

## WEDGE ISSUES\*

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### 1.0 INTRODUCTION

When I elicited the Pumi (Prinmi) word *tsó* ‘wedge’ in Kunming (March 1996), I was struck by its resemblance to Lahu *jû* ‘wedge’. Since the Qiangic languages are not particularly close to Loloish on the TB family tree, this apparent cognate for an item of non-core vocabulary was of interest. The first task in establishing a relationship between the Pumi and the Lahu forms was to reconstruct the PLB ancestor of Lahu *jû*. Then possible cognates to the Pumi form in other Qiangic languages had to be examined. Given our present rudimentary knowledge of comparative Qiangic, could parallel examples establish a Proto-Qiangic reconstruction resembling our newly reconstructed PLB form?

As it turns out, the Pumi and Lahu forms are not cognate after all. Still, this study has unearthed several new etyma for ‘wedge’, and clarified some Qiangic rhyme developments, especially as concerns the fate of PTB \*-**am** and \***ap**. Finally, it raises some cautionary issues in comparing sets of forms across distant subgroups of the vast TB family.

### 2.0 THE PLB PROVENIENCE OF LAHU *jû*: PLB \**N-džam*<sup>2</sup>

Lahu *jû* (N; M<sub>px</sub>) ‘wedge; shim; stake’ is both a free noun (N) and a morpheme prefixable by *ɿɔ-* (M<sub>px</sub>), occurring in collocations like:

<i>chɛ-kə-jû</i> (N)	‘shim used in a rice-pounder’
<i>jû dʒʔ ve</i> (OV)	‘drive in a wedge/stake’
<i>jû ʃɛ ve</i> (OV)	‘insert a wedge; insert a wooden pin into a prepared hole’
<i>ɿɔ-jû ka ve</i> (OV)	‘drive in a wedge/stake’

No etymology was offered for this morpheme in Matisoff 1988:163, 568. The abundant new Lolo-Burmese data provided in Sun et al, 1991 (henceforth

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\* This paper was originally presented orally in Chinese (Minorities University, Beijing; June 3, 1997) with the title 用楔子撬开问题 “*Yǐong xiēzi qiāo kāi wèntí*” (‘Using a wedge to pry open a problem’). It was then published under the same title in *Yǔyán Yánjiū* (Wuhan) 2000.1:106-27.

*ZMYYC*), and Dai et al, 1992 (henceforth *TBL*), now allows us to reconstruct a PLB root with confidence.

### 2.1 *Burmish reflexes*

Achang (Longchuan)	a <sup>31</sup> ɕe <sup>51</sup>	ZMYYC #413, p. 783; TBL #620, p. 207
Bola	s <sup>35</sup> tʃɛ̃ <sup>31</sup>	TBL #620
Langsu (=Maru) <sup>1</sup>	saŋ <sup>35</sup> tʃɛ̃ <sup>31</sup>	ZMYYC #413; TBL #620
Zaiwa (=Atsi)	siŋ <sup>21</sup> tʃam <sup>21</sup>	ZMYYC #413; TBL #620

The Burmish reflexes are crucial, pointing unmistakably to a nasal-finalled rhyme. The Zaiwa form narrows it down to *\*-am*. In WB itself, the reflex of *\*-am* is *-am*, but there is no apparent Burmese cognate to this set.<sup>2</sup> The Achang (Longchuan) form a<sup>31</sup>ɕe<sup>51</sup> cited above (2.01) is not cognate, since the regular Achang reflex of *\*-am* is also *-am* (see sets below).

The dozen or so best-attested *\*(w)am* etyma in Lolo-Burmese, and their WB reflexes, are as follows:

	<i>PLB</i>	<i>WB</i>
‘bear’	*d-wam <sup>1</sup> ⌘ <sup>2</sup>	(wak-)wam
‘belly’	*p-wam <sup>2</sup>	wâm
‘bridge’	*dzam <sup>1</sup>	tsam
‘dare’	*wam <sup>3</sup>	wam’
‘ear/spike (grain)’	*s-nam <sup>1</sup>	hnâm
‘fathom/cord’	*s-lâm <sup>1</sup> ⌘ <sup>2</sup>	lam ⌘ hlâm <sup>3</sup>
‘fence/garden’	*kram <sup>1</sup>	khram
‘fly’ (v.)	*byam <sup>1</sup>	pyam
‘hair (head)’	*tsam <sup>1</sup>	tsham
‘iron’	*syam <sup>1</sup>	sam
‘otter’	*syam <sup>1</sup> ⌘ *pyam <sup>1</sup> < PTB *sram	phyam
‘road’	*lam <sup>2</sup> ⌘ <sup>3</sup>	lam
‘sesame’	*s-nam <sup>2</sup>	hnâm
‘smell’	*nam <sup>1</sup> ⌘ <sup>2</sup> ⌘ <sup>3</sup>	nam, nâm, nam’

<sup>1</sup> The first syllables in the Langsu and Zaiwa forms apparently mean ‘wood’, although the free morphemes for ‘wood’ in Langsu and Zaiwa have final stops rather than nasals (Langsu *sak*, Zaiwa *sik*<sup>55</sup>). This root shows *-ŋ* ⌘ *-k* variation in TB as a whole.

<sup>2</sup> See below 4.2 for a discussion of WB *sap* and its possible cognates.

<sup>3</sup> The aspirated allofam means ‘to stretch out the arm’; the *\*s-* prefix is also reflected in Yi Mile *tu*<sup>33</sup> and Jinuo *te*<sup>33</sup>.

Reflexes of these etyma in other Burmish languages are quite regular:

	<i>Achang</i>	<i>Zaiwa</i>	<i>Leqi</i>	<i>Langsu</i> <sup>4</sup>	<i>Bola</i>
‘bear’	ɔm <sup>55</sup>	vam <sup>51</sup>	wɔm <sup>31</sup>	vẽ <sup>31</sup>	vẽ <sup>55</sup>
‘belly’	ɔm <sup>31</sup> tau <sup>31</sup>	vam <sup>21</sup>	wɔm <sup>33</sup> tou <sup>33</sup>	vẽ <sup>35</sup> tuk <sup>31</sup>	vẽ <sup>31</sup> tau <sup>31</sup>
‘bridge’	tɕam <sup>55</sup>	tsam <sup>51</sup>	tsam <sup>31</sup>	tsẽ <sup>31</sup>	tsẽ <sup>55</sup>
‘dare’	---	vam <sup>55</sup>	wu:m <sup>55</sup>	vẽ <sup>55</sup>	vẽ <sup>35</sup>
‘fathom’	lam <sup>55</sup>	lam <sup>51</sup>	lam <sup>31</sup>	lẽ <sup>31</sup>	lẽ <sup>55</sup>
‘ear/spike (grain)’	tɕɔ <sup>55</sup> nɔm <sup>55</sup>	a <sup>21</sup> nɔm <sup>51</sup>	a <sup>55</sup> nɔm <sup>33</sup>	kauk <sup>31</sup> nẽ <sup>31</sup>	nẽ <sup>55</sup>
‘fly’	tɕam <sup>55</sup>	[taŋ <sup>21</sup> ]	[ta:ŋ <sup>33</sup> ]	[tɕ <sup>35</sup> ]	[tɕ <sup>31</sup> ]
‘garden/fence’	---	khjam <sup>51</sup>	khjam <sup>33</sup>	khjẽ <sup>31</sup>	khjẽ <sup>55</sup>
‘hair (of head)’	---	u <sup>21</sup> tsham <sup>51</sup>	tsham <sup>33</sup>	tshẽ <sup>31</sup>	tshẽ <sup>55</sup>
‘iron’	ɕam <sup>55</sup>	ɕam <sup>51</sup> tɔ <sup>55</sup>	[tɕɔ <sup>31</sup> tɔ <sup>55</sup> ]	ɕẽ <sup>31</sup> tɔ <sup>55</sup>	ɕẽ <sup>55</sup> -ta <sup>55</sup>
‘otter’	sam <sup>55</sup>	xam <sup>51</sup>	ɕam <sup>33</sup>	xẽ <sup>31</sup>	xẽ <sup>55</sup>
‘smell’	nam <sup>31</sup>	nam <sup>51</sup>	na:m <sup>31</sup>	nẽ <sup>31</sup>	nẽ <sup>55</sup>
‘wedge’	[a <sup>31</sup> ɕe <sup>51</sup> ]	siŋ tɕam <sup>21</sup>	---	saŋ <sup>35</sup> tɕẽ <sup>31</sup>	sɔ <sup>35</sup> tɕẽ <sup>31</sup>

These Burmish reflexes may be tabulated as follows:

<i>PLB</i>	<i>Achang</i> ( <i>Longchuan</i> )	<i>Zaiwa</i> ( <i>Atsi</i> )	<i>Leqi</i> ( <i>Lashi</i> )	<i>Langsu</i> ( <i>Maru</i> )	<i>Bola</i>
*-am	-am, -ɔm	-am	-am, -ɔm, -um	-ẽ	-ẽ

## 2.2 *Loloish reflexes for ‘wedge’*

<i>Gazhuo</i>	sɿ <sup>35</sup> tɕe <sup>31</sup>	TBL #620
<i>Hani (Lüchun)</i>	tsha <sup>31</sup> tshɔ <sup>31</sup>	TBL #620
<i>Hani (Mojiang)</i>	tɔ <sup>31</sup> tɕu <sup>31</sup>	TBL #620
<i>Hani (Shuikui)</i>	tɔ <sup>31</sup> tɕhu <sup>31</sup>	ZMYYC #413
<i>Lahu (Black)</i>	dzu <sup>53</sup>	ZMYYC #413
<i>Lisu</i>	dɕɔ <sup>31</sup> tɕhe <sup>55</sup>	ZMYYC #413
<i>Lisu (Northern)</i>	nɔ <sup>55</sup> dzɔ <sup>21</sup>	DB-Lisu <sup>5</sup>
<i>Naxi (Lijiang)</i>	ɕu <sup>55</sup>	ZMYYC #413; TBL #620
<i>Nusu (Bijiang)</i>	tɕa <sup>55</sup>	ZMYYC #413
<i>Nusu</i>	tɕa <sup>55</sup>	TBL #620
<i>Sani</i>	sʒ dzɿ <sup>11</sup>	TBL #620
<i>Yi (Mile (Axi))</i>	dzɿ <sup>21</sup> bu <sup>33</sup>	ZMYYC #413
<i>Yi (Mojiang)</i>	ɕɿ <sup>33</sup> dze <sup>33</sup>	ZMYYC #413
<i>Yi (Nanjian)</i>	dzy <sup>21</sup>	ZMYYC #413
<i>Yi (Nanhua)</i>	ɕɿ <sup>33</sup> dzɿ <sup>21</sup>	ZMYYC #413
<i>Yi (Weishan)</i>	bu <sup>21</sup> dzy <sup>21</sup>	TBL #620
<i>Yi (Wuding)</i>	ŋtɕhe <sup>33</sup>	TBL #620
<i>Yi (Xide)</i>	ndzɔ <sup>33</sup>	ZMYYC #413; TBL #620

<sup>4</sup> The Bola forms given in TBL (Language #32 of 50) are virtually identical to these Langsu (Maru) forms (Lg. #31 in TBL).

<sup>5</sup> This form is not from either ZMYYC or TBL, but rather from Bradley 1994.

At first glance, some of these forms look like possible loans from Chinese 楔子 (cf. Mandarin *xiēzi*), especially Yi Nanhua  $\text{ɕe}^{21} \text{ts}\text{ɿ}^{33}$  (TBL #620). On the other hand, the first syllables might be reduced forms of morphemes meaning ‘wood’ (< PTB \**sik*  $\approx$  \**siŋ*). To ascertain whether, e.g. the Gazhuo, Sani, Mojiang, and Nanhua (ZMYYC) forms are loans from Chinese or not, we shall have to look at other cognate sets reflecting the rhyme \*-am.

### 2.3 The PLB \*initial

The voicedness of the initial in Lahu *jû* points unmistakably to a \*prenasalized prototype.<sup>6</sup> The Chinese Lahu source has **dz-**, perhaps inaccurately recorded; but in any case there is no contrast in Black Lahu between dentals and palatals. The palatal phonemes /c ch j š y/ have dental allophones before ɾ:

/c ch j š y/ ---> [ts tsh dz s z] / -----ɾ<sup>7</sup>

The prenasalization of the PLB initial is directly confirmed by the Yi Wuding and Yi Xide reflexes.

### 2.4 The PLB \*tone

Since Lahu *jû* is from PLB Tone \*2, we expect that its LB cognates will also reflect that tone. To check that out, all we need do is compare the tones for ‘wedge’ in these languages with the tones of the reflexes of an “exemplary” Tone \*2 etymon. In the case of the Burmish forms we should select a non-verbal<sup>8</sup> etymon, e.g. PLB \**sum*<sup>2</sup> ‘three’:

	<i>Tone of WEDGE</i>	<i>Tone of THREE</i>
<b>Burmish</b>		
<i>Achang (Longchuan)</i>	---	31 <i>sum</i> <sup>31</sup>
<i>Bola</i>	31	55 <i>sam</i> <sup>55</sup> <sup>9</sup>
<i>Zaiwa (Atsi)</i>	21	21 <i>sum</i> <sup>21</sup>
<i>Langsu (Maru)</i>	31	31 <i>sam</i> <sup>31</sup>
<i>Leqi (Lashi)</i>	---	55 <i>sɔm</i> <sup>55</sup>
<i>WB</i>	---	^ <i>sûm</i>

<sup>6</sup> See Matisoff 1972:15-16.

<sup>7</sup> See Matisoff 1973/1982, pp. 6-8.

<sup>8</sup> As Burling (1968:57-8, 69) demonstrated, Atsi and Maru tonal reflexes of PLB Tone \*2 are different for verbs as opposed to non-verbs.

<sup>9</sup> I cannot explain why this form has tone 55, since many other Tone \*2 etyma give Bola tone 31: ‘bone’ \**rəw*<sup>2</sup> > Bo. *ǰă-u*<sup>31</sup>, ‘four’ \**b-ləy*<sup>2</sup> > Bo. *məi*<sup>31</sup>, ‘five’ \**ŋa*<sup>2</sup> > Bo. *ŋa*<sup>31</sup>, ‘nine’ \**gəw*<sup>2</sup> > Bo. *ka*<sup>31</sup>. Furthermore, other Tone \*2 etyma with initial \*s- develop Bola tone 35: ‘blood’ \**swəy*<sup>2</sup> > Bo. *sui*<sup>35</sup>, ‘meat’ \**sa*<sup>2</sup> > Bo. *ja*<sup>35</sup>. On the other hand, numerals frequently show tonal irregularities in LB; Lahu *šē?* ‘three’ is also tonally anomalous (the ‘correct’ form *šē* only occurs with certain classifiers).

In the case of Loloish, ‘three’ will not do as a comparison, since etyma with voiceless sibilant initials often acquire special tones. Better would be ‘bitter’ (PLB \*ka<sup>2</sup>):

	<i>Tone of WEDGE</i>	<i>Tone of BITTER</i>
<b>Loloish</b>		
<i>Gazhuo</i>	31	31 kha <sup>31</sup>
<i>Hani (Lüchun)</i>	31	31 xa <sup>31</sup>
<i>Hani (Mojiang)</i>	31	31 xo <sup>31</sup>
<i>Hani (Shuikui)</i>	31	31 xo <sup>31</sup>
<i>Lahu (Black)</i>	53	53 qha <sup>53</sup>
<i>Lisu</i>	31	31 khuc <sup>31</sup>
<i>Lisu (Northern)</i>	21	21 hkwa <sup>21</sup>
<i>Nusu (Bijiang)<sup>10</sup></i>	55	53 kha <sup>53</sup>
<i>Sani</i>	11	11 qho <sup>11</sup>
<i>Yi (Dafang)</i>	---	33 khu <sup>33</sup>
<i>Yi (Mile (Axi))</i>	21	21 kha <sup>21</sup>
<i>Yi (Mojiang)</i>	33	33 kho <sup>33</sup>
<i>Yi (Nanhua)</i>	21	21 kha <sup>21</sup>
<i>Yi (Nanjian)</i>	21	21 kha <sup>21</sup>
<i>Yi (Weishan)</i>	21	21 kha <sup>21</sup>
<i>Yi (Wuding)</i>	33	33 kho <sup>33</sup>
<i>Yi (Xide)</i>	33	33 khu <sup>33</sup>

## 2.5 The PLB \*rhyme

When you have widely divergent rhymes in cognates from language to language, it’s a good bet that they reflect a closed syllable proto-rhyme (i.e. one with a final stop or nasal). As we shall see, Loloish reflexes of \*-am go all over the map:

i	y	ɿ	ʉ	ɥ	u
ɪ			ɣ		ʊ
e					o
ɛ					ɔ
	a		ɱ		ɑ

<sup>10</sup> The conditioning for the reflexes of Tone \*2 in Nusu are not yet clear. Other Tone \*2 etyma do give Nusu 55, e.g. ‘five’ PLB \*ŋa<sup>2</sup> > Nusu ŋa<sup>55</sup>.

## 2.51 Loloish sets with the \*-am rhyme

	<b>BEAR</b>	<b>BELLY</b>	<b>BRIDGE</b>
	*ɖ-wam <sup>1</sup> ɰ <sup>2</sup>	*p-wam <sup>2</sup>	*n-dzam <sup>1</sup>
<i>Lahu (Black)</i>	ɣlɛ-mi-t̃ <sup>5</sup>	ḡō-ɣlɛ / ɣu <sup>53</sup> pe <sup>31</sup> 11	cɿo
<i>Yi Xide</i>	ɣo <sup>33</sup> (T *1)	[i <sup>21</sup> mo <sup>21</sup> ] 12	dzi <sup>33</sup>
<i>Yi Nanjian</i>	---	---	ɣo <sup>21</sup> dzy <sup>55</sup>
<i>Yi Nanhua</i>	ɣu <sup>33</sup> mA <sup>21</sup>	---	dzu <sup>33</sup>
<i>Yi Mile (Axi)</i>	---	tsi <sup>33</sup>	---
<i>Yi Mojiang</i>	---	---	dzu <sup>21</sup> gu <sup>21</sup>
<i>Yi Dafang</i>	ɣu <sup>21</sup>	ɣo <sup>13</sup> mo <sup>55</sup>	ʰu <sup>33</sup> 13
<i>Lisu</i>	ɣo <sup>33</sup> / vɛ-ti <sup>55</sup> 14	[he <sup>31</sup> khi <sup>31</sup> ]	kho <sup>31</sup> dze <sup>33</sup>
<i>Naxi Lijiang</i>	gv <sup>31</sup>	---	ndzo <sup>31</sup>
<i>Naxi Yongning</i>	---	---	dzo <sup>33</sup>
<i>Hani Biyue</i>	ɔ <sup>31</sup> je <sup>55</sup>	---	tse <sup>33</sup> kv <sup>31</sup>
<i>Hani Dazhai (Luchun)</i>	xa <sup>31</sup> ɔ <sup>55</sup>	lo <sup>55</sup> dzɔ <sup>5</sup>	---
<i>Hani Shuikui (Mojiang)</i>	xɔ <sup>31</sup> v <sup>55</sup>	ɣu <sup>31</sup> mo <sup>33</sup>	tʰo <sup>31</sup>
<i>Akha</i>	k' a <sub>˘</sub> hm̃	---	law̃ dzm̃
<i>Jinuo</i>	a <sup>33</sup> ø <sup>44</sup>	---	khka <sup>33</sup> tshɛ <sup>33</sup>
<i>Gazhuo</i>	---	---	tse <sup>33</sup>
<i>Yi Sani</i>	ɣu <sup>33</sup>	[i <sup>11</sup> pi <sup>44</sup> ]	tsy <sup>33</sup>
<i>Yi Wuding</i>	je <sup>11</sup> mo <sup>55</sup>	---	ntshe <sup>11</sup>
<i>Yi Weishan</i>	---	[hr <sup>21</sup> ma <sup>33</sup> dz ɿ <sup>33</sup> ]	ɣo <sup>21</sup> dzy <sup>55</sup>
<i>Nusu (Bijiang)</i>	ua <sup>33</sup>	va <sup>31</sup> lo <sup>53</sup>	gu <sup>55</sup> dza <sup>33</sup>
	<b>EAR/SPIKE/PANICLE of GRAIN<sup>15</sup></b>	<b>DARE<sup>16</sup></b>	
	*s-nam <sup>1</sup>	*wam <sup>3</sup>	
	---	---	
<i>Lahu (Black)</i>	ɿɔ-m	---	
<i>Yi Xide</i>	ŋi <sup>33</sup>	---	
<i>Yi Nanjian</i>	ny <sup>55</sup>	---	

11 Lahu here has initial ɣ-, instead of the usual v- reflex of \*w-, since Lahu does not tolerate syllables of the shape vɔ. Several Lahu words (including some loans from Burmese) show alternation between ɣ- and v-. See Matisoff 1973:9.

12 There is a separate root PLB \*ɣwik 'stomach' that may underlie the Xide, Lisu, Weishan, and Sani forms for 'belly'. See Matisoff 1972 (TSR) #176.

13 Note the deaffrication of the initial, as in Mpi (see Matisoff 1978). But 'hair' in Dafang is affricated.

14 The former form is from ZMYYC, the latter from TBL. Both are varieties of the Lisu of Fugong District, Nujiang County.

15 This is an excellent etymon that must be set up at the PTB level, though it is sparsely attested in Loloish. Cf. Proto-Tamang-Gurung-Thakali-Manang \*A<sup>h</sup>nam (Mazaudon 1996).

16 This etymon is sparsely attested in Loloish.

<i>Yi Nanhua</i>	nu <sup>33</sup>	---
<i>Yi Mile (Axi)</i>	---	---
<i>Yi Mojiang</i>	ne <sup>55</sup>	---
<i>Yi Dafang</i>	nu <sup>33</sup>	---
<i>Lisu</i>	e <sup>55</sup> ni <sup>33</sup> , e <sup>55</sup> ne <sup>33</sup>	---
<i>Naxi Lijiang</i>	---	---
<i>Naxi Yongning</i>	ɲu <sup>31</sup>	---
<i>Hani Biyue</i>	ɔ <sup>31</sup> ne <sup>55</sup>	---
<i>Hani Dazhai (Luchun)</i>	a <sup>55</sup> no <sup>55</sup>	---
<i>Hani Shuikui (Mojiang)</i>	tʃhe <sup>55</sup> ny <sup>55</sup>	---
<i>Akha</i>	---	---
<i>Jinuo</i>	ko <sup>33</sup> ne <sup>44</sup>	---
<i>Gazhuo</i>	tʃhe <sup>33</sup> ne <sup>24</sup>	---
<i>Yi Sani</i>	ny <sup>44</sup>	---
<i>Yi Wuding</i>	ne <sup>33</sup>	---
<i>Yi Weishan</i>	ɲy <sup>55</sup> / ɲy <sup>55</sup>	---
<i>Nusu (Bijiang)</i>	‘na <sup>33</sup>	va <sup>31</sup>

	FATHOM	FENCE/GARDEN	FLY (v.)
	*s-lam <sup>1</sup>	*kram <sup>1</sup>	*byam <sup>1</sup>
	---	---	---
<i>Lahu (Black)</i>	hɔ	kho	pɿo
<i>Yi Xide</i>	li <sup>33</sup>	xo <sup>33</sup> gu <sup>44</sup>	dzi <sup>33</sup>
<i>Yi Nanjian</i>	---	tɕhy <sup>55</sup>	by <sup>55</sup>
<i>Yi Nanhua</i>	lu <sup>33</sup>	---	du <sup>33</sup> (also biu <sup>33</sup> )
<i>Yi Mile (Axi)</i>	ʔu <sup>33</sup>	gu <sup>55</sup> khu <sup>33</sup>	tʃi <sup>33</sup>
<i>Yi Mojiang</i>	le <sup>21</sup>	go <sup>21</sup> tʃho <sup>21</sup>	be <sup>21</sup>
<i>Yi Dafang</i>	lu <sup>21</sup>	---	ɕɿ <sup>21</sup>
<i>Lisu</i>	---	---	dʒe <sup>33</sup> (also bi <sup>33</sup> )
<i>Naxi Lijiang</i>	ly <sup>31</sup>	xo <sup>31</sup> phe <sup>55</sup> kho <sup>31</sup>	mbi <sup>31</sup>
<i>Naxi Yongning</i>	---	tʃha <sup>33</sup> khu <sup>13</sup>	dze <sup>13</sup>
<i>Hani Biyue</i>	le <sup>55</sup>	ja <sup>55</sup> khe <sup>55</sup>	pɛ <sup>55</sup>
<i>Hani Dazhai (Luchun)</i>	b <sup>55</sup>	---	bjɔ <sup>55</sup>
<i>Hani Shuikui (Mojiang)</i>	h <sup>55</sup>	xo <sup>55</sup> khu <sup>55</sup>	pu <sup>55</sup>
<i>Akha</i>	lm̃	km̃ ceh̃	---
<i>Jinuo</i>	ʔe <sup>33</sup>	a <sup>33</sup> ke <sup>33</sup> khe <sup>33</sup>	pɛ <sup>33</sup>
<i>Gazhuo</i>	le <sup>24</sup>	---	phv <sup>31</sup>
<i>Yi Sani</i>	ly <sup>33</sup>	khu <sup>33</sup> ɕ <sup>33</sup>	tʃi <sup>33</sup>
<i>Yi Wuding</i>	le <sup>11</sup>	---	ɕe <sup>11</sup>
<i>Yi Weishan</i>	---	chy <sup>55</sup>	by <sup>55</sup>
<i>Nusu (Bijiang)</i>	la <sup>33</sup>	khɿa <sup>33</sup>	bia <sup>33</sup>

	<b>HAIR (head)</b> *tsam <sup>1</sup>	<b>IRON</b> *syam <sup>1</sup>	<b>OTTER</b> <sup>17</sup> *s-/p-yam <sup>1</sup> < PTB *sram
<i>Lahu (Black)</i>	[cɛ-khɛ-mu] <sup>18</sup>	šo	ḡɿ <sup>21</sup> -šo-lo
<i>Yi Xide</i>	---	ḡu <sup>33</sup> du <sup>33</sup>	ḡo <sup>33</sup>
<i>Yi Nanjian</i>	u <sup>21</sup> tchy <sup>55</sup>	xy <sup>55</sup>	---
<i>Yi Nanhua</i>	u <sup>55</sup> tshu <sup>33</sup>	xu <sup>33</sup>	zi <sup>21</sup> ʂi <sup>33</sup>
<i>Yi Mile (Axi)</i>	o <sup>55</sup> tshi <sup>33</sup>	xu <sup>33</sup>	
<i>Yi Mojiang</i>	ŋu <sup>33</sup> tche <sup>21</sup>	ɕe <sup>21</sup>	zi <sup>21</sup> ɕe <sup>55</sup>
<i>Yi Dafang</i>	o <sup>33</sup> tshu <sup>33</sup>	xu <sup>21</sup>	zi <sup>21</sup> ʂɿ <sup>33</sup>
<i>Lisu</i>	o <sup>55</sup> tshe <sup>44</sup>	xo <sup>44</sup>	---
<i>Naxi Lijiang</i>	---	ḡu <sup>31</sup>	ḡu <sup>31</sup>
<i>Naxi Yongning</i>	---	ḡe <sup>33</sup>	ḡu <sup>33</sup>
<i>Hani Biyue</i>	tshe <sup>55</sup> khɿ <sup>55</sup>	se <sup>55</sup>	ɿ <sup>55</sup> se <sup>55</sup>
<i>Hani Dazhai (Luchun)</i>	tshe <sup>55</sup> kho <sup>55</sup>	so <sup>55</sup>	u <sup>55</sup> so <sup>55</sup>
<i>Hani Shuikui (Mojiang)</i>	tshe <sup>55</sup> khu <sup>55</sup>	ʃu <sup>55</sup>	ɣu <sup>55</sup> ʃu <sup>55</sup>
<i>Akha</i>	---	shm <sup>˘</sup>	ui <sup>˘</sup> shm <sup>˘</sup> ~ i <sup>˘</sup> shm <sup>˘</sup>
<i>Jinuo</i>	tshe khu <sup>33</sup>	ɕe <sup>42</sup>	ɕe <sup>42</sup>
<i>Gazhuo</i>	---	se <sup>33</sup>	---
<i>Yi Sani</i>	o <sup>55</sup> tshɿ <sup>33</sup>	xu <sup>33</sup>	ʒ <sup>33</sup> ʂɿ <sup>44</sup>
<i>Yi Wuding</i>	---	ɕe <sup>11</sup>	ji <sup>11</sup> se <sup>33</sup>
<i>Yi Weishan</i>	ɿy <sup>21</sup> tchy <sup>55</sup>	ɕy <sup>55</sup>	---
<i>Nusu (Bijiang)</i>	tsha <sup>33</sup>	ʂa <sup>33</sup>	ŋa <sup>55</sup> dza <sup>55</sup>
	<b>ROAD</b> *lam <sup>2</sup> ʌ <sup>3</sup>	<b>SESAME</b> <sup>19</sup> *s-nam <sup>2</sup>	<b>SMELL</b> *nam <sup>1</sup> ʌ <sup>2</sup> ʌ <sup>3</sup>
<i>Lahu (Black)</i>	[lo <sup>ˈ</sup> loc. prt. < *ʂ] <sup>3</sup>	nī	m̥u
<i>Yi Xide</i>	---	---	nī <sup>21</sup>
<i>Yi Nanjian</i>	---	---	nɿ <sup>21</sup>
<i>Yi Nanhua</i>	---	---	nur <sup>55</sup>
<i>Yi Mile (Axi)</i>	---	---	nur <sup>21</sup>
<i>Yi Mojiang</i>	---	---	nur <sup>21</sup>
<i>Yi Dafang</i>	---	---	bi <sup>55</sup> nur <sup>33</sup>
<i>Lisu</i>	---	---	tʃhɿ <sup>31</sup> nur <sup>33</sup>
<i>Naxi Lijiang</i>	---	---	nɿ <sup>31</sup>
<i>Naxi Yongning</i>	---	---	bv <sup>33</sup> nɿ <sup>33</sup>
<i>Hani Biyue</i>	---	---	re <sup>55</sup>
<i>Hani Dazhai (Luchun)</i>	---	---	ro <sup>55</sup>
<i>Akha</i>	---	nm̥ <sub>λ</sub> <sup>20</sup>	---

<sup>17</sup> The first elements in all the compounds except Nusu mean WATER < PLB \*røy<sup>1</sup>.

<sup>18</sup> The first syllable (ɛ́) of the Lahu form is from \*n-dzi-k, not \*tsam.

<sup>19</sup> Unfortunately this item is missing both from ZMYYC and TBL.



<i>Jinuo</i>	---	---	ne <sup>42</sup> tje <sup>33</sup>
<i>Gazhuo</i>	---	---	ne <sup>31</sup>
<i>Yi Sani</i>	---	---	ny <sup>11</sup>
<i>Yi Weishan</i>	---	---	ny <sup>21</sup>
<i>Nusu (Bijiang)</i>	---	---	no <sup>33</sup>

## 2.52 BRIDGE and WEDGE

In most Loloish languages the reflexes for ‘wedge’ are very similar to those for ‘bridge’, except for tone and the manner and/or position of articulation of the initial affricate. These etyma have identical PLB reconstructions, except for tone and (I now believe) type of affricate:

	BRIDGE	WEDGE
	*n-dzam <sup>1</sup>	*n-dzam <sup>2</sup>
<i>Lahu (Black)</i>	ɕo	ju
<i>Yi Xide</i>	dzi <sup>33</sup>	ndzo <sup>33</sup>
<i>Yi Nanjian</i>	yo <sup>21</sup> dzy <sup>55</sup>	dzy <sup>21</sup>
<i>Yi Nanhua</i>	dzur <sup>33</sup>	ɕi <sup>33</sup> dzur <sup>21</sup>
<i>Yi Mile (Axi)</i>	tsi <sup>33</sup>	dzi <sup>21</sup> bu <sup>33</sup>
<i>Yi Mojiang</i>	dzur <sup>21</sup> gur <sup>21</sup>	ɕi <sup>33</sup> dze <sup>33</sup>
<i>Yi Dafang</i>	tu <sup>33</sup> 21	---
<i>Lisu</i>	kho <sup>31</sup> dze <sup>33</sup>	dzo <sup>31</sup> tʃhe <sup>55</sup>
<i>Naxi Lijiang</i>	ndzo <sup>31</sup>	---
<i>Naxi Yongning</i>	dzo <sup>33</sup>	---
<i>Hani Biyue</i>	tse <sup>33</sup> kv <sup>31</sup>	---
<i>Hani Dazhai (Luchun)</i>	lo <sup>55</sup> dzo <sup>55</sup>	tsha <sup>31</sup> tsho <sup>31</sup>
<i>Hani Shuikui (Mojiang)</i>	tɕe <sup>33</sup> kv <sup>31</sup>	to <sup>31</sup> tʃhu <sup>31</sup> (ZMYYC); to <sup>31</sup> tʃu <sup>31</sup> (TBL)
<i>Akha</i>	law <sup>~</sup> dzm <sup>~</sup>	---
<i>Jinuo</i>	khka <sup>33</sup> tshe <sup>33</sup>	ze <sup>42</sup> (ZMYYC); ze <sup>31</sup> (TBL)
<i>Gazhuo</i>	tse <sup>33</sup>	sɿ <sup>35</sup> tse <sup>31</sup>
<i>Yi Sani</i>	tsɿ <sup>33</sup>	sʒ <sup>44</sup> dzɿ <sup>11</sup>
<i>Yi Wuding</i>	ntshe <sup>11</sup>	ɳtʃhe <sup>33</sup>
<i>Yi Weishan</i>	yo <sup>21</sup> dzy <sup>55</sup>	lu <sup>21</sup> dzy <sup>21</sup>
<i>Nusu (Bijiang)</i>	gu <sup>55</sup> dza <sup>33</sup>	tʃa <sup>55</sup>

For some speculations as to a possible semantic interconnection between ‘wedge’ and ‘bridge’, see below.

<sup>20</sup> The tone here is irregular, pointing to a \*low-stopped provenience instead of \*2 (as elsewhere in LB).

<sup>21</sup> Note the deaffrication of the initial, as in Mpi (see JAM 1978). But ‘hair’ is affricated. Could there be a typo?

## 2.6 Lahu Reflexes of \*-am etyma

‘bear’	[ɣɛ-mĩ-t̚ʰ]
‘belly’	ḡō-ɲɛ
‘bridge’	ɕɔ
‘dare’	—
‘ear/spike (of grain)’	ɽɔ-nɪ
‘fathom’	ɬo
‘fly’	ɲo
‘garden/fence’	kho
‘hair’ (of head)	—
‘iron’	šo
‘otter’	ḡɽ-šo-lo
‘road’	[lo ‘locative particle’ < * <sup>3</sup> ]
‘sesame’	n̄
‘smell’	ɲu
‘wedge’	j̄

The most common Black Lahu reflex of \*-am is -o. However, the regular reflex of \*-am after **n-** is clearly -u, with three excellent examples (‘sesame’, ‘smell’, ‘ear/spike of grain’).<sup>22</sup> Furthermore, exactly paralleling ‘wedge’ is the word j̄u-q̄ō ~ j̄ō-q̄ō ‘blacksmith’s bellows’ [DL 569, 574], with **j-** initial and variation between -o and -u. In fact there is considerable alternation between Black Lahu -o and -u (e.g. ɽɔɽ ‘burn’ ≈ tú ‘set on fire’, etc.; see GL, pp. 12-13). Even the ethnonym for Lahu is often written Ladhōl (i.e. Lâhō) in China.

The rhyme of ‘bear’ is irregular, perhaps because of the preempted -w- (< PTB \*d-wam).

## 2.7 Reflexes in other Loloish languages (in alphabetical order)

<i>Akha</i>	ɲ	‘bear’, ‘bridge’, ‘fathom’, ‘garden/fence’, ‘iron’, ‘otter’, ‘sesame’
<i>Gazhuo</i>	ɛ	‘bridge’, ‘ear/spike’, ‘fathom’, ‘iron’, ‘smell’, ‘wedge’
	ɣ	‘fly’
<i>Hani Biyue</i>	e	‘bear’, ‘bridge’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘garden/fence’, ‘hair’, ‘iron’, ‘otter’, ‘smell’
<i>Hani Dazhai (Lüchun)</i>	ɔ	‘bear’, ‘bridge’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘iron’, ‘otter’, ‘smell’, ‘wedge’

<sup>22</sup> A fourth example is ‘snot’ (Lh. nú) from a stopped prototype \*s-nap, with the high-rising tone /´/ derived by dissimilation from a doubly glottalized pre-Lahu \*ʔ-naʔ. The usual Lahu reflex of \*-ap is -oɽ. See Matisoff 1972, p. 61.

<i>Hani Shuikui</i> ( <i>Mojiang</i> )	-u	‘fly’, ‘ear/spike’, ‘garden/fence’, ‘iron’, ‘fathom’, ‘otter’, <b>‘wedge’</b>
	-ɣ	‘bear’
<i>Jinuo</i>	-ɛ	‘bridge’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘garden/fence’, ‘hair’, ‘iron’, ‘otter’, ‘smell’, <b>‘wedge’</b>
<i>Lisu</i>	-o	‘bear’, ‘iron’, <b>‘wedge’</b>
	-u	‘smell’
	-e	‘bridge’, ‘ear/spike’, ‘fly’, ‘hair’
<i>Naxi Lijiang</i>	-u	‘iron’, ‘otter’
	-v	‘bear’, ‘smell’
	-o	‘bridge’, ‘garden/fence’
	-y	‘fathom’
	[-u]	<b>‘wedge’</b> ] <sup>23</sup>
<i>Naxi Yongning</i>	-o	‘bridge’
	-e	‘fly’, ‘iron’
	-u]	‘garden/fence’, ‘otter’
	-v	‘smell’
	-u	‘ear/spike’
<i>Nusu (Bijiang)</i>	-a	‘bear’, ‘belly’, ‘bridge’, ‘dare’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘garden/fence’, ‘hair’, ‘iron’, ‘otter’, <b>‘wedge’</b>
	-ɔ	‘smell’
<i>Yi Dafang</i>	u	‘bear’, ‘bridge’, ‘ear/spike’, ‘fathom’, ‘hair’, ‘iron’, ‘smell’
	-ɔ	‘belly’
	-ɿ	‘fly’, ‘otter’
<i>Yi Mile (Axi)</i>	-i	‘bridge’, ‘fly’, ‘hair’, <b>‘wedge’</b>
	u	‘fathom’, ‘garden/fence’, ‘iron’, ‘smell’
<i>Yi Mojiang</i>	-e	‘ear/spike’, ‘fathom’, ‘fly’, ‘hair’, ‘iron’, ‘otter’, <b>‘wedge’</b>
	u	‘bridge’, ‘smell’
	-o	‘garden/fence’
<i>Yi Nanhua</i>	u	‘bear’, ‘bridge’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘hair’, ‘iron’, ‘smell’, <b>‘wedge’</b>
	-i	‘otter’
<i>Yi Nanjian</i>	-y	‘bridge’, ‘ear/spike’, ‘fly’, ‘garden/fence’, ‘hair’, ‘iron’
<i>Yi Sani</i>	x	‘bridge’, ‘ear/spike’, ‘hair’, ‘fathom’, ‘otter’, ‘smell’, <b>‘wedge’</b>
	u	‘bear’, ‘iron’, ‘garden/fence’
	-i	‘fly’
<i>Yi Weishan</i>	-y	‘bridge’, ‘ear/spike’, ‘fly’, ‘garden/fence’, ‘hair’, ‘iron’, <b>‘wedge’</b>
<i>Yi Wuding</i>	-e	‘bear’, ‘ear/spike’, ‘bridge’, ‘fathom’, ‘fly’, ‘iron’, ‘otter’, <b>‘wedge’</b>
<i>Yi Xide</i>	-o	‘bear’, ‘garden/fence’, ‘otter’, <b>‘wedge’</b>
	-i	‘belly’, ‘bridge’, ‘ear/spike’, ‘fathom’, ‘fly’, ‘smell’
	u	‘iron’

<sup>23</sup> One might think this form for ‘wedge’ comes from \*sap [see 4.2 below], but two forms from \*-am in Naxi Yongning have the same reflex.

Eleven languages/dialects have quite regular phonological developments here. Seven others (Lisu, Naxi Lijiang, Naxi Yongning, Yi Mile, Yi Mojiang, Yi Sani, Yi Xide) have some unexplained phonological developments of the \*-am rhyme. As adumbrated above, there are no fewer than 15 Loloish reflexes of this rhyme, sprawled all over vocalic space:

i	y	ɿ	ɯ	ɤ	u	ɯ
ɪ			ɤ			
e					o	
ɛ					ɔ	
	a			ɱ		

### 3.0 ETYMOLOGICAL POSSIBILITIES FOR PUMI tsó ‘WEDGE’

We are on much shakier ground when trying to deal with Qiangic words for ‘wedge’. Forms for ‘wedge’ have been recorded for at least five dialects of Pumi:

Pumi (Dᵛayáng)	tsó [ts <sup>w</sup> o <sup>55</sup> ]	JAM fieldnotes
Pumi (Jīnghuá)	tso <sup>55</sup>	ZMYYC, p. 783
Pumi (Jiǔlóng)	tso <sup>35</sup>	TBL, p. 207
Pumi (Lánpíng)	siẽ <sup>13</sup> dzə <sup>55</sup>	TBL, <i>ibid.</i>
Pumi (Tǎobā)	sẽ <sup>35</sup> kuɛi <sup>53</sup>	ZMYYC, <i>ibid.</i>

The latter two are obvious loans from Chinese, the Lanping form apparently from the SW Mandarin pronunciation of xiēzi ‘wedge’, and the Taoba form perhaps from a compound like Mand. xiē-guī 楔規 ‘wedge gauge’.<sup>24</sup> It is the other, presumably native word (e.g. Dayang tsó) that is of particular interest in connection with the Lolo-Burmese forms just discussed:

Taking what one might call the “bottom-up” approach, one could look at other Dayang words with the -o rhyme and see where they come from. Here too, however, the situation is not clear, with at least four attested velar-rhyme proveniences:<sup>25</sup>

<sup>24</sup> It is not clear why the first syllables of the Lanping and Taoba words have nasalized vowels.

<sup>25</sup> Note that the three examples of \*-ak > Pumi -o are all etyma with -r- or -l- in the initial cluster, and -- apparently more importantly -- are all in the high tone (symbolized by the acute

*-ak	‘chicken’	PTB *k-rak	(STC p.88; TSR #184)	Dayang ɿó
	‘boil/cook’	PTB *s-klak	(STC #124; TSR #61)	Dayang xó, ɣǫ
	‘rat’	PTB *k-r-wak	(STC p.107; TSR #188)	Dayang wó
*-ak	‘year’	PTB *kok	(TSR #34)	Dayang kó
	‘back’	PTB *s-nok/ŋ	(STC #354; TSR #155)	Dayang ńǫ
*-aŋ	‘tiger’	PTB *s-roŋ	(STC p. 107)	Dayang wǫ
	‘peacock/ pheasant’	PTB *m-donj ---	(STC #341) ---	Dayang ɣŋo ǫ
*-aŋ	‘mountain’	PTB *s-gaŋ	(DL, p. 299)	Dayang ǧǫ

But can Pumi Dayang tsó be related to PLB \*N-džam<sup>2</sup>? Several other Qiangic languages have words for ‘wedge’ that are phonologically similar to the Pumi and LB forms, e.g. Namuyi ɣo<sup>35</sup> / ɣuo<sup>35</sup>, Lusu ndze<sup>35</sup>, Queyu tsə<sup>53</sup>, etc. Are these relatable to Pumi tsó and/or to our LB etymon \*N-džam<sup>2</sup>?

In order to decide these questions, we will have to figure out what the regular reflexes of the PTB \*-am rhyme are in Pumi and the other Qiangic languages.

### 3.1 Qiangic reflexes of exemplary PTB \*-am etyma

Data on the following Qiangic languages and dialects are available:<sup>26</sup>

PT	Pumi (Taoba)	ZMYYC #10
PJH	Pumi (Jinghua)	ZMYYC #11
PJL	Pumi (Jiulong)	TBL #1
PLP	Pumi (Lanping)	TBL #9
PD	Pumi (Dayang)	JAM fieldnotes
QM	Qiang (Mawo)	ZMYYC #8
QT	Qiang (Taoping)	ZMYYC #9
QA	Qiang (Mao, Aba Prefecture)	TBL #8
RGB	rGyalrong (Benzhen)	Jackson Sun fieldnotes
RGC	rGyalrong (Caodeng)	Jackson Sun fieldnotes
RGS	rGyalrong (Suomo)	ZMYYC #12
RGM	rGyalrong (Maerkang)	TBL #11

accent). The most frequent Dayang reflex of \*ak seems to be -ɒ, with at least nine examples, all of them under the low tone (symbolized by a wedge): ‘ashamed’ \*g-yak & \*s-rak > PD ʃtʃhǫ; ‘bowl/cup’ \*kwak > PD qhwǫ; ‘dirty’ \*tšak > PD tʃǫ; ‘drop’ \*N-dzak > PD sthǫ; ‘hand’ \*g-lak > PD zǫ; ‘leaf’ \*r-pak > PD ǫpǫ; ‘lick’ \*m-lyak > PD dǫ; ‘pig’ \*p-wak > PD ptʃhǫ; ‘weave’ \*t-(r)ak > PD tǫǫ.

<sup>26</sup> The crosshatched numbers in this list refer to the position of the particular language among all those cited in the sources, e.g. “ZMYYC #10” means that Pumi Taoba is the tenth out of the 52 languages cited in the synonym sets of ZMYYC; “TBL #9” means that Pumi Lanping is the ninth out of the 50 languages cited in the sets of TBL, etc.

DF	Daofu (=Horpa = Stau)	TBL #12
EG	Ergong	ZMYYC #14
MYS	Muya (Kangding, Shade)	ZMYYC #15
MYG	Muya (Kangding, Ganzi)	TBL #15
QYY	Queyu (Yajiang) [ “Zhábā” ]	ZMYYC #16
QYX	Queyu (Xinlong)	TBL #13
ZB	Zhábṛa	TBL #14
GQY	Guiqiong (Kangding, Yutong)	ZMYYC #17
GQG	Guiqiong (Kangding, Ganzi)	TBL #16
ES	Ersu	ZMYYC #18
LS	Lüsu	TBL #18
NML	Namuyi Muli Luobo	ZMYYC #19
NMM	Namuyi Muli	TBL #46
SXS <sup>27</sup>	Shixing (Shuiluo River)	ZMYYC #20
SXM	Shixing (Muli, Liangshan)	TBL #17

**BEAR** (ZMYYC #125; TBL #311)<sup>28</sup>

PT	gũ <sup>55</sup>	PJH	u <sup>55</sup>	PJL	ŋũ <sup>35</sup>	PD	wéN
RGM	tə wam	RGB	tə-wam?	RGC	pre? tom	DF	dəm
EG	wo	MYS	zẽ <sup>35</sup> we <sup>55</sup> <sup>29</sup>	MYG	re <sup>33</sup> we <sup>55</sup>	QYY	wua <sup>35</sup>
QYX	wẽr <sup>13</sup>	ZB	ŋi <sup>55</sup> vɹ <sup>55</sup>	GQY	ɛ <sup>33</sup> ŋui <sup>53</sup>	GQG	ã <sup>31</sup> gui <sup>55</sup>
NM	vu <sup>55</sup>	SXS	gĩ <sup>55</sup>	SXM	gĩ <sup>35</sup>		

**PTB \*d/g-wam****BELLY** (ZMYYC #260; TBL #96)

DF	w	EG	vẽu	MYS	vu <sup>35</sup> lɔ <sup>53</sup>	MYG	βə <sup>33</sup> lɔ <sup>53</sup>
QYY	bu <sup>55</sup>	QYX	lvu <sup>55</sup> / rvu <sup>55</sup>	ZB	vei <sup>13</sup>		

**PTB \*p-wam**

<sup>27</sup> These two Shixing dialects are virtually identical.

<sup>28</sup> Here the crosshatched numbers refer to the position of the particular synonym set among the 1004 presented in ZMYYC and the 1822 sets of TBL.

<sup>29</sup> For the first syllable of MY zẽ<sup>35</sup>we<sup>55</sup> see the first syllable of Lahu ɣɿɿɛ-mí-t̚s̚.

<b>BRIDGE</b> (ZMYYC #477; TBL #70)				<b>PTB *n-dzam</b>			
PT	dza <sup>35</sup>	PJH	dzi <sup>13</sup> au <sup>13</sup>	PJL	dza <sup>35</sup>	PD	dzouN
QM	tshi	QT	tshie <sup>33</sup> da <sup>241</sup>	QA	tshua	RGS	ta ndzam
RGM	ta ndzam	RGB	te-ndzem	RGC	ndzem	DF	dzo
EG	dzo	MYS	ndzo <sup>35</sup>	MYG	ndzo <sup>24</sup>	QYY	dza <sup>55</sup>
QYX	tso <sup>55</sup>	ZB	ptsI <sup>55</sup>	GQY	z <sup>33</sup> pu <sup>53</sup>	GQG	za <sup>55</sup> pa <sup>55</sup>
ES	dzi <sup>55</sup>	LS	dze <sup>35</sup>	NM	dzo <sup>55</sup>	SXS/SXM	ze <sup>55</sup>

Note that in ‘bridge’, **-o** is indeed the reflex of **\*-am** for several of these languages (Daofu, Ergong, Muya, Queyu Xinlong, Namuyi) - but not for Pumi!

<b>DARE</b> (ZMYYC #731; TBL #1335)				PQiangic <b>*s-n-wam</b> [JAM] <sup>30</sup>			
PT	wa <sup>55</sup>	PJH	nu <sup>55</sup>	PJL	nu <sup>55</sup>	PD	noN
RGS	kha nos	RGM	ka nos	RGB	ka-noʔs	RGB	ke/ne-nos
DF	znə	EG	snuu	MYS	ne <sup>55</sup>	MYG	no <sup>53</sup>
QYY	‘ni <sup>53</sup>	ZB	na <sup>13</sup>	GQY	ji <sup>55</sup> ne <sup>35</sup> yi <sup>35</sup>	GQG	ne <sup>35</sup>
ES	no <sup>55</sup>	LS	ɣu <sup>53</sup> 31	NM	na <sup>33</sup>	SXS	fi <sup>35</sup>
SXM	fi <sup>53</sup>						

The rGyalrong forms may not be cognate: why final **-s** instead of **-m**?

<b>EAR/SPIKE &amp; GRAIN</b> (ZMYYC #229; TBL #407)				PTB <b>*s-nam</b>			
RGB	khə-fnem	RGC	ka-fnemʔ	QYX	ɕnoŋ <sup>13</sup>		
PT	‘ni <sup>53</sup>	PJH	‘niə <sup>55</sup>	PLP	‘niə <sup>55</sup>	PJL	‘ne <sup>55</sup>
EG	sno-zime	ES	ndzo <sup>33</sup> ndzo <sup>55</sup>				

There is another root **\*s-nye** (cf. WT *snye-ma* ≈ *snyi-ma*), which may underlie the following syllables:

QYY	ɣa <sup>35</sup> ‘ne <sup>53</sup>	ZB	ne <sup>33</sup> dzi <sup>55</sup>	SXM	hã <sup>53</sup> ne <sup>33</sup> i <sup>33</sup>	SXS	lu <sup>55</sup> nuu <sup>33</sup>
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<b>FATHOM</b> (ZMYYC #959; TBL #899)				<b>PTB *lam</b> (perhaps > PQiangic <b>*g-lam</b> )			
PT	tə <sup>35</sup> ji <sup>55</sup>	PJH	tə <sup>55</sup> iē <sup>55</sup>	PJL	tə <sup>55</sup> iē <sup>55</sup>	PD	yiN
QM	zɿ	QT	zi <sup>241</sup>	QA	ɛ zɛ	RGS	tə kçam
RGM	kçam	DF	a cho	EG	gɿ el (? < gɿɛ-l)		
MYS	tɛ <sup>35</sup> de <sup>35</sup>	MYG	tɛ de <sup>53</sup>	QYY	tə <sup>35</sup> lō <sup>55</sup>	QYX	tu <sup>55</sup> lu <sup>55</sup>
ZB	tɛ <sup>55</sup> li <sup>55</sup>	GQY	tɿ <sup>33</sup> x <sup>53</sup>	GQG	ta <sup>31</sup> hō <sup>55</sup>	ES	lio <sup>55</sup>
LS	tɛ <sup>55</sup> liu <sup>53</sup>	NML	ɿy <sup>55</sup>	NMM	tu <sup>53</sup>	SXS	ji <sup>55</sup>
SXM	dzi <sup>33</sup> jē <sup>55</sup>						

<sup>30</sup> This etymon is reconstructed as PTB **\*hwam** in STC #216, on the basis of forms from Lushai, Jingpho, and WB. The root is also represented by Proto-Tamang **\*wam** ‘coax’ < PTamangic **\*hnam** (tone A). See note 15.

<sup>31</sup> Perhaps with preemption by the outer, sibilant prefix (i.e. < **\*s-wam**).

<b>FLY/RUN</b> <sup>32</sup> (ZMYYC #782; TBL #1318) PTB *byam > PQiangic *N-byam					
PT	khə <sup>35</sup>	bē <sup>35</sup>	PJH	khə <sup>13</sup>	bʒē <sup>13</sup>
QM	gzi		QT	dze <sup>241</sup>	
RGB	ka-nbjam		RGC	kə-qə-lnbjəmʔ	
MYS	ndzye <sup>35</sup>		MYG	thi <sup>33</sup>	ndzue <sup>55</sup>
ZB	tə <sup>55</sup>	mdzi <sup>55</sup>	GQY	phə <sup>55</sup>	
SXS	bu <sup>33</sup>	zi <sup>55</sup>	SXM	dze <sup>55</sup>	
				PJL	bʒē <sup>13</sup>
				PD	b(d)ʒiN
				RGS	ka bjam
				RGM	ka bjam
				DF	bjo
				EG	bzo la
				QYY	tə <sup>35</sup> de <sup>55</sup>
				QYX	rde <sup>13</sup>
				GQG	phu <sup>31</sup>
				LS	bze <sup>35</sup>
				NMM	mi <sup>33</sup> ndzu <sup>55</sup> ndzu <sup>55</sup>

<b>GARDEN</b> (ZMYYC #366; TBL #522) PTB *kram					
PT	kho <sup>55</sup>	re <sup>53</sup>	PJH	ŋə <sup>13</sup>	qhe <sup>13</sup>
QM	kuz	(< ku-z)	QT	tshie <sup>55</sup>	kie <sup>33</sup>
ZB	xo <sup>55</sup>	ji <sup>55</sup>	NM	dze <sup>33</sup>	ntshu <sup>55</sup> qhe <sup>55</sup>
				PJL	gi <sup>11</sup> tsɿ <sup>55</sup>
				PD	tʰə <sup>33</sup>
				QA	tse k'u
				DF	skə <sup>o</sup> rjo
				SXS	hə <sup>55</sup> ji <sup>33</sup>

<b>FENCE (bamboo, twig)</b> <sup>34</sup> (TBL #521)					
DF	rjo		MYG	tʃhə <sup>53</sup>	
			QYX	ntʃho <sup>55</sup>	
			LS	tʃhu <sup>53</sup>	dzɿ <sup>53</sup>
SXM	qu <sup>55</sup>				

<b>HAIR</b> (ZMYYC #234; TBL #75) PTB *tsam					
ES	tsi <sup>55</sup>		ZB	gu <sup>33</sup>	tshɿ <sup>55</sup>
				LS	tɕe <sup>31</sup>

Most Qiangic words for ‘hair’ descend from other roots, e.g. \*skra (STC #115), \*ney (STC #292), \*mul (STC #2).

<b>IRON</b> (ZMYYC #38; TBL #54) PTB *syam					
PT	ci <sup>55</sup>		PJH	ʃə <sup>55</sup>	
QM	su <sup>1</sup>	mu	QT	ci <sup>55</sup>	
RGM	ʃam		RGB	ʃamʔ	
EG	tɕo		MYS	ɕe <sup>53</sup>	
QYX	ɕo <sup>55</sup>		ZB	ci <sup>55</sup>	
ES	ʃe <sup>55</sup>		LS	ʃu <sup>53</sup>	
SXM	ʃə <sup>35</sup>				
				PJL	ʃə <sup>55</sup>
				PD	ʃiN
				RGS	ʃam
				DF	tɕo
				QYY	ɕə <sup>55</sup>
				GQG	ʃə <sup>31</sup>
				SXS	ʃə <sup>35</sup>

<b>OTTER</b> (ZMYYC #133, TBL #317) PTB *sram					
PT	xɿ <sup>55</sup>		PJH	skhē <sup>55</sup>	
QT	[tsuə <sup>33</sup> ma <sup>31</sup> ŋy <sup>33</sup> ]	<sup>35</sup>	QA	ɣdzə̃	
RGB	ʃram		RGC	ʃəmʔ	
MYS	dzyɿ <sup>35</sup>		MYG	dzuə <sup>24</sup>	
ZB	tɿ <sup>33</sup>	ʃi <sup>33</sup>	GQY	wi <sup>55</sup> zɿ <sup>53</sup>	
LS	ʃe <sup>35</sup>		SXS	ʃē <sup>55</sup>	
				PJL	ʃē <sup>55</sup>
				QM	ɣdzi
				RGS	tʃə ʃram
				RGM	tʃhə sram
				DF	ʃsəm
				EG	sɿ ɛm
				QYX	ʃse <sup>55</sup>
				GQG	tʃhə <sup>55</sup> sɿ <sup>55</sup>
				ES	ʃɿ <sup>55</sup> ji <sup>55</sup>
					<sup>36</sup>

<sup>32</sup> This root often means ‘run’ in Qiangic.

<sup>33</sup> The initial reflex here is quite regular (see Matisoff 1996 for many parallel examples); but the rhyme is irregular with respect to all the other \*-am reflexes in Dayang.

<sup>34</sup> This is the same etymon as ‘garden’.

<sup>35</sup> This compound means literally “water-cat” (p. c., Jonathan P. Evans).

<sup>36</sup> Judging from the Lusu and Shixing forms, it is the first syllable of this compound which is the cognate; but it is apparently the Guiqiong second syllables which are cognate.



**SMELL v.** (ZMYYC #548; TBL #1707) PTB \***s-nam**

PT	xə <sup>35</sup> ŋō <sup>35</sup>	PJH	xə <sup>13</sup> ŋiə <sup>55</sup>	PJL	xə <sup>13</sup> ŋiə <sup>55</sup>	PD	mɛ̃N
RGC	kə-nə-mnəm?	DF	n	EG	snu n	MYS	khur <sup>55</sup> nu <sup>53</sup>
MYG	khi <sup>33</sup> sɔ̃ <sup>55</sup> nə <sup>33</sup>	QYY	tə <sup>35</sup> lu <sup>55</sup> nū <sup>55</sup>	QYX	ɣnoŋ <sup>13</sup>	ZB	ŋΛ <sup>33</sup> mnl <sup>55</sup> mnl <sup>33</sup>
SXS	by <sup>55</sup> n <sup>55</sup>	SXM	hū <sup>55</sup> nu <sup>55</sup>				

The first syllable hū<sup>55</sup> of the SXM form seems to indicate that a number of other syllables in **h-** belong to a different etymon than \***s-nam**:

GQY	xū <sup>55</sup> xū <sup>33</sup>	GQG	ji <sup>35</sup> h <sup>55</sup>	ES	hi <sup>55</sup> hi <sup>55</sup>	LS	te <sup>53</sup> hū <sup>53</sup> hū <sup>31</sup>
NM	hi <sup>33</sup> hi <sup>55</sup>						

**WHITE** (ZMYYC #840; TBL #1006) PQiangic \***pram** <sup>37</sup>

PT	phẓ ā <sup>55</sup> mə <sup>53</sup>	PJH	phẓ ǣ <sup>55</sup>	PLP	phẓ ǣ <sup>55</sup>	PJL	phẓ i <sup>55</sup> lə <sup>55</sup> lə <sup>11</sup>
PD	phẓ ɛ̃N	QM	phi	QT	phzi <sup>55</sup>	QA	phɪɣ (< phɪ-ɣ)
RGS	kə pram	RGM	kə pɾam	RGB	kə pram	RGC	kə ɣrəm?
ZB	ptʂhi <sup>55</sup> ptʂhi <sup>55</sup>						

The following forms look as if they descend from a distinct etymon, PTB \***plu** (STC pp. 60-1):

DF	phru phru	EG	phʂu phʂu	MYS	tʂhø <sup>55</sup> tʂhø <sup>33</sup>	MYG	tʂhø <sup>53</sup> tʂhø <sup>33</sup>
QYY	tʂhō <sup>55</sup> tʂhō <sup>55</sup>	QYX	ptʂho <sup>55</sup> ptʂho <sup>33</sup>	GQY	ʂ <sup>55</sup> mɔ̃ <sup>55</sup>	GQG	ʂā <sup>55</sup> ma <sup>55</sup>
NM	phu <sup>55</sup> lu <sup>55</sup>	SXS	phu <sup>33</sup>	SXM	phu <sup>33</sup> tci <sup>33</sup> tci <sup>55</sup>	SXM	phu <sup>33</sup> tci <sup>33</sup> tci <sup>55</sup>

**3.2 Pumi reflexes of exemplary PTB \*-am sets**

A quick look at the Pumi reflexes of these etyma from PTB \***-am** makes it clear that Pumi **tsɔ** cannot possibly be related to PLB \***N-džam**<sup>2</sup>, thus answering in the negative the question posed above in 3.0 (a):

<sup>37</sup> This root has not been discovered in Lolo-Burmese.

PT (Taoba); PJH (Jinghua); PJJ (Jiulong); PLP (Lanping); PD (Dayang)

		PTB * <b>d/g-wam</b>		
‘bear’				
PT	gũ <sup>55</sup>	PJH uã <sup>55</sup>	PJJ ŋũ <sup>35</sup>	PD wéN
		PTB * <b>n-dzam</b>		
‘bridge’				
PT	dzã <sup>35</sup>	PJH dziũ <sup>13</sup>	PJJ dzã <sup>35</sup>	PD dzõuN
		PQiangic * <b>s-n-wam</b>		
‘dare’				
PT	wã <sup>55</sup>	PJH nuã <sup>55</sup>	PJJ nuã <sup>55</sup>	PD nõN
		PTB * <b>kam</b> ≈ * <b>kap</b> <sup>38</sup>		
‘draw water’				
PJJ	tʃã <sup>55</sup> khẽ <sup>55</sup>			
		PTB * <b>s-nam</b>		
‘ear/spike of grain’				
PT	ŋ <sup>53</sup>	PJH ŋiã <sup>55</sup>	PLP ŋiã <sup>55</sup>	PJJ ŋẽ <sup>55</sup>
		PTB * <b>lam</b> (perhaps > PQiangic * <b>g-lam</b> )		
‘fathom’				
PT	tã <sup>35</sup> ʃĩ <sup>55</sup>	PJH tã <sup>55</sup> iẽ <sup>55</sup>	PJJ tã <sup>55</sup> iẽ <sup>55</sup>	PD yĩN
		PTB * <b>byam</b>		
‘fly/run’				
PT	khã <sup>35</sup> bẽ <sup>35</sup>	PJH khã <sup>13</sup> bʒẽ <sup>13</sup>	PJJ bʒẽ <sup>13</sup>	PD b(d)ʒiN
		PTB * <b>syam</b>		
‘iron’				
PT	çĩ <sup>55</sup>	PJH ʒã <sup>55</sup>	PJJ ʒẽ <sup>55</sup>	PD ʃĩN
		PTB * <b>sram</b>		
‘otter’				
PT	xĩ <sup>55</sup>	PJH skhẽ <sup>55</sup>	PJJ ʒẽ <sup>55</sup>	
		PTB * <b>s-nam</b>		
‘smell’				
PT	xã <sup>35</sup> ŋũ <sup>35</sup>	PJH xã <sup>13</sup> ŋiã <sup>55</sup>	PJJ xã <sup>13</sup> ŋiã <sup>55</sup>	PD mẽN
		PQiangic * <b>pram</b>		
‘white’				
PT	phzã <sup>55</sup> mã <sup>53</sup>	PJH phzã <sup>55</sup>	PLP phʒã <sup>55</sup>	PJJ phzĩ <sup>55</sup> lɔ <sup>55</sup> lɔ <sup>11</sup>
PD	phʒéN			

As these sets show, almost all Pumi reflexes of \*-am etyma have nasalized vowels. In Dayang, the reflexes include -eN (‘bear’; ‘draw water’; ‘white’), -iN (‘fathom’; ‘fly/run’; ‘iron’), -ɛN (‘smell’), and -ouN (‘bridge’). Dayang forms are lacking for ‘ear/spike’ and ‘otter’, but the Jiulong dialect has -eN (written -ẽ) for both. The Dayang form for ‘dare’ has -rN, but that set is a bit problematical.

<sup>38</sup> See STC #336 and n. 226; TSR #39. STC only sets up the allofam with final stop \*kap (underlying, e.g. WB khap); the variant \*kam is directly attested by forms like Lahu qho and Zaiwa kham<sup>51</sup>.

### 3.3 Other Qiangic words for WEDGE

Several other forms for ‘wedge’ in Qiangic languages bear a surface similarity to Pumi **tsɔ**, but they must be individually scrutinized, since several etymological possibilities exist for each one of them. First let us just present them in an alphabetical list<sup>39</sup>:

Daofu	(DF)	zav
Ersu	(ES)	ndzi <sup>55</sup>
Guiqiong <sup>40</sup>	(GQG)	ze <sup>35</sup>
Lusu	(LS)	ndze <sup>35</sup>
Muya (=Minyak)	(MYS)	tshu <sup>33</sup> ze <sup>55</sup>
Muya	(MYG)	tshə <sup>33</sup> ze <sup>53</sup>
Namuyi Muli Luobo	(NML)	ʂo <sup>35</sup>
Namuyi Muli	(NMM)	ʂuo <sup>35</sup>
Pumi (Lanping)	(PLP)	siē <sup>13</sup> dzə <sup>55</sup> 41
Qiang Aba	(QA)	qɛ sɛ
Qiang (Taoping)	(QT)	siɛ <sup>33</sup> tɕhy <sup>33</sup>
Queyu Yajiang (Zhábā <sup>ˇ</sup> )	(QYY)	tsə <sup>53</sup>
Queyu Xinlong	(QYX)	ʂsa <sup>35</sup>
rGyalrong	(RGS; RGM))	tɛ cɕhə
rGyalrong Benzhen	(RGB)	tɛ -tʃhə
rGyalrong Caodeng	(RGC)	tɛ -mtʃhi
Shixing	(SXS)	ʂǎ <sup>55</sup>
Shixing	(SXM)	ʂǒ <sup>53</sup>
Zhábǝ	(ZB)	cɕhɿ <sup>13</sup>

Several of these forms bear a *prima facie* resemblance to PLB \*N-džam<sup>2</sup> (above), especially those with prenasalized initials (Ersu, Lusu, rGyalrong Caodeng):

Lusu **ndze**<sup>35</sup> ‘wedge’

The same reflex **-e** occurs in Lusu ‘bridge’, ‘fly’, ‘hair’, ‘otter’:

Lusu <b>dze</b> <sup>35</sup>	‘bridge’
Lusu <b>bze</b> <sup>35</sup>	‘fly’
Lusu <b>tɕe</b> <sup>31</sup>	‘hair’
Lusu <b>ʂe</b> <sup>35</sup>	‘otter’

<sup>39</sup> Forms taken from ZMYYC #413 (p. 783) and TBL #620 (p. 207).

<sup>40</sup> The Guiqiong form cited in ZMYYC (GQY), **ɕe**<sup>33</sup> tsɿ<sup>33</sup>, is an obvious loan from Chinese.

<sup>41</sup> Despite the nasalization of the first syllable, this form looks like a loan from Chinese.

Other Lusu reflexes of **\*-am** etyma include: **u** ('iron', 'fence') and **iu** ('fathom'). For another possible etymology of Lusu **ndze**<sup>31</sup>, see below.

*Ersu ndzi*<sup>55</sup> 'wedge'

The same reflex **-i** occurs in Ersu 'bridge':

Ersu **dzi**<sup>55</sup> 'bridge'

However, other Ersu reflexes of **\*-am** etyma include: **ɣ** ('otter'), **o** ('ear/spike'), **io** ('fathom'), and **ɛ** ('iron').

The *rGyalrong* forms, despite the prenasalization in Caodeng, cannot be related to our PLB etymon, since **\*-am** is generally preserved as such in *rGyalrong* dialects.

The rhymes of the *Namuyi* forms are also consistent with an **\*-am** origin:

*Namuyi Muli Luobo* (NML) **ʂo**<sup>35</sup>, *Namuyi Muli* (NMM) **ʂuo**<sup>35</sup> 42

The same reflex **-o** occurs in *Namuyi*:

**dzo**<sup>55</sup> 'bridge'

Other *Namuyi* reflexes of **\*-am** etyma include: **u** ('iron', 'bear', 'garden'), and **-y** ('fathom').

The *Guiqiong* (GQG) form **ze**<sup>35</sup> looks very much like Lusu **ndze**<sup>31</sup>, that we have already assigned to **\*N-dzam**. However, *Guiqiong* does not have **-e** as the reflex of any other **\*-am** etymon. Rather, the unruly *Guiqiong* reflexes of **\*-am** include **ʂ** ('bridge', 'fathom', 'iron'), **ɣ** ('otter'), **ui** ('bear'), and **ʂ** ('fly'). An alternative proposal for the origin of this *Guiqiong* form is given below.

The remaining forms for 'wedge' in our list (*Muya*, *Qiang*, *Queyu*, *Shixing*, *Zhaba*) similarly show no particular rhyme similarities to established **\*-am** etyma:

*Muya* (MYG) **tshə**<sup>33</sup> **zɛ**<sup>53</sup>, (*MYS*) **tshu**<sup>33</sup> **zɛ**<sup>55</sup>

The same *MYS* reflex **-u** occurs in only one **\*-am** etymon:

*Muya* (*MYS*) **khur**<sup>55</sup> **nu**<sup>53</sup>.

*Muya* reflexes of **\*-am** etyma include: **-e** ('bear', 'fathom', 'fly', 'iron'), **-o** ('bridge'), **ɣ** / **ɛ** ('otter').

42 The **-u-** in the *NMM* form may represent an allophonic labialization of the initial consonant before the vowel **-o**. As similar labialization occurs automatically in *Pumi Dayang* before **-o** (Matisoff 1996).

Qiang (QA) qɛ sɛ, (QT) sie<sup>33</sup> tɕhy<sup>33</sup> 43, Qiang (QM) sa sɔɪ

The most frequent QM reflex of *\*-am* seems to be **-i** ('bridge', 'fly', 'otter', 'smell', 'white'). QT reflexes are all over the place, including **-ie** ('bridge',<sup>44</sup> 'garden'), **-e** ('fly'), **-i** ('iron'), **-i** ('white'). QA reflexes range from **-ua** ('bridge'), to **-ə** ('otter'), to **-i** ('white').

The QM and QA forms for 'iron' are transcribed with a rhotic offglide (written above the line in the sources): QM suɪ mu, QA su.ɪ mu. It is possible that these descend from PTB *\*syi:r* ≈ *\*sya:l* (STC #372), but note that the QM word for 'wedge' (QM sa sɔɪ) and the QA word for 'otter' (QA ydzəə) show similar rhotacization. In the case of QM 'wedge' there is a possible explanation (see below).

Queyu Yajiang ["Zhábā"] (QYY) tsə<sup>53</sup>, Queyu Xinlong (QYX) ʂsa<sup>35</sup>

QYY reflexes of *\*-am* etyma include **-ua** ('bear'), **-ã** ('bridge', 'iron'), **-ō** ('fathom', 'otter'), **-ū** ('smell'), **-e** ('fly')

QYX reflexes of *\*-am* etyma include **-ɛ** ('otter'), **-ɛr** ('bear') [again note the rhotacization], **-o** ('bridge', 'iron', 'fence/garden'), **-u** ('fathom'), **-e** ('fly')

Shixing (SXS) ʂã<sup>55</sup>, (SXM) ʂõ<sup>53</sup>

SXS reflexes of *\*-am* etyma include **-ĩ** ('bear', 'fathom', 'fly'), **-ẽ** ('bridge'), **-ẽ** ('otter'), **-ã** ('iron'), **-o** ('smell'), **-õ** ('dare')

SXM reflexes of *\*-am* etyma include **-ĩ** ('bear'), **-ẽ** ('bridge', 'fathom', 'fly', 'otter'), **-õ** ('iron', 'dare'), **-u** ('smell')

The irregularity of these reflexes makes it less impressive that the SXS reflexes of 'iron' and 'wedge' are the same, or that the SXM reflexes of 'iron', 'dare', and 'wedge' are all the same.

Zhábɿa (ZB) cɕhɿ<sup>13</sup>

Zhaba reflexes of *\*-am* etyma include **-a** ('bear', 'dare'), but also especially **-ɿ** ('bridge', 'fly', 'smell', 'white'), and **-i** ('iron', 'fathom', 'otter').

In general, then, these Qiangic forms do not seem unequivocally relatable to our PLB root in *\*-am*. There are, however, several other possibilities.

<sup>43</sup> The first syllable of this form looks like a loan from Chinese (Mand. xiē).

#### 4.0 TIBETAN AND BURMESE FORMS, AND THEIR POSSIBLE RELATIONSHIP TO QIANGIC ONES

##### 4.1 Tibetan *gzer* ≈ *ḥdzer* ‘peg; wedge’ and its possible congeners

Most of the Qiangic forms for ‘wedge’ we have cited bear a strong resemblance to forms from Tibetan dialects. Jäschke (pp. 495, 489) cites WT *gzer* ≈ *zer* ‘nail; tack’, which appears together with *lčags* ‘iron’ and *śiŋ* ‘wood’ in compounds meaning ‘iron nail’ (*lčags-gzer*) and ‘wooden nail’ (*śiŋ-gzer*), the latter elsewhere glossed ‘peg’ (p. 559). This morpheme can also be used verbally (*gzer-ba* ‘bore into, drive or knock into’), and has developed some interesting extensions of meaning as a noun, including ‘mnemonic verse’ (presumably intended to knock a text into one’s head); ‘ray, beam (e.g. of sunlight)’; perhaps because of the elongated shape; and ‘pain, ache’ (maybe by association with sharp or pointed objects). TBL (p. 207) cites a Written Tibetan form *ciŋ ḥdzer* ‘wedge’ (not to be found in Jäschke),<sup>45</sup> with the *a-chung* prefix; this is confirmed by forms in several Tibetan dialects with prenasalized initials:<sup>46</sup>

Tibetan (Batang)	<i>xhi</i> <sup>35</sup> <i>ndze</i> <sup>55</sup>	TBL #620
Tibetan (Amdo:Zeku)	<i>ndzer ma</i>	ZMYYC #413

This now raises the strong possibility that our best Qiangic candidates for relationship with PLB \**n-džam*, i.e. Lusu *ndze*<sup>35</sup> and Ersu *ndzi*<sup>55</sup> (above 3.3), are to be related instead to this Tibetan morpheme.

Other Tibetan dialect forms for ‘wedge’ include:

Tibetan (Lhasa)	<i>ciŋ</i> <sup>55</sup> <i>se</i> <sup>15</sup>	ZMYYC #413
Tibetan (Lhasa)	<i>ciŋ</i> <sup>55</sup> <i>se</i> : <sup>55</sup>	TBL #620
Tibetan (Khams:Dege)	<i>chin</i> <sup>55</sup> <i>dze</i> <sup>55</sup>	ZMYYC #413
Tibetan (Amdo:Bla-brang)	<i>tchə</i>	ZMYYC #413
Tibetan (Alike)	<i>tchə</i>	TBL #620

The Monpa Tshona (Mama = Takpa) form *ceŋ*<sup>55</sup> *zer*<sup>13</sup> (ZMYYC #413; TBL #620) also has the morphemic structure ‘wood’ + ‘peg’, and is obviously closely related to or borrowed from Tibetan.<sup>47</sup> The same may now be said for

<sup>44</sup> If it is the *first* syllable of QT *sie*<sup>33</sup> *tchy*<sup>33</sup> that is being compared, its rhyme -ie would agree with ‘bridge’ and ‘garden’.

<sup>45</sup> ZMYYC #413 has *ciŋ gzer* ‘wedge’.

<sup>46</sup> For the connection between *a-chung* and prenasalization, see e.g. Matisoff 1975. It is possible that this nasal prefix arose secondarily in the compound for ‘wedge’ by assimilation to the final of the first syllable *śiŋ* ‘wood’.

<sup>47</sup> Other Tshona (= Cuona) forms reflect a distinct etymon \**sap* found also in Burmese (see below 4.2).



A strong Kamarupan cognate is Tangkhul Naga **thin-tap** ‘wedge’ [Pettigrew 1918:211, 456]. Like other Kuki-Chin-Naga languages (e.g. Mizo, Lai), Tangkhul has developed dental stops from PTB \*s- [see STC p.28], e.g. ‘die’ \*səy > TN **thi**, ‘wood’ \*siŋ > TN **thin** [this is the first element in the compound for ‘wedge’ just cited]. The lack of aspiration in the second syllable of **thin-tap** is perhaps due to its non-initial position as a bound constituent of the compound (**tap** does not appear as a head entry in Pettigrew).

I have just learned that another Kamarupan language, Lai Chin, has an obviously cognate form, **tsop** (p.c., Kenneth VanBik).

Another possible reflex of \*sap is Naxi (Lijiang) **ɣuɑ<sup>55</sup>** ‘wedge’ (but see 2.34 above).

Finally, there is a solid comparandum in Chinese: 榫 OC tsɿap (GSR 635f) ‘peg, tenon’.

Since this etymon must now definitely be set up for PTB and probably for PST as well, this leads us to a new question. Could Dayang Pumi **tsó**, which started this whole investigation, perhaps come from \*sap instead of \*N-džam? There is actually one shred of evidence that this might be so: the Pumi word for ‘needle’ (< PTB \*k-**rap**; see TSR #191) has the same rhyme as Pumi ‘wedge’. As a matter of fact, the Namuyi words for ‘needle’ and ‘wedge’ also have the same rhyme -o:

‘needle’	PTB *k- <b>rap</b>	WB <b>ɽap</b>	Pumi Dayang <b>qhǒ</b>	Namuyi <b>ɬo<sup>33</sup></b>
‘wedge’	PTB * <b>sap</b>	WB <b>sap</b>	Pumi Dayang <b>tsó</b>	Namuyi <b>ʂo<sup>35</sup></b>

Unfortunately, however, no further examples of Dayang -o < PTB \*-ap have yet been uncovered.<sup>53</sup> Dayang reflexes of etyma in \*-ap include -a (WEEP \***krap** > PD **χqwá**), and -ɔ (SHOOT \***gap** > PD **thǒ**).<sup>54</sup>

## 5.0 WORDS FOR WEDGE IN OTHER BRANCHES OF TIBETO-BURMAN; OTHER ETYMA FOR WEDGE

Several forms in the little-known Abor-Miri-Dafla (Mirish) branch of TB have forms for ‘wedge’ with affricate initials and non-front vowels that look superficially very much like our Pumi **tsó**, but which remain equally obscure in origin (data from ZMYYC #413; TBL #620):

Darang Deng (=Taraon)	<b>tɕ<sup>31</sup>tsau<sup>53</sup></b>
Geman Deng (=Kaman)	<b>dɕ<sup>31</sup>tsuu<sup>55</sup></b>
Idu (Luoba)	<b>ɑ<sup>55</sup>tsu<sup>55</sup></b>

<sup>53</sup> Except perhaps for Dayang **m̥o sɿN** ‘morning’ < PTB \*m-**nap**. This root also has a well-attested variant \*m-**nak** in Lolo-Burmese (see TSR #131).

<sup>54</sup> Although there are over 30 cognate sets reconstructed with PTB and/or PLB \*-**ap** in STC and TSR, only a handful of them have so far been shown to have solid Qiangic cognates.



A few other new etyma for ‘wedge’ may perhaps be reconstructible, though the evidence is still scattered:

### 5.1 \*san

The Akha (S. Loloish) word for *seh* ‘wedge’ cannot be from \*-am, since the regular Akha reflex of \*-am is definitely syllabic /-ṃ/ (see above 2.51), but might be from PLB \*san<sup>2</sup> (cf. ‘louse’ PLB \*san<sup>1/2</sup> > Ak. *sheh*<sup>55</sup>).<sup>55/56</sup>

This would make the Akha form a perfect cognate to Dulong (Nungish group) *san*<sup>55</sup> ‘wedge’ (TBL #620). We should probably also include another Nungish form in this set, Anong *go*<sup>31</sup>*saŋ*<sup>55</sup> (ZMYYC #413; TBL #620), despite the difference in position of the final nasal.

Less secure would be an attempt to relate Qiangic forms like Shixing (SXS) *ṣã*<sup>55</sup> (SXM) *ṣõ*<sup>53</sup> to this root, though anything is possible.

In any event, this new etymon seems quite distinct both from \**džam* and \**sap*.

### 5.2 \*-n(y)e

This flimsily attested item occurs as the second syllables of compounds in Apatani (Tani group of Mirish) and Bai, two languages whose geographic separation precludes contact with each other:

Apatani	<i>pu-ñe</i>	J. Sun 1993
Apatani	<i>ú-ñe</i>	<i>ibid.</i>
Bai (Jianchuan)	<i>tci</i> <sup>55</sup> <i>ne</i> <sup>21</sup>	ZMYYC #413, p. 783

### 5.3 \*ka

This equally flimsy prospective etymon occurs only in the (unclassified) Tujia language and in Tibetan:

Tujia (Northern)	<i>ko</i> <sup>21</sup>	wedge/clip	Tian and He 1986
Tujia (Southern)	<i>kha</i> <sup>33</sup>	wedge/clip	<i>id.</i>
Tibetan (Written)	<i>ka-u</i>	wedge	Jäschke, p. 2

The non-aspirated Tibetan initial immediately stamps this lexical item as somehow aberrant, perhaps a loanword, since non-prefixed WT syllables with voiceless obstruent initials are overwhelmingly aspirated in native vocabulary.

<sup>55</sup> But ‘hawk’ \**džwan*<sup>1</sup> gives Ak. *k’a* *de* ˇ.

<sup>56</sup> The Akha compound for ‘nail’ is *shm*<sup>5</sup> *seh* (‘iron’ + ‘wedge’, with the first syllable < \**syam*). This compound thus has the same *semantic* structure as WT *lčags-gzer* ‘nail’, though both syllables are *etymologically* distinct in the two languages. The first syllable of the Lahu compound *šo-chû* ‘nail’ reflects the same etymon for ‘iron’ as the Akha compound, though the second element means ‘thorn’ < PTB \**tsow* [STC # 276].

## 6.0 CONCLUSIONS

Although we have not achieved our original goal of etymologizing Pumi *tsó* ‘wedge’, the attempt to do so has yielded a number of side benefits. We have reconstructed several new roots for ‘wedge’, including PLB *\*N-džam*<sup>2</sup>, Proto-Himalayish *\*-zer*, and PTB *\*sap*, clarifying in the process the fate of the rhymes *\*-am* and *\*-ap* in both Lolo-Burmese and Qiangic. A number of other forms have not been assigned with certainty to any of these etyma, but at least some of the difficulties involved have been expounded.

It will be challenging to work out Qiangic phonological developments in sufficient detail to establish the exact nature of the relationship of this branch of TB to the other subgroups of the family. Although Qiangic initial consonants are justly famous for their manifold complexities, the rhymes of Qiangic languages (except for the rGyalrong/Ergong group) are often just as depleted as those of Loloish, with total loss of post-vocalic consonants. The phonological evolution of originally *\*closed* syllables in Qiangic seems particularly intricate.<sup>57</sup> Compounding the comparativist’s headaches is the high degree of dialectal differentiation within individual Qiangic languages. Some of the invaluable data provided in recent Chinese sources may be insufficiently phonemicized, so that certain reflex-patterns appear more complicated than they actually are. Despite the copiousness of these published sources, many key cognate forms are undoubtedly still lacking, not because they do not exist, but simply because they were accidentally not recorded, in favor of a more or less synonymous form. It behooves us then to approach comparisons between Qiangic and other branches of TB with due humility.

In closing, I cannot resist one speculative semantic sally. We have seen that the PLB root *\*N-džam*<sup>2</sup> ‘wedge’ is almost identical (except for tone) with PLB *\*N-dzam*<sup>1</sup> ‘bridge’. Could there be some intrinsic semantic connection between the two concepts? Wedges have both splitting and joining functions: they can be used to pry things apart,<sup>58</sup> or conversely to bridge the gap between objects that are too far apart (in the manner of a shim). The ‘bridge’ of a violin wedges the strings apart from the sounding-board, while simultaneously connecting the four strings together by causing them to vibrate over the same thin piece of wood.

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<sup>57</sup> Not that the evolution of *\*open* syllables is straightforward either! Even *\*-a*, the most common of all TB rhymes, has complex conditioned reflexes in Dayang Pumi, with the most common reflex being *\*-i*. See Matisoff 1996.

<sup>58</sup> Cf. Jingpho *sɯm-prɨat* ‘wedge’ (< *phɨat* ‘split’).

## REFERENCES

- BENEDICT, Paul K. 1972. *Sino-Tibetan: a Conspectus*. Contributing Editor, James A. Matisoff. Cambridge: Cambridge University Press. (“STC”)
- BRADLEY, David. 1994. *A Dictionary of the Northern Dialect of Lisu*. Based on Xu Lin, Mu Yuzhang, et al., *Lisu-Chinese Dictionary* (Kunming 1985). Pacific Linguistics C-126. Canberra; Australian National University.
- BURLING, Robbins. 1967. *Proto-Lolo-Burmese*. Indiana Research Center in Anthropology, Folklore, and Linguistics, Pub. #43. The Hague: Mouton.
- DAI Qingxia, et al, eds. 1992. 藏缅语族语言词汇 *Zhangmiǎn yǔzú yǔyán cíhuì*. [A Tibeto-Burman Lexicon] Beijing: Central Institute of Nationalities Press. (“TBL”)
- JÄSCHKE, H.A. 1881. *A Tibetan-English Dictionary*. London: Routledge and Kegan Paul Ltd. Reprinted 1958.
- LU Shaozun. 1983. 普米语简志 *Pǔmí-yǔ jiǎnzhì*. [Brief Description of the Pumi Language] Beijing: People’s Publishing Co.
- \_\_\_\_\_. 1986. 错那门巴语简志 *Cuona Ménbā-yǔ Jiǎnzhì*. [Brief Description of the Cuona Menba Language] Beijing: People’s Publishing Co.
- MATISOFF, James A. 1972. *The Loloish Tonal Split Revisited*. Research Monograph #7. Berkeley: Center for South and Southeast Asia Studies. (“TSR”)
- \_\_\_\_\_. 1973. *The Grammar of Lahu*. University of California Publications in Linguistics #75. Berkeley and Los Angeles: University of California Press. Reprinted 1982.
- \_\_\_\_\_. 1975. “Rhinoglottophilia: the mysterious connection between nasality and glottality.” In C. Ferguson, L. Hyman, and J. Ohala, eds., *Nasálfest: Papers from a Symposium on Nasals and Nasalization*, pp. 265-87. Stanford, CA.

- \_\_\_\_\_. 1978. "Mpi and Lolo-Burmese microlinguistics." *Monumenta Serindica* (Tokyo) #4, 36 pp.
- \_\_\_\_\_. 1988. *The Dictionary of Lahu*. Berkeley and Los Angeles: University of California Press. ("DL")
- \_\_\_\_\_. 1992. "A key etymology." *Linguistics of the Tibeto-Burman Area* 15.1:139-43.
- \_\_\_\_\_. 1994. "On keys and wedges: comment on Sagart's discussion note." *Linguistics of the Tibeto-Burman Area* 17.1:169-71.
- \_\_\_\_\_. 1998. "Dǎyáng Pumi phonology and adumbrations of comparative Qiangic." *Mon-Khmer Studies* 27:171-213.
- MAZAUDON, Martine. 1996. "An outline of the historical phonology of the dialects of Nar-Phu (Nepal)." *Linguistics of the Tibeto-Burman Area* 19.1:103-114.
- PETTIGREW, W. 1918. *Tāngkhul Nāgā Grammar and Dictionary (Ukhrul Dialect)*. Shillong.
- SAGART, Laurent. 1994. "Discussion note: reply to James A. Matisoff's 'A key etymology.'" *Linguistics of the Tibeto-Burman Area* 17.1:167-8.
- SUN Hongkai, et al, eds. 1991. 藏缅语语音和词汇 *Zāngmiǎnyǔ yǔyīn hé cíhuì*. [Phonologies and Vocabularies of Tibeto-Burman Languages] Beijing: Chinese Academy of Social Sciences Press. ("ZMYYC")
- SUN, Jackson Tianshin. 1993. *A Historical-Comparative Study of the Tani (Mirish) Branch of Tibeto-Burman*. Ph.D. dissertation, University of California, Berkeley.
- \_\_\_\_\_. 1992. "Review of *Zāngmiǎnyǔ Yǔyīn hé Cíhuì* ." *Linguistics of the Tibeto-Burman Area* 15.2:73-113.
- TIAN Desheng, HE Tianzhen, et al., eds. 1986. 土家语简志 *Tǔjiā-yǔ Jiǎnzhì*. [Brief Description of the Tujia Language] Beijing: Nationalities Press.