

Theory and description in African Linguistics

Selected papers from the 47th
Annual Conference on African
Linguistics

Edited by

Emily Clem

Peter Jenks

Hannah Sande

Contemporary African Linguistics



Contemporary African Linguistics

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Part I

Phonetics and phonology

Chapter 1

A featural analysis of mid and downstepped high tone in Babanki

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In this study, I examine the occurrence of the surface Mid (M) and downstepped High (↓H) tone in Babanki, a Central Ring Grassfields Bantu language of Cameroon. Hyman (1979) has demonstrated that Babanki has two underlying tones, namely, High (H) and Low (L), and that on the surface, it contrasts three level tones, H, M, L, plus a downstepped High (↓H). There is also contrast between a falling (L) and a level low (Lo) tone before pause in the language. I demonstrate in this paper that the M tone is from two different phonological sources and derived by the regressive spread of the high register feature of a following H tone while ↓H is caused by the progressive spread of the low register feature of a preceding floating L tone. The M and ↓H tone are phonetically identical in the language but differ in that ↓H establishes a ceiling for following H tones within the same tonal phrase.

1 Introduction

Part of the complexity of tone in Grassfields Bantu (GB) languages of Northwest Cameroon such as Babanki (a Central Ring GB language) is the lack of correspondence between underlying and surface tones as well as the presence of many floating tones. There is no underlying M tone in Babanki, yet it occurs on the surface with the constraint that it must be followed by a H tone. Hyman (1979) has given a historical account of this M tone which is unnecessarily abstract as a synchronic analysis. I demonstrate in this paper that M tone results from the regressive spread of the [+R] feature of high tones which is blocked only by a nasal in NC initial roots. Downstep on its part results from the progressive spread of the [-R] feature of a floating L tone. The synchronic reanalysis of Babanki surface tones in this paper addresses the following issues: 1) What are the underlying

sources of the M **tone**? 2) How should the M **tone** be represented, as opposed to the downstepped H? I begin by illustrating in §2 that the lexical tones of Babanki are H and L even though a number of other tonal distinctions are found on the surface. I then proceed to examine the sources of M **tone** in the language in §3 before turning to discuss how the M **tone** is derived in §4. In §5, I provide evidence that both M and ↓H are phonetically identical and differ only in that the **register** is reset to high after M **tone** but not after ↓H which establishes a ceiling for future H tones within the same tonal phrase.

2 Babanki lexical tone

Babanki has two underlying tones, namely H and L, illustrated in (??). As a native speaker, I have provided most of the data but have also taken some from prior literature, particularly Hyman (1979) and a lexical database of 2,005 Babanki entries in Filemaker Pro™.¹

(1)

ndòŋ	‘potato’	ndónŋ	‘cup’
kà-bwìn	‘witchcraft’	kà-bwín	‘ridge’
à-sè	‘grave’	à-sé	‘profit(n)’
kà-mbò	‘bag’	kà-mbó	‘madness’

On the surface, however, several tonal realizations are possible. As noted by Hyman (1979: 160-161), there is a distinction between falling low (L) and level low (Lo) tones before pause as in (??):

(2)	L		L ^o	
kà-ntò	‘cross (n)’	kà-mbò ^o	‘bag’	/kà-mbò’/
nyàm	‘animal’	dzà ^o m	‘back’	/dzàm’/
tàn	‘five’	wàn ^o	‘child’	/wàn’/
à-sè	‘grave’	dzè ^o	‘kind of fruit’	/dzè’/

The level low **tone** is considered an effect of a floating high **tone** that follows the low **tone** and prevents it from falling. A mid (M) **tone** also occurs even though with an unusual constraint that it must be followed by a H **tone**:

¹The IPA symbols for the following orthographic symbols used in this paper are given in square brackets: ny [ɲ], sh [ʃ], zh [ʒ], gh [gʰ], ch [tʃ], j [dʒ], y [j].

- (3) a. káŋ fāsés²
 káŋ ' fā-sés
 fry IMP c19-pepper
 'fry pepper'
- b. kùmá kākí
 kùm ' kà-kí
 touch IMP c7-chair
 'touch a chair'
- c. ghá? kāvú
 ghá? ' kà-vú
 hold IMP c7-hand
 'hold a hand'

The data show that the M **tone** is derived from a L **tone** found between two H tones as illustrated in §3.1 and discussed elaborately in §4. Finally, there is a downstepped H **tone** as in (??):

- (4) a. kà-fó` ↓ká nyàm
 kà-fó` ká nyàm
 c7-thing AM c9-animal
 'thing of animal'
- b. kàmbó ↓ká wì?
 kà-mbó` ká wì?
 c7-madness AM c1.person
 'madness of person'
- c. kàkán ↓ká byí shóm
 kà-kán` ká byí shóm
 c7-dish AM goat.c10 mine.c10
 'dish of my goats'

The data in (??) illustrate that the H **tone** of the associative marker (AM) is produced at a lower level than that of the preceding noun root because of the intervening floating L **tone**. This is discussed further and formalized in §5. The presence of both M and ↓H in the same language is of interest for two reasons. First, Babanki is unique in that Grassfields Bantu Ring languages are typically said to have either M or ↓H. As Hyman puts it:

²There is a change in the root vowel because in Babanki, /e/ and /o/ are realized as [ɛ] and [ɔ] respectively in closed syllables (Mutaka & Chie 2006: 75).

For example, it is known that the western **Ring** languages and **Babanki** (of the central **Ring** group) have similar downstep systems. The remaining languages of the central group (**Kom**, Bum, Bafmeng, Oku, Mbizinaku) all have systems with M **tone** instead of ↓H, a system which **Grebe & Grebe (1975)** have also documented for **Lamnsoq** of the eastern group (**Hyman 1979**: 176-177).

Second, although phonologically distinct, the M and ↓H tones are phonetically identical, as I shall show below, which is of particular interest to the study of **tone** in general. It is therefore necessary to examine how the M **tone** is derived and how it should be formally represented.

It is important to note that contour tones are rare in the language, allowed mainly in a few borrowed words. In the lexical database of 2,005 **Babanki** entries in Filemaker Pro™, only eight monosyllabic nouns with low-Rising (LH) and four with high-falling (HL) tones were found.³

3 Sources of Babanki M tone

The M **tone** is derived in **Babanki** from L via two separate processes which I will refer to as prefix L-Raising and stem L-Raising.

3.1 Prefix L-Raising: H # L-H → H # M-H

The L **tone** of a prefix is raised to M if it appears between two H tones as in the following examples.

- (5) a. tətóʔ tətáʔ
tə-tóʔ tə-táʔ
c13-bush c13-three
'three bushes'
- b. kəkím kə vətśóŋ
kə-kím kə vətśóŋ
c7-crab AM c2-thief
'crab of thieves'

³LH: *àŋkəpàm* 'pig', *bələŋ* 'groundnut', *fəndzəndzə* 'type of bird', *kəŋgũ* 'fool (n)', *mbwĩ* 'nail', *ŋgũ* 'rake (n)', *sə* 'saw (n)', *tələm* 'cobra'.

HL: *bibi* 'deaf', *bəbó* 'Lord', *byə* 'pear', *lām* 'lamp', *kĩ* 'key', *chôs* 'church', *wəs* 'watch'.

The presence of words like *sə* 'saw (n)', *lām* 'lamp', etc. suggests that many of the **Babanki** words with contour tones are borrowings.

- c. tətʰ tətò
tə-tó? tət-bò
c13-bush c13-two
'two bushes'
- d. kəkím ká vəlèmə
kə-kím ká vè-lèmə
c7-crab AM c2-sibling
'crab of siblings'

Raising applies in (5a) where the L is flanked by Hs but not in (5b) where it is followed by a L **tone**. I return to the issue in §4 to provide a featural analysis of the raising.

3.2 Stem L-Raising: L-L # H → L-M # H

In **Babanki**, the L **tone** of certain noun roots that also have a L prefix is realized as M if it is followed by a H **tone**. The following sets of data show stem L-Raising when the noun is in N1 position in an associative N1 of N2 construction (6a), when the noun is followed by a modifier (6b), and in verb phrases (6c). Forms without raising (i.e. with surface L **tone**) are given in (6d):

- (6) a. kəkʰs ká wì?
kə-kòs ká wì?
c7-slave AM c1.person
'slave of person'
- b. fəkʰ? fə nyàm
fə-kò? fə nyàm
c19-wood AM c9.animal
'wood of person'
- c. fəsò fə↓wén
fə-sò fə wén
c19-abscess AM him
'his abscess'
- d. kəkyè lá kəmù?
kə-kyè lá kə-mù?
c7-basket just c7-one
'just one basket'

- e. wyé kàzhwī tsú
wyé kà-zhwì tsú
put c7-air there
'inflate it'
- f. kú kàlāŋ lúwèn
kú kà-lāŋ lúwèn
give c7-cocoyam now
'give cocoyam now'
- g. nyàm à wì?
nyàm à wì?
c9.animal AM c1.person
'animal of person'
- h. kàkòs kà mù?
kà-kòs kà-mù?
c7-slave c7-one
'one slave'
- i. áshù kàlāŋ nè mú↓ú
á-shù kà-lāŋ nè múú
INF-wash c7-cocoyam PREP c6a.water
'to wash cocoyam with water'

To account for the raising in (6a-c), Hyman (1979: 168) offers a synchronic analysis which mirrors the historical developments, as in (7):

(7) kákòs ká → kákôs ká → kàkòs ká → kàkôs ká ...

As seen, the prefix originally had a H **tone** which spreads onto the L **tone** stem.⁴ After spreading, the prefix H changes to L and then the resulting L-HL # H sequence becomes L-M # H by contour simplification. While this historical account derives the correct output, it appears to be unnecessarily abstract as a synchronic analysis. Instead, the H **tone** on the prefix can rather be analyzed as L (Akumbu 2011) and the change from L to M can be accounted for as a raising rule (see §4). There is, however, a complication that either analysis must deal with: L-L nouns that have a nasal as part of the root initial NC do not become L-M before H as illustrated in (8):

⁴Hyman's pre-autosegmental analysis also posits a floating L after the L stem, i.e., /-kòs/ 'slave'. This is ignored here because it is unnecessary and also an OCP violation.

- (8) a. kèndòŋ ká nyàm
 kà-ndòŋ ká nyàm
 c7-neck AM c9.animal
 ‘neck of animal’
- b. tàŋkàŋ tá ŋkà?
 tà-ŋkàŋ tá ŋkà?
 c13-comb AM c1.rooster
 ‘combs of rooster’
- c. fàŋgàm fá wì?
 fà-ŋgàm fá wì?
 c19-gong AM c1.person
 ‘gong of person’

To account for this, Hyman (1979: 167) distinguished two classes of nouns based on whether the stem syllable has an oral (O) or nasal (N) onset and observed that “a noun in the O class changes from L-L to L-M when in the N1 position before a H **tone** associative marker. A noun in the N class ...remains L-L.” He illustrates that L-Raising is blocked when the N1 is from a nasal class and posits that “in N1 position, N L-L nouns and L-Lo nouns have an underlying L prefix, rather than the underlying H proposed for other noun prefixes” (Hyman 1979: 169). Since HTS does not occur, there is no L-HL # H sequence to become L-M # H. While that analysis is historically plausible, we can again propose a more concrete analysis by which L-Raising is simply blocked when a L **tone** root has an NC onset. As argued in Akumbu (2011: 9), there is a L **tone** linked to the N in NC sequences that blocks the raising. This is because in these cases, the nasal forms part of the root and bears the same L like the root vowel because of the OCP (Snider 1999) that is enforced morpheme-internally in Babanki. The multiple linking of the L (to the nasal and root vowel) violates the condition for raising, namely, that the **tone** that precedes the target L must be singly-linked (Akumbu 2011: 6). L-Raising will automatically not apply to L-L° nouns since they have a floating H after them that prevents raising from occurring. The fact that the roots in (8) all end with a nasal could be relevant in providing a possibility of tying the failure of L-Raising to apply to some phonetic motivation. A possibility might be that the extra nasal, an extra mora, gives the L **tone** more of a chance to manifest itself. If so, then we might expect the same if the stem has a long vowel (another manifestation of an extra mora). Unfortunately, Babanki does not have long vowels and two other problems exist: there are stems, e.g. fàŋgù? fá wì? ‘small stone of person’, without final nasal that do not also become M, as well as stems with final nasal, e.g. kàbūm

ká wì? ‘mucus of person’, that do in fact become M. So far, the two sources of M tone have been presented: prefix L becomes M between Hs and stem L becomes M when preceded by a L prefix and followed by a H. It should be noted that this occurs over a word boundary although it is still unclear what the influence of the boundary is. In addition, there is another context in which a stem L becomes M. This arises when a coda consonant is deleted intervocalically (see Akumbu 2016 and references cited therein for more information on coda deletion in Babanki). As seen in (9), when the CVC stem is H and the following prefix vowel is L, the H+L sequence resulting from coda deletion is realized M:

- (9) a. *kàbā: kóm*
 kà-bán à-kóm
 c7-corn.fufu c7-my
 ‘my corn fufu’
 b. *kàŋkō: kóm*
 kà-ŋkón à-kóm
 c7-fool c7-my
 ‘my fool’
 c. *kàbā: kóm*
 kà-báŋ à-kóm
 c7-home c7-my
 ‘my home’

I propose to account for this by invoking the prefix raising rule. Thus, in (9a) for example, the input /*kà-bán à-kóm*/ first undergoes prefix L-Raising to become *kà-bán ā-kóm*. Next, the coda consonant (alveolar or **velar nasal**) is deleted in intervocalic position, creating the structure *kà-bá ā-kóm*. This is followed by vowel (schwa) deletion which allows its M tone to float: *kà-bá⁻-kó*. The floating M tone docks leftwards and causes the deletion of the H tone, since HM contour tones are not permitted in the language. The vowel that causes **vowel deletion** then undergoes compensatory lengthening, resulting to the surface structure [*kàbā: kóm*].

4 Featural analysis of Babanki M tone

In this section I show that the M tone can be insightfully accounted for using tonal features which spread. Various proposals for the use of features in the representation and analysis of tone have been addressed by Yip (1980), Clements

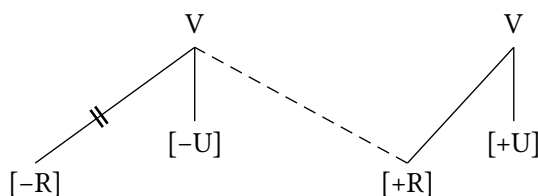
(1983), Pulleyblank (1986), Odden (1995), Snider (1999), Hyman (2011) and others. Following the **tone** features introduced by Yip (1980) and modified by Pulleyblank (1986), I assume the feature system in (10) for the two underlying Babanki tones:

(10)

	H	L
Upper	+	-
Raised	+	-

I propose that Babanki M **tone** be represented as [-U, +R] which can be derived directly from the leftwards spreading of the [+R] feature of a H **tone** to a preceding L **tone**, whose [-R] feature automatically delinks. I formulate the process in (11) where I link features directly to the TBUs even though there are arguments in the literature to link features to tonal nodes, e.g. Yip (1989) and Hyman (2011). This implies that linking features directly to TBUs is merely for expository convenience.

(11) Leftwards [+R] spread



It should be recalled that there are two different morphological restrictions on the application of this rule: the L **tone** that is raised must either be that of a prefix found between two H tones (§3.1) or of a stem preceded by a prefix L **tone** and followed by a H **tone** (§3.2). The first is an instance of **register** plateau where [-R] becomes [+R] between [+R] specifications. In both cases, the application of the rule results in a M **tone** with the features [-U, +R], as illustrated in the following derivations:

(12) UR		Leftwards [+R] spread	PR
tà- tò? tà- tsén		tà- tò? tà- tsén	[tətó? tətсэн]
	→	// \	
[-R] [+R] [-R] [+R]		[-R] [+R] [-R] [+R]	
(13) UR		Leftwards [+R] spread	PR
kà- kòs ká wì?		kà- kòs ká wì?	[kà-kòs ká wì?]
	→	// \	
[-R] [-R] [+R] [-R]		[-R] [-R] [+R] [-R]	

To summarize this section, the resulting feature system of Babanki is as follows:

(14)		H	M	L
	Upper	+	-	-
	Raised	+	+	-

The use of features allows for a unified account of the Babanki derived M tone using one tone rule (albeit with constraints) thereby avoiding Hyman's abstract intermediate contour tones which are not realized on the surface. In the next section, I address the analysis of the ↓H downstep tone.

5 Babanki downstepped high tone

While the different sources of the M tone have been discussed above and its realization shown, nothing has been said about the ↓H tone which, like M is also a derived tone in the language. Downstep is commonly used to describe successive lowering of H tones in an utterance. The two kinds of downstep commonly mentioned in the literature are non-automatic downstep, phonologically conditioned by a floating L tone (Clements & Ford 1979; Pulleyblank 1986) or by one that had been lost historically, and automatic downstep, caused by an associated low tone (Stewart 1965; Odden 1982; Snider 1999; Connell 2014). Downstep has been described as a downward shift in register (e.g. Snider 1990; Snider & van der Hulst 1993; Snider 1999; Connell 2014). Automatic downstep occurs in Babanki but the focus in this study is on non-automatic downstep which has been noted in the Babanki nominal system (Hyman 1979; Akumbu 2011) as well as in the verb system (Akumbu 2015). As seen in the following data, the floating low tone that causes downstep in Babanki may be underlying:

(15)	a.	á`-sé	→	á↓sé	‘to sharpen’
		á`-sám	→	á↓sám	‘to migrate’
	b.	á`-bùm	→	ábùm	‘to meet’
		á`-sìm	→	ásìm	‘to tighten’

As shown in (15a), a H verb stem is realized as a downstepped H after the infinitive prefix. Downstep can be accounted for by assuming that the H tone schwa of the infinitive prefix is followed by a floating L. The presence of this floating L tone is justified by the fact that the H tone of the verb root is realized on a lower register than the preceding H tone. When the H tone prefix is followed by

a L **tone** verb, the verb **tone** does not change (15b). These data are analyzed as involving ↓H as opposed to the previous cases analyzed as involving M specifically because it is shown, subsequently (see Figure 1), that ↓H sets a new ceiling for subsequent Hs producing a terracing effect as opposed to M which results from the local raising of L and is obligatorily followed by H.

In the noun system, certain H **tone** stems have a following floating L **tone** in their underlying representation. Evidence has been presented that in Babanki, “class 7 nouns fall into three subclasses, A, B, C [corresponding to (16a, b, c)] which behave differently in context” (Hyman 1979: 163-164).⁵ Hyman illustrates the distinction between the three using noun-plus-noun (N1 of N2) associative constructions (AM). When H **tone** roots are in N1 position and are followed by the H **tone** of the AM, the latter is lowered to ↓H after A and B, but not C. Secondly, when in N2 position after a L toned AM, A and C become L-Lo, while B remains L-H. Finally, when in N2 position after the H toned AM, A becomes H-Lo, while B and C become H-↓H.

As said above, A and B cause the following H **tone** of the AM to be realized at a lower level than the preceding root H **tone** (16a,b):

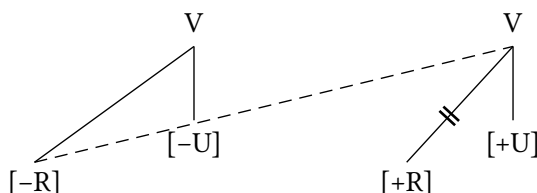
- (16) a. kàfó ↓kʰá wì?
 kà-fó` kʰá wì?
 c7-thing AM c1.person
 ‘thing of person’
 b. kàkáj ↓kʰá ndòŋ
 kà-káj` kʰá ndòŋ
 c7-tin AM c1.potato
 ‘tin of potato’
 c. kàfú ↓kʰá wì?
 kà-fú` kʰá wì?
 c7-medicine AM c1.person
 ‘medicine of person’
 d. kàtyí ↓kʰá nyàm
 kà-tyí` kʰá nyàm
 c7-stick AM c9.animal
 ‘stick of animal’

⁵The historical origins of the different classes adopted synchronically by Hyman (1979) were: A = *LH, B = *HL, C = *HH.

- e. kəkím ká ká↓kú
kə-kím ká kə-kú
c7-crab AM c7-gift
'crab of gift'
- f. kəshí ká ká↓təŋ
kə-shí ká kə-təŋ
c7-place AM c7-belt
'place of belt'

Downstep of the AM H **tone** is best explained by the presence of a floating L **tone** on N1 noun roots. Hyman's class C nouns (16c) do not cause downstep of the following H **tone** of the associative marker because they do not have a floating **tone** in their underlying representation. The forms in (16c) further show that the H **tone** of the AM spreads rightwards and delinks the L **tone** of the prefix of N2 nouns. It is this floating L **tone** that causes downstep of the H **tone** of N2 noun roots. Its [−R] feature spreads rightwards and delinks the [+R] feature of the following H **tone** as follows:

(17) Rightwards $[-R]$ spread (Downstep)

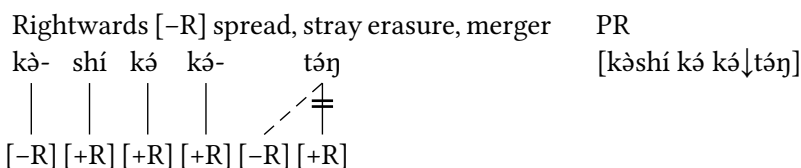


The application of this rule yields a $\downarrow\text{H}$ **tone** with the features [+U, -R], as illustrated in the following derivations:

- (18) UR Rightwards [-R] spread & stray erasure PR
 kà- fó ká wí? kà- fó ká wí?
 | | | | | | |
 [-R] [+R] [-R] [+R] [-R] [-R] [+R] [-R] [+R] [-R]
- (19) UR High tone spread⁶ & low tone delinking
 kà- shí ká kà- táŋ kà- shí ká kà- táŋ
 | | | | | | | | | |
 [-R] [+R] [+R] [-R] [+R] [-R] [+R] [+R] [-R] [+R]

⁶I have shown only the spread of [+R] here but it must be said that it is the entire **tone** root node that spreads both [+U,+R] and delinks [-U,-R] of the L **tone**.

1 A featural analysis of mid and downstepped high tone in Babanki



Each [+U, -R], i.e., ↓H, sets a new ceiling for subsequent Hs such that H tones after the one downstepped in the same tonal phrase do not rise above it as seen in (20), where italics have been used to indicate downstep of all Hs following H:

- (20) kàkánj ↓ká byí shóm ‘dish of my goats’
nyám ↓sá wén shí sá ‘those animals of his’

The pitch traces in Figure 1 show lower F0 values (120Hz-125Hz) for all the H tones after ↓H compared to the F0 value of the H **tone** before ↓H which is approximately 138Hz (In this and subsequent Figures, vowels are demarcated by vertical lines and marked by **tone** labels (L, H, M, ↓H) on the second tier.)⁷

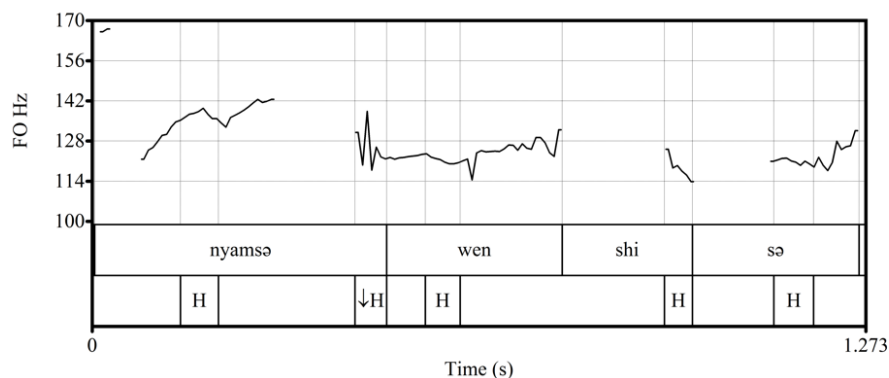


Figure 1: Downstep

We are now in a position to complete the tonal feature matrix to accommodate the downstepped high **tone**.⁸

⁷The pitch traces used in this paper were obtained from recordings of the author’s speech at the Phonology Laboratory at UC Berkeley and analyzed in Praat (Boersma & Weenink 2016).

⁸The matrix is said to be complete because although Babanki has two contrastive underlying **tone** heights but five in derived forms, I do not treat the fifth - the prepausal level low **tone** as separate phonological **tone** features because I analyze it as the late phonetic effect of a floating high **tone** that follows the low **tone** and prevents it from falling.

(21)

	H	↓H	M	L
Upper	+	+	-	-
Raised	+	-	+	-

An issue this raises is whether the M tone [-U, +R] and the ↓H tone [+U, -R] are phonetically distinguishable from one another. Hyman (1979: 162) has observed that “...the sequence H-M is identical, phonetically, to the sequence H-↓H.” He further states that “the two are distinguishable, however, since ↓H establishes a ceiling for future H tones within the same tonal phrase, while M does not.” The two tones therefore differ only in that they come from separate sources as well as on the effect they have on subsequent H tones. The pitchtracks in Figure 2 show that M and ↓H are not phonetically distinguishable.

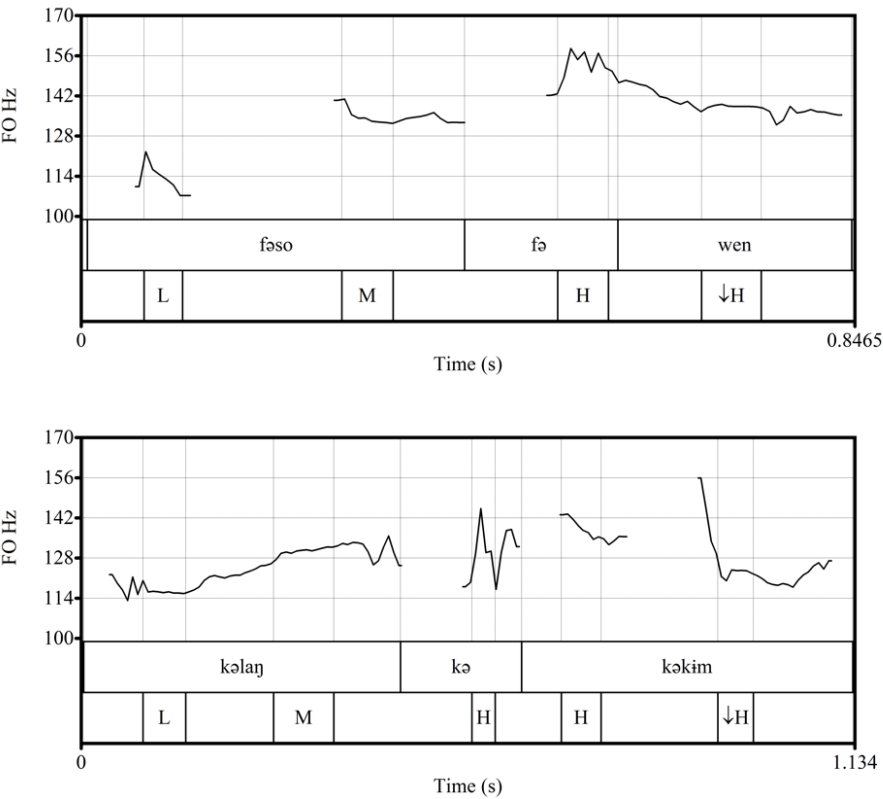


Figure 2: Comparison between M and ↓H

In both phrases, the F0 of vowels with M and ↓H tones are around 120 Hz while the intervening H tone has an F0 of about 135 Hz, confirming that M and ↓H are phonetically very similar, particularly if all other factors surrounding the utterance are the same. It is not likely that the two tones are discriminable if they typically exhibit this small F0 difference. The phonetic sameness of Mid and downstepped H is not unique to Babanki as it has been reported in other languages e.g. Bimoba (Snider 1998).

Figure 3 and Figure 4 show that the phonetic pitch levels of H tones differ slightly depending on whether the preceding tone is M or ↓H. These pitchtracks show that a M tone may be followed by a H tone whereas the H tones following ↓H, are pronounced at the same level as the ↓H. Figure 3 shows that the F0 of vowels with H tone is about 126 Hz, slightly higher than the F0 of vowels with ↓H in Figure 4 which is about 120 Hz.

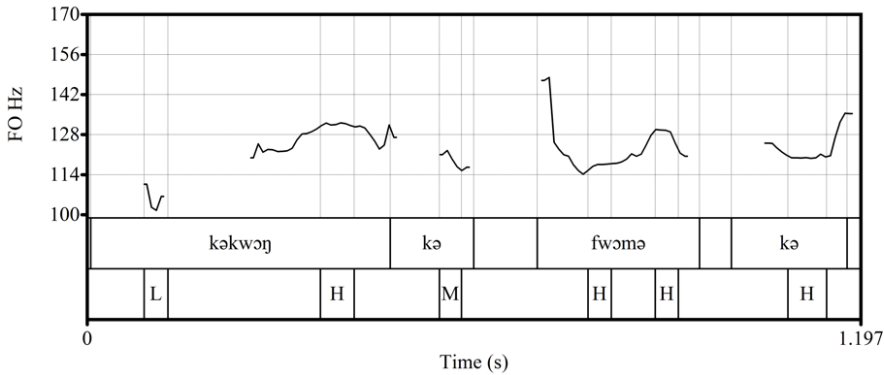


Figure 3: Comparison of H tone following M

6 Conclusion

Although there is no underlying M tone in Babanki, it appears on the surface when a prefix or stem L tone is raised in two separate conditions: prefix L-Raising takes place if it is found between two H tones while stem-Raising takes place if preceded by a L prefix and followed by a H tone. I have given a synchronic account of the processes that derive the M tone, arguing that it results from the regressive spreading of the [+R] feature of high tones which is blocked only by a nasal in NC initial roots. Downstep on its part results from the progressive spread

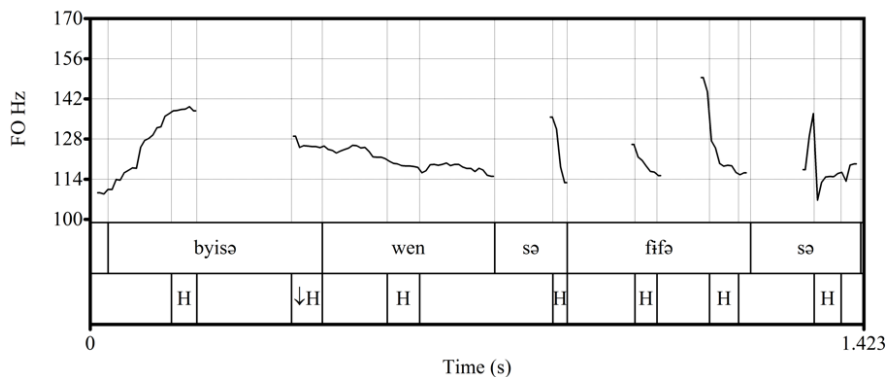


Figure 4: Comparison of H tone following ↓H

of [–R] feature of a floating L tone. Simple acoustic analyses have confirmed that both M and ↓H are realized with similar F0 levels.

It was stated above that the other Central Ring languages such as Kom have a much more general M tone (see Hyman 2005), while Western Grassfields Bantu languages instead have a downstepped ↓H. Babanki is unusual in having both M and ↓H. However, whereas the source of the M in other Central Ring languages is from an underlying /H/ that is lowered after a L, we have seen that Babanki creates output Ms from underlying /L/. Although Hyman’s (1979: 166-168) account is unnecessarily abstract as a synchronic analysis, it clearly shows that M tone originates to avoid tonal ups and downs (Hyman 2010: 15). In particular, it is meant to avoid tonal contours surrounded by the opposite tone. As we have seen, unlike most other Ring languages, Babanki has rid itself of nearly all contours, but has developed a M tone level that is phonetically identical to ↓H, but phonologically distinct.

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Abbreviations

AM	associative (possessive) marker	INF	infinitive
c1-19	class Marker	n	noun
IMP	imperative	PREP	preposition

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Part II

Syntax and semantics

Chapter 2

Notes on the morphology of Marka (Af-Ashraaf)

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This paper provides an overview of selected aspects of the nominal, pronominal, and verbal morphology of the Marka (Merca) dialect of Af-Ashraaf, a Cushitic language variety spoken primarily in the city of Merca in southern Somalia, as well as by several diaspora communities around the world, and in particular, in the United States. Marka is interesting to us for a variety of reasons, not the least of which is the general dearth of descriptive work on the language in comparison to two of its closest relatives, Somali and Maay. While many details of the structure of Somali are fairly well established (e.g., Bell 1953; Saeed 1999), and those of Maay are the subject of several recent works (e.g., Paster 2010; 2018), the various ways in which Marka relates to and/or differs from these languages, are yet poorly understood. Our goal in this paper is to begin to remedy this situation, beginning with a comparison of selected morphological characteristics across the three languages.

1 Introduction

This paper describes aspects of the morphology of Marka, a variety of Af-Ashraaf spoken in and around the city of Merca in Southern Somalia, as well as by diaspora communities in the United States and elsewhere. The data that we present are from our own fieldwork with our main consultant, a mother tongue speaker of Marka, conducted in three locations across the United States over a span of several years. The data were collected by the first author in Minneapolis, Minnesota, in October 2014 and in Phoenix, Arizona, in October 2015. Data were



also collected by the second author in Minneapolis in 2009 and 2010. These cities, among a few others in the United States, are home to sizable diaspora populations of **Marka** speakers.

Marka is one of two varieties of **Af-Ashraaf**, the other being **Shingani**, which is spoken primarily in and around the **Somali** capital, Mogadishu; **Shingani** is also sometimes called **Xamar**, which is the name locals attribute to Mogadishu itself. To our knowledge, there is one published theoretical article on **Shingani** which pertains to so-called “theme constructions” (Ajello 1984). There is also a self-published book of pedagogical materials for the dialect (Abo 2007) and a short grammatical sketch (Moreno 1953). There is less available for **Marka**; this includes an unpublished grammatical sketch [in **German**] (Lamberti 1980), and one article on aspects of its **verbal inflection** (Ajello 1988). In addition, both Ashraaf varieties are briefly mentioned in several classificatory works (as cited below) and in Banti (2011). Compared even to other African languages, the varieties of **Af-Ashraaf** are under-described and certainly under-documented.

In this paper, we present data highlighting certain morphological characteristics of **Marka**. Our immediate goal in this paper is to begin to establish (and in some instances reaffirm) characteristics of contemporary **Marka**. In order to better situate this language variety alongside two of its closest and better-described cousins, namely **Somali** and **Maay**, we provide comparable examples from these languages wherever possible. We believe that this is an important component of our ongoing work on **Marka**. While we have not yet explored it empirically, and despite all classifications of Ashraaf treating it as a dialect of **Somali**, our **Marka** speakers have intimated to us that both **Marka/Somali** and **Marka/Maay** intelligibility presents a challenge, though they deem **Somali** to be somewhat more intelligible to them than **Maay**. Our hope that by directly comparing these three languages throughout our ongoing research wherever possible, it will permit further discussion concerning the classificatory and structural relationships between them.

As we mention above, the **Marka** data that we present are our own. Comparative lexical and morphological data for **Somali** are drawn primarily from Green et al. (forthcoming), and the data therein are in line with other published sources on the language (e.g., Bell 1953; Saeed 1999). These data are from Northern **Somali**; hereafter, any reference to **Somali** refers to Northern **Somali** unless otherwise indicated. Corresponding **Maay** data are drawn from a recent grammatical sketch of the Lower Jubba variety of the language Paster & Ranero (2015), which itself is in line with other published materials on the language (e.g., Paster 2007; 2010; 2018). The comparative data that we present allow us to begin to draw some

generalizations, though preliminary, about morphological similarities and differences between Marka, Somali, and Maay. We highlight two unique characteristics of Marka that stand out in comparison to Somali and Maay; these include the morphological encoding of pluralization and grammatical gender.

The Marka data presented below are transcribed using the International Phonetic Alphabet (IPA). Somali data are given in the standard Somali orthography (Andrzejewski 1978); in this orthography, certain written symbols differ markedly from their IPA counterparts. These and their phonetic equivalents are as follows: c [ʕ], dh [d], kh [χ], x [h], j [tʃ], and sh [ʃ]. Although Maay does not have an official or standard orthography, we follow the conventions used in Paster & Ranero (2015) in presenting Maay data below. Like in the case of Somali, some Maay written symbols differ from their IPA counterparts. For Maay, these letters and their phonetic equivalents are as follows: j [tʃ], sh [ʃ], ny [ɲ], d' [dʰ], y' [f], and g' [g]. Data for all three languages include morpheme breaks which are indicated by a hyphen; finer-grained distinctions such as clitic boundaries are not indicated.

Arriving at a better understanding of Marka's place alongside Somali and Maay has broader implications, as its place (and of Af-Ashraaf, more broadly) in classifications of Lowland East Cushitic languages is not entirely clear. As we mention above, despite the fact that some classifications treat Ashraaf as a dialect of Somali, Marka and Somali appear not to have a high degree of mutual intelligibility, begging the question as to whether the former is properly classified as a dialect of the latter. Although it is not our intent to engage in a lengthy discussion of classification, we believe that it is nonetheless important to ground our paper in a short description of the state of the science concerning the internal classification of languages believed to be most closely related to Marka.

Generally speaking, there are several competing classifications concerning the composition of the so-called 'Somali' branch of the Lowland East Cushitic languages in the larger Afro-Asiatic language family (e.g., Abdhullahi 2000; Ehret & Ali 1984; Heine 1978; Lamberti 1984; Moreno 1955). Lamberti (1984) and Ehret & Ali (1984) are of importance to our interests, as they specifically refer to Ashraaf varieties in their classifications. Note that 'Somali' is the name of both the sub-group as a whole and of a language within the sub-group designated ISO:som in Lewis et al. (2016). Lamberti (1984) defines five dialect groups of 'Somali' wherein Ashraaf is considered a separate dialect group from both the better-described Northern and Benaadir Somali dialects. He further divides Ashraaf into Shingani and Lower Shabelle varieties, of which the latter is the Marka variety discussed elsewhere. Examples provided compare only the "peculiarities" (to use

Lamberti's term) of the **Shingani** variety to Af-Maxaad Tidhi (i.e., a group composed of Northern and **Benaadir Somali**), but no differentiation is provided pertaining to the **Marka** variety of Ashraaf, which is the **focus** of the current paper. Ehret & Ali (1984), on the other hand, group **Xamar** and **Marka** (i.e., Ashraaf) varieties with **Benaadir Somali** and little detail about their properties relative to one another or to other varieties/dialects is given. We certainly do not mean to imply that we are the first to look at **Af-Ashraaf**, nor is it our intent to engage in a classification debate in this paper, but we believe that it there is much more to learn about the properties of this language group (i.e., **Af-Ashraaf**'s two constituent varieties, **Shingani** and **Marka**) and its relationship to its closest relatives. In order to begin to do so, we turn our attention first in this paper to properties of **Marka** morphology.

2 Nominal morphology

Singular nouns in **Marka** are unmarked, and their plural counterparts are all formed by the addition of the suffix *-(r)ajno* wherein an epenthetic rhotic appears after vowel-final stems. We illustrate in Table 1 that **Marka** adopts a single strategy to pluralize nearly every noun. The exception to this is a few high frequency nouns that are used in proverbs whose plurals are identical to those found in **Somali** (e.g., *ilig* 'tooth' vs. *ilko* 'teeth'). Corresponding **Somali** plurals are provided for comparison, wherever possible. The fact that outside of these few outliers, **Marka** adopts a single pluralization strategy distinguishes it from both **Somali** and **Maay**. This is because **Somali** adopts at least five different pluralization strategies (e.g., suffixation of *-o* or *-yaal*, partial suffixing reduplication, tonal accent shift, and both broken and sound pluralization in some **Arabic** borrowings), while **Maay** adopts two or three, depending on the particular noun (Paster 2010), all of which involve suffixation.

Like **Somali** and **Maay**, **Marka** encodes two grammatical genders in its nominal system: **masculine** and **feminine**. Nouns have inherent **gender**, however, there is no overt segmental indication of **gender** on nouns themselves. Rather, a given noun's grammatical **gender** is recoverable from the patterns of agreement that it requires on its modifiers. This can be seen, for example, in definite determiners, wherein the initial consonant of the determiner (except in one context discussed below) reveals the noun's **gender**. These consonants, however, often alternate following particular stem-final segments. The **masculine definite determiner** is *-e* after liquids and pharyngeals and *-ke* in most other contexts. The **feminine definite determiner** is *-de* after [d] and pharyngeals and *-te* in most other instances.

Table 1: Pluralization

Marka Sin- gular		Marka Plural		Somali plural
dabaal	fool	dabaal-ajno	fools	dabbaal-o
af	language	af-ajno	languages	af-af
karfin	tomb	karfim-ajno	tombs	
khoor	necks	khoor-ajno	necks	qoor-ar
mindí	knife	mindí-rajno	knives	mindí-yo
maro	head	mara-rajno	heads	madáx
guddoomije	chairman	guddoomija-rajno	chairmen	guddoomiya-yaal

Somali

Following vowel-final stems, the **definite determiner** is always *-re*, even in association with those nouns that are biologically **masculine** or **feminine**. This points towards a neutralization of the morphological encoding of **gender** in such contexts. Thus, both **masculine** and **feminine** nouns whose stem ends in a vowel take the **definite determiner** *-re*. In addition, and as one might expect, certain nouns are free to change their **gender** in accord with the biological **gender** of their referent, as in *saaxibke* ‘the (male) friend’ vs. *saaxibte* ‘the (female) friend.’ Examples of **Marka** **masculine** and **feminine** singular nouns in their indefinite and definite forms are in Table 2.

Although there is no overt **gender** marking on **Marka** nouns, it appears at least preliminarily that the accentual **gender** distinction found in **Somali** is maintained in **Marka**. As discussed in detail in Hyman (1981) and Green & Morrison (2016), **Somali** nouns exhibit a tonal accent on either their final or penultimate mora; the mora is the **tone** and accent bearing unit in the language. It is typically the case that non-derived **masculine** singular nouns have a tonal accent on their penultimate mora while non-derived **feminine** singular nouns have a tonal accent on their final mora. Like **Somali**, **Marka** appears to exhibit this same phenomena, as seen for example in a comparison of **masculine** *kárfín-ke* ‘the tomb’ and **feminine** *mindí-re* ‘the knife.’ This accentual distinction is helpful in determining the grammatical **gender** of nouns with vowel-final stems. Compare, for example, the **masculine** noun *sánno* ‘year’ to the **feminine** noun *mindí* ‘knife,’ both of which take the same **definite determiner** *-re*. Their corresponding definite forms are *sánna-re* ‘the year’ and *mindí-re* ‘the knife.’

Table 2: Grammatical gender and definite determiners (Marka)

	Indefinite		Definite	
Masculine:	nin	‘man’	niŋ-ke	‘the man’
	saŋ	‘nose’	saŋ-ke	‘the nose’
	abti	‘maternal uncle’	abti-re	‘the maternal uncle’
	dabaal	‘fool’	dabaal-e	‘the fool’
	gasaŋ	‘can’	geseŋ-e	‘the can’
Feminine:	maaliŋ	‘day’	maalin-te	‘the day’
	kab	‘shoe’	kab-te	‘the shoe’
	irbad	‘needle’	irbad-de	‘the needle’
	saddeχ	‘three’	saddeχ-de	‘the three’
	inŋo	‘mother’	inŋa-re	‘the mother’

While **Marka** maintains a fairly clear distinction between **masculine** and **feminine** grammatical **gender** in singular nouns, whether segmental, accentual, or both, this distinction is lost upon pluralization. That is, all plural nouns require **feminine gender** agreement. This characteristic distinguishes **Marka** from both **Somali** and **Maay**. **Somali** has a complex grammatical **gender** system; following the noun classification adopted in **Green et al. (forthcoming)**, nouns in Classes 1c and 2 maintain the same **gender** in both the singular and plural, while nouns in Classes 1a, 1b, 3, 4, and 5 exhibit so-called **gender polarity** (**Meinhof 1912**) where a noun’s **gender** changes from **masculine** to **feminine** (or vice versa) upon pluralization. **Maay**, on the other hand, also collapses its grammatical **gender** distinction in nouns upon pluralization, but unlike **Marka** which levels **gender** to **feminine**, all **Maay** plural nouns are **masculine**. A summarized comparison of these three systems is in Table 3.

In addition to the definite determiners described above, **Marka** has four additional determiner which can modify nouns. The initial consonant of each determiner alternates under the same conditions described above for definite determiners. There are two demonstrative determiners: *koy/toŋ* ‘this’ and *kaas/taas* ‘that.’ These have direct correspondents in both **Somali** and **Maay**, although **Somali** has an additional distal demonstrative to point out ‘that yonder.’ The **Marka** interrogative determiner is *kee/tee* ‘which?’, which, once again, has direct correspondents in both **Somali** and **Maay**. Like **Somali**, **Marka** exhibits so-called *remote* or *anaphoric* definite determiners, namely *kii/tii*. In **Somali**, these are described

Table 3: Grammatical gender – singular vs. plural

Marka	Somali	Maay	Gloss
igaar	inan	dinaŋ	‘boy’
igaare (m)	inanka (m)	dinaŋki (m)	‘the boy’
igaarajno	inammo	dinamo/dinanyyal/dinamoyal	‘boys’
igaarajte (f)	inammada (f)	dinamoyi/dinanyyalki/ dinanmoyalki (m)	‘the boys’
naag	naag	bilan	‘woman’
naagte (f)	naagta (f)	bilanti (f)	‘the woman’
naagajno	naago	bilamo/bilanyyal/bilamoyal	‘women’
naagajte (f)	naagaha (m)	bilamoyi/bilanyyalki/ bilamoyalki (m)	‘the women’

Maay

as being associated with **past tense** referents (Lecarme 2008; Tosco 1994). They appear to instead have a disambiguating function in **Marka**, which we gloss as ‘the/that (one) X.’ In addition, **Marka** has a determiner, *koo/too*, that speakers use to point out an item that the speaker knows about but the hearer does not. There is a great deal of similarity in the determiners discussed thus far when comparing **Marka** to both **Somali** and **Maay**; however, the possessive determiners in each are more divergent. Possessive determiners in the three varieties are shown in Table 4; they are presented in **masculine/feminine** pairs in their default forms. Note that **Marka** and **Maay** lack the exclusive vs. inclusive distinction encoded in **Somali** for **first person plural**. Also, **third person masculine** possessive determiners in both the singular and plural in **Maay** differ greatly from those found in both **Somali** and **Marka**.

Concerning the derivational morphology that can be added to nouns, there are several parallels between **Marka** and **Somali**; the following list should not be taken as exhaustive. Thus far, we find that there are two **Marka** suffixes, *-nimo* and *-ija*, that derive abstract nouns. Examples include: *hurnimo* ‘freedom’ (cf. *hur* ‘free’) and *insaanija* ‘humanity’ (cf. *insaan* ‘human’). These correspond to *-nimo* and *-iyad* in **Somali**. The **Somali** suffix *-tooyo*, which derives stative abstract nouns is absent in **Marka**, and we have not yet been able to find another morpheme that accomplishes this function. The **Marka** suffix *-dari* derives antonyms, as in *nahariisdari* ‘merciless’ (cf. *naharis* ‘mercy’); this corresponds to *-darro* in **Somali**, which accomplishes the same function. The **Marka** suffix *-lo* corresponds

Table 4: Possessive determiners

	Marka	Somali	Maay
1SG	kee/tee	kay/tay	key/tey
2SG	kaa/taa	kaa/taa	ka/ta
3SG.M	kiis/tiis	kiis/tiis	y'e/tis
3SG.F	kiiŋe/tiiŋe	keed/teed	y'e/tie
1PL	kaŋ/taŋ	kayo/tayo (exc.) keen/teen (inc.)	kaynu/taynu
2PL	kiin/tiin	kiin/tiin	kin/tin
3PL	kiiŋon/tiiŋon	kood/tood	y'o/tio

to **Somali** *-le* and is used to derive agentive nouns, as in *dukaanlo* ‘store owner’ (cf. *dukaan* ‘store’). Finally, we have found that inchoative and experiencer verbs can be derived from nouns in **Marka** via the suffixes *-wow* and *-fow*, respectively, as in *duqowow* ‘to become old’ (cf. *duq* ‘elder’) and *rijoŋfow* ‘to have a dream’ (cf. *rijo* ‘dream’).

3 Pronouns

Marka has a single series of **subject** pronouns which are inflected for person, number, and for biological **gender** with human referents; **Marka** does not encode an exclusive vs. inclusive distinction in its **first person** plural **subject** pronouns. **Marka** **subject** pronouns may be used independently whereupon they take on characteristics similar to other nouns. In addition, they may also cliticize to complementizers and negative markers under some conditions. A comparison between **subject** pronouns in **Marka**, **Somali**, and **Maay** is in Table 5. In addition to these **subject** pronouns, **Marka** (like **Somali**) has a non-specific **subject pronoun**, *la*.

Table 5 reveals that there are many similarities across the three language varieties under consideration regarding their **subject** pronouns. A comparison of their object pronouns in Table 6, however, shows far fewer similarities in this particular category. To begin, **Somali** has so-called *first series* (OP1) and *second series* (OP2) object pronouns, the latter of which appear only in those instances where two non-third person pronominal objects are required. **Somali** maintains an exclusive vs. inclusive distinction in both series of its object pronouns; neither

Table 5: Subject pronouns

	Marka	Somali	Maay
1SG	aan	aan	ani
2SG	at	aad	aði
3SG.M	uus	uu	usu
3SG.F	ishe	ay	ii
1PL	annuŋ	aannu (exc.) aynu (inc.)	unu
2PL	asiin	aydin	isiŋ
3PL	ishoon	ay	iyo

Maay

Marka nor Maay encode such a distinction, and both have only a single series of object pronouns. Both series of Somali object pronouns have third person gaps in both the singular and plural. Marka and Maay differ in that each has third person object pronouns. While Marka's third person object pronouns appear innovative in all instances, the situation with Maay is somewhat different. A comparison of Maay subject vs. object pronouns in Tables 5 and 6 shows that they are in many instances identical. The exception of the first and second person singular, and the second person plural to some degree. In addition to its other object pronouns, Marka has the reflexive/reciprocal pronoun *is*, similar to that found in Somali.

Table 6: Object pronouns

	Marka	Somali (OP1)	Somali (OP2)	Maay
1SG	iŋ	i	kay	i
2SG	ku	ku	kaa	ki
3SG.M	su	-	-	usu
3SG.F	sa	-	-	ii
1PL	nurŋ	na (exc.) ina (inc.)	kayo (exc.) keen (inc.)	unu
2PL	siin	idin	kiin	isiŋ-siŋ
3PL	soo	-	-	iyo

Maay

Marka object pronouns cliticize onto adpositional particles, of which there are three. Object pronouns also co-occur with a non-specific subject pronoun (NSP)

meaning ‘one.’ We notice no prosodic difference between them, but according to our speaker’s intuition, sequences of NSP+object **pronoun** are divisible, while object **pronoun**+adposition are a single unit. Examples are in Table 7.

Table 7: Pronouns with adpositional particles (Marka)

	Object pronoun	NSP	ka ‘in/from’	u ‘to/for’	la ‘with’
1SG	in	la in	inka	iin	inla
2SG	ku	la ku	kuka (koo)	kuun	kula
3SG.M	su	la su	suka	suun	sula
3SG.F	sa	la sa	saka	saan	sala
1PL	nun	la nun	nunka	nuun	nunla
2PL	siin	la siin	siinka	siin	siinla
3PL	soo	la soo	sooka	soon	soola

4 Verbal morphology

The simplest **Marka** verbs are formed by a single verbal base. These simple bases may contain just the verb root itself, but more complex bases can contain one or more derivational affixes, such as a Weak Causative, Middle, or even a combination of the two. Suffixes inflecting for person, number, and **gender** follow the stem. **Marka** has two verb contexts with a single verbal base, namely the Present Habitual and Past Simple. These contexts correspond go the Present Habitual and Simple Past in **Somali** (Green et al. forthcoming), and to the Simple Present A and Simple Past in **Maay** (Paster & Ranero 2015). Like both **Somali** and **Maay**, inflection in **Marka** for **first person** singular and **third person masculine** singular are identical. Likewise, inflection for **second person** singular and **third person feminine** singular are identical. The basic inflectional properties of **Marka** verbs for four stem types (Bare, Weak Causative, Weak Causative + Middle, and Middle) are given in Table 8, which shows inflection for the Present Habitual and Table 9, which shows inflection for the Past Simple.

Other contexts (e.g., Present Progressive, Past Progressive, Past Habitual, and Assumptive) are formed via **auxiliary** constructions containing two verbal bases; the first base is the infinitival form of the main verb which is, in turn, followed by an inflected form of an **auxiliary** verb. These are comparable to those found in

Table 8: Present Habitual (Marka)

	Bare 'see'	WeakCaus 'cook'	WeakCaus+Middle 'sell'	Middle 'sink'
1SG/3SG.M	deje	karife	iibsade	qubme
2SG/3SG.F	dejte	karise	iibsate	qubmate
1PL	dejne	karine	iibsane	qubmane
2PL	dejtiin	karisiin	iibsatiin	qubmatiin
3PL	dejaan	karifaan	iibsadaan	qubmadaan

Table 9: Past Simple (Marka)

	Bare 'see'	WeakCaus 'cook'	WeakCaus+Middle 'sell'	Middle 'sink'
1SG/3SG.M	deji	karifi	iibsadi	qubmi
2SG/3SG.F	dejti	karisi	iibsati	qubmati
1PL	dejni	karini	iibsani	qubmani
2PL	dejteen	kariseen	iibsateen	qubmateen
3PL	dejeen	karifeen	iibsadeen	qubmadeen

Somali (Green et al. forthcoming), and also to the Present Progressive, Past Progressive, and Generic Future in **Maay** (Paster & Ranero 2015); exceptions, however, include the Near Future and Conditional in **Maay**, in which both the main verb and **auxiliary** are inflected.

In the **Marka** Present Progressive, the infinitival main verb is followed by an inflected Present Habitual form of *rebo* 'to do.' For the Past Habitual, the main verb infinitive is followed by an inflected Past Simple form of *jiro* 'to be, exist.' The Past Progressive and Assumptive are similar in that they involve Present Habitual and Past Simple forms of *rejo*, respectively; the precise meaning of this verb is unclear. In the interest of space, we illustrate the formation of only one **auxiliary** construction, the Present Progressive of *sugo* 'to wait,' in Table 10.

Marka creates stative verbs via an **auxiliary** construction composed of an adjective or adjectival participle followed by an inflected form of the irregular verb *ahaan* 'to be.' Such stative verbs are used in instances where one might find an attributive or predicate adjective in other languages. In our description of **Marka**, we follow others (e.g., Andrzejewski 1969; Ajello & Puglielli 1988) who have

Table 10: Auxiliary constructions – Present Progressive (Marka)

	Marka	Gloss
1SG/3SG.M	sugo rebe	'I am/he is waiting'
2SG/3SG.F	sugo rebte	'you are/she is waiting'
1PL	sugo rebne	'we are waiting'
2PL	sugo rebtiin	'you (PL) are waiting'
3PL	sugo rebaan	'they are waiting'

called such verbs in **Somali** *hybrid verbs*, although other names have also been used elsewhere in the literature. **Paster & Ranero (2015)** refer to such verbs as the Simple Present B in **Maay**. For the sake of comparison, one might encounter *Way adagtahay* 'It is difficult' in **Somali**, which is similar in form to *Ani farahsiny-ya* 'I am happy' in **Maay**. In **Marka**, the situation is similar, as in *Uus weynye* 'It is big.' In each of these examples, the adjectival portion of the **auxiliary** construction is italicized.

Like in **Maay** (and some southern dialects of **Somali**), all **verbal inflection** in **Marka** is accomplished via suffixation. Northern **Somali**, however, maintains a small class of four irregular verbs whose inflection is accomplished through prefixation in non-**auxiliary** contexts. These include *ool* 'to be located,' *odhan* 'to say,' *oqoon* 'to know,' and *imow* 'to come.' These four verbs correspond to *jaalo* 'to be located,' *doho* 'to say,' *aqaaano* 'to know,' and *imafo* 'to come,' in **Marka**. Table 11 compares inflection in Northern **Somali** vs. **Marka** in the Past Simple and the Past Progressive for the verb 'to say.' In the Past Simple, this irregular verb is inflected via prefixation in **Somali**, while in **Marka**, inflection is via suffixation. Both languages employ an **auxiliary** construction in the Present Progressive.

Inflection in **Marka** of the verb *ahaafo* 'to be' is irregular. Table 12 shows that 'to be' is conjugated as expected in **auxiliary** contexts like the Past Progressive, instances and differs somewhat in the Present Habitual compared to other verbs in maintaining a unique **third person** singular **masculine** form (see Table 8). For the Past Simple, **Marka** has a single invariable form of 'to be' for all person/number/**gender** combinations.

A last point pertaining to **verbal morphology** in **Marka** verbs concerns reduplication. Partial prefixing reduplication is used to indicate intensity or iteration of action in some verbs. When this occurs, the maximum size of the reduplicant appears to be CVV; for example, *dhadhaqaaqo* 'to move about restlessly, fidget.' In such instances of reduplication, **Marka** remains faithful to the underlying quality

Table 11: Northern Somali vs. Marka – ‘to say’

	Past Simple		Past Progressive	
	Somali	Marka	Somali	Marka
1SG	idhi	d̥ihi	odhanayay	d̥oho reji
2SG/3SG.F	tidhi	d̥ahti	odhanaysay	d̥oho reti
3SG.M	yidhi	d̥ahji	odhanayay	d̥oho reji
1PL	nidhi	d̥ahni	odhanaynay	d̥oho reni
2PL	tidhaahdeen	d̥ahteen	odhanayseen	d̥oho reteen
3PL	yidhaahdeen	d̥ahjeen	odhanayeen	d̥oho rejeen

Marka

Table 12: Inflection of ‘to be’ (Marka)

	Past Simple	Present Habitual	Past Progressive
1SG	ahaaj	ife	ahaadeje
2SG/3SG.F	ahaaj	ite	ahaadete
3SG.M	ahaaj	ije	ahaadeje
1PL	ahaaj	ine	ahaadene
2PL	ahaaj	itiin	ahaadetiin
3PL	ahaaj	ijaan	ahaadejaan

of the vowel in its reduplicants. We have found that **Marka** also employs total prefixing reduplication to derive an adjective from a noun, as in *buurbuur* ‘mountainous’ (cf. *buur* ‘mountain’).

5 Concluding thoughts

This paper offers a renewed look at the nominal, pronominal, and **verbal morphology** of the **Marka** variety of **Af-Ashraaf**. While we have not yet had the opportunity to conduct a systematic comparison of **Marka** and its closest relative, **Shingani**, we have taken the first steps to compare **Marka** directly to two of its better-known and better-documented relatives, **Maay** and **Somali**. **Marka** shares characteristics with both **Somali** and **Maay**, but conclusions concerning the extent to which **Marka** aligns more closely with one or the other must await further research. At present, we endeavor to highlight those properties of **Marka**

that distinguish it from both **Somali** and **Maay**, such as its methods of encoding pluralization and **gender**. While there is most certainly a great deal more work to be done, we hope that this short description lays the foundation for further inquiries into **Marka** grammar and provides those with interest in the ongoing debate concerning the internal classification of East **Cushitic** languages new information upon which to justify their analyses.

Abbreviations

CAUS	causative	NSP	non-specific subject pronoun
EXC	exclusive	OP	object pronoun
F	feminine	PL	plural
INC	inclusive	SG	singular
M	masculine		

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Part III

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