THE BULGING MONOSYLLABLE,
OR
THE MORA THE MERRIER:
ECHO-VOWEL ADVERBIALIZATION IN LAHU

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1. Sesquisyllabism in South-East Asian Languages

The languages of South-East Asia are overwhelmingly monosyllabic in structure (the notable exception being the Austronesian family) at least in the sense that their morphemes are only one syllable long. Yet, as all South-East Asianists can ruefully testify, this 'monomorphosyllabism' is by no means to be equated with phonetic simplicity! The South-East Asian monosyllabic often seems to be bulging at the seams with phonetic material: consonantal, vocalic, and supra-segmental. Diachronically, phonemic features frequently bounce back and forth from one segment of a South-East Asian syllable to the other. Adjacent vowels and consonants unidirectionally or mutually influence each other's articulation -- something I have been known, rather inelegantly, to refer to as 'intersegmental stopover'. More strikingly, decaying consonantal contrasts in syllable-initial or -final position may be 'transphonologized' into the suprasegmental realm, so that previously redundant tonal features acquire a compensatory phonemic status.

The intersegmental attraction is by no means confined neatly within the boundaries of individual syllables. A voracious South-East Asian monosyllable may also absorb phonetic material from a neighbouring syllable, incorporating it into its own substance. These adjacent syllables belong originally to other morphemes -- these are after all 'monomorphosyllabic' languages -- yet the fusional process respects no lexical boundaries.

A. Prefixization of compound constituents

Especially vulnerable to trans-syllabic absorption are weakly stressed morphemes that stand in a modifying or subordinate relationship. A modifying syllable in a lexical compound may undergo such radical phonological reduction that its original morphemic identity is obscured. Once this happens, it can become more like a meaningless affix or 'formative' than like a full noun or verb and, although elements in compounds may also suffer this fate, even in non-monosyllabic languages like English, the process of 'affixization' or 'cliticization' comes into full flower only in truly monomorphosyllabic language families like

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Tibeto-Burman (TB):

--The now meaningless pa- in Written Burmese (WB) pərwaṭ 'ant' (Mod.Bs. pəẉ ẉ ə,?) descends from the free morpheme *buw 'insect, bug' (Benedict 1972:27), reflected by forms like Written Tibetan (WT) 'bu' and by the independent WB word pəi 'bug'. The fully disyllabic compound for ant is explicitly attested by forms like Lahu (Lh.) pū-ʔəʔ 'ant' (*buw-rəwak), where the vowel of the first syllable retains its quality and has not been reduced to shwa.5

--The prefixal element sa- in WB səmak 'son-in-law' (> Mod.Bs. səme?) is a reduction of the full morpheme *sa *tsa 'child, son' (ibid.,#59). The unprefixed root *ma.k (ibid.,#324) is reflected in forms like WT mag-pə and Lushai ma.k-pə. The disyllabic prototype *tsə-mak is directly preserved in the Ch'iang cognates tsə-me and tsə-mja. Forms like Dhimal hva-wa and Lahu ʔ-mə-pə have taken the fusional process even further than Burmese, preserving only indirect traces of a sibilant feature before the root.6

Sometimes the telescoping of two proto-syllables into one is so complete in TB that the disyllabic prototype can only be established at the cost of considerable comparative-historical toil. The TB root for lungs that Benedict reconstructed as *təywəp or *təwəp (ibid.,#239), largely on the basis of Lushai təwəp, has since been shown to be a fusion of two separate roots *təi-wəp, with a second element that originally meant 'spongy, porous'. (Matisoff 1978:113-23, esp.115).

In Jinghpaw (=Kachin), an important TB language of northern Burma and adjacent areas of China and India, the process of prefixization has been carried very far, to the point where hundreds of nouns and verbs have the phonological shape CəC (C)V (C),*.7 Most of these unstressed prefixal or 'pre-initial' syllables (Cə-) seem to be relatively recent accretions to their roots, and have no plausible etymologies or definable meanings. Others are reductions of semantically obscure but fully syllabic prefixes like gum- or nig-, with which they sometimes alternate. One prefix, ᵇə-, ɨə, has a clear-cut grammatical function and has been generalized to all verbal roots with the meaning causative/transfer/transformative.8 Still others -- and these cases are the most interesting in the present context -- are reductions of fully syllabic root-morphemes that were once the first constituent in compounds. An example of this latter type is the pair ləkhrə 'right' and ləpə́i 'left', where the lə is a reduction of the widespread Proto-Tibeto-Burman (PTB) root

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* Refer to linguistic symbols/abbreviations at the head of the NOTES. (Ed.)
*lak 'hand' (Benedict 1972:#86) (cf. WB lak-va 'right hand').

In some TB languages, the vowel of the reduced prefixal syllable is not exactly a centralized schwa, but rather an unstressed front or back vowel, like Angami Naga -ɓ- (e.g. mëkrū 'dove'; pē- 'causative prefix') or Gyarung -_INITIALIZER (e.g. kōrök 'ant'). In any case, these prefixal syllables are so stressless that they usually cannot bear a full tone -- and it is universally true that even if a tone contrast does exist in such syllables, as has been claimed for Jinghpaw (Maran 1971) it is on the rudimentary side (never more than a two-way, high vs. low distinction).

Important as these reduced pre-syllables are in TB, they seem to play an even more basic structural role in the languages of the Austro-Asiatic (AA) or Mon-Khmer (MK) family. In almost all branches of MK, except Vietnamese, these 'minor syllables' abound. Compared to TB, there is generally a wider variety of possible consonants in MK minor syllables, and it is seldom possible to derive such a syllable from any semantically plausible fully syllabic prototype. This makes it look as if the MK minor syllables go back to remote antiquity, and were present in the family ab initio.

In any event, it is clear that untold thousands of words in South-East Asian languages are neither monosyllabic nor dissyllabic, but rather what we might call sesquisyllabic: a 'syllable-and-a-half' long.

B. Suffixization and fused vocalic nuclei

This paper is concerned primarily with bulging at the other end of the syllable, i.e. the vocalic nucleus.

In SOV, the postpositional languages, grammatical functors like case- and aspect-particles follow the nouns or verbs with which they interact. Since these functors have a high textual frequency and are naturally unstressed by comparison with their preceding root-word, they are prime candidates for sloppy articulation and phonological reduction.

In a language like Lahu -- a member of the Central Loloish group of the Lolo-Burmese branch of Tibeto-Burman -- postpositional particles are apt to lose their initial consonant in rapid speech. Sometimes both variants are used almost interchangeably (e.g. ta ~ a 'perfective aspect'; thāʔ ~ ʔaʔ 'accusative case') (Matisoff 1973a:38); but the disproportionately large number of modern Lahu particles that begin with a vowel all the time makes one suspect that in some cases an old initial consonant has been lost for good.
Once its initial consonant has disappeared, a functor is so phonologically slight that it may be helpless to resist the pull of the voracious, fully-stressed noun or verb that precedes it. If circumstances are right the functor's vowel and/or tone may be incorporated bodily into the vowel of the head-syllable, resulting in a complex, fused vocalic nucleus that is 'a mora-and-a-half' long. The 'sesquimoral' syllables of Lahu are synchronically anomalous and marginal, but the strains to which they subject the phonology are of fundamental importance, since they might well presage an eventual radical restructuring of the entire vowel system.

In what follows, we shall focus on an elusive type of Lahu sesquimoral syllable, which was only recognized after many years of work on the language: *echo-vowel adverbials*. First, however, we should consider the whole phenomenon of vocalic fusion in Lahu in terms of the forces operating to tear down or build up the phonetic substance of the syllable.

2. Diachronic dimensions of the phonological system of Black Lahu:15 intersegmental influence and the economy of the syllable

The Black Lahu dialect of Chiangdao, Chiang Mai Province, Thailand, has a system of nine simple vowels rather similar to that of Siamese:16

\[
\begin{align*}
  i & i u \\
  e & ò o \\
  ɛ & a ɔ.
\end{align*}
\]

If only syllables with these nuclei are taken into account (and they comprise the vast majority), the Lahu syllable-canon can be formulated as:

\[
T
\]

\[
(C_i) V.
\]

This starkly simple syllabic structure, maximally comprising an initial consonant, a vowel, and a tone, represents an extreme reduction from the point of view of the complex syllables reconstructed for PTB:

\[
[T]
\)

\[
*(P_1)(P_2)C_i(G) V (:)(C_r)(s).^{17}
\]

The final stops */-p -t -k/ of Proto-Lolo Burmese (PLB) have lost their oral occlusion in Lahu, though they have usually left their trace in the form of a post-vocalic glottal stop.18 Although such syllables are transcribed with the symbol 'ʔ'.