

# Issues in the reconstruction and affiliation of Proto-Miao-Yao

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## Abstract

In this paper, I present a new look at the phonological reconstruction of Proto-Miao-Yao. Particular attention is devoted to the outstanding problems concerning the reconstruction of initial consonants and clusters. Based on the new reconstruction system, I discuss the viability of some proposed lexical items shared between Miao-Yao and Chinese. A modest goal is to put the long-range comparisons on the firmer ground based on established sound correspondences.

*Key words:* Miao-Yao, phonological reconstruction, velarization, genetic relationship, East Asian languages

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## 1. Introduction

The discussion in this paper focuses on my reconstruction of a Proto-Miao-Yao (PMY) velarized feature, which in turn is related to several core issues regarding initial and rime reconstructions. The comprehensive treatment of the whole reconstruction system has to be elaborated elsewhere but I will select a set of examples to illustrate the idea here. Comments on lexical comparisons between Miao-Yao (MY) and Chinese are made with reference to this new reconstruction system.<sup>1</sup>

## 2. The reconstruction of PMY onsets

### 2.1 Labial onsets

#### 2.1.1 Plain and prenasalized stop onsets

In several Yao dialects, the velarized feature is attested as -w- or -j-, depending on the vowels. We see in Table 1, for instance, that the velarized feature has induced Luoxiang (Lx) -w- and brought about Lanjin (Lj) spirant reflexes (f- and v-). In Jiangdi (Jd), it has become -j- when occurring with \*-a-, which must have been relatively front in this dialect.

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<sup>1</sup> The Miao-Yao dialectal materials are from Wang and Mao (1995), otherwise indicated. White Hmong forms are from Ratliff (2010), Old Chinese forms are from Schuessler (2007), and Tibeto-Burman forms are from Matisoff (2003).

Table 1. Plain and velarized labial onsets in Yao dialects

		Lx	Lj	Jd	
To know	A	pei	pei	pei	*pəi
To dream	C	bei	bei	bei	*mpəi
To sleep	C	pwei	fei	pwei	*p <sup>y</sup> əi
To boil	C	bwei	vei	bwei	*mp <sup>y</sup> əi
To rake	A	pa	pa	pa	*ba
Thin	D	pwa	fa	pje	*b <sup>y</sup> ak
Father	B	pwa	fa	---	*p <sup>y</sup> a
To mend	B	bwa	va	bje	*mp <sup>y</sup> a
Chaff	D	bwa	va	bje	*mph <sup>y</sup> ak
Step	C	bwa	va	bje	*mb <sup>y</sup> a

(The capital letters A, B, and C in all the tables indicate early tone classes).

When occurring with the front vowel \*e, the velarized feature has induced -j-. Before the high vowel \*i and \*u, the reflex of the velarized feature has lost in Lx and Lj (probably through redundancy) but is attested as the expected /-j-/ or /-w-/ in Jd.

Table 2. Labial onsets with \*e, \*i and \*u in Yao dialects

		Lx	Lj	Jd	
Satisfied	B	peu	pi:u	peu	*peu
Fruit	B	pjeu	pjəu	pjou	*p <sup>y</sup> eu
Float	A	bjeu	bjəu	bjou	*mb <sup>y</sup> eu
Bedbug	A	pi	pi	pje	*p <sup>y</sup> i
Three	A	pu	pu	pwo	*p <sup>y</sup> u
Burn	B	pu	pu	pw(o)	*p <sup>y</sup> u
Name	C	bu	bu	bwo	*mp <sup>y</sup> u
Hand	B	pu	pu	pwo	*b <sup>y</sup> u

In some cases, Miao dialects supply further evidence for the early velarized feature. Some Western Miao such as Shimen (Sm), for instance, shows a sibilant reflex of the velarized labial onsets, but only when followed by the high vowel -i. Table 3 shows the corresponding forms in Jiangdi Yao, Shimen (Western Miao) and Jiwei (Northern Miao) dialects.

Table 3. PMY plain and velarized labial onsets

		Jd	Sm	Jw	
To know	A	pei	pau	---	*p-
To dream	C	bei	mpu	mpei	*mp-
To sleep	C	pwei	py	pə	*p <sup>y</sup> -
To boil	C	bwei	mpau	---	*mp <sup>y</sup> -
Father	B	---	tsi	pɑ	*p <sup>y</sup> -
To mend	B	bje	ntsi	mpa	*mp <sup>y</sup> -
Fruit	B	pjou	tsi	pi	*p <sup>y</sup> -
Bedbug	A	pje	---	---	*p <sup>y</sup> -
Three	A	pwo	tsi	pu	*p <sup>y</sup> -
Name	C	bwo	ntsi	mpu	*mp <sup>y</sup> -

Failing to consider various conditioning factors, Wang and Mao (1995) have reconstructed many complex labial onsets for the preceding words, basically taking all modern reflexes back to the proto stage.

Table 4. PMY labial onsets and Wang and Mao's complex labial onsets

PMY	Wang and Mao's	Examples
*p-	*p-	to know
*p <sup>y</sup> -	*pw-	to sleep
	*pj-	bedbug
	*pts-	fruit
	*pwts-	three, father
*mp-	*mp-	to dream
*mp <sup>y</sup> -	*mpw-	to boil
	*mpwj-	to mend
	*mpwts-	name

### 2.1.2 Nasal + Liquid onsets \*m.l- and \*m.r-

There are two sets of words that are usually put under PMY \*mbl- by both Wang and Mao (1995) and Ratliff (2010). (I consider -b- as the emerging stop developing secondary from PMY \*m.l- > mbl-). These are shown in Table 5; Jiwei (Jw), Yanghao (Yh) and Zongdi (Zd) represent the Northern, Eastern, and Western Miao dialects respectively. For \*m.l-, Jiwei and Yanghao have assimilated \*m.l- > /n-/; \*m.l<sup>y</sup>- on the other hand has developed to Jiwei /mj-/.

Table 5. Two series of PMY \*ml- in Miao

		Jw	Yh	Zd	
Rice plant	A	nu	na	mplæ	*m.l-
Glutinous	D	nu	nə	mplu	
Tongue	D	mja	ji	mple	*m.l <sup>y</sup> -
Smooth	A	mje	---	mplein	

The distinction is also made in some Yao dialects as shown in Table 6. The Lanjin (LJ) Mun and Liangzi (Lz) Mien, for instance, show /bl-/ (< mbl-) for \*m.l- but bj- (< mbl<sup>y</sup>-) for \*m.l<sup>y</sup>-. Dongshan (Ds) Biao Min simply reflex both as \*bl-.

Table 6. Two series of PMY \*ml- in Yao

		Lj	Lz	Ds	
Rice plant	A	blau	blau	blau	*m.l-
Glutinous	D	blut	blot	blun	
Tongue	D	bjet	bjet	blin	*m.l <sup>y</sup> -
Smooth	A	bjau	bjau	---	

PMY \*m.r- and \*m.r<sup>y</sup>- may be similarly distinguished, though here the Miao reflexes have become neutral. Evidence in Yao is found in more limited numbers of dialects than in those of \*ml-/ \*ml<sup>y</sup>-. In Table 7, see the distinction between Luoxiang (Lx) Mien bl- (< \*m.r-) and bj- (< \*m.r<sup>y</sup>-). The parallel case of \*pr-/ \*pr<sup>y</sup>- is also provided in the Table.

Table 7. PMY \*mr- and \*pr-

		<u>Yao</u>			<u>Miao</u>			
		Lx	Lz	Ds	Jw	Yh	Zd	
Spicy	D	bla:t	bja:t	blan	mzɛi	za	mpzɪ	*m.r-
Fish	B	bjau	bjau	bla	mzɯ	zɛ	mpzɛ	*m.r <sup>y</sup> -
Five	A	pla	pja	pla	pzɔ	tsa	pzɪ	*pr-
House	B	pjau	pjau	pla	pzɯ	tɛ	pzæ	*pr <sup>y</sup> -

From the preceding lists, we may also find some Chinese related forms. There, it is significant to note that the corresponding Chinese onsets are usually \*l or \*r, never stops (namely, \*b).

Table 8. PMY \*mr-/\*ml- and their corresponding OC initials

	PMY	OC
Spicy	*m.r-	辣 *rât
Fish	*m.r <sup>y</sup> -	鯉 *rəʔ ‘carp’
Rice plant	*m.l-	稻 *lûʔ
Tongue	*m.l <sup>y</sup> -	舌 *mlat

I have pointed out elsewhere (Ostapirat 2011) that the suggestion to link the MY word for ‘fish’ to Tai \*pla: (cf. Chen 2001, Ratliff 2010) is not supported by the corresponding sounds between these languages (\*m.r- versus \*pl-). There has also been a proposal that MY ‘nose’, Dongshan Biao-Min /bli/, Zongdi Miao /mpzu/, Jiwei Miao /mzə/ < \*m.r<sup>y</sup>- is related to Chinese \*bji(t)s. If the MY and Chinese forms are really related, it seems to indicate a borrowing since MY \*m.r- would normally correspond to Chinese \*r- as shown above. It needs to be demonstrated why MY \*m.r- would correspond to Chinese \*b- in this case. Note also that the typical Sino-Tibetan root for ‘nose’ is \*sna (Written Tibetan /sna/, Written Burmese /hna/).

## 2.2 Velars and Postvelars

Modern Miao languages are known to have contrastive velar and uvular stop initials /k-/ and /q-/ and these are usually posited directly back to Proto-Miao-Yao. I have shown elsewhere (Ostapirat 2011) that, in most cases, Miao \*k- does not correspond to Yao \*k- but \*kr-, leaving the possibility to interpret the correspondence between Miao \*q- and Yao \*k- as simply PMY \*k- (which is typically retracted to q- in Miao dialects).

Table 9. PMY \*k and \*kr

		Yao		Miao		
		Ds	Lj	Sm	Yh	
Horn	A	klɔ	kjɔ:ŋ	ku	ki	*kr
To cut	D	klaŋ	kjap	---	ken	*kr
Insect	A	klɛ	kje:ŋ	kau	kaŋ	*kr
Road	B	kla	kjau	ki	ki	*kr
-----						
To crow	C	---	ka:i	qa	qa	*k
Sweet	A	kan	ka:m	qau	qaŋ	*k
Borrow	B	kɔ	ka	qe	---	*k
Old	C	ku	ku		qo	*k

Ratliff (2010) reconstructs \*kl- for what I reconstruct \*kr-.<sup>2</sup> I reconstruct \*kl- for another set of words that show a straightforward \*-l- in most dialects.

Table 10. PMY \*kl

		<u>Yao</u>			<u>Miao</u>			
		Ds	Lj	Lz	Dn	Yh	Fy	Jw
Dog	B	klu	klu	tlo	t̚e	ɭa	qlei	qwu
Waist	B	kla	kla:i	tla:i	t̚ua	ɭa	qla	qwa
Hawk	B	klaŋ	kla:ŋ	tlaŋ	t̚aŋ	ɭaŋ	---	qwei
Neck	A	klaŋ	kla:ŋ	tlaŋ	t̚aŋ	---	---	---

As we see, the cluster \*kl- has assimilated into /t̚l-/~/t̚l-/ in some dialects, namely, Liangzi (Lz) Yao and Dananshan (Dn) Miao. This further develops into /d-/ in White Hmong: /de<sup>3</sup>/ ‘dog’, /dua<sup>3</sup>/ ‘waist’, /da<sup>3</sup>/, ‘hawk’, and /da<sup>1</sup>/ ‘neck’.

When \*kl- is velarized, it typically develops into /kw-/ in Yao dialects. The -l- medial, however, is retained faithfully in Miao dialects such as Dananshan (Dn) and Shimen (Sm) /t̚l-/ in the same way we have just noted for PMY \*kl-. (See also White Hmong /di<sup>1</sup>/ ‘cucumber’ and /da<sup>3</sup>/ ‘wide’).

Table 11. PMY \*kl<sup>y</sup>-

		<u>Yao</u>			<u>Miao</u>			
		Ds	Lj	Lz	Dn	Yh	Fy	Jw
Cucumber	A	kwa	kwa	kwa	t̚i	fa	qwa	kwa
To cross over	C	kwa	kwa:i	kui	t̚ua	fa	qwa	kwa
Wide	B	kwaŋ	kwaŋ	kwaŋ	t̚aŋ	faŋ	---	kwei

In several Miao dialects, the development \*kl- > /ql-/ contrasting with \*kl<sup>y</sup>- > /qw-/ occurs (cf. Fuyuan); in Yanghao (Yh) these further become /ɭ-/ and /f-/. It is worth noting that the Jiwei (Jw) dialect has kept the distinction (before PMY \*a) by retaining the velar articulation for the velarized onset: /kw-/ < \*kl<sup>y</sup>-, but /qw-/ < \*kl-. All etyma in Table 11 have the vowel \*a.

Some examples of \*kl<sup>y</sup>- are obscured by the variant development conditioned by the vowels. For instance, the expected -w- is typically lost in Yao dialects when followed by the rounded vowels, namely, \*kl<sup>y</sup>u > /ku/ ‘far’. Before the front vowel \*e, the palatal -j- instead of -w- has emerged (cf. ‘bear’).

<sup>2</sup> The \*kr- here may belong to two sets: \*kr- and \*kr<sup>y</sup>-, based on the Zao Min distinctive reflexes /ts-/ and /k-/. See Zao Min /kəu/ ‘horn’, /kep/ ‘cut’, but /tsaŋ/ ‘insect’, /tsu/ ‘road’. There is also an example that may point to \*qr- (‘egg’) contrasting with \*kr- (‘road’) as in the following pairs where the distinction is attested in Western Miao dialects (represented by Dn and Zd).

		<u>Miao</u>			<u>Yao</u>		
		Dn	Zd	Yh	Sj	Lx	Zm
Road	B	ke	kæ	ki	klu	kjau	tsu
Egg	C	qe	hæ	ki	klu	kjau	tsu

Table 12. PMY \*kl<sup>y</sup>- with \*u and \*e

		<u>Yao</u>			<u>Miao</u>		
		Ds	Lj	Lz	Dn	Yh	Fy
Far	A	ku	ku	ko	t̚le	---	qwei
Bear	D	---	kja:p	kjap	t̚lai	ɿi	---

As usual, some Western Miao dialects such as Dananshan (Dn) come to the rescue with their reflexes attesting \*-l-. For ‘far’, see also Shimen Miao /t̚li/, White Hmong /de/; for ‘bear’, see Sanjiang Biao Min /kljɛ/, Shimen Miao /t̚lai/, White Hmong /dai/. Note also Yanghao /ɿi/ ‘bear’; this Eastern Miao dialect shows variant reflexes of the cluster under similar conditions to Yao dialects. Compare the following reflexes in Lanjin (Lj) Yao and Yanghao (Yh) Miao.

	Lj	Yh	Dn
*kl-	kl-	l̚-	t̚l̚-
*kl <sup>y</sup> -	kw-	f-	t̚l̚-
*kl <sup>y</sup> -/_e	kj-	ɿ-	t̚l̚-

Our reconstruction here has helped set up a system much simpler than earlier proposals. Compare, for instance, our established set of \*kl- and \*kl<sup>y</sup>- to those of Ratliff’s below. This is not to mention that the medial -l-, attested in several modern dialects, cannot be accounted for by the reconstructed sounds such as \*Kw- or \*qw-.

PMY	Ratliff (2010)	Examples
*kl-	*ql-	dog
*kl <sup>y</sup> -	*Kw-	cucumber
/_u	*qw-	far
/_e	*qr-	bear

The same rules apply for other velar/postvelar reflex patterns in modern dialects. Table 13 lists the parallel examples of \*gl- and \*ŋ.l- > \*ŋgl-.

Table 13. PMY \*gl- and \*ŋ.l- (> ŋgl-)

		<u>Yao</u>		<u>Miao</u>		
		Ds	Lj	Dn	Fy	
peach	A	kla	klau	t̚lua	ɿlei	*gl-
intestine	A	klaŋ	kla:ŋ	---	---	*gl-
river	A	---	---	t̚le	ɿlei	*gl-
shuttle	B	---	glou	---	---	*ŋgl- < *ŋ.l-
front	B	---	---	nta	Nqlen	*ŋgl- < *ŋ.l-

See also Shimen Miao /dlfia/ ‘peach’, /dlfi/ river, and /ndfile/ ‘front’.

Our proposal also helps solve some outstanding problems in the initial reconstruction of certain roots. The word ‘sky, heaven’, for instance, has been listed under three separate initials in previous reconstructions, namely Ratliff’s \*w-, \*nd-, and \*NG-. In our system, the disparate reflexes are in fact regular and point to PMY \*ŋ.l<sup>Y</sup>- > ŋgl<sup>Y</sup>-.

Table 14. PMY \*ŋ.l<sup>Y</sup>- (> ŋgl<sup>Y</sup>-) onset for ‘sky, heaven’

		<u>Yao</u>			<u>Miao</u>			
		Lj	Lz	Ds	Dn	Yh	Fy	
Sky, heaven	A	gu:ŋ	guŋ	guŋ (Lx)	nto	vɛ	Nqwaŋ	*ŋ.l <sup>Y</sup> -
Front	B	---	---	---	nta	---	Nqlen	*ŋ.l-
Far	A	ku	ko	ku	t̚e	---	qwei	*kl <sup>Y</sup> -
Dog	B	klu	tlo	klu	t̚i	la	qlei	*kl-

We can see the parallel case between \*-l- and \*-l<sup>Y</sup>- in the above comparisons. Remember that Yao dialects typically lose /-w-/ < \*-l<sup>Y</sup>- before /u/ (cf. ‘far’) and that Yanghao (Yh) Miao has /f-/ for \*kl<sup>Y</sup>- (e.g. /fa:/ ‘cucumber’), thus Yh /v-/ for \*ŋgl<sup>Y</sup>- < \*ŋ.l<sup>Y</sup>- is expected.

The etymon ‘yellow’ is posited under Ratliff’s \*Gw-. As in case of her \*Kw-, this does not explain the -l- reflex in some Miao dialects. Proto-Miao onset for this root is rather \*gl<sup>Y</sup>-, a voiced counterpart of \*kl<sup>Y</sup>-, as can be seen in the following comparisons.

Table 15. PMY \*gl<sup>Y</sup>- and ‘yellow’

		<u>Yao</u>			<u>Miao</u>				
		Ds	Lj	Lz	Dn	Yh	Fy	Jw	
Yellow	B	waŋ	vaŋ	waŋ	t̚aŋ	faŋ	ɸwen	kwei	*gl <sup>Y</sup> -
Wide	B	kwaŋ	kwaŋ	kwaŋ	t̚aŋ	faŋ	---	kwei	*kl <sup>Y</sup> -

The expected Yao reflexes should be something like /gwaŋ/, however. Taking them at face-value, we may need to posit the PMY uvular onset \*Gl<sup>Y</sup>, though it seems simpler to consider the Yao forms as separately borrowed from Chinese (黃 OC wâŋ > MC ywaŋ).

### 2.3 Palatals

There are a number of problems related to the PMY palatal series reconstructed by Ratliff (2010). Most of them are rather ‘palatalized’ velar and dental onsets. Instead of reconstructing a second proto feature, I regard them as reflexing the velarized feature that

we establish. We have already shown that the velarized feature can be a source of -w- and -j- medials in modern Miao-Yao dialects.

I reconstruct PMY \*g<sup>y</sup>- for Ratliff's \*j-. The velar articulation is still attested in some dialects including the Daping (Dp) and Liangzi (Lz) dialects of Yao and a She (S) dialect in Guangdong. The change \*j- > \*g- would be phonetically somewhat strange.

Table 16. PMY \*g<sup>y</sup>-

		<u>Yao</u>			<u>Miao</u>		
		Zm	Lz	Jd	S	Yh	Sm
To ride	A	ki	kjei	tɕei	khji	tɕi	dʒɦu
Bridge	A	ku	kjau	tɕou	khji	tɕu	---
Eggplant	A	kjɛ	---	tɕe	khju	tɕa	---
Male (human)	C	kjaŋ	kjaŋ	tɕaŋ	---	tɕaŋ	dʒɦau

Also reconstructible with \*g<sup>y</sup>- onset, the following two etyma suggest some complex pre-initials. The word 'nine' may have a complex onset \*d.g<sup>y</sup>-, with metathesis in some Yao dialects (cf. Lz and Lx /d-/). The word may be linked to Tibeto-Burman root for 'nine' (cf. Written Tibetan /dgu/). The etymon 'root' may have developed similarly. (See also Pa-hng /ko/ 'nine' and /kõ/ 'root').

Table 17. PMY \*d.g<sup>y</sup>-

		<u>Yao</u>			<u>Miao</u>		
		Zm	Lz	Lx	S	Yh	Sm
Nine	A	ku	du	du	khju	tɕə	dʒɦa
Root	A	---	duŋ	duŋ	khjuŋ	tɕo	dʒɦau

Examples in Table 18 show PMY velarized (> palatalized) dental onsets. The She/Jiongnai dialects (S and Jn) keep the original dental initials well in most cases.

Table 18. PMY velarized (> palatalized) dental onsets

		<u>Miao</u>			<u>Yao</u>			
		S	Jn	Dn	Dp	Lx	Jd	
To thread	A	thjuŋ	tʃui	tɕhau	tsui	ɕwəŋ	---	*th <sup>y</sup> -
Steelyard	C	thjaŋ	ntjaŋ	---	dzaŋ	dʒaŋ	dzjaŋ	*nth <sup>y</sup> -
Bamboo strip	D	tju	ntjeu	jtɕou	dziu	dʒu	dzu	*nt <sup>y</sup> -
Pillow	C	njaŋ	ntjoŋ	jtɕoŋ	---	dʒom	dʒəm	*nt <sup>y</sup> -
To peck	D	tju	---	jtɕeu	---	---	dzo	*nt <sup>y</sup> -
Mouth	A	tjɔ	ntjɔ	jtɕou	dzi	---	dzu:i	*nd <sup>y</sup> -

These onsets correspond mainly to Ratliff’s palatal initials: \*ch- (to thread), \*ɲc- (bamboo strip, pillow, to peck), \*ɲj- (mouth), and one example to \*nthj- (steelyard).

Some etyma that Ratliff has put the Yao forms under her PMY palatal initials (namely, \*ɕ- ‘girl, daughter’, \*ɲch- ‘ant’) have corresponding Miao forms with labial onsets. For these I reconstruct \*(m)ph<sup>Y</sup>- (before \*e) from which Yao palatalized reflexes have developed secondarily.

Table 19. PMY \*(m)ph<sup>Y</sup>-

		S	Jn	Dn		Dp	Lx	Jd	
Ant	B	phui	mphai	---		dziu	ɕeu	dzjou	*mph <sup>Y</sup> -
Girl, daughter	D	phui	phai	ntshai		sa	ɕa	sje	*(m)ph <sup>Y</sup> -

For ‘girl, daughter’, see also Zongdi /mpje/, Fuyuan /mʔphje/.

### 3. Miao-Yao and Chinese

The issue of affiliation between Miao-Yao and Chinese has been debated over a century. A typical view is to consider them as genetically related under the grand Sino-Tibetan family, though a recent review of the issue (Gong 2006) seems to make the scheme skeptical. Gong points out that a number of putative related forms fail to show regular correspondences, that the Miao or Yao forms often reflect Middle Chinese or later stages instead of Old Chinese (thus liable to be loans), and that many etyma are represented by only Miao or Yao forms (indicating that the words may not go back to Proto-Miao-Yao). These imply that some of the proposed related etyma have to be rejected (due to lack of regular correspondences) while the others are better treated as borrowings from Chinese into Miao-Yao.

Even so, there is much we can learn from the lexical comparisons between Chinese and Miao-Yao, especially from the vocabulary items that belong to the older stages. For instance, the selected words in Table 20 show the correspondences between Miao-Yao prenasalized stops and what Norman (1974) calls Proto-Min (the ancestral language of the Chinese Min dialects) softened stops. The list appears to support Norman’s contention that these distinct initial series have to be reconstructed for Proto-Min (and thus also for Old Chinese) and that one of their major sources could be prenasalized stops (Norman 1986).

Note that Proto-Min \*-d may correspond to Miao-Yao \*d- or \*r- when preceded by nasal onsets. See ‘ramie, hemp’ (PMY \*nd-), ‘fish, carp’ (PMY \*m.r-), and ‘lazy’ (PMY \*ɲ.r-). Also, Proto-Min \*-dʒ is found to correspond to PMY \*m.l<sup>Y</sup>- (cf. ‘tongue’). (The representative dialects are Fuyuan for Miao and Luoxiang for Yao. (Cr) is a Chiengrai dialect of Yao, from my field-notes, and (Ds) is Dongshan Biao Min).

Table 20. MY prenasalized onsets and Proto-Min softened stop initials<sup>3</sup>

	Miao	Yao	PMY	Proto-Min
Collapse	---	ba:ŋ (Cr)	*mp-	-p 崩
Mend	mʔpa	bwa	*mp-	-p 補
To boil	mʔpu	bwei	*mp-	-p 沸
Daughter in law	---	bwəŋ	*mb-	-b 婦
Float	---	bjeu	*mb-	-b 浮
Step	---	bwa	*mb-	-b 步
Challenge	---	dou (Cr)	*nt-	-t 賭
Carry on shoulder	---	da:m	*nt-	-t 擔
Ramie	nta	do	*nd-	-d 紵
Fish, carp	mpji	bjau	*m.r-	-d 鯉
Lazy	ŋkaŋ	---	*ŋ.r-	-d 懶
Early	nʔtsu	djeu	*nts-	-ts 早
Name, character	---	dzaŋ (Ds)	*ndz-	-dz 字
Tongue	mple	bjet	*m.l-	-dʒ 舌
Mushroom	ŋʔka	ju	*ŋk-	-k 姑
Hold in mouth	---	gɔm	*ŋk-	-g 含

The direction of borrowings is also a tantalizing issue. Words reconstructed with PMY \*kl<sup>v</sup>- can be taken as an illustrative case. No trace of -l- is found for these words in Chinese, which are usually reconstructed with OC initial \*k<sup>w</sup>-. If they are loans, the borrowing must have gone from Miao-Yao into Chinese rather than the other way around. The same is true for such etymon as ‘dog’ (PMY \*kl-); for this word Chinese simply shows \*k-.

Table 21. PMY \*kl-/ \*kl<sup>v</sup>- and OC \*k-/ \*k<sup>w</sup>-

		PMY	OC
Cucumber	A	*kl <sup>v</sup> a	*kwra 瓜
To cross over	C	*kl <sup>v</sup> ai	*kwaih 過
Wide	B	*kl <sup>v</sup> aŋ	*kwaŋʔ 廣
Dog	B	*klu	*koʔ 狗

<sup>3</sup> Norman represents Proto-Min softened stop initials with a preceding hyphen. For ‘ramie, hemp’, see also Pa-hng /mjo/, which suggests \*m.d-. For ‘mushroom’, see also Zao Min /gu/. The word ‘hold in mouth’ is an exception where the Yao \*ŋk- does not agree in voicing with Min \*-g. Note also that a number of etyma lack corresponding forms in Miao, perhaps suggesting a more intimate contact link between the ancestors of Min and Yao.

Note also that Chinese has another native root for ‘dog’ (犬 OC \*khwin?) that can be traced back to Sino-Tibetan (cf. Written Tibetan /khji/, Written Burmese /khwe/). In such case, the possibility that Chinese has borrowed 狗 \*ko? from Miao-Yao is further substantiated by its lack of Sino-Tibetan origin. The search along this line that put Miao-Yao and Chinese lexical comparisons into Sino-Tibetan perspective thus may help clarify the affiliation and borrowing issues between Miao-Yao and Chinese in the near future.

## References

- [1] Chen Qiguang. 2001. A comparative study of Chinese and Miao-Yao languages. *Cognate Words in Sino-Tibetan Languages*, vol.2, ed. by Ting Pang-hsin and Sun Hongkai, 129-642. Nanning: Guangxi Nationality Press.
- [2] Gong Hwang-cherng. 2006. The Sino-Miao-Yao relationship revisited. *Bulletin of Chinese Linguistics* 1.1: 255-270.
- [3] Matisoff, James. 2003. *Handbook of Proto-Tibeto-Burman*. Berkeley: University of California Press.
- [4] Norman, Jerry. 1974. The initial of Proto-Min. *Journal of Chinese Linguistics* 2.1: 27-36.
- [5] Norman, Jerry. 1986. The origin of Proto-Min softened stops. *Contributions to Sino-Tibetan Studies (Cornell Linguistic Contributions 5)*, ed. by J. McCoy and T. Light, 375-384. Leiden: E.J. Brill.
- [6] Ostapirat, Weera. 2011. Linguistic interaction in South China: the case of Chinese, Tai and Miao-Yao. Paper presented at *Symposium on Historical Linguistics in the Asia-Pacific Region and the Position of Japanese*. Osaka: National Museum of Ethnology.
- [7] Ratliff, Martha. 2010. *Hmong-Mien Language History*. Canberra: Pacific Linguistics (Studies in Language Change 8).
- [8] Schuessler, Axel. 2007. *ABC Etymological Dictionary of Old Chinese*. Honolulu: University of Hawai'i Press.
- [9] Wang Fushi and Zongwu Mao. 1995. *Reconstruction of the Sound System of Proto-Miao-Yao*. Beijing: China Social Sciences Press.