaá'yí[khá'láká]	'cutting'	yaá'yí[sí'tááká]	'accusing'
yaá'yí[sá'ándítsá]	'thanking'	yaá'yí[khó'ng'óóndá]	'knocking'
yaá'yí[bó'hólólá]	'untying'		

(682) /H/ V-Initial + OP_{refl} 's/he is ever/always...him/herself'

yaá'yí[yí'rá]	'killing'	yaá'yí[yí'kóómbá]	'admiring'
yaá'yí[yí'síáká]	'smacking'	yaá'yí[yó'nónyínyá]	'spoiling'
yaá'yí[yá'búkhányínyá]	'separating'		

(683) /Ø/ C-Initial + OP_{refl} 's/he is ever/always...him/herself'

yaá'yí[sía]	'grinding'	yaá'yí[lékhá]	'leaving'
yaá'yí[sííngá]	'bathing'	yaá'yí[kúlíkhá]	'naming'
yaá'yí[náábúlá]	'undressing'	yaá'yí[lákhúúlá]	'releasing'
yaá'yí[hóómbélítsá]	'comforting'	yaá'yí[síínjílítsá]	'making...stand'
yaá'yí[réébáréébá]	'asking (iter)'	yaá'yí[kálúkhányínyá]	'turning...over'

(684) /Ø/ V-Initial + OP_{refl} 's/he is ever/always...him/herself'

yaá'yí[yálá]	'exposing'	yaá'yí[yéyé]	'wiping for'
yaá'yí[yámbákháná]	'refusing'	yaá'yí[yéléélítsá]	'hanging...up'

(685) /H/ C-Initial + OP + OP_{1sg} 's/he is ever/always...him/her for me'

yaá'múú['ndéélá]	'burying'	yaá'múú['mbéché]	'shaving'
yaá'múú['ndééré]	'bringing'	yaá'múú['kháláchí]	'cutting'
yaá'múú['sítááchí]	'accusing'	yaá'múú['mbóólítsí]	'seducing'
yaá'múú['mbóhólólé]	'untying'		

(686) /H/ V-Initial + OP + OP_{1sg} 's/he is ever/always...him/her for me'

yaá'múú['nzírí]	'killing'
yaá'múú['nzéchítsí]	'admiring'
yaá'múú['nzísíáchí]	'smacking'
yaá'múú['nzónónyínyí]	'spoiling'

yaá'múú['nzábúkhányínyílá] 'separating'

(687) /Ø/ C-Initial + OP + OP_{1sg} 's/he is ever/always...him/her for me'

yaá'múú['nzíílá]	'going for'
yaá'múú['ndéshélá]	'leaving'
yaá'múú['nóóndélá]	'following'
yaá'múú['ngúlíshílá]	'naming'
yaá'múú['ndákhúúlílá]	'releasing'
yaá'múú['séébúlílá]	'saying bye to'
yaá'múú['mbóómbélítsílá]	'comforting'
yaá'múú['sínjílítsílá]	'making...stand'

(688) /Ø/ V-Initial + OP + OP_{1sg} 's/he is ever/always...it_{3/14} {ku-/bu-} for me'

yaá'búú['nzálílá]	'displaying'	yaá'kúú['nzáshítsílá]	'lighting'
yaá'búú['nzílúúlílá]	'winnowing'	yaá'kúú['nzéléélítsílá]	'hanging'

(689) /H/ C-Initial Phrase-Medial 's/he is ever/always...the boy {mú⁺yáyí} /
someone {muundu}'

yaá[ra] mú'yáyí/muundu	'burying'
yaá[beka] mú'yáyí/muundu	'shaving'
yaá[leera] mú'yáyí/muundu	'bringing'
yaá[khalaka] mú'yáyí/muundu	'cutting'
yaá[sitaaka] mú'yáyí/muundu	'accusing'
yaá[boolitsa] mú'yáyí/muundu	'seducing'
yaá[khong'oonda] mú'yáyí/muundu	'knocking'
yaá[boholola] mú'yáyí/muundu	'untying'
yaá[boyong'ana] mú'yáyí/muundu	'going around'
yaá[ng'ong'oolitsa] mú'yáyí/muundu	'teasing'

(690) /Ø/ C-Initial Phrase-Medial 's/he is ever/always...the boy {mú⁺yáyí} /
someone {muundu}'

yaá[tsia] mú'yáyí/muundu	'going for'
yaá[lekha] mú'yáyí/muundu	'leaving'
yaá[loonda] mú'yáyí/muundu	'following'
yaá[kulikha] mú'yáyí/muundu	'naming'
yaá[lakhuula] mú'yáyí/muundu	'releasing'
yaá[seebula] mú'yáyí/muundu	'saying bye to'
yaá[kalushitsa] mú'yáyí/muundu	'returning'
yaá[siinjilitsa] mú'yáyí/muundu	'making...stand'
yaá[reebareeba] mú'yáyí/muundu	'asking (iter)'
yaá[kalukhanyinya] mú'yáyí/muundu	'turning...over'

(691) /H/ C-Initial +OP Phrase-Medial 's/he is ever/always...the boy {mú'yáyí} /
someone {muundu} for him/her'

yaá'mú[réela] mú'yáyí/muundu	'burying'
yaá'mú[béchela] mú'yáyí/muundu	'shaving'
yaá'mú[léerela] mú'yáyí/muundu	'bringing'
yaá'mú[khálachila] mú'yáyí/muundu	'cutting'
yaá'mú[sítaachila] mú'yáyí/muundu	'accusing'
yaá'mú[bóolitsila] mú'yáyí/muundu	'seducing'
yaá'mú[khóng'oondela] mú'yáyí/muundu	'knocking'
yaá'mú[bóhololela] mú'yáyí/muundu	'untying'
yaá'mú[bóyong'anila] mú'yáyí/muundu	'going around'
yaá'mú[ng'óng'oolitsila] mú'yáyí/muundu	'teasing'

(692) /Ø/ C-Initial +OP Phrase-Medial 's/he is ever/always...the boy {mú'yáyí} /
someone {muundu} for him/her'

yaámu[tsiila] mú'yáyí/muundu	'going for'
yaámu[leshela] mú'yáyí/muundu	'leaving'
yaámu[loondela] mú'yáyí/muundu	'following'
yaámu[kulishila] mú'yáyí/muundu	'naming'
yaámu[lakhuulila] mú'yáyí/muundu	'releasing'
yaámu[seebulila] mú'yáyí/muundu	'saying bye to'
yaámu[reebareebela] mú'yáyí/muundu	'asking (iter)'

(693) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is ever/always...the boy {mú'yáyí} /

yaá'múú[ndeela] mú'yáyí/muundu	someone {muundu} for him/her for me'
yaá'múú[mbechela] mú'yáyí/muundu	'burying'
yaá'múú[ndeerela] mú'yáyí/muundu	'shaving'
yaá'múú[khalachila] mú'yáyí/muundu	'bringing'
yaá'múú[sitaachila] mú'yáyí/muundu	'cutting'
yaá'múú[mboolitsila] mú'yáyí/muundu	'accusing'
yaá'múú[mbohololela] mú'yáyí/muundu	'seducing'
	'untying'

(694) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is ever/always...the boy {mú'yáyí} / someone {muundu} for him/her for me'

yaá'múú[nziila] mú'yáyí/muundu	'going for'
yaá'múú[ndeshela] mú'yáyí/muundu	'leaving'
yaá'múú[noondela] mú'yáyí/muundu	'following'
yaá'múú[ngulishila] mú'yáyí/muundu	'naming'
yaá'múú[ndakhuulila] mú'yáyí/muundu	'releasing'
yaá'múú[seebulila] mú'yáyí/muundu	'saying bye to'
yaá'múú[mboombelitsila] mú'yáyí/muundu	'comforting'
yaá'múú[siinjilitsila] mú'yáyí/muundu	'making...stand'

A.1.34 Habitual Negative: Pattern 8

(695) /H/ C-Initial 's/he is not ever/always...'

yaá['rá] tá	'burying'	yaá['ng'wá] tá	'drinking'
yaá['líá] tá	'eating'	yaá['lúma] tá	'biting'
yaá['béká] tá	'shaving'	yaá['téékhá] tá	'cooking'
yaá['léérá] tá	'bringing'	yaá['kháláká] tá	'cutting'
yaá['káláángá] tá	'frying'	yaá['sítááká] tá	'accusing'
yaá['bóólítsá] tá	'seducing'	yaá['sáándítsá] tá	'thanking'
yaá['tsúúnzúúná] tá	'sucking'	yaá['bóhólólá] tá	'untying'
yaá['bóyóng'áná] tá	'going around'	yaá['ng'óng'óólítsá] tá	'teasing'
yaá['línákányínyá] tá	'crumpling'		

(696) /H/ V-Initial 's/he is not ever/always...'

yaá['yírá] tá	'killing'	yaá['yíkóómbá] tá	'admiring'
yaá['yísíáká] tá	'smacking'	yaá['yíkóbólá] tá	'belching'
yaá['yónónyínyá] tá	'spoiling'	yaá['yábúkhányínyá] tá	'separating'

(697) /Ø/ C-Initial 's/he is not ever/always...'

yaá['tsíá] tá	'going'
yaá['kwá] tá	'falling'
yaá['lékhá] tá	'leaving'
yaá['réébá] tá	'asking'
yaá['lóóndá] tá	'following'
yaá['kúmílá] tá	'holding'
yaá['kúlíkhá] tá	'naming'
yaá['hómóólá] tá	'massaging'
yaá['lákhuúlá] tá	'releasing'
yaá['séébúlá] tá	'saying bye'
yaá['hóómbélítsá] tá	'comforting'
yaá['kálúshítsá] tá	'returning'
yaá['síínjílítsá] tá	'making stand'
yaá['réébáréébá] tá	'asking (iter)'
yaá['kálúkhányínyá] tá	'turning over'
yaá['séébúlúkhányínyá] tá	'scattering'

(698) /Ø/ V-Initial 's/he is not ever/always...'

yaá['yényá] tá	'wanting'	yaá['yéyé] tá	'wiping for'
yaá['yílúúlá] tá	'winnowing'	yaá['yámbákháná] tá	'refusing'
yaá['yéléélítsá] tá	'hanging up'	yaá['yíkóómbá] tá	'admiring'

(699) /H/ C-Initial + OP 's/he is not ever/always...him/her'

yaá'mú[rá] 'tá	'burying'
yaá'mú[khuá] 'tá	'paying dowry'

yaá'mú[bé'ká] tá	'shaving'
yaá'mú[lé'érá] tá	'bringing'
yaá'mú[khá'láká] tá	'cutting'
yaá'mú[sí'tááká] tá	'accusing'
yaá'mú[bó'ólítsá] tá	'seducing'
yaá'mú[khó'ng'óóndá] tá	'knocking'
yaá'mú[bó'hólólá] tá	'untying'
yaá'mú[bó'yóng'áná] tá	'going around'
yaá'mú[ng'ó'ng'óólıtsá] tá	'teasing'
yaá'mú[lí'ngákányínyá] tá	'bending'

(700) /Ø/ C-Initial + OP 's/he is not ever/always...him/her {mu-}'

yaá'mú[tsía] tá	'going for'
yaá'mú[lékhá] tá	'leaving'
yaá'mú[lóóndá] tá	'following'
yaá'mú[kúlíkhá] tá	'naming'
yaá'mú[lákhúúlá] tá	'releasing'
yaá'mú[séébúlá] tá	'saying bye to'
yaá'mú[hóómbélítsá] tá	'comforting'
yaá'mú[kálúshítsá] tá	'returning'
yaá'mú[síinjílítsá] tá	'making...stand'
yaá'mú[réébáréébá] tá	'asking (iter)'
yaá'mú[kálúkhányínyá] tá	'turning...over'
yaá'mú[sébúlúkhányínyá] tá	'scattering'

(701) /H/ C-Initial + OP_{1sg} 's/he is not ever/always...me'

yaá'á[ría] 'tá	'fearing'	yaá'á[khwá] 'tá	'paying dowry'
yaá'á[mbé'ká] tá	'shaving'	yaá'á[ndé'érá] tá	'bringing'
yaá'á[khá'láká] tá	'cutting'	yaá'á[sí'tááká] tá	'accusing'
yaá'á[mbó'ólítsá] tá	'seducing'	yaá'á[khó'ng'óóndá] tá	'knocking'
yaá'á[mbó'hólólá] tá	'untying'	yaá'á[mbó'yóng'áná] tá	'going around'
yaá'á[ng'ó'ng'óólıtsá] tá	'teasing'	yaá'á[ní'ngákányínyá] tá	'bending'

(702) /Ø/ C-Initial + OP_{1sg} 's/he is not ever/always...me'

yaá'á[síá] tá	'grinding'
yaá'á[ndékhá] tá	'leaving'
yaá'á[nóóndá] tá	'following'
yaá'á[ngúlíkhá] tá	'naming'
yaá'á[ndákhúúlá] tá	'releasing'
yaá'á[séébúlá] tá	'saying bye to'
yaá'á[mbóómbélítsá] tá	'comforting'
yaá'á[síínjílítsá] tá	'making...stand'
yaá'á[réébáréébá] tá	'asking (iter)'
yaá'á[ngálúkhányínyá] tá	'turning...over'

(703) /H/ C-Initial + OP + OP_{1sg} 's/he is not ever/always...him/her for me'

yaá'múú['ndéélá] tá	'burying'	yaá'múú['mbéchélá] tá	'shaving'
yaá'múú['ndéérélá] tá	'bringing'	yaá'múú['kháláchílá] tá	'cutting'
yaá'múú['sítááchílá] tá	'accusing'	yaá'múú['mbóólítsílá] tá	'seducing'
yaá'múú['mbóhólólélá] tá	'untying'		

(704) /Ø/ C-Initial + OP + OP_{1sg} 's/he is not ever/always...him/her for me'

yaá'múú['nzíílá] tá	'going for'
yaá'múú['ndéshélá] tá	'leaving'
yaá'múú['nóóndélá] tá	'following'
yaá'múú['ngúlíshílá] tá	'naming'
yaá'múú['ndákhúúlílá] tá	'releasing'
yaá'múú['séébúlílá] tá	'saying bye to'
yaá'múú['mbóómbélítsílá] tá	'comforting'
yaá'múú['síínjílítsílá] tá	'making...stand'

(705) /H/ C-Initial Phrase-Medial 's/he is not ever/always...the boy {mú'yáyí} /
someone {muundu}'

yaá[ra] mú'yáyí/muundu tá	'burying'
yaá[beka] mú'yáyí/muundu tá	'shaving'

yaá[leera] mú'yáyí/muundu tá	'bringing'
yaá[khalaka] mú'yáyí/muundu tá	'cutting'
yaá[sitaaka] mú'yáyí/muundu tá	'accusing'
yaá[boolitsa] mú'yáyí/muundu tá	'seducing'
yaá[khong'oonda] mú'yáyí/muundu tá	'knocking'
yaá[boholola] mú'yáyí/muundu tá	'untying'
yaá[boyong'ana] mú'yáyí/muundu tá	'going around'
yaá[ng'ong'oolitsa] mú'yáyí/muundu tá	'teasing'

(706) /Ø/ C-Initial Phrase-Medial 's/he is not ever/always...the boy {mú⁺yáyí} /
someone {muundu tá}'

yaá[tsia] mú'yáyí/muundu tá	'going for'
yaá[lekha] mú'yáyí/muundu tá	'leaving'
yaá[loonda] mú'yáyí/muundu tá	'following'
yaá[kulikha] mú'yáyí/muundu tá	'naming'
yaá[lakhuula] mú'yáyí/muundu tá	'releasing'
yaá[seebula] mú'yáyí/muundu tá	'saying bye to'
yaá[kalushitsa] mú'yáyí/muundu tá	'returning'
yaá[siinjilitsa] mú'yáyí/muundu tá	'making...stand'
yaá[reebareeba] mú'yáyí/muundu tá	'asking (iter)'
yaá[kalukhanyinya] mú'yáyí/muundu tá	'turning...over'

(707) /H/ C-Initial +OP Phrase-Medial 's/he is not ever/always...the boy {mú⁺yáyí} /
someone {muundu tá} for him/her'

yaá'mú[réela] mú'yáyí/muundu tá	'burying'
yaá'mú[béchela] mú'yáyí/muundu tá	'shaving'
yaá'mú[léerela] mú'yáyí/muundu tá	'bringing'
yaá'mú[khálachila] mú'yáyí/muundu tá	'cutting'
yaá'mú[sítaachila] mú'yáyí/muundu tá	'accusing'
yaá'mú[bóolitsila] mú'yáyí/muundu tá	'seducing'
yaá'mú[khóng'oondela] mú'yáyí/muundu tá	'knocking'
yaá'mú[bóhololela] mú'yáyí/muundu tá	'untying'
yaá'mú[bóyong'anila] mú'yáyí/muundu tá	'going around'
yaá'mú[ng'óng'oolitsila] mú'yáyí/muundu tá	'teasing'

(708) /Ø/ C-Initial +OP Phrase-Medial 's/he is not ever/always...the boy {mú⁺yáyi} /
someone {muundu tá} for him/her'

yaámu[tsiila] mú'yáyi/muundu tá	'going for'
yaámu[leshela] mú'yáyi/muundu tá	'leaving'
yaámu[loondela] mú'yáyi/muundu tá	'following'
yaámu[kulishila] mú'yáyi/muundu tá	'naming'
yaámu[lakhuulila] mú'yáyi/muundu tá	'releasing'
yaámu[seebulila] mú'yáyi/muundu tá	'saying bye to'
yaámu[reebareebela] mú'yáyi/muundu tá	'asking (iter)'

(709) /H/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is not ever/always...
the boy {mú⁺yáyi} / someone {muundu tá} for him/her for me'

yaá'múú[ndeela] mú'yáyi/muundu tá	'burying'
yaá'múú[mbechela] mú'yáyi/muundu tá	'shaving'
yaá'múú[ndeerela] mú'yáyi/muundu tá	'bringing'
yaá'múú[khalachila] mú'yáyi/muundu tá	'cutting'
yaá'múú[sitaachila] mú'yáyi/muundu tá	'accusing'
yaá'múú[mboolitsila] mú'yáyi/muundu tá	'seducing'
yaá'múú[mbohololela] mú'yáyi/muundu tá	'untying'

(710) /Ø/ C-Initial +OP + OP_{1sg} Phrase-Medial 's/he is not ever/always...
the boy {mú⁺yáyi} / someone {muundu tá} for him/her for me'

yaá'múú[nziila] mú'yáyi/muundu tá	'going for'
yaá'múú[ndeshela] mú'yáyi/muundu tá	'leaving'
yaá'múú[noondela] mú'yáyi/muundu tá	'following'
yaá'múú[ngulishila] mú'yáyi/muundu tá	'naming'
yaá'múú[ndakhuulila] mú'yáyi/muundu tá	'releasing'
yaá'múú[seebulila] mú'yáyi/muundu tá	'saying bye to'
yaá'múú[mboombelitsila] mú'yáyi/muundu tá	'comforting'
yaá'múú[siinjilitsila] mú'yáyi/muundu tá	'making...stand'

's/he will just {tsa}...'

ala[kwa] khú/tsa	'fall'
ala[lekha] khú/tsa	'leave'
ala[reeba] khú/tsa	'ask'
ala[kulikha] khú/tsa	'name'
ala[lakhuula] khú/tsa	'release'
ala[seebula] khú/tsa	'say bye'
ala[kalushitsa] khú/tsa	'return'
ala[hoombelitsa] khú/tsa	'comfort'

(713/717) /H/ C-Initial *'s/he will...him/her a bit {khú}'* /

's/he will just {tsa}...him/her'

alamú[khwa] khú/tsa	'pay (her) dowry'
alamú[beka] khú/tsa	'shave'
alamú[leera] khú/tsa	'bring'
alamú[khalaka] khú/tsa	'cut'
alamú[sitaaka] khú/tsa	'accuse'
alamú[boolitsa] khú/tsa	'seduce'
alamú[tsuunzuuna] khú/tsa	'suck'
alamú[boyong'ana] khú/tsa	'go around'

(714/718) /Ø/ C-Initial *'s/he will...him/her a bit {khú}'* /

's/he will just {tsa}...him/her'

alamú[tsia] khú/tsa	'go for'
alamú[lekha] khú/tsa	'leave'
alamú[loonda] khú/tsa	'ask'
alamú[kulikha] khú/tsa	'name'
alamú[lakhuula] khú/tsa	'release'
alamú[seebula] khú/tsa	'say bye'
alamú[kalushitsa] khú/tsa	'return'
alamú[hoombelitsa] khú/tsa	'comfort'

A.2.2 Near Future Negative

(719/723) /H/ C-Initial ‘s/he will not...a bit {khú}’ /
 ‘s/he will not just {tsa}...’

ala[khwá] khú/tsa tá	‘pay dowry’
ala[lúma] khú/tsa tá	‘bite’
ala[téekha] khú/tsa tá	‘cook’
ala[khálaka] khú/tsa tá	‘cut’
ala[kálaanga] khú/tsa tá	‘fry’
ala[bóolitsa] khú/tsa tá	‘seduce’
ala[tsúunzuuna] khú/tsa tá	‘suck’
ala[bóyong’ana] khú/tsa tá	‘go around’

(720/724) /Ø/ C-Initial ‘s/he will not...a bit {khú}’ /
 ‘s/he will not just {tsa}...’

ala[kwa] khú/tsa tá	‘fall’
ala[lekha] khú/tsa tá	‘leave’
ala[reeba] khú/tsa tá	‘ask’
ala[kulikha] khú/tsa tá	‘name’
ala[lakhuula] khú/tsa tá	‘release’
ala[seebula] khú/tsa tá	‘say bye’
ala[kalushitsa] khú/tsa tá	‘return’
ala[hoombelitsa] khú/tsa tá	‘comfort’

(721/725) /H/ C-Initial ‘s/he will not...him/her a bit {khú}’ /
 ‘s/he will not just {tsa}...him/her’

alamú[khwa] khú/tsa tá	‘pay (her) dowry’
alamú[beka] khú/tsa tá	‘shave’
alamú[leera] khú/tsa tá	‘bring’
alamú[khalaka] khú/tsa tá	‘cut’
alamú[sitaaka] khú/tsa tá	‘accuse’
alamú[boolitsa] khú/tsa tá	‘seduce’
alamú[tsuunzuuna] khú/tsa tá	‘suck’
alamú[boyong’ana] khú/tsa tá	‘go around’

(722/726) /Ø/ C-Initial ‘s/he will not...him/her a bit {khú}’ /
 ‘s/he will not just {tsa}...him/her’

alamú[tsia] khú/tsa tá	‘go for’
alamú[lekha] khú/tsa tá	‘leave’
alamú[loonda] khú/tsa tá	‘ask’
alamú[kulikha] khú/tsa tá	‘name’
alamú[lakhuula] khú/tsa tá	‘release’
alamú[seebula] khú/tsa tá	‘say bye’
alamú[kalushitsa] khú/tsa tá	‘return’
alamú[hoombelitsa] khú/tsa tá	‘comfort’

A.2.3 Remote Past

(727/731) /H/ C-Initial ‘s/he...a bit {khú}’ /
 ‘s/he just {tsa}...’

yaa[khwá] khú/tsa	‘paid dowry’
yaa[lúma] khú/tsa	‘bit’
yaa[téekha] khú/tsa	‘cooked’
yaa[khálaka] khú/tsa	‘cut’
yaa[kálaanga] khú/tsa	‘fried’
yaa[bóolitsa] khú/tsa	‘seduced’
yaa[tsúunzuuna] khú/tsa	‘sucked’
yaa[bóyong’ana] khú/tsa	‘went around’

(728/732) /Ø/ C-Initial ‘s/he...a bit {khú}’ /
 ‘s/he just {tsa}...’

yaa[kwá] khú/tsa	‘fell’
yaa[lékha] khú/tsa	‘left’
yaa[réeba] khú/tsa	‘asked’
yaa[kúlikha] khú/tsa	‘named’
yaa[lákhula] khú/tsa	‘released’
yaa[séebula] khú/tsa	‘said bye’
yaa[kálushitsa] khú/tsa	‘returned’
yaa[hóombelitsa] khú/tsa	‘comforted’

(729/733) /H/ C-Initial 's/he...him/her a bit {khú}' /
's/he just {tsa}...him/her'

yaamú[khwa] khú/tsa	'paid (her) dowry'
yaamú[beka] khú/tsa	'shaved'
yaamú[leera] khú/tsa	'brought'
yaamú[khalaka] khú/tsa	'cut'
yaamú[sitaaka] khú/tsa	'accused'
yaamú[boolitsa] khú/tsa	'seduced'
yaamú[tsuunzuuna] khú/tsa	'sucked'
yaamú[boyong'ana] khú/tsa	'went around'

(730/734) /Ø/ C-Initial 's/he...him/her a bit {khú}' /
's/he just {tsa}...him/her'

yaamú[⁺ tsiá] khú/tsa	'went for'
yaamú[⁺ lékhá] khú/tsa	'left'
yaamú[⁺ lóónnda] khú/tsa	'asked'
yaamú[⁺ kúlíkha] khú/tsa	'named'
yaamú[⁺ lákhuúla] khú/tsa	'released'
yaamú[⁺ séébula] khú/tsa	'said bye'
yaamú[⁺ kálúshitsa] khú/tsa	'returned'
yaamú[⁺ hóómbélitsa] khú/tsa	'comforted'

A.2.4 Remote Past Negative

(735/739) /H/ C-Initial 's/he did not...a bit {khú}' /
's/he did not just {tsa}...'

yaa[khwá] khú/tsa tá	'pay dowry'
yaa[lúma] khú/tsa tá	'bite'
yaa[téekha] khú/tsa tá	'cook'
yaa[khálaka] khú/tsa tá	'cut'
yaa[kálaanga] khú/tsa tá	'fry'
yaa[bóolitsa] khú/tsa tá	'seduce'
yaa[tsúunzuuna] khú/tsa tá	'suck'
yaa[bóyong'ana] khú/tsa tá	'go around'

(736/740) /Ø/ C-Initial 's/he did not...a bit {khú}' /
 's/he did not just {tsa}...'

yaa[kwá] khú/tsa tá	'fall'
yaa[lékha] khú/tsa tá	'leave'
yaa[réeba] khú/tsa tá	'ask'
yaa[kúlikha] khú/tsa tá	'name'
yaa[lákhula] khú/tsa tá	'release'
yaa[séebula] khú/tsa tá	'say bye'
yaa[kálushitsa] khú/tsa tá	'return'
yaa[hóombelitsa] khú/tsa tá	'comfort'

(737/741) /H/ C-Initial 's/he did not...him/her a bit {khú}' /
 's/he did not just {tsa}...him/her'

yaamú[ra] khú/tsa tá	'pay (her) dowry'
yaamú[beka] khú/tsa tá	'shave'
yaamú[leera] khú/tsa tá	'bring'
yaamú[khalaka] khú/tsa tá	'cut'
yaamú[sitaaka] khú/tsa tá	'accuse'
yaamú[boolitsa] khú/tsa tá	'seduce'
yaamú[tsuunzuuna] khú/tsa tá	'suck'
yaamú[boyong'ana] khú/tsa tá	'go around'

(738/742) /Ø/ C-Initial 's/he did not...him/her a bit {khú}' /
 's/he did not just {tsa}...him/her'

yaamú[¹ tsiá] khú/tsa tá	'go for'
yaamú[¹ lékhá] khú/tsa tá	'leave'
yaamú[¹ lóónda] khú/tsa tá	'ask'
yaamú[¹ kúlikha] khú/tsa tá	'name'
yaamú[¹ lákhúula] khú/tsa tá	'release'
yaamú[¹ séebula] khú/tsa tá	'say bye'
yaamú[¹ kálúshitsa] khú/tsa tá	'return'
yaamú[¹ hóómbélitsa] khú/tsa tá	'comfort'

A.2.5 Immediate Past

(743/747) /H/ C-Initial 's/he just...a bit {khú}' /
's/he just {tsa}...'

yá'khá[khwá] khú/tsa	'paid dowry'
yá'khá[lúma] khú/tsa	'bit'
yá'khá[téekha] khú/tsa	'cooked'
yá'khá[khálaka] khú/tsa	'cut'
yá'khá[kálaanga] khú/tsa	'fried'
yá'khá[bóolitsa] khú/tsa	'seduced'
yá'khá[tsúunzuuna] khú/tsa	'sucked'
yá'khá[bóyong'ana] khú/tsa	'went around'

(744/748) /Ø/ C-Initial 's/he just...a bit {khu'} /
's/he just {tsa}'...

yákha[kwa]	khú/tsa	‘fell’
yákha[lekha]	khú/tsa	‘left’
yákha[reeba]	khú/tsa	‘asked’
yákha[kulikha]	khú/tsa	‘named’
yákha[lakhuula]	khú/tsa	‘released’
yákha[seebula]	khú/tsa	‘said bye’
yákha[kalushitsa]	khú/tsa	‘returned’
yákha[hoombelitsa]	khú/tsa	‘comforted’

(745/749) /H/ C-Initial 's/he just...him/her a bit {khu'} /
's/he just {tsa'}...him/her'

yá'khámú[khwa] khú/tsa	'paid (her) dowry'
yá'khámú[beka] khú/tsa	'shaved'
yá'khámú[leera] khú/tsa	'brought'
yá'khámú[khalaka] khú/tsa	'cut'
yá'khámú[sitaaka] khú/tsa	'accused'
yá'khámú[boolitsa] khú/tsa	'seduced'
yá'khámú[tsuunzuuna] khú/tsa	'sucked'
yá'khámú[boyong'ana] khú/tsa	'went around'

(746/750) /Ø/ C-Initial 's/he just...him/her a bit {khú}' /
's/he just {tsa}...him/her'

yá ⁴ khámú[tsia] khú/tsa	'went for'
yá ⁴ khámú[lekha] khú/tsa	'left'
yá ⁴ khámú[loonda] khú/tsa	'asked'
yá ⁴ khámú[kulikha] khú/tsa	'named'
yá ⁴ khámú[lakhuula] khú/tsa	'released'
yá ⁴ khámú[seebula] khú/tsa	'said bye'
yá ⁴ khámú[kalushitsa] khú/tsa	'returned'
yá ⁴ khámú[hoombelitsa] khú/tsa	'comforted'

A.2.6 Immediate Past Negative

(751/755) /H/ C-Initial 's/he did not just...a bit {khú}' /
's/he did not just {tsa}...'

yá ⁴ khá[khwá] khú/tsa tá	'pay dowry'
yá ⁴ khá[lúma] khú/tsa tá	'bite'
yá ⁴ khá[téekha] khú/tsa tá	'cook'
yá ⁴ khá[khálaka] khú/tsa tá	'cut'
yá ⁴ khá[kálaanga] khú/tsa tá	'fry'
yá ⁴ khá[bóolitsa] khú/tsa tá	'seduce'
yá ⁴ khá[tsúunzuuna] khú/tsa tá	'suck'
yá ⁴ khá[bóyong'ana] khú/tsa tá	'go around'

(752/756) /Ø/ C-Initial 's/he did not just...a bit {khú}' /
's/he did not just {tsa}...'

yákha[kwa] khú/tsa tá	'fall'
yákha[lekha] khú/tsa tá	'leave'
yákha[reeba] khú/tsa tá	'ask'
yákha[kulikha] khú/tsa tá	'name'
yákha[lakhuula] khú/tsa tá	'release'
yákha[seebula] khú/tsa tá	'say bye'
yákha[kalushitsa] khú/tsa tá	'return'
yákha[hoombelitsa] khú/tsa tá	'comfort'

yá ⁴ khá[bóolitsɪ]	khú/tsa	‘seduce’
yá ⁴ khá[tsúunzuunɪ]	khú/tsa	‘suck’
yá ⁴ khá[bóyong’ane]	khú/tsa	‘go around’

(760/764) /Ø/ C-Initial ‘s/he just...a bit {khú}’ /
‘s/he just {tsa}...’

yákha[kwi]	khú/tsa	‘fall’
yákha[leshe]	khú/tsa	‘leave’
yákha[reebe]	khú/tsa	‘ask’
yákha[kulishɪ]	khú/tsa	‘name’
yákha[lakhuulɪ]	khú/tsa	‘release’
yákha[seebulɪ]	khú/tsa	‘say bye’
yákha[kalushitsɪ]	khú/tsa	‘return’
yákha[hoombelitsɪ]	khú/tsa	‘comfort’

(761/765) /H/ C-Initial ‘s/he just...him/her a bit {khú}’ /
‘s/he just {tsa}...him/her’

yá ⁴ khámú[rɛ]	khú/tsa	‘bury’
yá ⁴ khámú[beche]	khú/tsa	‘shave’
yá ⁴ khámú[leere]	khú/tsa	‘bring’
yá ⁴ khámú[khalache]	khú/tsa	‘cut’
yá ⁴ khámú[sitaache]	khú/tsa	‘accuse’
yá ⁴ khámú[boolitsɪ]	khú/tsa	‘seduce’
yá ⁴ khámú[tsuunzuunɪ]	khú/tsa	‘suck’
yá ⁴ khámú[boyong’ane]	khú/tsa	‘go around’

(762/766) /Ø/ C-Initial ‘s/he just...him/her a bit {khú}’ /
‘s/he just {tsa}...him/her’

yá ⁴ khámú[tsi]	khú/tsa	‘go for’
yá ⁴ khámú[leshe]	khú/tsa	‘leave’
yá ⁴ khámú[loonde]	khú/tsa	‘ask’
yá ⁴ khámú[kulishɪ]	khú/tsa	‘name’
yá ⁴ khámú[lakhuulɪ]	khú/tsa	‘release’
yá ⁴ khámú[seebulɪ]	khú/tsa	‘say bye’
yá ⁴ khámú[kalushitsɪ]	khú/tsa	‘return’

yá⁴khámú[hoombelitsɿ] khú/tsa ‘comfort’

A.2.8 Present

(767/771) /H/ C-Initial ‘s/he is...a bit {khú}’ /
‘s/he is just {tsa}...’

a[khweetsáángá]	khú/tsa	‘paying dowry’
a[lumaángá]	khú/tsa	‘biting’
a[teekháángá]	khú/tsa	‘cooking’
a[khalakáángá]	khú/tsa	‘cutting’
a[kalaangáángá]	khú/tsa	‘frying’
a[boolitsáángá]	khú/tsa	‘seducing’
a[tsuunzuunáángá]	khú/tsa	‘sucking’
a[boyong’ánáángá]	khú/tsa	‘going around’

(768/772) /Ø/ C-Initial ‘s/he is...a bit {khú}’ /
‘s/he is just {tsa}...’

a[kwiítsáanga]	khú/tsa	‘falling’
a[lekháanga]	khú/tsa	‘leaving’
a[reébáanga]	khú/tsa	‘asking’
a[kulíkháanga]	khú/tsa	‘naming’
a[lakhúulaanga]	khú/tsa	‘releasing’
a[seébúlaanga]	khú/tsa	‘saying bye’
a[kalúshítsaanga]	khú/tsa	‘returning’
a[hoómbélitsaanga]	khú/tsa	‘comforting’

(769/773) /H/ C-Initial ‘s/he is...him/her a bit {khú}’ /
‘s/he is just {tsa}...him/her’

amu[ré ⁴ étsáángá]	khú/tsa	‘burying’
amu[bé ⁴ káángá]	khú/tsa	‘shaving’
amu[lé ⁴ éráángá]	khú/tsa	‘bringing’
amu[khá ⁴ lákáángá]	khú/tsa	‘cutting’
amu[sí ⁴ táákáángá]	khú/tsa	‘accusing’
amu[bó ⁴ ólítsáángá]	khú/tsa	‘seducing’

amu[tsú⁴únzúúnáána] khú/tsa ‘sucking’
 amu[bó⁴yóng’ánaanga] khú/tsa ‘going around’

(770/774) /Ø/ C-Initial ‘s/he is...him/her a bit {khú}’ /
 ‘s/he is just {tsa}...him/her’

amu[tsítsáanga] khú/tsa ‘going for’
 amu[lekháanga] khú/tsa ‘leaving’
 amu[loóndáanga] khú/tsa ‘asking’
 amu[kulíkháanga] khú/tsa ‘naming’
 amu[lakhúulaanga] khú/tsa ‘releasing’
 amu[seébúlaanga] khú/tsa ‘saying bye’
 amu[kalúshítsaanga] khú/tsa ‘returning’
 amu[hoómbélitsaanga] khú/tsa ‘comforting’

A.2.9 Indefinite Future

(775/779) /H/ C-Initial ‘s/he will...a bit {khú}’ /
 ‘s/he will just {tsa}...’¹⁹

ali[khwa] khú/tsa ‘pay dowry’
 ali[luma] khú/tsa ‘bite’
 ali[teekhá] khú/tsa ‘cook’
 ali[khalaká] khú/tsa ‘cut’
 ali[kalaangá] khú/tsa ‘fry’
 ali[boolítsá] khú/tsa ‘seduce’
 ali[tsuunzuuná] khú/tsa ‘suck’
 ali[boyong’aná] khú/tsa ‘go around’

(776/780) /Ø/ C-Initial ‘s/he will...a bit {khú}’ /
 ‘s/he will just {tsa}...’

¹⁹Paradigm (775), with [khú], was recorded several times with varying tonal properties. The variant that SB appeared to be most comfortable describing as correct includes a H on the FV with a downstepped H on the enclitic. Paradigm (779), with [tsa], was also produced both with and without a H on the FV. The difference may be aspectual, with forms including a H on the FV denoting a sense of continuous action, while forms without a H on the FV denote an action that will be completed one.

ali[kwá] khú/tsa	‘fall’
ali[lekhá] khú/tsa	‘leave’
ali[reéba] khú/tsa	‘ask’
ali[kulíkha] khú/tsa	‘name’
ali[lakhúula] khú/tsa	‘release’
ali[seébúla] khú/tsa	‘say bye’
ali[kalúshítsa] khú/tsa	‘return’
ali[hoómbélitsa] khú/tsa	‘comfort’

(777/781) /H/ C-Initial ‘s/he will...him/her a bit {khú}’ /
‘s/he will just {tsa}...him/her’

alimu[rá] khú/tsa	‘bury’
alimu[béka] khú/tsa	‘shave’
alimu[léera] khú/tsa	‘bring’
alimu[khálaka] khú/tsa	‘cut’
alimu[sítaaka] khú/tsa	‘accuse’
alimu[bóolitsa] khú/tsa	‘seduce’
alimu[tsúunzuuna] khú/tsa	‘suck’
alimu[bóyong’ana] khú/tsa	‘go around’

(778/782) /Ø/ C-Initial ‘s/he will...him/her a bit {khú}’ /
‘s/he will just {tsa}...him/her’²⁰

alimu[tsíá] khú/tsa	‘go for’
alimu[lekhá] khú/tsa	‘leave’
alimu[loónda] khú/tsa	‘ask’
alimu[kulíkha] khú/tsa	‘name’
alimu[lakhúula] khú/tsa	‘release’
alimu[seébúla] khú/tsa	‘say bye’
alimu[kalúshítsa] khú/tsa	‘return’
alimu[hoómbélitsa] khú/tsa	‘comfort’

²⁰The forms in paradigm (782) seem three distinct tonal variants, all of which were judged acceptable: (i) H on the second mora of the stem, (ii) H on the object prefix, or (iii) L throughout. The first of these was produced spontaneously. The second was produced after the investigator attempted to produce (seemingly without success) and solicit a judgement on the acceptability of a tonal variant in which the verbal form was all L. Finally, a tonal variant in which the verbal form is all L was produced and judged as acceptable as well.

(783/787) /H/ C-Initial ‘...a bit {*khu*}!’ /
‘just {*tsa*}...!’

[khwa] khú/tsa	‘pay dowry’
[luma] khú/tsa	‘bite’
[teekhá] khú/tsa ²¹	‘cook’
[khalaká] khú/tsa	‘cut’
[kalaangá] khú/tsa	‘fry’
[boolitsá] khú/tsa	‘seduce’
[tsuunzuuná] khú/tsa	‘suck’
[boyong’aná] khú/tsa	‘go around’

(784/788) /Ø/ C-Initial ‘...a bit {*khu*}!’ /
‘just {*tsa*}...!’

[kwá] khú/tsa	‘fall’
[lé ¹ khá] khú/tsa	‘leave’
[réé ¹ bá] khú/tsa	‘ask’
[kúlí ¹ khá] khú/tsa	‘name’
[lákhúú ¹ lá] khú/tsa	‘release’
[séé ¹ búlá] khú/tsa	‘say bye’
[kálú ¹ shítsá] khú/tsa	‘return’
[hóómbé ¹ lítsá] khú/tsa	‘comfort’

(785/789) /H/ C-Initial ‘...him/her a bit {khú}!’ /
‘just {tsa}...him/her!’

mu[ré] khú/tsa	'pay (her) dowry'
mu[bé ¹ ché] khú/tsa	'shave'
mu[léé ¹ ré] khú/tsa	'bring'
mu[khá ¹ láché] khú/tsa	'cut'
mu[sí ¹ tááché] khú/tsa	'accuse'
mu[bóó ¹ lítsí] khú/tsa	'seduce'

²¹The archive includes two tonal variants of this form. The form with a H on the FV, i.e., [teekhá khu], conveys something like ‘cook anything, just cook something’, while a form with a H just on the enclitic, i.e., [teekha khú], advises the hearer not to overcook. A similar distinction can be made for ‘fry’.

mu[tsúú'nzúúní] khú/tsa 'suck'
 mu[bó'yóng'áné] khú/tsa 'go around'

(786/790) /Ø/ C-Initial '...him/her a bit {khú}!' /
 'just {tsa}...him/her!'

mu[tsí] khú/tsa 'go for'
 mu[léshé] khú/tsa 'leave'
 mu[lóó'ndé] khú/tsa 'ask'
 mu[kúlí'shí] khú/tsa 'name'
 mu[lákhú'úlí] khú/tsa 'release'
 mu[séébú'lí] khú/tsa 'say bye'
 mu[kálú'shítsí] khú/tsa 'return'
 mu[hóómbé'lítsí] khú/tsa 'comfort'

A.2.11 Imperative_{sg} Negative

(791/795) /H/ C-Initial 'do not...a bit {khú}!' /
 'do not just {tsa}...!'

ukha[khwa] khú/tsa tá 'pay dowry'
 ukha[luma] khú/tsa tá 'bite'
 ukha[teekha] khú/tsa tá 'cook'
 ukha[khalaka] khú/tsa tá 'cut'
 ukha[kalaanga] khú/tsa tá 'fry'
 ukha[boolitsa] khú/tsa tá 'seduce'
 ukha[tsuunzuuna] khú/tsa tá 'suck'
 ukha[boyong'ana] khú/tsa tá 'go around'

(792/796) /Ø/ C-Initial 'do not...a bit {khú}!' /
 'do not just {tsa}...!'

ukha[kwá] khú/tsa tá 'fall'
 ukha[lekhá] khú/tsa tá 'leave'
 ukha[reéba] khú/tsa tá 'ask'
 ukha[kulíkha] khú/tsa tá 'name'
 ukha[lakhúula] khú/tsa tá 'release'

ukha[seébula] khú/tsa tá	‘say bye’
ukha[kalúshitsa] khú/tsa tá	‘return’
ukha[hoómbélitsa] khú/tsa tá	‘comfort’

(793/797) /H/ C-Initial ‘do not...him/her a bit {khú}!’ /
‘do not just {tsa}...him/her!’

ukhamu[rá] khú/tsa tá	‘bury’
ukhamu[béka] khú/tsa tá	‘shave’
ukhamu[léera] khú/tsa tá	‘bring’
ukhamu[khálaka] khú/tsa tá	‘cut’
ukhamu[sítaaka] khú/tsa tá	‘accuse’
ukhamu[bóolitsa] khú/tsa tá	‘seduce’
ukhamu[tsúunzuuna] khú/tsa tá	‘suck’
ukhamu[bóyong’ana] khú/tsa tá	‘go around’

(794/798) /Ø/ C-Initial ‘do not...him/her a bit {khú}!’ /
‘do not just {tsa}...him/her!’

ukhamu[tsíá] khú/tsa tá	‘go for’
ukhamu[lekhá] khú/tsa tá	‘leave’
ukhamu[loónda] khú/tsa tá	‘ask’
ukhamu[kulíkha] khú/tsa tá	‘name’
ukhamu[lakhúula] khú/tsa tá	‘release’
ukhamu[seébula] khú/tsa tá	‘say bye’
ukhamu[kalúshitsa] khú/tsa tá	‘return’
ukhamu[hoómbélitsa] khú/tsa tá	‘comfort’

A.2.12 Subjunctive

(799/803) /H/ C-Initial ‘let him/her...a bit {khú}!’ /
‘let him/her just {tsa}...!’

a[khwí] khú/tsa	‘pay dowry’
a[lumí] khú/tsa	‘bite’
a[teeshé] khú/tsa	‘cook’
a[khalaché] khú/tsa	‘cut’

a[kalaanjé] khú/tsa	‘fry’
a[boolitsí] khú/tsa	‘seduce’
a[tsuunzuúne] khú/tsa	‘suck’
a[boyong’áne] khú/tsa	‘go around’

(800/804) /Ø/ C-Initial ‘let him/her...a bit {khú}!’ /
‘let him/her just {tsa}...!’

a[kwí] khú/tsa	‘fall’
a[leshé] khú/tsa	‘leave’
a[reebé] khú/tsa	‘ask’
a[kulishí] khú/tsa	‘name’
a[lakhuúli] khú/tsa	‘release’
a[seebulí] khú/tsa	‘say bye’
a[kalushítsi] khú/tsa	‘return’
a[hoombelítsi] khú/tsa	‘comfort’

(801/805) /H/ C-Initial ‘let him/her...him/her a bit {khú}!’ /
‘let him/her just {tsa}...him/her!’

amu[ré] khú/tsa	‘pay (her) dowry’
amu[béche] khú/tsa	‘shave’
amu[léere] khú/tsa	‘bring’
amu[khálache] khú/tsa	‘cut’
amu[sítaache] khú/tsa	‘accuse’
amu[bóolitsi] khú/tsa	‘seduce’
amu[tsúunzuuni] khú/tsa	‘suck’
amu[bóyong’áne] khú/tsa	‘go around’

(802/806) /Ø/ C-Initial ‘let him/her...him/her a bit {khú}!’ /
‘let him/her just {tsa}...him/her!’

amu[tsí] khú/tsa	‘go for’
amu[leshé] khú/tsa	‘leave’
amu[loónde] khú/tsa	‘ask’
amu[kulíshi] khú/tsa	‘name’
amu[lakhúuli] khú/tsa	‘release’
amu[seébuli] khú/tsa	‘say bye’

amu[kalúshitsɪ] khú/tsa 'return'
 amu[hoómbélitsɪ] khú/tsa 'comfort'

A.2.13 Hesternal Perfective

(807/811) /H/ C-Initial 's/he...a bit {khú}!' /
 's/he just {tsa}...!'

ya[khwéélé] khú/tsa 'paid dowry'
 ya[lúmí] khú/tsa 'bit'
 ya[téeshí] khú/tsa 'cooked'
 ya[khálááché] khú/tsa 'cut'
 ya[káláánjí] khú/tsa 'fried'
 ya[bóólítsí] khú/tsa 'seduced'
 ya[tsúúnzúúní] khú/tsa 'sucked'
 ya[bóyóng'ááné] khú/tsa 'went around'

(808/812) /Ø/ C-Initial 's/he...a bit {khú}!' /
 's/he just {tsa}...!'

ya[kwíí'lí] khú/tsa 'fell'
 ya[léshí] khú/tsa 'left'
 ya[réé'bí] khú/tsa 'asked'
 ya[kúlíí'shí] khú/tsa 'named'
 ya[lákhú'úlí] khú/tsa 'released'
 ya[séé'búúlí] khú/tsa 'said bye'
 ya[kálú'shíítsí] khú/tsa 'returned'
 ya[hóómbé'líítsí] khú/tsa 'comforted'

(809/813) /H/ C-Initial 's/he...him/her a bit {khú}!' /
 's/he just {tsa}...him/her!'

yamu[ré'élé] khú/tsa 'paid (her) dowry'
 yamu[bé'chí] khú/tsa 'shaved'
 yamu[lé'érí] khú/tsa 'brought'
 yamu[khá'lááché] khú/tsa 'cut'
 yamu[sí'tááchí] khú/tsa 'accused'

yamu[bó ⁴ ólítsí] khú/tsa	‘seduced’
yamu[tsú ⁴ únzúúní] khú/tsa	‘sucked’
yamu[bó ⁴ yóng ⁴ ááné] khú/tsa	‘went around’

(810/814) /Ø/ C-Initial ‘s/he...*him/her a bit {khú}!*’ /
‘s/he just {tsa}...*him/her!*’

yamu[tsíí ⁴ lí] khú/tsa	‘went for’
yamu[léshí] khú/tsa	‘left’
yamu[lóó ⁴ ndí] khú/tsa	‘asked’
yamu[kúlíí ⁴ shí] khú/tsa	‘named’
yamu[lákhú ⁴ úlí] khú/tsa	‘released’
yamu[séé ⁴ búúlí] khú/tsa	‘said bye’
yamu[kálú ⁴ shíítsí] khú/tsa	‘returned’
yamu[hóómbé ⁴ líítsí] khú/tsa	‘comforted’

A.2.14 Perfect (2nd Sg)

(815/819) /H/ C-Initial ‘you have...*a bit {khú}!*’ /
‘you have just {tsa}...!’

u[khweele] khú/tsa	‘paid dowry’
u[lumi] khú/tsa	‘bitten’
u[teeshi] khú/tsa	‘cooked’
u[khalaachε] khú/tsa	‘cut’
u[kalaanji] khú/tsa	‘fried’
u[booliitsi] khú/tsa	‘seduced’
u[tsuunzuuni] khú/tsa	‘sucked’
u[boyong’aanε] khú/tsa	‘gone around’

(816/820) /Ø/ C-Initial ‘you have...*a bit {khú}!*’ /
‘you have just {tsa}...!’

u[kwiili] khú/tsa	‘fallen’
u[leshi] khú/tsa	‘left’
u[reebi] khú/tsa	‘asked’
u[kuliishi] khú/tsa	‘named’

u[lakhuuli] khú/tsa	‘released’
u[seebuuli] khú/tsa	‘said bye’
u[kalushiitsɪ] khú/tsa	‘returned’
u[hoombeliitsɪ] khú/tsa	‘comforted’

(817/821) /H/ C-Initial ‘you have...him/her a bit {khú}!’ /
‘you have just {tsa}...him/her!’

umu[reele] khú/tsa	‘paid (her) dowry’
umu[bechi] khú/tsa	‘shaved’
umu[leeri] khú/tsa	‘brought’
umu[khalaache] khú/tsa	‘cut’
umu[sitaachi] khú/tsa	‘accused’
umu[booliitsɪ] khú/tsa	‘seduced’
umu[tsuunzuuni] khú/tsa	‘sucked’
umu[boyong’aane] khú/tsa	‘gone around’

(818/822) /Ø/ C-Initial ‘you have...him/her a bit {khú}!’ /
‘you have just {tsa}...him/her!’

umu[tsiili] khú/tsa	‘gone for’
umu[leshi] khú/tsa	‘left’
umu[loondi] khú/tsa	‘asked’
umu[kuliishi] khú/tsa	‘named’
umu[lakhuuli] khú/tsa	‘released’
umu[seebuuli] khú/tsa	‘said bye’
umu[kalushiitsɪ] khú/tsa	‘returned’
umu[hoombeliitsɪ] khú/tsa	‘comforted’

A.2.15 Habitual

(823/827) /H/ C-Initial ‘s/he is always/ever...a bit {khú}!’ /
‘s/he is always/ever just {tsa}...’

yaá[‘khwá] khú/tsa	‘paying dowry’
yaá[‘lúmá] khú/tsa	‘biting’
yaá[‘téékhá] khú/tsa	‘cooking’

yaá[⁺ kháláká] khú/tsa	‘cutting’
yaá[⁺ káláángá] khú/tsa	‘frying’
yaá[⁺ bóólítsá] khú/tsa	‘seducing’
yaá[⁺ tsúúnzúúná] khú/tsa	‘sucking’
yaá[⁺ bóyóng’áná] khú/tsa	‘going around’

(824/828) /Ø/ C-Initial ‘s/he is always/ever...a bit {khú}’ /
‘s/he is always/ever just {tsa}...’

yaá[⁺ kwá] khú/tsa	‘falling’
yaá[⁺ lékhá] khú/tsa	‘leaving’
yaá[⁺ réébá] khú/tsa	‘asking’
yaá[⁺ kúlíkhá] khú/tsa	‘naming’
yaá[⁺ lákhúúlá] khú/tsa	‘releasing’
yaá[⁺ séébúlá] khú/tsa	‘saying bye’
yaá[⁺ kálúshítsá] khú/tsa	‘returning’
yaá[⁺ hóómbélítsá] khú/tsa	‘comforting’

(825/829) /H/ C-Initial ‘s/he is always/ever...him/her a bit {khú}’ /
‘s/he is always/ever just {tsa}...him/her’

yaá’mú[khwá] khú/tsa	‘paying (her) dowry’
yaá’mú[bé’ká] khú/tsa	‘shaving’
yaá’mú[lé’érá] khú/tsa	‘bringing’
yaá’mú[khá’láká] khú/tsa	‘cutting’
yaá’mú[sí’tááká] khú/tsa	‘accusing’
yaá’mú[bó’ólítsá] khú/tsa	‘seducing’
yaá’mú[tsú’únzúúná] khú/tsa	‘sucking’
yaá’mú[bó’yóng’áná] khú/tsa	‘going around’

(826/830) /Ø/ C-Initial ‘s/he is always/ever...him/her a bit {khú}’ /
‘s/he is always/ever just {tsa}...him/her’

yaá’mú[tsíá] khú/tsa	‘going for’
yaá’mú[lékhá] khú/tsa	‘leaving’
yaá’mú[lóóndá] khú/tsa	‘asking’
yaá’mú[kúlíkhá] khú/tsa	‘naming’
yaá’mú[lákhúúlá] khú/tsa	‘releasing’

yaá'mú[séébúlá] khú/tsa 'saying bye'
yaá'mú[kálúshítsá] khú/tsa 'returning'
yaá'mú[hóómbélítsá] khú/tsa 'comforting'

A.3 Passives, Questions, and Subject Relatives

This portion of Appendix A constitutes the pilot questionnaire I prepared to survey the properties of the passive suffix, yes/no and WH questions, and subject relatives. For each construction surveyed, a small paradigm consisting of 4-6 verb forms was generated to probe each of these four topics.

These data were not discussed in the thesis. The transcriptions below are impressionistic and require further verification and analysis.

A.3.1 Near Future

(831) Passives '*s/he will be...*'

ala[khálakwa]	'cut'
ala[tsúunzuunwa]	'sucked'
ala[lakhuulwa]	'released'
ala[kalushilwa]	'defended'

(832) Yes/No Questions '*will s/he...?*'

ala[khálaka]?	'cut'
ala[tsúunzuuna]?	'suck'
ala[lakhuula]?	'release'
ala[kalushila]?	're-do'

(833) WH-Questions '*who will s/he...?*'

ala[khá ¹ láká] bí?	'cut'
ala[tsú ¹ únzúúná] bí?	'suck'

ala[lakhúúla] bi? 'release'
 ala[kalúshítsa] bi? 'return'

(834) Subject Relatives '*the person {muundu} / the man {musáatsa} who will...*'

muúndu u[khalaká] 'cut'
 muúndu u[lakhúula] 'release'
 musáatsa u[khalaká] 'cut'
 musáatsa u[lakhúula] 'release'

A.3.2 Near Future Negative

(835) Passives '*s/he will not be...*'

ala[khá'lákwá] tá 'cut'
 ala[tsú'únzúúnwá] tá 'sucked'
 ala[lákhúúlzá] tá 'released'
 ala[kálúshítswá] tá 'returned'

(836) Yes/No Questions '*will s/he not...?*'

ala[khá'láká] tá? 'cut'
 ala[tsú'únzúúná] tá? 'suck'
 ala[lákhúúlá] tá? 'release'
 ala[kálúshítsá] tá? 'return'

(837) WH-Questions '*who will s/he not...?*'

ala[khá'láká] bína tá? 'cut'
 ala[tsú'únzúúná] bína tá? 'suck'
 ala[lákhúúlá] bína tá? 'release'
 ala[kálúshítsá] bína tá? 'return'

(838) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who will not...*’

muúndu ukhá[khalaka] tá	‘cut’
muúndu ukhá[tsuunzuuna] tá	‘suck’
muúndu ukhá[‘lákhuúla] tá	‘release’
musáatsa ukhá[khalaka] tá	‘cut’
musáatsa ukhá[tsuunzuuna] tá	‘suck’
musáatsa ukhá[‘lákhuúla] tá	‘release’

A.3.3 Remote Past

(839) Passives ‘*s/he was...*’

yaa[khá‘lákwa]	‘cut’
yaa[tsú‘únzúúnwá]	‘sucked’
yaa[lá‘khúúlwá]	‘released’
yaa[ká‘lúshítswá]	‘returned’

(840) Yes/No Questions ‘*did s/he...?*’

yaa[khálaka]?	‘cut’
yaa[tsúunzuuna]?	‘suck’
yaa[lákhuula]?	‘release’
yaa[kálushitsa]?	‘return’

(841) WH-Questions ‘*who did s/he...?*’

yaa[khálaka] bi?	‘cut’
yaa[tsúunzuuna] bi?	‘suck’
yaa[lákhuula] bi?	‘release’
yaa[kálushitsa] bi?	‘return’

(842) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who...*’

muúndu waa[khálaka]	‘cut’
muúndu waa[lákhuala]	‘released’
musáatsa waa[khálaka]	‘cut’
musáatsa waa[lákhuala]	‘released’

A.3.4 Remote Past Negative

(843) Passives ‘*s/he was not...*’

yaa[khá ¹ lák ^{wá}]	¹ tá	‘cut’
yaa[tsú ¹ únzúún ^{wá}]	¹ tá	‘sucked’
yaa[lá ¹ khúúl ^{wá}]	¹ tá	‘released’
yaa[ká ¹ lúshít ^{wá}]	¹ tá	‘returned’

(844) Yes/No Questions ‘*did s/he not...?*’

yaa[khálaka]	tá?	‘cut’
yaa[tsúunzuuna]	tá?	‘suck’
yaa[lákhuala]	tá?	‘release’
yaa[kálushitsa]	tá?	‘return’

(845) WH-Questions ‘*who did s/he not...?*’

yaa[khálaka]	bi tá?	‘cut’
yaa[tsúunzuuna]	bi tá?	‘suck’
yaa[lákhuala]	bi tá?	‘release’
yaa[kálushitsa]	bi tá?	‘return’

(846) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who did not...*’

muúndu waa[khálaka] tá ‘cut’
 muúndu waa[lákhula] tá ‘release’
 musáatsa waa[khálaka] tá ‘cut’
 musáatsa waa[lákhula] tá ‘release’

A.3.5 Immediate Past

(847) Passives ‘*s/he was just...*’

yá⁺khá[khálakwa] ‘cut’
 yá⁺khá[tsúunzuunwa] ‘sucked’
 yákha[lakhuulwa] ‘released’
 yákha[kalushitswa] ‘returned’

(848) Yes/No Questions ‘*did s/he just...?*’

yá⁺khá[khálaka]? ‘cut’
 yá⁺khá[tsúunzuuna]? ‘suck’
 yákha[lakhuula]? ‘release’
 yákha[kalushitsa]? ‘return’

(849) WH-Questions ‘*who did s/he just...?*’

yá⁺khá[khá⁺láká] bi? ‘cut’
 yá⁺khá[tsú⁺úzúúná] bi? ‘suck’
 yá⁺khá[lákhúula] bi? ‘release’
 yá⁺khá[kálúshítsa] bi? ‘return’

(850) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who just...*’

muúndu wá⁺khá[khá⁺láká] ‘cut’

muúndu wá ⁺ khá[tsú ⁺ únzúúná]	‘sucked’
muúndu wá ⁺ khá[lákhúula]	‘released’
musáatsa wá ⁺ khá[khá ⁺ láká]	‘cut’
musáatsa wá ⁺ khá[tsú ⁺ únzúúná]	‘sucked’
musáatsa wá ⁺ khá[lákhúula]	‘released’

A.3.6 Immediate Past Negative

(851) Passives ‘*s/he was not just...*’

yá ⁺ khá[khá ⁺ lákwa]	tá	‘cut’
yá ⁺ khá[tsú ⁺ únzúúnwá]	tá	‘sucked’
yá ⁺ khá[lákhúúlwá]	tá	‘released’
yá ⁺ khá[kálúshítswá]	tá	‘returned’

(852) Yes/No Questions ‘*did s/he not just...?*’

yá ⁺ khá[khá ⁺ laka]	tá?	‘cut’
yá ⁺ khá[tsú ⁺ únzúúná]	tá?	‘suck’
yá ⁺ khá[lákhúúlá]	tá?	‘release’
yá ⁺ khá[kálúshítsá]	tá?	‘return’

(853) WH-Questions ‘*who did s/he not just...?*’

yá ⁺ khá[khá ⁺ láká]	bi tá?	‘cut’
yá ⁺ khá[tsú ⁺ únzúúná]	bi tá?	‘suck’
yá ⁺ khá[lákhúula]	bi tá?	‘release’
yá ⁺ khá[kálúshítsa]	bi tá?	‘return’

(854) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who did not just...*’

muúndu wá ⁺ khá[khá ⁺ láká]	⁺ tá	‘cut’
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muúndu wá ¹ khá[tsú ¹ únzúúná]	¹ tá	‘suck’
muúndu wá ¹ khá[lákhúula]	tá	‘release’
musáatsa wá ¹ khá[khá ¹ láká]	¹ tá	‘cut’
musáatsa wá ¹ khá[tsú ¹ únzúúná]	¹ tá	‘suck’
musáatsa wá ¹ khá[lákhúula]	tá	‘release’

A.3.7 Remote Future

(855) Passives ‘*s/he might be...*’

yakha[khálakwi]	‘cut’
yakha[tsúunzuunwi]	‘sucked’
yakha[lakhúulwi]	‘released’
yakha[kalúshitswi]	‘returned’

(856) Yes/No Questions ‘*might s/he...?*’

yakha[khálachε]	‘cut’
yakha[tsúunzuunɪ]	‘suck’
yakha[lakhúulɪ]	‘release’
yakha[kalúshitsɪ]	‘return’

(857) WH-Questions ‘*who might s/he...?*’

yakha[khá ¹ láché]	bí?	‘cut’
yakha[tsú ¹ úzúúní]	bí?	‘suck’
yakha[lakhúulɪ]	bi?	‘release’
yakha[kalúshítsɪ]	bi?	‘return’

(858) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who might...*’

muúndu wá ¹ khá[khá ¹ láché]	‘cut’
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muúndu wá ¹ khá[tsú ¹ únzúúní]	‘suck’
muúndu wá ¹ khá[lákhúulí]	‘release’
musáatsa wá ¹ khá[khá ¹ láché]	‘cut’
musáatsa wá ¹ khá[tsú ¹ únzúúní]	‘suck’
musáatsa wá ¹ khá[lákhúulí]	‘release’

A.3.8 Remote Future Negative

(859) Passives ‘*s/he might not be...*’

yakha[khá ¹ lákwi]	tá	‘cut’
yakha[tsú ¹ únzúúnwí]	tá	‘sucked’
yakha[lákhúulwi]	tá	‘released’
yakha[kalúshitswi]	tá	‘returned’

(860) Yes/No Questions ‘*might s/he not...?*’

yakha[khá ¹ láché]	tá?	‘cut’
yakha[tsú ¹ únzúúní]	tá?	‘suck’
yakha[lákhúulí]	tá?	‘release’
yakha[kalúshitsí]	tá?	‘return’

(861) WH-Questions ‘*who might s/he not...?*’

yakha[khá ¹ láché]	bí ‘tá?	‘cut’
yakha[tsú ¹ únzúúní]	bí ‘tá?	‘suck’
yakha[lákhúulí]	bit á?	‘release’
yakha[kalúshítsí]	bi tá?	‘return’

(862) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who might not...*’

muúndu wá ¹ khá[khá ¹ láché]	‘tá	‘cut’
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muúndu wá ¹ khá[tsúúnzúúní]	¹ tá	‘suck’
muúndu wá ¹ khá[lákhúulí]	tá	‘release’
musáatsa wá ¹ khá[kháláché]	¹ tá	‘cut’
musáatsa wá ¹ khá[tsúúnzúúní]	¹ tá	‘suck’
musáatsa wá ¹ khá[lákhúulí]	tá	‘release’

A.3.9 Present

(863) Passives ‘*s/he is being...*’

a[khalakwáá ¹ ngúa]	‘cutting’
a[tsuunzuunwáá ¹ ngúa]	‘sucking’
a[lakhú ¹ úl ¹ wáángúa]	‘releasing’
a[kalúshítswaangua]	‘returning’

(864) Yes/No Questions ‘*is s/he...?*’

a[khalakáánga]?	‘cutting’
a[tsuunzuunáánga]?	‘sucking’
a[lakhú ¹ ulaanga]?	‘releasing’
a[kalúshítsaanga]?	‘returning’

(865) WH-Questions ‘*who is s/he...?*’

a[khalakáá ¹ ngá] bi?	‘cutting’
a[tsuunzuunáá ¹ ngá] bi?	‘sucking’
a[lakhú ¹ úl ¹ áángá] bi?	‘releasing’
a[kalúshí ¹ tsáángá] bi?	‘returning’

(866) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who is...*’

muúndu u[khá ¹ lákáánga]	‘cutting’
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muúndu u[lákhúulaanga] ‘releasing’
 musáatsa u[khá‘lákáánga] ‘cutting’
 musáatsa u[lákhúulaanga] ‘releasing’

A.3.10 Present Negativ/e

(867) Passives ‘*s/he is not being...*’

a[khalakwáá‘ngwá] tá ‘cutting’
 a[tsuunzuunwáá‘ngwá] tá ‘sucking’
 a[lakhú‘úlwáángwá] tá ‘releasing’
 a[kalúshí‘tswáángwá] tá ‘returning’

(868) Yes/No Questions ‘*is s/he not...?*’

a[khalakáá‘ngá] tá? ‘cutting’
 a[tsuunzuunáá‘ngá] tá? ‘sucking’
 a[lakhú‘úláángá] tá? ‘releasing’
 a[kalúshí‘tsáángá] tá? ‘returning’

(869) WH-Questions ‘*who is s/he not...?*’

a[khalakáá(‘ngá)] ‘bí tá? ‘cutting’
 a[tsuunzuunáá(‘ngá)] ‘bí tá? ‘sucking’
 a[lakhú‘úlá‘á(ngá)] bí tá? ‘releasing’
 a[kalúshí‘tsáá(ngá)] bí tá? ‘returning’

(870) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who is not...*’

muúndu ukhá[‘khálákáánga] ‘cutting’
 muúndu ukhá[tsuunzuunaanga] ‘sucking’
 muúndu ukhá[‘lakhúulaanga] ‘releasing’

musáatsa ukhá[⁺ khálákáánga]	‘cutting’
musáatsa ukhá[tsuunzuunaanga]	‘sucking’
musáatsa ukhá[⁺ lák húulaanga]	‘releasing’

A.3.11 Indefinite Future

(871) Passives ‘*s/he will be...*’

ali[khalakwá]	‘cut’
ali[tsuunzuunwá]	‘sucked’
ali[lakhú ⁺ úl wá]	‘released’
ali[kalú ⁺ shítswá]	‘returned’

(872) Yes/No Questions ‘*will s/he...?*’²²

ali[khalaká]?	‘cut’
ali[tsuunzuuná]?	‘suck’
ali[lakhúula]?	‘release’
ali[kalúshitsa]?	‘return’

(873) WH-Questions ‘*who will s/he...?*’

ali[khalaká] bí?	‘cut’
ali[tsuunzuuná] bí?	‘suck’
ali[lák húúlá] bí?	‘release’
ali[kalushí ⁺ tsá] bí?	‘return’

(874) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who will...*’

muúndu ulí[⁺ kháláká]	‘cut’
muúndu ulí[⁺ lák húula]	‘release’

²²The first recording of this paradigm includes declarative, rather than interrogative, productions.

musáatsa ulí[⁺kháláká] ‘cut’
 musáatsa ulí[⁺lákhúula] ‘release’

A.3.12 Indefinite Future Negative

(875) Passives ‘*s/he will not be...*’

ali[khalakwá] ⁺tá ‘cut’
 ali[tsuunzuunwá] ⁺tá ‘sucked’
 ali[lakhú⁺úlwá] ⁺tá ‘released’
 ali[kalúshí⁺tswá] ⁺tá ‘returned’

(876) Yes/No Questions ‘*will s/he not...?*’

ali[khalaká] ⁺tá? ‘cut’
 ali[tsuunzuuná] ⁺tá? ‘suck’
 ali[lakhúula] tá? ‘release’
 ali[kalúshítsa] tá? ‘return’

(877) WH-Questions ‘*who will s/he not...?*’

ali[khalaká] bi tá? ‘cut’
 ali[tsuunzuuná] bi tá? ‘suck’
 ali[lakhúula] bi tá? ‘release’
 ali[kalushítsa] bi tá? ‘return’

(878) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who will not...*’

muúndu ulí[⁺kháláká] ⁺tá ‘cut’
 muúndu ulí[⁺lákhúula] tá ‘release’
 musáatsa ulí[⁺kháláká] ⁺tá ‘cut’
 musáatsa ulí[⁺lákhúula] tá ‘release’

A.3.13 Imperative_{sg}(879) Passives ‘*be...!*’

ali[khalakúa]	‘cut’
ali[tsúúnzúúnúa]	‘sucked’
ali[lákhúú ¹ lua]	‘released’
ali[kálúshí ¹ tsúa]	‘returned’

(880) Yes/No Questions ‘*...!?*’

ali[khalaká]?	‘cut’
ali[tsuunzuuná]?	‘suck’
ali[lakhúula]?	‘release’
ali[kálúshí ¹ tsá]?	‘return’

(881) WH-Questions ‘*...!?*’

ali[khalaka] bí?	‘cut’
ali[tsuunzuuna] bí?	‘suck’
ali[lakhuula] bi?	‘release’
ali[kalushitsa] bi?	‘return’

A.3.14 Imperative_{sg} Negative(882) Passives ‘*do not be...!*’

ukha[khalakwa] tá	‘cut’
ukha[tsuunzuunwa] tá	‘sucked’
ukha[lakhú ¹ úlwá] ¹ tá	‘released’
ukha[kalú ¹ shítswá] ¹ tá	‘returned’

(883) Yes/No Questions ‘*do not...!?*’

ukha[khalaka] tá?	‘cut’
ukha[tsuunzuuna] tá?	‘suck’
ukha[lakhúula] tá?	‘release’
ukha[kalúshítsa] tá?	‘return’

(884) WH-Questions ‘*do not...who!?*’²³

ukha[khalaka] bi tá?	‘cut’
ukha[tsuunzuuna] bi tá?	‘suck’
ukha[lakhúula] bi tá?	‘release’
ukha[kalúshítsa] bi tá?	‘return’

A.3.15 Crastinal Future

(885) Passives ‘*s/he will be...*’

naa[khalakwí]	‘cut’
naa[tsuunzuú ⁴ nwí]	‘sucked’
naa[lakhuú ⁴ lwí]	‘released’
naa[kalushí ⁴ tswí]	‘returned’

(886) Yes/No Questions ‘*will s/he...?*’

naa[khalaché]?	‘cut’
naa[tsuunzuúni]?	‘suck’
naa[lakhuúli]?	‘release’
naa[kalushítsi]?	‘return’

²³The situation in which this form might be used is one in which the speaker is not prepared or willing to carry out the negative command given to him/her, rather a situation in which the speaker is not aware of the identify of the person upon whom the addressee believes the speaker should not perform an action..

(887) WH-Questions ‘*who will s/he...?*’

naa[khalaché] bi? ‘cut’
 naa[tsuunzuúni] bi? ‘suck’
 naa[lakhuúli] bi? ‘release’
 naa[kalushítsi] bi? ‘return’

(888) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who will...*’

muúndu wanaa[khalaché] ‘cut’
 muúndu wanaa[lakhuúli] ‘release’
 musáatsa wanaa[khalaché] ‘cut’
 musáatsa wanaa[lakhuúli] ‘release’

A.3.16 Crastinal Future Negative

(889) Passives ‘*s/he will not be...*’

naa[khalakwí] ‘tá ‘cut’
 naa[tsuunzuú‘nwí] ‘tá ‘sucked’
 naa[lakhuú‘lwí] ‘tá ‘released’
 naa[kalushí‘tswí] ‘tá ‘returned’
 naa[kalushí‘tsílwí] ‘tá ‘returned for’

(890) Yes/No Questions ‘*will s/he not...?*’

naa[khalaché] ‘tá? ‘cut’
 naa[tsuunzuúni] tá? ‘suck’
 naa[lakhuúli] tá? ‘release’
 naa[kalushítsi] tá? ‘return’

(891) WH-Questions ‘*who will s/he not...?*’

naa[khalaché] bi tá? ‘cut’
 naa[tsuunzuúni] bi tá? ‘suck’
 naa[lakhuúli] bi tá? ‘release’
 naa[kalushítsi] bi tá? ‘return’

(892) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who will not...*’

muúndu wanaa[khalaché] ‘tá ‘cut’
 muúndu wanaa[lakhuúli] tá ‘release’
 musáatsa wanaa[khalaché] ‘tá ‘cut’
 musáatsa wanaa[lakhuúli] tá ‘release’

A.3.17 Imperative_{pl}

(893) Passives ‘*be...!*’

[khalakwí] ‘cut’
 [tsuunzuunwí] ‘sucked’
 [lákhuú‘lwí] ‘released’
 [kálúshí‘tswí] ‘returned’

(894) Yes/No Questions ‘*...!?*’

[khalachí]? ‘cut’
 [tsuunzuuní]? ‘suck’
 [lákhuú‘lí]? ‘release’
 [kálúshí‘tsí]? ‘return’

(895) WH-Questions ‘*...!?*’

[khalachí] bí?	‘cut’
[tsuunzuuní] bí?	‘suck’
[lakhúú‘lí] bi?	‘release’
[kálúshí‘tsí] bi?	‘return’

A.3.18 Imperative_{pl} Negative

(896) Passives ‘do not be...!’

mukha[khalakwi] tá	‘cut’
mukha[tsuunzuunwi] tá	‘sucked’
mukha[lakhú‘úlwí] ‘tá	‘released’
mukha[kalúshí‘tswí] ‘tá	‘returned’
mukha[kalúshí‘tsílwí] ‘tá	‘returned for’

(897) Yes/No Questions ‘do not...!?’

mukha[khalachi] tá?	‘cut’
mukha[tsuunzuuni] tá?	‘suck’
mukha[lakhúuli] tá?	‘release’
mukha[kalúshítsi] tá?	‘return’

(898) WH-Questions ‘do not...who!?’

mukha[khalachi] bi tá?	‘cut’
mukha[tsuunzuuni] bi tá?	‘suck’
mukha[lakhúuli] bi tá?	‘release’
mukha[kalúshítsi] bi tá?	‘return’

A.3.19 Subjunctive

(899) Passives *'let him/her be...'*

a[khalakwí]	'cut'
a[tsuunzuú ⁺ nwí]	'sucked'
a[lakhuú ⁺ lwí]	'released'
a[kalushí ⁺ tswí]	'returned'
a[kalushí ⁺ tsilwí]	'returned for'

(900) Yes/No Questions *'let him/her...?'*

a[khalaché]?	'cut'
a[tsuunzuúni]?	'suck'
a[lakhuúli]?	'release'
a[kalushítsi]?	'return'

(901) WH-Questions *'let him/her...who?'*

a[khalaché] bi?	'cut'
a[tsuunzuúni] bi?	'suck'
a[lakhuúli] bi?	'release'
a[kalushítsi] bi?	'return'

A.3.20 Subjunctive Negative

(902) Passives *'let him/her not be...'*

a[khalakwí] ⁺ tá	'cut'
a[tsuunzuú ⁺ nwí] ⁺ tá	'sucked'
a[lakhuú ⁺ lwí] ⁺ tá	'released'
a[kalushí ⁺ tswí] ⁺ tá	'returned'
a[kalushí ⁺ tsílwí] ⁺ tá	'returned for'

(903) Yes/No Questions *'let him/her not...?'*

a[khalaché] 'tá? 'cut'
 a[tsuunzuúni] tá? 'suck'
 a[lakhuúli] tá? 'release'
 a[kalushítsi] tá? 'return'

(904) WH-Questions *'let him/her not...who?'*

a[khalaché] bi tá? 'cut'
 a[tsuunzuúni] bi tá? 'suck'
 a[lakhuúli] bi tá? 'release'
 a[kalushítsi] bi tá? 'return'

(905) Subject Relatives *'the person {muundu} / the man {musáatsa} who should not...'*

muúndu ukhá[khalaka] tá 'cut'
 muúndu ukhá[¹lakhúula] tá 'release'
 musáatsa ukhá[khalaka] 'tá 'cut'
 musáatsa ukhá[¹lakhúula] tá 'release'

A.3.21 Hesternal Perfective

(906) Passives *'s/he was...'*

ya[khálááchwí] 'cut'
 ya[tsúúnzúúnwí] 'sucked'
 ya[lákhúú¹lwí] 'released'
 ya[kálú¹shíítswí] 'returned'

(907) Yes/No Questions *'s/he...?'*

ya[khálááché]? ‘cut’
 ya[tsúúnzúúní]? ‘sucked’
 ya[lákhú‘úlí]? ‘released’
 ya[kálú‘shíítsí]? ‘returned’

(908) WH-Questions ‘*s/he...who?*’

ya[khalaache] bí? ‘cut’
 ya[tsuunzuuni] bí? ‘sucked’
 ya[lakhuuli] bí? ‘released’
 ya[kalushiitsi] bí? ‘returned’

(909) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who...*’

muúndu wá[‘khálááché] ‘cut’
 muúndu wá[‘lákhúuli] ‘released’
 musáatsa wá[‘khálááché] ‘cut’
 musáatsa wá[‘lákhúuli] ‘released’

A.3.22 Hesternal Perfective Negative

(910) Passives ‘*s/he was not...*’

ya[khálááchwí] ‘tá ‘cut’
 ya[tsúúnzúúnwí] ‘tá ‘sucked’
 ya[lákhúú‘lwí] ‘tá ‘released’
 ya[kálú‘shíítswí] ‘tá ‘returned’

(911) Yes/No Questions ‘*s/he did not...?*’

ya[khálááché] ‘tá? ‘cut’
 ya[tsúúnzúúní] ‘tá? ‘suck’

ya[lákhú'úlí] 'tá? 'release'
 ya[kálú'shíítsí] 'tá? 'return'

(912) WH-Questions 's/he did not...who?'

ya[khalaaché] bi tá? 'cut'
 ya[tsuunzuuní] bi tá? 'suck'
 ya[lákhú'úlí] bi tá? 'release'
 ya[kalushíítsí] bi tá? 'return'

(913) Subject Relatives 'the person {muundu} / the man {musáatsa} who did not...'

muundu wá'khá[kháláaché] 'cut'
 muundu wá'khá[lákhú'úlí] 'release'
 musáatsa wá'khá[kháláaché] 'cut'
 musáatsa wá'khá[lákhú'úlí] 'release'

A.3.23 Perfect (3rd Sg)

(914) Passives 's/he has been...'

uu[khálaachwi] 'cut'
 uu[tsúunzuunwi] 'sucked'
 uu[lakhuulwi] 'released'
 uu[kalushiitswi] 'returned'

(915) Yes/No Questions 'has s/he...?'

uu[khálaache]? 'cut'
 uu[tsúunzuuni]? 'sucked'
 uu[lakhuuli]? 'released'
 uu[kalushiitsi]? 'returned'

(916) WH-Questions ‘*who has s/he...?*’

aa[khá¹lááché] bí? ‘cut’
 aa[tsú¹únzúúní] bí? ‘sucked’
 aa[lakhúuli] bí? ‘released’
 aa[kalúshíitsi] bí? ‘returned’

(917) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who has...*’

muúndu uu[khá¹lááché] ‘cut’
 muúndu uu[lá¹khúúlí] ‘released’
 musáatsa uu[khá¹lááché] ‘cut’
 musáatsa uu[lá¹khúúlí] ‘released’

A.3.24 Perfect (3rd Sg) Negative

(918) Passives ‘*s/he has not been...*’

aa[khá¹lááchwí] tá ‘cut’
 aa[tsú¹únzúúnwí] tá ‘sucked’
 aa[lákhúúlwí] tá ‘released’
 aa[kalúshíitswí] tá ‘returned’

(919) Yes/No Questions ‘*has s/he not...?*’

aa[khá¹lááché] tá? ‘cut’
 aa[tsú¹únzúúní] tá? ‘sucked’
 aa[lákhúúlí] tá? ‘released’
 aa[kalúshíítsí] tá? ‘returned’

(920) WH-Questions ‘*who has s/he not...?*’

aa[khá¹lááché] bí ¹tá? ‘cut’
 aa[tsú¹únzúúní] bí ¹tá? ‘sucked’
 aa[lakhúuli] bi tá? ‘released’
 aa[kalúshíitsi] bi tá? ‘returned’

(921) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who has not...*’

muúndu ukhá[¹khá lááché] ‘cut’
 muúndu ukhá[¹tsúúnzúúní] ‘sucked’
 muúndu ukhá[¹lakhúuli] ‘released’
 musáatsa ukhá[¹khá lááché] ‘cut’
 musáatsa ukhá[¹tsúúnzúúní] ‘sucked’
 musáatsa ukhá[¹lakhúuli] ‘released’

A.3.25 Perfect (2nd Sg)

(922) Passives ‘*you have been...*’

uu[khalaachwi] ‘cut’
 uu[tsuunzuunwi] ‘sucked’
 uu[lakhuulwi] ‘released’
 uu[kalushiitswi] ‘returned’

(923) Yes/No Questions ‘*have you...?*’

uu[khalaaché]? ‘cut’
 uu[tsuunzuuni]? ‘sucked’
 uu[lakhuuli]? ‘released’
 uu[kalushiitsi]? ‘returned’

(924) WH-Questions ‘*who have you...?*’

uu[khá¹lááché] bí? ‘cut’
 uu[tsú¹únzúúní] bí? ‘sucked’
 uu[lakhúuli] bí? ‘released’
 uu[kalúshíitsi] bí? ‘returned’

A.3.26 Perfect (2nd Sg) Negative

(925) Passives ‘*you have not been...*’

uu[khalaachwi] tá ‘cut’
 uu[tsuunzuunwi] tá ‘sucked’
 uu[lakhuulwi] tá ‘released’
 uu[kalushiitswi] tá ‘returned’

(926) Yes/No Questions ‘*have you not...?*’

uu[khalaachε] tá? ‘cut’
 uu[tsuunzuuni] tá? ‘sucked’
 uu[lakhúuli] tá? ‘released’
 uu[kalúshíitsi] tá? ‘returned’

(927) WH-Questions ‘*who have you not...?*’

uu[khalaachε] bí ‘tá? ‘cut’
 uu[tsuunzuuni] bí ‘tá? ‘sucked’
 uu[lakhúuli] bí tá? ‘released’
 uu[kalúshíitsi] bí tá? ‘returned’

A.3.27 Hodiernal Perfective

(928) Passives '*s/he was...*'

a[khalaachwí] 'cut'
 a[tsuunzuunwí] 'sucked'
 a[lakhú⁺úlwí] 'released'
 a[kalúshí⁺ítswí] 'returned'

(929) Yes/No Questions '*did s/he...?*'

a[khalaache] ? 'cut'
 a[tsuunzuuni] ? 'suck'
 a[lakhúuli] ? 'release'
 a[kalúshíítsi] ? 'return'

(930) WH-Questions '*who did s/he...?*'

a[khalaache] bí? 'cut'
 a[tsuunzuuni] bí? 'suck'
 a[lakhúuli] bí? 'release'
 a[kalúshíítsi] bí? 'return'

(931) Subject Relatives '*the person {muundu} / the man {musáatsa} who...*'

muúndu u[khá⁺lááché] 'cut'
 muúndu u[lá⁺khúúlí] 'released'
 musáatsa u[khá⁺lááché] 'cut'
 musáatsa u[lá⁺khúúlí] 'released'

A.3.28 Hodiernal Perfective Negative

(932) Passives '*s/he was not...*'

a[khalaachwí] 'tá 'cut'
 a[tsuunzuunwí] 'tá 'sucked'
 a[lakhú'úlwí] 'tá 'released'
 a[kalúshí'ítswí] 'tá 'returned'

(933) Yes/No Questions '*did s/he not...?*'

a[khalaache] tá? 'cut'
 a[tsuunzuuni] tá? 'suck'
 a[lakhúuli] tá? 'release'
 a[kalúshíítsi] tá? 'return'

(934) WH-Questions '*who did s/he not...?*'

a[khalaache] bí 'tá? 'cut'
 a[tsuunzuuni] bí 'tá? 'suck'
 a[lakhúuli] bí 'tá? 'release'
 a[kalúshíítsi] bí 'tá? 'return'

(935) Subject Relatives '*the person {muundu} / the man {musáatsa} who did not...*'

muúndu ukhá['khálááché] 'cut'
 muúndu ukhá['lakhúuli] 'release'
 musáatsa ukhá['khálááché] 'cut'
 musáatsa ukhá['lakhúuli] 'release'

A.3.29 Conditional

(936) Passives '*if s/he is...*'

naá['khálákwá] 'cut'
 naá['tsúúnzúúnwá] 'sucked'

naá[¹lákú¹úlwá] ‘released’
 naá[¹kálú¹shítswá] ‘returned’

(937) Yes/No Questions ‘*if s/he...?*’

naá[¹kháláká]? ‘cuts’
 naá[¹tsúúnzúúná]? ‘sucks’
 naá[¹lákúula]? ‘releases’
 naá[¹kálúshítsa]? ‘returns’

(938) WH-Questions ‘*if s/he...who?*’

naá[¹kháláká] bi? ‘cuts’
 naá[¹tsúúnzúúná] bi? ‘sucks’
 naá[¹lákúula] bi? ‘released’
 naá[¹kálúshítsa] bi? ‘returned’

A.3.30 Conditional Negative

(939) Passives ‘*if s/he is not...!*’

naákha[khalakwa] ‘cut’
 naákha[tsuunzuunwa] ‘sucked’
 naákha[lakhú¹úlwá] ‘released’
 naákha[kalú¹shítswá] ‘returned’

(940) Yes/No Questions ‘*if s/he does not...!?*’

naákha[khalaka]? ‘cut’
 naákha[tsuunzuuna]? ‘suck’
 naákha[lakhúula]? ‘release’
 naákha[kalúshítsa]? ‘return’

(941) WH-Questions ‘*if s/he does not...who!?*’

naákha[khalaka] bi?	‘cut’
naákha[tsuunzuuna] bi?	‘suck’
naákha[lakhúula] bi?	‘release’
naákha[kalúshítsa] bi?	‘return’

A.3.31 Persistive

(942) Passives ‘*s/he is still being...*’

ashi[khalakwáángua]	‘cutting’
ashi[tsuunzuunwáángua]	‘sucking’
ashi[lakhú‘úlwáángúa]	‘releasing’
ashi[kalúshí‘tswáángúa]	‘returning’

(943) Yes/No Questions ‘*is s/he still...?*’

ashi[khalakáánga]?	‘cutting’
ashi[tsuunzuunáánga]?	‘sucking’
ashi[lakhúulaanga]?	‘releasing’
ashi[kalúshítsaanga]?	‘returning’

(944) WH-Questions ‘*who is s/he still...?*’

ashi[khalakáá‘ngá] bi?	‘cutting’
ashi[tsuunzuunáá‘ngá] bi?	‘sucking’
ashi[lakhú‘úláángá] bi?	‘releasing’
ashi[kalúshí‘tsáángá] bi?	‘returning’

(945) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who is still...*’

muúndu ushí[¹ khálákáánga]	‘cutting’
muúndu ushí[¹ lakhúulaanga]	‘releasing’
musáatsa ushí[¹ khálákáánga]	‘cutting’
musáatsa ushí[¹ lakhúulaanga]	‘releasing’

A.3.32 Persistent Negative

(946) Passives ‘*s/he is not still being...*’

ashi[khalakwáá ¹ ngúá]	¹ tá	‘cutting’
ashi[tsuunzuunwáá ¹ ngúá]	¹ tá	‘sucking’
ashi[lakhúulwaangua]	tá	‘releasing’
ashi[kalúshítswaangua]	tá	‘returning’

(947) Yes/No Questions ‘*is s/he not still...?*’

ashi[khalakáá(nga)]	tá?	‘cutting’
ashi[tsuunzuunáá(nga)]	tá?	‘sucking’
ashi[lakhuúlaa(nga)]	tá?	‘releasing’
ashi[kalúshítsaa(nga)]	tá?	‘returning’

(948) WH-Questions ‘*who is s/he not still...?*’

ashi[khalakáá]	bi tá?	‘cutting’
ashi[tsuunzuunáá]	bi tá?	‘sucking’
ashi[lakhuúlaa]	bi tá?	‘releasing’
ashi[kalúshítsaa]	bi tá?	‘returning’

(949) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who is not still...*’

muúndu ushí[¹ khálákáá]	¹ tá	‘cutting’
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muúndu ushí[¹lákhuúlaa] tá ‘releasing’
 musáatsa ushí[¹khálákáá] ¹tá ‘cutting’
 musáatsa ushí[¹lákhuúlaa] tá ‘releasing’

A.3.33 Habitual

(950) Passives ‘*s/he is ever/always being...*’

yaa[khá¹lákwa] ‘cut’
 yaá[¹tsúúnzúúnwá] ‘sucked’
 yaá[¹lákhuúlá] ‘released’
 yaá[¹kálúshítswá] ‘returned’

(951) Yes/No Questions ‘*is s/he ever/always...?*’

yaá[¹kháláká]? ‘cutting’
 yaá[¹tsúúnzúúná]? ‘sucking’
 yaá[¹lákhuúlá]? ‘releasing’
 yaá[¹kálúshítsá]? ‘returning’

(952) WH-Questions ‘*who is s/he ever/always...?*’

yaá[¹kháláká] bí? ‘cutting’
 yaá[¹tsúúnzúúná] bí? ‘sucking’
 yaá[¹lákhuúlá] bí? ‘releasing’
 yaá[¹kálúshítsá] bí? ‘returning’

(953) Subject Relatives ‘*the person {muúndu} / the man {musáatsa} who is ever/always...*’

muúndu waa[khálaka] ‘cutting’
 muúndu waa[lákhula] ‘releasing’
 musáatsa waa[khálaka] ‘cutting’

musáatsa waa[lákhúula] ‘releasing’

A.3.34 Habitual Negative

(954) Passives ‘*s/he is ever/always being...*’

yaá[‘khálákwá] tá ‘cut’
 yaá[‘tsúúnzúúnwá] tá ‘sucked’
 yaá[‘lákhúúlwá] tá ‘released’
 yaá[‘kálúshítswá] tá ‘returned’

(955) Yes/No Questions ‘*is s/he ever/always...?*’

yaá[‘kháláká] tá? ‘cutting’
 yaá[‘tsúúnzúúná] tá? ‘sucking’
 yaá[‘lákhúúlá] tá? ‘releasing’
 yaá[‘kálúshítsá] tá? ‘returning’

(956) WH-Questions ‘*who is s/he ever/always...?*’

yaá[khalaká] ‘bí tá? ‘cutting’
 yaá[tsuunzuuná] bi tá? ‘sucking’
 yaá[‘lákhúúla] bi tá? ‘releasing’
 yaá[‘kálúshítsa] bi tá? ‘returning’

(957) Subject Relatives ‘*the person {muundu} / the man {musáatsa} who is ever/always...*’

muúndu waá[kháláká] tá ‘cutting’
 muúndu waa[lá‘khúúlá] tá ‘releasing’
 musáatsa waá[‘kháláká] tá ‘cutting’
 musáatsa waa[lá‘khúúlá] tá ‘releasing’

B

Verbal Subject Tests

The brief questionnaire below was administered primarily to determine the effect of subject choice on verb tone in constructions known to exhibit a variety of tonal melodies. While most of the paradigms included herein serve this purpose, the first four paradigms were added to confirm the existence and tonal properties of a construction that was identified only after the main questionnaire (featured in Appendix A) had been completed. The construction in question is an alternative of the Near Future Negative, described in 2.1.1.

With support from Pomona College, the audio archive may currently be downloaded freely via <https://pomona.box.com/s/dprn6ub6zurftfkwi0>.

Near Future Negative

(1) /H/ C-Initial ‘*s/he will not...*’

sha[khwa] tá	‘pay dowry’	sha[luma] tá	‘bite’
sha[teekha] tá	‘cook’	sha[khalaka] tá	‘cut’
sha[kalaanga] tá	‘fry’	sha[boolitsa] tá	‘seduce’
sha[ng’ong’oolitsa] tá	‘tease’	sha[khunishila] tá	‘close in’
sha[kholomoshitsa] tá	‘push down’		

(2) /Ø/ C-Initial ‘*s/he will not...*’

sha[kwá] ‘tá	‘fall’	sha[lekhá] ‘tá	‘leave’
sha[reéba] tá	‘ask’	sha[kulíkha] tá	‘name’
sha[lakhúula] tá	‘release’	sha[seébúla] tá	‘say bye’
sha[kalúshíla] tá	‘repeat’	sha[siínjílitsa] tá	‘make stand’
sha[kalúkhányinya] tá	‘turn over’		

(3) /H/ C-Initial + OP 's/he will not...him/her'

shamu[khwá] 'tá	'pay dowry'	shamu[lúma] tá	'bite'
shamu[léera] tá	'bring'	shamu[khálaka] tá	'cut'
shamu[khóng'oonda] tá	'knock'	shamu[bóolitsa] tá	'seduce'
shamu[tsúunzuuna] tá	'suck'	shamu[khúnishila] tá	'close in'
shamu[kholomoshitsa] tá	'push...down'		

(4) /Ø/ C-Initial + OP 's/he will not...him/her'

shamu[tsía] 'tá	'go for'	shamu[lekhá] 'tá	'leave'
shamu[loónda] tá	'follow'	shamu[kulíkha] tá	'name'
shamu[lakhúula] tá	'release'	shamu[seébúla] tá	'say bye to'
shamu[kalúshíla] tá	'defend'	shamu[siínjílitsa] tá	'make...stand'
shamu[kalúkhányinya] tá	'turn...over'		

Near Future

(5) /H/ C-Initial '...will bring'

na[leera] 'I'	khula[leera] 'we'
ula[leera] 'you'	mula[leera] 'you (pl)'
ala[léera] 's/he'	bala[léera] 'they'

(6) /Ø/ C-Initial '...will ask'

na[reeba] 'I'	khula[reeba] 'we'
ula[reeba] 'you'	mula[reeba] 'you (pl)'
ala[reeba] 's/he'	bala[reeba] 'they'

(7) /H/ C-Initial + OP '...will bring him/her'

namu[leera]	‘I’	khulamu[leera]	‘we’
ulamu[leera]	‘you’	mulamu[leera]	‘you (pl)’
alamú[leera]	‘s/he’	balamú[leera]	‘they’

(8) /Ø/ C-Initial + OP ‘...will ask him/her’

namu[reeba]	‘I’	khulamu[reeba]	‘we’
ulamu[reeba]	‘you’	mulamu[reeba]	‘you (pl)’
alamú[reeba]	‘s/he’	balamú[reeba]	‘they’

Near Future Negative

(9) /H/ C-Initial ‘...will not bring’

na[leera] tá	‘I’	khula[leera] tá	‘we’
ula[leera] tá	‘you’	mula[leera] tá	‘you (pl)’
ala[léera] tá	‘s/he’	bala[léera] tá	‘they’

Remote Past

(10) /H/ C-Initial ‘...brought’

naa[léera]	‘I’	khwaa[léera]	‘we’
waa[léera]	‘you’	mwaa[léera]	‘you (pl)’
yaa[léera]	‘s/he’	baa[léera]	‘they’

(11) /Ø/ C-Initial ‘...asked’

naa[réeba]	‘I’	khwaa[réeba]	‘we’
waa[réeba]	‘you’	mwaa[réeba]	‘you (pl)’
yaa[réeba]	‘s/he’	baa[réeba]	‘they’

Immediate Past

(12) /H/ C-Initial ‘...*just brought*’

ná ⁴ khá[léera]	‘I’	khwá ⁴ khá[léera]	‘we’
wá ⁴ khá[léera]	‘you’	mwá ⁴ khá[léera]	‘you (pl)’
yá ⁴ khá[léera]	‘s/he’	bá ⁴ khá[léera]	‘they’

Immediate Past Negative

(13) /H/ C-Initial ‘...*did not just bring*’

ná ⁴ khá[léera]	tá	‘I’	khwá ⁴ khá[léera]	tá	‘we’
wá ⁴ khá[léera]	tá	‘you’	mwá ⁴ khá[léera]	tá	‘you (pl)’
yá ⁴ khá[léera]	tá	‘s/he’	bá ⁴ khá[léera]	tá	‘they’

Present

(14) /H/ C-Initial ‘...*am/are/is bringing*’

[ndeeráángá]	‘I’	khu[leeráángá]	‘we’
u[leeráángá]	‘you’	mu[leeráángá]	‘you (pl)’
a[leeráángá]	‘s/he’	ba[leeráángá]	‘they’

(15) /Ø/ C-Initial ‘...*am/are/is asking*’

n[ndeébáanga]	‘I’	khu[reébáanga]	‘we’
u[reébáanga]	‘you’	mu[reébáanga]	‘you (pl)’
a[reébáanga]	‘s/he’	ba[reébáanga]	‘they’

(16) /Ø/ C-Initial + OP ‘...*am/are/is asking him/her*’

mu[reébáanga]	‘I’	khumu[reébáanga]	‘we’
umu[reébáanga]	‘you’	mumu[reébáanga]	‘you (pl)’
amú[reébáanga]	‘s/he’	bamú[reébáanga]	‘they’

Immediate Past Negative

(17) /Ø/ C-Initial ‘...*did not just ask*’

nákha[reeba]	‘I’	khwákha[reeba]	‘we’
wákha[reeba]	‘you’	mwákha[reeba]	‘you (pl)’
yákha[reeba]	‘s/he’	bákha[reeba]	‘they’

(18) /H/ C-Initial + OP ‘...*did not just bring him/her*’

ná ⁴ khámú[leera]	‘I’	khwá ⁴ khámú[leera]	‘we’
wá ⁴ khámú[leera]	‘you’	mwá ⁴ khámuá ⁴ khá[leera]	‘you (pl)’
yá ⁴ khámú[leera]	‘s/he’	bá ⁴ khámú[leera]	‘they’

(19) /Ø/ C-Initial + OP ‘...*did not just ask him/her*’

ná ⁴ khámú[reeba]	‘I’	khwá ⁴ khámú[reeba]	‘we’
wá ⁴ khámú[reeba]	‘you’	mwá ⁴ khámú[reeba]	‘you (pl)’
yá ⁴ khámú[reeba]	‘s/he’	bá ⁴ khámú[reeba]	‘they’

Indefinite Future

(20) /H/ C-Initial ‘...*will bring*’

nɪɪ[leerá]	‘I’	khuli[leerá]	‘we’
uli[leerá]	‘you’	muli[leerá]	‘you (pl)’
ali[leerá]	‘s/he’	bali[leerá]	‘they’

(21) /Ø/ C-Initial ‘...*will ask*’

nɪɪ[reéba]	‘I’	khuli[reéba]	‘we’
uli[reéba]	‘you’	muli[reéba]	‘you (pl)’
ali[reéba]	‘s/he’	bali[reéba]	‘they’

(22) /H/ C-Initial + OP ‘...will bring him/her’

nilimu[leerá]	‘I’	khulimu[leerá]	‘we’
ulimu[leerá]	‘you’	mulimu[leerá]	‘you (pl)’
alimu[leerá]	‘s/he’	balimu[leerá]	‘they’

(23) /Ø/ C-Initial + OP ‘...will ask him/her’

nilimu[reéba]	‘I’	khulimu[reéba]	‘we’
ulimu[reéba]	‘you’	mulimu[reéba]	‘you (pl)’
alimu[reéba]	‘s/he’	balimu[reéba]	‘they’

Crastinal Future

(24) /H/ C-Initial ‘...will bring’

nee[ndeeré]	‘I’	nɪkhu[leeré]	‘we’
nuu[leeré]	‘you’	nimu[leeré]	‘you (pl)’
naa[leeré]	‘s/he’	niba[leeré]	‘they’

Subjunctive Negative

(25) /H/ C-Initial ‘let...not bring’

kha[leera]	‘me’	khukha[leera]	‘us’
ukha[leera]	‘you’	mukha[leera]	‘you (pl)’
akha[leera]	‘him/her’	bakha[leera]	‘them’

(26) /Ø/ C-Initial ‘let...not ask’

kha[reéba]	‘me’	khukha[reéba]	‘us’
ukha[reéba]	‘you’	mukha[reéba]	‘you (pl)’
akha[reéba]	‘him/her’	bakha[reéba]	‘them’

Habitual

(27) /H/ C-Initial ‘...am/are drunk {ng’wa} / ...are/is married {teekha}’

naá[‘ng’wá]	‘I’	khwaá[‘ng’wá]	‘we’
waá[‘téékhá]	‘you’	mwaá[‘téékhá]	‘you (pl)’
yaá[‘téékhá]	‘s/he’	baá[‘téékhá]	‘they’

(28) /Ø/ C-Initial ‘...am/are/is always/ever asking’

naá[‘réébá]	‘I’	khwaá[‘réébá]	‘we’
waá[‘réébá]	‘you’	mwaá[‘réébá]	‘you (pl)’
yaá[‘réébá]	‘s/he’	baá[‘réébá]	‘they’

(29) /H/ C-Initial + OP ‘...am/are/is always/ever cooking for him/her’

naá‘mú[té‘éshélá]	‘I’	khwaá‘mú[té‘éshélá]	‘we’
waá‘mú[té‘éshélá]	‘you’	mwaá‘mú[té‘éshélá]	‘you (pl)’
yaá‘mú[té‘éshélá]	‘s/he’	baá‘mú[té‘éshélá]	‘they’

(30) /Ø/ C-Initial + OP ‘...am/are/is always/ever asking him/her’

naá‘mú[réébá]	‘I’	khwaá‘mú[réébá]	‘we’
waá‘mú[réébá]	‘you’	mwaá‘mú[réébá]	‘you (pl)’
yaá‘mú[réébá]	‘s/he’	baá‘mú[réébá]	‘they’

Perfect

(31) /H/ C-Initial ‘...have/has brought’

[ndeeri]	‘I’	khuu[leeri]	‘we’
uu[leeri]	‘you’	muu[leeri]	‘you (pl)’
uu[léeri]	‘s/he’	baa[léeri]	‘they’

(32) /Ø/ C-Initial ‘...*have/has asked*’

[ndeebi]	‘I’	khuu[reebi]	‘we’
uu[reebi]	‘you’	muu[reebi]	‘you (pl)’
uu[reebi]	‘s/he’	baa[reebi]	‘they’

(33) /H/ C-Initial + OP ‘...*have/has brought him/her*’

mu[leeri]	‘I’	khuumu[leeri]	‘we’
uumu[leeri]	‘you’	muumu[leeri]	‘you (pl)’
uumú[leeri]	‘s/he’	baamú[leeri]	‘they’

(34) /Ø/ C-Initial + OP ‘...*have/has asked him/her*’

mu[reebi]	‘I’	khuumu[reebi]	‘we’
uumu[reebi]	‘you’	muumu[reebi]	‘you (pl)’
uumú[reebi]	‘s/he’	baamú[reebi]	‘they’

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