

# THE ORIGIN OF TONES IN VIET-MUONG

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## 1. Introduction

*Abbreviations:* AA: Austroasiatic. VM: Viet-Muong (=Vietic). PVM: Proto-Viet-Muong (=Proto-Vietic). OC: Old Chinese. MC: Middle Chinese.

The problem of the origin of tones in Vietnamese was first discussed by the famous sinologist Henri Maspero (1912). He demonstrated, with the help of Sino-Vietnamese (the Vietnamese pronunciation of Chinese characters), that the six tones of Vietnamese could be analysed into two series: *ngang-sắc-hỏi* corresponding to ancient voiceless initials and *huyền-nặng-ngã* corresponding to ancient voiced initials.

A further contribution was made by André G. Haudricourt in his seminal article *De l'origine des tons en vietnamien* (1954). He showed masterly that the three tones of Ancient Vietnamese originated from ancient laryngeal finals. In short, *sắc-nặng* tones derived from an ancient final glottal stop and *hỏi-ngã* tones from an ancient final spirant, while, by contrast, *ngang-huyền* tones developed in final vowel context. Haudricourt's model was developed and extended by James A. Matisoff (1973) to account for much of the tonogenesis phenomena in Southeast Asia.

Gérard Diffloth (1989), contra Haudricourt, proposed to reconstruct an earlier Proto-AA creaky voice to account for Vietnamese *sắc-nặng* tones, contrasting with a Proto-AA clear voice. This theory solves several tonogenesis problems within the VM group; on the other hand, it raises many new problems within the AA family.

In this paper, I suggest that the Vietnamese tone contrast, *sắc-nặng* vs *ngang-huyền* and its cognates in other VM languages, reflects an earlier *tense* vs *lax* contrast that results from the influence of the Chinese language during the Han

times (206 B.C.—220 A.D.). In the end, this hypothesis reinforces Haudricourt's ideas.

This hypothesis leads us to divide PVM into an Early PVM, the stage just before the first Chinese influence, and a significantly different Late PVM, or traditional PVM.

## 2. The state of affairs in Proto-VM (henceforth Late PVM)

We can safely asserted that all tone systems in modern VM languages derive from a fundamental three-way contrast of Proto-VM between - Ø (unmarked voiced ending rhyme), - ʔ (constricted voiced ending rhyme) and - h (laryngeal spirant ending rhyme). Checked syllables in - C (voiceless ending rhyme) are apart.

| - Ø                                     | - ʔ                                     | - h   | - C   |
|---|---|-------|-------|
| vowel<br>semi-vowel<br>nasal<br>lateral | vowel<br>semi-vowel<br>nasal<br>lateral | vowel | vowel |

This implies that Proto-VM was a toneless language. The constriction - ʔ in vowel ending derives from a Proto AA final glottal stop -ʔ.

## 3. Tonogenesis in Viet-Muong

To put the case simply, tones in VM were generated by two major phenomena:

- Loss of laryngeal features in rhymes with - ʔ and - h in two phases. The first phase is the change of - ʔ into a pitch/contour melody, presumed rising and slightly constricted, that contrasts with - Ø in a two-tone system. The second phase is the loss of the laryngeal spirant - h, creating a third pitch/contour melody that contrasts with the two previous ones in a three-tone system.

- Devoicing of plosive initials (confusion of voiced into voiceless) associated with tone splitting.

The relative chronology of these two major phenomena for each language led to different types of tone systems (Ferlus 1998a).

- If the devoicing of plosive initials took place after the complete loss of the two laryngeal features -ʔ and -h, then the language developed a six-tone basic system as in northern VM languages (Vietnamese, Mường, Thổ).

- If the devoicing took place after the change of the laryngeal constriction -ʔ, while final spirant -h was still preserved, then the language developed a four-tone basic system as in southern VM languages (Maleng, Arem, Sách/Rục, Thavung).

I give examples of tone systems for written standard Vietnamese and Sách/Rục (Nguyễn Văn Lợi 1993; personal data).

**Vietnamese:** The tone system of Vietnamese can be presented as follows (in quốc ngữ spelling):

|                     | voiced finals |             |            | voiceless finals |
|---------------------|---------------|-------------|------------|------------------|
| *voiceless initials | <i>ngang</i>  | <i>sắc</i>  | <i>hỏi</i> | <i>sắc</i>       |
| *voiced initials    | <i>huyền</i>  | <i>nặng</i> | <i>ngã</i> | <i>nặng</i>      |

- Within syllables ending in vowels, all of the six tones can occur.

- Within syllables in nasal finals (-*m* -*n* -*nh/-ng*) and ancient lateral final (-*l* > Việt -*i/-y*), only tones derived from -Ø (*ngang-huyền*) and -ʔ (*sắc-nặng*) can occur in genuine VM words. Tones corresponding to -h (*hỏi-ngã*) only exist in borrowings from Chinese, or in words of expressive origin (those that were already singled out by Maspero).

- Tones issued from rhyme in -h exist on syllables that are either vowel-final or with the ancient final fricative -s (> -l<sup>h</sup> > Việt -*i/-y*).

- The tones in syllables -C with final plosives (-*p* -*t* -*ch/-c*) are realized with the same contour as *sắc-nặng* tones, but they constitute a subsystem that contrasts, as a whole, with the subsystem in voiced final syllables.

- In some dialects the confusion of two tones (usually *nặng-ngã* but sometimes *hỏi-ngã*) reduced the number of tones from six to five.

**Sách/Rục:** The Sách and Rục dialects show very tiny differences and are practically the same language. They form the Chứt subgroup spoken in Tuyên Hóa district, Quảng Bình province.

|                     | voiced finals |    | voiceless finals |    |
|---------------------|---------------|----|------------------|----|
| *voiceless initials | v             | vʔ | vh               | vC |
| *voiced initials    | ṽ             | ṽʔ | ṽh               | ṽC |

Tones: *clear voice:*    v [44]      vʔ [45ʔ]      vh / vC [45]  
                              ṽ [11]      ṽʔ [11ʔ]      ṽh / ṽC [11]

A fifth tone [423] exists only in borrowings from the Nguồn language.

*Comparative vocabulary:*

|          | Viet | Sách/Rục            |          | Viet | Sách/Rục            |
|----------|------|---------------------|----------|------|---------------------|
| three    | ba   | pa <sup>44</sup>    | four     | bốn  | po:n <sup>45ʔ</sup> |
| zebu     | bò   | pò <sup>11</sup>    | salty    | mặn  | màn <sup>11ʔ</sup>  |
| fish     | cá   | ka <sup>45ʔ</sup>   | grass    | cỏ   | kɔh <sup>45</sup>   |
| mother   | mẹ   | məɛ <sup>11ʔ</sup>  | middle   | giữa | təah <sup>11</sup>  |
| bird     | chim | ici:m <sup>44</sup> | firewood | củi  | ku:l <sup>h44</sup> |
| wear out | mòn  | məɔŋ <sup>11</sup>  | tongue   | lưỡi | lèa <sup>h11</sup>  |

**4. Haudricourt's theory**

As was mentioned in the introduction, the origin of Vietnamese tones was clearly explained by André G. Haudricourt (1954). According to the author, *sắc-nặng* tones derive from an ancient final glottal stop, *hỏi-ngã* tones from an ancient final spirant while, by contrast, *ngang-huyền* tones developed within vowel-final contexts. He reconstructed Vietnamese tonogenesis in terms of three stages:

1. Ancient Vietnamese was a toneless language.
2. The final glottal stop -ʔ changed into a rising contour. The final spirant -h changed into a falling contour. The final -Ø remained at an even pitch. The result was a three-tone system made up of the ancestors of the three pairs, *ngang-huyền* (from -Ø), *sắc-nặng* (from -ʔ) and *hỏi-ngã* (from -h).