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Tones in Mizo Language

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Abstract

The paper on " Tones in Mizo Language" deals with the identification of lexical (root) tones in Mizo. In the midst of various assumptions about differing opinions on the number of tones present in the language, the paper establishes that there are only four lexical tones in Mizo viz High tone,Low tone,Rising tone and Falling tone. It also highlights the fact that since Mizo, belongs to the Tibeto-Burman family of tone languages the phonology of tones in Mizo is closer to the Asian typology.

Key words: Tones, Inventory, Lexical, Homophones, Non-derived Contour

I. Introduction

Pike (1961) defines a tone language as a language in which a pitch of a syllable determines the lexical meaning of words. Pitch variation which is 'segmented' into units of 'tonemes' or 'tones' (not in the sense of a phonetic tone group) is realized as high, low, mid or as a glide from one distinct pitch level to another distinct pitch level. Pike also says that tone languages may use different tonal systems to distinguish the meaning of words. Some tone languages make use of only level tones as in most African tone languages. The presence of a glide or a contour tone in this type of languages, as Pike observes, may be non-significant. That is, contour tones are created when there is a transition from one distinct level tone to another or through the association of floating tones to tone-bearing units in auto-segmental terms. In these cases, the contour tones are not, phonologically or lexically distinct from level tones. On the other hand, there are tone languages in which both level tones and contour tones are lexically distinct. Most Asian tone languages are supposed to be of this type. The typological differences among tone languages are discussed in detail in Pike (1961), Fromkin (1978), Yip (1980), etc. Since Mizo belongs to the Tibeto-Burman family of tone languages the phonology of tones in Mizo is closer to the Asian typology.

2. Description of the Tones of Mizo

The different pitch levels in Mizo have been classified mainly into four basic tonal melodies. In Weidert (1975) they are described as High level, High-falling, Low-rising and Low level. In L. Chhangte (1986), they are High, Rising, Falling and

Mid-Low. Bright (1957) has the following: High (level), Falling (high to low), Rising and allophonic Mid-level and Mid-to-Low falling tones. The classification of Mizo tones in this paper conforms more or less to that of L. Chhangte (1986) except for one additional tone, an Extra-low tone which is non-contrastive. The Mid-Low tone, which is the only contour tone in the language will be shown to behave like a unitary toneme phonologically and hence will be represented as a Low tone. Examples of the four tonal melodies which are contrastive and lexically significant are given below.

3. Tonal Melodies

a.	(i)	lei	-	'slanting'	-	High tone
	(ii)	lei	-	'to buy'	-	Rising tone
	(iii)	lei	-	'a bridge'	-	Low tone
b.	(i)	pa	-	'father'	-	Falling tone
	(ii)	pa	-	'male'	-	Low tone
	(iii)	pa	-	'mushroom'	-	Rising tone
c.	(i)	sam	-	'easy'	-	High tone
	(ii)	sam	-	'hair'	-	Rising tone
d.	(i)	man	-	'to arrest/catch	-	High tone
	(ii)	man	-	'cost of'	-	Low tone
e.	(i)	man	-	'dream'	-	Rising tone (short form)
	(ii)	man	-	'to become	-	Falling tone extinct'
f.	(i)	tawng	-	'a measurement	-	Low tone
	(ii)	tawng	-	'to reach up to'	-	Falling tone (e.g. roof/ceiling)

From the above examples, we arrive at the following inventory of contrastive tones in Mizo as given below.

4. Mizo tone Inventory

a.	lei	-	'slanting'	- High tone
b.	lei	-	'a bridge'	- Low tone
c.	pa	-	'mushroom'	- Rising tone
d.	pa	-	'father'	- Falling tone

Following the general convention of diacritic tone markings, the tones in (4) can be represented as in (5).

5. Tone Markings

a. H - / (High tone)
b. L - \ (Low tone)
c. LH - v (Rising tone)
d. HL - ^ (Falling tone)

6. A Note on Homophonous Tones

It has been illustrated that Mizo has four basic distinctive tone melodies. It is also seen that a single lexical item can have two different meanings through distinct tonal specifications. There are also cases of tonal homophony; homophonous lexical items with distinct meanings. The meanings of these words are interpretable in contexts only.

7. Contextual Meanings

a. (i) mu = H tone - 'to sleep'
(ii) mu = H tone - 'an eagle'
(iii) tui = H tone - 'be tasty'
(iv) tui = H tone - 'an egg'

b. (i) la = L tone - 'to take'
(ii) la = L tone - 'thread'
(iii) dai = L tone - 'be cool'
(iv) dai = L tone - 'dew'

c. (i) lei = Rising tone -'to buy'
(ii) lei = Rising tone -'earth'
(iii) suan = Rising tone -'to take off (e.g. from the fire)
(iv) suan = Rising tone -'silver'

d. (i) mek = Falling tone - 'to emit sparks'
(ii) mek = Falling tone - 'thunderbolt'
(iii) tawk = Falling tone - 'to meet/encounter
(iv) tawk = Falling tone - 'to be enough'

8. Tones in Non-derived Words

The following examples illustrate tonal specifications in non-derived monosyllabic and polysyllabic words.

9. Syllables

a. Monosyllables

(i) High tone

a. u - 'elder brother/sister'
b. ang - 'to open the mouth'
c. ar - 'chicken'
d. sawn - 'illegitimate child'
e. dil - 'to ask'
f. khu - 'one's hometown'
g. piang - 'to be born'
h. sual - 'to rape'
i. lai - 'navel'
j. khap - 'to blink'
k. kal - 'to go'

(ii) Low tone

a. e - 'to defecate'
b. em - 'cane basket'
c. mu - 'to be lumpy'
d. hang - 'dark- complexioned'
e. dar - 'the shoulder'
f. pua - 'to carry on the back'
g. lian - 'be big'
h. hmuar - ' mildewed'
i. lai - 'to dig'
j. khap - 'to prohibit'
k. dul - 'belly'

(iii) Rising tone

a. u - 'to howl'
b. haw - 'to go home'
c. awl - 'to be unoccupied free
d. fun - 'to wrap'
e. hua - 'to hate'
f. fiak - 'to be high pitched'
g. puan - 'a cloth'
h. hnial - 'to argue'
i. sam - 'hair'
j. kal - 'kidney'
k. fei - 'a spear'

(iv) Falling tone

a. at - 'to cut' (eg. grass)
b. awng - 'a hole'
c. mu - 'seed'
d. phung - 'a ghost'
e. kil - 'to sit around for a meal/ to surround'
f. puak - 'to explode'
g. hual - 'to be betrothed'
h. hung - 'to fence'
i. khel - 'to gnaw'
j. lut - 'to go in'
k. phiat - 'to sweep'

b. Disyllables

(i) H H

a. thlangdar - 'name of a beetle'
b. paikawng - 'basket made of bamboo'
c. vaimim - 'maize'

(ii) L L

a. vangvat - 'a leech'
b. pheikhawk - 'shoe'
c. bungrua - 'luggage'

(iii) L H

a. fanghma - 'cucumber'
b. kaikuang - 'prawn'
c. pawvawng - 'name of a large fly'

(iv) H L

a. phenglawng - 'a flute'
b. hmelma - 'an enemy'
c. mingmang - 'guitar'

(v) L LH
a. chengkawl - 'water snail'
b. sephung - 'dung-beetle'
c. depde - 'be dishonest'

(vi) L HL
a. chepa - 'a type of a squirrel'
b. chukchu - cockroach'
c. thawmhnaw - 'clothes' (e.g. dresses)

(vii) H LH
a. faifuk - 'to whistle'

(viii) HL L
a. huaihawt - 'to organize'

(ix) LH LH
a. zauthau - 'to be excited'
b. mumal - 'to be definite'

c. Trisyllables
(i) L L L
a. rangkachak - 'gold'

(ii) L H H
a. tawtawrawt - 'a bugle'

The distribution of tones in non-derived words is schematized below. High tone is represented as H, Low tone as L, Rising tone as LH and Falling tone as HL.

10. a. Monosyllables
(i) L (ii) H
(iii) L H (iv) H L

b. Disyllables
(i) L L (ii) H H
(iii) L H (iv) H L
(v) L LH (vi) H LH
(vii) L HL (viii) * H HL
(ix) * LH H (x) * LH L
(xiii) LH LH (xiv) * HL HL

c. Trisyllables
(i) L L L
(ii) L H H

Pitch variations recorded on the Visi-pitch meter reveal some interesting correlations between surface L and H sequences in monosyllabic and disyllabic words. The sequences of L tones and the sequences of H tones in disyllables correlate well with L and H tones melodies respectively in monosyllables. But the phonetic realization of the sequences of LH and HL melodies is dependent on their being mapped on to the same syllable or to different syllables.

The Low tone in Mizo, as mentioned before, is a unitary level tone underlyingly. Its complete contour specification i.e. the glide from a mid to a low pitch is obtained during the course of the derivation.

The tones of syllables with a glottal stop in the Coda in derived environments is

uniformly Low. But this Low tone is different from the normal low tone. Instrumental experiment shows a steep, rapid fall wherever there is a glottal stop in the Coda therefore, the glottal stop in Mizo is a tone depressor. In non-derived words, syllables with a glottal stop in the Coda can have tonal specifications different from the extra-low tone as exemplified below.

11. a Monosyllables

(i) bauh (High) - 'to bark'
(ii) pheuh (High) - 'at long intervals'
(iii) chheih (High) - 'an exclamation'
(iv) seih (High) - 'to smile'

b. Reduplicated adverbs/expressions

(i) nelh nelh (High High) - 'suggests something small and light' (e.g.to carry)

(ii) thauh thau - 'suggests the big steps taken by a big person' (e.g. walking)

Contour Tones

Differences in the function and behavior of tones among tone languages have made it difficult to arrive at a uniform system of phonological representation of tones. The representation of tones with respect to distinct pitch levels of high, mid or low is non-controversial. But the representation of Contour tones is still a point of contention. There are two conflicting representations that are being proposed for contour tones. Whereas a contour tone is claimed to be represented as a sequence of level tones according to one theory, the other theory regards a contour tones as an independent phonemic unit, distinct from level tones (Cf. Pike (1961), Wang (1967), Fromkin (1978), Yip (1980).

Pike (1961) distinguishes tone languages into register and contour systems. A register tone system utilizes only level tones and contour tones that occur in this system are to be considered non-phonemic glides. In a contour system, the glides are basic. Therefore, they are to be treated as lexically significant pitch units. The arguments given by Pike (1961) in support of unitary contour features are reproduced below:

a. "The basic toneme is gliding instead of level.

b. The unitary contour glides cannot be interrupted by morpheme boundaries as can the non-phonemic compounded types of a register system.

c. The beginning and ending points of the glide of a contour system cannot be equated with level tonemes in the same system, whereas all glides of the register system are to be interpreted phonemically in terms of their end points."

(Pike (1961): p.8)

In the subsequent literature, contour tones in African languages have been analyzed as sequences of level tones (Cf. Goldsmith (1976), William (1970), Leben (1978), Clements (1981), Pulleyblank (1986)). In spite of the different behavior of contour tones in African tone languages and Asian tone languages, arguments in favour of contour tones as sequences of level tones in the latter have also been motivated. For instance, Yip (1980) argues that the decomposition of contour tones into sequences of level tones allows a simpler statement of the distribution of tonal melodies in these languages. She further argues that contour tones sometimes behave like level tones that match their end points in conditioning and undergoing tone rules. If contour tones are treated as unitary features, reference cannot be made to their end-points when required by linguistic processes. However, Yip (1989) observes that contour tones sometimes behave like affricates. They associate as units and in some tone languages, they also exhibit 'edge-effect' i.e. one of the components of a branching tone can spread (Cf. Yip (1989)). According to her, this behavior of tones can be explained if tonal features hang off a tonal root node, and the tonal root node is allowed to branch. She proposes two kinds of contour structures which differentiate between a contour tone and a complex tone cluster. These structures are given below:

8.

(8 a) treats contour tones as branching melodic units dominated by a tonal node (Register) and (8b) as a tone cluster. Yip points out that this does not contradict her earlier theory of a level analysis of contour tones but simply proposes a level at which contour tones may be recognized as units.The analysis of contour tones would have to take into consideration either of the two representation above. This is yet beyond the scope of the paper.

In sum, there are four lexical tones in Mizo. Any other tonal variation in the language is the result of individual pitch difference and tonal changes that take place in phonological, morphological and syntactic changes in derived environments.

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