VIETNAMESE HÖI AND NGÃ TONES AND MON-KHMER -h FINALS

Kenneth Gregerson and David Thomas

1. Introduction

2. Vietnamese hoi tone: Mon-Khmer -h

3. Vietnamese nga tone: Mon-Khmer -h

4. Comments

- 1. Introduction. The position of Vietnamese (and Muong) among the languages of Southeast Asia has long been a matter of debate. Differences of opinion on the genetic affinities of Vietnamese regularly center about the question of how to account for its tone system. Maspero (1912:116) said with regard to the possibility, of a Mon-Khmer relationship with Vietnamese, "l'annamite est separe de cette famille par un obstacle absolutement insurmontable, le système des tons." Maspero felt that the factor of initial and final consonant influence as a long standing feature of Chinese, Tai, and Tibeto-Burman tone systems was paralleled in Vietnamese. But the notion that Vietnamese could have derived from a toneless Mon-Khmer-like Austroasiatic precursor which later independently developed such a tonal system was more than Maspero considered plausible. Rather he concluded that Vietnamese was simply a Tai language which had borrowed along with Chinese forms an abundance of Mon-Khmer items. The generalizations he made concerning the tones assigned to such Mon-Khmer words were these (Maspero 1912:99,100):
- 1. Words with voiceless or medium voiceless (mi-sourds) initials, or non-syllabic voiceless prefixes usually receive sac or bang (=ngang) tone.
- 2. Those with voiced, nasal or liquid initials possess huyen tone.
- 3. Those with initial s or h or an initial liquid or nasal preceded by s or h have sac tone; before other initials such "prefixed" consonants lose their influence on the tone.
- 4. Those with occlusive finals get sắc or nặng tone.

- 5. Those with final 1 (and perhaps \underline{r}) seem to have produced hoi or nang tone; which tone depended on the vd/vl nature of the initial.
- 6. Those with final h (or perhaps s) take hoi or nga tone (again depending on the voicing of the initial).

In 1953 Haudricourt reopened the debate, reviving the contention that Vietnamese was not a Tai language but rather an Austroasiatic¹ one whose historical position was 'between the Palaung-wa on the Northwest and the Mon-Khmer on the Southeast." In 1954 Haudricourt discussed the origin of the Vietnamese tone system, reviewing Maspero's observations that, parallel to Chinese and Proto-Tai, the Vietnamese tone system ("tenth century") was partitioned into two series, each composed of three tones: ngang, hoi, sắc accompanying all voiceless initials and huyen, nga ,nang with voiced initials. Haudricourt goes on to offer a schematic table tracing the development of the Vietnamese tone system from an earlier toneless state with distinctive initial and final consonant types, through to a three tone system resulting from loss of final consonants, then on to a six tone system produced by the loss of initial voicing contrast. Finally, he notes the reintroduction of voicing for certain initials of both the old voiceless and voiced series. The rudimentary three tone system as sketched by Haudricourt derives the ngang-huyên tone from syllables with no final constrictive consonant, sac-nang from syllables with final glottal stop, and hoi-ngã from syllables with final laryngeal spirants.

Since 1954 considerable work has been done on Mon-Khmer Ian-guages of Southeast Asia which ncreasingly confirms the reasonableness of Haudricourt's general assumption that Vietnamese originated from a non-tonal linguistic ancestor. Fuller understanding of the nature of the register system of Mon-Khmer also enhances the plausibility of "register systems" and "tone systems" as manifestations of a more general overall historical system in the area (cf. Purtle 1969, 1970; Gregerson, to appear).

It is also worth reminding the reader here that, as regards the development of hoi-ngã, one Mon-Khmer language, Jeh, presents a kind of linguistic "primitive contemporary", possessing as it does dialectal variants in which a rising (hoi-ngã-like) tone replaces final -h (Gradin, 1966:42). Thus, processes at work in a modern language appear to be "recapitulating", the historical path followed in Vietnamese.

The aim of this brief paper is simply to begin to add a little more flesh to the skeletal observations and suggestions of Maspero and Haudricourt on the Mon-Khmer final consonant sources for Vietnamese tones. Specifically, we restrict ourselves here to Mon-Khmer forms that represent possible cognates of Vietnamese forms with hoi or nga

- tones. The list offered makes no pretense at being exhaustive or broad in comparative scope. Rather we cite possible cognates we have noted in the languages in which we have done primary research, i.e. Rongao and Chrau. Rongao, a language of Vietnam, regularly cited in Maspero, is North Bahnaric and Chrau is South Bahnaric. Occasionally other languages are cited but not systematically. Muong, a language closely related to Vietnamese, is sometimes listed when it lends insight.
- 2. <u>Vietnamese hoi tone: Mon-Khmer -h.</u> Languages cited are abbreviated as follows: Vietnamese (V.), Middle Vietnamese (MV.), Middle (M.), Rongao (R.), Chrau (C.), Pacŏh (P), Bahnar (B.), Brũ (Br.), Stieng (S), Sanskrit (Skt.).
- 2.1 V. bẩy, M. pẩy 'seven': R. tơpâih, C. pâh, B. tơpơh 'seven'.
- 2.2 V. be, be, M. pe, pe 'chipped': R. beh, C. beh 'chipped'.

 But cf. also V. me 'chipped'.
- 2.3 V. bổ 'split open (coconut)': R. pôh, C. pơq, P.pôh, B. poh 'open (door)'. But cf. also V. mở 'open'.
- 2.4 V. che 'cleave': R. klah, P. klah 'divide', C. chreh 'split'.
- 2.5 V. de, M. te 'give birth': R. ronih, C. deh, B. roneh 'give birth'
- 2.6 V. de 'put', M. ta 'put down': R. tah 'put', C. randah 'throw down', B. tah 'put in'.
- 2.7 V. do 'pour': R. tuh 'pour, to water', C. tuh, P. toh, B. tuh, 'pour'.
- 2.8 V. <u>duối</u> 'chase': R. <u>duih</u> <u>kơduih</u> 'hurry', C. <u>dăh</u>, B. <u>druh</u>, Br. <u>duih</u> 'chase'.
- 2.9 V. dưới 'afraid': C. canduh 'afraid'.
- 2.10 V. gia/tra, MV. bla 'pay': R. blah 'divide, apportion', C. vlah 'divide'.
- 2.11 V. giải 'untie': R. yih, B. yaih 'untie', C. yaih 'damage, undo'.
- 2.12 V. giổi 'clever': R. juaih, (C. yăh 'good'?).
- 2.13 V. hd, hd-hoi 'open': R. pdhoh 'to open', hoh hoi 'open'.
- 2.14 V. lay 'to shell corn': R. 'lih, C. reh 'to shell corn'.
- 2.15 V. lay co 'pull the trigger': R. 'leih khel, C. khlayh,
 - P. layh, B. 'leh, 'pull the trigger'.
- 2.16 V. lo 'cave in': R. rolaih 'cave in' B. holeh 'cave in',
 - C. toroh 'fall' (??)

- 2.17 V. moi 'tired of limb': R. romoih 'caress, massage'. But cf. Maspero 1912:64 where Siamese muoy and other Tai languages are cited as cognate.
- 2.18 V. nổ 'explode': R. pơtuh 'explode' (tr. verb), 'luh 'explode' (intr. verb), noh 'firing cap', C. ntŏh, S. toh, B. 'dôh 'explode'.
- 2.19 V. nổi 'have strength': R. bơnúh 'strength'. Cf. also V. nỗ 'strive'.
- 2.20 V. nhay (mui) 'sneeze': R. kocheih, B. koseh 'sneeze'.
- 2.21 V. nho 'small': R. 'yoh 'small'
- 2.22 V. nhố, M. chú 'spit': R. chúh, C. chhŏh, P. kuchŏh, B. kosoh 'spit'.
- 2.23 V. $\dot{\sigma}$ 'live, be at': R. \underline{ah} , B. \underline{ah} 'be at'.
- 2.24 V. phúi 'sweep, dust': R. hơpuih, B. hơpuih, C. bôih 'sweep'. Cf. also V. bụi, C. vuh 'dust'.
- 2.25 V. <u>rai</u> 'scatter', <u>ray</u> 'sprinkle': R. <u>prah</u> 'vegetable garden, sprinkle', <u>roreih</u> 'sprinkle (with fingers), C. <u>rah</u> 'scatter', <u>caprah</u> 'scattered', B. <u>toprah</u> 'scattered'.
- 2.26 V. ru 'invite, inveigle': C. ruh 'go in a crowd'.
- 2.27 V. rua 'wash': R. ruh 'wash (clothes)'. But cf. also V. ru 'rinse'.
- 2.28 V. se, xe 'divide, saw up': R. sih 'cut meat', C. chreh 'split', B. cheh 'small pieces'.
- 2.29 V. toi 'garlic': R. toih 'garlic'.
- 2.30 V. tra 'hand over, repay': C. troh 'hand over, repay'.
- 2.31 V. va, M. pa 'slap': C. tovah, P. pah 'slap'.
- 2.32 V. va 'more over': R. bah, wâyh 'more over', C. bây 'also'.
- 2.33 V. vai, MV. bai 'cloth': R. kopeih, C. paih, B. kopaih 'cotton', SKT. karpasa 'cotton'.
- 2.34 V. xá 'rinse': R. srah 'pour water', C. jrŏh 'clean', C. jraih 'sprinkle ceremonially'.
- 3. Vietnamese nga tone: Mon-Khmer -h.
- 3.1 V. be 'ashamed': R. komeih 'ashamed, bashful'.
- 3.2 V. du 'shake, dust off': R. pŏng duih 'broom', C. duyh 'scrub'.
- 3.3 V. go 'knock': C. goh 'knock'.
- 3.4 V. gay 'break': C. gayh 'break'.

- 3.5 V. kỹ 'skillfully': R. kih 'skillfully'.
- 3.6 V. let 'rite, ceremony', tuần let 'week': R. leh 'turn, occasion', leh hi ding 'week'.
- 3.7 V. lõ 'hole': R. boluh, boluh, B. boloh 'hole'.
- 3.8 V. muỗi 'mosquito': C. moih, B. moih 'mosquito'.
- 3.9 V. mui, M. mui 'nose': R. muh, C. muh, B. muh 'nose'.
- 3.10 V. nãy 'a while ago': R. nêh 'time past'.
- 3.11 V. nghĩ 'think': R. ngơih 'think', P. ơrnghĩh 'think' B. ngêh 'think'.
- 3.12 V. <u>rã</u> 'dispersed': C. <u>răh</u> 'scattered'. Cf. <u>rai</u> in the preceding section.
- 3.13 V. re 'root': R. rih, C. diyeih, B. roh 'root'.
- 3.14 V. ro 'clear': R. hodah, todah, C. jroh, B. hodah 'clear'.
- 3.15 V. roi 'leisure, free time': R. dôh 'be free, unoccupied'.
- 3.16 V. trī 'young, tender': R. hŏdrih, B. hơdrih 'green, fresh'.
- 3.17 V. vây 'beckon with hand motion': R. kowaih, C. lawaih, B. govoih 'beckon with hand wave'. Cf. Sino-Vietnamese huy.
- 3.18 V. võ 'flap, clap': R. bâh 'flap (wings)'.

4. Comments.

4.1. Vietnamese Loan Words The following forms are recognized by native minority language speakers to be loan words:3

V. tu : R. kotuh 'cabinet'

V. Mỹ : R. Mih 'American'

V. re : R. reh 'inexpensive'

V. đũa: R. 'dwah, C. duôh 'chopsticks'

Here we are faced not with the replacement of old -h's by hoi-ngã tones but the reverse. The Rongao speaker is (was) apparently responding to some perceived feature of Vietnamese hoi/ngã articulation at the time of borrowing. In thinking of the historical development of hoi/ngã from old -h, we perhaps with too much phonemic haste dispense with registering residual laryngeal effects that remain subphonemically. And of course, modern Hanôi, Vinh, and Huế still actually reflect laryngeal quality in hoi/ngã pronunciation (Thompson,

1965:104). Thus even relatively recent loans point to some kind of MKS 5:76-83 (c)1976 See archives.sealang.net/mks/copyright.htm for terms of use.

laryngeal constriction associated with Vietnamese hoi/nga articulation.

- 4.2. Exceptions The large majority of the recognized Mon-Khmer cognates for Vietnamese hoi/nga words have -h, as given in the above listings. A few exceptions, however, have been noted:
 - V. de 'easy': C. de 'easy'
 - V. $\underline{\underline{ray}}$ 'swidden field' : C. $\underline{\underline{re}}$ 'old swidden field'
 - V. rua 'wash' : C. rao 'wash' But cf. example 2.27.

The first of these exceptions may possibly be a non-modern borrowing, as Chrau also has its antonym kho = V. kho 'difficult'. (A modern borrowing would have had the form $y\hat{e}$.)

4.3. Haudricourt's rudimentary hoi-nga tone. As mentioned above Haudricourt schematized a rudimentary three-tone system for Vietnamese, i.e. ngang-huyên, săc-nang, and hoi-nga. The first was characterized as a neutral (level) tone, the second as high, and the third as low. It is understandable that in postulating a three-way tone division one could come to some such logical alternative. He explains the low tone as deriving from abrupt relaxing of the vocal cords which also causes the shift from final spirants to final -h. However, one is justified in asking what cogent evidence there is that hoi/nga ever had the same pitch configuration. Consider the following section of Haudricourt's (1954:31) schematization:

| | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
|-----------|----------|---------------------------------------|---------|---------|
| ? | <u> </u> | | ? | ? |
| hoi tone: | pas/h | pa | pa | ba |
| ~ | - 4- | • • • • • • • • • • • • • • • • • • • | ? | ~ |
| nga tone: | bas/h | ba | pa | ba |

Stage 1 is the original state with vd/vl initials distinguished and possessing the final spirants. Stage 2 subtitutes schematically a pitch for the final spirant. Stage 3 reflects the falling together of the vd/vl initial contrast and the separation of <u>hoi</u> and <u>nga</u> tones. The last stage is the voicing of initials.

But alternately consider the following possible schematization:

| | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
|-----------|---------|---------|---------|---------|
| hoi tone: | pas/h | pa | pa | ba |
| nga tone: | bas/h | bã | pã | bã |

That is, in Stage 2, where -h is lost, the tone configuration already had the hoi/nga contrast. This would be hypothesizing that the b/p word-initial contrast already had concomitant subphonemic pitch effects in Stage 1. Or stated in more recent terms, that Stage 1 had a cluster of register effects that included both a vd/vl initial contrast and a low/high pitch contrast simultaneously.

Looking at $h\delta i/ng\tilde{a}$ as two tones from the beginning has implica-

tions for the interpretation of the other two tone pairs ngang-huyền and sắc-nặng. Haudricourt had them as follows:

| | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
|-------------|---------|---------|---------|---------|
| ngang tone: | pa | pa | pa | ba |
| huyền tone: | ba | ba | pa | ba |
| săc tone : | pa? | pa | pa | ba |
| nặng tone: | ba? | ba | pa | ba |

Again there seems little evidence to show that ngang-huyền were phonetically the same (level?) in Stage 2 or that sac-nặng were both rising in Stage 2. The following representation serves us just as well:

| | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
|-------------|---------|---------|---------|---------|
| ngang tone: | pa | pa | pa | ba |
| huyền tone: | ba | ba | pa | · ba |
| sắc tone: | pa? | pa | pa | ba |
| nặng tone: | ba? | bạ | pạ | ba |

But the result of this is that there is no real phonetic three-tone stage in Vietnamese. In fact, it seems likely that the pitch effects were subphonemic simultaneous features along with other consonantal and vocalic factors right in Stage 1. Haudricourt assumed a register-less (or at least pitch-less) Stage 1. We are proposing that Stage 1 may have had a two-register contrast, including a two-pitch (high/low) contrast, and that as a result Vietnamese went from a two-tone stage to a more complex system which never included precisely the three tones of Haudricourt 1954. More detailed work must be done to systematically relate Mon-Khmer register phenomena to Viet-Mudng tone history.

FOOTNOTES

- 1. More recently Thomas and Headley (1970) have also pointed to the Austroasiatic (and near Mon-Khmer) position of Viet-Muong on lexicostatistic grounds.
- 2. Rongao forms are from Gregerson and Chrau from Thomas., We are indebted to Richard Watson and John Banker for the Pacon and Bahnar forms respectively.
- 3. The suspect loan pairs are: Sino-Vietnamese chi 'paper': R. chih 'write'; V. chi trich 'criticize': C. chih 'criticize'; V. du 'enough': R. 'duh 'enough'. Perhaps V. ky 'skillfully': R. kih 'skillfully' goes here too.

REFERENCES

- Gradin, Dwight. 1966. Consonantal tone in Jeh phonemics. Mon-Khmer Studies II, 41-54.
- Gregerson, Kenneth. To appear. Tongue-root and register in Mon-Khmer. In Papers from the First International Conference on Austroasiatic Linguistics. University of Hawaii.
- Haudricourt, André-G. 1953. La place du vietnamien dans les langues austroasiatiques. Bulletin de la Société de linguistique de Paris. 49 (1). 122-28.
- Journal Asiatique, tome 242.69-82.
- Maspero, Henri. 1912. Études sur la phonétique historique de la langue annamite. Les initiales. BEFEO 12.1-126.
- Purtle, Dale I. 1968. Tone from vowel register: an Asian areal feature. Paper presented at the annual meeting of the Linguistic Society of America, December 29, New York City.
- Thomas, David and Robert K. Headley. 1970. More on Mon-Khmer subgroupings. Lingua 25.398-418.
- Thompson, Laurence C. 1965. A Vietnamese Grammar. Seattle: University of Washington Press.