BWE KAREN AS A TWO-TONE LANGUAGE?
AN ENQUIRY INTO THE INTERRELATIONS OF PITCH,
TONE AND INITIAL CONSONANT

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1.1 When Professor Gordon Luce directed my attention to Western Bwe Karen many years ago, he pointed out that the special interest these dialects hold for Sino-Tibetan linguists is the fact that they are a living testimony to one of the principal tenets of Sino-Tibetan linguistics: namely, that the loss of an earlier distinction between voiced and voiceless stops has resulted in the doubling of the original number of tones in many languages in the area. It is assumed that pitch differences correlated with the presence or absence of voice, which were phonologically non-distinctive as long as the voice/voiceless contrast survived, became phonemic themselves once the voice contrast was lost. The better known Sgaw and Pwo dialects of Karen, in which there is no longer a phonemic opposition between voiced and voiceless stops, are commonly described as having six tones (four for Bassein Pwo, see Jones 1961); whereas Western Bwe, which preserves the opposition between voiced and voiceless stops, is described as having only three tones. At the time, the only "modern" publication on Karen was Haudricourt's celebrated 1946 paper, in which he accepted the traditional 6 tone analysis of contemporary Pwo and Sgaw, but divided the 6 tones into a high and low series, with 3 tones in each, systematically associated, as in Chinese and Tai, with features of the initial consonants. By comparing these two dialects, and without benefit of knowledge of Western Bwe, he postulated a 3-tone system for Proto-Karen, and a 3-way system of initial consonants: voiceless unaspirated, voiceless aspirated and voiced. Since Haudricourt's third tone was associated with stopped syllables
only, like the Chinese ch'ü sheng, this left a 2-tone system for un-
stopped syllables. Nevertheless, some consternation was expressed when,
after working for some time with the Western Bwe dialect which has no
stopped syllables to complicate the issue, I suggested in a seminar
paper that there are clear indications that in this dialect the under-
lying (synchronic) phonological contrast is between 2 rather than 3
tones.

1.2 In recent years, the case for the reconstruction of Proto-Karen
and of Sino Tibetan itself as 2-tone languages has been further and
cogently argued by such scholars as Benedict and Jones.¹ It seems ap-
propriate therefore, to present here the evidence pointing towards a
2-tone interpretation of contemporary Bwe. I must emphasise that the
evidence presented is purely synchronic: I leave its historical inter-
pretation to colleagues better versed than I in this field. I have how-
ever attempted to correlate the Bwe forms in my material with the forms
cited by Benedict in the revised and expanded version of his paper to
the Second Sino-Tibetan Conference (Benedict 1969), and with those
cited by Jones in his paper to the Fourth Sino-Tibetan Conference
(Jones 1971), and with the hypotheses put forward by Haudricourt (1946
and 1953).

1.3 My research and field work were mainly concerned with what is some-
times referred to as the Blimaw dialect of Western Bwe, but I was also
able to do a little work on the closely related Geba dialect, and shall
draw upon this, and upon Luce's Geba word lists (Luce 1959, and further
material at present in the press), when appropriate.

2.1 It is beyond dispute that from the phonetic point of view Blimaw
exploits three pitch levels for lexical purposes. These are high level
(pitch 1), and mid level (pitch 2), and low level (pitch 3), as in
le¹ 'moon', le² 'leaf' and le³ 'to keep, conserve' — an excellent prima
facie case for postulating three tones, it would seem. A closer examina-
tion of the distribution of these pitches in relation to initial conso-
nants and of other factors affecting pitch in this dialect — such as
tone-sandhi, the use of what I have called tone-dissimilation (Henderson
1961 and 1967) in the word-compounding process, and the use of pitch-
raising as a syntactic marker — soon demonstrates, however, that the
picture is not quite so simple as it at first appears. On the other
hand, some of these factors offer explanations of forms which at first
glance appear tonally deviant from a historical point of view. I have
described a number of these pitch-determining factors in some detail in Henderson (1961) and so will refer to them only briefly here. I cannot, however, forbear to point out how misleading it can be to select for comparative purposes the odd cognate syllable from a disyllabic or polysyllabic word without being aware of the possible effect of such factors on the pitch of the syllable concerned. A case in point is the apparent tonal irregularity of the Blimaw words for 'tail', 'tooth', and 'pot' in Jones' lists (see section 6 below). The full Blimaw word for 'tail' is not me³ but ka'sme³ (ka¹ = 'bottom'), that for 'tooth' is not me² but o0'sme³. In both instances the low pitch of the final syllable, which Jones seems to find irregular, is the perfectly regular realisation on the second syllable of a disyllabic compound of this kind of a common type of high-low word-intonation pattern, and is thus not necessarily to be equated with the pitch to be expected of the component morphemes in isolation. From the point of view adopted in this paper I do not regard these forms as tonally irregular. See Section 5.1.6. Similarly, the (to Jones) "irregular" high pitch on bo¹ in 'pot' is the realisation of a second dissimilated pattern, low-high - the full form of the Blimaw word for 'pot' being g6²bo¹ or g8³bo¹.³

2.2 Below, at 2.4 will be found a table showing the distribution of the Western Bwe (Blimaw) syllables occurring in my material, arranged according to vowels, consonants, and pitches. All Western Bwe syllables are of the CV type. There are no final consonants, no diphthongs, and no distinctive vowel nasalisation.⁴ There may be a glide (r, R or w) between C and V; since the pitch distribution of such syllables does not differ significantly from that of syllables without glides, they are omitted from the table for the sake of simplicity. As observed elsewhere (Henderson 1965), all mid and low pitch syllables before a pause may exhibit glottal constriction finally (i.e. a weak glottal stop); high pitch syllables before a pause never do so, but an h-like off-glide is sometimes audible. (The universality of these pre-pause syllable-closing features in Bwe prohibits their interpretation as echoes of formal final consonants, now vanished, but may nevertheless be relevant to the history and development of the tones.)

2.3 The symbols in the Table, where not self-explanatory, are to be interpreted as follows:

✓ marks the occurrence of a syllable as a full, "normal" monosyllabic word, e.g. as a noun, pronoun, or verb, etc.

₁ indicates that the syllable is found as the first (bound) syllable
of a disyllabic or polysyllabic word or compound, but is not found as an independent word. For the purposes of this paper, the term "compound" is used to include the very common type of "double" construction in which one of the elements does not occur independently, e.g. \( \theta \text{i}^2 \text{-ja}^2 \), as in \( \text{me}^2 \theta \text{i}^2 \text{me}^2 \text{ja}^2 \) 'to be able to do s.' in which \( \text{me}^2 \) 'to do' and \( \text{ja}^2 \) 'to be able' occur as independent verbs, but \( \theta \text{i}^2 \) does not. (There are independent words \( \theta \text{i}^2 \) 'comb', \( \theta \text{i}^2 \) 'dental decay' and \( \theta \text{i}^2 \) 'to thread on a string', but it doesn't make sense to attempt to identify any of these with the first element of -\( \theta \text{i}^2 \text{-ja}^2 \).)

2 indicates that the syllable concerned is found only as the second (bound) element in a disyllabic word or compound. The numerals 1 and 2 together (e.g. 12) indicate that the syllable concerned is found both as the first and as the second element in disyllabic words or compounds, but that it is not found as an independent word.

3 (one instance only) indicates that the syllable is found only as the third element in a polysyllabic word or compound. Information about the position of a syllable within a polysyllabic word is especially important in this language because of the effect polysyllabic word-patterns can have upon the pitch of component syllables.

C means that the syllable is only found as a numeral classifier.

E indicates a syllable found as an exclamation only.

F marks a loan-word (usually from Burmese). There are doubtless many unidentified loan-words in the material.

O indicates an onomatopoeic or phonaesthetic word of some kind.

Ol and O2 indicate that the syllable is found only as the first or second element respectively in an onomatopoeic or phonaesthetic expression.

P marks syllables which only occur as affixes, particles or particle-like words which are highly susceptible in this language to pitch variation that can be associated systematically with syntactic, morphological and emotional factors. P2 means 'only found as a particle OR as the second syllable of a disyllable', and so on.

Q indicates a question-word used (how much, how many, how narrow, how small, what kind, etc.) in wh-type questions (and often in the answers to them) which characteristically bears a high pitch as part of an overall interrogative intonation pattern. Q1 means 'only found in question words OR as the first syllable of a disyllable', and so on.