SOME INTERNAL EVIDENCE FOR THE

HISTORY OF VIETNAMESE TONES

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It is a well known phenomenon in the development of East Asian tonal systems that the number of tones apparently doubled on the occasion of the disappearance of certain initial contrasts. Li Fang-kuei (1966) has given us a valuable summary of the facts in the Tai languages. On a broader basis André-G. Haudricourt (1961) surveyed such developments in several language families and presented evidence for three-way splits in some cases.

The phenomenon was observed in Vietnamese by Henri Maspero (1912), who showed that both in it and in the related Muong dialects the tones are distributed between two registers, one set deriving from earlier voiced initials, the other from earlier voiceless initials. In those dialects having six tones, three belong to each register, while five-tone dialects have modified their systems by coalescing two tones. Haudricourt (1954) refined the description of the Vietnamese case, making clear that before the loss of contrast between voiced and voiceless initials there were just three tones. These latter, he suggested, rose from a different source: evidence from certain Mon-Khmer and Palaung-Wa languages indicate that one original tone contour developed from syllables with earlier final stops, another from syllables earlier closed by a voiceless spirant, the third from syllables ending in voiced continuants (vowels, semivowels and resonants). Much later, the contrast between the two sets of initials was lost, and the three tones were doubled to six. A reasonable hypothesis based on comparative evidence, then, states that tones developing from earlier voiceless initials were at first higher, those from earlier voiced initials lower, and that this division into register occurred at a time considerably later than the development of the original tone contours.

In modern Vietnamese there are a number of morphological formations in which systematic tonal relationships can be observed.[1] The most extensive material is reduplicative: in a few productive formations and in many apparently residual sets representing earlier productive patterns, dissyllabic forms show consistent relationships of tone between the two syllables.

In the following examples forms are given in a phonemic orthography representing Hanoi speech; the tones are symbolized last in the syllable: mid trailing /–/, high rising /'/, high rising laryngealized /~/, mid–low dipping /ˇ/, low dropping tense or laryngealized /./, and low trailing /`/. These symbols are close to those used in Vietnamese standard orthography, in which the tone marks appear over (in the case of /./, under) a vowel of the syllable; in the official writing, however, /–/ syllables are unmarked, and /ˇ/ is symbolized by the top part of a question mark. Among the tonal contours, *dropping* refers to an abrupt fall, *trailing* to a slower fall. Other phonemes include *fortis* stops: voiceless unaspirated /p t c k ʔ/ and voiced preglottalized /b d/; *lenis* consonants: voiceless /f tʻ s x h/, and voiced /v l z g/; *nasals* /m n ñ ŋ/; *vowels*: non-back /i e ɛ ǎ/, back rounded /u o ɔ/, back unrounded /ï ē ə/; and *semivowels* /y w ï ə/. Of the lenis consonants the only stops are (aspirated) /tʻ / and one allophone of /g/—[g] directly after a syllable ending in [ŋ], otherwise [ɤ]. Of the vowels, /i e ǎ ə/ have central allophones; /ǎ ə/ are consistently shorter than other vowels in comparable environments. Note that the semivowels /ï ə/ are written with the symbols for the homorganic vowels: no confusion need arise since they always follow more prominent vowels. (For further details see Thompson 1965: chapter 2.) A few examples are from Saigonese informants; they are preceded by the symbol S. Forms marked with an asterisk seldom occur as free elements.

Reduplicative suffix /–a/

/ŋwiy~/ high, steep: /ŋwiy~ ŋa–/ grandiose, impressive

/tʻiet'/ have an interest in: /tʻiet' tʻa–/ earnest, insistent

/zəy`/ annoy, pester: /zəy` za`/ troublesome, complicated

/mǎn./ salty; hearty, kindly: /mǎn. ma`/ cordial

/zəy~/ fat: /zəy~ za`/ very fat

Reduplicative suffix /–ak/

/ŋĕï~/ ignore: /ŋĕï~ ŋak'/ be stupified

/ñaw'/ in disorder: /ñaw' ñak'/ distraught, frightened

/zay ˇ/ spread, sow, distribute: /zay ˇ zak'/ be scattered around

/zẽy`/ come unstuck: /zẽy` zak./ discontinuous, inharmonious

/cẽn./ wide-eyed: /cẽn. cak./ give a menacing look

/diñ~/ extraordinary: /diñ~ dak./ id.

Reduplicative suffix /–ăn/

/dɔ⁻/ to measure, gauge: /dɔ⁻ dăn'/ weigh both sides of a question

/căk' /solid, sure: /căk' căn'/ id.

/ñɔˇ/ small: /ñɔˇ ñăn'/ id.

/za`/ old: /za` zăn./ experienced

/ñun~/ courteous, humble: /ñun~ ñăn./ id.

Reduplicative suffix /–ɛ/

/vuy⁻/ pleasant: /vuy⁻ vɛˇ/ id.

/mẽy'/ new: /mẽy' mɛˇ/ id.

/ñɔˇ/ small: /ñɔˇ ñɛˇ/ soft (of voice)

/măñ./ strong: /măñ. mɛ~/ id.

Reduplicative suffix /–iy/

/zen⁻/ to groan: /zen⁻ ziyˇ/ id.

/səp'/ be all the way up to: /səp' siyˇ/ nearly, approximately

/ʔəm`/ noisy: /ʔəm` ʔiy~/ be a very loud noise

/kuw~/ old: /kuw~ kiy~/ be (rather) old

Reduplicative suffix /–iñ/

/tïẽy⁻/ gay, merry: /tïẽy⁻ tiñˇ/ joyous

/bïẽŋ'/ stubborn: /bïẽŋ' biñˇ/ id.

/cɔn`/ round: /cɔn` ciñ~/ roundish, plump

/ŋow./ strange; cute: /ŋow. ŋiñ~/ id.

Reduplicative suffix /–ɔ/

/hăy⁻/ good, well done: /hăy⁻ hɔ⁻/ id.

/liw'/ tongue-tied, embarrassed: /liw' lɔ⁻/ jabber, speak indistinctly

/zuyˇ/ unlucky: /zuyˇ zɔ⁻/ id.

/gəy`/ thin: /gəy` gɔ`/ id.

/tʻɛn./ ashamed: /tʻɛn. tʻɔ`/ id.

That the tones are not determined by the vowels or consonants of the suffix is clear from contrasting formations where the same shapes have different tones; compare, for example, the first set above (reduplicative suffix /–a/) with the following:

/năwŋ⁻/ force, squeeze into: /năwŋ⁻ naˇ/ id.

/ʔem⁻/ tranquil: /ʔem⁻ ʔaˇ/ id.

/hoyˊ/ be in a hurry: /hoyˊ haˇ/ id.

/ʔăwŋˊ/ [fabric] shines: /ʔăwŋˊ ʔaˇ/ id.

/buonˋ/ sad: /buonˋ ba~/ id.

/ñanˋ/ idle; leisurely: /ñanˋ ña~/ id.

/zon./ noisy, disorderly: /zon. za~/ vehement

/ñuk./ disgraced: /ñuk. ña~/ id.

or again the following set with /-ɛ/ with the corresponding set (reduplicative suffix /-ɛ/) above:

/hăm⁻/ threaten: /hăm⁻ hɛ⁻/ id.

/ñănˊ/ send a message by someone: /ñănˊ ñɛ⁻/ id.

/lăwŋˇ/ be fluid: /lăwŋˇ lɛ⁻/ very fluid

S/măwˋ/ color: S/măwˋ mɛˋ/ flavor; beautiful appearance

/zut./ withdraw, pull back: /zut. zɛˋ/ be retiring, timid

One similar formation is productive: it produces colloquial derivatives from virtually any base. The resulting derivatives are difficult to gloss out of context (for convenience they are called ironic emphatics). An example in context will suggest the extension of meaning involved.

S/ŋïëyˋ dɔˊ xəwŋ⁻ kɔˊ dăw⁻ diək˺ ziyˋ dəw⁻!/ 'That person's not sick at all!'

(He just says he is to attract attention.)

(/dăw⁻ diək˺/, based on S/dăw⁻/ sick)

(This example is from a Saigonese informant, but is cited here with Hanni pronunciation for the sake of uniformity. I earlier understood from various northern informants that this formation was not used in the North, but Nguyen-Dinh-Hoa [1966] says it is widespread throughout the country. It would appear that it is considered just inelegant enough so that some informants have preferred to think of it as quite apart from educated Hanoi speech, which is often equated with a kind of cultured standard. The best treatment is probably to designate the formation as non-literary.) Other examples (with suggestive glosses) are

/săcˊ/ book: /săcˊ siək˺/ any old kind of book

/ñɔˇ/ small: /ñɔˇ ñiək˺/ small, you say!

/banˋ/ table: /banˋ biək./ any old sort of table

/dien./ electricity: /dien. diək./ electricity indeed!

/kuw~/ old: /kuw~ kiək./ not old at all

From this sampling of derived forms regular tonal relationships can be

abstracted. It will be observed that in each derivative the suffix begins with the initial consonant or cluster of the base; the balance of the syllable then has the same syllabic and final for each set, with one of two possible tones—which of the two depends on the tone *register* of the base. Which one of the three tonal sets is involved, however, is a property of the affix. Each affix has its own characteristic tone set: for example, the suffix /–a/ seen in /tʻiet´ tʻa˜/ and /zəy` za`/ has either /–/ or /`/ (which we shall call *even* tones) depending on what the tone register of the base is. But the different suffix /–a/ seen in /hoy´ ha˅/ and /buon` ba˜/ has either /˅/ or /˜/ (which we shall call *long* tones), depending on the tone register of the base. Again the suffix /–ăn/ seen in /dɔ˜ dăn´/ and /za` zăn./ has either /´/ or /./ (*short* tones), depending on the tone register of the base. The pattern of correspondences is summarized in Table 1.

These correspondences are precisely the ones which would be expected in terms of historical development: / – ´ ˅/ derive regularly from forms which originally had voiceless initials, while /` . ˜/ accompany syllables that originally began with voiced consonants.

	Base Tone	Tone in Affixal Syllable		
		Even	Short	Long
1st Register	/ – ´ ˅			
2d Register	` . ˜		`	˜ /

Table 1

This patterning is not limited to suffixes. It is also found with the far less extensive prefixal material; e.g.,

/let´/ drag about painfully: /la˜ let´/ do something with much pain and difficulty

/duŋ˅ diñ˅/ go slowly, leisurely: /duŋ˅ da˜ duŋ˅ diñ˅/ id.

/luŋ. tʻuŋ./ too big (of clothes): /luŋ. tʻa˅ luŋ. tʻuŋ./ id.

/ñiy˅ ñăñ˅/ lively, sprightly: /ñiy´ ña˜ ñiy´ ñăñ˅/ id.

/ʔăwŋ˜ ʔɛw./ behave affectedly: /ʔăwŋ˜ ʔa` ăwŋ˜ ʔɛw./ id.

(Note the pattern for dissyllabic bases: the reduplicative prefix includes an exact replica of the first syllable of the base, plus the initial of the second syllable; the balance of the second syllable—in this case vowel and tone—is /a/ with the even tone of the appropriate register.)

Among the reduplicative prefixes there is a productive one with a consistent meaning of attenuation; its allomorphs are perfect replicas of the base except for

tone, which is replaced by /-/ or /`/ (that is, the appropriate even tone). (An additional morphophonemic complication arises in some forms: Vietnamese syllables ending in stops are accompanied only by /'/ or /./; in these prefixes, then, final stops are not possible—they are replaced by their homorganic nasals.)

/kwɛn⁻/ acquainted: /kwɛn⁻ kwɛn⁻/ slightly acquainted

/kĭŋ'/ tough: /kĭŋ⁻ kĭŋ'/ rather tough

/mɛt'/ pale: /mɛn⁻ mɛt'/ rather pale

/ñɔˇ/ small: /ñɔ⁻ ñɔˇ/ rather small

/kĭɛy`/ laugh: /kĭɛy` kĭɛy`/ laugh a little

/ñɛ./ light(weight): /ñɛ` ñɛ./ rather light (weight)

/dɛp./ beautiful: /dɛm` dɛp./ rather beautiful

/săc./ clean: /săñ` săc./ rather clean

There is a puzzling departure from the pattern, however, with the very few bases having /ˇ/ tone; here we find, not /`/, according to the regular pattern, but /⁻/:

/zɔˇ/ clear: /zɔ⁻ zɔˇ/ rather clear

Even in these cases some informants pronounce /`/, although the forms are written /-/.[2]

The pattern is again observable with certain non-reduplicative forms that fit a paradigm of demonstratives (Table 2).

Unspecified	Close to Speaker or Newly Introduced	Remote or Already Identified
/dəw⁻/	/dəy⁻/	/dəy'/ (S/dɔ'/)
where(ver)	here	there
/naw`/	/năy`/ (S/nəy`/)	/nɔ./
which(ever)	this	that, another
/baw⁻/	/bəy⁻/	/bəy'/
to what(ever) extent	to this extent	to that extent
/saw⁻/	/vəy`/	/vəy./
how(ever)	this way, thus	that way, so

Table 2

Aside from the attenuatives, where the affix differs from the base in tone alone, the other reduplicative formations we have discussed are *alliterative*—that is, the affix retains the initial of the base, adding its own vowel, final, and tone. In addition to this quite extensive material, there are some more restricted

examples in which reduplicative affixes are *rhyming* rather than alliterative—they retain the vowel and final of the base, replacing the initial. Many of these retain also the tone of the base—

Reduplicative prefix /b–/

   /ñăw`/ [cloth is] wrinkled: /băw` ñăw`/ very wrinkled

   /zoy´/ confused: /boy´ zoy´/ perplexed, upset

   /tʻuŋ./ [clothes are] roomy: /buŋ. tʻuŋ./ too large, ill fitting

Reduplicative suffix /l–/

   /xăwk´/ weep: /xăwk´ lăwk´/ id.

   /tʻam‾/ greedy: /tʻam‾ lam‾/ greedy, covetous

   /xɛw´/ skillful: /xɛw´ lɛw´/ id.

However, there are those in which the tone is different, and interestingly enough in these cases the tones seem to belong regularly to the opposing register (all the examples in the corpus involve suffixes):

Reduplicative suffix /l–/

   /xɛt´/ have odor of burned substance: /xɛt´ lɛt./ have badly burned odor

   /sɛp./ flattened: /sɛp. lɛp´/ completely flattened

Reduplicative suffix /ñ–/

   /săc./ clean: /săc. ñăc´/ completely clean; cleaned out, exhausted

Reduplicative suffix /c–/

   /mɛt´/ pale: /mɛt´ cɛt./ very pale

   /lun`/ short (not tall): /lun` cunˇ/very short, dwarfed

These are paralleled by other reduplicative formations in which the affix differs from the base only in tone, and, again, the affixal tones belong to the opposing register. E.g.,—

Reduplicative prefix

   /met./ tired: /met´ met./ somewhat tired, vague

   /bïï./ big: /bïï´ bïï./ very big

Reduplicative suffix

   /sop´/ spongy: /sop´ sop./ very spongy

   /ñɛt´/ viscous: /ñɛt´ ñɛt./ very viscous

In these, the predominating pattern seems to be a dissyllabic form in which the first syllable has /´/, the second /./; a few other forms have /ˇ/ in the offix, regardless of the tone register of the base:

   /kɔn‾/ small: /kɔnˇ kɔn‾/ very small

   /lăŋ./ quiet: /lăŋˇ lăŋ./ very quiet

/hway`/ constantly: /hway⌄ hway`/ incessantly

The forms of these last types are troublesome in another way: they seem marginal to most informants and there is disagreement about the validity of some of them as modern [forms.

The balance of reduplicative formations have affixes which utilize the initial, final and tone of the base, but replace its vowel. E.g.,

/zey~/ easy: /zey~ zay~/ easy-going

/məp./ fat: /məp. map./ id.

/ʔiët′/ wet: /ʔiët′ ʔat′/ id.

These can obviously not tell us much about tones, since the affix regularly has the same tone as the base.

Considering the ensemble of morphological patterns, then, we may be impressed by the regularity of register in those forms where the initial of the base is constant, and recognize that this is expectable in that the initial determines the tone's register. On the other hand we are not surprised to find that in rhyming derivatives and in many forms involving only change of tone in the affix we may suspect from the minimal material available that there is perhaps a pattern of retaining the tonal contour, with a shift in register—this could easily relate historically to an original difference in the class of the initials; further materials may make it possible to see more patterns in the kinds of consonantal substitution.

For the moment it seems valuable to point out that Vietnamese offers extensive internal corroboration of the hypothesis that its tones fall into two registers, one relating back to original voiceless initials, the other to original voiced initials. The evidence also seems to corroborate the notion that the development of tone contours depended not upon the initial, but presumably on original finals now lost in Vietnamese (see Haudricourt 1954). It is significant that this internal evidence clearly separates these two categories, and points to a much earlier development for the tonal contours than for the registers: the registers seem clearly to have doubled an already existent set of tones. (Note that the internal evidence supporting this view of the registers is very clear and intact, while that which tends to corroborate the tonal contour hypothesis involves skimpy and marginal material which has the earmarks of a long evolution in the modern language.) Finally, we should take particular note of the fact that the morphological pattern which clearly involves only vowels (that in which only

the vowels of bases are replaced in the reduplicative affixes) shows no deviation of tonal patterns: this tends to support the hypothesis that tonal contours (obviously not related to syllable initials) must relate to original syllable finals, rather than to the vocalic portions of the syllables.

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FOOTNOTES

[1] For more details on these formations see Thompson 1965: Chapter 7.

It is my great pleasure to acknowledge here my endebtedness to Li Fang-kuei for many hours of valuable discussion on Southeast Asian linguistics and for assistance on many particular problems.

[2] The historical implications of this anomaly are not clear. While the distinction between /ˇ/ and /~/ has been neutralized in central and southern dialects, the resulting fused tone has much in common with second-register tones (for example, vowel qualities in Saigonese are similar in syllables with this tone to those with /ˋ ./). Curiously enough, the informants who have been observed to pronounce /ˋ/ in these forms were from Saigon or neighboring areas of the south: their renditions could, of course, reflect hyperurbanization. On the other hand, /~/ is in general the least common of the tones; Emeneau (1951) calls attention to this fact, and notes in particular that in Vinh many forms written with /~/ are actually pronounced with /./. Maspero (1912) earlier called attention to the fact that in both Vietnamese and Muong dialects some tone systems (southerly ones) showed merger of /~/with /ˇ/, while others (northerly ones) had rather a single tone representing /~/ and /./.