FROM MALAYIC TO SINITIC: THE RESTRUCTURING OF TSAT UNDER INTENSE CONTACT

Graham Thurgood  
*California State University, Chico*  
<ghthurgood@csuchico.edu>  

Fengxiang “Frank” Li  
*California State University, Chico*  
<FLi@csuchico.edu>

1 Background  
Hainan Cham [=Tsat], an Austronesian language of Hainan, is one of the clearest examples in the literature of a language restructuring under intense contact. Some two thousand years ago, traders speaking a Malayo-Chamic language set up trading posts on the coast of modern day Vietnam. Interaction and intermarriage with speakers of Bahnar led to the total restructuring of the language; under intense contact with Bahnar, it became Chamic, a language that differed strikingly from its Malayo-Chamic ancestor in phonology, morphology, lexicon, and syntax (constructions). For roughly a thousand years, this newly restructured Chamic language—the language of the Champa Federation—existed as an only moderately differentiated dialect continuum along the coastline of southern Vietnam, with a small trading post on Hainan Island.

The next major restructuring occurred after the northern capital fell to the Vietnamese in 982. This event led the Northern Cham to split into two groups: the bulk of the merchant class (including many Muslims—Huihui, in Chinese) fled to Hainan becoming the Utsat (etymologically, utsat ‘people classifier’ + Tsat, *cam ‘Cham’; note that, a thousand years ago, all Chamic speakers were more than likely called Chams), while the bulk of the non-merchant class fled to south and, in many cases, inland, becoming the Northern Roglai (etymologically, ra ‘people’+ glai ‘forest’). It is worth noting that the Northern Roglai are the Chamic group reputed to have the royal treasures from the northern capital.

The arrival of the Northern Cham traders on Hainan—an event noted in the Chinese Dynastic records—led to another complete restructuring of the language, this time under the influence of the monosyllabic and tonal Hlai languages (Tai-Kadai), the monosyllabic and tonal Min dialects of Chinese, and, more recently, under the quite intense influence of Mandarin.

2 Restructuring the Phonology  
The phonological restructuring was significant, although the initial steps were simple enough. Malayo-Chamic had penultimate stress, but like some dialects of modern Malay, when the penultimate vowel was shwa, it more than likely had final stress. Under influence from Bahnar speakers (and possibly other Mon-Khmer groups), stress switched to final position. This, combined with continued interaction with Bahnar speakers whose languages...
were sesquisyllabic (weaker presyllable + stressed final syllable; in terms of stress, iambic) led to the change from disyllabic to sesquisyllabic forms.

While the four unstressed first syllable vowels remained unchanged, the stressed main syllable vowels proliferated. The inherited vowels went from seven to nine (four monophthongs and three diphthongs), with the splitting of the two high vowels into a diphthongized stressed variant and an unstressed, undiphthongized short variant. A number of vowels were borrowed into Chamic from Bahnar sources, although usually one or more inherited forms appear to have first developed the vowel phonetically, with this outlier providing a model for the borrowing. Finally, a length distinction developed, apparently triggered initially by the lowering of the inherited shwa to a short /a/, thus providing a length contrast with the inherited /al/. Continued contact with Bahnar reduced the four-way contrast in the first syllable in many dialects of Chamic, making the structure more sesquisyllabic. (For more on vowels, see Thurgood 1998, 1999)

Another minor change was the proliferation of glottalized stops, again apparently first through changes in inherited forms with native material (see Greenberg 1970; Thurgood 1999:87-94). This opened the way for borrowings, although given the intensity of the contact, the glottalized stops most likely would have been borrowed in any case.

Last, but not least, was the development of a register system, that is, contrasting voice qualities, typically a two-way between breathy voiced vowels (< earlier voiced obstruents) in contrast with modal or clear register. This simple register distinction may be reconstructable to PC. There is some question whether this register distinction developed under Mon-Khmer/Bahnaric influence or not; our initial assessment was that it did, but others such as Sidwell (p.c.) argue that Bahnar was not registral at that point. Be that as it may, register was widespread and certainly existed in the history of Hainan Cham. Other Chamic languages have gone on to elaborate their own systems in various ways (Thurgood 1996).

The final restructuring of Hainan Cham phonology takes place after their arrival on Hainan and had come into more intense contact both with Hlai speakers and with Min speakers, that is, sometime after 982. The two salient features are the much accelerated movement from sesquisyllabic to monosyllabic and the development of tones, but there was also simplification in the vowel system.

The increased monosyllabification sometimes came about through collapsing the two syllables into one. If the medial syllable began with *-h-, the monosyllabification was completed before the arrival on Hainan, perhaps as far back as the PC stage: as nothing has been distorted by doing so, we have used Malay to represent the Malayo-Chamic stage: Malay *tahun ‘year’ cf. PC *thūn > Hainan Cham *t’un33 (note that in some dialects of Chamic the reflexes of *th- actually are pronounced as clusters, not aspirated stops). Collapse of forms with medial *-l- or *-r- into monosyllables postdates the Hainan Cham arrival on Hainan, as several Northern Roglai sources still have two syllable forms, but otherwise the developmental pattern parallels that for the medial *-h-: Malay bulan ‘moon’ cf. PC *bila:n > Hainan Cham p’ian11. Finally, where it was not possible to collapse the two syllables into one, a process with an intermediate stage still seen in Rade but completed in Hainan Cham: Malay *basah ‘wet’ cf. PC *basa: > Rade msah, Hainan Cham sa55.

The most discussed development, however, is the development of a tone system, a tone system that parallels the tone systems of the other languages of Hainan, including the
Hlai dialects and Min dialects that Hainan Cham speakers had contact with. The external motivation for the tonogenesis was contact; the internal paths are transparent: forms ending in *-h have a 55 tone (high level); forms ending in a glottal stop have a 42 falling tone if the form began with a PC voiced obstruent (which led to breathiness, which determined the tone class), but with a 24 rising tone, if it did not; and, the remaining forms have a 11 tone (low level tone), if the form began with a PC voiced obstruent (which led to breathiness, which determined the low tone class), and a 33 (mid level) tone, if it did not. The actual picture is slightly more complicated; in PC disyllabic forms with two syllables, if the initial of the first syllable was a PC voiced obstruent, the breathiness from that obstruent spread through the medial and this breathiness determined the tone class of the second syllable. (Haudricourt 1984, Maddieson and Pang 1993, Thurgood 1996)

3 Lexicon
The vocabulary was restructured first in Champa and then again on Hainan. Half of the vocabulary, including much of the core vocabulary, is Bahnaric. In fact, there are often doublets, with one form inherited, the other borrowed. Also a significant number of body part words are borrowed e.g. *cadian ‘finger’, *sua ‘dead skin’ (*kulit ‘skin’ is inherited). Other borrowings included kinship terms, adjectives, nouns, verbs, and so on. In fact, the borrowing is so massive that the language was sometimes thought to be Mon-Khmer, rather than Austronesian.

There is also the occasional borrowing of a grammatical morpheme, such as the negative imperative marker. More significant for the morphology is the iambic stress pattern; prefixes were reduced and then lost.

The arrival on Hainan led first to the borrowing of a small amount of Hlai vocabulary (and Hlai borrowed some from Chamic, most notably the word *nam ‘six’). Contact with Chinese, in contrast, led to massive lexical borrowing, including and grammatical morphemes (discussed in the next section). Zheng (1997:54) writes that, of some 2428 lexical items, roughly 20% are of Chinese origin: 21% of the nouns, 14% of the verbs, 31% of the adjectives, 31% of the classifiers, and several pronouns.

Much of the original Austronesian vocabulary is now gone, some lost to Bahnaric (Mon-Khmer) borrowings and now some to Chinese.

4 Constructions
The Hainan Cham came to Hainan speaking a language with limited grammatical morphology and with constructions marked with a grammatical morpheme plus word order. All of this is being rapidly restructured under contact with Chinese; we suspect that two aspects of this restructuring are the effects of the mass media and the results of near-universal schooling. Much of this is discussed in Thurgood and Li (2003), but it can be illustrated briefly here.

4.1 Genitives with Full Noun Phrases
In Northern Roglai all full NPs are postposed. In Hainan Cham, all genitive full NPs are preposed, as in Chinese, with the construction marked by sa\textsuperscript{33} even in the most colloquial, least-Sinicized texts.
Northern Roglai:  Nh GENNP
(1)    gaʔ sa:k  (Lee 1966:65)
    roof house
    ‘the roof of the house’
Hainan Cham (all)  GENNP saʔ^33 Nh
(2)   ...piiai^33 saʔ^33 za:ŋ^32.
    ...village GEN person
    ...cūn de rēn
    ...cūn de rēn
    ‘people of the village...’

In the most Sinicized texts, the native genitive marker saʔ^33 has been replaced by ti^3, borrowed from Chinese.

Hainan Cham (Mandarinized)  GENNP ti^33 HeadNP
(3)  tan^33 k^wa^33 ti^33 si^11 ha:u^21,
    arrive daybreak GEN after
dào tiānliáng de shìhòu ...
dào tiānliáng shìhòu, ...
    ‘At daybreak,...’

4.2 Genitives with Pronouns
Genitives with pronouns show a mixed pattern in Hainan Cham. In more colloquial texts, the pronominal genitive is simply preposed without a genitive marker; in the more Sinicized texts it tends to be preposed with a genitive marker, as in Chinese. In Chinese, some variation in the use of a genitive marker occurs, apparently correlating with the transparency of situation being coded.

Northern Roglai:  Nh GENPr
(4)    sa:k hā  (Lee 1966:65)
    house you
    ‘your house’
Hainan Cham (colloquial):  Nh GENPr
    head.hair she messy
tōufa tā luān
    ‘Her hair is messy.’
Hainan Cham (Chinese influenced, with sa^33)
    she GEN head.hair messy
tā de tōufa luān
tā de tōufa luān.