Restructured Register in Haroi: Reconstructing its Historical Origins

Graham Thurgood

California State University, Fresno[1]

1.0 THE HAROI VOWEL SYSTEM

For a Chamic language, Haroi has too many vowels. As Tegenfeldt-Mundhenk and Goschnick (1977, p.1) note at the beginning of their synchronic description of Haroi phonemes, in place of the nine or ten vowel systems found elsewhere in Chamic, Haroi has some 32 vowels. Table 1 illustrates the 16 basic vowels, each of which can occur short or long. The array of Haroi vowels is also unexpectedly rich from a diachronic perspective—most proto-Chamic (= PC) basic vowels have at least two Haroi reflexes.

Table 1. *Haroi Vowels (adapted from Tegenfeldt-Mundhenk and Goschnick, 1977)*

		front		central		back	
high:	closed	i	ia	ɨ	ɨa	u	ua
	open	ɪ				ʊ	
mid		e	eə	ə		o	oa
low		ɛ		a		ɔ	

Following the distinctions Henderson used in her survey of Southeast Asian phonetic and morphological patterns (1965, p. 402), the syllables of Haroi words are

either pretonic or tonic, with pretonic referring to unstressed presyllables and tonic referring to stressed main syllables. All monosyllables are tonic, that is, stressed; and, all disyllabic words consist of a pretonic presyllable followed by a tonic main syllable, with the pretonic syllable restricted to a single onset consonant followed by schwa. In the pretonic syllables, there are no vowel contrasts. However, in the tonic main syllables are some 32 contrasting vowels: 11 simple vowels, each occurring both long and short, and 10 diphthongs. If the 10 rarely occurring nasalized vowels are also counted, the total would rise to 42, a total not all that large by comparison with Mon-Khmer languages, but quite large by Austronesian standards.

Modern Haroi has what Huffman (1976) termed a restructured register system. Under influence from Mon-Khmer languages in the area, after certain classes of initials, Haroi developed certain phonation distinctions on vowels. At this point, it was still possible to predict the phonation types on vowels from the initial consonants. However, the partial merger of voiceless and voiced obstruents, coupled with borrowings from neighboring Mon-Khmer languages, left it impossible to predict the phonation distinctions from the syllable-initial consonants. At this point Haroi had developed into a register language: that is, it had two (or more) sets of vowels distinguished by phonation type. If the vowels did not do so immediately, these vowel registers came to differ not only in phonation type, but also in vowel quality. Then, with the loss of the phonation type differences, the originally predictable vowel quality differences became phonemic—Haroi was now a restructured register system.

Even in Modern Haroi, several of the phonological subsystems retain unmistakable distributional evidence of registrally-influenced restructuring. In monosyllabic words, the vowel splitting patterns correlate directly with the manner of the PC root initial consonant. In disyllabic words, there is evidence of the spreading of phonation distinctions from the pretonic syllable to the main syllable, a pattern that is inexplicable unless pre-Haroi had earlier phonation distinctions. Further, there is a pattern of vocalic assimilation that is restricted to resonant initials, a restriction that only makes sense in the context of a register system. And, finally, there is a particular distribution to the reflexes of *s- and *h- that again only makes sense if there was an earlier register system.

The distributional evidence suggests an earlier three-way phonation distinction, with each phonation type correlated with a distinct class of PC syllable-initial consonants—the voiced obstruents, the voiceless obstruents, and a third group, consisting of the glottalized obstruents and the resonants.

2.0 THE VOWEL SPLITS

There are two wide-spread vowel splits in Haroi that correlate with classes of PC initial consonants: the lowering of certain vowels after PC voiceless stops and affricates and the raising of certain vowels after PC voiced obstruents. Note that it was not the PC initials themselves that caused the vowel movements, but rather phonation distinctions that developed much, much earlier from specific classes of PC initials. In any case, these vowel splitting patterns are pervasive in the Haroi lexicon, applying not only to the entire inherited lexicon but to many of the older borrowings as well. This pattern of vowel restructuring is of a kind only associated with register

systems, and thus, almost by itself, is strong evidence that modern Haroi is a restructured register system.

For the monosyllables, the vowel splits correlate directly with the manner of articulation of the PC syllable-initial consonant. Following the voiceless obstruents—but not the other initials, the pre-Haroi high vowels *-u and *-i and the diphthong *-ui lowered. Following the voiced obstruents, but not the other initials, the mid and low vowels rose. Following both the glottalized initials and the resonants, except for some vowel harmony, all the pre-Haroi vowels stayed in place.

For many of the disyllabic roots, there is no evidence that the pretonic syllable had any effect on the main-syllable vowel-splitting pattern. As one might expect, if the initials of both syllables agree in manner of articulation, the pretonic syllable has no effect on the main-syllable vowel-split pattern. And, even if the two initials conflict in manner, the pretonic syllable-initial may have no effect on the main-syllable vowel splits; specifically, if the main syllable began with a voiced obstruent or with a voiceless obstruent, the initial of the pretonic syllable was irrelevant to the vowel splitting. In such cases, it was not necessary to draw a distinction between monosyllabic and disyllabic roots.

2.1 Vowel Lowering after Voiceless Obstruents

Vowel lowering occurred after PC voiceless obstruents. Table 2 shows that, following the voiceless obstruents but not other initials, the pre-Haroi high vowels *-u and *-i and the high diphthong *-ui lowered. Table 3 provides specific examples.

Table 2. *Vowel Splits after Voiceless Obstruents*

proto-Chamic	pre-Haroi	voiceless obstruents	glottalized obstruents	resonants	voiced obstruents
*-i	> *-i	> -ei /__ʔ, #	-i	-i	-i, -ɪ
		> -e / other			
*-u	> *-u	> -ou < *uː	-u	-u	-u
		-ou / ___#			
		-o / other			
*-uc	> *-uiʔ	> -oiʔ	-uiʔ	---	---
*-ui	> *-ui	> -oi	---	---	-ui

Note: The distinction between -i and -ɪ is problematic on at least two counts. In my data, it only occurs after the voiced obstruents, but without any apparent distribution pattern. Then, it is possible that the distinction itself does not even exist: it may be nothing more than a phantom, produced by inaccurate guesses about hard-to-read materials.

Table 3. *Splits after Voiceless Obstruents (Examples)*

	Proto-Chamic	Haroi
'a comb'	*tasi, *kasi	cəsei
'absent'	*lukuːt	ləkouʔ
'bird'	**cim	cem
'bitter; bile'	*phiʔ	pheiʔ
'boil; cook''	*sitŭk	ʔatoʔ
'descend'	*trun	trŏn
'dry'	*thu	thoừ
'fart'	*kutuːt	kətouʔ, tout
'fire'	*ʔapui	ʔapoi
'flour'	*tupŭŋ	cəpŏŋ
'kiss; smell'	**cŭm	cŏm
'salted; salty'	*masĭn	msĕn
'sea; ocean'	*tasiʔ	cəseiʔ
'shavings'	*ʔasuːk	ʔasouʔ
'tail'	*ʔiku	ʔakoừ
'to follow'	*tui	toi (auxiliary verb)
'to pour'	*tuh	tŏh, cətŏh
'to receive'	*tuːʔ	touʔ
'white'	*pitih	pətĕh
'year'	*thun	thŏn, thon

In both Tables 2 and 3, note that it is only the two high monophthongs and the high diphthong *-ui that were lowered after a voiceless obstruent. The forms with the double asterisk are early borrowings into pre-Chamic from Mon-Khmer, but which must be reconstructed for PC. Note that these forms are quite regular with respect to their Haroi reflexes.

2.2 Vowel raising after voiced obstruents

Vowel raising occurred after voiced obstruents. Table 4 shows that, following the voiced obstruents but not other initials, the pre-Haroi mid and low vowels rose. The vowels following other initials remained in place.