TONE IN MALAWIAN TONGA VERBS1

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1. Introduction

Most of the studies on Bantu tonology have shown that the languages which belong to this family have two level tones namely, high and low and that in the majority of cases, particulary in verbs, there is no underlying or lexical contrast between these two tones. Root forms in such languages are either high or low toned underlyingly and that the surface tonal patterns are easily accounted for by general tone assignment rules of the language. Studies by Goldsmith (1984, 1987), Odden (1987), Mtenje (1986, 1993) among others have given detailed illustrations of tone systems of this type particularly for languages in the East-Central African region.

In this paper, a tonal analysis of Malawian Tonga verbs is presented and evidence is given showing that this language like those studied in the cases cited above, has two tones high and low. It is shown that only the high tone needs to be underlyingly specified in verbal forms. Low tone verbs are tonally unspecified underlyingly and their surface tone values are supplied either by default rules which mark all toneless forms as low toned or by general and language-specific tone assignment rules determined by the tense and aspectual morphology of the verbs.

2.0 Preliminary remarks in Tonga

The paper presents tonal data from Malawian Tonga (hereafter referrred to as Tonga) which is spoken primarily in Nkhatabay and other surrounding areas in the northern region of Malawi. In the study, an acute accent on a vowel "represents a high tone, a circumflex "\" stands for a falling tone, an inverted wedge "\" shows

a rising tone and low tones are left unmarked. As it was stated in the introduction above, Tonga verbs show no lexical contrast between high and low tones. That is, there are no minimal pairs of verbal forms whose meaning differences result from total differences between a high and a low tone over a given vowel or syllable. Instead, the majority of the forms recorded show a predominance of low toned verbs over high toned ones. These examples are given in (1) below:

Verbs

(1) Low Toned Verbs

- (a) lelesya look at/see
- (b) imba sing
- (c) danika answer
- (d) liya cry
- (e) puma beat
- (f) sambiza teach
- (g) mbwika jump
- (h) zumbuwa reveal
- (i) peya sweep
- (j) vwiya sleep

(2) <u>High Toned Verbs</u>

- (a) chimbiyá run
- (b) sambilá learn
- (c) khumbilá admire
- (d) tonděká fail
- (e) bangulá shout

As it can be noted from the data above, the forms in (1) are low-toned through out while those in (2) bear a high tone on the final vowel but they have a rising tone

on their penultimate vowels. The analysis being proposed in this paper is that the forms in (1) are lexically unmarked for tones while those in (2) are marked with a high tone on the final vowel and that there is a tone retraction rule in Tonga similar to that found in neighbouring languages like Chichewa and Chiyao (cf. Mtenje 1986, 1993) which spreads a word-final high tone leftwards to the penultimate vowel under varying conditions such as the presence of a long penultimate syllable. The point here is that penultimate vowels are lengthened in Tonga (like in most of its neighbouring languages) and that process triggers tone retraction.

3.0 Tone in tensed tones

It has been observed in many tone studies on Bantu languages that when toneless verb roots of the type given in (1) above occur in constructions with tense markers, high tones appear on some vowels of the verb root. The most compelling analysis in accounting for this phenomenon has been to attribute these high tones to the presence of these tense markers. Rules have then been formulated to assign the high tones to the specific domains where they are attested. The surface tonal differences which occur among Bantu languages have thus been related to the differences in the specific domains where high tones in a particular language are assigned rather than a fundamental genetic tonal polarity.

Tonga behaves similarly with respect to the behaviour of toneless verb roots. When these roots (as those given in (1) above) occur with tense markers, they acquire high tones on some vowels thus obliterating the initial tonal distinction between such roots and the high-toned ones as those shown in (2).

Consider the forms given below:

3. <u>Present Progressive Tense</u>

- (a) ndi-vina I am dancing
- (b) ndí-lélesya I am looking
- (c) ndi-wélenga I am reading

- (d) ndi-peya I am sweeping
- (e) ndi-samba I am bathing
- (f) ndí-thawa I am running
- (g) ndí-kámbula I am shouting
- (h) ndi-vwiya I am sleeping

In the forms above, we note that the verb roots vina, lelesya, welenga, peya, samba, thawa, kambula and vwiya which were underlying low toned i.e. had no high tone, now surface with high tones particularly in (3b, c & g). We account for these forms by claiming that in the present progressive tense (which is not morphologically marked) a high tone is placed on the first vowel of the stem, i.e. the subject marker ("ndi" in the above forms). In cases like 3b, c & g where there is an extra high tone on the root vowel, we propose a rule of tone doubling. This rule, which is very common in Bantu languages (cf. Mtenje 1986, 1993 for Chichewa and Chiyao respectively), spreads a high tone on a vowel to the next vowel. The conditions under which this rule applies vary among the languages and details of that type will be avoided here. Suffice it to say that in the Tonga forms given above, the high tone initially assigned to the subject marker ndi in 3b, c & g spreads to the next vowel.

Now consider the additional data from the same tense given in (4) below:

- 4. (a) ndi-túvwa I am listening
 - (b) ndi-ténda I am walking
 - (c) ndi-tumba I am singing
 - (d) ndi-túlya I am eating

In these forms we note two things. First, the subject marker <u>ndi</u> is low toned unlike in (3) where it was high-toned. Second, the root vowels now bear high tones whereas underlyingly, they are low-toned (cf. (1) above). This suggests that our tone assignment rule has to be more complex than it was stated above. The clue to the solution lies in the nature of the verb roots in (4). We note that unlike the roots in (3) which begin with consonants, in isolation, these are either monosyllabic or they are vowel-initial as shown in (5).

- 5. (a) -vwa listen
 - (b) -enda walk
 - (c) -imba sing
 - (d) -lya eat

We can thus hypothesize that the rule assigning tone to the-present progressive tense forms states that a high tone is generally assigned to the subject marker (with tone doubling where appropriate) and in cases where the verb roots are either monosyllabic (as in 4a & d) or vowel-initial (as in 4b & c), then the high tone is assigned to the vowel following the subject marker, in this case <u>tu</u> or <u>te</u> which seem to act as tense markers in these forms.

Let us now consider tone assignment in the simple past tense.

6. Simple Past Tense

- (a) ndinguvina I danced
- (b) ndingulélesya I looked
- (c) ndinguwérenga I read
- (d) ndingusámba I bathed
- (e) ndinguthawa I ran
- (f) ndinguvwa I listened
- (g) ndingumba I sang
- (h) ndingulya I ate
- (i) ndingwenda I walked

The forms above show that in this tense, a high tone is placed on the first root vowel or mora as noted in 6a-e where the high tone occurs after the tense marker ngu. However, like in the case in (4), if the verb root begins with a vowel or is monosyllabic as in 6-d and f) then the tense markers surface with rising tones. We account for this difference as follows. In these forms, the mora which would have received the high tone from the tense marker, namely the root initial mora, is missing thus the high tone is assigned to the second mora of the tense marker itself which results from penultimate lengthening.

We now examine tone assignment in the present habitual tense. These are given below:

7. Present Habitual Tense

- (a) ndívwiya I listen
- (b) ndivina I dance
- (c) ndílélesya I look(d) ndísamba I bathe
- (d) nuisamoa i batin
- (e) ndithawa I run
- (f) nditumba I sing
- (g) nditénda I walk (h) nditúlya - I eat

These forms behave like the present progressive cases in (3) and (4). A high tone is placed on the subject maker (cf. 7a-e) otherwise it goes on to the vowel after the subject marker if the verb root is monosyllabic or vowel initial.

Finally we look at how tone assignment is done in the past habitual and distant future tenses. These are given below in (8) and (9) respectively.

8. Past Habitual Tense

- (a) ndavwiyanga I used to listen
- (b) ndambanga I used to sing
- (c) ndavinanga I used to dance
- (d) ndayendanga I used to walk
- (e) ndalélésya I used to look
- (f) ndalyanga I used to eat
- (g) ndaliyanga I used to cry

9. <u>Distant Future Tense</u>

- (a) ndívwiyenge I will listen
- (b) ndimbenge I will sing

- (c) ndivinenge I will dance
- (d) ndíyéndenge I will walk
- (e) ndílélesyenge I will look
- (f) ndilyenge I will eat

The data in (8) shows that a high tone in the past habitual tense is assigned to the first vowel of the verb root. In cases like (8e) where the conditions for tone doubling are met, that high tone is copied one syllable to the right.

Tone assignment in the distant future tense as shown in (9) takes the stem initial syllabe as its focus. A high tone is placed on the subject marker and where appropriate (cf. 9d & e) that high tone is doubled on to the next syallable.

The discussion above shows that tone assignment in Tonga verbs falls into two main patterns. The first group comprises tenses in which a high tone is placed on the first stem vowel (i.e. the subject marker) as in the present progressive, present habitual and distant future tenses. The second group has tenses where a high tone is assigned to the first vowel of the root as in the simple past and past habitual tenses. The generalisation in both cases is that in the past tense forms, a high tone is assigned to the first root vowel while in the non-past tenses a high tone is placed on the stem-initial vowel.

4.0 Conclusion

In conclusion, the paper has shown that Tonga behaves like other Bantu languages with respect to tone assignment in verbs. Low toned verbs are underlyingly unspecified for tones. In tensed forms, these verbs are assigned high tones either on the stem-initial vowel or the root-initial vowel depending on the tense. In appropriate cases, the rule of tone doubling, which is also attested in other Bantu languages, spreads the high tone to adjacent vowels.

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- The data presented in this study is based on recordings made with two native Tonga speakers, Drs W. Chirwa and J. Saka. All errors of presentation and transcription are entirely mine.