

Syllables

The Be morphemes tend to be monosyllabic, as in the case of many other East and South-east Asian isolating languages. All the morphological formation of larger meaningful linguistic units of Be takes the form of composites of these syllables, with certain sandhi phenomena of syllable constituents. A Be syllable consists of the initial consonant (hereafter C), the medial vowel (M), the syllabic vowel (V), the ending vowel or consonant (E), and the syllabic musical accent or tone (T) carried by each syllable. Thus the formula for Be syllable is: (C)(M)V(E)T, where constituents given in parentheses are optional.¹⁴⁾ Examples: liau/low-rising tone 'to laugh' or lian/low-rising tone 'honey' (CMVE/T), nam/low-falling tone 'water' or lai/middle-level tone 'to have' (CVE/T), nia/high-level tone 'to come' or lua/high-level tone 'boat' (CMV/T), ma/low-rising tone 'dog' (CV/T), ua/middle-level tone 'nest' (MV/T), ai/high-level tone 'to dislike' or an/middle-level tone 'to scold' (VE/T), and e/low-rising tone 'to defecate' (V/T).

Initial consonants

		bilabial	labio-dental	dental	alveolar	palato-alveolar	velar	glottal
implosive			ɓ		ɗ			
stop				t			k	(ʔ)
affricate		pf/pç				tʃ	kx/kç	
fricative	voiceless			s/f				
	voiced		v			ʒ		
nasal		m			n		ŋ	
lateral					l			

The Be consonant system is of the typical mainland Southeast Asian type. The manner-of-articulation distinction among stops is voiced implosive (for front consonants)/voiceless explosive (for back consonants) vs. affricate. The occlusion for the latter series is so weak that they are often pronounced practically as fricatives. The implosives are restricted to both labial and alveolar, the palato-alveolar and velar counterparts lacking for obvious physiological reasons.¹⁵⁾ The palato-alveolar and velar series, therefore, include no voiced stops or affricates.

The former *s- went to t- (the former *t- to h); thus [t] remains as the only dental consonant in the system.¹⁶⁾ The phonological notation of these consonants is as follows:

		bilabial	labio-dental	dental	alveolar	palato-alveolar	velar	glottal
implosive		b			d			
stop				t			g	∅
affricate		p				c	k	
fricative	voiceless				s			h
	voiced		v			ʒ		
nasal		m			n		ŋ	
lateral					l			

[[p]] : a weak bilabial stop is followed by very conspicuous aspiration or friction, e.g. [pʰ]; before high-front vowels, [pç]. For typographical reasons, we represent the former as [pf] and the latter as [pç].

[[c]] : often aspirated. Since there is no phonological distinction between the aspirates and non-aspirates, we represent this sound as [tʃ]. The point of articulation is somewhere between the alveola and palato-alveola, as in the case of standard Cantonese [tʃ]. Both [ts] and [tʃ] appear as free variants. This causes some problem when one tries to place Chinese loan-words in the Be sound system, as many Chinese dialects maintain the phonological distinction between dental [ts] and palato-alveolar [tʃ] or retroflex [tʂ]. In fact many Chinese loan-words are accepted in Be with either clear [ts] or clear [tʃ]. Since there is no phonological distinction on the part of Be, we represent them uniformly with [tʃ].

[[s]] : palato-alveolar before the vowels [i], [u] and [e], [s] otherwise, though the latter can also be pronounced with a free variant [ʃ].

[[∅]] : syllables having no initial consonant (the zero initial syllables) are often pronounced with a clear glottal stop. We omit such a glottal stop in our phonetic notation. We won't write ∅, either, in our phonological representation.

[[k]] : the occlusion is also weak as in the case of [pf], but unlike the latter, this initial never appear as a pure fricative. For typographical reasons, we write the palatalized variants, occurring before high-front vowels, as [kç], not as [kç].

Vowels

i

e ə o

a

[[i]: functioning as the non-syllabic vowel of a descending diphthong, [i] is always much lower than the phonetic symbol denotes, but since this is some universal tendency of i-diphthong¹⁷⁾ and a kind of 'determined feature' of such an [i], we just write [i] for this kind of lower [i]. As a medial vowel occurring before -aŋ and particularly after dental/alveolar initials, [[i] is as low as [ɛ]. We write no special phonetic symbol for this kind of [[i], either, as its occurrence is so clearly conditioned.

[[u]: as in the case of [i], [u] is always much lower than the phonetic symbol denotes, particularly when it functions as the ending segment. We write [u] for this kind of lower [u] for the same reason. [i] and [u] occur as both medial vowels and ending vowels.

[[e]: between [e] and [ɛ].

[[ə]: a typical shwa.

[[o]: lower than [o] but clearly higher than [ɔ].

[[a]: after the medial [[i] and before the ending consonant [n] or [t], the syllabic vowel [[a] is very conspicuously centralized and higher. We represent this kind of [[a] with the symbol [ɐ] following the principle of the International Phonetic Association.

Ending consonants

[m], [n] and [ŋ] and their homorganic stops, [p], [t] and [k] occur as the ending consonants. Since the occurrence of these nasals is so strictly paralleled by that of the homorganic stops, we interpret the latter series as tonal variants of the former. For justification, see M. J. Hashimoto 1978-79, pp. 325-334 and 1979. Both [-n] and [-t] are alveolars, not dentals, while the initial [t] is dental.

Tones

There are in all six syllabic intonations or tones in the Be language. For typographical convenience, we number them with small Roman numerals, tone i, tone ii, tone iii, tone iv, tone v and tone vi.

Tone i: a low-rising legato tone with very conspicuous laryngeal constriction toward the end of syllable. Since this constriction is a determined feature of tone i syllables, we leave this

phonation feature unmarked. While this constriction is unmistakable in tone i syllables pronounced in isolation or occurring at the end of phonological phrases, it disappears in tone i syllables occurring elsewhere. For typographical convenience, the symbol ʌ is typed to indicate this tone in the phonetic description, and the Roman numeral [i] is used in the phonological representation.

Tone ii: a high-level legato tone. The phonetic notation in this lexicon is ʌ̄.

Tone iii: a middle-level legato tone. The Be tones are neutralized in suffixes and enclitics. The neutralized tones assume the middle-level contour. There is no clear distinction between tone iii and this kind of neutralized tone. In other words, the Be tone-neutralization takes the form of alternation between the original tone and tone iii. Regardless of the etymological/morphological origin, the middle-level tone is indicated with the symbol ʌ̄.

Tone iv: a low-falling legato tone. The phonetic notation in this lexicon is ʌ̄̂.

Tone v: a high-level staccato tone. The phonetic notation in this lexicon is ʌ̄̂̂, though tone iv syllables are normally pronounced much shorter than tone ii syllables. Although we use the same phonetic symbol to indicate tones ii and iv, there will be no danger of confusion, since tone iv syllables always end with -ʔ, -p, -t or -k while tone ii syllables cannot co-occur with these stops.

Tone vi: a middle-level staccato tone, and is always carried by syllables ending with -ʔ, -p, -t or -k as in the case of tone v. The phonetic symbol to indicate this tone is ʌ̄̂̂̂. Because of the unique stop endings of tone vi syllables, there will be no danger of confusion with the phonetic symbol of tone iii.

Syllables carrying tone v or vi but with no consonantal endings are pronounced with a glottal stop at the end of these syllables. This glottal stop disappears, however, when the tone v or vi syllable is reduplicated. The staccato tones co-occur only with those syllables having the ending segments ʔ, p, t and k, (tones v and vi) and the legato tones (tones i, ii, iii and vi) are carried by other types of syllables. The distribution is very clear-cut. This constitutes another reason to interpret the stop endings as the tonal variants of the homorganic nasal endings.

Tone alternations

When it occurs in syllables which function neither as suffixes/enclitics nor as the final syllable of a phonological phrase, tone i assumes the contour of low falling, losing its conspicuous glottal constriction which one can observe when the syllable carrying this tone is pronounced 'in isolation'. In this lexicon, we follow the normal practice of indicating the tonal shape of this 'pronunciation in isolation' for each tone, though we ourselves interpret that this non-phonological-phrase-final pronunciation should in fact be regarded as the underlying form of Be tones.¹⁸⁾ Since this low-rising vs. low-falling alternation of tone i is so regular that we indicate the former only in this lexicon. For the alternation between legato tones i and ii, see page 197. Some seeming tone alternation is apparently due to borrowing from Min dialects of Chinese.¹⁹⁾ If a Min word is borrowed into Be with its sandhi form in one case and with its original form in other cases, one can find this seeming alternation in Be. No systematic treatment will be given for such 'alternation' in this lexicon. 'Alternations' due to the difference of layers or strata of

Chinese loan-words are by nature so sporadic that we won't discuss them here. Alternations due to such fossilized derivations as $k\check{c}iam\uparrow$ 'to pincer' vs. $k\check{c}iam\downarrow$ 'pincers', or $hem\downarrow$ [hem^v] 'to raise' vs. $hep\uparrow$ [hem^v] 'to pile up', won't be mentioned here, either. Because of the large scale borrowing from Chinese, there are many words and phrases which have more than one form, mainly two, the colloquial and the literary. The Chinese loan-words normally constitute the literary variants, for which we have added the note 'literary'.

Since neutralized tones carry some morphological functions to indicate that the given morpheme is either a suffix or an enclitic, we give the neutralized form only, when a given form undergoes such modification. Thus, for example: $hua\downarrow$ $l\check{e}n\uparrow$ 'flower + lotus' = 'lotus flower' but $m\check{e}i\downarrow$ $hua\downarrow$ 'plum + flower' = 'plum flower', $v\check{e}n\uparrow$ $zop\downarrow$ 'sky + dark' = 'cloudy day' but $da\downarrow$ $v\check{e}n\downarrow$ 'eye + sky' = 'the sun', $tia\downarrow$ $nok\downarrow$ 'mountain + small' = 'small mountain' but $kok\uparrow$ $tia\downarrow$ 'foot + mountain' = 'foot of a hill', etc. But these phenomena should not be confused with the 'alternations' like $kua\downarrow$ $la\check{n}\downarrow$ 'melon + yellow' = 'cucumber' vs. $du\check{n}\downarrow$ $kua\downarrow$ 'winter + melon' = 'winter melon'. The recent loans from Mandarin are pronounced with some 'non-committal' neutralized tones in Be. Apparently tone iii is interpreted as the most non-committal, being a middle-level legato tone. The $kua\downarrow$ in $du\check{n}\downarrow$ $kua\downarrow$ 'winter melon' takes this shape for this reason. Thus one will witness certain fluctuation in words like 'water melon': $fi\downarrow$ $kua\downarrow$ 'western + melon' or $fi\downarrow$ $kua\downarrow$. Since tone i assumes the contour shape of low falling in the non-final position of a phonological phrase, tone iv, which 'in isolation' is pronounced with low falling contour, is pronounced with the middle-level contour in the same position. We do not indicate this sandhi form of tone iv in this lexicon, as this alternation is also quite regular. The tone neutralization is quite fixed for some morphemes functioning as pure suffixes or enclitics. But there are some morphemes which function as both suffixes and ordinary words (a kind of semi-suffix). For these morphemes, the speaker remained indeterminate as to the neutralization. For such words, we give both neutralized and unneutralized forms in this lexicon, e.g. $d\check{e}u\uparrow$ $vo\downarrow$ (the neutralized) and $d\check{e}u\uparrow$ $vo\downarrow$ (the unneutralized).

A kind of neutralization can also be observed in the loss of glottal stop in some auxiliary verbs, classifiers, etc. For instance, the verb $nia\check{?}\uparrow$ 'to come', used as an auxiliary verb for direction, never occurs with the glottal stop; $be\check{?}\uparrow$ used as a semi-prefixal morpheme for 'man, -men' also occurs without a glottal stop. These words are listed in this lexicon with the tone ii, instead of their 'etymological' tone v. A spurious tone alternation can also be found for certain tones, when some syllable ending stops are replaced by nasals due to assimilation. For instance, $kit\downarrow$ $\eta a\check{?}\uparrow$ 'to play + needle' = 'to give an injection' is actually pronounced $kin\downarrow$ $\eta a\check{?}\uparrow$, the phonemic transcription of which should be $/gin^{iii}\eta a^v/$, since tones iii and vi share the same pitch contour; $t\check{f}ik\uparrow$ $\eta iap\uparrow$ 'occupation + profession' = 'profession' undergoes the same type of ending assimilation and is pronounced $t\check{f}i\eta\uparrow$ $\eta iap\uparrow$ $/cin^{ii}\eta iam^v/$, since both tones ii and v have the high-level pitch contour. We have given here the phonemic transcription for those having assimilation within word boundaries like the latter, transcribing the former type only morphophonemically. We thus witness on the surface tone alternations both between tones ii and v, and between tones iii and vi. Both cases are accompanied by brief explanatory notes.

THE BE LANGUAGE

A Classified Lexicon of Its Limkow Dialect

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