Creaky and Glottalized syllables in Katuic languages: analysis of the Huffman recordings

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The project

- * In the 1970s Frank Huffman received a Guggenheim and later Ford Foundation grant to do field data collection in Thailand.
- Some of the data was used to prepare papers on classification and phonology, most went to storage in the mid 1980s.
- * The boxes containing the notebooks and cassettes remained undisturbed until they were passed to me in 2008. Subsequently the notebooks were scanned and put online <u>http://sealang.net/archives/huffman/</u>.
- * The sound files, indexed to Huffman's transcriptions will start coming online later through 2013.

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Franklin Huffman

Franklin Huffman is a leading scholar of Mon-Khmer linguistics, with a particular focus on the Cambodian language. He was born in Harrisonburg, Virginia, in 1934, and received an undergraduate degree from Bridgewater College in 1955. In 1960, he entered Cornell University, where he began his life-long interest in Mon-Khmer language issues.

An Outline of Cambodian Grammar (Huffman 67)

1967 Unpublished

Huffman's Cornell University Ph.D. thesis had a major impact on Khmer Studies. He drew on it extensively in his later work on the Cambodian language, and it was prominently cited in Madeline Ehrman's *Grammatical Sketch of Contemporary Cambodian*.

Mon-Khmer Vocabulary Lists (Huffman 71)

Comparative vocabulary list Two views of the same work, this unpublished list of some 1,000 words in each of 20 languages is cited by Huffman as early as 1971. These scans were made from a very poor-quality photocopy, which included some re-lettering and reunderlining, located in the SIL Library, Bangkok (495.9, Mon-Khmer, Austronesian General Folder, dated 1976). Each original ledger page had been photocopied in three overlapping segments; these scans (all originally 600 DPI B/W) are each in three segments.

The Huffman Notebooks

In 2007, Franklin Huffman made a generous bequest of his unpublished research notebooks to CRCL (detailed inventory). Consisting of broad comparative sets (particularly the *Comparative Vocabulary List* and *Katuic Wordlist*), detailed field notes, and notebook after notebook of painstaking analyses, the Huffman Papers provide an unmatched picture of the dedicated linguist in his native habitat -- the field!

The SEAlang Library is proud to host the Huffman Papers. We invite other scholars to consider making their invaluable first-hand data available to future generations of researchers.

Cham materials

Gathered 1983 (Fulbright-Hays Senior Research Grant): Vocabulary lists for Cham

Notebook 1

Notebook 2

Rudimentary vowel analysis of Cham Notebook 3

Mon-Khmer materials

Gathered 1970-71 (Guggenheim Foundation Fellowship Grant for Research on Mon-Khmer Languages in Thailand, Cambodia, and Laos):



- The data passed to me included cassette tapes for eight languages: Ta'oi, Kuy, Souei, Makong, Bru (Lao & Thai dialects), So, Yir (Ir, In), and Katang,
- * Lists are approximately 1300 to 1700 words each.
- * The tapes were digitized and are now being analysed with PRAAT.

The data #2

Makong, Bru (Thaliand), Katang modal versus breathy voice, with varying extent of vowel restructuring and vowel ongiding related to registers

So, Souei and have a weak *breathy* registers, difficult to hear, sometimes ambiguous register (especially diphthongs – compare with Khmer)

Ta'oi no register system but: normal versus stopped final sonorants

Bru (Laos) strong *tense* versus *breathy* registers, tense registers have creak and stopped final sonorants

Yir modal versus *creaky* registers with stopped final sonorants, but creaky register is blind to historical VOT of onsets, unlike Bru of Laos.

Today we will focus on Ir in the short time available for this talk.

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Where are the languages?

Katuic languages are spoken in 4 countries, counting reported population figures suggests more than a million speakers.



Diversity centred in Laos

The centre of genetic diversity of the Katuic languages is clearly about the Ta'oih area in Salavan Province.

This central group includes languages with creaky/ glottalized phonation.



Proto-Katuic: Sidwell 2005

- * 2005 I reconstructed proto-Katuic, but did not deal with the creak problem.
- I did not have good phonetic data for "creaky" dialects and sources I used showed confused correspondences.
- It is easy to show that Kui/Bru breathy registers are secondary, and also that the tense/lax in Pacoh comes from vowel restructuring.
- * The Huffman recordings opens the opportunity to look closer at the phonetics of Katuic creak and work on understanding origins.

A wider historical significance?

Ferlus (2012) makes the point that 3 AA groups with creak – Vietic, Katuic, Pearic – sat on a first Millennium overland trade route.

Controversially suggests a linguistic area that spread creak from Classical Chinese into Indo-China.

Is there something important about the prehistory of MSEAsia connected with this phenomenon?



Ong/Talan/Ir creak

	*-p	*-t	*-c	*-k	*-m	*-n	*-n	*-ŋ	*-y	*-r	*-1	*-w	*-s	*-h	*_
A: short V: all V: long VV:	-m,	-n?	-y?	-?	-m? - 'm -m	-n? -'n	-ŋ? - 'n	-ŋ? -'n	-'y	-'r	-'1	- 'w	-'s	- ' ħ	-v
							J.	~							
B:	- p	-t	-c	-k	m	-n	-n	-ŋ	-у	-r	-1	-w	-5	-h	-v

Ong (Ferlus 1974) and *Talan* (Diffloth 1989) have the same system of creaky codas diagrammed above, appear to be the same language.

Huffman recordings of Yir also seem to show the same language.

Ir: long vowel, nasal coda



Token 1 [kɔ:ŋ] 'pile'; v = 180ms, $\eta = 100$ ms Token 2 [kɔ:ŋ²] 'bridge'; v = 120ms, η is glottalized after 80ms

Ir: short vowel, nasal coda #1



Token 1 [kan] 'female'; v = 120ms, n = 140msToken 2 [kan[?]] 'to cut'; v = 100ms, n = 130ms

Ir: short vs. long, nasal coda #2



Token 1 $[kam^{?}]$ 'bite'; v = 100ms, m = 115ms Token 2 $[karm^{?}]$ 'husk'; v = 180ms, m = 110ms



Glottal stop or creak?

- So all examples apparently above involve a glottal stop a simple temporary cessation of voicing by closure of the glottis.
- * But sometimes it is clearly a period of creaky phonation, either of the vowel or through the continuant final.

Creaky final lateral



[6əl] 'rat'



Creaky final lateral







Creaky with –h final





- * The distribution of Katuic creak/glottalization is blind to conditioning such as voicing of consonants or vowel height.
- * The lexical items do not regularly correspond to creaky lexicon in Vietic or Pearic, do not obviously have common origins.
- * We do know of unambiguous cases of creak/glottalization emerging from breathy voice systems: Bru, Sedang.
- * If etymology does not help, we need to look to the typology of the problem to orient our thinking.

Origins? #2

- Apparently, the languages have all undergone devoicing or merger of voiced stops with implosives – why is it not observed in languages retaining the AA voiced consonant series intact? (No sign in Katu?)
- * There is a known connection with breathy voice in some cases, in all cases it is not far away.
- * Questions the phonetic analysis will investigate:
 - how do creak vs. glottal stop pattern in the data?
 - what is the relation with length?
 - how does creak pattern in loan words?

Huffman's remarks may offer clues...

Yir:

Unlike Bru, the contrasts are far more common in long than short vowels (although no <u>ii</u> appears in the data).

Ta'oih:

I cannot find any register contrast in this language. Although it has the glottalisation characteristic of Lao Bru and Jir, it is apparently optional in this language, and I can find no case of minimal contrast. A given form would be given first with glottalization and then without; either pronunciation is acceptable.

References

- * Diffloth, Gérard. 1989. Proto-Austroasiatic Creaky Voice. Mon-Khmer Studies 15:139-154.
- Ferlus, Michel. 1974d. La langue Ong, mutations consonantiques et transphonologisations. Asie du Sud-Est et Monde Insulindien 5.1: 113-121.
- * Sidwell, Paul. 2005b. The Katuic Languages: classification, reconstruction and comparative lexicon. Munich, Lincom Europa.