# Stieng phonemes

RALPH HAUPERS

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## 0. Introduction.

Stieng is a language of the Mon-Khmer family spoken in southern Viet Nam and eastern Cambodia. In Phướe Long province they are said to number about 20,000, and Bình Long province 10,000. We have seen no figure for Cambodia. This study represents the Bulơ dialect, which is geographically the central Stieng dialect in Phướe Long.Data was gathered while resident in the village of Bukrêoai,near the foot of the Bara Mountain, in the Phướe Bình district of Phướe Long.

## 1. Syllable and word structure.

Stieng syllables are of two types : presyllables and main syllables. The pre-syllable can be symbolized as POS, where P may be any stop or /s/, O is a neutral vowel, noncontrastive in quality and length, and S is a syllabic (cf. §3.2). A pre-

syllable may be composed of PŎ /bo̍naŋ/ '24-hr period', S /ndah/ 'not yet', or PŎS /ko̍mlaŋ/ 'health'.

The main syllable can be symbolized as CHWVF. C may be any consonant, H represents the phonemes /h,w,l,r,/, W represents /w,l/,/ V any vowel, and F any consonant except a voiced stop or a glottalized consonant (§3.1; 3.3).

Clusters of up to three consonants may occur in the main syllable. The only 3-consonant clusters that have been found are /thl, khw/. /thlȟy/ 'expensive', /khwan/ 'dare',/khwah/ 'lack'.

Two consonant clusters may be formed with /h,w,l,r/ in H position. All simple stops can combine with /h/ (but with a voiced stop and /h/ there cannot be a presyllable). /bhɨ̀ry/ 'breezy'. /w/ combines with only /k,ɕ/. /gwàl/ 'to herd'. /l/ combines with only /p/b/k/g/. plǒk/ 'to open'. /r/ can combine with any simple or glottalized stop. /ˀbrɨ̀s/ 'immediately'.

Words then may be monosyllabic (/ˀê/ 'repair', /khwah/ 'lack') or disyllabic (/bo̍naŋ/ '24-hr period'). Disyllabic words are stressed on the main (second) syllable. No words have been found with the full PŎSCHWVF structure — PŎS and W slots are mutually exclusive except in a few reduplicated forms. /ko̍khwan/ reduplicated from /khwan/'dare'. /po̍ndrìŋ/ (pᵊndri.ᵊŋ) 'nourishing' illustrates the maximum phonemic positions which can be filled in one word.

A few items do not fit the predominant pattern. Some, usually showing reduplication, have a cluster in P position. /kho̍khɨt/ 'stir'. Others, perhaps onomatopoetic, have a non-syllabic in S position. /ˀo̍kˀay/ 'a lizard'.

## 2. Vowel phonemes.

The vowels of Stieng are :

| | Front | Central | Back | |
|---|---|---|---|---|
| High | i | ɨ | u | |
| Mid | ê | o̍ | ô | prosody : |
| Low | e | a | o | length |

/i/ [i.] high front close unrounded, phonetically long but functioning phonemically as short /i/. [iə] high front close unrounded gliding off to mid central, functioning phonemically as long /ì/. [riˑŋ] /ring/ 'dangerous', [tiəŋ] /tìng/ 'tail'. This analysis avoids having to posit vowel clusters, and also fills the otherwise empty short /i/ slot.

/ê/ [ɩ,ɩˑ] high front open unrounded, occurs in closed syllables except before /h/. [e,e.] mid front unrounded, occurs in open syllables or before /h/. [tɩŋ] /têŋ/ 'follow', [ʔɩˑn] /ʔèŋ/ 'alone', [me] /mê/ 'mother', [teh] /têh/ 'big'.

/e/ [ɛ-æ,ɛˑ ᷇ æ.] low front close to open unrounded, short (usually [æ]' before /h,ʔ/, long (usually [ɛˑ]) elsewhere. [dɛh, dæh] /deh/ 'grass', [ʔæ.n, ʔɛ.ŋ] /ʔeŋ/ 'magpie'.

/ɯ/ [+,+ˑ] high central unrounded. /kɯ̀t/ 'able', /kɯt/ 'frog'.

/ɤ/ [ʌ,ʌ.] mid central unrounded. /kɤ̀t/ 'sunrise', /kɤt/ 'tie'. In the presyllable it varies phonetically over a wide range of articulatory positions, under the influence of surrounding consonants.

/a/ [a,a.] low central unrounded. /kàt/ 'roughen', /kat/ 'cut'.

/u/ [u.] high back close rounded, phonetically long but functioning phonemically as short /u/. [uə] high back close rounded gliding off to mid central, functioning phonemically as long /ù/ (cf. /ì/). [ʔu.t] /ʔut/ 'hug', [ʔuət] /ʔùt/ 'sleep uncovered'.

/ô/ [u, o.] high back open partially rounded short, and mid back rounded long [tuk] /tôk/ 'cloud', [to.k] /tòk/ 'to place'.

/o/ [ɐ,ɔˑ] low back slightly rounded short, and mid-low back rounded long. [kɐŋ] /kong/ 'wheel', [kɔ.ŋ] /kòng/ 'bracelet'.

Length is not contrastive in open syllables or in the presyllable, but in closed syllables length is contrastive on all vowels except /e/.

Alternatives to an emic prosody of length would be to describe the phonemic system as having 17 vowel phonemes and consider the articulatory differences between long and short vowels as significant. Or one could describe it in terms of 15

vowel phonemes and 2 vowel clusters.

No distinction of voice quality (register) has been found in Stieng.

## 3. Consonant phonemes

|           | Bilabial | Dental | Palatal | Velar | Glottal |
|-----------|----------|--------|---------|-------|---------|
| Stops     | p        | t      | c       | k     |         |
|           | b        | d      | j       | g     |         |
| Syllabics | m        | n      | ñ       | ŋ     |         |
|           |          | r      |         |       |         |
|           |          | l      |         |       |         |
| Glottalized | 'b     | 'd     | 'j      |       |         |
|           | 'm       | 'n     |         |       |         |
|           |          | 'l     |         |       |         |
| Other     | w        |        | y       |       | ʔ       |
|           |          |        | s       |       | h       |

**3.1** Stops are that class of consonants which may occur in P and C positions in the word. Voiceless stops also occur in F position, but voiced stops do not.

/p/ voiceless bilabial stop. /poˈl/ 'dull', /kap/ 'bite', /poˈrman/ 'lessen'.

/t/ voiceless dental stop /toˈl/ 'to pedal', /dat/ 'very', /toˈrnaŋ/ 'all'.

/c/ voiceless palatal stop. /càl/ 'wind' /coˈbap/ 'permission'. All palatal phonemes in syllable-final position are preceded by an [i] onglide. [taⁱc] /tac/ 'sell'. [taⁱñ] /tañ/ 'hot', [kʌiñjoh] /kŏñjôh/ 'fetish pole', [rueⁱɣ] /ruôs/ 'elephant'.

/k/ voiceless velar to back velar stop. /kap/ 'bite', /dàk/ 'water', /kŏnat/ 'clothe,.

/b/ voiced bilabial stop. /boˈl/ 'thick', /boˈkaw/ 'tobacco'.

/d/ voiced dental stop. /da/ 'duck', /doˈlu/ 'young man'.

/j/ voiced palatal stop. /ja/ 'thatch' /jɔŋδ/ 'dark'.
/g/ voiced velar stop. /gô/ 'cow' /gɔnèŋ/ 'fang'.

3.2 Syllabics are that class of consonants which occur in the S,C, and F positions in the word. With the exception of /r/, in F position they may freely be preceded by a lenis voiced homorganic stop ([$d_l$, $b_m$, $d_n$], etc.), except after /a,ɔ,o/. This is especially noticeable with /n/ and /l/; with the other syllabics it has been heard only in the slow precise speech of the informant while teaching.[1]

Nasal syllabics occur only in S,C, and F positions.

/m/ bilabial nasal. /ma/ 'right side', /rom/ 'beautiful', /kɔmbra/ 'grey haired'. When /m/ alone constitutes the presyllable before /l,r/, it can vary freely to /mɔ/. /mlɔm ∾ mɔlɔm/ 'one'.

/n/ dental nasal. /net/ 'hair ornament', [ju. $d_n$] /jun/ 'deer', /ʔàn/ 'give', /cɔndrôŋ/ 'caterpillar', /ndah/ 'not yet'.

/ñ/ palatal nasal. /ñêt/ 'drink wine' /tañ̃/ 'hot', /kõnjôh/ 'fetish pole' /ñhap/ 'smelly'.

/ŋ/ velar nasal. /ŋat/ 'leak', /lôŋ/ 'on top', /sɔŋgar/ 'drum', /ŋhôŋ/ 'empty'.

Liquid syllabics may further occur in H position following a stop.

/l/ dental lateral. /lap/ 'cut' /bòl/ 'tired', [tɩdl] /têl/ 'tracks', /lhôŋ/ 'papaya' /ɩlày/ 'wife's brother'.

/r/ alveolar retroflex, varying from trill to flap. Word-initially a non-distinctive vocoid is often heard preceding the onset of the trill. /aͬɩc/ /ric/ 'to flood', /bòr/ 'raise pigs', /rhôŋ/ 'loose', /kɔrmac/ 'twist', /kray/ 'guard'.

3.3 Glottalized consonants are limited to C position in the word. Preglottalized stops can occur in consonant clusters, other glottalized consonants only occur alone.

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[1] Forfurther details see R. Haupers, 'Word final Syllabics in Stieng', *Văn Hóa Nguyệł San* 11:846 848 (1962).

/'b/ preglottalized bilabial stop. /'baŋ/ 'bamboo shoot', /baŋ/ 'hen', /mbaŋ/ 'type
of people', /'bòr/ 'goad' /bòr/ 'raise pigs, /'brừs'/ 'immediately'.

/'d/ preglottalized dental stop. /ʔa 'dôh/ 'the same', /ʔa dôh/ 'suffer burns'.

/'j/ preglottalized palatal semivowel /ʔy./ It is interpreted phonemically as a pre-
glottalized stop because its distribution is like /'b, 'd/, and also because
phonetically it is preglottalized like /'b,'d/, rather than conglottalized like
/'m,'n,'l/ in which the glottalization is concurrent with the consonant. /'jar/
bamboo', /yar/ 'cast a beam', /jar/ 'arrow poison', /'jrừh/ 'a personal name'.
Glottalized continuants never occur first in a consonant cluster. Phonetically,
in isolation the voicing may start before the glottalization, and is then heard
again before the vowel.

/'m/ glottalized bilabial nasal. /mʔme/ /'mê/ 'new', /mê/ 'mother', /sơ 'mừt/ 'paper
with writing'.

/'n/ glottalized dental nasal. /nʔnaw/ /'naw/ 'before', /r'nàr/ 'a saw', /nar/ 'sun'.

/'l/ glottalized dental lateral. [lʔ lòy] /'lơy/ 'poor', /lơy/ 'leave'. /'lơh/ 'cool', /lơh/
'work'.

3.4 There are five remaining consonants which have no single feature in
common. /y,ʔ/ may occur in C and F positions, but not in the presyllable or in
clusters. /s/ may occur in P,C, and F positions but not in clusters. /w,h/ may
occur in C,H, and F positions, but not in the presyllable. /w/ also
occurs in W position.

/y/ palatal semivowel. /yùn/ 'Vietnamese', /khay/ 'moon ', /khày/ 'confess' (fr.
VN khai). The combination /ùy/ is realized as [ue]. [rue] /rùy/ 'a fly', [ruy]
/ruy/ 'to make yarn'. The combination /iy/ is realized as [ie], and has been
found only in three personal names (Miê, Liê, Iê).

/ʔ/ glottal stop. In C position, without a presyllable, it is frequently dropped in
rapid conversation. It has not been found in F position after /i,u/. It
occurs following either long or short vowels. /baʔ/ 'carry a child'. /bàʔ/ 'which
types?', /ʔơh/ 'answer', /doʔur/ 'woman'.

/s/ [s] voiceless alveolar fricative in P and C positions. [Y] voiceless palatal fricative in F position, [sa] /sa/ 'eat', [sɔnuk] /sɔnôk/ 'easy', [ga·ⁱY] /gàs/ 'outside', [ʔσ·ⁱY] /ʔờs/ 'familiar'.

/h/ voiceless vocoid. It has been found after all vowels except /u/. /ha/ 'open one's mouth', /pôh/ 'last year's field', /pồh/ 'clattering bamboo pole for scaring birds', /pô/ 'parent-in-law'.

/w/ bilabial semivowel. /wan/ 'wear around the neck', /kàw/ 'flower', /kaw/ 'owl'. The combination /ìw/ is realized as [io]. [lio] /lìw/ 'to lead', [liw] /liw/ 'button''.

/a,à/ occur before both /w/ and /y/. /i,ì,ê,e/ occur before /w/. /u,ù,ô,o,ɯ/ occur before /y/. /σ,ờ/ do not occur before /w/ or /y/.