

## FEATURE SHUFFLING IN SOUTHEAST ASIAN LANGUAGES

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The present paper is a modified version of one read to the Sino-Tibetan Conference held in San Francisco in 1975, in response to observations made by James Matisoff, in his contribution to Larry Hyman's Consonant Types and Tone. "There is something", Matisoff wrote, "about the tightly structured nature of the syllable in monosyllabic languages which favours the shift in contrastive function from one phonological feature of the syllable to another". And again: "When we look at the phonological changes which these richly complex syllables have undergone through time ... we find that the different parts of the syllable have constantly been influencing each other". And yet again: "So tightly inter-dependent are these neighbouring vowels and consonants that certain phonetic features seem to have bounced back and forth from vowel to consonant and back again through the history of the Tibeto-Burman languages". As a striking example of this, Matisoff cites the curious Burmese case noted at (1):

(1) \*ik → Written Burmese ac → Modern Spoken Burmese [iʔ].

Here, if written Burmese can be assumed to represent some sort of attempt at a phonetic representation of the pronunciation of Burmese

some centuries ago, it seems that the frontness of the original Tibeto-Burman vowel fronted the following velar stop while at the same time, apparently, the backness of the original stop retracted the original front vowel. Modern Spoken Burmese, however, bears witness to a subsequent reversal of this process, arriving at the status quo ante, before the eventual merging of final stops in [ʔ].

This curious picture of features apparently 'bouncing back and forth', discussed by Matisoff in a historical perspective, reminded me of somewhat similar synchronic processes that may be observed, either as dialectal variation or as free variation within a single dialect, in the S.E. Asian area. It seemed to me that the popular phonological models of the time, with their preoccupation with segment-based matrices of features, and their anxiety to avoid "redundancy" in the statement of such features, did not provide a convincing or even an adequate framework of description for such processes. The importance of the delicate balance of timing between the articulatory movements of an utterance was largely neglected, and it was the aim of my 1975 paper to suggest that something more flexible than the current segment-by-segment approach was needed to make sense of cases such as that cited by Matisoff for Burmese.

The concept of "panchronic phonology" as presented three years later by André Haudricourt and his distinguished colleague takes full account of the importance of "synchronisation" and "désynchronisation" processes in the history of languages, and it is for this reason that it has seemed worthwhile to take a second look at some of the material in the earlier paper.

If we look at the examples of free variation in Bwe Karen at (2) below

- |     |     |   |             |
|-----|-----|---|-------------|
| (2) | (a) | Ru <sup>2</sup> ~ wi <sup>2</sup>                     | 'snake'     |
|     | (b) | lwi <sup>3</sup> ~ lwi <sup>1</sup> ~ lu <sup>1</sup> | 'four'      |
|     | (c) | khwi <sup>1</sup> ~ khu <sup>1</sup>                  | 'nine'      |
|     | (d) | bwe <sup>1</sup> ~ bo <sup>1</sup>                    | 'how many?' |
|     | (e) | thwi <sup>2</sup> ~ chu <sup>2</sup>                  | 'dog'       |

it seems clear that in these instances the relevant unit for the understanding of such variation is the syllable rather than the 'segment' as usually thought of, and that within the syllable itself we are concerned with syllable parts whose boundaries do not necessarily coincide with those of 'segments'. The important point is to recognize that if we allow ourselves to be too rigidly bound by a phonological theory which demands a strictly segment-by-segment approach, let alone a theory which wants to dispense with syllables altogether, we are liable to miss a number of insights both synchronic and diachronic. Most phonologists are so accustomed now-a-days to think that 'segments' must be 'roman

letter sized' - (surely an example of linguistic chauvinism?)

- and that features must be attached to such segments, that when we hear of 'features bouncing back and forth' we immediately think in terms of changes or exchanges in the feature matrices of segments, and are disposed to formulate our phonological rules accordingly. With a certain amount of ingenuity at times, this can usually be done, but whether the resulting rules are the most illuminating way of looking at the data is quite another matter.

For many languages it may be helpful at times to think of certain of the phonological features of syllables as being dealt out in 'hands' of 'playing cards', so to speak, to the syllable as a whole rather than as firmly attached to any one segment in it, or even to any one place. Obviously, the phonetic realisation takes place in time, and in sequence of some sort, but even here the temporal distribution of features may be far less important from the point of view of 'distinctiveness' than for most Western languages. In the Burmese example already cited, the presence of both what one may call 'Frontness' and 'Backness' have always been present; what appears to have changed from time to time is their temporal distribution over the canonical VC structure of the rhyme. We could try to formulate this in terms of some kind of feature metathesis or 'flip-flop', some kind of  $\alpha$ -reversal rule, like the 'exchange