

Pa-hng development and diversity

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1. **Introduction.** The Pa-hng 巴𠵼 or Red Yao 紅仡 have traditionally been classified as belonging to the Hmongic Branch of Hmongic-Mienic, Bunu type, cf. Meng et al 1982.¹ However, Paul K. Benedict (1975:xxi, 1986) and Strecker (1987a, 1987b)—in light of its special features—have contemplated assigning Pa-hng to a separate branch of Hmong-Mien (Miao-Yao) along side Hmongic, Mienic, Ho Nte (She), and others. Strecker (1987b), however, reports that some Chinese linguistics regard this reclassification as hasty and seem more inclined to persevere in a tripartite division of Proto-Hmong-Mien. A second issue raised by Strecker (1987a, 1987b) was to divide Pa-hng into Northern and Southern forms. The Southern form would be represented by the Pa-hng of Guangxi Sanjiang Wenjie (cf. Mao et al) and perhaps also by the outlier Na-e of Vietnam (Bonifacy 1905), whereas Guizhou Gundong would be characteristic of the Northern type. The modest aim of this paper is not to broach the question of the ultimate placement of Pa-hng in the larger Stammbaum of Hmong-Mien from the top down, but instead to consider the pattern of microcosmic change from location to location as an aid to understanding where sound changes began and what areas they reached last. My result will require a more subtle differentiation than a dichotomous separation into Northern and Southern Pa-hng in which the dominant physical landmark of the area, the Rongjiang River namely, seems to have played a major role. Simultaneously I wish to present a corpus of data gathered at about ten locations that might be of further use in the solution to the questions of the history and development of the Hmong-Mien language group.

The Pa-hng live mostly in the NE corner of Guangxi-Zhuang Autonomous Region in Rongshui, Sanjiang, and Longsheng Counties and in adjoining areas of Guizhou Province at Liping, Congjiang, and Rongjiang Counties on both banks of the Rongjiang River. According to Mao et al (1982), the Pa-hng

throughout China numbered 10,375 in the late seventies. Outside of China there is an outlier group of about 2,000 Pa-hng living in Vietnam according to 1982 figures, where they call themselves

巴天 Batian or Baxing, and where they are referred to as the Lai Miao 'Immigrant Miao' or Hua Miao 'Flowery Miao' by the local people (Fan Honggui et al 1986). They say they migrated to Vietnam 200-300 years ago, coming over the sea. They live in three areas of Vietnam: (1) Zhanhua County Linfu Township and Anshan County Zhongshan Township; (2) includes Hexian Province Zhanhua County Youchan, Beiguang, and Hongguang Townships; (3) in Beiguang County on the right bank of the Jing River there are three Townships: Xinzheng, Xinli, and Yanping Townships, according to the Chinese translation of the Vietnamese original. They lived mixed with the Yao, Tai, and Sui peoples, raising two major crops: wet paddy rice (both glutinous and long-grain) and corn. Bonifacy (1905) recorded a few lexical items of their language to constitute the first contact by foreign scholars. Haudricourt (1954, 1971) has pointed out that this group is identical to the Pa-hng.²

The Pa-hng language data in larger amounts is found in Chang Kun (1947:96 and *passim*), who personally gathered vocabulary on Congjiang Xishan Dahua Pa-hng in 1941. Chinese specialists in Hmongic languages, notably Professors Wang Fushi and Chen Qiguang of Central Institute of Nationalities, have included some data in a number of their papers. The most extensive study has been performed on Guizhou Liping Gundong Pa-hng by Zhang et al (1985).

In the winter and early spring of 1990 Professor Yang Quan of the Central Institute of Nationalities and I were able to collect a body of vocabulary from about ten locations in Sanjiang and Rongshui Counties. In Sanjiang County these people are found in three settlement areas: Tongle 同樂,³ Laobao 老

巴⁴ and Gaoji Gongjiang 高基弓江.⁵ We were fortunate enough to obtain language help for Laobao and Tongle. The inaccessibility of Pa-hng villages made an onsite visit impossible, as the Pa-hng live in the most mountainous, most isolated, least fertile areas of Sanjiang County off of any public roads. They also plant only one crop of rice per year. These circumstances result in the Pa-hng being among the most impoverished of the minorities peoples of Sanjiang. Indeed, it seems to be a characteristic feature of the Pa-hng to crave isolation and hence it

is also their fate to endure a more austere existence than some of their brethren. Li (1985) likewise documents the Pa-hng's lamentable resistance to organized education and the Han language. This sad state of affairs is especially true among females, not a single one of which in Guizhou Province ever having finished elementary school, and not a single Pa-hng ever having graduated from college.

In early January 1990 we arrived in Guangxi Sanjiang Kam Autonomous County to work principally on Kam. A survey of the languages spoken in Sanjiang revealed that the Pa-hng also inhabited this area and thus a brief session of data elicitation was arranged. Our first interviewee was Mr. Pan Shengwen, a Yao Mjen village leader and official from Tongle Jindai Village 近代, who grew up speaking both Yao Mjen and Pa-hng. Shortly thereafter, we were able to conduct a more extensive session with Mr. Wan Rensheng of Laobao Bianlang 邊浪. In a second session Mr. Wan brought along two additional speakers from this very remote village, Mr. Wan Yuqing and Mr. Tang Xiangcai. We were able to make comprehensive audio, computer, and airflow recordings of the sounds of these speakers and document about 500 vocabulary items.

Our travels to Rongshui County to the south of Sanjiang in late February 1990 also were rewarded with even more opportunities to study Pa-hng. In this endeavor we were aided by Chairman Pu (first name unfortunately unknown), a Pa-hng and member of the Minority Affairs Committee of Rongshui County. He informed us that there was a special school in Rongshui County Seat to try to break through the cycle of entrenched illiteracy among the Pa-hng. The next day he brought over seven students from the school, each from a different area of the county and all native speakers of Pa-hng. Because each of the seven speakers was to repeat the same elicited item, we were more limited in the total number of vocabulary we could gather. We elected to have all the speakers produce the list of minimal contrasts found in Chen Jin 1988.

2. Tones. There are seven or eight contrastive tones in Pa-hng. Historically speaking, the proto-tones A, C and D have each divided, while the original B tone did not split in the Pa-hng of Guangxi, resulting in seven tonal contrasts. The tone value and the number of tone categories are quite uniform in all the speakers we examined. We have provided composite pitch

plots of these seven tones for Mr. Wan Rensheng in Figures 1 and 2.⁶

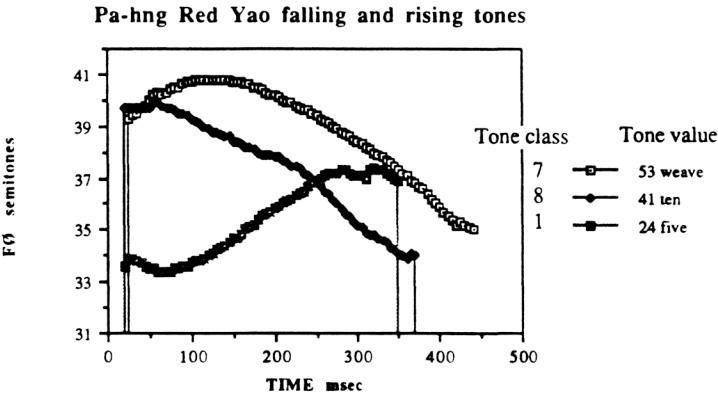


Figure 1: Pa-hng contour tone trajectories

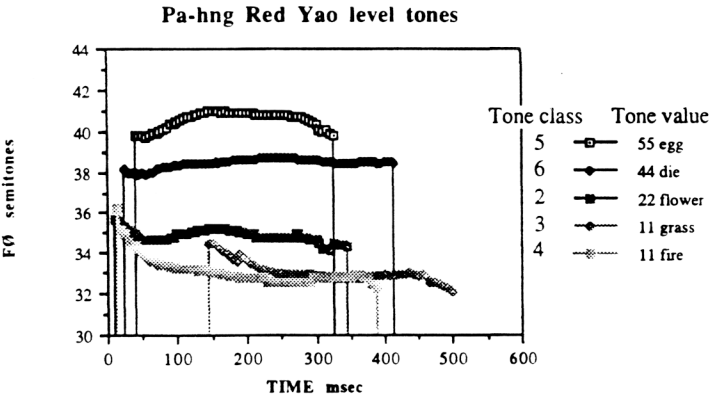


Figure 2: Pa-hng level tone trajectories

These plots show a tonal system quite typical for Hmongic type languages. In fact, the two most distinctive characteristics are strongly in evidence: (a) lack of rusheng or checked tones⁷ and (b) the presence of a large number of level tones as opposed to falling, rising or more complex contours. In fact, it takes some practice to become accustomed to perceiving three or four level tones, i.e. 55, 44, 22, and 11.⁸

The pitch trajectories in Pa-hng level tones are strictly speaking not level. There are rises at the beginning of high pitches and drops at the beginning of low pitches, noticeably Tones 3 and 4, which have in reality contours 211. The tonal system is exemplified in Figure 3:

Tone 1	pja ²⁴	five	pi ²⁴	to know
	pji ²⁴	body hair		
Tone 2	py ²²	flower	mjē ²²	person
	lji ²²	paddy		
Tone 3	so ¹¹	grass	pjo ¹¹	house
	no ¹¹	salt		
Tone 4	mē ¹¹	horse	nho ¹¹	fish
	ty ¹¹	fire		
Tone 5	me ⁵⁵	pig	qo ⁵⁵	egg
Tone 6	te ⁴⁴	to die	tso ⁴⁴	chopsticks
	mi ⁴⁴	soft		
Tone 7	na ⁵³	to weave	tša ⁵³	to laugh
	ʔa ⁵³	duck		
Tone 8	ji ⁴¹	eight	mji ⁴¹	tongue
	ku ⁴¹	ten		

Figure 3: Examples of each of the tonal contrasts
in Laobao Pa-hng

Some varieties of Pa-hng apparently have eight tones. Chang (1947:99) provides a often cited description of Bunu Yao from Guizhou Yongcong (today called Congjiang) Xishan Dahua Village, which splits all four proto-tone categories into high and low reflexes. Examples of these renumbered according to the above schema are:

Tone 1	pja ²⁴ ne ²⁴	five snake	va ²⁴	two
Tone 2	pai ³³ mã ³³	flower vegetable	mjo ³³ ko ³³	ear nine
Tone 3	pã ²² pjo ²²	full house	pje ²² tɕy ²²	fruit alcoholic beverage
	ko ²² ne ²²	road blood	soŋ ²²	bone
Tone 4	mjo ¹¹ ne ¹¹	fish rat	ty ¹¹	fire
Tone 5	ɬa ⁵⁵ tɕu ⁵⁵	moon six	jã ⁵⁵	good
Tone 6	te ⁴⁴ me ⁴⁴	to die light in weight	me ⁴⁴	eye
Tone 7	ʔæ ⁵³ pɔ ⁵³	duck to open	tɕæ ⁵³	to laugh
Tone 8	pa ³¹ tu ³¹	to see bean	mai ³¹ ku ³¹	tongue ten

Figure 4: Tonal values for Xishan Dahua Pa-hng (Chang 1947)

As one can see from Figure 3 and 4 the Voiced-Low Principle has operated in paradigmatic fashion and caused even-numbered tones to be lower than odd-numbered counterparts (with the possible exception of Tone 2 in Dahua).

The syllable structure of Pa-hng, as mentioned above, has undergone considerable erosion. The nasals have been absorbed by the vowels preceding them at most locations and stop consonants have disappeared in Tone 7 and 8 and have left in their places a tightness of voice at the end of the syllable with creak (slow glottal closure) and a lowering and backing of vowels in these tones. I have indicated this feature in Figure 3.

3. Initials. The initials of Pa-hng are considerably more interesting than its tones. First of all consider the inventory of its sounds in Figure 5.

p	ph	m	mh			f	w
pj	phj	mj	mhj				
t	th	ŋ	ŋh	l	lh	ɬ	ɬh
tɕ						ɕ	
tj				lj	lhj		ɬhj
tɕh	tɕh	ɲ	ɲh			ɕ	j
k	kh	ŋ	ŋh			x	
kw	khw						
q	qh						
qw	qhw						

p	qɑ ³³ pu ⁵³ ljã ⁵³	leopard	pr ²²	flower
ph	kha ⁵⁵ phw ¹¹	hold hand, to		
pj	ʔɑ ³³ pjo ¹¹	house, home	pja ²⁴	tree, five
phj	phjɔ ²⁴	whistle, to	phji ⁵³	daughter
m	ma ⁴¹	thickly matted	ma ¹¹	dig, to
mh	mhẽ ²⁴	scold, to (slight aspiration only)		
mj	mjẽ ²²	person	pa ¹¹ mju ²²	Kam nationality ⁹
mhj	qo ³³ mhjɔ ⁴⁴	nose (slight aspiration only)		
w	wɣ ²⁴ xɣ ²⁴	seek, to	wɑ ²⁴	two
f	fɣ ²⁴	light in weight	fɣ ⁴¹	dip water, to
t	tɑ ⁴¹	bite, to	tɣ ²⁴ lu ²⁴	table
	tɔ ¹¹	long	tẽ ¹¹	wait, to
th	thw ⁵⁵	read, to		
tj	(these may all have changed to pj)			
ŋ	ŋɑ ²²	good	ŋɑ ⁵³	weave, to
ŋh	ʔɑ ³³ ŋhẽ ²⁴	lungs	ŋhe ²⁴	day
			(slight aspiration only)	
l	la ⁴¹	bury, to	lã ¹¹	short
lh	qa ³³ lhe ²⁴	day (slight aspiration only)		
lj	ljĩ ²²	paddy	lja ¹¹	oar

lhj	l(h)jũ ²²	cool	qa ³³ l(h)jã ⁵³	dog (slight aspiration only)
ɬ	ɬu ⁵⁵	iron		
ɬh	ʔa ³³ ɬha ⁵⁵	moon	ɬɿ ³³ ɬhe ⁴⁴	rope (slight aspiration only)
ɬhj	ɬhjo ²⁴	big (slight aspiration only)		
tʂ	ʔa ³³ fu ⁵⁵ tʂõ ¹¹	coffin		
ʂ	ɬɿ ²² sɿ ⁴⁴ ɿ ¹¹	sleeve	qa ¹¹ ʂõ ¹¹	bone
	ʂã ²⁴	invite, to		
tɕ	ʔa ³³ tɕa ¹¹	sister, older	tɕɔ ⁴⁴	chopsticks
tɕh	ɿ ⁵³ tɕhi ⁴⁴	wall		
ŋ	ŋo ¹¹ qha ¹¹	vomit, to	ʔa ³³ ŋo ²²	dam
ŋh	ŋha ¹¹	heavy	ŋhi ³⁵	clear (water)
	ŋhi ¹¹	stir fry, to		
ɸ	ɸa ¹¹	fly, to		
j	jɛ ⁵³	lightning, to	ja ¹¹	want, to
k	ke ⁵⁵	street	kã ²²	talk, to
	kwẽ ⁵³	crooked		
kh	kha ⁴¹	put, to	kha ⁵⁵ pu ¹¹	hold hand, to
kw	kwa ¹¹	intelligent	kwɔ ²⁴	white
	kwɿ ²⁴	demon		
khw	ɬɿ ³³ khwa ⁵⁵ ljĩ ²²	paddy wall	khwi ⁵⁵	poor
ŋ	ŋɿ ⁵⁵	carry on pole, to	ŋa ²²	meat
	ŋe ⁵⁵	like, to		
ŋh	ŋhe ¹¹	blood (slight aspiration only)		
x	xo ³⁵	talk, to	a ³³ xõ ¹¹	cave
xw	(found in other locations, but not in Laobao)			
q	qa ³³ sõ ¹¹	bone		
qh	qhɔ ⁵⁵	cough	ŋo ¹¹ qha ¹¹	vomit, to
	pa ¹¹ qhe ²⁴	Han		
qw	qwa ⁵⁵ sõ ⁴⁴	rabbit		
qhw	(no examples yet)			

Figure 5: The initials of Guangxi Sanjiang Laobao Pa-hng

The dental series //t̪ t̪h ɳ ɳh// are retroflexed in Laobao. The palatalized series loses this retroflex character.

The feature [aspiration] in Pa-hng carries a high functional load. As is clear from Figure 5, stops and sonorants come in unaspirated and aspirated forms. Unlike in Eastern Guizhou Miao, fricatives do not distinguish for aspiration. It is important to note that aspiration in Pa-hng does not mean that a period of voicelessness follows the release of a stop before the voicing of the vowel begins. In Pa-hng there is strongly increased airflow presumably from a spread glottis that may or may not be vibrating. One of the best ways to document this difference is a comparison of the airflow between aspirated and unaspirated initial consonants.¹⁰

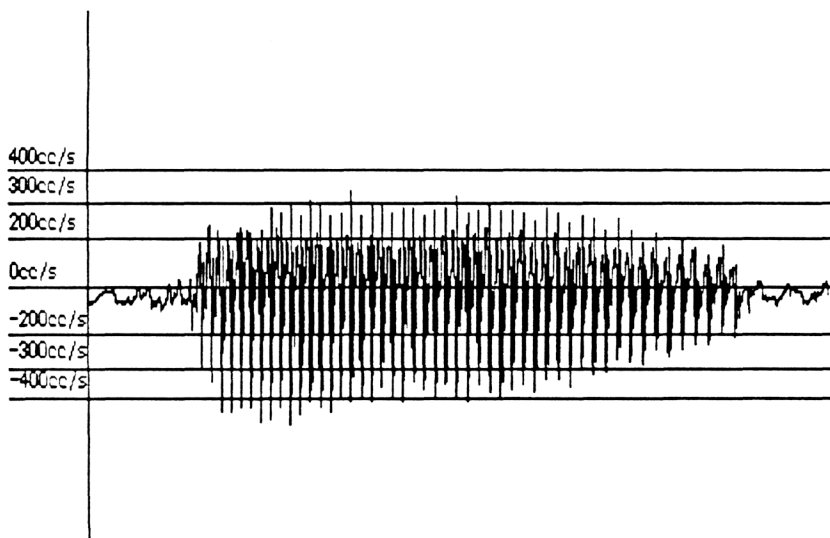


Figure 6: Airflow recording of Laobao Pa-hng na⁵³ 'to weave'

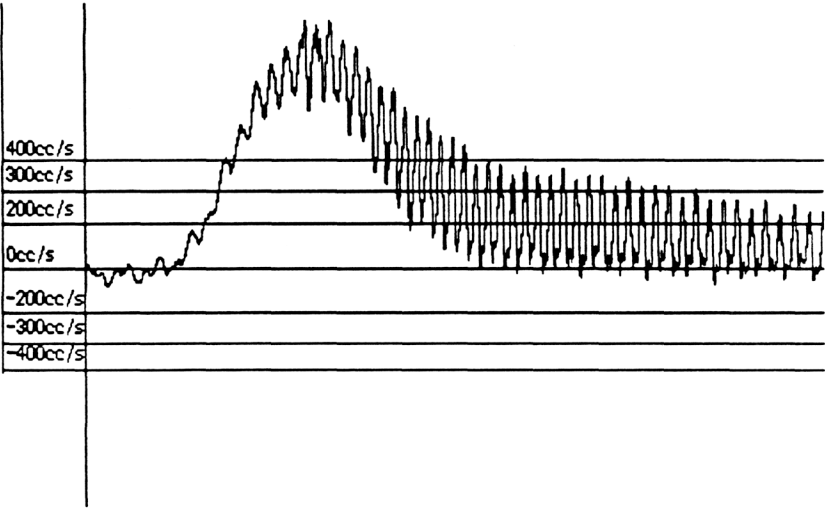


Figure 7: Airflow recording of Laobao Pa-hng n̥hi¹¹ 'to stir fry'

It is very evident from Figure 7 that voicing is going on during the period of increased airflow.

4. Finals. Pa-hng has a very distinctive inventory of finals. They are even by Hmongic standards simple in structure. For example, nasal codas are typically not present. Original nasals at the end of the syllable have been absorbed by the nuclear vowel in front of them to form nasalized vowels. Most finals consist of simple nuclear vowel nuclei or a syllabic nasals. There are, for instance, four vowel heights, three degrees of backness, and no distinction for vowel length. These are illustrated in the Figure 8 below.

i	e	ɛ	a	ɑ	ɔ	o	u	ʏ
ĩ	ẽ	ɛ̃	ã	ã̃	õ	õ̃	ũ	
m̩	n̩	ŋ̩	ŋ̩ŋ̩					

a	na ²²	good		
ɑ	na ⁵³	to weave	ta ²¹	to bite
e	pje ¹¹	fruit	mje ²²	have, exist
ɛ	jɛ ⁵³	lightning, to		

i	ã ³³ ɿ ⁵⁵	wind	nɿ ⁵⁵	go, to
			ni ²⁴	cloth
o	ko ⁴⁴	nine	nɔ ¹¹	salt
ɔ	nhɔ ²²	eat, to	mɔ ⁵³	hit, to
ɿ	tɿ ¹¹	fire	pɿ ²²	flower
u/w	ʔɿ ³⁵ mhu ¹¹	face	pu ¹¹	hand
ã	ʔi ¹¹ kã ⁴⁴	cl for houses	ʔi ¹¹ lã ²²	general cl
			nã ²⁴	difficult
ã	kã ²⁴	pond		
ẽ	ẽ ⁵³	cooked rice	jẽ ²⁴	bitter
			mjẽ ²²	person
ẽ	tɕhẽ ⁴⁴ lo ⁴⁴	fr. water snail		
ĩ	ĩ ⁴⁴	sell, to	ljĩ ²²	paddy
			mĩ ⁴⁴	buy, to
õ	qa ¹¹ ʃõ ¹¹	bone		
õ	qa ²² mjõ ⁴⁴	leaf		
ũ	i ⁴⁴ nũ ¹¹	forget, to		
ṁ	ṁ	negative		
ṇ	ṇ ¹¹ nã ²⁴	this	ṇ ¹¹ tɕɔ ⁵⁵	
ṇ	pa ¹¹ ṇ ²²	cow	ṇ ²⁴ ljã ⁵³	flea
ṇṇ	pa ¹¹ ṇṇ ²⁴	Pa-hng	a ³³ ṇṇ ¹¹	belly

Figure 8: Finals of Laobao Pa-hng

The vowel //i// is centralized and approaches [ɨ] as in [pi²⁴] 'to know' except following palatalized initials as in [pji²⁴] 'body hair'.

5. Pa-hng lectal variation and its phonological development. Pa-hng has figured prominently in the history of Hmong-Mien languages. In the following I present a wide spectrum of data (about 100 minimally contrasting roots) at about 7 locations (see Map), using Laobao as the standard of comparison. I have chosen Laobao for this role for at least two reasons: (1) Laobao Pa-hng is the variety for which I have collected the most data and (2) Lao Pa-hng preserves a number of features not found in Rongshui Pa-hng. Locations investigated:

1	Liangzhai	良ī
2	Baiyun	白雲
3	Dalang	大浪
4	Xiangfen	香粉
5	Gunbei	è貝
6	Ganbei	L洞
7	Dongtou	同縲

5.1. Initials.

5.1.1 Uvulars and velars. One of the characteristics Strecker (1987a, 1987b) remarks on in Pa-hng is the merger of the Proto-Hmongic velar and uvular stop series. In Gaoji Gongjiang (Wenjie) Pa-hng some of the original velars are preserved, whereas others from original velars merge with the uvulars. In Figure 9 below I have compared contemporary reflexes of *k and *q at four locations. Lines surround forms that today show uvular initials and the page break divides original velars and uvulars.

	Wenjie (Mao et al 1982)	Gundong (Zhang et al 1985)	Laobao	Shunhua (Li 1985)
*k				
needle	kɕ ³⁵ (1)	tai ³³ kar ¹³		kar ³⁵
ten	kfu ³² (8)	ku ³²	ku ¹¹	
pair		keu ⁵⁵		keu ⁵⁵
insect	qɣ ³⁵ (1)	qai ¹³	qe ²⁴	kei ³⁵
road	qo ¹¹	qo ²¹	qo ¹¹	ku ²¹
horn	qɕ ³⁵ (1)	qar ¹³	qã ²⁴	qer ³⁵

	Wenjie (Mao et al 1982)	Gundong (Zhang et al 1985)	Laobao	Shunhua (Li 1985)
*q				
star	qɔ̃ ³⁵	qan ¹³	qã ²⁴	
excrement	qa ³¹	qa ³¹		
old	qo ⁵⁵ (5)	qo ⁵⁵		
hole	qho ³¹	qhoŋ ¹³		qhoŋ ²¹
meat	nqfiɛ ³³ (2)	ŋe ²²	ŋai ⁴⁴	ŋai ³³
ql/ _G lw				
white		qo ¹³	kwɔ̃ ²⁴	qo ¹³
black		kuan ²²	kwã ⁴⁴	qan ⁵³
yellow	khwɿ (2)	kuai ²²	kwɿ ²²	kui ³³

Figure 9: Variation of Pa-hng velars and uvulars

On the basis of this data it appears that uvulars are preserved and, in fact, even expand in the areas north of the Rongjiang River with the isolated village at Wenjie having preserved uvulars mostly strongly (even in nasals). At Tongle, which is north of the river, my time for data elicitation was so brief I didn't record any of the above examples. A few items in this location have contrasting //k q//: nɔ̃¹¹qa²² 'to vomit'; qa¹¹soŋ¹¹ 'bone'; kha⁴¹ 'to put or place'; kwɛ²² 'intelligent'; ʔa²²ku⁴¹ 'story'; kwe²⁴ 'demon'; khwa⁵⁵ljɿŋ²² 'paddy wall'. In some areas to the north of the river at Shunhua, for example, there is less departure from the original division between the two stop positions. In Rongshui Pa-hng, the uvulars are rare or are missing altogether, at least among younger speakers at all location except in Dalang, where we found a few cases. The rule then seems to be that southern Pa-hng (Rongshui and less so Laobao) merges uvulars with original velars, whereas in northern Pa-hng (Gundong, Shunhua, Tongle, and especially at Wenjie) uvulars are still present and seem even to have absorbed some vocabulary with original velars.

5.1.2 Palatalized labials and dentals. One change very evident at various locations among the Pa-hng is the correspondence of palatalized labials in some locations to palatalized dentals in others, i.e. pj <-> tj; phj <-> thj; mj <-> nj,

and mɰj <-> nɰj. This kind of change is found in Kam, in Chinese and also in Italian and Slavic, cf. Edmondson 1989, and Ohala 1979. The change from labials to dentals dominates, though there may be some cases of change in the opposite direction. Neither Zhang, Xu, and Li (1985) nor Li (1985) lists palatalized or labialized initials among the inventory of initials. Instead they opt for a more complex set of rhymes that includes an i-element and a u-element as onset. However, the phonological behavior of these sounds argues for regarding them as palatalization and labialization of initial consonants and not vocalic differences. Therefore, Gundong and Shunhua should have the palatalized labial series //pɰ pɰh mɰ mɰh// and //tɰ lɰ lɰh ɰh//. Similarly, the labialized initials might be assumed, i.e. //kw kwh xw qw qwh//. The net result is a kind of "sluicing" in which the change has gone in opposite directions resulting in the western and northern areas having more dentals and the eastern and southern forms having developed labials.

5.2.1. Reflexes of original prenasalized voiced stop initials. In Rongshui many locations preserve original prenasalized voiced stop initials and these locations also evidence significance amounts of breathy voice quality in initials. This feature is especially prominent in even number tone categories. Deng (1983) and Strecker (1989) have suggested that the voiced initials of Proto-Hmong-Mien were aspirated. Thus, following Chang Kun and Wang Fushi they assume that there was a three-way opposition among voiceless unaspirated, voiceless aspirated, and voiced initials:

*t	*nt	*ʔn
*th	*nth	*n (or *nh)
*d	*nd	*n

whereby the last series was phonetically [dʰi ndʰi nʰi].

Gloss	Proto-form Gundong	Rongshui 3	Tongle	Rongshui 1 2 4 6 7 ¹	Rongshui 5	Laobao
person	n-2	njɛ ²²	njɛ ²²	mjɛ ²²	mjɛ ²²	mjɛ ²²
nose	mbr-6	nhjɔ ⁴⁴	nhjɔ ⁴⁴	mpɸjɔ ⁴⁴	mɸjɔ ⁴⁴	mjɔ ⁴⁴
fish	mbr-4	nho ¹¹	no ¹¹	mbɸio ¹¹	mɸio ¹¹	no ¹¹
daughter	mɸɬ-7	thjɛ ⁵³	thjɛ ⁵³	phjɪ ⁵³	phjɪ ⁵³	phjɪ ⁵³
whistle, to ?	thio ¹³	thjo ²⁴	thjo ²⁴	phjo ²⁴	phjo ²⁴	phjo ²⁴
body hair	pl-1	ti ¹³	ti ²⁴	pi ²⁴	pi ²⁴	pi ²⁴
head	w-3	ti ³¹		pɪ ¹	pɪ ¹	phjɪ ¹¹
tree	nt-1	tia ¹³	tja ²⁴	pja ²⁴	pja ²⁴	pja ²⁴
five	pr-1	tia ³³ (tone)	tja ²⁴	pja ²⁴	pja ²⁴	pja ²⁴
house	pr-3	tiu ³¹	tjo ¹¹	pjo ¹¹	pjo ¹¹	pjo ¹¹
crooked		thjɛ ¹¹	thjɛ ¹¹	phjɛ ¹¹	phjɛ ¹¹	

Figure 10: Variation of Pa-hng labials/dentals

¹For the moment I am ignoring the difference between voiceless aspiration and breathy voice (Strecker's whispered voice).

Gloss	1	2 4 6 7	5	3	Laobao	Gundong Shunhua
fish	mbjɕɔ ¹¹	mbjɕɔ ¹¹	mhjɔ ¹¹	nhjɔ ¹¹	nhjɔ ¹¹	nou ¹¹
salt	nɔ ¹¹	nɔ ¹¹	nɔ ¹¹	nɔ ¹¹	nɔ ¹¹	niu ³¹ /niu ³¹
pig	mpi ⁵⁵	mpi ⁵⁵	me ⁵⁵	me ⁵⁵	me ⁵⁵	mei ⁵⁵
weave, to	nta ⁵³	nta ⁵³	na ⁵³		ɳa ⁵³	
thickly	mba ⁴¹	mba ⁴¹	ma ⁴¹			
matted						
nose	mbɕjɔ ⁴⁴	mbɕjɔ ⁴⁴	mhjɔ ⁴⁴	nhjɔ ⁴⁴	mjɔ ⁴⁴	no ⁴⁴
lungs	mpjɔ ⁵⁵	phɔ ⁵⁵	mpjɔ ⁵⁵		nhɛ ⁴⁴	pho ⁵⁵
carry on	ɳkw ⁵⁵	ɳkw ⁵⁵	ɳw ⁵⁵		ɳv ⁵⁵	ɳai ⁵⁵
pole, to						
blood	nɔɕhe ¹¹	ɳhe ¹¹	ɕhe ¹¹		ɳhe ¹¹	nei ³¹ /nie ²¹
fear, to	ntɕɛ ⁵⁵	nxe ⁵⁵	ɕhe ⁵⁵		nɛ ⁵⁵	niu ⁵⁵

Figure 11: Diversity of Prenasalization in Pa-hng

Much more study is warranted, of course, but these results confirm Strecker's view that original voiced, prenasalized voiced, and nasal initials in Hmong-Mien—those that led to low register tones—were accompanied by a strong breathy component. Breathiness is preserved longest in continuant initials, nasals and laterals in Pa-hng just as I found in the Kam, cf. Edmondson (1990b). This pitch lowering element certainly would have abetted the development of low tones.

5.2 Finals with nasal absorption and coda weakening. Nasal consonants tend first to nasalize vowels in their environments and then the nasal consonants are fully absorbed. Li (1985) indicates that both // -n -ɳ// are found in the Pa-hng Shunhua Gaoniang, whereas Zhang Jiming, Xu Zhishun, and Li Juewei (1985) found that in Guizhou Province Liping County Gundong, which is very close to the Guangxi border only // -ɳ// existed. Our data showed that at Tongle there is still a velar nasal // -ɳ// just as in Gundong. However, at Xishan Dahua (Chang Kun 1947), Laobao and at all locations in Guangxi Rongshui the nasals had been absorbed by the vowels that preceded them. The following implication pattern of absorption emerges in which southern forms show the most advanced state:

Shunhua, Gundong	ṽ	-ɳ	-n
Tongle	ṽ	-ɳ	
Dahua, Rongshui, Wenjie	ṽ		

6. Conclusion. The preceding exposition has tried to focus on the special features of Pa-hng and to sketch their phonological evolution showing the step-by-step progression still manifest in the local varieties of Pa-hng.

First of all, there has been vast simplification of the (reconstructed) Proto-Miao's 131 initials and 29 codas in current Pa-hng. As for places of articulation, only five of the six original are retained: labial, dental, prepalatal, velar, and uvular, since the prepalatal, dental, and retroflex series merge to two. Moreover, I did not uncover any clustered initials, such as //pɹ pl pr// in Pa-hng, most of them having been weakened into secondary articulations, e.g. pj. By contrast, the prenasalization of voiceless, aspirated, and voiced stops and affricates is well-preserved. The absorption of nasal codas is in an advanced state, even more than in Western Hmong, except for vocabulary with nasal initials and nasal codas, which collapse to give syllabic nasal forms, cf. ɲɲ²⁴ 'Pa-hng' from *mɹəŋ^{Al}.

Secondly, Pa-hng sound system is still rich in contrasts between breathy/aspirated vs. plain sonorants //m n ɲ ɳ// vs. //mɸ nɸ ɳɸ// (also //l/ vs. //lɸ/) and these forms are not listed in the proto-inventory by Wang Fushi. As is well known, the kind of Eastern Hmong centered in Kaili, Guizhou features a contrast between breathy/aspirated and plain fricatives. The aspirated fricatives correspond to plain fricatives, aspirated (prenasalized) affricates, voiceless nasals and have a tonogenetic association with the upper tone register, whereas the unaspirated fricatives are often Han loans or stem from unaspirated affricates (Wang 1985:107-20). Clearly, the breathy (aspirated) sonorants of Pa-hng do not share a common history with the aspirated fricatives of Eastern Hmong.

Notes

¹Support for this research was provided by the Committee for Scholarly Communication with the PRC and the National Endowment for the Humanities for the period Jan.-June 1990. It is hoped that this account will awaken interest in the Pa-hng language and be a partial repayment for the enthusiasm and forbearance displayed by my Pa-hng friends and helpers: Pan Shengwen, Sanjiang Tongle; Wan Rensheng, Wan Yuqing, and Tang Xiangcai, Sanjiang Laobao; Feng Wenji, Rongshui Liangzhai; Lan Rongxing, Baiyun; Chen Shiping and Chairman Pu, Rongshui Daliang; Feng Jinhua, Rongshui Xiangfen; Chen

Liannan, Rongshui Gunbei; Yang Fen, Rongshui Gandong; Ye Changzi, Dongtou. Although the Pa-hng are widely also known by the appellation Red Yao and locally as the Eight-Name Yao 八姓 T—the family names of the Laobao Pa-hng are: Wan 萬, Chen 陳, Feng 風, Dai 代, Pu 卜, Tang 湯, Li 李 and Yang 楊—their autonym is Pa-hng, which I propose as the future term of reference for this group.

²Like the Pa-hng of Guangxi Province the Pa-hng of Vietnam also use the designation Eight Name Miao or Yao. However, those listed by Fan Honggui et al 1986, including Fu, Deng, Dai, Hong, and Xin, are not identical with those family names in footnote 1.

³Tongle Jindai has a population as follows: Miao 102 households, Pa-hng 207 households, and Kam 9 households.

⁴In Laobao Bianlang there are 223 households, 1321 people of which about 70% are Pa-hng. Most of the remainder are Kam.

⁵This location seems to be identical with that described by Mao et (1982) under the name Wenjie. However, this name is not familiar to local officials today.

⁶The data for these plots was recorded on a Sony TCM 5000 Professional Quality Cassette Tape Recorder using a Atus ATR20 Unidirectional Microphone on high quality tape. Later, the data were digitized with CECIL (Edmondson 1990a) and stored on floppy disk medium of a DOS computer. A compositing program removed the idiosyncracies from five repetitions before computing mean values at each data point. The results were then plotted.

⁷It may be that the original stoppage of tones 7 has not disappeared entirely. In our data vocabulary in this tone category possesses some remnants of an original final stop coda in the form of a creaking of voice tending toward closure at the end of the syllable.

⁸The tone values plotted here for Laobao Pa-hng were found unchanged in Tongle, Liangzhai, Baiyun, Dalang, Xiangfen, Gandong, and Dongtou. At one location, Gunbei, tone 6 had a value of 35, instead of the expected 44.

⁹The root mju²² means 'to use shears to harvest glutinous

rice' and refers to a culturally distinctive practice among the Kam and other Kadai peoples of using a small shears attached to the finger in snipping off handfulls of the glutinous rice stalks at harvest. This tool is called in Kam tip⁹.

¹⁰These recordings were made with the Rothenburg Mask (Glottal Enterprises, Inc.), which is a plastic mask containing transducers measuring air pressure. The transducers in turn are connected to an amplifier and filter unit. The output from this hardware unit was digitized by the MacAdios 411 Hardware Unit (GW Instruments, Inc) connected to a Macintosh Computer (Apple Computer) and stored on floppy disk medium.

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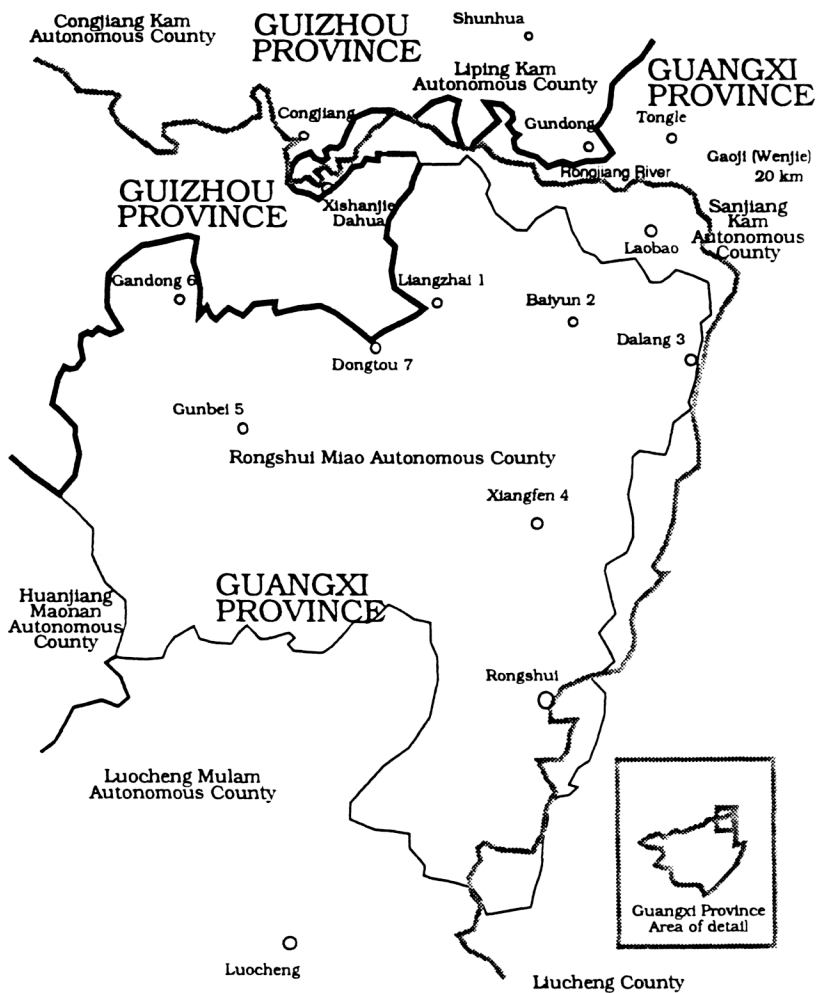
Gloss	Liangzhai 1	Baiyun 2	Dalang 3	Xiang'en 4	Gumbel 5	Gandong 6	Donglou 7
ant	ʔa ⁴⁴ ko ²²	ʔa ⁴⁴ ko ²²	ʔa ⁴⁴ ko ²²	ʔa ⁴⁴ ko ²²	ko ²²	ʔa ⁴⁴ ko ²²	ko ²²
big	ʰho ²⁴	ʰho ²⁴	ʰho ²⁴	ʰho ²⁴	ʰho ²⁴	ʰho ²⁴	ʰho ²⁴
bite, to	ta ⁴¹	ta ⁴¹	ta ⁴¹	ta ⁴¹	ta ⁴¹	ta ⁴¹	ta ⁴¹
bitter	ʃɿ ²⁴	ʃɿ ²⁴	ʃɿ ²⁴	ʃɿ ²⁴	ʃɿ ³³	ʃɿ ²⁴	ʃɿ ²⁴ /ʃɿ ²⁴
blood	nɿche ¹¹	nɿche ¹¹	nɿche ¹¹	ɿche ¹¹	ɿcho ¹¹	nɿche ¹¹	nɿche ¹¹
body hair	pjɿ ²⁴	pjɿ ²⁴	ɿɿ ²⁴	pjɿ ²⁴	pjɿ ³³	pjɿ ²⁴	pjɿ ²⁴
carry pole, to	ŋkuw ⁵⁵	ŋkuw ⁵⁵	ŋuw ⁵⁵	ŋke ⁵⁵	ŋuw ⁵⁵	ŋke ⁵⁵	ŋkaɪ ⁵⁵
chopsticks	ɿv ²² ɿco ⁴⁴	ɿv ²² ɿco ⁴⁴	ɿv ²² ɿco ⁴⁴	ɿv ²² ɿco ⁴⁴	ɿv ²² ɿco ³⁵	ɿv ²² ɿco ⁴⁴	ɿv ²² ɿco ⁴⁴
cloth	niɿ ²⁴	niɿ ²⁴	niɿ ²⁴	niɿ ²⁴	niɿ ²⁴	niɿ ²⁴	niɿ ²⁴
coffin	fu ⁵⁵ ɿco ¹¹	fu ⁵⁵ ɿco ¹¹	fu ⁵⁵ ɿco ¹¹	fu ⁵⁵ ɿco ¹¹	fu ⁵⁵ ɿco ¹¹	fu ⁵⁵ ɿco ¹¹	ɿco ¹¹
cool	lɰjwɿ ²²	lɰjwɿ ²²	lɰjwɿ ²²	lɰjwɿ ²²	lɰjwɿ ²²	lɰjwɿ ²²	lɰjwɿ ²²
cough, to	khɔ ⁵⁵	khɔ ⁵⁵	khɔ ⁵⁵	khɔ ⁵⁵	khɔ ⁵⁵	khɔ ⁵⁵	khɔ ⁵⁵
cow	ŋɿ ²²	pa ¹¹ ŋɿ ²²	pa ¹¹ ŋɿ ²²	pa ¹¹ ŋɿ ²²	ŋɿ ²² ŋɔ ³³	pa ¹¹ ŋɿ ²²	pa ¹¹ ŋɿ ²²
crooked	phie ¹¹	phie ¹¹	phie ¹¹	phie ¹¹	phie ¹¹	phie ¹¹	phie ¹¹
daughter	ʔa ⁴⁴ phe ⁵³	ʔa ⁴⁴ phe ⁵³	ʔa ⁴⁴ the ⁵³	ʔa ⁴⁴ phe ⁵³	ʔa ⁴⁴ phe ⁵³	ʔa ⁴⁴ phe ⁵³	ʔa ⁴⁴ phe ⁵³
demon, spirit	kwy ²⁴	kwe ²⁴	kwy ²⁴	kwaɪ ²⁴	kwy ³³	kwe ²⁴	kwaɪ ²⁴
die, to	te ⁴⁴	te ⁴⁴	te ⁴⁴	te ⁴⁴	te ³⁵	te ⁴⁴	te ⁴⁴
difficult	nā ⁵³	nā ⁵³	nā ⁵³	nā ⁵³	nā ⁵³	nā ⁵³	nā ⁵³
dig, to	mæ ⁴¹	mæ ⁴¹	mæ ⁴¹	mæ ⁴¹	mæ ⁴¹	mai ⁴¹	ma ⁴¹
dip water, to	fy ⁴¹	fy ⁴¹	fy ⁴¹	fy ⁴¹	fy ⁴¹	fy ⁴¹	fy ⁴¹
dog	ka ¹¹ ja ⁵³	ja ⁵³	ja ⁵³	ja ⁵³	ja ⁵³	ja ⁵³	ja ⁵³
duck	ʔa ⁵³	ʔa ⁵³	ʔa ⁵³	ʔa ⁵³	ʔa ⁵³	ʔa ⁵³	ʔa ⁵³
earth	ka ¹¹ ɰe ²²	ka ¹¹ ɰe ²²	qa ¹¹ ɰe ²²	ka ¹¹ ɰe ²²	ka ¹¹ ɰe ²²	ka ¹¹ ɰe ²²	ka ¹¹ ɰe ²²

Gloss	Liangzhai 1	Baiyun 2	Dalang 3	Xiangfen 4	Gunbei 5	Gandong 6	Donglou 7
leaf	ka ²² mfiɿ ²²	ka ²² mfiɿ ²²	ka ²² ɱfiɿ ²²	ka ²² mfiɿ ²²	ka ²² mfiɿ ²²	ka ²² mfiɿ ²²	ka ²² mfiɿ ²²
leopard	ka ¹¹ pɔ ⁵⁵	ka ¹¹ pɔ ⁵⁵	qa ¹¹ pɔ ⁵⁵	fwe ²⁴	fɿ ³³	ka ¹¹ pɔ ⁵⁵	ka ¹¹ pɔ ⁵⁵
light in weight	fɿ ²⁴	fwe ²⁴	fɿ ²⁴	fwe ²⁴	fɿ ³³	fɿ ²⁴	fai ²⁴
long	to ¹¹	to ¹¹	to ¹¹	to ¹¹	to ¹¹	to ¹¹	to ¹¹
look for, to	wɿ ²⁴	wɿ ²⁴	wɿ ²⁴	wɿ ²⁴	ɣwɿ ³³	wɿ ²⁴	vai ²⁴
lungs	a ⁴⁴ mbjɔ ⁵⁵	ɾa ⁴⁴ pjɔ ⁵⁵	ɾa ⁴⁴ mbjɔ ⁵⁵	ɾa ⁴⁴ mbjɔ ⁵⁵	ɾa ⁴⁴ mbjɔ ⁵⁵	ɾa ⁴⁴ mbjɔ ⁵⁵	ɿha ⁴⁴
moon	ɾa ²² ʈha ⁴⁴	ɾa ²² ʈha ⁴⁴	ɾa ²² ʈha ⁴⁴	ɾa ²² ʈha ⁴⁴	ɾa ²² ʈha ³⁵	ɾa ²² ʈha ⁴⁴	ɾa ²² ʈha ⁴⁴
mud	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²	ka ¹¹ lɛ ²²
NEG	m ¹¹	m ¹¹	m ¹¹	m ¹¹	m ¹¹	m ¹¹	m ¹¹
nine	ko ²²	ko ²²	ko ²²	ko ²²	kɸo ²²	ko ²²	ko ²²
nose	kho ¹¹ mbfiɿ ⁴⁴	kho ¹¹ mbfiɿ ⁴⁴	kho ¹¹ ɱɔ ⁴⁴	kho ¹¹ mbfiɿau ⁴⁴	kho ¹¹ mfiɿau ³⁵	kho ¹¹ mbɿhja ⁴⁴	kho ¹¹ mbɿhja ⁴⁴
oar	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹	ɾa ²² ʈja ¹¹
paddy	lɿɿ ²²	lɿɿ ²²	lɿɿ ²²	lɿɿ ²²	lɿɿ ²²	lɿɿ ²²	lɿɿɿ ²²
person	ɾa ⁴⁴ mfiɿ ²²	ɾa ⁴⁴ mfiɿ ²²	ɾa ⁴⁴ ɱfiɿ ²²	ɾa ⁴⁴ mfiɿ ²²	ɾa ⁴⁴ mfiɿ ²²	ɱfiɿ ²²	ɱfiɿ ²²
person	mfiɿ ²²	mfiɿ ²²	ɱfiɿ ²²	mfiɿ ²²	mfiɿ ²²	ɱfiɿ ²²	ɱfiɿ ²²
pig	mpɿ ⁵⁵	mpɿ ⁵⁵	mɛ ⁵⁵	mpɛ ⁵⁵	mɛ ⁵⁵	mpɛ ⁵⁵	mɛ ⁵⁵
pond	ʋfiɿ ¹¹	ʋfiɿ ¹¹	ʋfiɿ ¹¹	ʋfiɿ ¹¹	ʋfiɿ ¹¹	ʋfiɿ ¹¹	ʋfiɿ ¹¹
poor	khwi ⁵⁵	khwi ⁵⁵	khwi ⁵⁵	khwi ⁵⁵	kɸi ⁵⁵	khwi ⁵⁵	khwi ⁵⁵
put, place, to	kha ⁴¹	ɿɕ ⁵⁵	kha ⁴¹	kha ⁴¹	kɸa ⁴¹	ɿɕ ⁵⁵	kha ⁴¹
rail against, to	lo ⁵⁵	lo ⁵⁵	lo ⁵⁵	lo ⁵⁵	lo ⁵⁵	lo ⁵⁵	lo ⁵⁵
rat	tau ²⁴ ɱfi ¹¹	ta ²⁴ ɱfi ¹¹					
read, study, to	thu ⁵⁵	thu ⁵⁵	thu ⁵⁵	thu ⁵⁵	thu ⁵⁵	thu ⁵⁵	thu ⁵⁵
rice husk	ka ¹¹ mfiɿ ⁵⁵	ka ¹¹ mfiɿ ⁵⁵	ka ¹¹ mfiɿ ⁵⁵	ka ¹¹ mfiɿ ⁵⁵	ka ¹¹ pɸe ⁵⁵	ka ¹¹ mpɸe ⁵⁵	ka ¹¹ mɸe ⁵⁵

[illegible]

<u>Gloss</u>	<u>Liangzhai 1</u>	<u>Baiyun 2</u>	<u>Dalang 3</u>	<u>Xiangfen 4</u>	<u>Gunbei 5</u>	<u>Gandong 6</u>	<u>Donglou 7</u>
two	wə ²⁴	wə ²⁴	wə ²⁴	və ²⁴	wə ³³	və ²⁴	wə ²⁴
wait for, to	lŋt ¹¹	lŋt ¹¹	lŋt ¹¹	lŋt ¹¹	tŋt ¹¹	lŋt ¹¹	lŋt ¹¹
want, to	ja ¹¹	ja ¹¹	ja ¹¹	ja ¹¹	ja ¹¹	ja ¹¹	kuw ¹¹
water dam	pa ⁴⁴ ŋ ²²	pa ⁴⁴ ŋ ²²	pa ⁴⁴ ŋ ²²	pa ⁴⁴ ŋ ²²	pa ⁴⁴	pa ⁴⁴	pa ⁴⁴
weave, to	ntə ⁵³	ntə ⁵³	ntə ⁵³	ntə ⁵³	pa ⁵³	ntə ⁵³	ntə ⁵³
whistle/blow, to	phjə ²⁴	phjə ²⁴	thjə ²⁴	phjə ²⁴	phjə ³³	phjə ²⁴	phjə ²⁴
white	kwo ²⁴	kwo ²⁴	kwo ²⁴	kwo ²⁴	ʔan ¹¹ lɕi ⁵⁵	ʔa ¹¹ lɕi ⁵⁵	kwo ²⁴
wind	ʔə ¹¹ lɕi ⁵⁵	ʔə ¹¹ lɕi ⁵⁵	ʔə ¹¹ lɕi ⁵⁵	ʔə ¹¹ lɕi ⁵⁵	fe ²⁴ sə ¹¹	ʔə ¹¹ lɕi ⁵⁵	ʔə ¹¹ lɕi ⁵⁵
young person	nɔ ⁵⁵	nɔ ⁵⁵	nɔ ⁵⁵	nɔ ⁵⁵		nɔ ⁵⁵	nɔ ⁵⁵

Gloss	Liangzhai 1	Baiyun 2	Dalang 3	Xiangfen 4	Gumbei 5	Gandong 6	Donglou 7
rice, cooked	ʔɕ ⁵³	ʔɕ ⁵³	ʔɕ ⁵³	ʔɕ ⁵³	ʔɕ ⁵³	ʔɕ ⁵³	ʔɕ ⁵³
rope	ty ²² he ⁴⁴	ty ²² he ⁴⁴	ty ²² he ⁴⁴	ty ²² he ⁴⁴	ty ²² he ⁴⁴	ty ²² he ⁴⁴	ty ²² he ⁴⁴
salt	nto ¹¹	nto ¹¹	no ¹¹	nto ¹¹	no ¹¹	no ¹¹	nto ¹¹
scold, to	mhe ¹¹	mhe ¹¹	mhe ¹¹				
short	lā ⁴¹	lā ⁴¹	lā ⁴¹	lā ⁴¹	lā ⁴¹	lā ⁴¹	lā ⁴¹
sister, older	lɛa ¹¹	lɛa ¹¹	lɛa ¹¹	lɛa ¹¹	lɛa ¹¹	lɛa ¹¹	lɛa ¹¹
sleeves	sy ²⁴ ɣ ¹¹	se ²⁴ ɣ ¹¹	sy ²⁴ ɣ ¹¹	se ²⁴ ɣ ¹¹	my ²⁴ ɣ ¹¹	se ²⁴ ɣ ¹¹	se ²⁴ ɣ ¹¹
snail, fr. water	lɛh ⁴⁴ lo ⁴⁴	lɛh ⁴⁴ lo ⁴⁴	lɛh ⁴⁴ lo ⁴⁴	lɛh ⁴⁴ lo ⁴⁴		lɛh ⁴⁴ lo ⁴⁴	lɛh ⁴⁴ lo ⁴⁴
soft	mfi ⁴⁴	mfi ⁴⁴	mfi ⁴⁴	mfi ⁴⁴	mfi ⁴⁴	mfi ⁴⁴	mfi ⁴⁴
speak, to	kā ¹¹	kā ¹¹	kā ¹¹	kā ¹¹	kā ¹¹	kā ¹¹	kā ¹¹
stir fry, to	nhi ¹¹	nhi ¹¹	nhi ¹¹	nhi ¹¹	nhi ¹¹	nhi ¹¹	nhi ¹¹
story	ku ¹¹ mɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴	ku ¹¹ nɛ ⁴⁴
straw hat	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³	ʔa ²² ku ⁵³
street	ke ⁵⁵	ke ⁵⁵	qɣ ⁵⁵	ke ⁵⁵	ʔa ¹¹ ɕi ⁴⁴	ke ⁵⁵	ke ⁵⁵
table	thau ²⁴	thau ²⁴	thau ²⁴	tho ²⁴	tho ³³	thau ²⁴	tho ²⁴
take, to	ky ²²	ke ²²	ʔe ²²	ke ²²	ky ²²	ke ²²	ke ²²
ten	ku ⁴¹	ku ⁴¹	ku ⁴¹	ku ⁴¹	ku ⁴¹	ku ⁴¹	ku ⁴¹
thickly matted	mba ⁴¹	mba ⁴¹	ma ⁴¹	mba ⁴¹	mfa ⁴¹	mbfa ⁴¹	mba ⁴¹
thin	f ¹¹ nɔ ²⁴	f ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ ɱ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴
this	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴	n ¹¹ nɛ ³³	n ¹¹ nɔ ²⁴	n ¹¹ nɔ ²⁴
this year	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵	ɲ ¹¹ lɛ ⁵⁵
tongue	ty ²² mhi ⁴¹	ty ²² mbhe ⁴¹	ty ²² mfi ⁴¹	ty ²² mbhe ⁴¹	ty ²² mfi ⁴¹	ty ²² mbfi ⁴¹	mbi ⁴¹
tree	pja ²⁴	pja ²⁴	tja ²⁴	pja ²⁴	pā ³³	pja ²⁴	pja ²⁴



**GUANGXI RONGSHUI-SANJIANG PA-HNG LOCATIONS
WITH GUIZHOU LOCATIONS RECORDED BY OTHERS**