Vowel length and TMA micro-variation in Kilimanjaro Bantu

SHINAGAWA, Daisuke
Kagawa University

This paper attempts to shed light on two kinds of morphological micro-variation found within Kilimanjaro Bantu languages (KB) resulting from language-specific differences in the phonological status of vowel length, namely, the presence or absence of i) vowel copy clitic (VCC) as a past tense marker and ii) the suffix -aa as a future tense marker, both of which are limitedly found in West Kilimanjaro languages (WK). The historical relationship between KB and a possible preexistent language is discussed based on the formal characteristics of VCC. It is also discussed how the presence or absence of the suffix -aa affects the internal typology of tense, mood, and aspect (TMA) marking systems.

Keywords: vowel length contrast, morphological micro-variation, TMA marking systems, vowel copy suffix, Kilimanjaro Bantu (Chaga)

1. Introduction

It is well-known that the Bantu languages are, in spite of their vast geographical distribution, structurally rather uniform, which makes their general typology apparently simple; the values of such parameters as head-complement order (head-initial), locus of marking (head marking), basic word order (SVO), basic morphological process (agglutinating), etc., are basically consistent throughout the languages. However, as Marten et al. (2007) and Marten (2012) successfully show, the application of more fine-grained parameters, i.e., micro-parameters, to these languages reveals significantly
rich typological micro-variation. This can not only provide empirical grounds for theoretical correlations among such parameters, but also shed light on the historical aspects of language contact both within Bantu languages and between Bantu and non-Bantu languages.²

This paper aims to investigate two cases of phonologically-induced morphological micro-variation, both of which have to do with TMA (tense/mood/aspect) marking, found within genetically closely related Kilimanjaro Bantu (KB) languages and to discuss their historical and typological implications.

The organization of this paper is as follows. Section 2 introduces typologically contrastive examples of object marking from different varieties of KB, which verify the existence of significant micro-variation even within an immediate stock of languages. Following a brief observation of phonological variation in vowel length contrast (VLC) in Section 3, two instances of phonologically-induced micro-variation, i.e., presence vs. absence of vowel copy clitic (Section 4.1) and the suffix -aa (Section 4.2) will be dealt with. In Section 4.1, based on the morphological characteristics of the clitic, some historical issues on language contact between (an antecedent of) KB and a possible preexistent language will be discussed. Section 4.2 will investigate how the suffix affects the tense-aspect (TA) marking system, and the discussion will extend to the issue of the semantic mismatch of markers grammaticalized from ‘come’ and ‘go.’ Section 5 concludes the paper.

2. Micro-variation within Kilimanjaro Bantu: The case of object marking

2.1. The Kilimanjaro Bantu languages

The KB languages are spoken by the Chaga people on the slopes of Mt. Kilimanjaro in Tanzania, sharing the border with the Maa (Nilotic) speaking area in the west, the Nyika-Taita group (Bantu) in the northeast, and Shamba (Bantu) in the south. The languages are traditionally called the Chaga group (E60) in the code list compiled by Guthrie (1971), based on which the sub-classification is modified by Maho (2009), following the generally accepted version in Philippson and Montlahuc (2003). Fig. 1 lists some of the KB languages.

² The former (intra-Bantu contact) is responsible for “convergence” effects and the latter (extra-Bantu contact) for “divergence effects,” respectively (cf. Marten 2012).
Table 1: List of Kilimanjaro Bantu languages
(cf. Philippsen and Motlahuc 2003: 475)

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Kilimanjaro (WK)</td>
<td>Siha, Rwa, Mashami, Kiwoso, etc.</td>
</tr>
<tr>
<td>Central Kilimanjaro (CK)</td>
<td>Uru, Mochi, Wunjo, Kahe, etc.</td>
</tr>
<tr>
<td>Rombo</td>
<td>Useri, Mashati, Mkuu, Keni</td>
</tr>
<tr>
<td>Gweno</td>
<td>Gweno</td>
</tr>
</tbody>
</table>

The languages categorized into the same sub-group largely share common grammatical and phonological features, while any two languages crossing a sub-group boundary may well be significantly different to the extent that they are mutually unintelligible. This paper analyzes data from three sub-groups, namely, West Kilimanjaro (WK: Rwa, Kibosho, and Mashami), Central Kilimanjaro (CK: Wunjo and Uru), and Rombo (Mkuu).

2.2. An example of micro-parameter: The case of object marking

As mentioned in Section 1, the micro-parametric approach to Bantu grammar reveals its in-depth variation, which is typologically significant. For example, , Marten et al. (2007) set up four (partially correlational) micro-parameters for the object marking system, quoted in (1).

(1) a. One OM: Is object marking restricted to one object marker [=OM] per verb?
   b. Restr 2 OM: Are two object markers possible in restricted contexts?
   c. Mult OM: Are two or more object markers freely available?
   d. Free order: Is the order of multiple object markers structurally free?

Under these parameters, four patterns are attested in their cross-Bantu investigation. They are listed in Fig. 2.

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3 Cf. Nurse (2003: 69) “[...] although all the “dialects” considered, except Gweno, are today subsumed under the unitary name Chaga, “Chaga” is considerably less homogeneous than, for example, the languages of central Kenya (Gikuyu, Meru, Kamba, etc), which each have a separate name.”
5 If (1a) is ‘yes,’ then all the rest should be ‘no’ because (1b–d) are only relevant to the languages that allow (more than) two object markers. Hence, from scratch, the total number of logically possible patterns cannot be 16 (2^4); it is reduced to 5 (because the value of (1b) and (1c) must not be identical), i.e., four patterns in Fig. 2 plus unattested ‘no-yes-no-yes.’
Table 2: Attested patterns of object marking variation

<table>
<thead>
<tr>
<th>Type</th>
<th>(1a)</th>
<th>(1b)</th>
<th>(1c)</th>
<th>(1d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>II</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>III</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>IV</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

For example, Swahili falls into type-I because only one object marker (OM) is allowed (2a), i.e., the value for (1a) is ‘yes’ and all the other parameters (1b–d) are not applicable.

(2) a. \(ni-li-m-p-a\)

\[
\text{SM1SG-PST-OM1-give-FV}
\]

‘I gave him (it).’

b. \(*ni-li-i-m-p-a\)

\[
\text{SM1SG-PST-OM9-OM1-give-FV}
\]

c. \(*ni-li-i-p-a\)

\[
\text{SM1SG-PST-OM1-OM9-give-FV}
\]

(Marten et al. 2007) [Swahili (G42)]

On the other hand, Wunjo\(^6\) has (more than) two slots for OM in its morphological template of the verb, as illustrated in (3b), where three OMs are affixed; thus, ‘no’ appears in (1a, b) and ‘yes’ in (1c). In terms of parameter (1d), the order of OMs is seemingly structurally fixed\(^7\); thus, Wunjo is classified as type-II.

(3) a. \(mangi n-a-lë-zrüm-a \) mânà nyámà kílrí-nyí

\[
\text{chief FOC-SM1-PST-send-FV 1.child 9.meat 16.room-in}
\]

‘The chief sent the child for (to get) the meat in the room.’

b. \(mangi n-a-lë-i-kú-m-zrüm-a\)

\[
\text{FOC-SM1-PST-OM9-OM16-OM1-send-FV}
\]

‘The chief sent him there with it.’

(Moshi 1998, quoted in Marten et al. 2007) [Wunjo (CK)]

Contrary to what one would naturally assume, some other KB, for example, Rwa and Rombo, are classified into type-III, because the order of OMs in these languages is basically interchangeable, as illustrated in (4) and (5)\(^8\).

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\(^6\) Spelled “Vunjo” in Marten et al. (2007) including some other major sources.

\(^7\) However, there is no mention of rules that control the order of OMs.

\(^8\) Post verbal object NPs are normally omitted when they are marked in the verb by OMs.
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(4) a. \( ni=n-\text{re}i\text{yo} \) \text{va-a-\text{m}u-ti-s\text{er}is-i-a} \\
FOC=3-trap SM2-PST-PERF-OM3-OM1PL-send-APPL-FV \\
‘(It is) the trap that they (had) sent to us.’ \\
b. \( ni=n-\text{re}i\text{yo} \) \text{va-a-\text{m}i-ti-u-s\text{er}is-i-a} \\
FOC=3-trap SM2-PST-PERF-OM1PL-OM3-send-APPL-FV \\
‘(It is) the trap that they (had) sent to us.’

[Rwa (WK)]

(5) a. \( kisali \) \text{e-le-ka-i-andik-i-a (b\text{ar}u\text{akalamu})} \\
Kisali SM1-PST-OM12-OM9-write-APPL-FV 9.letter 12(DIM)-pen \\
‘Kisali wrote a letter with a small pen.’ \\
b. \( kisali \) \text{e-le-i-ka-andik-i-a (b\text{ar}u\text{akalamu})} \\
Kisali SM1-PST-OM9-OM12-write-APPL-FV 9.letter 12(DIM)-pen \\
‘Kisali wrote a letter with a small pen.’

[Mkuu (Rombo)]

These examples sufficiently show that significant micro-variation can be found not only among languages remotely distributed in terms of geographical distance as well as genetic relation (e.g., Swahili and Wunjo), but also among languages with close genetic affinity like KB. The next section attempts to investigate the typological micro-variation of the latter case, especially morphological variation induced by the difference of phonological treatment of vowel length.

3. Vowel length and variation of grams

3.1. Vowel length in Kilimanjaro Bantu languages

According to Philipsson and Montlahuc (2003), KB in general seems not to have a clear distinction of phonological vowel length,\(^9\) because phonologically contrasting long vowels are found only in specific environments such as (i) at a morphological boundary between prefix and stem (but phonologically unpredictable), (ii) before a nasal cluster (but basically where (i) applies), and (iii) the first stem syllable of some (non-Bantu) lexical items (Philipsson and Montlahuc 2003: 477). Since these environments cannot be in word-final position, consequently contrasting long vowels are not appeared in the position. This is clearly confirmed in Rombo. As illustrated in (6), underlying vowel sequences in the verb final position are regularly fused into glide-vowel sequences, and

\(^9\) However, identical vowel sequences, i.e., not phonological long vowels within single syllables but two successive short vowels, are well attested in some lexical items. These historically emerged by the loss of an intervocalic onset consonant (Philipsson and Montlahuc 2003: 477).
the final vowel is systematically realized as a short vowel (compare (6a) with (6b), and (6c) with (6d)).

(6) a. \textit{finu-a} [finwa] 
strip.off-FV
‘Strip (sth) off!’ (imperative for a singular addressee)
b. \textit{finu-ení} [finuéní] 
strip.off-FV.PL.ADR
‘Strip (sth) off!’ (imperative for plural addressees)
c. \textit{i-مى-fimú-li-a} [i\-mí-fimúlja] 
INF-OM1-strip off-APPL-FV
‘to strip (sth) off for him/her’
d. \textit{i-مى-fimú-li-á ku} [i\-mí-fimúli\-áː ku] 
INF-OM1-strip off-APPL-FV NEG
‘not to strip (sth) off for him/her’

The complete or partial neutralization of VLC was reported in Wunjo (see McHugh 1999)\textsuperscript{10} and in Old Moshi (Mochi; see Nurse and Philippson 1977). Note, however, that as Nurse and Philippson (1977: 50)\textsuperscript{11} Raum’s (1909) data on Mochi reflects vowel length, suggesting that formerly it might be phonemic.

Unlike the abovementioned languages, Rwa has a clear contrast of vowel length in the anti-penult (7a), penult (7b), and most notably word/sentence-final positions (7c).

(7) a. \textit{i-loli-a} [i\-loli\-a] \textit{vs.} \textit{i-i-loli-a} [i\-i\-loli\-a] 
INF-see-FV INF-OM4-see-FV
‘to see’ ‘to see it’ (classes 4, 9)
b. \textit{i-rék-a} [i\-rék\-a] \textit{vs.} \textit{i-réek-a} [i\-r\-éek\-a] 
INF-escape-FV INF-breathe-FV
‘to escape’ ‘to breathe’
c. \textit{n-ri} [n\-ri] \textit{vs.} \textit{n-rii} [n\-riiː] 
9-knee 9-fly
‘knee’ ‘fly (of an insect)’

\textsuperscript{10} “There is no distinction within single syllables between long and short vowels. All sequences of identical vowels are therefore underlingly heterosyllabic. On the surface, it appears that adjacent syllabic nuclei not separated from one another by onsets are resyllabified as single syllables...” (McHugh 1999: 9).

\textsuperscript{11} “In contemporary OM [= Old Moshi = Mochi], surface length is not phonemic, but Raum’s description seems to imply that it was a century ago” (Nurse and Philipppson 1977: 50 [f.n. 3]).
In summary, most KB are not sensitive to VLC especially in sentence/word-final position, except Rwa and some other WK languages, which have a clear distinction even in sentence/word-final position.

3.2. Lengthened vowel suffixes

In languages with VLC, there are at least two morphemes that are attached to the final position of the verb structure and realized on the surface as a long vowel, namely, vowel copy clitic (VCC) and the remnant of Proto Bantu (PB) *-ag(-a), which denotes the meaning “ranging from <imperfective> to <repetitive> or <habitual>” (Meeussen 1967: 110).

3.2.1. Vowel copy clitic

In Rwa, the past tense of stative predicates such as existentials (8) and stative verb forms (9) that end with the inflectional suffix -ié\(^{12}\) is expressed by lengthening of the final vowel.

(8) a. \textit{ni-ifo}  
\text{SM1SG-DEM.N}  
‘I am (in a specific location).’

b. \textit{ni-i-ifo=0}  
\text{SM1SG-PST.IMPF-DEMN.N=POSF}  
‘I was (in a specific location).’

(9) a. \textit{ti-loli-ię}  
\text{SM1PL-see-FV(STAT)}  
‘We see / We have seen.’

b. \textit{ti-i-loli-ię=e}  
\text{SM1PL-PST.IMPF-see-FV(STAT)=POSF}  
‘We saw / We had seen.’

As illustrated in (8) and (9), the form of the marker, which almost always co-occurs with the prefix \textit{i-} just like a circumfix, is said to be a lengthened final vowel of the preceding stem or suffix. This lengthened vowel can be regarded as a kind of “vowel copy suffix” (cf. Nurse 2008: 82–85), which is a copied vowel of the final syllable of the stem and functions as an inflectional suffix. Typical examples are seen in, for instance, Comorian (G44), a language of Swahili group, as illustrated in (10).

\(^{12}\) This verb form typically denotes a certain aspectual meaning like “resultant state” or “in the state of (doing).”
Two points should be noticed here. First, as Nurse (2008) points out, the typical vowel copy suffix denotes near past tense or anterior aspect, the former of which largely corresponds to the concept expressed in Rwa (more examples are given in Section 4.1). Second, the lengthened vowel marker in Rwa is morphologically not a pure suffix in that it attaches to the inflectional final vowel and even to non-verbal stems as in (8b). Based on these traits, it is treated as a vowel copy clitic (VCC).

3.2.2. -aa

Another verb ending, -aa,13 is a future tense marker, as in Mashami (11) and Rwa14 (12), or a progressive aspect marker, as in Kibosho (13). This marker is historically traced back to PB prefinal *-ag(-a), which supposedly expressed a rather wide range of imperfective aspectual concepts (cf. Nurse 2008: 138).

(11) n-lú-mány-aa
FOC-SM1PL-know-FV
‘We will know.’

(Rugemalira and Phanuel 2009, gloss added by the present author) [Mashami (WK)]

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13 As its tonal realization is changeable depending on the tonal environment and from language to language, tone marking of -aa is omitted (e.g., the basic tonal realization in Rwa is -áa).

14 These languages have another tonally different suffix that expresses the habitual aspect, and it is likely that both suffixes are reflexes of *-ag(-a) (cf. Philippson and Montlahuc 2003: 495–496).
(12)  \textit{ti-lóli-á-a}  \\
SM1PL-see-FUT-FV
‘We will see’

[Rwa (WK)]

(13)  \textit{n-lu-u-som-aa}  \\
FOC-SM1PL-(additional vowel [sic.])-read-FV
‘We read / We are reading’

(Kagaya 1989, gloss added by the present author) [Kibosho (WK)]

3.3. Implications of VLC influence on grams

It is important to note here that these two forms, i.e., VCC and \textit{-aa}, are only attested in WK and not reported in other KB. This has already been mentioned in part by Philippson and Montlahuc (2003: 495), who wrote that “[the presence or absence of \textit{-aa} is] a major dividing line cutting across KB between WK and the rest.” As discussed in this section, the imbalance of the distribution of these markers may well be due to the difference of phonological treatment of vowel length between WK (if not in all the varieties) and the other sub-groups. When this is considered along with the possibility that VLC was phonemic in Mochi more than a century ago, the two forms may be regarded as archaic forms that remain only in WK and have been lost in all the other varieties. We will explore this point further in Section 4.1.

On the other hand, it can be said that these exponents reflect the process where the language-specific phonological restriction on VLC triggers morphological variation, and this, in turn, influences the typological variation in the TA marking system. This issue will be discussed in Section 4.2.

4. VLC-induced micro-variation

4.1. VCC and its historical implication

As seen in Section 3.2.1, VCC in Rwa is a past tense marker for stative predicates. It can be attached to other verb forms as well, such as irregular stative verbs\textsuperscript{15} as in (14) and regular verb forms expressing imperfective aspects as in (15), for which it can be regarded as a marker of past tense of (much broader) imperfective aspect forms.

(14)  a. \textit{ni-ishí}  \\
SM1SG-know
‘I know’

\textsuperscript{15} These verbs lack the forms inflected by the “default” final vowel \textit{-a}.
b. \text{nì-i-ishì=i}
\begin{tabular}{ll}
SM1SG-PST.IMPF-know=POSF
\end{tabular}
‘I knew’

(15) a. \text{t-a-ŋ-loli-a}
\begin{tabular}{ll}
SM1PL-PST-ANT-see-FV
\end{tabular}
‘We have seen.’

b. \text{t-e-ē-ŋ-loli-ā=a}
\begin{tabular}{ll}
SM1PL-PST-PST.IMPF-ANT-see-FV=POSF
\end{tabular}
‘We had seen.’

Interestingly, according to Nurse (2003), the past tense of imperfective that is expressed by VCC in Rwa seems to correspond to that denoted by the prefix \text{we-} \footnote{cf. Nurse (2003: 80): “In Vunjo this \text{we} occurs first in any string, although it does not mark tense, and it replaces regular past tense markers in some combinations of past and aspect. This behavior of \text{we} is paralleled across Chaga, where it is associated predominantly with forms referring to past and/or imperfective (i.e., progressive, habitual, or continuous).”} in Wunjo, which was described in Nurse (ibid.: 80) as showing “anomalous behaviour”; see (16).

(16) a. \text{lu-kap-ie}
\begin{tabular}{ll}
SM1PL-hit-FV(ANT)
\end{tabular}
‘We have hit.’

b. \text{lu-we-kap-ie}
\begin{tabular}{ll}
SM1PL-PST.IMPF?-hit-FV(ANT)
\end{tabular}
‘We had hit.’

\footnote{17 According to Nurse (2008: 84), vowel copy suffixes are found mostly in southeastern languages such as those in Zones K, R (including Herero “harmonic vowel”), parts of H and L, and dispersedly distributed in parts of G languages, including Comorian. There are eight languages that take any vowel copy suffix for (affirmative) past tense marking in Nurse’s (2008) reliable cross-Bantu database, which consists of data from 100 languages.}

On the other hand, in terms of its morphological status, it should be noted that there are only a few examples comparable to VCC in WK, compared to those of typical vowel copy suffixes such as the Comorian examples shown in (10). \footnote{17 One of the few elements morphologically akin to VCC in WK is the past marker of anterior in Bila, one of the Forest Bantu languages spoken in the vast area of Congo forest (Lojenga 2003: 469). Just as in Rwa, a lengthened vowel (of the final vowel -\text{i}) denotes the past of the anterior aspect (17).} One of the few elements morphologically akin to VCC in WK is the past marker of anterior in Bila, one of the Forest Bantu languages spoken in the vast area of Congo forest (Lojenga 2003: 469). Just as in Rwa, a lengthened vowel (of the final vowel -\text{i}) denotes the past of the anterior aspect (17).
(17)  a.  *a-chéch-i*  
   \[\text{SM3SG-run-FV(ANT)} \text{ (AFF)}\]  
   ‘He has run (perfect).’

  b.  *a-chéch-ii*  
   \[\text{SM3SG-run-FV(R.PST)} \text{ AFF}\]  
   ‘He has run (a long time ago).’

(Lojenga 2003, gloss added by the present author) [Bila D32]

Grégoire (2003) also points out that in various Forest Bantu languages, there are elements that attach to the final vowel, i.e., (postfinal) clitics, denoting temporal/aspectual concepts.\(^\text{18}\) This formal and structural similarity shared between WK and Forest Bantu, along with the “class 5 infinitive,” which is the norm in KB and attested in a number of Forest Bantu languages,\(^\text{19}\) might be seen as a remnant of the historical connection between the two distant language groups. This is perhaps corroborated by local oral history, in which the people who previously lived in the Kilimanjaro area before the immigration of the Chaga ancestors are presumably the ancestors of the Pygmy people, called “Wakoningo” in the folktales, whose descendants currently dwell in the Congo forest (cf. Makule 2004).

4.2.  *-aa*, future marking systems, and ‘come’ and ‘go’ grammaticalization

It seems that the presence or absence of *-aa*, as morphological variation contrasting WK with other KB sub-groups, is correlated with the typology of the more systematic component of language, the future marking system. As Nurse (2003: 75) points out, most varieties of WK have only one future form,\(^\text{20}\) while CK and Rombo “have two clear and discrete futures, that is, forms which are distinct in form from each other.”

(18)  a.  *lw-eci-kap-a*  
   \[\text{SM1PL-FUT1-hit-FV}\]  
   ‘We will hit.’ [Near Future]

  b.  *lw-e-kap-a*  
   \[\text{SM1PL-FUT2-hit-FV}\]  
   ‘We will hit.’ [Far Future]

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\(^\text{18}\) cf. Grégoire (2003: 366) “Another striking characteristic of the conjugation in the forest languages seems to be the use of temporal/aspectual morphemes which have the status of either postfinal elements or adverbs which comes after the verb, the two of which are not always clearly distinguished in the sources.”

\(^\text{19}\) Note that, unlike the situation in KB, the class affiliation of the infinitive (or gerund) is rather diverse in the Forest languages. Besides the class 5 and the “classic” class 15, prefixes of classes 7, 3, and 11 etc are attested. See Grégoire (2003: 367–368) for more details.

\(^\text{20}\) cf. Nurse (2003: 75) “While the WK data are much to be desired, most dialects there have one or no discrete future forms, the present or a transparently grammaticized form of an auxiliary being used instead.”
As illustrated in (18)–(20), all the markers denoting the future tense are prefixes, and many of them are apparently grammaticalized from lexical elements; e.g., eci- (18a) and tfi- (19b) are from the verb stem meaning ‘know,’ and i- in (19a) and (20a) are presumably from one of the copulative stems *li (See Fig. 3 below).

As for WK, Nurse (2003:75) regards that the future tense is expressed by either the expanded usage of the present tense (or progressive aspect) marker (in his term “present-used-as-future”) or “transparently grammaticalized form of an auxiliary.” The forms of the latter is she-, a grammaticalized form from i-sha ‘come,’ or nde- from i-enda ‘go.’ However these grammaticalized prefixes are not the markers of future tense but those denoting modal notions, since they are clearly acceptable even with past tense forms, as in (21).

(21) a. fuá  y-a-ndé-nis-á
   9.rain  SM9-PST-GOM-rain-FV
   ‘It rained (unexpectedly).’

b. fuá  y-a-shé-nis-á
   9.rain  SM9-PST-COM-rain-FV
   ‘It rained (as expected).’

[Nurse 2003, glosses added by the present author] [Wunjo (CK)]

(19) a. lú-i-káp-a
   SM1PL-FUT.N-hit-FV
   ‘We will hit this tree.’ [Near Future]

b. lú-tfí-káp-a
   SM1PL-FUT.R-hit-FV
   ‘We will hit this tree.’ [Far Future]

[Uru (CK)]

(20) a. du-i-m’-kab-a
   SM1PL-FUT.N-OM3SG-hit-FV
   ‘We are hitting ~ will hit him/her’ [Near Future]

b. du-é-m’-kab-a
   SM1PL-FUT.R-OM3SG-hit-FV
   ‘We will hit him/her’ [Far Future]

[Mkuu (Rombo)]
Consequently the pure future marker in Rwa is only -aa, and there is no other (specific) future forms. That is, Rwa has no categorical distinction of the future tense in its TA system, and basically this holds true for other “-aa languages” such as Siha and Mashami (cf. Yukawa 1989, Rugemalira and Phanuel 2009).

Hence, we could tentatively propose KB-internal generalizations; (i) languages with the -aa future marker have no systematic distinction in the future tense, in contrast, (ii) languages which lack -aa and denote the future tense by (mostly grammaticalized) prefixes have (at least) a bipartite distinction of the future. In other words, “-aa languages” can be classified as the mono-future type and “non -aa languages” as the pluri-future type.

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Language</th>
<th>Tense</th>
<th>Form</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>WK</td>
<td>Rwa</td>
<td>FUT</td>
<td>-áa</td>
<td>*-ag &lt;imperfective&gt;</td>
</tr>
<tr>
<td></td>
<td>Siha</td>
<td>FUT</td>
<td>-áa</td>
<td>*-ag &lt;imperfective&gt;</td>
</tr>
<tr>
<td>CK</td>
<td>Uru</td>
<td>FUT.N</td>
<td>i-</td>
<td>*li- ‘be’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FUT.R</td>
<td>tli-</td>
<td>*ci ‘know’</td>
</tr>
<tr>
<td></td>
<td>Wunjo</td>
<td>FUT.N</td>
<td>ci-</td>
<td>*ci ‘know’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FUT.R</td>
<td>e-</td>
<td>(cf. *eci-?)</td>
</tr>
<tr>
<td>Rombo</td>
<td>Mkuu</td>
<td>FUT.N</td>
<td>i-</td>
<td>*li- ‘be’</td>
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<tr>
<td></td>
<td></td>
<td>FUT.R</td>
<td>e-</td>
<td>(cf. *eci-?)</td>
</tr>
</tbody>
</table>

This micro-typological distinction may apply to yet another phenomenon related to the semantics of modal markers grammaticalized from ‘come’ and ‘go’ verbs. As Moshi (1994) describes, the marker grammaticalized from ‘come’ (COM) expresses a modal concept of “certainty,” while the marker derived from ‘go’ (GOM) denotes “less certain” in Wunjo. This is illustrated in (22).

(22) a. Ṣũũl̩r̩ /
1.nobleman PROC-SM3SG-FUT.N-COM-speak
‘The nobleman (definitely) intends to speak (sometime soon).’

b. Ṣũũl̩r̩ /
1.nobleman PROC-SM3SG-FUT.N-GOM-speak
‘(We know that) the nobleman intends to speak.’

(Moshi 1994, gloss modified by the present author) [Wunjo, CK]
This “COM-as-certain” reading is confirmed in some other “non -aa languages” such as Uru and Rombo (Mkuu). However, in at least some “-aa languages,” the construal of these markers is reversed, i.e., GOM is used for expressing certainty, as shown in (23).

(23) a. va-šé-shi-kab-ís-’á-a   m-biíri
   SM3PL-COM-OM1SG-hit-CAUS-FUT-FV 9-stick
   ‘(Perhaps) they will hit me with a stick.’

b. va-ndé-shi-kab-ís-’á-a   m-biíri
   SM3PL-GOM-OM1SG-hit-CAUS-FUT-FV 9-stick
   ‘They will (definitely) hit me with a stick.’

[Rwa (WK)]

It is far from clear what causes the apparent mismatch of the modal meaning of COM and GOM between “-aa languages” and “non -aa languages.” Thus, it is safe just to mention a possibly related phenomenon. There is also a clear difference in the degree of grammaticalization of especially GOM between the two types of languages. In “GOM-as-certain” languages, both GOM and COM are fully grammaticalized, i.e., both are used either with an animate or inanimate subject, with basically any tense forms, etc.21 However, in “COM-as-certain” languages, GOM tends to be only partially grammaticalized.

(24) a. ndži-i-tsá-orók-a
   SM1SG-FUT.N-COM-stand up-FV
   ‘I will (come to) stand up.’ [Near Future]

b. ndži-tsi-tsá-orók-a
   SM1SG-FUT.R-COM-stand up-FV
   ‘I will (come to) stand up.’ [Far Future]

c. *ndži-i-endá-orók-a
   SM1SG-FUT.N-GOM-stand up-FV
   ‘I will (come to) stand up’ [Near Future]

d. ?ndži-tsi-endá-orók-a
   SM1SG-FUT.R-GOM-stand up-FV
   lit. ‘I will go somewhere to stand up’ [Far Future]

[Uru (CK)]

21 See also (21) where GOM and COM are used with an inanimate subject.
In Uru, there seems no restriction for COM in terms of the co-occurrence with tense markers (24a, b). However, GOM is clearly not allowed to co-occur with the near future (24c), and its meaning basically implies physical movement (24d).

This imbalance between the languages with fully grammaticalized GOM and those with less grammaticalized GOM, as a possibility, might be related to the systematic difference of future marking (mono-future vs. pluri-future) and/or the structural difference between suffixing future marking (“-aa languages”) and prefixing future marking (“non -aa languages”). For the issue to be accounted for more clearly, empirical as well as theoretical investigations are needed.

5. Conclusion

This paper mainly discussed two examples of phonologically induced morphological variety found within KB, i.e., the presence or absence of VCC and the verbal suffix -aa. Both of them are limitedly attested in WB languages, supposedly because, unlike other KB languages, most WK languages allow a long vowel in word/sentence-final position.

The morphological investigation on VCC in WK suggests that VCC in WK is quite similar to the typical vowel copy suffix attested in some other Bantu languages in terms of its grammatical meaning, but is apparently different in terms of its morphological status. Rather, morphological elements comparable to VCC, in terms of meaning, forms, and structural features, are found in some Forest Bantu languages. Accordingly it is suggested that the morphological similarity may be the remnant of language contact between the preexistent language and that of the direct predecessors of the Chaga people.

The second point regards the suffix -aa. Its morphological typology, i.e., the presence in WK vs. absence in other KB, seems directly reflected on the types of future marking system. If a language has -aa, then the language has only one future marker (-aa itself), while if a language lacks -aa, then it has a bipartite future distinction (marked by grammaticalized prefixes). It is also suggested that there is a possibility that the typology of the future marking system, i.e., mono-future vs. pluri-future, in turn, influences the grammaticalization path traveled by `come’ and `go’ verbs, since there is a rough correspondence that the mono-future languages tend to adopt “GOM-as-certain” construal, while the pluri-future languages take COM as expressing modal certainty. For this issue, however, further investigation from both empirical and theoretical approaches is needed.

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For example, Bourdin’s (2014) discussion on the two types of `come’ and `go’ grammaticalization paths (i.e., one is a path from a lexical verb via futurity to modality, and the other is a path without futurity) would be helpful for this issue.
Abbreviations

References
Bourdin, P. 2014. “When come and go go necessive”. In M. Devos and J. van der Wal (eds.) ‘COME’ and ‘GO’ off the Beaten Grammaticalization Path. Mouton de Gruyter.


———. 2008. Tense and Aspect in Bantu. OUP.


