Bakweri Tone Melodies
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Abstract

This paper reports on tone melodies in Bakweri, which has 6 inflectionally-governed tone patterns. Depending on tense, a verb may have no tones beyond those in the lexicon, or may add L, H, HL, or LH to the stem. These melodic tones are linked to the final vowel, and melody-initial H spreads leftward to the lexical tone of the root. In addition, reflexive OPs contribute a LH melody which partially replaces the inherent melody determined by a verb’s tense, and which undergoes a special leftward spreading rule.

Keywords: Bantu, tone, melody, tense-aspect-mood, reflexive
1 Introduction

The primary sources for tone in Bakweri [bri] (A22), aka Mokpe, are the M.A. thesis Gensler (1980), the series Kagaya (1991, 1992a, b, c) – reporting on the Buea dialect – and Marlo & Odden (2007), reporting on the present Limbe dialect. This article builds on the overview of the morphology of tense-aspect-mood-polarity and clause type distinctions (which we refer to non-technically as ‘tense’) in Marlo & Odden (2007), based on research carried out as part of a field methods course at Ohio State University in 2004-2005. Other work on Bakweri includes a Ph.D. dissertation on Bakweri morphology (Hawkinson 1986), a grammar sketch (Atindogbé 2013), and two dictionaries, Connell (1997), which is based on data collected by Edwin Ardiner, and Kagaya (1992d).

There is a high degree of agreement between our data and that of Kagaya and Gensler, with a few unsurprising phonological differences. Differences in glossing tenses between these sources are more striking, but unsurprising since the sources focus on tonal patterns. Our glosses do not reflect systematic semantic investigation, rather they indicate the English gloss which we found suitable for eliciting the desired form from our consultant. In some instances, we happened to select different conventional glosses for a particular tense.

Vowel length in Bakweri is complex. Vowels with non-final contour tones are phonetically long, for example luúngb,uniî25Bl,uniî25B ‘to stink’, nazóozóza ‘I don’t wash you’. In these examples, the surface long vowels and contours derive from morphologically concatenating distinct H- and L-toned vowels, viz. /li-úngbèle/. /nází-o-zóza/. Heteromorphemic same-tone vowel combinations may result in a surface long vowel or a short vowel, thus /li-andá/ surfaces as laandá or landá ‘to buy’, and /vá-óma/ surfaces as wóóma or wóma ‘they send’. This suggests an optional rule shortening vowels when the two halves have the same tone. Not all long vowels are from heteromorphemic sequences, for example nama4váál,uniî25B́ ‘I borrowed’. However, non-identical sequences exist, e.g. li4t,uniî25’íz,uniî25B́ ‘to boil’, l4ongóá ‘to change’. The only phonological evidence that identical vowel “sequences” are long vowels is that they are optionally shortened if not contour-toned. Our observation is that vowel shortening usually takes place in ordinary speech as opposed to careful speech, but only seems to affect heteromorphemic derived long vowels, thus we have not observed shortening in instances like nama4váálé. Word-final vowels are not noticeably long even when contoured, thus li4k,uniî25’,uniî25’́. Though we have occasionally transcribed li4k,uniî25’,uniî25’́.

Bantu languages are often equivocal as to whether non-H toned syllables have specified L or are are phonologically toneless. Specified Ls play a role in the tonology of Bakweri, e.g. final L contrasts with no melody, and H, LH and HL are contrasting melodies; certain prefixes have floating Ls such as the perfective2 negative -zá- and the past perfective -má-. The only minimal contrast between L and Ø is the one underlying the behavioral difference between tenses which acquire H before another word versus those which do not. Floating L tones obviously must be analyzed as having a specified L tone, not Ø, and any contour tone on a surface final short vowel deriving from a long vowel must at least have a
derivationally-provided specified L. We otherwise are relatively agnostic as to whether surface non-H vowels have L vs. Ø.

2 Tone melodies

In prepausal verbs, Bakweri has a basic tonal pattern which adds no Hs to the stem, and melodic patterns with the profiles H, HL and LH. The general pattern for these melodies is that both tones associate to the final vowel, and H of the H and HL patterns spreads leftward to toneless vowels within the stem. However, phrase-medial forms reveals that the basic pattern splits into two subpatterns, one of which has the same form phrase-medially and finally, and one where the verb has a melodic H phrase-medially. This type of alternation was first termed ‘metatony’ in Meeussen (1967) – see Hyman & Lionnet (2012) for background and an analysis of the phenomenon in Abo.¹ We treat the invariant subpattern as having a melodic L, and the subpattern with medial H as having no melodic tone. This analysis expresses the generalization that non-initial stem vowels in the melodic L pattern are consistently L, whereas those which alternate phrasally between H and L do so due to a phrasal rule, which only applies to verbs lacking a melodic tone.

2.1 Basic pattern

Bakweri verbs fall into two lexical tone classes, /H/ and /L/. The lexical tone is realized on the first vowel, and subsequent tones are determined by inflectional and phrasal melodic tones. The quality of the final suffix in Bakweri is determined in part by tense-aspect-mood and clause-type distinctions. For example, the present-future tense selects the final vowel -a. The suffixes -e, -i, -ê and -ai are also selected, in other contexts. Numerous verbs have lexically-determined final vowels, as in na-koa ‘I hate’, na-lakizane ‘I trust’. The lexically determined final vowel always overrides the final vowel that would otherwise be selected by morpho-syntactic considerations alone, except in reflexives.

2.1.1 Melodic L

The melodic-L variant of the basic pattern is exemplified with the present-future tense in (1). Observe that L verbs have no stem H, and H verbs have H on the first vowel, or fall on monosyllabic stems.² A simple analysis of monosyllabic stems is that they underlingly have two vowels, which in H stems results in a falling tone on a long first syllable, but final vowels are regularly shortened.

(1) na-lā ‘I will eat’  na-ko ‘I hate’
na-ţafa ‘I will hit’  na-zoza ‘I will wash’

¹ Hyman & Lionnet (2012) phonologically analyze the alternation in Abo as coming from an underlying HL melody. This does not work in Bakweri, which has a distinct HL melody. The languages differ in various details of the metatony-like alternation.

² We underline the first root vowel of H verbs.
Subject markers also contrast /H/ vs. /L/. As shown in (2), all cl. 1-2 SPs are /L/, but 3p vá-, which is /H/. When the H of 3p vá- precedes a root H, there is no alternation: both Hs surface at the same pitch level.

(2) na-fáfa ‘I will hit’ i-fáfa ‘we will hit’
o-fáfa ‘2s will hit’ e-fáfa ‘2p will hit’
a-fáfa ‘he will hit’ vá-fáfa ‘they will hit’

Object markers have the same contrasts as subject markers. (3) shows that 3pl vá- is /H/, while other cl. 1-2 OPs are /L/. Among the non-human SPs and OPs, all are /H/ except the cl. 9 SP and OP, which are /L/ (Hawkinson 1986: 70-72).

(3) a-no-fáfa ‘he will hit me’ a-jo-fáfa ‘he will hit us’
o-o-fáfa ‘he will hit you’ e-e-fáfa ‘he will hit 2p’
a-mo-fáfa ‘he will hit him’ a-vá-fáfa ‘he will hit them’
a-mo-zoza ‘he will wash him’ a-vá-zoza ‘he will wash them’

This tense has the same tone when the verb is in phrase-medial position, which contrasts with other tenses presented in the next section. As noted above, we assume that phrasally non-alternating patterns have a melodic L on the final vowel.

(4) na-zoza Lingongo ‘I will wash Lingongo’
na-fáfa mwêlê ‘I will hit tomorrow’

The tonal pattern of the past negative is analogous to that of the present-future, being marked with the prefix zí- and the final vowel -e.

(5) na-zí-lê ‘I didn’t eat’ a-zí-ye ‘he didn’t laugh’
na-zí-fáfe ‘I didn’t hit’ na-zí-zoze ‘I didn’t wash’
a-zí-kôkize ‘I didn’t punish’ na-zí-lakize ‘I didn’t forgive’

When an OP intervenes between zí- and a root H, there are no tonal alternations. This is in contrast to other contexts where the tone sequence HLH undergoes a plateauing process to become HHH, discussed below.

(6) na-zí-mo-kôkize ‘I didn’t punish him’
na-zí-vá-kôkize ‘I didn’t punish them’

As with the present-future, when a word follows, the verb’s tone is not changed.

(7) na-zí-zoze Lingongo ‘I didn’t wash Lingongo’
na-zí-fáfe Lingongo ‘I didn’t hit Lingongo’
Another tense characterized by the melodic L is the perfective2 negative, with the negative prefix zá-. As shown in (8), a root H is downstepped after negative zá-. We attribute this downstep to a floating L at the end of the negative prefix.

(8) na-zá-'và ‘I haven’t married’ na-zá-va ‘I haven’t divided’ na-zá-‘fáfí ‘I haven’t hit’ na-zá-zozi ‘I haven’t washed’

As shown in (9), perfective2 negative forms remain L-final phrase-medially.

(9) na-zá-zozi Lingongo ‘I haven’t washed Lingongo’ na-zá-‘fáfí Lingongo ‘I haven’t hit Lingongo’

The final tense following this pattern is seen in (10) – (11), namely subjunctive forms lacking an OP. In this tense, all SPs are H toned.

(10) ná-lè ‘that I eat’ ná-je ‘that I come’ ó-fáfí ‘you should hit’ vá-foze ‘they should wash’ ó-tíndle ‘you should push’ f-laale ‘let’s step on’

(11) á-tángEnvelope moní ‘he should pay money’

2.2 Melodic Ø

The melodic Ø pattern is the same as the melodic L pattern phrase-finally, but phrase-medially, the verb acquires a melodic H. One tense illustrating the Ø melody is the indefinite future negative. As shown in (12), H verbs have a H on the stem-initial syllable, realized as a fall in monosyllabic stems, and L verbs are all L. The marker zóo- is a composite of negative zí- and future óo-.


Phrase-medially, the verb acquires a H, which surfaces on the final vowel and preceding vowels up to but not including the stem-initial vowel – this is identical to the melodic H pattern discussed in 2.3. As shown in (13), H stems are entirely H-toned, while L verbs have an initial L followed by H on all remaining vowels.

(13) a. na-zóo-zááwá móngo moní ‘I won’t pay that money’
    b. na-zóo-keká liváva ‘I won’t try to divide them’
    na-zóo-lakízé Lingongo ‘I won’t forgive Lingongo’

The affirmative version of the indefinite future, formed with óo-, has the same essential tonal properties as its negative counterpart – H verbs have a stem-initial
H, and L verbs are all L. When the SP has L tone, the resulting vowel sequence has a rise-fall contour tone, which is sometimes simplified to fall.

\[(14)\]  
\begin{align*}  
n-o-o-lâ & \quad \text{‘I will eat’} & n-o-o-kô & \quad \text{‘I will hate’} 
n-o-o-kôkô & \quad \text{‘I will bite’} & w-o-o-koka & \quad \text{‘they will grow up’} 
w-o-o-tïÎndîlç & \quad \text{‘you will push’} & w-o-o-tâmîzê & \quad \text{‘they will surprise’} 
n-o-o-kîkîzê & \quad \text{‘I will punish’} & n-o-o-kâkâk & \quad \text{‘I will promise’} 
\end{align*}

Phrase-medially, verbs have H from the second to the final vowel of the stem.

\[(15)\]  
\begin{align*}  
\text{a.} & \quad n-o-o-fâfâfâ & \quad \text{Lingongo} & \quad \text{‘I’ll hit Lingongo’} 
n-o-o-kîkîzê & \quad \text{Lingongo} & \quad \text{‘I’ll punish Lingongo’} 
\text{b.} & \quad n-o-o-kô & \quad \text{Lingongo} & \quad \text{‘I’ll hate Lingongo’} 
n-o-o-zozâ & \quad \text{Lingongo} & \quad \text{‘I’ll wash Lingongo’} 
n-o-o-lakîzê & \quad \text{Lingongo} & \quad \text{‘I’ll forgive Lingongo’} 
\end{align*}

This pattern is also found in the past perfective, seen in (16). The tone of pre-stem morphemes is somewhat peculiar, in that all subject markers acquire H, after which the tense prefix má is downstepped. We attribute downstep between the SP and the prefix má to a floating L which is part of the tense prefix. There is variation recorded in our notes regarding whether the root H is downstepped after this prefix, yielding an ultimate representation /má-/. The source of the variation in downstepping of the root H is unclear.

\[(16)\]  
\begin{align*}  
nâ-‘mâ-lâ & \quad \text{‘I have eaten’} & nâ-‘mâ-yô & \quad \text{‘I have laughed’} 
nâ-‘mâ-fâfâ & \quad \text{‘I have hit’} & nâ-‘mâ-zozâ & \quad \text{‘I have washed’} 
nâ-‘mâ-‘fâfâ & \quad \text{‘he has punished’} & â-‘mâ-kîkîzê & \quad \text{‘he has promised’} 
\end{align*}

Another reason to posit a floating L after má is that phrase-medially, where H is added, the regular process of Plateauing which would transform HLH into HHH is blocked in (17b). This blockage would be explained by a floating L: Plateauing applies to HLH, not HLLH found in /nâ-‘mâ-‘zozá/.

\[(17)\]  
\begin{align*}  
\text{a.} & \quad nâ-‘mâ-mo-fâfâfâ & \quad \text{Lingongo} & \quad \text{‘I’ve hit Lingongo for him’} 
â-‘mâ-kîkîzê & \quad \text{‘mwåna} & \quad \text{‘he has punished a child’} 
\text{b.} & \quad nâ-‘mâ-zozâ & \quad \text{Lingongo} & \quad \text{‘I’ve washed Lingongo’} 
nâ-‘mâ-lakîzê & \quad \text{Lingongo} & \quad \text{‘I’ve forgiven Lingongo’} 
\end{align*}

The inceptive tense has the tense prefix âa- and the melodic Ø pattern. Unlike the indefinite future oô-, we do not encounter rise-fall with inceptive âa-, which may indicate that the SP is uniformly H in this tense.

\[(18)\]  
\begin{align*}  
n-áa-lâ & \quad \text{‘I’m about to eat’} & n-áa-yô & \quad \text{‘I’m about to laugh’} 
n-áa-fâfâ & \quad \text{‘I’m about to hit’} & n-áa-zozâ & \quad \text{‘I’m about to wash’} 
\end{align*}
n-áa-kókize ‘I’m about to punish’  n-áa-kakane ‘I’m about to promise’

Phrase-medial forms of the inceptive with a melodic H are provided in (19).

(19)  á-a-kúlé ‘móléfé’  ‘he’s about to finish food’  
     n-áa-kómó Lingongo ‘I’m about to greet Lingongo’  
     n-áa-zozá Lingongo ‘I’m about to wash Lingongo’

The consecutive tense has morphological parallels to the present-future tense, as there is no segmental tense prefix, the final vowel is -a, and phrase-final verbs lack a melodic H. However, in addition to taking an initial particle zi, subject markers are obligatorily H in the consecutive, and a H that immediately follows the subject prefix is downstepped, as in the root Hs in (20) and the OPs in (21).³

(20)  zi ná-‘lă  ‘then I ate’  zi ná-yo  ‘then I laughed’  
     zi ná-‘ľáfă  ‘then I hit’  zi ná-zosa  ‘then I washed’  
     zi vá-‘tínđele  ‘then they pushed’  zi ná-lakize  ‘then I forgave’

(21)  zi ná-‘vá-tínđele  ‘then I pushed them’

The example in (22) shows that consecutive verbs acquire a melodic H in phrase-medial position.

(22)  zi ná-‘ľáfă Lingongo  ‘then I hit Lingongo’

One tense underdocumented in our study is the negative hesternal past, exemplified by forms such as a-žá-zoeai ‘he didn’t wash’ which takes either the melodic L or Ø pattern. We lack phrasal data for this tense, which is necessary to determine its tonal classification. The pattern is reported in Kagaya (1992a: 140-141) and in Gensler (1980), but phrasal data are not provided in those sources either.

2.3 Melodic H

The first melodic pattern which affects prepausal verbs is the H pattern, characterized by a H tone spanning from the second vowel of the stem to the final vowel. /H/ verbs surface all H; /L/ verbs surface with stem-initial L followed by H, which is realized as a rise in monosyllabic stems. This pattern is illustrated with the past tense in (23), which selects the prefix /ma/.

(23)  na-ma-lă  ‘I ate’  na-ma-yŏ  ‘I laughed’  
     na-ma-vánjă  ‘I jumped’  na-ma-koká  ‘I grew up’  
     vá-ma-vánjă  ‘they jumped’  na-ma-tŏízé  ‘I boiled’  
     nă-ma-ťínđelé  ‘I pushed’  na-ma-kakăně  ‘I promised’

³ Gensler (1980: 48) gives data indicating that this is a more general construction that induces a H-toned subject prefix and combines with multiple tenses.
The addition of a melodic H also creates an opportunity for a tone-plateauing rule to apply. Examples of this tense with object prefixes are given in (24), showing application of Plateauing which we have previously referred to, whereby H[LH becomes H[HH. Surface na-ma-vá'-lákízé thus derives from /na-ma-vá-lákízé/. As shown by vá-ma-vá-njá ‘they jumped’, Plateauing only affects a root-initial L, and does not spread H from a root to a prefix.

(24) na-ma-mo-vá ‘I divided him’ na-ma-vá-vá ‘I divided them’
    na-ma-mo-lákízé ‘I forgave him’ na-ma-vá-lákízé ‘I forgave them’

The incompletive negative employs this melodic H, also selecting the negative prefix -zí- and the final vowel -i, which is overridden by lexically determined vowels in roots like -vá ‘marry’, -kókízé ‘punish’, and -zazo ‘comb’. All stem vowels of H verbs are H and there is no downstep between the stem and zí. In L verbs, all stem vowels including the root-initial one are H toned, and there is a downstep between the stem and -zí, because Plateauing applies after -zí- and spreads the melodic H to the first vowel, thus na-zí-zózí comes from na-zí-zózí.

(25) na-zí-vá ‘I haven’t yet married’ na-zí-vá ‘I haven’t yet divided’
    na-zí-fáfí ‘I haven’t yet hit’ na-zí-zózí ‘I haven’t yet washed’
    na-zí-kókízé ‘I haven’t yet punished’ na-zí-lákízé ‘I haven’t yet forgiven’

Data in (26) with OPs show that Plateauing does not affect a L verb when the OP of the preceding syllable is L toned. As we have seen in (23), these forms also show that H does not spread from a root to an OP.

(26) a-zí-no-fáfí ‘he hasn’t yet hit me’ a-zí-no-zózí ‘he hasn’t yet washed me’
    a-zí-mo-zómí ‘he hasn’t yet thanked her’ a-zí-vá-zózí ‘he hasn’t yet washed them’

The negative of the present-future likewise selects the melodic H. This tense employs the negative prefix /zá/.

(27) na-zá-‘vá ‘I won’t marry’ na-zá-kó ‘I won’t hate’
    na-zá-‘fáfá ‘I won’t hit’ na-zá-zózá ‘I won’t wash’
    na-zá-‘kókízé ‘I won’t punish’ na-zá-lákízé ‘I won’t forgive’
    na-zá-‘vá-vá ‘I won’t marry them’ na-zá-‘vá-kó ‘I won’t hate them’
    na-zá-mo-vá ‘I won’t marry him’ na-zá-mo-kó ‘I won’t hate him’
Because the negative prefix has a floating tone, a downstep appears between the H of that prefix and a H root (thus /na-zá-´vá/ becomes na-zá-´vá). The floating L also blocks Plateauing from applying to a L root (/na-zá-´lákízé/ becomes na-zá-´lákízé, not *na-zá-´lákízé).

As shown in (28), negative /zá/ dissimilates to L after a Htoned SP.

(28) vá-zá-vá 'they won’t marry' vá-zá-kó 'they won’t hate'
    vá-zá-vealá 'they won’t hit' vá-zá-zozá 'they won’t wash'

We find the negative marker /zá/ in one form of the negative subjunctive / imperative. H roots and H OPs are downstepped when they immediately follow /zá/-, and Plateauing is blocked. As with the negative present-future, a H SP lowers /zá/ to [za].

(29) o-zá-´fáfá 'don’t hit' o-zá-zozá 'don’t wash'
    o-zá-mo-vealá 'don’t hit him' o-zá-mo-zozá 'don’t wash him'
    o-zá-´vá-vealá 'don’t hit them' vá-zá-zozá 'let them not wash'

Object relative clause forms of the present-future negative also have the melodic H. A common feature of all object relative clause verb forms is that the SP is uniformly H, after which we find L-toned [za].

(30) á-za-lá '(what) he won’t eat'
    á-za-kókízé '(who) he won’t punish'
    á-za-´lákízé '(who) he won’t forgive'

A second form of the negative subjunctive, probably the “true” form which corresponds to Gensler’s (1980) version, also selects the H melody. As shown in (31), this tense has the negative prefix zi-.

(31) i-zi-´fáfá 'let’s not hit' i-zi-zozá 'let’s not wash'
    i-zi-kókízé 'let’s not punish' i-zi-lákízé 'let’s not forgive'

In (32), we provide data from a probably related negative construction with negative zi- and an initial particle zi, which is optionally realized as ži.

(32) ži na-zi-mo-vá 'if I don’t marry him'
    ži na-zi-kóká 'and then I didn’t bite'
    ži na-zi-mo-zozá 'if I don’t wash him'
    ži na-zi-mo-lákízé 'if I don’t forgive him'

As in many Bantu languages (see Marlo 2013), subjunctives with an OP in Bakweri act as a construction independent of the subjunctive, in terms of selection of melodic tone, SP tone, and final vowel. The subjunctive + OP construction se-
lects a melodic H, makes all SPs H-toned, and requires final -e in roots that do not have a lexically pre-specified final vowel. Lexical tones of roots and OPs are not changed in this context.

(33) í-vá-vá ‘let’s marry them’ vá-mo-vá ‘let them divide him’
vá-mo-fáfé ‘let them hit him’ vá-mo-zungé ‘let them rescue him’
vá-mo-kókizé ‘let them punish him’

As expected, we find effects of Plateauing whenever a H OP precedes a L root which is followed by the melodic H.

(34) í-vá-’vá ‘let’s divide them’
vá-vá-’vá ‘let them divide them’
vá-vá-’zúngé ‘let them rescue them’
vá-vá-’zózé ‘let them wash them’

Another tense selecting the melodic H is the anterior past, which is marked with the prefix /é/, the final V /-a/, and a melodic H.

(35) w-é-lá ‘before you had eaten’ a-é-’já ‘by the time he came’
n-é-kúlé ‘before I finish’ n-é-’zózá ‘before I had washed’
n-é-’tindélé ‘before I pushed’ n-é-’lákizé ‘by the time I had forgiven’

A number of subject relative clause forms select the melodic H. The verb form may be used in a number of syntactic frames, such as ‘which person ___’ or ‘the one/person who ___’. Subject-relatives of the past are seen in (36), recent perfectives are in (37) and their negatives are in (38), present-future negatives are in (39), and the hesternal past is in (40), the latter data from Gensler (1980).

(36) a-má-’lá4 ‘... ate’ a-má-vá ‘... divided’
a-má-’tängá ‘... paid’ a-má-zozá, a-má-zozá ‘... washed’
a-má-’tindélé ‘... pushed’ a-má-kakáné ‘... promised’

(37) a-lélí ‘... just ate’ a-kó ‘... just hated’
a-kókí ‘... just bit’ a-zungí ‘... just rescued’
a-tindélé ‘... just pushed’ a-lakizé ‘... just forgave’

(38) a-zí-mo-kókí ‘... hasn’t yet bit him’ vá-zí-’yó ‘... pl. has not laughed’

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4 The rising tone on the prefix /má/ optionally but usually simplifies to H.
The infinitive, formed with the cl. 5 prefix li-, has a variant of the melodic H pattern which is sensitive to the tone of the macrostem – the constituent that includes the verb stem plus a preceding OP. /H/ verbs lack a melodic H and are thus tonally identical to analogous forms with the basic pattern. /L/ verbs without an OP and /L/ verbs with a /L/ OP have a melodic H. However, there is no melodic H in /L/ verbs that have a /H/ OP. In short, if there is a H within the macrostem, a root H or an OP H, then there is no melodic H. Otherwise, there is a melodic H.6

Verbs inflected with the melodic H do not modify their melodic tone before an object, indicating that verbs with the Ø variant of the basic pattern cannot be treated as a special case of melodic H which deletes prepausally.

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5 This example is from Gensler (1980).
6 Kagaya (1992a) indicates that L verbs with a H OP have a melodic H, however analogous data from Gensler (1980) are like those which we report. Our notes do include some instances of melodic H with H OP, for example li-vá-lakíz ~ li-vá-‘lákízé ‘to forgive them’.
2.4 Melodic HL

Our next melodic pattern adds HL to the stem. This pattern, illustrated in (43) with the recent perfective, is realized like the preceding melodic H pattern, except that the final vowel has a falling tone. However, when the penultimate stem vowel is H, the predicted falling tone of the final syllable optionally simplifies to L. The final vowel suffix is /i/, though lexically-specified final vowels override that affix. Additionally, certain monosyllabic roots such as ‘eat’ take the suffix /-li/.

(43) na-vâ ‘I’ve already married’ na-vâ ‘I’ve already divided’
na-fânji ~ na-fânji ‘I’ve already jumped’ na-zoți ‘I’ve already washed’
na-tîndêlec ~ na-tîndêlec ‘I’ve already pushed’ na-lingâni ~ ‘I like’
na-lingâni

The examples in (44) show Plateauing applying to L roots after H, including H of SPs or OPs, as expected.

(44) na-vâ-‘vâ ‘I’ve already divided them’ na-vâ-‘lákîzê ‘I’ve forgiven them’
na-vâ-‘zoãi ‘I’ve washed them’ vá-‘lááli ‘they’ve stepped on’

The imperative likewise selects the HL melody.7

(45) lá ‘eat’ yși ‘laugh’
fâfâ ‘hit’ zozâ ‘wash’
tîmê ‘stand’ laálâ ‘step on’
kôkízê ‘punish’ lakízê ‘forgive’
tîndêlewê ‘get pushed’ lingánâvâ ‘be liked’

The hesternal past, with the complex suffix /eai/, also takes the HL melody.8

(46) na-léái ‘I ate’ na-kêái ‘I hated’
na-zâéái ‘I danced’ na-vaéái ‘I divided’
na-kûlêái ‘I finished’ na-zozéái ‘I washed’
na-kôkízêái ‘I pushed’ na-kakánêái ‘I promised’

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7 Our data do not include instances of HF simplification such as ?kôkízê, which may indicate that this simplification does not apply in the imperative.
8 We have not noticed optional differences in the location of the pitch drop on the final vocalic sequence which corresponds to application of the rule HF → HL, and have not directly investigated the possibility of both na-kêái and na-kêái.
Some object relative forms select the HL pattern, including those for the past in (47), the recent perfective in (48), and the hesternal past in (49), the latter from Gensler (1980). As noted above, SPs are uniformly H in object relatives.

(47) ná-ma-kókê ‘... (who) I bit’, ná-ma-ozoê ‘... when I bathed’
   vá-ma-kókizê ‘... (who) they punished’
   vá-má-kókönê ‘... (which) they pounded with’

(48) á-vâ ‘... (who) he married’
   á-lêli ‘... (what) he ate’
   á-kókizê ‘... (who) he punished’
   á-kakan ‘... (who) he forgave’

(49) á-kókéái ‘... (who) he bit’

The HL melody is not altered in phrase-medial position, as seen in (50), although it is subject to a general optional simplification of word-final fall to H in phrase-medial position. Recall also that HF optionally becomes HL.

(50) vá-fáfi Lingongo ‘they’ve hit Lingongo’
   vá-‘ozoí Lingongo ‘they’ve washed Lingongo’
   và ‘wuwa ‘buy a chicken!’
   và-‘ozoí Lingongo ‘they’ve washed Lingongo’
   na-lingáni nôn ‘I like birds’

2.5 Melodic LH

The final melodic pattern which we identify is the LH pattern, where the final vowel has a rising tone and vowels between the root-initial and final vowels are L – CV stems realize the pattern as fall-rise (H verbs) and rise (L verbs). Only relative clause verb tenses select this pattern (though as we have seen, not all relative clause forms do). We also see below that reflexive verb forms are inflected with the LH melody. The subject-relative present-future is exemplified in (51).

(51) a-lâ ‘who will eat’
   a-kâ ‘who will hate’
   a-fâfa ‘who will hit’
   a-ozoà ‘who will wash’
   a-kókizê ‘who will punish’
   a-kakan ‘who will promise’

The past negative subject-relative, which has the negative prefix /zí/ and the final vowel /-e/, likewise selects the LH melody.

(52) a-zí-lê ‘who didn’t eat’
   vá-zí-yô ‘who pl. didn’t laugh
   vá-zí-úfê ‘who pl. didn’t pluck’
   vá-zí-kókizê ‘who pl. didn’t punish’
   vá-zí-kakan ‘who pl. didn’t promise’
The object-relative of this tense likewise has LH, and differs from the subject relative in having a uniformly H SP.

(53) ná-zí-mo-řč ‘when I didn’t eat him’  
    ná-zí-tángè ‘when I didn’t pay’ ná-zí-zozè ‘since I didn’t wash’  
    ná-zí-kókizè ‘when I didn’t punish’ ná-zí-kakanè ‘when did I not promise’

Other tenses selecting the LH pattern are the subject-relatives of the perfective negative in (54), the progressive in (55) from Gensler (1980), and the object-relatives of the present-future in (56), the perfective2 negative in (57), the remote indefinite future in (58), and the remote future negative in (59).

(54) a-zá-lélè ‘who hasn’t eaten’  
    a-zá-zóowè ‘who hasn’t shaved’  
    vá-zá-já ‘who hasn’t come’

(55) áa-zã ‘who is dancing’  
    áa-kóká ‘who is biting’  
    áa-kókizè ‘who is making bite’
    áa-yõ ‘who is laughing’  
    áa-zozã ‘who is washing’  
    áa-kikimè ‘who is stammering’

(56) ná-lã ‘(where) I eat’  
    ná-kóká ‘(who) I bite’  
    ná-tínèlè ‘(who) I will push’  
    ná-zungã ‘(who) I will rescue’  
    ná-tínd,uniî25Bl,uniî25B,uniî3îC ’(who) I will push’
    ná-zóo-tínd,uniî25Bl,uniî25B,uniî3îC ’(who) I won’t push’
    ná-zóo-tamizè ‘(who) I won’t surprise’

(57) á-zã ‘(what) he hasn’t eaten’  
    á-zã-fáfè ‘(who) he hasn’t hit’ á-zã-nyangè ‘(who) he hasn’t caught’  
    á-zã-tínèlè ‘(who) he hasn’t pushed’ á-zã-lakizè ‘(who) he hasn’t forgiven’

(58) n-óo-fã ‘(who) I will marry’  
    n-óo-tínèlè ‘(who) I will push’ n-óo-tamizè ‘(who) I will surprise’

(59) ná-zó-ángã ‘(who) I won’t count’  
    ná-zó-óňd ‘(what) I won’t buy’
    ná-zóo-tínèlè ‘(who) I won’t push’ ná-zóo-tamizè ‘(who) I won’t surprise’

The LH melody is not changed phrase-medially.
Interestingly, the LH melody of subject-relatives in our data corresponds to a LH melody in Gensler (1980), but object-relatives which have the LH melody in our data have instead a rise-fall tone in Gensler’s data. All object-relatives end with a L in the Buea dialect, as part of a fall or rise-fall tone.

3 Reflexives

The reflexive selects the prefix á-, final -e, and the LH melody, as shown for tenses with a melodic L in (61) – (63). The final vowel of a given tense (e.g. -a in the present-future, -e in the past negative) or a lexically-specified final vowel is overridden by reflexive -e. Throughout the reflexives, we also find the optional application of a long-distance version of Plateauing where HL*H → H*H, i.e. any number of Ls can intervene (multiple Ls block general Plateauing, e.g. a-kókizé ‘who will punish’).

(61) Present-future ‘I V myself’

na-á-fâfê ‘hit’
na-á-zárâwê ‘pay’
na-á-kókizê ‘punish’

na-á-‘zôzé ~ ‘wash’
na-á-‘zúngê ~ ‘rescue’
na-á-lakizê ‘forgive’

(62) Past negative ‘I didn’t V myself’

na-zá-á-fâfê ‘hit’
na-zá-á-‘zôzé ‘wash’
na-zá-á-kókizê ‘punish’

(63) Perfective2 negative ‘I haven’t Ved myself’

na-zá-á-fâfê ‘hit’
na-zá-á-kókizê ‘punish’

na-zá-á-‘zôzé ‘wash’
na-zá-á-‘lakizê ‘forgive’

As expected, reflexive data from the melodic Ø pattern in (64) – (67) match those of the melodic L pattern.

(64) Indefinite future negative ‘I won’t V myself’

na-zóo-á-fâfê ‘hit’
na-zóo-á-‘zôzé ‘wash’

(65) Indefinite future ‘I’ll V myself’

n-ôo-á-fâfê ‘hit’
na-á-á-‘zôzé ‘wash’

n-ôo-á-zárâwê ‘pay’
n-ôo-á-zúngê ‘rescue’
n-Ôô-á-kókizê ‘punish’
n-ôo-á-‘lakizê ‘forgive’
(66) Past perfective ‘I’ve Ved myself’

ná-'má-á-fá'fè 'hit'  ná-’má-á-zó'zé 'wash'
na-'má-á-zá'awè 'pay'  na-'má-á-zungè 'rescue'
na-'má-á-kó'kízè 'punish'  na-'má-á-'lákízè 'forgive'

(67) Consecutive ‘and then I Ved myself’

zi na-'á-fá'fè 'hit'  zi ná-'á-'kó'kízè 'hate'
zi ná-'á-zá'awè 'pay'  zi ná-'á-'zó'zé 'wash'
zi ná-'á-kó'kízè 'punish'  zi ná-'á-'lákízè 'forgive'

We also find the LH reflexive pattern in tenses selecting melodic H in (68) – (75). Most often we find long-distance Plateauing, but in a handful of examples in (73) – (75) final LH transparently surfaces.

(68) Past ‘I Ved myself’

na-ma-á-fá'fè 'hit'  na-ma-á-'zó'zé 'wash'
na-ma-á-zá'awè 'pay'  na-ma-á-álá'álè 'step on'
na-ma-á-kó'kízè 'punish'  na-ma-á-á-'lákízè 'forgive'

(69) Incompletive ‘I haven’t yet Ved myself’

na-zá-á-fá'fè 'hit'  na-zá-á-'zúngè 'rescue'
na-zá-á-kó'kízè 'punish'  na-zá-á-'lákízè 'forgive'

(70) Present-future negative ‘I don’t V myself’

na-zá-á-fá'fè 'hit'  na-zá-á-'zó'zé 'wash'

(71) Negative imperative ‘don’t V yourself’

o-zá-á-fá'fè 'hit'  o-zá-á-'zó'zé 'wash'
o-zá-á-kó'kízè 'punish'

(72) Consecutive negative ‘and then I didn’t V myself’

zi na-zá-á-fá'fè 'hit'  zi na-zá-á-'zó'zé 'wash'

(73) Subjunctive (+OP) ‘let’s V ourselves/each other’

j-áá-fá'fè 'hit'  j-áá-'zó'zé 'wash'
j-áá-zá'awè 'pay'  j-áá-'zúngè 'rescue'
j-áá-kó'kízè 'punish'  j-áá-'lákízè 'forgive'

(74) Imperative (+OP) ‘V yourself’

áá-fá'fè 'hit'  áá-'zó'zé 'wash'
áá-kó'kízè 'punish'

(75) Infinitive ‘to V oneself’

láá-fá'fè 'hit'  láá-zungè 'rescue'
As (76) shows, reflexive recent perfectives have an overall melodic profile LHL. Without the reflexive, this tense has the HL melody (á-fánji ‘he has jumped’), so by simple concatenation of melodies we predict /-HL-LH/. The simplest account of the discrepancy is that the H part of the perfective HL melody is deleted before the reflexive tone, and perfective L is retained and links to the final vowel. That L triggers downstep after long-distance Plateauing.

(76) Recent Perfective ‘I Ved myself’

<table>
<thead>
<tr>
<th>Reflexive</th>
<th>Melodic Tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>na-á-fáčé</td>
<td>aá-zó-zé</td>
</tr>
<tr>
<td>na-á-kóčízé</td>
<td>a-á-lá-kízé</td>
</tr>
</tbody>
</table>

Our data on reflexives in tenses selecting the HL melody are not extensive, and deeper investigation is called for into the near-obligatoriness of long-distance Plateauing in melodic H tenses. The tonology of reflexives is one area where our data from the Limbe dialect diverges from those of Gensler and Kagaya. Long-distance Plateauing is apparently not found in the Buea dialect.

4 Conclusions

We find two features of the Bakweri tone-melodic system to be noteworthy. First, the phonology of melodic tones is relatively simple – the relevant tones are assigned to the final vowels, and H spreads leftward through the stem. Second, there is a strong undercurrent of clause-type organization to melody-determination. All relative verb forms select some melodic H; object-relatives select HL or LH, with the exception of the present-future negative whose melody is H (and is rise-fall in the Buea dialect, which corresponds to rise in the Limbe dialect). The choice between LH and H in subject-relatives is predictable from the main-clause pattern. It is H in (a) if the main-clause tense melody is H or HL, and LH in (b) if the main-clause tense has the L or Ø melodies. “X” indicates the tone when a word follows and “(X)” denotes invariant tone – this diagnoses the distinction between L and Ø.

(77) Main clause Subject-relative

a. na-zá-zózá (X) a-zá-zózá ‘won’t V’
   na-ma-zózá (X) a-má-zózá ‘Ved’
   na-zózáí a-zózáí ‘Ved (hesternal)’
   na-zí-zózáí (X) a-zí-zózáí ‘haven’t yet V’d’
   na-zózá (X) a-zózá ‘just V’d’

b. na-zózá (X) a-zózá ‘will V’
   na-zá-zózáí (X) a-zá-léfë ‘haven’t V’d’
   na-zí-zózáí (X) a-zí-zózáí ‘didn’t V’
This points to a decomposition of clause / tone relations where relative clauses are marked with H, and object-extracted clauses (including reflexives) additionally have L, while simultaneously requiring the subject prefix to be H.

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References


