Tenyidie: Another African Tone System in Southeast Asia?

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Abstract

In this paper, I compare Tenyidie (Angami) with two neighbouring languages Kuki-Thadou and Mizo, which are also Tibeto-Burman, by looking at the similarities and dissimilarities in the tonal aspects, with the knowledge that Kuki-Thadou is known to be an outlier in the language map by showing more of an African tone aspect (Hyman 2010) [1].

While Mizo shows up to be a very typical Tibeto-Burman tone language (Sreenivasan 2015) [2], Tenyidie lies somewhere in between Mizo and Kuki-Thadou in its similarities to African tonal characteristics. The properties of 'contour tone system' in Pike (1948) [3] fit more for the Mizo contours and those for 'register tone system' fit more for Thadou and Tenyidie. However, while the post-lexical phenomena of 'downstep' and 'downdrift' are present in Thadou, they are absent in both Mizo and Tenyidie.

Index Terms: tone phonology, lexical tones, contour tones, cluster tones, typology, Tibeto-Burman, African tone, East Asian tone, Tenyidie, Angami, Kuki Thadou, Mizo

1. Introduction

Tenyidie, also known as Angami, is a Tibeto-Burman language spoken in Kohima, Nagaland, in the northeastern border of India. In Meyase (2014) [4], based on the data in (1), I argued that there are five tones in the language but that only four show up on the surface level, while the fifth tone only show up in morphophonemic alternations. The four tones were assigned features following Yip (1980) [5] as in table 1 and I argued for the fifth tone (T_5) to be a complex tone made up of an overt High tone followed by a Mid tone which takes part only in morpho-tonal changes.

(1)   petǎ + lie   = petǎ liè   'to drive' + IMP
       rəlí + lie   = rəlí liè   'to rest' + IMP
       rəlí (T_5) + lie   = rəlí liē   'to go slow' + IMP
       rədī + lie   = rədī liē   'to change' + IMP
       pelè + lie   = pelè liē   'to believe' + IMP

Table 1: *Featural representation of Tenyidie Tones, Meyase (2014).*

| Register	Tone/Pitch	
+Upper	+high	Extra High (E)
	–high	High (H)
–Upper	+high	Mid (M)
	–high	Low (L)

The fifth one is a complex tone with the form H<M> where <M> is a floating tone. This tone is, strictly speaking, a cluster tone, but for the sake of uniformity, I use the term 'contour tone' in this paper.

2. The fifth tone as a contour tone

Having said that the fifth tone is a contour tone, we look at other tonal languages in the neighbourhood to support the existence of such a tone. Contour tones are very common in the world's tonal languages, but what about a contour tone that does not surface as a contour tone but instead just surfaces as a non-complex tone. Although, tonal languages of East and Southeast Asia have not been documented to have such tones apart from the odd case of Kuki-Thadou (Hyman 2010), the African tone system is said to not only have such tones but, in fact, such a tonal observation is an outcome of some of the most common tonal rules in that system (Hyman 2007) [6].

The tonal rule in question that Hyman mentions here is a process called contour simplification (CS). According to this rule, when the contour tone HL (High-Low) in a syllable is followed by another syllable, the second tone in the contour, i.e, L, is delinked from the contour. This is represented as follows.
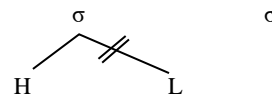

As a result of this rule, the syllable bearing the contour eventually surfaces with just the first tone (H as in the case of the representation, after L is delinked). The delinked or free tone is called the 'floating' tone.

It is a well-known fact that in African languages the process of downstep, indicated by $^\downarrow$, is attributed to such a delinked, 'floating' tone. This happens after the process of delinking in contour simplification. In this process when another syllable with an HL falling tone or an H tone follows the tone in the above process, the falling tone HL or the H tone is realised at a level lower than the preceding H tone. This lowering of the H and HL tones is said to be caused by the covert floating tone L. Downstep is represented as follows.
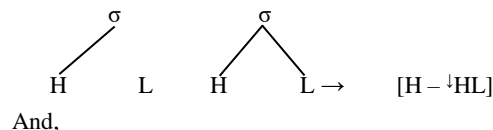
And,
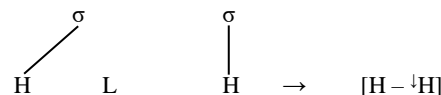
These two processes are very common in African tonal languages and Hyman has observed that the same is found in Kuki-Thadou, which is a Tibeto-Burman language. Tibeto-Burman languages otherwise have not been reported to have such tonal traits.

An example of a sentence showing downstep in Kuki-Thadou is seen in figure 1, adapted from Sreenivasan (2015), for the sentence in (2) (she uses ! instead of $\downarrow$).

(2) kên + tû + in + môt + kà + tʃô + êe
    1SG   now   NOM   banana   1PRO   buy   1DECL
    → kén !tú in mót kà tʃó !êe
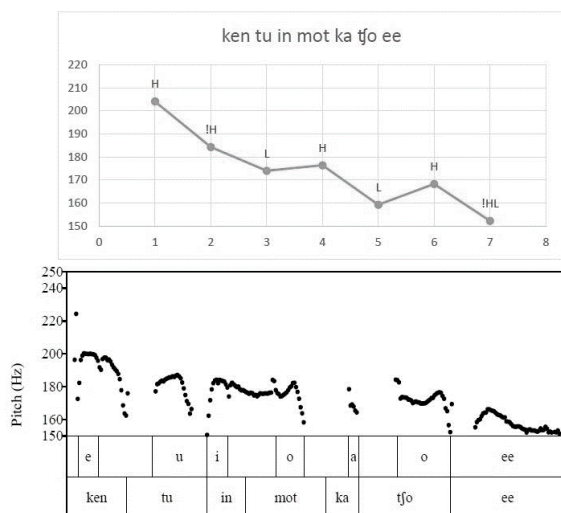   'I buy banana now'

Figure 1: *Downstep in Kuki-Thadou (Sreenivasan 2015).*

We would like to propose that the 'contour' tone HM (the fifth tone) in Tenyidie is comparable to the phenomenon in African tone languages and, closer home, to Kuki-Thadou and Mizo. While the latter has two fully fledged contour tones, namely HL and LH which are always realised on the surface (Fanai 1989) [7], the Kuki-Thadou contour tone surfaces only pre-pausally (Hyman 2010). In all other environments, the second tone in the contour is never linked to the syllable it originates. This is comparable to the contour tone HM in Tenyidie which again is always simplified to an H tone via contour simplification.

The difference between Kuki-Thadou and Tenyidie is with respect to the unlinked right member of the contour tone. Whereas in Kuki-Thadou it results in downstep across the board, in Tenyidie it merely relinks part of the specification (tonal) to the suffix which is specified only for the Register feature [±Upper]. Thus while both Kuki-Thadou and Tenyidie have a high-ranking rule which prohibits more than one tone per syllable, Kuki-Thadou with just two basic tones, namely H and L, allow the L tone to float and induce a downstep on the right environment. Tenyidie, which has a complete set of basic tone and two tonal features, namely [±Upper] and [±high], allows the feature [±high] to link rightward as the suffixes are partially specified for the feature [±Upper].

3. Tenyidie and African tone languages

Hyman (2010) stated of Kuki-Thadou that if the tone system of Southeast Asia were of a valid type, then the language could be the 'odd man out' of the lot since it behaved mostly like African tone languages. Hyman used Pike's (1948) model of distinguishing the 'contour tone system' and the 'register tone system'. While the 'contour tone system' represents the

Asian tone system with Chinese as a prototype, the 'register tone system' represents the African tone system, Yoruba and Igbo being examples of such. Hyman presented that out of 11 properties, Kuki-Thadou exhibited 9 properties of the African tone system. When we try this out for Tenyidie, it is seen that Tenyidie also leans more towards the African tone system rather than the Asian one system, although not as much as Kuki-Thadou. This is shown in table 2.

Table 2: *Contour tone system and register tone system compared for Tenyidie based on Pike (1948).*

A. 'Contour tone system'	B. 'Register tone system'	Tenyidie
Fewer level tones than contours	More level tones than contours	B
Contour tones = units	Contour tones = sequences (clusters)	B
Contour tones have free distribution within the utterance	Contour tones (clusters) are often limited to the last syllable	–
Dissimilation of contour + contour	Dissimilation of contour tones = rare	B
Metathesis of features within a contour	Metathesis of contour tones = rare	B
No downstep	Downstep	A
Floating tones = rare	Floating tones = frequent	B
Tone spreading = rare	Tone spreading = frequent	+B
Function of tone = lexical	Function = lexical *and/or* grammatical	A
Words are monosyllabic	Words come in various sizes	+A
Tones are restricted by syllable type	Tones may occur on any syllable type	–

(+A = more A; +B = more B; – = not applicable)

Tenyidie has four level tones and one contour tone. The contour tone in Tenyidie is a sequence of tones rather than a unit of its own, thereby a cluster. Unlike Kuki-Thadou, for example, the contour in Tenyidie is never realised on the surface as a contour in any environment, hence the distribution of the contour tone is not applicable in the table. The contour tone remains as it is and no dissimilation or metathesis is observed. The hanging tone, comparable to the floating tone, is not rare, if not as frequent as in other languages. Tone spreading per sé does not take place but tonal features spread to suffixes whose tones are not fully specified. No grammatical tones are noticed. Words in Tenyidie are more disyllabic-like, but come only in limited sizes. Syllable type is inapplicable here as there is only syllable type in the language.

As far the table is concerned, Tenyidie is more of a 'register tone system' than a 'contour tone system'. This says that Tenyidie adheres more to the African tone system rather than the Asian one. Tenyidie, however, does not come as close to it as Kuki-Thadou which turns out to show all the properties of the 'register tone system' except for the last two which concerns syllables.

4. Contours in Tenyidie, Kuki-Thadou, and Mizo

Kuki-Thadou and Mizo belong to the Kuki-Chin classification of the Tibeto-Burman family. These two and Tenyidie fall under the Kuki-Chin-Naga classification according to Matisoff (1991) [8]. However, this classification was done more on a geographical basis and van Driem (2001, 2008) [9] [10] points out that the relationships of Kuki-Chin languages to the Naga languages, among others, are vague. Tenyidie, Kuki-Thadou, and Mizo are spoken chiefly in the states of Nagaland, Manipur, and Mizoram respectively. On the map, Manipur is sandwiched between Nagaland to the north and Mizoram to the south. All these three Indian states share the international boundary to Myanmar (Burma) to their east.

Kuki-Thadou has three tones comprising one level tone L and two contour tones HL and LH (Hyman & Haokip 2004) [11]. However, Hyman has analysed the HL tone to be undyingly a level H tone. The tones of Kuki-Thadou are presented in the table 3.

Table 3: *Tones in Kuki-Thadou (Hyman 2004).*

HL	LH	L
saa 'animal'	saa 'hot'	saa 'build'
muu 'seed'	muu 'hawk'	muu 'see'
low 'field'	low 'medicine'	low (negative)
lei 'earth'	lei 'tongue	lei 'bridge'

According to Hyman, Kuki-Thadou only allows the contour tones to surface at the utterance-final position. When HL is followed by a syllable the process called contour simplification delinks the L which becomes a floating tone and participates in the process of downstep. LH on the other hand either simplifies to H or L when followed by a syllable without resulting in an active floating L tone, hence Hyman's conclusion that LH is actually H underlying.

Downdrift is also observed in Kuki-Thadou. This has been documented by Sreenivasan (2015), where she uses the name Thadou instead of Kuki-Thadou based on the literature as well as the preference of her informants. Downdrift is the process by which an L tone triggers a lower realisation of the following H tone in a sequence (Gussenhoven 2004) [12]. It is a post lexical phenomenon. Yip (2002) [13] points out that even though this phenomenon is common, it is not universal, and therefore is a phonological phenomenon rather than phonetic. Downdrift is similar to downstep in the sense that the following H tone is lowered by an L tone. However the difference lies in the fact that downdrift is initiated by an overt L tone, while downstep is initiated by the floating L tone. Sreenivasan points out that downdrift is also a very common feature in African tone languages.

Mizo on the other hand has four tones (Fanai 1992) [14]. There are two level tones H and L and two contour tones LH and HL. Table 4 gives examples of each tones.

Table 4: *Tone in Mizo (Fanai 1992).*

H	L	LH	HL
lei 'tongue'	lei 'bridge'	lei 'to buy; earth'	–
–	pa: 'male'	pa: 'mushroom'	pa: 'father'
man 'to catch'	man 'cost of'	–	–
–	–	maŋ 'dream'	maŋ 'to become extinct'

Sreenivasan (2015) did a study of the two languages and found that none of the three processes – contour simplification, downstep, and downdrift – that are attributed to Thadou for being similar to the African tone system has been seen in Mizo. Unlike the contour tones in Thadou and Tenyidie, Mizo contour tones behave more like units rather than clusters, and the contour tones are also seen to be much more freely distributed in the utterance, which are properties the 'contour tone system' (Pike 1948). This can be seen in disyllables in table 5 from Sarmah and Wiltshire (2010) [15].

Table 5: *The distribution of tones in Mizo (Sarmah and Wiltshire 2010).*

Syllable type	Distribution
Monosyllable	H, F, L, R
Disyllable	HH, HL, HR, FL, LL, LH, LR, LF, RR
Trisyllable	LLL, LHH

(Here, F = falling tone, HL; and R = rising tone, LH)

Coming to Tenyidie, the language has four level tones – L, M, H, and E – and one HM contour tone. When compared with Thadou and Mizo, Tenyidie seems to be somewhere in the middle ground. Tenyidie observes the process of contour simplification by delinking one of the tones in the contour, like Thadou does. The delinked tone from this process plays a role in the morphophonemic tonal alternations in the language. Although tonal spreading as such, where the whole of the tone spreads to the neighbouring syllables, is not seen in Tenyidie, tone features are seen to spread from fully specified tones to neighbouring underspecified tones in suffixes. Thadou is seen to have tone spreading in the system. Contour simplification and tone spreading are not observed in Mizo.

On the other hand, both Mizo and Tenyidie tone systems do not have the post lexical phonological processes of downdrift or downstep. Downdrift and downstep are found in Thadou.

5. Conclusion

Following Hyman's (2010) comparison of Kuki-Thadou with African tone system, when we do the comparison with Tenyidie, the language also seems to have more in common with the African tonal system than the East and Southeast Asian tonal systems. Contour simplification and tonal spreading are examples of features that are found in Kuki-Thadou as well as Tenyidie, which are attested more in the African tone system. However, Kuki-Thadou tone system has

much more in common with the African tone system than Tenyidie has with that tone system.

Tenyidie is caught in between Mizo and Thadou when it comes to the study of contours. Tenyidie tone system is like Thadou's with regards to the 'register tone system', unlike Mizo. On the other hand, the post-lexical phenomena of downstep and downdrift are present in Thadou, but absent in both Mizo and Tenyidie.

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