

tone features, segmental features and tonogenesis

Recently, the need for tone features has been questioned by a number of authors, who maintain that proposed tone features do not fulfil functions regarded as basic for segmental features, such as the ability to define natural classes and natural changes, and also their universality (Hyman 2010; Clements, Michaud & Patin 2010). In an earlier paper, Mazaudon (1988) suggests that tone features that are related to segmental features may be useful in the analysis of a transitional stage in the historical development of tone languages, for example after tone splits conditioned by merger of consonant classes, but that tone systems later develop to a stage where feature analysis is not useful and “each tone follows its own path”.

In this paper I suggest that in some languages that have recently undergone tonogenesis, the tones are best analysed by segmental features, usually features of onset consonants. One such language is the Northern dialect of the Austroasiatic language Kammu, spoken in northern Laos. This is a tone language with two tones, high and low, that have developed in connection with the neutralization of an earlier voiceless/voiced consonant contrast, preserved in the Eastern Kammu dialect, that has not developed tones (e.g. Northern Kammu *kláaŋ* ‘eagle’ ~ *klàaŋ* ‘stone’ vs. Eastern Kammu *klaaŋ* ~ *glaaŋ*).

There are several indications that the tones in Northern Kammu are determined by a feature on the onset consonant: In different kinds of word play, the substitution of the syllable rhyme does not change the tone (*cúʔ lùuj* > *cúuj lùʔ* ‘have a pain in the stomach’), and in rhymes in songs and sayings, the tone is irrelevant. More importantly, there are tone changes that can be explained only by assuming that the tones belong phonologically to the onset. For example, causatives formed with the prefix *p-* always get high tone (*cùur* ‘go down’ > *pcùur* ‘take down’; *juur*, *pjuur* in Eastern Kammu).

This shows that the contrasts upheld by the segmental feature voiceless/voiced in the pre-tonogenesis dialect are due to another segmental feature (say High/Low tone) in tonal Kammu, with the same distribution as (and thus formally identical to) voiceless/voiced.

Another fact that needs an explanation is the asymmetric distribution of the tones, which contrast only in syllables whose onset is an oral stop or a sonorant, i.e. those consonant classes where voiceless/voiced merger took place in tonogenesis. Syllables whose onset is an aspirated stop, a voiceless fricative or a glottalized consonant always have high tone.

There are indications that the tones are becoming independent. One tone dissimilation rule is difficult to express by a consonant feature. Another indication is the changes in some loanwords from Lao, where the original old Lao onset, borrowed before tonogenesis, is now being replaced by its modern Lao pronunciation. This led to words with low tone and an onset that normally combines only with high tone (e.g. *sùu* ‘lover’; traditional Northern Kammu *cùu*). Thus the tones seem to be in the process of liberating themselves from the onset consonants. This may lead to a stage where tones are no longer determined by segmental features but live their own lives, following Mazaudon’s scheme.

I will also discuss other Southeast Asian languages as Lamet and Wa, where consonant mergers have given rise to voice quality contrasts with similar distribution asymmetries, and also the Angkuic language Hu, where tonogenesis is conditioned by vowel length, giving rise to another kind of distribution asymmetry between tones and segments, in this case vowels.

References

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