

Tonal Systems of Some Liberian and Guinean Dialects of Looma: A Comparative Study

Looma is one of the South-Western Mande (SWM) languages whose speakers live in Liberia and Guinea. Unfortunately, tonology of Looma dialects remains understudied. There are works on Looma tonal system based on the data of Liberian dialects Gizima, Ziεma, Buluyiεma (or Briama)¹ [Sadler 1949/2006; 1951; Vydrine 1989], Zozo [Dwyer et al. 1981] and Guinean Woi-Balagha dialect [Mishchenko 2009]. In what follows, the nominal and the verbal tonal systems of the Liberian dialects and Guinean Woi-Balagha will be compared. The present work is based on the data of Gizima, Ziεma, Buluyiεma from [Sadler 1949/2006; 1951] and on my data collected during field trips in Guinea in 2009 and 2010. After establishing tonal classes and regularities in tonal behavior of the words in different Looma dialects, one can apply this information for a reconstruction of the proto-SWM tonology.

The tonal systems of the Liberian dialects and that of Woi-Balagha differ substantially, but still, certain common features can be singled out:

- 1) there are two level tones in Looma, high and low;
- 2) the toneme domain is a morpheme;
- 3) there are 2 major tonal classes, with a high and a low tone throughout; other classes are represented by smaller number of words, some of them have restrictions on the word structure, others includes only loans;
- 4) the total number of the nominal tonal classes (6) exceeds the number of the verbal tonal classes (2);
- 5) in the main, in the dialects under consideration, the distribution of lexis throughout major tonal classes coincides; discrepancies concern subclasses and stem from peculiarities of the tonal behavior of a word dependent on its structure, which are specific for each dialect; in the meantime, the set of minor tonal classes, their tonal schemes and the distribution of words throughout them are unique;
- 6) in the quotation form, almost all nouns and verbs adjoin the referential article *ɲ*- at the underlying level; at the surface level, it manifests itself by preserving the “strong” alternation grade of the initial consonant of a word and communicating it a high tone;
- 7) many loans do not attach the high-tone referential article; as a result, they keep their lexical tones even in the quotation form;
- 8) the lexical tone of a word can manifest itself on the subsequent word in a phrase, i.e. on the second constituent of an attributive or genitival phrase or (for the tone of a direct object) on the transitive verb.

Still, the distinctive features of the dialects under discussion are rather essential. In reference to the Liberian dialects Gizima, Ziεma and Buluyiεma, one should mention the following peculiarities.

1. The phonemic structure of a noun determines the extent of the outspread of the high surface tone: adjoined to the words of the tonal class 2.1, the high tone referential article *ɲ*- results in a high tone

¹ W. Sadler does not specify the dialectal origin of his data for each of his example.

on the first syllable of a word only: *kpídi* ‘night’, which can be explained by the fact that the “strong” consonant blocks the outspread of a high tone. In other cases, there is no barrier for a surface high tone: *pèlè* ‘house’ (class 2).

2. The same is true for certain verbs. Verbs from the tonal class 2.1 have a falling tonal contour at the surface level because of their phonemic structure.

3. The tone of the definite article *-i* depends on both a lexical tone of a word and its structure. Tonally, this suffixed article can be influenced by a word in two ways. First, the word communicates its lexical tone to the definite article, e.g.: *máság-i* ‘the chief’ (*màsà(g)* ‘chief’, class 2). Thereafter a superficial high tone of a word can spread over the definite article, too. This outspread takes place after a stem-final vowel, while the stem-final *-(g)* prevents it, cf.: *pélé-í* ‘the house’ (*pèlè* ‘house’), but *máság-i* ‘the chief’ (*màsà(g)* ‘chief’). The tone of the definite suffix *-i* adjoined to words from the tonal class 2.1a (all of them have stem-final *-(g)*) varies: *kpókpòg-i* or *kpókpòg-í* ‘the chair’. This variation is the only reason for distinguishing such words as a separate tonal subclass.

4. Tonal behavior of verbal suffixes can be described in a similar way. Their tones depend not only on the lexical tone of a verb, but on its phonemic structure, too. A verbal suffix adjoined to a verb of the tonal class 1 acquires a low tone, while a verb of the class 1.1 with the stem-final *-(g)* makes its tone high.

5. The high lexical tone of a word manifests itself on the second constituent of an attributive or genitival phrase or, for the tone of a direct object, on the subsequent verb regardless of the basic tone of this latter: *súó* ‘animal’ (class 1), *nòwò* ‘be dirty’ (class 2) → *súó nówò* ‘dirty animal’. Still, the low lexical tone of the first constituent in a phrase does not influence a tone of the second word, cf.: *pèlè* ‘house’ (class 2), *gwàlà* ‘be big’ (class 2) → *pélé wàlà* ‘big house’, but *gùlù* ‘stick’ (class 2), *wélé* ‘be white’ (class 1) → *gùlù wélé* ‘white stick’. Thus, a high tone spreads over the second constituent of a phrase, while a low tone does not.

6. In Liberian dialects, a polarizing tone was attested [Vydrin 1989: 90, 96]. Still, the data available is insufficient to describe the rules of tonal polarization in these dialects.

7. No grammatical tone in Liberian dialects has been attested.

As for Woi-Balagha, its main distinctive features are the following.

1. The high-tone referential article **íj-* adjoined to a word at the underlying level communicates it the high tone throughout, including the definite article *-i*, regardless the lexical tone of the word and its phonemic structure: *pélé-í* ‘the road’ (*pélé*, class 1), *pélé-í* ‘the house’ (*pèlè*, class 2), *máság-í* ‘the chief’ (*màsà(g)*, class 2).

2. The subclass 2.1 nouns, when in an attributive NP, influence the subsequent word in two ways: at first, their lexical low tone spreads over the second constituent of the phrase, then their high surface tone spreads over the first syllable of the second word: *sèè* ‘elephant’, *gòlà* ‘be big’ → *íj-sèè wòlà-ì* (a low lexical tone of the verb spreads over the definite article *-ì*) → *séé wòlà-ì* (a high tone of the referential article *íj-* spreads over the noun) → *séé wólà-ì* ‘the big elephant’ (a high surface tone of the noun spreads over the first syllable of the verb).

3. The definite article *-i* is assimilated tonally by the preceding syllable.

4. The tone of a verb manifests itself on the verbal suffixes *-zu/ -su* (imperfective mark) and *-ve/ -ε* (factative mark); other suffixes have their own lexical tones.

5. The attributive phrase is marked with a low grammatical tone on the second constituent: *mándáliní gòlà-ì* ‘the big mandarin’ (*mándáliní(g)* ‘mandarin’, class 4; *gòlà* ‘be big’, class 2).

6. The surface tone of a verb is influenced by the lexical tone of the final word of the direct object NP. When the direct object is expressed by a noun, it affects the verb tonally twice: first, its lexical tone spreads over the verb, then the surface tone of the direct object modifies the tone of the verb. If the noun stem has a final *-(g)*, it prevents a spread of its secondary (surface) tone on the verb. Thus, in *Zúnú-í yà kómíg-í zò-sù* ‘The man is catching the bee’, the low tone of the verbal predicate is determined by the drifting of the low lexical tone of the noun *kòmì(g)* ‘bee’ (class 2), and the stem-final *-(g)* prevents a spread of the high surface tone on the verb. But if the surface tone does spread on the verb, it involves the first syllable of the verb only: *Máság-í yà pélé-í wódì-zù* ‘The chief is selling the house’.

Appendix

Table 1. Nominal tonal classes in Gizima, Zìema and Buluyiema

Nº	Lexical tonal contour	Tones on the surface level	Morphological structure	Examples
1	high tone throughout	high tone throughout	No restrictions	<i>péle</i> ‘road’, <i>yáǎlé</i> ‘cat’, <i>gálú</i> ‘rope’
2	low tone throughout	high tone throughout	No restrictions	<i>pèlè</i> ‘house’, <i>màsà(g)</i> ‘chief’, <i>sèè</i> ‘elephant’
2.1	low tone throughout ²	falling	CVVCV, CV(g)CV, C ₁ VC ₂ V, where C ₂ is /b/ or /v/	<i>bààlà (g)</i> ‘sheep’, <i>kpìdì</i> ‘night’
2.1a	low tone throughout ³	falling	CV(g)CV(g), CV:CV(g), C ₁ VC ₂ V(g), where C ₂ is /b/ or /v/	<i>kpòkpò(g)</i> ‘chair’
3	low tone throughout ⁴ with a high floating tone	falling	(CV)CV(g)CV, (CV)CV(g)CV(g), (CV)CVVCV, (CV)CVVCV(g), (CV)C ₁ VC ₂ and (CV)C ₁ VC ₂ V(g), where C ₂ is /b/ or /v/	<i>bèkè(g)</i> ‘branch’, <i>sùbù</i> ‘morning’
4	low tone throughout	low tone throughout	No restrictions	<i>wù(g)</i> ‘european man’
5	rising with a floating low tone	rising	(CV...)CV(g)CV, (CV...)CVVCV	<i>Zèzè</i> ‘Zeze (man’s name)’, <i>kòfè(g)</i> ‘coffee’
6	low tone throughout with a floating high tone	low tone throughout	CV(g)CV(g)	<i>wùlù(g)</i> ‘thousand’, <i>wùò(g)</i> ‘frog (species)’

Table 2. Nominal tonal classes in Woi-Balagha

Nº	Lexical tonal contour	Tones on the surface level	Morphological structure	Examples
1	high tone throughout	high tone throughout	No restrictions	<i>péle</i> ‘road’, <i>yáǎlé</i> ‘cat’, <i>sùbù</i> ‘morning’, <i>káfè</i> ‘coffee’
2	low tone throughout	high tone throughout	No restrictions	<i>pèlè</i> ‘house’, <i>màsà(g)</i> ‘chief’, <i>gàlù</i> ‘rope’, <i>kpìdì</i> ‘night’, <i>kpòkpò(g)</i> ‘chair’, <i>wù(g)</i> ‘european man’
2.1	low tone throughout	high tone throughout	CV/CV(g), CVV/CVV(g),	<i>sèè</i> ‘elephant’, <i>wònn(g)</i> ‘tail’

² One can postulate the low tone throughout or the falling tone for this class, but the data of other SWM-languages say for the low tone.

³ See 2.

⁴ See 2.

			C ₁ VC ₂ V, where C ₂ is sonant	
3	high tone throughout	high tone throughout	No restrictions	<i>lákólí</i> ‘school’, <i>mándáliní(g)</i> ‘mandarin’
4	low tone throughout	low tone throughout	No restrictions	<i>bilíki</i> ‘brick’, <i>lòòmà</i> ‘Looma’
5	rising	rising	No restrictions	<i>wòibàlàgá</i> ‘Woi-Balagha’, <i>ṣòmé</i> ‘camel’, <i>Zèzé</i> ‘Zeze (man’s name)’
6	falling	falling	No restrictions	<i>fásáḽ</i> (name of a canton), <i>sòvàlè(g)</i> ‘mule’

Table 3. Verbal tonal classes in Gizima, Ziema and Buluyiema

Tonal class	Lexical tone	Tones on the surface level	Word structure	Tone on the suffixes	Examples
1	high	high tone throughout	No final -(g)	high	<i>dáá-láó</i> ‘open’
1.1	high	high tone throughout	With final -(g)	low	<i>kwéle(g)</i> ‘be white’, <i>pílí(g)</i> ‘throw’
2	low	high tone throughout	No restriction	low	<i>dà</i> ‘lie down, put’
2.1	low	falling	CVVCV, CV(g)CV, CV(g)CV(g), C ₁ VC ₂ V, where C ₂ is /b/ or /v/	low	<i>pètè</i> ‘see’

Table 4. Verbal tonal classes in Woi-Balagha

Tonal class	Lexical tone	Tone on the suffixes	Examples
1	high	high	<i>pílí(g)</i> ‘throw’
2	low	low	<i>dà</i> ‘lie down, put’, <i>kòlè(g)</i> ‘be white’

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