

Sociolinguistics and contact-induced language change:
Hainan Cham, Anong, and Phan Rang Cham

Graham Thurgood
California State University, Chico
gthurgood@csuchico.edu

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1.0 Introduction

One of the influences on nature and direction of linguistic change is not language-internal but language-external, that is, language contact patterns and, in many cases, language contact is not just one of the influences but is the major influence. Unfortunately, many linguistic descriptions pay only minimal attention to such sociolinguistic factors. This paper examines the sociolinguistic conditions under which three Southeast Asian languages have restructured under intense multilingual contact: Hainan Cham, a Chamic language of Hainan; Anong, a Tibeto-Burman language of Yunnan; and Phan Rang Cham, a Chamic language of southern Vietnam.

The situation in all three languages reflects what is largely but not exclusively language maintenance with restructuring occurring under intense contact. In Thomason and Kaufman (1988:50) terms, the changes reflect language borrowing under significant contact; in Ross's terms (2003) the changes reflect metatypy, that is, restructuring under intense language contact. All three are examples of restructuring and borrowing under language maintenance, but the patterns of contact differ as do the consequent changes. Primarily both Hainan Cham and Anong ceased to be the dominant languages of their primary speech communities and neither was the language used to speak to outsiders; Phan Rang Cham was both the dominant language of its speech community and a lingua franca. In addition, the number of speakers has differed significantly: Hainan Cham has between three and five thousand speakers, Anong has 62 or fewer, and Phan Rang Cham has from 35,000 to 50,000 speakers.¹

All three languages involve language maintenance but with restructuring, what Ross (2003) has been terming 'metatypy', with Ross's emphasis on extending our understanding of the social contexts involved. Ross's metatypy is subsumed under what Thomason and Kaufman (1988:50) term 'borrowing' and what Weinreich (1963 [1953]) terms 'grammatical interference'. Although other factors play a role, in these languages two factors appear to be of primary importance: whether or not the language being maintained is

1. Within recent history, however, Phan Rang Cham ceased to be a lingua franca and some time after that, under the increasing influence of Vietnamese, it ceased to be the dominant language of at least some of its speakers.

the dominant language of the speakers and whether or not the language is used with outsiders. Other factors exist, of course, but these seem to play a major role.² These three languages, however, have been picked because, despite the existence of a great deal of information about their social settings, little about their social settings is readily available. In the descriptions below, the languages are briefly identified, the restructuring involved is characterized, and then the social setting is described in as much detail as is useful.

2.0 Case 1: Hainan Cham, a Chamic language of Hainan

Hainan Cham, *tsa:n*³², is an Austronesian language located on Hainan Island. The 1982 census lists 4131 Hainan Cham people largely in the villages of Huihui and Huixin near Sanya on Hainan Island (which has recently been designated as a province), 3849 of whom still speak Hainan Cham. Virtually all the Hainan Cham speakers also speak one or more Chinese dialects, typically Taiwanese (Fukienese) or Cantonese, the languages of business, and Mandarin, the language of school.

Genetically the closest language to Hainan Cham is the Northern Roglai of Vietnam, a Chamic language (Austronesian) which it split off from common Chamic first around 982, with a second migration probably around 1471. Despite the genetic closeness, Hainan Cham is now radically different both phonologically and syntactically from N. Roglai. Phonologically, Northern Roglai is sesquisyllabic and atonal whereas Hainan Cham is monosyllabic and fully tonal. Structurally, Northern Roglai is much, much more like the other Chamic languages of Vietnam which, in turn resemble the Mon-Khmer languages of the region, while Hainan Cham, not surprisingly, is much like the Chinese dialects, Li, and Kra-dai dialects that surround it. Increasingly, all that remains of Hainan Cham is the vocabulary, with the structure being Chinese, albeit with Hainan Cham lexical items. Of interest here, Hainan Cham provides some exceptionally clear examples of contact-induced syntactic variation and change. Work has been done on genetic affiliations of Hainan Cham (Benedict 1941), the history of the Chamic languages including Hainan Cham (e.g. Thurgood 1999, 1996), and on the description of Hainan Cham itself (Ouyang and Zheng 1983; Zheng 1986, 1997) with the later work by Zheng including numerous valuable observations on the influence of Chinese on Hainan Cham, both identifying Chinese borrowings and commenting on Chinese structural influence.

2.1 Contact-induced restructuring

Changes in Hainan Cham resulting from contact with neighboring languages of Hainan are quite obvious. Phonologically, it has gone from sesquisyllabic and registral to monosyllabic and tonal. Lexically, it contains four layers of borrowings reflecting contact

2. The centrality of these considerations is not restricted to just these languages, of course. Other languages that seem to have particular relevance to this discussion include the Malay of Nonthaburi (Uri 1995), Baba Malay (E. Thurgood 1998), Jiamao (Thurgood 1992), various Malay dialects, etc.

patterns since the Hainan Cham arrival in Hainan: Hlai languages (= Li; a subgroup of Kra-dai), an early Chinese level reflecting early contact with speakers of Min dialects such as Hainanese and various Cantonese dialects, a later layer of contact with the Mandarin spoken by the army and officials, and most recently the Mandarin of the schools. The intensity of the last layer of contact looks to have initiated rapid and thorough restructuring of the language.

2.1.1 Phonology

Essentially, when the language that was to become Hainan Cham arrived on the island, it was sesquisyllabic—a weakly stressed onset syllable followed by a stressed main syllable; under the influence of the tonal languages of Hainan, it became monosyllabic and tonal—Modern Hainan Cham has a rich, 5-way tonal system. However, this restructuring of the phonology of Hainan Cham has been written about extensively elsewhere and there is no reason to go into it further here (Haudricourt 1984, Benedict 1984, Maddieson and Pang 1993, Ni 1988ab, 1990ab Thurgood 1993, 1996, 1999, Thurgood and Thurgood in press (instrumental)).

2.1.2 Lexicon

The Hainan Cham lexicon shows several discernible layers of borrowings: a Mon-Khmer layer (overwhelmingly Bahnaric (P. Sidwell, p.c.) dating back in part to Proto-Chamic (or, at least, not too long after the breakup of Proto-Chamic (c. 750 items); two layers of Chinese items, a small, earlier one looking like it was a Min dialect (possibly Mai) and a latter Mandarin layer, reflecting both earlier contact with the so-called Military language and later contact with standard Mandarin; and, bits and pieces of Li and other languages (cf. Thurgood 1999). The Chinese borrowings include the full range of borrowings: content words, classifiers, numbers (in certain contexts), prepositions, adverbs, verbs, nouns, conjunctions, and so on; they number at least 900 or so items. Most of this is discussed in both Zheng (1997) and Thurgood (1999).

2.1.3 Constructions and word order

While the phonological restructuring of Hainan Cham has been written about extensively elsewhere, its metatypic structural changes in constructions and word order are less well-known. Both are widely attested in Hainan Cham, sometimes simultaneously in a borrowed construction, one may use both a borrowed Chinese morpheme as the marker of the construction and Chinese word order. This restructuring has also been discussed elsewhere (cf. Thurgood and Li 2003). The following is a selective subset of that work.

In Thurgood and Li (2003), there is a focus on the developments that left alternate word orders, one inherited and one Sinicized, in genitives with pronouns, genitives with full noun phrases, demonstratives and head nouns, adjectives and head nouns. In all four patterns, the older pattern was the one found in the closely related Northern Roglai, while the more recently-innovated word order matched that of the unrelated Chinese.

The genitive patterns of full noun phrases as the genitive differ from those involving pronouns. In Northern Roglai, full-NP genitives are postposed, but in Hainan Cham, all full-NP genitives are preposed with the genitive construction marked by *sa*³³, even in the most colloquial, least Sinicized texts (Thurgood and Li 2003:187). The more Mandarinized variants tend to occur in more Mandarinized texts, sometimes even with borrowed Mandarin grammatical markers (at times marking the construction), and the contexts themselves display more Mandarin borrowings.

The Hainan Cham genitives with pronouns, however, show both the older postposed pattern and a newer preposed pattern. In Northern Roglai, genitives with pronouns are postposed, but in Hainan Cham both postposed and preposed genitives occur, with the preposed pronouns genitives marked by *sa*³³ even in the most colloquial, least Sinicized texts.

The demonstrative pronouns show a pattern similar to that of the genitive pronouns: in Northern Roglai demonstratives are postposed; in colloquial Hainan Cham they remain postposed, but in Chinese-influenced Hainan Cham as in Mandarin, they are preposed. In addition, in Chinese-influenced Hainan Cham, the demonstratives are often accompanied by a genitive marker, a pattern paralleling the Mandarin construction. The demonstrative-noun order is a result of Chinese contact. This word order change induced by extensive and prolonged contact with Chinese is quite systematic and pervasive throughout the grammatical system of Hainan Cham. It is found in texts collected from the same speaker by Zheng Yiqing in the 80s published in Zheng (1997). It is interesting to note that the borrowed patterns are found in texts that describe more recent phenomena, whereas the native patterns are used in texts of traditional stories.

With adjectives, the colloquial Hainan Cham retains the postposed position for adjectives found in closely related N. Roglai, while the Mandarinized Hainan Cham, like Mandarin, has preposed adjectives (Thurgood and Li 2003:191-192). Under the influence of Chinese, preposed modifiers of a head noun are often accompanied by a genitive marker.

In comparative constructions, the existence of an inherited and a contact-induced Mandarin-influenced word order is quite clear. As Zheng (1997:75) writes, the word order for the inherited pattern is quality-marker-standard (X - Adj - CM/ST), that is, the quality being compared, followed by the preposition *la:w*³² 'CM; pass, exceed,' a preposition derived from a verb (Thurgood and Li 2003:193-195). For example,

Hainan Cham (colloquial):

- (1) *naw*³³ *ma*³³ *la:w*³² *ha*³³. (Zheng 1997:75)
 he fat CM you
 'He is fatter than you.'

- (2) *lu*³³ *pyoŋ*^{ʔ32} *la:w*^{ʔ32} *ʔbo*^l*koy*^{ʔ24}. (Zheng 1997:89)
 coconut.palm big CM pomelo
 'The coconut palm is bigger than the pomelo.'
- (3) *ʔa*^l*ko*³³ *p^hay*^{ʔ43} *kh a:n*²¹ *na:y*^{ʔ32} *la:w*^{ʔ32} *ʔa*^l *th ay*^l. (Zheng 1997:75)
 elder.brother read book good CM younger.brother
 'Elder brother studies more than younger brother.'

Zheng then compares the inherited comparative pattern with the pattern associated with Mandarin influence, as is obvious not just by the word order but also by its use of the borrowed comparative marker *pi*^l 'CM; compare.'

- (4) *kaw*³³ *pi*^l *ha*³³ *tsat*²⁴*tso*³³ *kiv*³³ *sun*³³. (Zheng 1997:75)
 I CM you short three inch
 'I am three inches shorter than you.'
- (5) *mi*³³ *sa*³³ *saj*³³*huat*²⁴, *ta*^l *zay*³³ *pi*^{ʔ43} *ta*^l *zay*³³ *pu*³³ *na:y*^{ʔ32}, (Zheng 1997:2.1.4)
 we GEN life, one day CM one day NEG good
 '...our life went downhill each day.'
- (6) *zin*^l*min*^l *sa*³³ *saj*³³*huat*²⁴ *ta*^l *zay*³³ *pi*^{ʔ43} *ta*^l *zay*³³ *na:y*^{ʔ32} *a*⁰. (Zheng 1997:2.1.16)
 people GEN life one day CM one day good PART
 '...people's lives began to get better and better.'

Numerous other non-varying constructions are also heavily Chinese influenced. Most of the adverbs, prepositions, and conjunctions are borrowed from Chinese, a phenomenon not uncommon in Southeast Asian contact situations. Not just in Hainan Cham, but elsewhere as well, when this happens, it is usually the form and its syntax that it borrowed, not just the form—in short, it is a construction, not a word, that is borrowed, a construction marked by a defining morpheme.

2.2 Language contact patterns

Up from the 4131 of the 1982 census, the 1990 census shows that there are roughly 5695 Hainan Cham³ in Hainan Province, with Zheng estimating that 5000 or so of these reside in Sanya. In the '80s when Zheng and Ouyang began their work on Hainan Cham, the villages of Huihui and the Huixin were both surrounded by villages that speak several distinct dialects of Chinese and Hlai (= Li). Zheng and Ouyang characterized the Chinese

3. More precisely, the census states that there are that many *hui* 'Muslim' in the area, but since the vast majority of the Muslims in the area are Hainan Cham, the census figures provide a relatively accurate count of the Hainan Cham.

dialect spoken then by the Hainan Cham as a variety of ‘military speech’, that is, South-west Mandarin, but a variety quite distinct both from the military speech in Yacheng and the military speech of Basuo in Dongfang County and a variety that appears to be disappearing among the Cham.

The villagers in Huihui and Huixin can all speak their native language Cham fluently. The adults have quite high literacy skills in Chinese. Most of the adults, including women, speak several Chinese dialects, and some also speak Li. In old Yacheng City and its vicinity as well as for several dozen miles west of Huihui and Huixin, the so-called military speech (the official language of the southwest among the northern Chinese dialects) is spoken. In Yanglan Village to the northeast, two Min dialects, both closely related to Cantonese, are spoken: the Mai dialect and the Danzhou dialect, spoken in Haipo Village in the south, which is the same dialect as the dialect spoken in Danzhou in Dan Country in the northern part of the island. From the east to the west along the seashore, the Hainan dialect (a Taiwanese dialect) is used. In Sanya City itself one sometimes finds speakers of Mandarin Chinese and Cantonese.

In 1984, Yiqing Zheng, Kerang Tan, Guanghua Xie, and Jiquan Wang went to Yanglan Township of Sanya Municipality and did a language survey of 76 people, aged 6 or older. The results are presented along with discussion in Zheng (1999:14-18, table on page 17), which shows the languages, number of speakers, and age ranges for the 76 people surveyed.

Table 1: Age ranges, (other) languages spoken, and numbers of speakers F=fluent, C=comprehend

Ages	Cham	Mandarin		Hainanese		Mai		Li	
		F	C	F	C	F	C	F	C
7-12	5	2	2		4				
13-17	10	8	2	8	1	3	1	1	
18-45	43	37	6	42	1	18	10	6	9
46-59	11	4	5	9	1	11		6	3
60+	7	4	1	6	1	6	1	4	1
Total	76	55	16	65	8	38	12	17	13

Mandarin. Of the total number of people surveyed, 55 are proficient in Mandarin Chinese (i.e. 72%) and 16 have some comprehension of Mandarin Chinese, making it 93% who either speak or comprehend Mandarin. Those with only some comprehension of Mandarin Chinese are either children or middle-aged or older; otherwise, they would have

been learned it in school. In the village, the young people speak Cham first, learn Mandarin in school, and then pick up Hainanese. Earlier, many Cham knew the so-called military dialect, but that has been superseded by Mandarin.

The Hainan dialect of Chinese. Of the Hainan Cham surveyed, all of them except those under 14 speak the Hainan dialect (86%) or at least comprehend it (8); school children do not have much opportunity to interact with Hainanese speakers.

The Mai dialect. Of the 76 people surveyed, 38 speak Mai with 12 more having some comprehension, amounting to 65% of the total surveyed. This high percentage is because about a kilometer away from Huihui village lies a high school in Yanglan village, where many of the Cham went to high school and where many of the students speak Mai. In addition, the Mai dialect is commonly used in market places. As a result, many of those who are 16 or older, male or female, know some Mai.

The Li dialects. Some 39% of the Cham, most of them older, know some Li. These people all have extensive interactions with the Li people.

Others. In addition to the these languages included in the table, some of the Cham speakers also speak the Danzhou dialect (8)—a Cantonese dialect, Cantonese (4), the Military dialect (2), and Japanese (3). Specific circumstances led to the learning of these languages; they are not in typical daily use.

What language the Cham speakers use is situationally determined. In Huihui and Huixin villages, Cham is used in all of the activities. At the elementary school, Mandarin is used in the classroom, but when explaining texts, Cham is used. When intellectuals and cadres interact with visitors from the mainland, Mandarin Chinese is used for the most part. When discussing Cham among themselves but in front of me, Mandarin was used by all six of our informants, but this might be in part because it was the one language common to those in the room. With some frequency, elicitation produced a Mandarin form (or, much less commonly a Hainanese form), leading to a discussion of what the Cham form was. The general public can also use Mandarin Chinese to communicate with mainlanders. When they interact with the Hainan dialect speakers from within Hainan Province, they use the Hainan dialect, though youngsters generally use Mandarin Chinese. Not many can communicate in Li when interacting with the Li, so the Hainan dialect or Mandarin is often used. In the market place and within the Sanya Municipality, the Cham speakers use Cham among themselves, and when they interact with speakers of other languages, they mostly use the Hainan dialect. However, in the market places near the government seat of Yanglan Township, they either use the Hainan dialect or the Mai dialect.

While Hainan Cham is still spoken as in the village, even between two Hainan Cham speakers the growing dominance of Chinese is fairly obvious. For an increasing range of topics, the Hainan Cham feel more comfortable in Mandarin.

3.0 Case 2: Anong, a Tibeto-Burman language of Yunnan

Anong, an autonym, is a Tibeto-Burman language closely related both to Trung [tǎrùŋ] (Chinese exonym: Dulong; population c. 6000 (LaPolla 2000:282-283)) and to Rawang, with the details of higher-level relationships remaining to be sorted out. The Anong people live surrounded by Lisu, Chinese, and Bai speakers. In fact, the majority of the Anong people no longer speak Anong, most having shifted either to Lisu or Chinese, with a few having shifted to Bai. Ethnic Anong who still speak Anong are now found primarily in the villages, such as Muguja, Kashi, Muleng, Lagagong, Aniqia, and Lahaigong, which belong to the Muguja Township of Shangpa Town in Fugong County.

3.1 Contact-induced restructuring

Two things set the Anong data apart: a precise time frame and clear, richly attested diachronic data, albeit data that is at times difficult to work with.

3.1.1 Phonology

In Sun's 1960 recordings, there were initial pre-glottalized stops; by 1999, except for a few of the oldest speakers, these had disappeared, sometimes being replaced by tense vowels. The tense vowels, a feature of Lisu, had been absent in 1960; by 1983 there was tenseness in vowel and nasal codas but tenseness did not seem to have any grammatical functions; however, by 1999 the minimal pairs involving tense versus non-tense vowels had not only fully come into being, but tenseness was present as the contrast in minimal pairs and Sun noted that it marked grammatical meaning. Clusters with retroflex consonants have been simplified; speakers under 50 no longer have them; simple retroflexes are similarly disappearing. New free variation has been introduced; the alveolar and palatal affricate series, once distinct, now vary freely. In short, various phonological restructuring has occurred, most of it in the direction of assimilation to Lisu.

3.1.2 Lexicon

In a paper written in 1999, Sun notes (1999a:354) that Anong frequently uses Lisu words in place of common Anong words. He further comments that the numeral system has begun to disappear; some fluent speakers could count to a hundred, but the less fluent only used Anong for numbers up to ten, using Lisu otherwise. Sun (1999a:354) reports that of 2,600 words recorded in 1960, some 8% were from Lisu and another 5% were from Chinese; in 1999, the Lisu loans constituted around 17%, while the Chinese were around 8%. In Thurgood and Li (in press), a long list of Lisu loans is given, established on the basis of various sound correspondences; since our own list was more restricted than Sun's, the considerable size of the loan component was striking.

3.1.3 Constructions and word order

Many of the Anong linguistic subsystems have been totally restructured in the last forty years. Sun's earliest recorded Anong displayed a rich system of affixes. However, since that time, some of the categories only occur in elderly speakers, having largely disappeared in the speech of the only slightly younger.

Other systems have restructured just as dramatically. In the verbal agreement system, the older subject-object-number marking has been almost completely lost. In the nominal morphology, the case marking particle system has largely been lost by the speakers under 50: the *mi*⁵³ instrumental marker is still used, but the causative marker *mi*⁵³ is no longer used, the recipient marker *ba*³¹ is no longer used, the locative marker *than*⁵³ is only sometimes used, and the possessive marker *kh a*³¹ is no longer used.

Lisu has an influence, but work remains to be done in that area. One example is the borrowed Lisu agentive suffix *su*⁵⁵, which now looks to be at least semi-productive.

The causative system has gone from productive and morphologically transparent to lexical, that is, causatives are now learned one-by-one. The older system of forty years ago would be quite familiar to students of Tibeto-Burman languages: it marked most causative forms by prefixing *su*⁵⁵- (or *ci*³¹- before palatals) to the basic root. The newer contemporary system, recorded in 1999, is much messier: the older, easily-segmentable prefix + root combinations have undergone considerable assimilation, with the former prefixes fusing with the initial of the root; this has resulted in a system in which the simplex forms (i.e., non-causative forms) are distinguished from the causative forms by differences in the root-initial consonants. While the basic outlines of these phonetic changes have been known to Tibeto-Burmanists for some time (e.g., Matisoff 1972; Thurgood 1977, 1981), some of the phonetic details are nonetheless of interest. In a recent paper, Sun (1999a:355-356) notes that in 1983, the Anong used by an older speaker (a 70 year old) double marked causatives, using both the inherited Proto-Tibeto-Burman (PTB) prefix and transparently-related changes in the verb roots; thus, the older system morphological system had been augmented by subsequent phonological assimilation. However, doing additional fieldwork in 1999, just sixteen years later, Sun's reports (1999a:355-356) that the causative system used by his new language assistant did not include many of the forms used by the 1983 language assistant. He states that, while some speakers claimed to recognize the older forms, others did not; some suggested that the system had undergone simplification. Table 1 exemplifies one of the differences between the oldest, most conservative speakers and others.

Table 1: Anong causatives (older vs. middle-aged speakers)

verb	causatives (older speakers)	causatives (middle-aged speakers)	gloss
<i>dzurj</i> ⁵⁵	<i>ci</i> ³¹ <i>dzurj</i> ⁵⁵	<i>ctzurj</i> ⁵⁵ > <i>tc^hzurj</i> ⁵⁵	be broken
<i>ni</i> ⁵⁵	<i>ci</i> ³¹ <i>ni</i> ⁵⁵	<i>ni</i> ⁵⁵	know
<i>ga</i> ⁵⁵	<i>su</i> ⁵⁵ <i>ga</i> ⁵⁵	<i>kh a</i> ⁵⁵	be broken
<i>ba</i> ⁵⁵ <i>a</i> ³¹	<i>su</i> ³¹ <i>ba</i> ⁵⁵ <i>a</i> ³¹	<i>ph a</i> ⁵⁵ <i>a</i> ³¹	be white

Source: Sun (1999b:195); transcription slightly modified.

The forms correlate with recent changes in the patterns of language use. The older layer of Anong causatives are still seen in the causatives of closely related Trung: Table 2 shows the older causatives attested in older Anong speakers resemble the causatives of Trung, while the newer causatives used by middle-aged (and younger) speakers are now quite distinct.

Table 2: Modern Trung (Dulong) causatives vs. older Anong causatives

Trung (Dulong)		Anong			
verb	causative	verb	older causative	newer causative	
<i>lup</i> ⁵⁵	<i>tu</i> ³¹ <i>lup</i> ⁵⁵	<i>lim</i> ⁵⁵	<i>ci</i> ³¹ <i>lim</i> ⁵⁵	<i>ci</i> <i>m</i> ⁵⁵	<i>bury</i>
<i>dum</i> ⁵⁵	<i>su</i> ⁵⁵ <i>dum</i> ⁵⁵	<i>dim</i> ⁵⁵	<i>ci</i> ³¹ <i>dim</i> ⁵⁵	<i>ctim</i> ⁵⁵ > <i>th im</i> ⁵⁵	<i>collapse</i>
<i>ɲu</i> ⁵³	<i>su</i> ³¹ <i>ɲu</i> ⁵³	<i>ɲu</i> ⁵⁵	<i>su</i> ³¹ <i>ɲu</i> ⁵⁵	<i>ɲu</i> ⁵⁵	<i>cry</i>

Source: Sun (1999b:194-195)

The table is to illustrate the fact that, although both languages were extremely similar just 40 years ago, while Trung has undergone only moderate change since then, Anong has completely restructured.

3.2 Language contact patterns

In short, although both languages were extremely similar just 40 years ago, while Trung has undergone only moderate change since then, Anong has completely restructured. While the earlier structure of Anong of course places some constraints on the restructuring of the Anong causative, the primary sources of the changes are in the social setting. One obvious indication of this comes from the above comparison of Anong causatives with the causatives of closely related Trung, a language which was structurally similar to Anong forty years ago and which has undergone only modest change in the last forty years.

Speakers, numbers, and fluency. The apparent similarity between the population figures for Anong (c. 6500) and those for Trung (c. 6000) is deceptive: the numbers reflect ethnic affiliation more than the number of speakers. In fact, it is here where one of the more striking differences between the Anong and Trung can be seen. Trung is still a viable language, it has younger speakers, and is used for a range of purposes. Anong is a language on the edge of extinction, under intense pressure from Lisu as a local language and from Chinese as a language of wider communication, with only 400 or so remaining Anong speakers, and of these, only roughly 12% are fluent.

In a 1999 paper, Sun (1999a:353-355) reports his survey of some 104 people from 25 households—roughly a quarter of all the Anong speakers, located in Mugujia village, the area where Anong is the most concentrated. The survey checked their fluency in Anong, in Lisu, and in Chinese, in terms of four levels of linguistic competence, here called Levels A, B, C, and D. These levels are described below, as they apply to Anong.

Level A-Fluent: Level A speakers are able to engage in everyday conversation as well as describe food production and daily living and are able to use over 3,000 basic items of vocabulary.

Level B-Semi-fluent: Level B speakers can engage in everyday conversation, but not very fluently and able to use around 1,000 basic words. Level B speakers are better in their second language than in Anong.

Level C-Limited: Level C speakers are only able to use daily greetings or a few everyday phrases and, thus, are unable to use Anong to express themselves adequately and completely. Their Anong frequently includes words from their second language. They only use a limited number of Anong vocabulary items, with much of the basic vocabulary missing. Their pronunciation of Anong is inaccurate. In contrast, they are very fluent in their second language.

Level D-Non-speakers: Level D respondents have essentially lost their mother tongue, although some can still understand a little, but they can no longer speak their mother tongue. In fact, some have completely lost their Anong.

Table 3 puts Sun's (1999a:353-355) numbers together in table form. Examination of the Anong column shows some 62 individuals, roughly 60%, are still fluent in Anong (using the criteria above). However, Sun (1999a:354) writes, outside of Mugujia village, there are virtually no fluent Anong speakers left! Essentially, these 62 are the last fluent speakers. Sun also found some 19 semi-fluent speakers in the Mugujia sample and outside of the Mugujia area there are semi-fluent speakers left, in his estimation roughly 280 (1999a:254). In sum, as of 1999 there were roughly 62 fluent Anong speakers and perhaps a little over three hundred semi-fluent speakers remaining.

Table 3: Fluency rates in Anong, Lisu, and Chinese

Proficiency	Anong		Lisu		Chinese	
	#	%	#	%	#	%
A. Fluent	62	59.6%	96	93%	13	12.5%
B. Semi-fluent	19	18.2%	8	7.7%	17	16.3%
C. Limited	14	13.4%	0	0.0%	19	18.3%

D. Non-speakers	7	8.8%	0	0.0%	55	52.6%
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However, as Sun (1999a:353-355) observes, a closer look at the 62 fluent speakers of the 104 Anong speakers in Muguja village shows how close the language is to being lost. As the next column indicates, of the 104 Anong surveyed (including the 62 fluent speakers), 96 of them—all but 8—are fluent in Lisu. All 8 of those not fluent in Lisu were elderly people who rarely went out. Thus, as Sun notes, that even in the village where the highest concentration of Anong speakers was found, the proficiency and level in Lisu has already surpassed that of Anong. Further, as he notes, almost all the Anong, including most of the fluent speakers, can speak Lisu and most can speak it better than Anong.

The situation with Chinese, the final column, seems quite different. While Sun's numbers show some 30% of the Anong as fluent or semi-fluent in Chinese, typically it is a local dialect different both from the Kunming dialect and from Putonghua. Those who were fluent in Chinese were almost all middle-aged or younger and had lower secondary school level educations or higher and for the most part those who were semi-fluent frequently had either a primary school education or had at least attended school. As a consequence of this schooling, fluent and semi-fluent speakers of Chinese had more opportunities for interaction outside the village.

Usage patterns. The usage patterns correlate with the loss of frequency. Sun (1999a:354) writes that Muguja village has both the highest concentration of Anong speakers and, not surprisingly, the highest usage of Anong. As Sun observed, in Muguja village it was possible to hear conversations in Anong, although even here most people spoke in Lisu.

Outside of Muguja village Anong usage falls off sharply. Although Anong speakers also live in other villages around Muguja—Kashi, Muleng, Lagagong, Aniqia, and Lahaigon, in these areas the Anong often are less concentrated, living interspersed with concentrations of Lisu or with people of other nationalities. In these areas, Sun (1999a:354) notes, there are essentially no remaining Anong speakers who are fully fluent. In these areas, Sun (1999a:354) counted some 280 semi-fluent speakers, with most being elderly people in their 60s or 70s. Among the slightly younger speakers, the Anong in their 50s or 60s, only a handful could still speak their mother tongue even at the semi-fluent level. Sun (1999a:354) attributes this to the lack of opportunity to use Anong in their daily lives; most, he notes, only used a few sentences and then only use these when speaking to the elderly. In these areas, Lisu was the language used for common communication.

Demographics, usage, and restricted access. As Sun suggests (1999a:354), not only is Anong with its relatively complicated phonological and grammatical systems difficult to learn, but the patterns of interaction severely restrict usage. The Anong have interacted with various ethnic groups in the Nujiang River area, but especially with the Lisu. In conversations, unless all individuals spoke Anong fluently, the common language would, of course, have been Lisu. In the case of intermarriage where an Anong had married some-

one from another group, the same pattern held: even though only one member of the family did not speak Anong, the common language was Lisu, with the non-Anong only very rarely learning some Anong. Sun (1999a:354) observed that even in the rare villages where the Anong were the majority, few non-Anong learned Anong.

Sun (1999a:354) illustrates the typical language in the case of intermarriage by describing the patterns of his Anong language assistant. His assistant was fluent in Anong, but his wife was Lisu. They had been married 30 years, but even after 30 years, she spoke only a little Anong and even that rarely. Lisu was the common language in the family: the three daughters and the son, like the mother, only understood a little Anong, and none could speak it. Occasionally, the father would use a little Anong at home, but they would still answer in Lisu.

In sum, Anong tends to be restricted to situations where all participants speak it fluently: the default language is virtually always going to be Lisu. Thus, only fluent Anong speakers tend to have access to Anong; those less fluent in Anong only have very restricted access to the language.

Conclusions and speculation. One mechanism involved in the loss of Anong is simple replacement, generally by Lisu, a development undoubtedly exasperated by limited usage and limited access to Anong. Anong forms that are used infrequently are more easily forgotten; Lisu forms that are used frequently are more readily retrieved. All Anong speakers, even the most fluent, probably show some evidence of simple replacement; Sun cites the example of one of his best language assistants substituting the Anong form for 'very' with its Lisu equivalent. With less frequent usage, replacement should go up; with less proficiency, replacement should go up.

Other more minor factors also come into play. Certainly, although more marginal, one factor is attitudinal. Sun (1999a) notes that many of the best educated Anong are relatively indifferent to the impending loss of Anong, expressing the view that not only is this the general trend but also noting that they realize that there is little they could do about it in any case. It is worth noting that, while Anong is their first language, the language they are losing is neither their only language, nor their most useful language, nor even the language that they are most fluent in; almost all Anong speak Lisu better than Anong and use it for more purposes.

The shift to Lisu was well underway before the founding of the People's Republic of China in 1949; in fact, it must have been well underway at the time of Barnard's 1934 (1934:89) grammatical sketch and glossary of closely related Rawang which lists as the Rawang term for Lisu the word Anung. However, it is only in the last 30 years or so that the decline in the numbers of speakers and the increasingly restrictive usage patterns have produced the massive restructuring of Anong, not just in its causatives, but in all its systems.

Thus, it is obvious that the changes are a response to language contact and subsequent changes in usage patterns, however, to say this is to point out a correlation rather

than to explain anything. Nor is it much of an analysis to invoke 'assimilation to Lisu' as an explanation. Where Lisu differentiates causative and non-causatives, it is with suppletion. If so, what would Anong speakers be said to be assimilating from Lisu? Certainly not the specific words. Certainly not the process.

It is, however, true that Lisu is exerting an influence on the phonology of Anong, but while Lisu influence might account for the directionality of the phonological changes, it does little to account for the pace and timing of the restructuring. The bulk of the explanation for the rapidity of the changes lies outside of the phonology of Lisu.

It is clear that the older generation of Anong speakers is the last generation to successfully learn Anong. The middle-aged and younger speakers have not done so. And, as already observed, this failure to learn Anong correlates with the rapid restructuring and with the increasingly restricted usage and access. In this sense, access to Anong has become too restricted to be successfully passed on; the middle-aged and the younger Anong do not seem to be learning it.

None of this seems controversial. However, none of this directly accounts for the rapid restructuring either. The key to understanding lies in the nature and direction of the restructuring. Our examination of the Anong causative restructuring reveal a series of changes that, although they occurred unusually rapidly, were quite natural. For instance, all of the following developments are fairly natural changes: a prefixal *su*³¹- losing its unstressed vowel, fusing with the following root, devoicing a root initial stop or nasal, and then dropping.

In fact, the changes look to natural changes—the only thing requiring an explanation is the rapidity with which they took place. Thus, returning to a suggestion made earlier in this paper, these changes are so natural, it is necessary to explain not only why the changes have not occurred elsewhere, for instance, in the strikingly similar Trung data, but also why they haven't occurred as rapidly.

The answer is that normal transmission undoes both phonetic and morphological changes in children and, at least, in part in adult learners. Young and old learners regularly 'repair' their own phonetically motivated changes to make them conform to what they perceive as more desirable pronunciations. The repairs in morphology are a little more sophisticated but produce a similar result. Initially, the learner seems to simply acquire morphology as a series of individual tokens. At a later stage, learners often recognize a morphological pattern, and, in part restructure earlier forms on the basis of their generalizations—in the case of causatives by putting the prefix before the basic root. Later, some phonetically motivated changes that occurred quite naturally in the token stage of acquisition are at least partially undone when the learner recognizes the morphological pattern, in the case of causatives putting the prefix before the basic root—thus, connecting in some sense the unprefixated root with the prefixed root. This second stage, generalizing the pattern, has a tendency to undo the phonetic effect of the prefix on the root initial: the causative is reanalyzed each generation as a prefix plus the root. In Anong, however, the

younger learners of Anong seem to have never gotten beyond the stage of learning individual tokens—essentially because they lacked sufficient access to language. The result was the connection between the basic root and the causative root was lost—along with the constraint that that connection imposed on phonetic and morphological restructuring. The fact that Lisu uses a lexical approach too probably played a minor role, but the major impetus to restructuring came from increasingly restricted access to the language—a restriction that made the morphological patterns too rare and thus too obscure to learn. The phonetic tendencies explain how the changes took place; the loss of sufficient access to the language explains why the changes occurred in the last 40 years.

Summary

The overwhelmingly majority of the Anong have switched to Lisu, leaving only a handful of individuals still speaking Anong. Even among those fluent in Anong, their Lisu is more fluent than their Anong (with the exception of several elderly, essentially house-bound Anong). Thus, Anong is no longer a dominant language, and it is certainly not a language used with outsiders.

4.0 Case 3: Phan Rang Cham,⁴ a Chamic language of Vietnam

Cham has been spoken on the coast of Vietnam for over two thousand years and in parts of the highlands of Vietnam for nearly as long; nonetheless, Cham is strikingly lacking in complexity. Structurally, it resembles an early creole, rather than a language with a continuous history dating back some two thousand years. Why? Even though it is clear that the language was under intense contact with Mon-Khmer (overwhelmingly Bahnaric) languages of Vietnam, nothing in the data or in the historical records suggests it ever underwent pidginization. There is no evidence for attributing the transparency of the modern syntax to some sort of pidgin-to-creole scenario. The various pieces of archaic structure in the more formal registers would present a problem—in its very earliest stages Cham grammar was more complex than it is now.

Instead, the transparent nature of Cham syntax is the result of two thousand years of unending, unrelenting language contact. The historical evidence, both linguistic and non-linguistic alike, makes it clear (Thurgood 1999) that wave after wave of Mon-Khmer speaking peoples not only learned Cham as a second language, but many of these subsequently shifted to Cham. Until quite recently when the Cham increasingly began to learn Vietnamese, Cham was the dominant language in the region and unquestionably the dominant language for most of the Cham speakers, often serving not just as a language of the

4. Phan Rang Cham, or Eastern Cham, is a direct descendant of Proto-Chamic, having split off from Western Cham perhaps five or six hundred years ago. In the last 50 years or so, it has come under increasing influence from Vietnamese. This paper, however, focuses on the changes before this time.

home but also as a lingua franca. Given the function as a lingua franca, the possibility of a register for non-native speakers of Cham exists, but there is no obvious evidence of this in the older historical records.⁵ In addition, it is clear from some of the historical records that bilingualism was common among the Cham, with speakers often learning various Mon-Khmer languages. This paper argues that the structures of modern Chamic are a natural outgrowth of the patterns of language contact; more specifically, because for roughly two thousand years, Cham was spoken in a situation in which Cham was spoken as a second language and in which language shift was a central part of the linguistic landscape, the relative learnability of various structures became one of the most influential determinants of the direction of language change (cf. Thurgood 2000).

4.1 Contact-induced restructuring

4.1.1 Phonology and the lexicon. The morphemes of Cham are never less than a syllable and, aside from the possibility that the causative marking *pa-* is still marginally productive, the morphemes are overwhelmingly separate words.

4.1.2 The lexicon

The lexicon shows the ancient influence of contact with Bahnaric Mon-Khmer languages and much more recent contact with Vietnamese.

4.1.3 Constructions and word order

Both the constructions and the word order are typical of early creoles, the early stages of first language acquisition, early grammaticalization, and universal patterns.

4.1.3.1 The constructions

Aspectual marking, no tense. Cham lacks tense, but optionally indicates the basic aspectual distinctions, using the forms *tɔɔʔ* 'live; stay' > 'still' > 'PROGRESSIVE' and *plə̀h* 'finish' > 'PERFECTIVE' to distinguish ongoing states and activities from completed ones, not just on the verbal level (in the verb morphology) but also on the clausal level (at the onset of a clause).

Other periphrastic constructions. Other Cham periphrastic constructions include a causative from 'make,' a permissive from 'give', a quotative from 'say', a reflexive from 'body,' recipient, experiencer, and change-of-state marking from 'get; receive', locative nouns from nouns meaning 'top', 'bottom', and 'back', and prepositions that mark only the most basic relationships, e.g., 'INSTRUMENTAL' and 'BENEFACTIVE'.

4.1.3.2 Word order

Cham has a rigid SVO word order (WO). There is little morphology: the subject and the object are marked configurationally, but indirect objects must be marked with a preposition. Except where subject deletion serves to mark cohesion between clauses, sub-

5. The argument presented here does not rest crucially on the existence of a foreigner register used with non-native speakers. Its existence, however, seems likely in light of the bilingualism common among the Cham, the fact that many of the Cham were traders, and the existence of language shift, that is, speakers some of whom undoubtedly spoke a simplified version of Cham.

jects are retained. As with early first language acquisition and with many creoles, the genitives are marked by simple juxtaposition, with the head noun first and the genitive following. Most other sentence types are minimally altered variants of the declarative clause, generally modified by sentential particles at the periphery of the clause, thus keeping the basic clause configuration unaltered. As might be expected, questions follow the same word order as the corresponding declarative sentences. Questions answerable with a yes or no typically are signaled with nothing more than a rise in intonation on the last element in the sentence (Doris Blood 1977:42). Occasionally a yes/no question is signaled by the sentence-final particle *laay* 'Q'. Content questions, like yes/no questions, use the same word order as the corresponding declarative sentences, but with the question word inserted in place of the questioned item. Where explicitly marked, modality is indicated by an abundance of sentence final particles. In colloquial speech, negation is simply shown by the sentence-final o 'NEG'.

Interclausal cohesion is accomplished by heavy reliance on iconic juxtaposition augmented at times by the deletion of the coreferential subject to show cohesion between two clauses. Clause-final particles may also be used to mark interclausal cohesion. Transparency is further attained by a strong preference for iconic sequencing.

Only subject relative clauses occur, and even these are restricted in the materials examined to designation of locations, times, and the like. As with clausal cohesion subject relative clauses delete the coreferential subject. It is worth noting that the closely related Western Cham has a relative clause construction with its own relative clause marker *kung*.

An explicit purpose clause exists which is marked with the grammaticalized *pyàh* 'in order to', where the purpose clause might not be readily inferable from context. In either case, if the purpose clause has an explicit subject, as with wish-clauses, the subject is marked with the preposition *ka* 'for; BENEFACTIVE'.

Serial verb constructions exist, involving the deletion of coreferential subjects and the juxtapositions are overwhelmingly, but not exclusively, iconic.

The discourse tools are relatively sparse. Cham tends to maintain its rigid SVO order. With the emphasis on basic comprehension and basic processing, a minimum of special syntactic machinery is devoted to discourse concerns: in fact, Cham seems to have only those discourse pragmatic markers common to almost all languages: topicalization, left dislocation, and a presentative. The presentative clauses (or, existential clauses) introduce new entities onto the main stage. In the main verb uses, the subject appears in normal position before the verb *hu* 'have; get'. Left-dislocation, as the terms indicates, involves movement of an object to the beginning of the clause.

Most of the participant tracking in the text is done by indexicals, which, as mentioned earlier, index personal and social identity, and by classifiers, which index objects and classes of objects. Much more rarely pronouns are used but in the texts typically only when no possibility of ambiguity exists, usually because just a single major participant is being tracked.

4.2 Language contact patterns

Within recent history, Phan Rang Cham has come under intense pressure from Vietnamese, the dominant language of the area. However, in earlier times, a Cham dialect was the dominant language of numerous Cham speakers and an important lingua franca in the region. The earliest Cham dates back roughly two thousand years, with the influence of Mon-Khmer obvious in the phonology e.g the addition of implosives and vowel length and in the lexicon, at least 700 borrowings, including core vocabulary. However, these developments seem to date back to a quite early stage in Chamic as they reconstruct quite readily. Although my own beliefs about language change suggest that the history of Chamic must be more complicated, essentially Cham quickly established itself as a lingua franca for the Champa kingdom and remained a lingua franca for close to two millenia. For many, many speakers it was their dominant language and for many others it was an important second language. Unquestionably, many non-Cham speakers switched to Cham.

What marks Phan Rang Cham is its semantic transparency, its relative lack of morphological marking, and its high dependence on iconicity. The source morphemes still exist as such and the path of development is transparent, and, thus, easily learnable.

Phan Rang Cham is now a mainland Austronesian language that is distinctly different from the Austronesian languages left behind in the islands. A little of this is simply due to the normal course of historical change but most of the changes are the result of intense, long-term contact with the Mon-Khmer languages. The changes are intensified by the role that Cham played as a lingua franca for a better part of its long history. While much remains to be learned about Cham, we already see quite clearly the imprints of extended contact on the way Cham packages propositional content.

Conversely, it is also possible to tell by a careful examination of Cham and its history that it has undergone extensive contact by careful examination of the structures involved. On the one hand, many of the Cham structures are what might be termed highly learnable; on the other hand, many of the markers themselves are quite old. In the case of new constructions not only are the origins of the structure often readily apparent but also the central words themselves still co-exist as independent morphemes. The combination of new, more transparent grammar and older, more opaque grammar argues for long term contact, not prior creolization of a pidgin as part of its language history.

Thus, in Cham as in many of the world's languages, it can be argued that the 'early' or 'creolized' flavor to the structure of Modern Cham is an outgrowth of the natural advantage that the more learnable structures have in an intensely multilingual setting. A major contributing factor is the widespread tendency to reduce two (or more) languages to one whenever possible, often leaving the phonology, the syntax, and the semantics strikingly parallel, with the blatantly-distinguishable lexicon remaining to keep the various contribu-

tors to the amalgamation from realizing how similar the once distinct languages have become (Gumperz and Wilson 1971, Tadmor 1995, Thomason 1996, Thomason and Kaufman 1998). Thus, the survival advantages given by increased learnability, coupled with the related drive of the structures of the languages in contact to be similar, are by themselves sufficient to bring about the appearance of 'early' creolization out of long-term, intense language contact.

In short, it is argued that the modern Chamic structures are a natural outgrowth of a linguistic situation in which language acquisition and language shift are such a central part of the linguistic landscape that learnability becomes one of the most dominant determinant of the direction of language change.

It is further argued that it is possible, in the case of Cham, to tell that it has undergone extensive contact by careful examination of its structures.

5.0 Conclusions

None of this is restricted to these languages, of course. However, for these languages, the primary determinants of the paths of change are social factors—patterns of bilingualism, language dominance, language use, and, probably, population size. For Hainan Cham, although the emergence of Chinese as the dominant language seems to have set the changes in motion, the maintenance of Hainan Cham as the language of the village and, in many cases, of the home has kept Hainan Cham from restructuring more than it has. The restructuring has been further promoted by the fact that Hainan Cham is never used for wider communication, but instead some other language is used to speak to outsiders, usually some sort of Chinese.

For Anong, the switch to Lisu as the dominant language has led to the total restructuring of Anong—only a handful of the oldest speakers, those with less access to Lisu and less proficiency in it, have managed to avoid major restructuring. Here, the restructuring of Anong has been promoted both by the prominence of Lisu and by the fact that Anong is only used to talk to other Anong speakers, and, then, usually only to fluent Anong speakers. For both Hainan Cham and Anong, however, a major factor behind the patterns of restructuring is the increased dominance of what is now the target language.

For Phan Rang Cham the story is different. Until the emergence of Vietnamese as the dominant language in the region, Phan Rang Cham was the dominant language, the lingua franca for much of the area. Speakers of Bahnaric languages clearly shifted to Cham; one suspects that Cham speakers modified their speech when talking to less fluent, non-native speakers. The result was a more learnable, more transparent Cham—what one finds in modern Phan Rang Cham.

The two primary considerations, not ignoring other factors, are whether the language being maintained is the dominant language of the users and whether the language

being maintained is used with outsiders. Other factors, including such things as population size, play a role, but minor ones.

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Abbreviations

GEN	genitive
NEG	negative
SG	singular
PERF	perfective
PAST	past
PRES	present
CLF	classifier

References

- Barnard, J.T.O. 1934. *A handbook of the Rawang dialect of the Nung language, containing a grammar of the language, colloquial exercises and a vocabulary with an appendix of Nung manners and customs*. Rangoon: Superintendent, Government Printing and Stationery, Burma.
- Baumgartner, Neil. 1998. A grammar sketch of Western (Cambodian) Cham. *Papers in Southeast Asian Linguistics No. 15: Further Chamic Studies*. Pacific Linguistics. Series A-89. Pp. 1-20.
- Benedict, Paul K. 1941. A Cham colony on the island of Hainan. *Harvard Journal of Asiatic Studies* 4:129-34.
- _____. 1984. Austro-Tai parallel: A tonal Cham colony on Hainan. *Computational Analyses of Asian & African Languages* 22:83-86.

- Blood, Doris Walker. 1977. Clause and sentence final particles in Cham. *Papers in South East Asian Linguistics No. 4: Chamic Studies*. Edited by David Thomas, Ernest W. Lee, and Nguyen Dang Liem. Pacific Linguistics Series A, No. 48:39-51.
- Grace, George. 1996. Regularity of change in what? In: Mark Durie and Malcolm Ross, eds., *The comparative method reviewed: regularity and irregularity in language change*, 157-179. Cambridge: Cambridge University Press.
- _____. 1981. *An essay on language*. Hornbeam Press, Columbia, S.C.
- Gumperz, John J. and Robert Wilson. 1971. Convergence and creolization: a case from the Indo-Aryan/Dravidian border. In Dell Hymes (ed.), *Pidginization and creolization of language*. Cambridge University Press, pp. 151-168.
- Haudricourt, André-G. 1954. De l'origine des tons vietnamien. *Journal Asiatique* 242:69-82.
- _____. 1984. Tones of some languages in Hainan. *Minzu Yuwen* 4:17-25. Also published in *Bulletin de la Société de Linguistique de Paris* as "La tonologie des langues de Hai-nan." 79.1:385-394.
- LaPolla, Randy J. 2000. Valency-changing derivations in Dulong/Rawang. *Changing Valency: Case Studies in Transitivity*, ed. by R. M. W. Dixon & Alexandra Y. Aikhenvald, 282-311. Cambridge: Cambridge University Press.
- _____. 2003. Dulong. In Graham Thurgood and Randy LaPolla 2003, pp. 674-682.
- Lee, Ernest Wilson. 1966. Proto-Chamic phonologic word and vocabulary. Ph.D. dissertation. Indiana University. 67-3690.
- Maddieson, Ian and Keng-Fong Pang. 1993. Tone in Utsat. *Tonality in Austronesian Languages*. Edited by Jerry Edmondson and Ken Gregerson. Oceanic Linguistics Special Publication No. 24. Honolulu, Hawaii: University of Hawaii Press. Pp. 75-89.
- Matisoff, James A. 1972. *The Loloish Tonal Split Revisited*. Research Monograph No. 7, Center for South and Southeast Asia Studies, University of California, Berkeley. 88 pp.
- Ni, Dabai. 1988a. The genealogical affiliation of the language of the Hui people in Sanya Hainan. *Minzu Yuwen* 2:18-25.
- _____. 1988b. The Kam-Tai of China and the Hui of Hainan. *Bulletin of the Central Institute of Minorities* 3:54-65.
- _____. 1990a. The origins of the tones of the Kam-Tai languages. ms.
- _____. 1990b. The Sanya (= Utsat) language of Hainan island: a living specimen of a linguistic typological shift. ms.
- Ouyang, Jueya and Zheng Yiqing, 1983, The Huihui language of the Hui nationality of Yaxian, Hainan. *Minzu Yuwen* 1:30-40.
- Ross, Malcolm. 2003. Diagnosing prehistoric language contact. In: Raymond Hickey ed., *Motivations for language change*, 174-198. Cambridge: Cambridge University Press.

- Slobin, Dan I. 1977. Language change in childhood and in history. *Language learning and thought*, edited by John Macnamara. Academic Press. Pp. 185-214.
- Sun Hongkai. 1988. Notes on Anong: a new language. Translated by Fengxiang Li. *Linguistics of the Tibeto-Burman Area* 11:27-63.
- _____. 1999a. Notes on Anong: Observations of its path of gradual decline and loss]. *Zhongguo Yuwen* 272.5:352-357.
- _____. 1999b. The category of causative verbs in Tibeto-Burman languages. *Linguistics of the Tibeto-Burman Area* 22.1:183-199.
- _____. *A description of Anong*. New Found Minority Languages of China Series. Institute of Minority Studies.
- Tadmor, Uri. 1995. Language contact and systemic restructuring: The Malay of Non-thaburi, Central Thailand. Ph.D. dissertation: University of Hawai'i.
- Thomason, Sarah. 1996. Introduction. *Contact languages: a wider perspective*, edited by Sarah Thomason. Philadelphia: John Benjamins.
- _____. and Terrence S. Kaufman. 1988. *Language contact, creolization and genetic linguistics*. Berkeley: University of California Press.
- Thurgood, Elzbieta. 1999. A description of nineteenth century Baba Malay. Ph.D. dissertation. University of Hawai'i.
- _____. 1992. The aberrancy of the Jiamao dialect of Hlai: speculation on its origins and history. *Southeast Asian Linguistics Society I*, Edited by Martha Ratliff and Eric Schiller. Tempe: Arizona State University Southeast Asian Studies Publication Program. Pp. 417-433.
- _____. 1977. Lisu and proto-Lolo-Burmese. *Acta Orientalia* 38:147-207.
- _____. 1981. *Notes on the origins of Burmese creaky tone*. Monumenta Serindica Monograph Series No. 9. Institute for the Study of Languages and Cultures of Asia and Africa. Tokyo. 94pp
- _____. 1993. Phan Rang Cham and Utsat: tonogenetic themes and variants. *Tonality in Austronesian Languages*. Edited by Jerry Edmondson and Ken Gregerson. Oceanic Linguistics Special Publication No. 24. Honolulu, Hawaii: University of Hawaii Press. Pp. 91-106.
- _____. 1996. Language contact and the directionality of internal 'drift': the development of tones and registers in Chamic. *Language* 71.1:1-31.
- _____. 1999. *From Ancient Cham to Modern Dialects: Two Thousand Years of Language Contact and Change*. Oceanic Linguistics Special Publication No. 28. Honolulu: University of Hawai'i Press.
- _____. 2005. Phan Rang Cham. In *The Austronesian Languages of Asia and Madagascar*, edited by K. Alexander Adelaar and Nikolaus Himmelmann. Curzon Press. Pp. 489-512.
- _____. in press. The causatives in Sun Hongkai's Anong; Language death and rapid restructuring. *Berkeley Linguistics Society* 29. UC Berkeley.

- _____. 2000. Learnability and direction of convergence in Cham: the effects of long-term contact on linguistic structures. *Proceedings of the Western Conference On Linguistics. WECOL 2000*. California State University, Fresno. Pp. 507-527.
- _____. and Randy J. LaPolla (eds.). 2003. *The Sino-Tibetan languages*. Routledge Language Family Series. London and New York: Routledge.
- _____. and Ela Thurgood. in press. The Tones from Proto-Chamic to Tsat [Hainan Cham]: Insights from Zheng 1997 and from Summer 2004 fieldwork. To appear in a volume edited by Paul Sidwell and Justin Watkins.
- _____. and Fengxiang Li. 2003. Contact induced variation and syntactic change in the Tsat of Hainan. In *Language variation: Papers on variation and change in the Sinosphere and the Indosphere in honour of James A. Matisoff*. Edited by David Bradley, Randy LaPolla, Boyd Michailovsky, and Graham Thurgood. Pacific Linguistics. Research School of Pacific and Asian Studies. Pp. 285-300.
- _____. and Fengxiang Li. [in press]. Contact and attrition in Sun Hongkai's Anong: Complementary sources of change. *Proceedings of the Southeast Asian Linguistics Society XIII*, University of Arizona, Tempe, Arizona. 20 pp.
- Weinreich, Uriel. 1953. *Languages in contact*. The Hague: Mouton.
- Zheng, Yiqing. 1986. A further discussion of the position of Huihui speech and its genetic relationship. *Minzu Yuwen* 6:37-43.
- _____. 1997. Huihui Yu Yanjiu [A Study of Hainan Cham]. *Shanghai Yuandong Chuban She* [Shanghai Far East Publishers].

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