

## A PHONEMIC DESCRIPTION OF NONG (NUNG)

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0. *Introduction.* The materials used for this paper were gathered while studying Nong in Nam Son, a village near Dalat, South Viet Nam. The village has an estimated population of over 2000 inhabitants, the majority of whom are Nong refugees from the Lang Son and Bac Giang provinces of North Viet Nam.

The Nong people are frequently called Nung, but they are different from the Chinese-speaking Nung who are the famous fighters. Although usually referring to themselves as the Nong [nɔŋ], they sometimes call themselves the Tho, which is also the name of a very close dialect. Nong is also close to the White Tai, and is with Tho and White Tai a part of the Tai language family. This tribe of Nong should also not be confused with the Mnong Nong, a Mon-Khmer language of South Viet Nam.

Within this village of Nong there are several dialect differences, but only of minor significance. The two different provinces and the widespread villages from which they come no doubt account for the variations. I have worked with three different informants, but this paper is based on the dialect of my most recent informant to facilitate clarity and give uniformity in this phonemic presentation.<sup>1</sup>

1. *Tones.* The Nong language has a contour tone system of six contrastive tones. Tones are distributed over the voiced phonemes of a syllable. The pitches of the tones are more contrastive in animated or excited speech.

Figure 1. shows the relative pitch of the six contrastive tones with broken lines representing variants of the same tone.

<sup>1</sup>I would like to express appreciation to Hua Thi Then, originally from Vo village in Bac Giang province, North Viet Nam, for her help in gathering and correlating these language materials; to Richard Watson for helpful suggestions regarding the analysis of this language; and to David Thomas for his assistance concerning the preparation of this paper.

1.1 *Description of Tones.* /-/ The *high-rising* tone (1) is somewhat like the Vietnamese *sac* tone.<sup>2</sup> When two or more syllables with the high-rising tone occur in sequence, each one seems to be a little higher than the preceding one (↗↗↗). But in slow precise speech, high-rising tones in sequence all have the normal non-sequential shape (↗↗↗).

Figure 1. *Chart of Tones*

high-rising /˧/ (1)	high-glottal /˧̚/ (2)	mid-level /˧˧/ (3)	low-rising /˨˧/ (4)	low-falling /˨˨˧/ (5)	low-glottal /˨˨̚/ (6)

In rapid speech the high-rising glide is much shorter than in isolation or in slow speech.

Only a very few examples of initial aspirated stops have been found with the high-rising tone.

/-/ The *high-glottal* tone (2) differs considerably from the parallel northern Vietnamese *ngã* tone. In isolation or slow speech the high-glottal tone usually has a high rising glide and a final glottal. It is generally as high or higher than the simple high-rising tone.

When followed by a mid-level tone, the high-glottal tone can either retain its normal high rising contour (/˧̚˧/) or can take on a mid-level pitch much like the following tone (-˧˧-).

When between two high-rising tones, the high-glottal is always higher than either of the high-rising tones.

<sup>2</sup>Vietnamese Basic Course, Volume I, Army Language School, Presidio of Monterey, California, August 1955. This book gives a description of the tones in the northern dialect of Vietnamese.

Utterance medially this tone can have the glottal stop, or it can rise to a peak, then fall slightly without a glottal stop (↗). The syllable peak coincides with the tonal peak and is very pronounced.

When two high-glottal tones occur in succession, either both tones have falling peaks and drop their glottals (↘↘), or else the first tone has the glottal and the second the falling peak (↘↗).

The high-glottal is the only tone that cannot occur with final voiceless stops. And there are very few examples of high-glottal tone with initial aspirated stops.

// The unmarked *mid-level* tone (3) is actually pitched a little higher than the middle of the voice range. It is somewhat like the Vietnamese mid tone. It is normally a level tone except when modified by certain intonation patterns.

Only a few examples of initial aspirated stops have been found with the mid-level tone.

/ʔ/ The *low-rising* tone (4) usually has a slightly rising glide. It is often difficult to distinguish it from the low-falling tone because the rise is often almost imperceptible. After aspirates and sibilants, however, the rise is more pronounced and the tone sounds similar to the Vietnamese *hỏi* tone.

/ʼ/ The *low-falling* tone (5) is a low tone with a short falling glide. It is somewhat like the Vietnamese *huyền* tone. In isolation or utterance finally the low-falling tone ends with a glottal stop; medially it has no glottal stop.

/./ The *low-glottal* tone (6) seems to be level or only slightly falling. It is similar to the Northern Vietnamese *nặng* tone. At times the low-glottal tone is hard to distinguish from the high-glottal tone, as the low-glottal is not far below mid-level pitch, and the high-glottal tone can sometimes be near mid-level pitch. The low-glottal tone usually ends with a final glottal stop, but laryngealization may occur over all the voiced phonemes.

1.2 *Glottal Stop with Tones.* I have chosen to interpret the glottal of the high-glottal and low-falling tones as a feature of the tones rather than as a consonant. If the final glottal were interpreted as a consonant, it would create consonant clusters without parallel anywhere else in the language. Nong, like many other Southeast Asian languages, does not have final consonant clusters in the predominant pattern.

The optional laryngealization with the low-glottal tone would tend to indicate the suprasegmental nature of the glottal. The glottal stop does not restrict voiceless stops from occurring finally with the low-falling or low-glottal tones.

1.3 *Examples of Tone Contrasts.* The following examples are grouped by tones as they occur in open syllables or with nasals and voiceless stops.

*high-rising tone* (1)

má 'dog'

nám 'thorn'

bán 'drying basket'

káng 'deer'

*high-glottal tone* (2)

mã 'horse'

kãm 'stick to bar door'

ẵ 'lazy'

sãng 'elephant'

káp 'to smoke meat'  
pát 'broom'  
dák 'deep'

*mid-level tone (3)*

ma 'come'  
ham 'cold'  
kan 'stick for carrying water'  
kang 'chin'  
sap 'to stick'  
čat 'to skid'  
lak 'to wash'

*low-falling tone (5)*

khà 'trousers'  
dàm 'shoulder blade'  
bàn 'village'  
tàng 'by oneself'  
náp 'to carry under arm'  
khát 'to rip'  
phák 'leafy vegetables'

*low-rising tone (4)*

thá<sup>?</sup> 'eye'  
thám<sup>?</sup> 'carry with carrying pole'  
mán<sup>?</sup> 'capon'  
tàng<sup>?</sup> 'window'  
tháp<sup>?</sup> 'to look for'  
mát<sup>?</sup> 'animal with young'  
pák<sup>?</sup> 'mouth'

*low-glottal tone (6)*

khạ 'to kill'  
nạ̃m 'to step on'  
thạ̃n 'charcoal'  
hạ̃ng 'market'  
ạ̃p 'to wash'  
lạ̃t 'peppery hot'  
mạ̃k 'classifier for tools'

2. *Consonants and Syllable Patterns.* Phonological words in Nong are composed of one syllable, having CV and CVC as the predominant patterns.

All consonants can occur initially but only the following consonants can occur word finally: /p/ /t/ /k/ /m/ /n/ /ng/ /w/ /y/. Consonant clusters have been interpreted as not occurring phonemically.

Utterance initially glottal stop occurs phonetically before a vowel where there is no other consonant, although it is usually lost utterance medially. In accordance with the predominant patterns, CV and CVC, glottal stop has been interpreted as occurring phonemically before a vowel word - initially.<sup>3</sup> Figure 2 gives a chart of the consonants.

Every syllable occurs with one of the six tones.

<sup>3</sup>Jean Donaldson, *White Tai Phonology*, a thesis presented at the Hartford Seminary Foundation, Hartford, Connecticut, May 1963. This treatment of another Tai language interprets initial glottal stop as "not distinctive in prevocalic position", and therefore considers it not phonemic. If glottal stop in Nong were treated as a non-contrastive feature of initial vowels, this would eliminate it from the phoneme inventory, although it would introduce the two additional patterns, V and VC.

Figure 2. *Chart of Consonants*

	Labio.	Alveo.	Alv. - pal .	Vel.-glot.
stops	p	t	č	k, ?
	ph	th		kh
	b	d		
fricatives	f	s, ʃ		h
liquids	w	l	y	
nasals	m	n	ñ	ng

Figure 3. *Chart of Vowels*

	Front	Central	Back
High	i	ɨ	u
Mid	e	ə	o
High-Mid Vowel Subsystem			
Low	æ	a	ɔ
Low Vowel Subsystem with a S G C of length			

2.1 *Description of Consonants*

/p/	[p]	vl.	unaspirated bilabial stop
/ph/	[ph]	vl.	aspirated bilabial stop
/b/	[b]	vd.	bilabial stop
/t/	[t]	vl.	unaspirated alveolar stop
/th/	[th]	vl.	aspirated alveolar stop
/d/	[d]	vd.	alveolar stop
/č/	[tʃ]	vl.	affricated alveo-palatal stop
/k/	[k]	vl.	unaspirated velar stop

/kh/	[kx]	vl.	affricated velar stop
/ʔ/	[ʔ]		glottal stop
/f/	[f]	vl.	labio-dental fricative
/s/	[s]	vl.	alveolar grooved fricative
/ʃ/	[ʃ]	vl.	alveolar lateral fricative
/h/	[h]	vl.	velar fricative
/w/	[w]	vd.	bilabial semivowel found word-final, except after [ɨ]
	[v]	vd.	labio-dental fricative found word-initial
	[i̯]	vd.	high back unrounded semivowel found word-final after [ɨ]
/l/	[l]	vd.	alveolar lateral
/y/	[y]	vd.	high front unrounded semivowel found word-final
	[ç]	vd.	alveo-palatal grooved fricative found word-initial
/m/	[m]	vd.	bilabial nasal
/n/	[n]	vd.	alveolar nasal
/ɲ/	[ɲ]	vd.	alveo-palatal nasal
/ŋ/	[ŋ]	vd.	velar nasal

## 2.2 *Examples of Consonants in contrastive groups*

pát	(1)	'beads'
bát	(1)	'pipe'
pày	(5)	'to make dirty'
phày	(5)	'cloth'
báw	(4)	'older brother'
pháw	(4)	'(stomach) rumbles'
tàng	(5)	'by oneself'
thàng	(5)	'snap'
dàng	(5)	'malaria'
k <sup>?</sup> ng	(4)	'gate'
kh <sup>?</sup> ng	(4)	'squat'
h <sup>?</sup> ng	(4)	'I (lower class)'
ʔá	(1)	'aunt'
ká	(1)	'final particle'

ʔang	(6)	'basin'
həng	(6)	'market'
sáy	(1)	'to send'
yáy	(1)	'steam'
čáy	(1)	'bottle'
láy	(1)	'late'
láy	(1)	'much, many'
fã	(2)	'sky'
wã	(2)	'misfortune'
nà	(5)	'face'
nã	(5)	'medicine'
nay	(3)	'saliva'
ngay	(3)	'lunch'
mãy	(2)	'tree'
bãy	(2)	'lie'
nãm	(1)	'to plant'
ngãm	(1)	'to fit, suit'

3. *Vowels.* The Nong vowel system may be interpreted as having a subsystem of six vowels without length contrast and another subsystem of three vowel distinctions with a series generating component of length (see figure 3).<sup>4</sup> The high and mid vowels of the first subsystem contrast in both open and closed syllables. The low vowels of the second subsystem contrast only in closed syllables, the contrast being neutralized in open syllables. Examples demonstrating an all-way contrast in identical environments have so far been unobtainable, but the contrastiveness is well demonstrated before /ng/ (see 3.2).

### 3.1 *Description of Vowels*

#### High-Mid Vowel Subsystem:

- /i/ [i] high close front unrounded vowel, occurs in both open and closed syllables.
- /e/ [e] mid close front unrounded vowel, occurs in open syllables.
- [e<sup>h</sup>] mid close front unrounded vowel with [h] offglide, occurs only in closed syllables.

<sup>4</sup>C.F. Voegelin, "Linear Phonemes and Additive Components" (=S G C) *Word* 12.429-43, 1956.

/ɨ/	[ɨ]	high close central unrounded vowel, occurs in both open and closed syllables.
/ə/	[ə]	mid close central unrounded vowel, occurs in open syllables only.
	[ə <sup>^</sup> ]	mid close central unrounded vowel with [ʰ] offglide, occurs in closed syllables.
/u/	[u]	high close back rounded vowel, occurs in both open and closed syllables.
	[uə]	high close back rounded vowel with [ə] offglide, occurs in closed syllables before alveolar nasal.
/o/	[o]	mid close back rounded vowel, occurs in both open and closed syllables.
	[oə]	mid close back rounded vowel with [ə] offglide, occurs in closed syllables before alveolar nasal.

**Low Vowel Subsystem with Series Generating Component of Length:**

/æ/	[ǣ]	mid open front unrounded short vowel, occurs in closed syllables.
/æ°/	[æ]	low close front unrounded vowel, occurs in both open and closed syllables.
/a/	[ǎ]	low close central unrounded short vowel, occurs in closed syllables only.
/a°/	[a]	low open central unrounded vowel, occurs in both open and closed syllables.
/ɔ/	[ǔ]	low close back rounded short vowel, occurs in closed syllables only.
	[ɔ <sup>w</sup> ]	low close back rounded vowel labialized before velar nasal.
/ɔ°/	[ɔ]	low open back rounded vowel, occurs in open and closed syllables.

**3.2 Examples of Vowel Contrasts**

kh <sup>?</sup> ing	(4)	'ginger'
kh <sup>?</sup> eng	(4)	'chopping board'
h <sup>?</sup> ing	(4)	'a long time'
h <sup>?</sup> əng	(4)	'a fish basket'
yung	(3)	'peacock'
song	(3)	'loom'
dǎng	(1)	'to light'
dǎ°ng	(1)	'red'
tǎ <sup>?</sup> ng	(4)	'chair'
tǎ°ng	(4)	'window'
səng	(3)	'eyebrow'
sə°ng	(3)	'table'