The Tonological Study on Giha[1] Infinitive Verbs

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Abstract

Phonologists point out that accented languages have got a predictable tonal pattern. From this point, then each accented language has its Basic Tone Melody which is derived from the nucleus of the Melodic Tone. The accent is always associated with a certain tone in the Basic Tone Melody. Giha is among of the accented languages. Thus, this paper is aimed at identifying the Basic Tone Melody and describing the specific tone in the Basic Tone Melody which is associated with the accent in Giha infinitives. Also, this paper shows the rules which govern the tonological pattern in this language. The data used herein were collected by recording 15 native speakers of Giha language from Karunga village in Kasulu district of Kigoma region and was analyzed autosegmentally. The sample was selected by pointing elders aged 50 years and above. Then the pointed elders were selected randomly. The findings show that the Basic Tone Melody for Giha verbs is Low, High, Low (LHL) and the accent is associated with the left side low tone of the Basic Tone Melody.

Ikisiri

Wanafonolojia wanadai kuwa ruwaza ya toni katika lugha zenye viinitoni huwa ni ya kutabirika. Kutokana na mazingira hayo, kila lugha yenye viinitoni huwa na Kiimbotoni Msingi chake. Kiimbotoni Msingi hicho hudhibitiwa na kiinitoni ambacho huwa na toni mahususi katika Kiimbotoni Msingi ambayo kwayo kiinitoni hicho huhusishwa. Lugha ya Giha ni miongoni mwa lugha zenye viinitoni. Makala hii inalenga kubainisha Kiimbotoni Msingi katika lugha ya Giha, kufafanua silabi ambayo kwayo kiinitoni huhusishwa pamoja na kuonesha kanuni mbalimbali zinazotawala katika utokeaji wa toni. Data iliyotumika katika makala hii ilikusanywa kwa kuwarekodi takribani wazungumzaji 15 ambao ni wazawa wa lugha ya Giha kutoka katika kijiji cha Karunga, wilaya ya Kasulu mkoani Kigoma. Sampuli ilichaguliwa kwa kuteua kinasibu wazee wenye umri wa miaka 50 na kuendelea. Data inaonesha kuwa Kiimbotoni Msingi katika lugha ya Giha ni Chini, Juu, Chini (CJC) na kiinitoni huhusishwa na tonichini ya upande wa kushoto mwa Kiimbotoni Msingi.

1.0 Introduction

The prominent scholarly works on Giha language include Nurse (1979) and Nakagawa (1992). Nurse points out a preliminary structure of Giha nouns while Nakagawa gives a list of Giha lexical words. A rigorous preliminary study on Giha tonology was done by Harjula (2004). Harjula did not point out the Basic Tone Melody, the syllable of the verb stem on which an accent is associated and the tone of the Basic Tone Melody on which an accent is orchestrated. Tonologists agree in common that each accented tonal language has its own tonological pattern. For example, the Ci-Tonga tonal pattern starts with High tone

[1] Giha is a Bantu language spoken in Kigoma Region in the eastern side of Lake Tanganyika. According to Guthrie's classification of Bantu languages, the language is identified as D65 and grouped together with Kinyarwanda (D61), Kirundi (D62), Gishubi (D63), Gihangaza (D64) and Kivinza (D66). In some literatures, Giha language is mentioned as Kiha, Igiha or Ha.

and ends with Low tone (HL), Ci-Ruuri starts with Low tone, followed by High tone and finally ends with Low tone (LHL). This paper aims at addressing such issues by describing the verbal tone system in Giha language.

2.0 Theoretical Framework

The discussion of this paper is going to base on the Theory of Autosegmental Phonology. This theory is based on the assumption that phonological representations are multlinear sequence of segments in tiers. Within autosegmental framework we can therefore get a representation of phonological segments like:

1. u ku βo na
   | | | |
   L L H L

It should be noted that autosegmentally, tones are not taken as being part of the segments instead, they are taken as separate entries which associate with segments in derivations. Bear in mind that the autosegmental framework employs the notion of Well-formedness Condition (henceforth WFC). The WFC requires all vowels to be associated with at least one tone, all tones to be associated with at least one vowel and the association lines should not cross each other (Goldsmith, 1974: a-d).

Since the formulation of the WFC there has been a number of suggestions to make it more encompassing (Goldsmith, 1976, 1979, 1981; Clements, 1976, 1981; Halle and Kiparsky, 1981, 1982 to mention just a few). However, most of the suggestions given relate more to languages that are purely tonal than the languages that are accented. Thus, this paper will strictly adhere to the older version of WFC which is available in Goldsmith (1974).

3.0 Giha Verbal System

The Giha verbal system is of agglutinative structure of Bantu languages. In infinitive verbs, Giha has a pre-prefix which, although common in Bantu, is not found in every Bantu language. The structures bellow are illustrative:

2 (a) Nonfinite:

PP + Pref + OM(s) + root + Ext(s) + Fv

(b) Finite:

TM + SPref + OM(s) + root + Ext(s) + Fv

Or

SPref + TM + OM(s) + root + Ext(s) + Fv

Where by:

PP =	Pre-prefix	Pref =	Prefix
Ext =	Verb extension	Fv =	Final vowel
TM =	Tense Mark	Spref =	Subject Prefix

With finite verbs we see that sometimes the tense marker precedes the subject prefix, and sometime the subject prefix precedes the tense marker. This depends

on the tenses involved. For the purpose of this paper, we will address tones in nonfinite verbs. The issues concerning finite verbs need another time and pace. From this point, the role of tones in Giha tenses will not be addressed in this paper.

For the purpose of this discussion, a distinction between simple and complex nonfinite verbs is inevitable. By the simple nonfinite verbs we mean all verbs with no object marks while the latter mean verbs with object marks in their cluster. One might wonder why this simple distinction is necessary. However, as one observes the accentual system of Giha language one realizes how crucial such a distinction is. Interestingly, the presence and absence of object marks in this language has major effects in the realization of the tonal patterns in the verb cluster. The illustration bellow realizes this point:

3 Tonal system in simple and complex verbs

	Underlying structure	Surface structure	Gloss
(a)	u-ku-téék-a **PP-Pref-OM-cook-Fv**	[ugutééka]	to cook
(b)	u-ku-téék-eran-a **PP-Pref-OM-cook-Ext-Fv**	[ugutéékerana]	to cook for each other
(c)	u-ku-**kí**-teek-a **PP-Pref-OM-cook-Fv**	[ukugíteeka]	to cook something
(d)	u-ku-kí-**mu**-teek-er-a **PP-Pref-OM-cook-Ext-Fv**	[ukukímuteekera]	to cook it for someone

From the illustration above we notice that, High tone shifts from the first syllable of the stem to the syllable that marks object when accentual verbs are added with OM(s).

3.1 Giha Verbal Stem Classes

It is also better we put clear the distinctive classes of verbal stems. In Giha, one can make an accentual distinction of the verb stems. There are two classes of verbal stems: accented and unaccented. All accented verbs have High tone in the first syllable of the stem. Contrary to that, unaccented verbs do have Low toned stems. It is very important to make such a distinction because the two classes are very different tonally.

Most of the verbs in Giha which underlay accented and unaccented correspond to the stems that were underlying High tones in the Proto Bantu. The following comparison of stems from Giha and Guthrie's (1971) Proto- Bantu can be the empirical evidence:

4 Similarity between Proto-Bantu and Giha Tones

Proto Bantu	Giha	Gloss
*-bìík-	u-ku-βíík-a	to store

*-béép-	u-ku-βééh-a	to cheat
*-bún-	u-ku-vún-a	to brick
*-díng-	u-ku-zíng-a	to surround
*-dúád-	u-ku-gwáár-a	to become ill
*-téék-	u-gu-téék-a	to cook
*-bààr-	u-ku-vyààr-a	to give birth
*-cèèg-	u-gu-sèèg-a	to request
*-bòd-	u-ku-βòr-a	to be rotten
*-dìm-	u-ku-rìm-a	to cultivate

The illustration above shows clearly that there is great similarity between Proto Bantu and Giha tones. Interestingly, the picture we get here is that, all Proto Bantu tones have been retained in Giha language.

3.2 The Giha Tonal System

In Giha, four surface tones are exhibited: Low tone, High tone, Rising tone and falling tone. The low and high tones are commonly referred by linguists as level tones. In Giha language, these tones can be combined together to form rising and falling tones and this happens when glide formation involves two vowels with different tones. Perhaps, the illustration bellow will help us to have a better understanding of this point:

5 The tonal system

Underlying structure	Surface structure	Gloss
(a) /ù-kù-égèrà/ **pp-inf-be near**	[ùkwĕ:gèrà]	to be near to
(b) /ù-kù-átsàmùrà/ **pp-inf-sneeze**	[ùkwă:tsàmùrà]	to sneeze
(c) /ù-kù-díà/ **pp-inf-eat**	[ùkùdyâ:]	to eat
(d) /ù-kù-ng'úà/ **pp-inf-drink**	[ù-kù-ŋwâ:]	to drink
(e) /ù-kù-hìíndà/ **pp-inf-chase**	[ùgùhìíndà]	to chase
(f) /ù-kù-sèègà/ **pp-inf-request**	[ùgùsèègà]	to request
(g) /ù-kù-kúbhìtà/ **pp-inf-beat**	[ùgùkúβìtà]	to beat
(h) /ù-kù-sámà/ **pp-inf-get**	[ùgùsámà]	to get

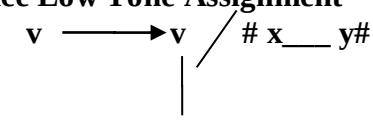
Whereby:

PP = pre-prefix Inf = infinitive marker

From the data given in the examples above we can find some verbs with High tone in their stems and others with Low tones. This appears to happen in all infinitives of such sort in Giha.

However, in most accented languages (Giha being among of) there is a rule that assigns Low tones to all syllables in unaccented verbs. This rule is called Surface Low Tone Assignment. This law is well presented in Massamba (1982:44) below:

Rule 1: Surface Low Tone Assignment



* Conditioned that: both x & y ≠ v

This means that a vowel becomes Low toned when it occurs between the two unaccented vowels. For the case of this paper we will pay our attention to the accented stems.

3.3 Basic Tone Melody in Giha

Massamba (2011:183) points out that each accented language has its own Basic Tone Melody (Herein BTM). Before we identify the BTM in Giha, it is better we give its meaning. According to Massamba, BTM refers to the tone melody that is being repeatedly in tonal languages. When a person speaks, one can identify the tone melody that is being repeatedly. There is no shortcut to identify the BTM of a certain language. Instead of, one needs to observe a variety of data and identifies the behavior of the tones. In fact, the following data will drive us in the identification of the BTM:

6 Verbs with monosyllabic stems

	Underlying structure	Surface structure	Gloss
(a)	/ù-kù-dí-à/	[ù-kù-dyâ]	to eat
(b)	/ù-kù-sí-à/	[ù-gù-syâ]	to grind
(c)	/ù-kù-ng'ú-à/	[ù-kù-ng'wâ]	to drink

In the examples provided above, we examine the verbs showing the tonal pattern of LLHL in the inner structure. Then, in the surface structure we examine the occurrence of Falling tone on the final syllable. In short, the Falling tone is resulted from the glide formation. Autosegmentally, each phonological segment is taken independently. Thus, the High tone on the first syllable of the stem in /ù-kù-**dí**-à/, /ù-kù-**sí**-à/, /ù-kù-**ng'ú**-à/ floats and amalgamate with the Low tone on the final vowel to form a Falling tone as the vowel /-i-/ and /-u-/ are glided. Therefore,

it can be argued that, the tonological pattern in monosyllabic infinitives is LHL. Then, let us observe the tonological pattern from following disyllabic verbs:

7 Verbs with disyllabic stems:

	Underlying structure	Surface structure	Gloss
(a)	/ù-kù-sámà/	[ù-gù-sámà]	to receive
(b)	/ù-kù-témà/	[ù-gù-témà]	to cut
(c)	/ù-kù-tórà/	[ù-gù-tórà]	to take

In the examples above we also observe the infinitives begin with Low tones followed by the High tone before ending with the Low tone. We also argue that, the tonological pattern in the disyllabic infinitives is LHL. This appears to be the same as in the following examples.

8 Verbs with polysyllabic stems:

	Underlying structure	Surface structure	Gloss
(a)	/ù-kù-dándàzà/	[ù-kù-dándàzà]	to sell
(b)	/ù-gù-sékùrà/	[ù-ù-sékùrà]	to grind
(c)	/ù-kù-kúβítà/	[ù-gù-kúβìtà]	to beat
(d)	/ù-kù-βáágà/	[ù-kù-βáágà]	to slaughter

The tonal pattern we observed in the data above is not different from the tonal pattern appearing in both extended verbs and verbs with object marks. The illustrations bellow in 9 and 10 are more elaborative:

9 Verbs with extensions:

	Underlying structure	Surface structure	Gloss
(a)	/ù-kù-dándàzìrà/	[ù-kù-dándàzìrà]	to sell on behalf
(b)	/ù-kù-dándàzànà/	[ù-kù-dándàzànà]	to sell each other
(c)	/ù-kù-dándàzìrànà/	[ù-kù-dándàzìrànà]	to sell for each other
(d)	/ù-gù-sékùrìrà/	[ù-gù-sékùrìrà]	to grind for someone
(e)	/ù-gù-sékùrànà/	[ù-gù-sékùrànà]	to grind for each other

10 Verbs with Object Markers:

	Underlying structure	Surface structure	Gloss
(a)	ù-kù-mú-kùβìtà	[ù-kù-mú-kùβìtà]	to beat someone
(b)	ù-kù-kí-mù-kùβìtà	[ù-kù-kí-mù-kùβìtà]	to beat him something
(c)	ù-kù-yí-mù-βààgìrà	[ù-kù-yí-mù-βààgìrà]	to slaughter something for someone

From the data provided above we can see all words begin with Low toned syllables, then High toned syllables and finally end with Low toned syllables. Then we can say that tonological pattern for Giha verbs is Low, High, Low. This means that verbs begin with Low toned syllable which can be more than one, then High tones syllables which can also be more than one and finally end with Low toned syllables which can be more than one as well. This tonological pattern is what brings the Melodic Tone of the verb. Thus, the BTM of the Giha verbs is LHL.

3.4 Accent Realization in Giha Verbs

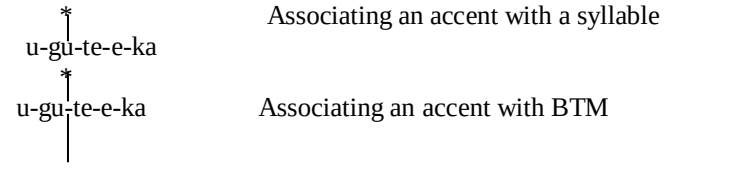
Massamba (1982) defines an accent as a melodic core on which the basic melody of that language is orchestrated. This means that the accent is the nucleus controls the Basic Tone Melody. Because the underlying accentual system in Giha is raised from the surface tones then it can be argued that these verbs are said to have accents that trigger the occurrence of High tones at their underlying structures. In order to display the underlying accentual system it is necessary to identify the syllable of the infinitive verbs, on which an accent is associated with. This is not an easy task, instead, we need to make empirical tests that will help us to identify the syllable that is associated with the accent. We should also identify the tone in the BTM that is associated with this accent. The data provided bellow can be useful in our empirical tests:

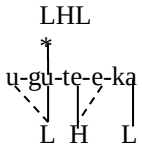
11 Accent realization:

	Underlying structure	Surface structure	Gloss
(a)	/ù-gù-téékà/	[ùgùtéékà]	to cook
(b)	/ù-gù-téékèrànà/	[ùgùtéékèrànà]	to cook for each other
(c)	/ù-kù-mú-tèèkà/	[ùkùmútèèkà]	to cook something
(d)	/ù-kù-kí-mù-tèèkèrà/	[ùkùkímùtèèkèrà]	to cook sth for someone

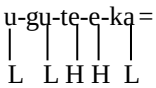
From the data provided above, one should note the clue that, High tone is marked on the first syllable of the stem in both (a) and (b) while in (c) and (d) High tone is marked on the syllable that carries direct OM. This gives us the clue that OM carries accents in their internal structures. Again, we should remember that, High tones are triggered by accents in accented languages. From that point, we can begin to test our hypothesis that accents are associated with the syllable that marks prefix [-ku-] and also, the accent is associated with the Low tone of the left side of the BTM (*LHL). This can be demonstrated autosegmentally as follows:

12 ù-gù-téékà [ùgùtéékà] "to cook"



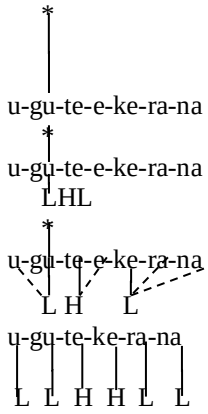


Well Formedness Condition (WFC)

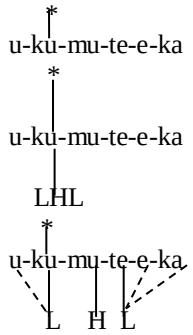


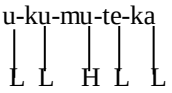
ùgùtéékà

13 ù-gù-téékèrànà [ùgùtéékèrànà] "to cook for each other"

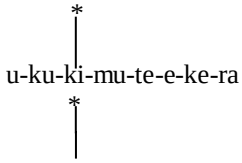


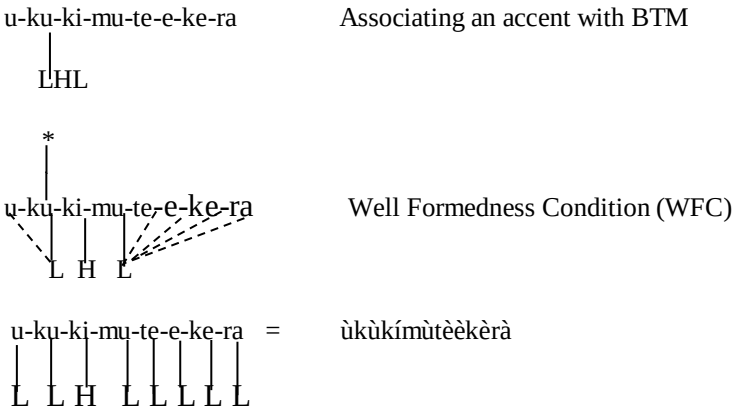
14 ù-kù-mú-tèèkà [ùkùmútèèkà] "to cook something"





15 ù-kù-kí-mù-tèèkèrà [ùkùkímùtèèkèrà] "to cook something for someone"

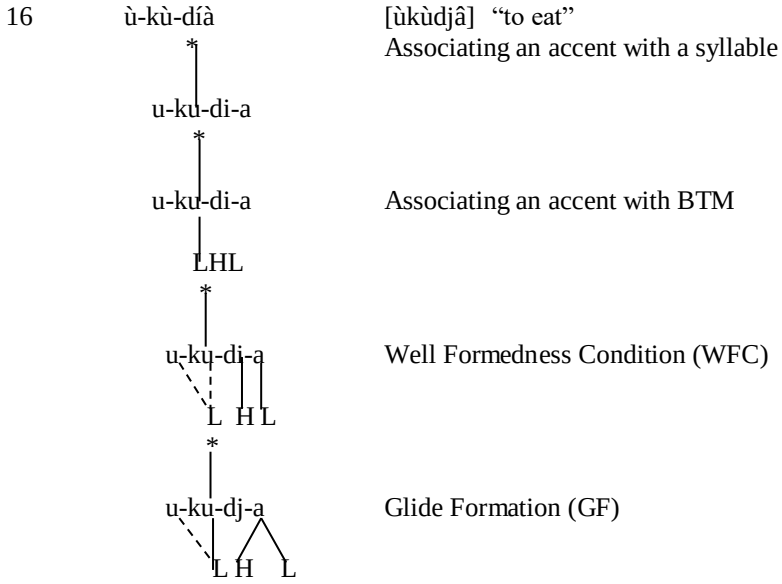




From the analysis presented above, it can be identified that, in Giha verbs the accent (which actually triggers High tone) is associated with the first "Low Tone", i.e. the one on the left of the High Tone. We may now say, therefore, that the tone pattern in the forms given in 6-15 above is a result of the underlying Basic Tone Melody LHL. In this term of the accent being associated with the Low Tone, Giha is very similar to Ci-Tonga (Zambian language) and Ci-Ruuri (spoken in Mara region). However, this language differ with Ci-Tonga in the sense that while in Giha an accent puts a High Tone on the immediate following syllable, in Ci-Tonga a sequence of High Tones is realized on the syllables that immediately precedes the accent.

3.5 Accent Realization in Simple Infinitives with Monosyllabic Stem

As we pointed earlier (cf. §.2.0) in this paper, simple verbs are those with no object marks. The analysis bellow is illustrative:



u-ku-dj-a = ùkùdjâ

L L H L

What is interesting here is that the amalgamation of High and Low Tones in the above example has made a Falling Tone on the final vowel. We should remember that, tone as one of the suprasegementals should be treated independently. The High tone in the internal structure [ù-kù-**dí**-à] remains floating when the vowel that bears it is glided. Then the floating High tone amalgamates with the Low tone on the final vowel to form a Falling tone. The same thing appears in simple infinitives whose stems begin with a vowel. The following example may provide the empirical evidence:

17 Formation of the Falling tone

Underlying structure	Surface structure	Gloss
(a) ù-kù-átsàmùrà	[ùkwă:tsàmùrà]	to sneeze
(b) ù-kù-égèrànà	[ùkwĕ:gèrànà]	to come close to each other
(c) ù-kù-ígìsha	[ùkwĭ:gisha]	to teach someone
(d) ù-kù-ógesha	[ùkwŏ:gesha]	to wash someone

We can now try to analyze the data above while bearing in mind that the BTM of Giha is *LHL. Example number 18 is more explanative:

18 ù-kù-ígìsha [ùkwĭ:gisha] "to teach someone"

*

u-ku-i-gi-sha Associating an accent with a syllable

*

u-ku-i-gi-sha Associating an accent with BTM

LHL

*

u-ku-i-gi- sha Well Formedness Condition (WFC)

LH L

u-kwĭ- gi-sha Glide Formation (GF)

L H L

u-kwĭ- gi-sha = ùkwĭgìshà

L L H L L

In the example illustrated above, we note that the Low tone on the infinitive marker [-kù-] is amalgamated with the High tone on the initial vowel of the stem to form Raising Tone.

3.6 Accent Realization in Complex Infinitives with One OM

We said earlier that a complex verb is the one that has one or more object markers in its structure. In Giha verb structure, OM(s) appear immediately before the verb stem. And this is a feature of the most of Bantu languages. In this language, OM(s) play a major effect in tonal patterns of the verb. The following infinitives can be more evident to the point mentioned:

19 Accent realization in verbs with one OM

Underlying structure	Surface structure	Gloss
(a) ù-kù-háàmbà	[ù-gù-háàmbà]	to burry
(b) ù-gù-háàmbìrà	[ù-gù-háàmbìrà]	to burry on behalf of someone
(c) ù-kù-mú-hààmbà	[ù-kù-mú-hààmbà]	to burry someone
(d) ù-kù-mú-hààmbìrà	[ù-kù-mú-hààmbìrà]	to burry someone on behalf of someone

We note here that in 19 (a) and (b) the High Tone is marked on the first syllable of the stem while in 19 (c) and (d) the High Tone is marked on the OM. The difference between the two must be triggered by the OM itself. From this point we can claim that OM must have an accent that triggers High Tone. To make this claim effective, let us now examine some examples from the verbs which underlie unaccented stems:

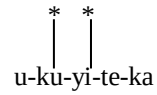
20 The High tone on the OM

Underlying structure	Surface structure	Gloss
(a) /ù-kù-sììgà/	[ù-gù-sììgà]	to smear
(b) /ù-kù-gùrà/	[ù-gù-gùrà]	to buy
(c) /ù-kù-**mú**-sììgà/	[ù-kù-**mú**-sììgà]	to smear someone
(d) /ù-kù-**kí**-gùrà/	[ù-kù-**kí**-gùrà]	to buy something

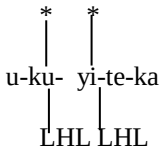
The data above points out that in 20 (a-b) there is no High Tone marked in any syllable. However, in 20 (c-d) where an OM appears, a High Tone is marked on the syllable that mark the OM. Since the stem in these verbs underlies unaccented, then, the High Tone appears in 20 (c-d) must be manifested with the surface accent on the OM. Hence, the OM in Giha language must be accented.

As far as OM is concerned, something must be noted here when analyzing the tonological pattern. Remember that, the verb stem in all the forms which underlie accented, there must be two accents; one on the syllable that marks infinitive [-ku-] and another on the OM. Given this, we would expect the following to happen:

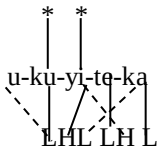
21 ù-kù-**yí**-tèkà "to cook something"



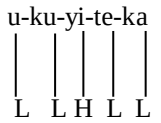
Associating an accent with a syllable



Melodic Association



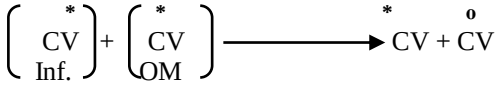
*****Well Formedness Condition (WFC)



ùkùyítèkà

Clearly, our prediction violates the Well Formedness Condition which requires association lines not to cross each other. In order to meet this condition, a certain tone rule must apply. In fact, there is a rule by which an OM accent is deleted if preceded by the accent on the infinitive [-ku-]. This rule can be illustrated formulary as follows:

22 **Rule 2: Accent Deletion**

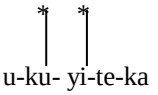


Whereby: $\overset{*}{CV}$= a syllable which carries an accent.

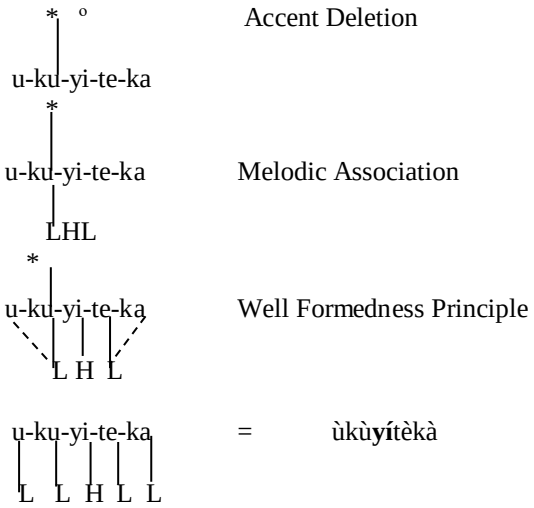
$\overset{o}{CV}$ = a syllable on which its accent is deleted.

With the help of this rule we can now explain why accented stems would have two accents when they are inserted with an OM. The following manifestation is more elaborative:

23 ù-kù-**yí**-tèkà "to cook something"



Associating an accent with a syllable



3.7 Accent Realization in Complex Infinitives with Two OMs

We said earlier that the Giha verbal structure permits two object marks in their cluster. This two objects function as direct and indirect object. When these OMs appear there are two restrictions in their appearance. First, they must be close to each other; secondly the direct OM precedes the indirect OM. This is quietly different from other Bantu languages whereby the indirect OM precedes the direct OM. Similarly to other Bantu languages like Ci-Ruri, OMs in Giha language occur when the verb is extended with applicative suffixes. This occurrence of OMs in Giha implies that an applicative suffix is involved. The data from Giha language provided bellow may be more descriptive:

24 Accented Stems

	Underlying structure	Surface Structure	Gloss
(a)	/ù-kù-**βá-mù**-hàmàgàr-**ǐr**-â/ inf-pref-iOM-dOM-call-appl-Fv	[ù-kù-**βá-mù**-hàmàgàr-**ǐr**-â]	To call them for someone
(b)	/ù-kù-**yí-mù**-ʧùmìt-**ǐr**-â/ inf-pref-iOM-dOM-insert-appl-Fv	[ù-kù-**yí-mù**-chuùmìt-**ǐr**-â]	To insert sth into someone
(c)	/ù-kù-**wú-mù**-sòkòz-**ěr**-â/ inf-pref-iOM-dOM-comb-appl-Fv	[ù-kù-**wú-mù**-sòkòz-**ěr**-â]	to comb a head for someone

25 Unaccented Stem

	Underlying structure	Surface structure	Gloss
(a)	/ù-kù-**rí-mù**-rìm-**ǐr**-â/ inf-pref-iOM-dOM-cultivate-appl-Fv	[ù-kù-**rí-mù**-rìm-**ǐr**-â]	to cultivate a farm for someone
(b)	/ù-kù-**mú-βà**-rààβ-**ǐr**-â/ inf-pref-iOM-dOM-look- appl-Fv	[ù-kù-**mú-βà**-rààβ-**ǐr**-â]	to look someone for them
(c)	/ù-kù-**yá-tù**-vòòm-**ěr**-â/ inf-pref-iOM-dOM-fetch- appl-Fv	[ù-kù-**yá-tù**-vòòm-**ěr**-â]	to fetch water for us

In the data provided in 24 all the verb stems underlies *accented* while those in 25 underlies *unaccented*. If we examine these examples more closely, we find that what has happened is that we expected High tone on the first syllable of the accented stems has disappeared. What is interesting to note here is that in both 24 and 25 the tone pattern is the same, i.e. a High Tone on the first OM, a Raising-Falling on the penultimate and the ultimate syllables respectively and Low tones elsewhere. This means the tonal difference between accented and unaccented has been neutralized. This is however simply because of the presence of the OM(s). Thus we should note that, both accented and unaccented stems have got three accents on their infinitives **[-ku-]** and on both two OMs. This can be demonstrated as follows:

26 (a) *Accented Stems:*

* * *
ù-kù- **βá-mù-**hàmàgàr-**ǐr-**â

(b) *Unaccented Stem:*

* * *
ù-kù **-rí- mù-**rìm-**ǐr-**â

Here we see clearly that three accents are on three syllables consecutively. Here is where the tonology applies a rule known as *OM Accent Shift.* In this analysis when two OM accents appear in a single verb cluster, then the rightmost OM accent shifts to the final vowel (FV). This is not only in Giha language, but also in Ci-Digo language (Kisseberth, 1984: 243) and Ci-Ruri (Massamba, 1982: 97-98). This rule is formulary described by Massamba (1982: 97) as follows:

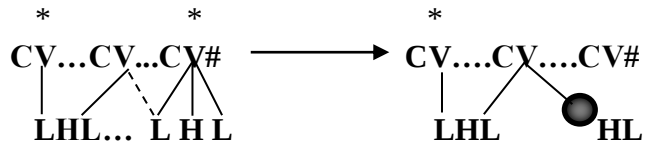
27 *Rule 3: OM Accent Shift:*

$$\overset{*}{\text{(C)V}} + \left[\overset{*}{\text{(C)V}} \ldots\ldots\ldots\ldots \text{V}\right]_{\#} \longrightarrow$$

Whereby: V# = the end of the word i.e. the final vowel.

Then, *rule 2* (OM Accent Deletion) proceeds *rule 3* (OM Accent Shift). Finally, there is another rule that requires the simplification of the Low Tone when two Low Tones of the different BTMs come into close in a single verb tonal cluster. Also, this rule appear in other Bantu tonal languages like Ci-Tonga (Goldsmith, 1894: 25), Ci-Ruri (Massamba, 1982: 98), and Zulu (Laughren, 1984: 185) to mention just a few. This rule can formulary be demonstrated as follows:

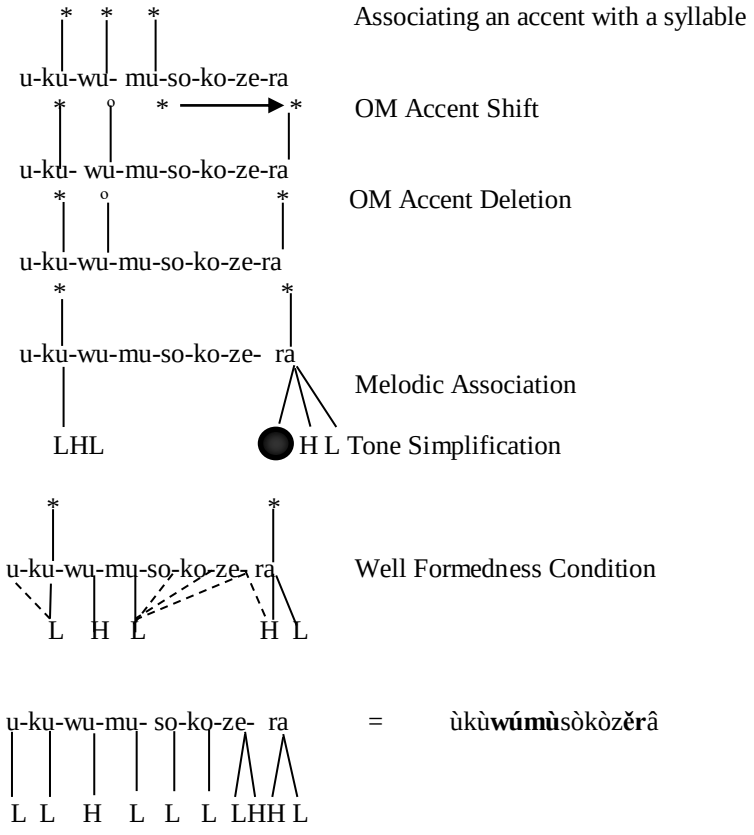
28 *Rule 4: Low Tone Simplification:*



Whereby: ● = A simplified Tone

Given that we have seen, it would seem that the accent realization in infinitives with two OMs would be demonstrated by applying the given rules. The analysis bellow would be explicit:

29 ùkù**wúmù**sòkòz**ěr**â "to comb a head for someone"



4.0 Conclusion

In this paper we have given a brief account of the accentual and tonal system in Giha infinitive verbs. We have identified that the Basic Tone Melody in Giha is *LHL whereby according to this analysis the accent is directly associated with the first Low Tone of the Melodic Tone. We have also identified that Giha verbs can

be grouped into two groups; the accented infinitives and unaccented infinitives. We can briefly point that, this paper has addressed only nonfinite verbs. Another study on Giha finite verbs can be conducted in another time and pace.

References

Clements, G.N. (1976). "Vowel Harmony in Nonlinear Generative Phonology: An Autosegmental Model." [Reproduced and distributed by IULC].

_____(1981). "Akan Vowel Harmony: A Nonlinear Analysis. Harvard Studies in Phonology", vol. II, 108-177. [Reproduced by IULC] .

Goldsmith, J. (1976). "Autosegmental Phonology." Ph.D. Dissertation. Massachusetts Institute of Technology.

_____ (1979). Autosegmental Phonology. New York: Garland Publishing.

_____ (1984). "Tone and Accent in Tonga" in Clements, G.N. and Goldsmith, J (Ed.) *Autosegmental Studies in Bantu Tone*. pp. 235-154. Dordrecht Holland: Foris Publications.

Guthrie, M. (1971). *Comparative Bantu: An Introduction to Comparative Linguistics and Pre-history of Bantu Languages*. Vol. 4. London: Gregg International Publisher.

Halle, M. and P. Kiparsky. (1981). From Cyclic to Lexical Phonology. The structure of phonological representations, vol. I, ed. by Harry van der Hulst and Norval Smith, 131–75. Dordrecht, The Netherlands: Foris Publications.

_____(1982). "Analogical change as a problem for linguistic theory." Reprinted in P. Kiparsky [ed] *Explanation in Phonology*. Dordrecht: Foris Publications.

Harjula, L. (2004). *The Ha Language of Tanzania: Grammar, text and vocabulary*. Köln: Rüdiger Köppe Verlag.

Kisseberth, C.W. (1984). "Digo Tonology" in Clements, G.N and J, Goldsmith (Ed.) (1984) *Autosegmental Study in Bantu Tone*. pp. 105-185. Dordrecht-Holland: Foris Publications.

Laughren, M. (1984). "Tone in Zulu Noun" in Clements, G.N. and Goldsmith, J (Ed.) *Autosegmental Studies in Bantu Tone*. pp. 235-154. Dordrecht Holland: Foris Publications.

Massamba, D.P.B. (1982). "Aspects of Accent and Tone in Ci-Ruuri". Ph.D. Dissertation: Indiana University.

_____ (1984). "Tone in Ci-Ruuri" in Clements, G.N. and Goldsmith, J (Ed.) *Autosegmental Studies in Bantu Tone*. pp. 235-154. Dordrecht Holland: Foris Publications.

_____ (2011). *Maendeleo katika Nadharia ya Fonolojia*. Dar es Salaam: Taasisi ys Taaluma za Kiswahili.

Nakagawa, H. (1992). *A Classified Vocabulary of the Ha language*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa (ILCAA). Tokyo University of Foreign Studies.

Nurse, D. (1979). "Description of Sample Bantu Languages of Tanzania". *African Languages*, 5 (1):1-150.