HRÊ CONTACT AND THE ORIGINS OF THE HAROI RESTRUCTURED REGISTER SYSTEM: A CASE OF SHARED SOUND CHANGES[1]

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Introduction

Southeast Asia provides some instructive examples of the respective roles played by internal and external factors in the development of register complexes and tone systems while in contact with languages with such systems. In the case of Haroi, it provides a clear example of external language contact initially resulting in a register system, and then evolving into a restructured register system. In the Haroi developments, the internal factors, the oft-mentioned 'language-internal pressures and imbalances', have played a minor, almost insignificant role, while the external contact has provided both the impetus and the directionality for the restructuring. In this data, the role of language-internal 'imbalances' and 'pressures' is limited largely to constraining the paths by which the restructuring occurred.

This discussion of the evolution of Haroi incorporates much of my earlier work on Haroi, but is much more specific in its discussion of the precise contact situation and the precise changes involved; it also goes beyond earlier work first in recognizing that certain Haroi changes predate contact with Hrê and then in correlating the post-contact changes specifically with the changes found in Smith's (1972) reconstruction of Proto-North-Bahnaric (PNB), a correlation that requires minor reworking of some of Smith's reconstructions, particularly the interaction between vowel changes and phonation types.

Modern Haroi is a Chamic language now located in the highlands of Vietnam. It is a member of the Chamic subgroup of Western Malayo-Polynesian, a group found predominately along the coast and in the highlands of Vietnam (e.g. Haroi, Cham, Northern Roglai, and so on), but also on Hainan Island just off mainland China (Tsat), and in northern Sumatra (Acehnese). The Chamic languages have been under intense influence from Mon-Khmer languages, as is obvious from the borrowing patterns and the direction of the internal restructuring.

Pre-Haroi Chamic restructuring

The Haroi restructuring involves two stages. Long before becoming Haroi, the pre-Proto-Chamic precursor of Haroi underwent a major prosodic restructuring under the influence of the Mon-Khmer languages then found along the coast of Vietnam.

Stress and the syllable structure. The pre-Chamic Austronesian speakers who arrived on the coast of Vietnam most likely brought with them a largely disyllabic lexicon with predictable stress: in disyllabic forms stress was penultimate unless the vowel of the initial syllable was a shwa; when that was the case, the stress fell on the final syllable (cf. modern Bahasa Indonesia or Bahasa Malaysia). Under the influence of Mon-Khmer languages, this canonical preference for penultimate stress was replaced by a preference for final stress. Thus, by early proto-Chamic (PC) most, although not necessarily all, disyllables had final stress.

Register complexes and voice quality. Register complexes were also acquired sometime after the arrival on the coast of Vietnam, with the pre-Haroi voice quality component (phonation distinctions) of register consisting of breathy voiced vowels after voiced obstruents and modal (or, clear) voiced vowels after the remaining consonants. It is these voice quality distinctions on the vowels that produced the vowel splitting so distinctive of Haroi historical phonology.

The Haroi internal paths of change

Modern Haroi has what Huffman (1976) termed a restructured register system. In the case of Haroi, between PC and modern Haroi the following chain of events has occurred: (1) certain classes of initials led to distinctive phonation differences on the following vowels, that is, a register system with voice quality differences; (2) the voice quality differences on the vowels produced vowel distinctions, that is, led to a register system with vowel registers; and, (3) the voice quality distinctions that originally conditioned the vowel splits disappeared, leaving behind a large number of now unconditioned vowel distinctions; in Huffman's terms, it became a restructured register system with the proliferation of vowels associated with restructured register systems.

Voice quality and the vowel splitting patterns

The remaining changes occurred within the history of Haroi while Haroi[2] was in contact with Hrê.

Modern Haroi reflects a major realignment and splitting of the original PC vowel system. The major vehicle for these multiple reflexes is voice quality-induced vowel splitting. Under the influence of tense voice (the phonation induced by the proto-voiceless obstruents) certain monophthongs were lowered and certain diphthongs had their onsets lowered. And, under the influence of breathy voice (the phonation induced by the proto-voiced obstruents), certain monophthongs were raised and certain diphthongs had their onsets raised.

Table 1: Restructured register and Haroi vowel splitting

PC initial classes:	PC voiceless obstruents >	all other PC initials >	PC voiced obstruents >
Voice quality:	tense voice >	modal voice >	breathy voice >
Effects on vowels:	high vowels lower >	no effect >	low and mid vowels raise >
Result:	proliferation of vowels		

For monosyllabic words, the various vowel types interacted with the manner of articulation of the PC syllable-initial consonant to produce the modern vowel splitting patterns. These vowel splitting patterns are summarized in Table 2 (below).

Transparency and phonation spreading

Table 1 does not, however, account for all the vowel proliferation. In specific cases, the voice quality induced by the onset of the presyllable spreads through main-syllable sonorant onsets. As a result, it is not the onset of the main syllable but the onset of the presyllable that correlates with the voice quality of the main syllable. Haroi spreading patterns are simple: the main-syllable initial sonorants are transparent to spreading from all obstruents in the pretonic syllable.

Table 2: Consonant types, vowel classes, and vowel splitting

	voiceless obstruents > tense voice	glottalized obstruents, voiced aspirates, & sonorants	voiced obstruents > breathy voice
high vowels; *-əŋ > *-i̇ŋ	(onset) lowered; > -əŋ	unchanged	unchanged
centering diphthongs: *ua > *oa *ia > *ea	unchanged	unchanged	raised and backed: **-ia > -i̇a; **-ua- > -ua; -ʊ- ∠m, -ʔ
mid *ɛ; *ə; *ɔ; *-ɛi̯ > *-ɔ̌i	unchanged	unchanged	raised: ɩ; i̇; ʊ (u); -i̇i [(fronted]
low vowels	unchanged	unchanged	developed -i̇- onset

Thus, with a minor exception noted below, if the main syllable begins with a sonorant, the phonation class of the main syllable is determined by the initial consonant of the pretonic syllable, not the main syllable: if the pretonic syllable begins with a voiced obstruent, the main syllable vowels reflect the effects of this voiced obstruent, while if the pretonic syllable begins with a voiceless obstruent other than *s or *h, the main syllable vowels reflect this voiceless obstruent (cf. Burnham 1976; Lee 1977:88). If the main syllable onset is other than a sonorant, spreading does not occur.

Haroi external contact with Hrê and its influence

The evidence of Hrê contact is not controversial. Hrê has undergone vowel realignments quite parallel to those undergone in Haroi. The evidence can be culled, with some minor readjustments of the