

Hezhang Buyi: a highly endangered Northern Tai language with a Kra substratum

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1. Introduction and background

Hezhang Buyi is a highly endangered Northern Tai language in northwestern Guizhou, China that is notable for having a Kra substratum. There are likely no more than 10 elderly speakers currently residing in the western part of Hezhang County, Guizhou Province, China. Hezhang Buyi is a moribund language with virtually no chances of revitalization, as there are no speakers of it under the age of 60. Most Buyi of Hezhang County have shifted to Southwestern Mandarin, the regional lingua franca. As a result, documentation work on Hezhang Buyi is extremely urgent.

Buyi¹ is a cover term for a dialect chain of related but often mutually unintelligible Northern Tai languages that are spoken across much of the southern half of Guizhou Province in southwestern China. This dialect chain is continuous with Northern Zhuang varieties spoken throughout the northern two-thirds of Guangxi Province to the south of Guizhou. The Buyi are

¹ Buyi is spelled *Bouyei* in Ethnologue, which assigns it the ISO 639-3 code [pcc].

one of the 56 officially recognized ethnic groups of China. The ethnic Buyi population in Bijie Prefecture of northwestern Guizhou, where Hezhang Buyi is located in, is much sparser. The Buyi dialects of Bijie Prefecture are all endangered and under-documented. The *Hezhang County Gazetteer* (2001:105-108) reports a Buyi population of 2,939 as of 1995.

As this variety of Buyi is spoken almost entirely within the boundaries of Hezhang Province, I will refer to this Buyi variety as *Hezhang Buyi*. Currently at the time of writing, there are no other Buyi dialects (linguistic varieties) in Hezhang County that are known to be mutually unintelligible with the Hezhang Buyi language variety discussed in this paper.

1.1. Names and identities

Hezhang Buyi speakers refer to themselves as *pu⁵⁵ŋzei³³*, and they are currently classified by the Chinese government as ethnic Buyi people. However, they are still locally known as “Shui 水,” and were also formerly classified as ethnic Shui (水族). Despite having had this ethnic classification, Hezhang Buyi is not closely related to the Sui language of southeastern Guizhou, which is a Kam-Sui language rather than a Tai language.² The Hezhang Buyi are surrounded by ethnic Han Chinese, Yi (Nasu speakers), and Miao (A Hmao speakers) people within about a 20-kilometer radius of Dazhai, Hezhang County. There are no other Buyi dialects or other Kra-Dai languages spoken near Hezhang Buyi villages. I consider Hezhang Buyi to be a separate language, as it is highly unlikely to be mutually intelligible with any other variety of Buyi due to its highly divergent lexicon.

1.2. Field notes

Encountering Hezhang Buyi was a serendipitous discovery that I had never planned on. I discovered Hezhang Buyi in April 2013 while doing fieldwork on Luoji (luo²¹dzi³³; also known as Qixingmin 七姓民, who are classified as ethnic Bai), an unclassified Lolo-Burmese language of Shejie Village 蛇街村, Yangjie Town 羊街镇, Weining County, Guizhou. Locals in Shejie Village and Yangjie Town reported the presence of “Cai” (蔡族) or “Caijia” (蔡家族) people in the previously unreported location of Niujiaying Village 牛角井村, and Shui people in Dazhai 大寨 of neighboring Fuchu Township 辅处乡. The Caijia speak an unclassified Tibeto-Burman language (Bo 2004) that is related to Longjia and Luren, which are now both extinct that were formerly spoken across much of western Guizhou. Field reports on Luoji and Longjia have been presented in Hsiu (2013).

² Various Buyi communities have also been referred to as Shui. For instance, my field work in 2013 has shown that the Shui of Luoping County and Fuyuan County, Yunnan Province actually speak Buyi dialects rather than Sui.

On April 8, 2013, I interviewed two different speakers of Hezhang Buyi in two separate locations. First, I interviewed Yang Zhenmei 杨珍妹 (born July 15, 1928), who was the mother of a local village official in Tiejiang Village 铁匠村, Tiejiang Township 铁匠乡, Hezhang County 赫章县. Yang was born in a neighboring village, and moved to Tiejiang Village when she married a local man there. Next, in Dazhai 大寨, Fuchu Township 辅处乡, Hezhang County 赫章县, Guizhou, China, my informant was an 84-year-old woman named Gao Chunjie 高春姐. Gao was illiterate, and was born on May 5, 1928 in Yuguo village 雨果村, Weining County, Guizhou. She was reported by locals in Dazhai to be the best native speaker of “Shui” in the village. There were also a few (no more than 5) other elderly fluent speakers in the village, all reported to be in their 70’s and above. Gao’s speech differed slightly from Yang’s speech, but both speak the same mutually intelligible dialect. Overall, Gao was a much more reliable informant, as she pronounced her words very clearly and had a better command of the language than Yang did. About 170 words were recorded using a USB cardioid microphone connected to a laptop computer. Recordings were made using the software program Audacity. WAV sound files were named and created during the elicitation session. All audio recordings have been uploaded onto Zenodo.org, where they are available to the public as open-source downloads.

Gao’s middle-aged male relative said their ancestors had migrated from from Dashiban, Taihe County, Fuguang Prefecture, Jiangxi (江西福广府太河县大石板). He also reported other locations of Shui in Hezhang County as Zhuyuan 竹园, Kele Township 可乐乡 (as well as one other village which I did not record the name of) and Tangbian 塘边, Zhuming Township 朱明乡. The *Hezhang County Gazetteer* (2001:105-108) also reports that there are ethnic Buyi people living in Nongchang Village 农场村, Kele Township 可乐乡, with a population of 332 as of 1995. I have personally not visited any of these locations. Future visits to these villages will be necessary in order to locate possible additional speakers of Hezhang Buyi.

1.3. Baiyan Shui: a related language in Yunnan?

Shui of Baiyan, Yiliang County, Yunnan, China is currently extinct, but the ethnic designation and location suggest that it was a Northern Tai (Buyi) language that could have been closely related to Hezhang Buyi. Yiliang County borders Hezhang County, and is located just to the northwest of the Hezhang Buyi villages, so it is certainly conceivable for Hezhang Buyi speakers to have migrated to Yiliang County.

On April 10, 2013, I visited Baiyan village 白岩村, Long'an township 龙安乡, Yiliang County 彝良县, Yunnan, China, which is an ethnic Shui village. I was only able to elicit one word remembered by an elderly ethnic Shui man: *ka33 tou11* ‘chopsticks’. According to Baiyan locals, the ancestors of the Shui of Yiliang had migrated from Taihe County, Ji’an Prefecture, Jiangxi. They moved to Sandu County for 42 years, then moved to Yiliang County in 1720.

1.4. Classification

Hezhang Buyi is a Northern Tai language, which is a branch belonging to the Kra-Dai (also called Tai-Kadai) language family. Following Edmondson (2014) and Snyder (2008), the classification of Northern Tai within the Kra-Dai language family is as follows.

Kra-Dai family

1. Kra branch
2. Tai branch
 - a. Central Tai, Southwestern Tai sub-branches
 - b. Northern Tai sub-branch
 - a. Buyi
 - i. Southern Qian Buyi
 - ii. Central Qian Buyi
 - iii. Western Buyi Buyi

1. Hezhang Buyi

Hezhang Buyi is most closely related to Western Qian Buyi dialects (Wu, et al. 2007), and has lost all final stops. However, Hezhang Buyi is especially notable for having a Kra substratum, which can be seen in its divergent lexicon, as well as the regionally unusual syntactic feature of circumfixal negation. There are various words borrowed from an unknown Kra languages that likely belonged to a currently extinct branch of Kra. The genetic position of the substrate language to Hezhang Buyi is likely to have been a sister of Lachi and Gelao (*see* section 5). These issues are further discussed in the sections below in this paper.

2. Phonology

Since just over 170 words were collected (appendix 1), this phonology of Hezhang Buyi should be considered to be a tentative one. In some ways, Hezhang Buyi phonology resembles

that of Red Gelao more than it does with the literary standard (official dialect) of Buyi in Wangmo County, Guizhou.

2.1. Consonants

Hezhang Buyi has 28 consonants, including 4 pre-glottalized consonants ʔb, ʔd, ʔl, and ʔz. There are 2 retroflexes, namely ʂ and ʐ. The voiced retroflex ʐ has only been found in the consonant cluster *mz* in *mzi*²¹ ‘year.’ Consonants that are usually not found in other Buyi lects are q, ʔl, ʔz, and ʈ.

p ^h	t ^h			k ^h		
p	t			k	q	ʔ
b	d					
ʔb	ʔd					
m	n		ɲ	ŋ		
	l					
	ʔl					
	ʈ					
	s	ʂ	ʑ			
	z	ʐ	ʑ			
			ʔz			
			tʂ			
			dʐ			

2.2. Vowels

Hezhang Buyi has 11 phonemic vowels.

i u u

e ɔ o

 ə

æ ɛ

a a

[ɿ] is an allophone of /i/, and occurs after sibilants. Sinologists usually transcribed this [ɿ] as <ɿ> when it occurs in this conditioned environment. I have used this convention in this paper as well.

Vowels can also be nasalized in Hezhang Buyi.

2.3. Tones

I have distinguished the following 5 contour tones for Hezhang Buyi, which are:

- 33 – mid level
- 55 – high level
- 21 – low falling
- 35 – rising
- 53 – high falling

Most Gelao dialects in western Guizhou have 4 or 5 tones (He 1983), while Kam-Sui languages in southeastern Guizhou around 8 tones (Diller, et al. 2008).

3. Syntax

As very limited recordings of Hezhang Buyi phrases and sentences were collected, I will briefly cover only the most basic syntactic features of Hezhang Buyi. Particular attention will be given to circumfixal negation, which in Guizhou is only also found in the Gelao languages.

The generic classifier *tu*³³ is attached to most animals and to certain body parts. In rapid speech, it is also pronounced as *tu*³³ or *tə*³³. Examples include *tu*³³*ɲa*⁵⁵ ‘skin’, *tu*³³*ma*²¹ ‘horse’, and *tu*³³*nei*⁵⁵ ‘child.’ Many other Buyi lects also make extensive use of the generic *tV* (/t/ plus vowel) classifier. When nouns are elicited in isolation, this classifier is always attached before the noun. In phrases, numerals precede the classifier, while demonstratives follow the head noun, as shown in example (1).

- (1) *san*³³ *tu*³³ *mua*⁵⁵ *ni*³³
 three CLS dog this
 ‘these three dogs’

Like all other Kra-Dai languages, Hezhang Buyi is an SVO (subject-verb-object) language, as shown in example (2)

- (2) ku³³ zu²¹ mu³³
1.SG know 2.SG
'I know you.'

As with most other languages in southwestern China, the copula *ti*³³ is used to equate nouns but not adjectives with the subject (example 3).

- (3) ku³³ ti³³ pu³³ŋzei²¹
1.SG be autonym
'I am Buyi.'

4. The case for a Kra substratum: syntactic evidence

Unlike other Buyi lects, negators are used both before the verb and at the end of the clause in Hezhang Buyi. The pre-verbal negator is *mu*³³, while the clause-final negator is *nu*³³, as seen in example (4) (see example 3 for the same sentence but without negators).

- (4) ku³³ mu³³ ti³³ pu³³ŋzei²¹ nu³³
1.SG NEG be autonym NEG
'I am not Buyi.'

Many Kra languages, as well as Yang Zhuang of southwestern Guangxi, are also notable for having clause-final negation, an unusual grammatical feature that is not found in any other language of southern China except for Tujia (Edmondson 2008; Jackson 2015). In Southeast Asia, this syntactic feature is quite atypical for Sinitic, Hmong-Mien, and Kra-Dai languages. However, according to the WALS database, circumfixal negation is common among many Kuki-Chin-Naga languages of the Indo-Burmese border region, such as Mongsen Ao (Coupe 2007). It also occurs in Tujia (Brassett 2006). In Gelao and Buyang, *ma-* is generally the negator preceding the negated phrase, and post-phrasal or post-clausal negators are often *-o* or *-lo*. In western Guizhou and in the Sino-Vietnamese border region, this phenomenon is uniquely Kra, and it is also not known to occur in Loloish languages (David Bradley p.c.).

However, in 2013 I found that Maza³, a previously undocumented Lolo-Burmese language with a Kra (likely Qabiao) substratum, also displays circumfixal negation, as shown in examples (5) and (6).

(5) ŋa²¹ ma²¹za³⁵ la⁵³
 I Maza be
 ‘I am Maza.’ (Source: Hsiu 2013 field notes)

(6) ŋa²¹ ma²¹za³⁵ ma²¹ ŋue³⁵ xa³³
 I Maza NEG be NEG
 ‘I am not Maza.’ (Source: Hsiu 2013 field notes)

Even though Maza has many lexical items that are most closely related to Qabiao, Qabiao itself does not display circumfixal negation, whereas Buyang does.

Based on evidence from toponyms and Zhuang folk traditions, Li Jinfang (1999) has suggested that Yang Zhuang speakers were in fact Buyang speakers who had switched over to Zhuang (Central Tai). Unlike Maza, which has various lexical items of Kra origin (Hsiu 2014), Kra lexical items have not yet been detected in Yang Zhuang, but circumfixal negation points to Yang Zhuang possibly having a Kra substratum.

As circumfixal negation does not occur in any other Kra-Dai branch but occurs instead in various Tibeto-Burman branches, I believe this feature in Kra likely derives from long-term contact with Tibeto-Burman languages, although this issue is beyond the scope of this paper. It is highly fortunate that syntactic evidence can be clearly presented for languages that were likely to have had Kra influence, as evidence of syntactic influence due to language contact can be difficult to deduce for the languages of the Mainland Southeast Asian linguistic area due to massive typological leveling.

³ Maza is a Lolo-Burmese language belonging to the recently described Mondzish branch. The Maza (ma³³za⁵³) live in the single village of Mengmei 孟梅 (qha³³le⁵³), located on a rocky hilltop overlooking the administrative village center of Puyang 普阳 in Muyang Township, Funing County, Yunnan, China. Liang Min, et al. (2007:1) reports that Qabiao speakers living in Dongdu Village 董渡村, Donggan Township 董干镇 further to the southwest had originally migrated in the 1600’s and 1700’s from locations called Pumei 普梅 (Qabiao name: gə³³mei³³) and Puyang 普阳 (Qabiao name: gə³³wan⁵⁵). Hence, Maza likely formed as a result of Mondzish speakers migrating into Mengmei and gradually assimilating the *in situ* Qabiao speakers. For more information on the Maza language, please consult Hsiu (2014).

Negators in Kra and Tibeto-Burman languages are summarized in Table 1.

Table 1: Negators in selected Kra and Tibeto-Burman languages

<i>Language</i>	<i>Branch</i>	<i>Source</i>	<i>Pre-verbal negator</i>	<i>Post-verbal negator</i>
Paha Buyang	Kra	Li (2006)	pi ⁵⁵	
Yalang Buyang	Kra	Li (2006)		la ³¹
Ecun Buyang	Kra	Li (2006)		naai ⁵³
Langjia Buyang	Kra	Li (2006)		laai ³¹
Pudi Gelao	Kra	Ni (2010)	ma ³¹	ʔo ³³
Bigong Gelao	Kra	Li (2014)	ma ³¹	ɔ ³³
Qinglong Gelao	Kra	Ni (2010)	ʔa ⁵⁵	ʔa ³¹
Judu Gelao	Kra	Ni (2010)	ma ⁵⁵	ʔo ⁵⁵
Wanzi Gelao	Kra	Ni (2010)	ma ⁵⁵	tʂo ²¹
Lachi	Kra	Ni (2010)		lio ¹¹
Mulao	Kra	Ni (2010)	a ⁵⁵	nəu ³⁵
Bolyu	Austroasiatic	Ni (2010)		ʔo ³³
Tujia	Tibeto-Burman	Tian (1986)		ta ³⁵ , t ^h a ⁵⁵
Mongsen Ao	Tibeto-Burman	Coupe (2007)	mə ²¹	la ³³
Proto-Kuki-Chin	Tibeto-Burman	VanBik (2009)		law

5. The case for a Kra substratum: lexical evidence

This section present lexical evidence for Hezhang Buyi having a Kra substratum. Comparisons and notes have been provided for both speakers of Hezhang Buyi that I had interviewed, as well as Jichang Buyi (Hsiu 2017c), Fa'er Buyi (Wu, et al. 2007), Proto-Tai (Pittayaporn 2009), and Proto-Kra (Ostapirat 2000). All other lexical items have been cited from Kra data and proto-language reconstructions in the *Austronesian Basic Vocabulary Database* (Greenhill, et al. 2008), most of which I had manually entered from 2010-2014.

I have also included the following section introducing Jichang Buyi, a Buyi dialect that I had recorded two days before I did fieldwork on Hezhang Buyi.

5.1. Introduction to Jichang Buyi

In 2013, I had also recorded a previously undocumented Buyi dialect of Zhijin County, Guizhou. Wu, et al. (2007) contains an extensive survey of Buyi dialects, but only contains word lists of dialects that are spoken in the more populous Buyi areas to the east and south of Zhijin County.

On April 6, 2013, I interviewed He Weifu (born October 1939 in Dawan village 大湾村), a Buyi speaker who was born in and had lived all his life in Dawan, Jichang Township 鸡场苗族彝族布依族乡, Zhijin County, Guizhou, China. He told me that ethnic Buyi clothing is now rarely worn in Dawan, and that the younger generations speak Buyi with Chinese accents or not at all. However, the older generation was completely fluent in Buyi, and he was proud of the fact that Dawan is one of the few villages in the township where Buyi is still widely spoken, at least by the elderly generation. Like the Buyi of Hezhang County, the Buyi of Dawan had been officially classified as Shui until the 1980's, when they were reclassified as Buyi. The neighboring villages just downhill still say that the residents of Dawan are ethnic "Shui" (水族), although the residents of Dawan now say they are ethnic "Buyi" (布依族).

Buyi of Zhijin County has not been documented in the Wu, Snyder, & Liang's (2007) extensive Buyi dialect survey. I am not aware of any Buyi dialects of Zhijin County that had previously been documented. Jichang Buyi is a Western Qian [Guizhou] dialect, using Snyder's (2008) classification of Buyi dialects. It is the least spoken of the three Buyi dialects in Guizhou, which are Western Qian, Central Qian, and Southern Qian. Western Qian Buyi is spoken in Zhenning, Guanling, Ziyun, Qinglong, Pu'an, Liuzhi, Pan, Shuicheng, Bijie, and Weining counties. The other Western Qian Buyi dialect that I have documented is Buyi of Suode, Pan County, which has not been included below. The Buyi dialects of Hezhang County, Zhijin County, and Pan County that I recorded had all lost the final stop consonants -p, -t, -k, and -m, while most other Buyi dialects in southern Guizhou have preserved all of these final stop consonants. Jichang Buyi is in a linguistic area of northwestern Guizhou where all languages have lost these final consonants. In northwestern Guizhou, all Miao (Hmong), Gelao, and Eastern Yi (Nasu) dialects also do not have the final stop consonants -p, -t, -k, and -m.

Jichang Buyi also displays initial nasal consonant fortition for some words, which is a feature also found in the Qau (Central) Gelao dialects of Wanzi and Dagouchang. Examples of hardened nasal consonants in Jichang Buyi include *mbu*³⁵ 'new' (*m-* instead of *mb-* in other Buyi dialects) and *tə*³³*ŋkəu*²¹ 'snake' (*ŋ-* instead of *ŋk-* in other Buyi dialects).

Buyi dialects that I had documented in 2013 are shown in Map 1, which has been taken from Hsiu (2013). Buyi dialects not included in this paper are the Suode, Buzhang, and Aboji dialects. The Dawan and Suode datapoints are located on the northwestern periphery of the Buyi-speaking area of southern Guizhou. Very few other Buyi-speaking communities located further northwest of these two datapoints. Dazhai is thus quite geographically isolated from other Buyi dialects.

Map 1: Map of Buyi dialects documented by Andrew Hsiu in 2013



5.2. Divergent vocabulary in Hezhang Buyi

Hezhang Buyi has various divergent vocabulary items that are not found in any other Buyi dialect or Tai language. This section compares and discusses the origins of various divergent lexical items in Hezhang Buyi. The tables shown cite forms recorded from both the Dazhai and Tiejiang speakers of Hezhang Buyi that I had worked with, and also highlight the differences between Hezhang Buyi and the other two documented Buyi dialects that are geographically closest to Hezhang Buyi. Buyi (Jichang) is from my own field notes, while Buyi (Fa'er) has been cited from Wu, et al. (2007). Both of the latter two Buyi dialects belong to Snyder's (2008) Western Qian dialect group of Buyi.

Etymology notes have been provided for each Dazhai Buyi form after each comparative table.

Table 2: Hezhang Buyi words of Kra origin

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai)</i>	<i>Hezhang Buyi (Tiejiang)</i>	<i>Buyi (Jichang)</i>	<i>Buyi (Fa'er)</i>	<i>Proto-Tai</i>	<i>Proto-Kra</i>	<i>Comparisons</i>
water	水	ʔɑ ⁵⁵	ʔɑ ⁵⁵	zaŋ ²¹	za:ŋ ⁴²	*Ç.nam C	*ʔuŋ C	Red Gelao (Vietnam) aŋ ³⁵
salt	盐	ɲu ⁵⁵ ŋlǎ ³³	ɲu ⁵⁵ ŋlǎ ³³	kʏ ⁵⁵	mən ⁴⁴ ku ³³	*klwuuə A	*ɲo A	Lachi (Tân Lợi) ɲu ²³ , Gelao (Sanchong) ɲu ³¹
year	年	mɲi ²¹ , mzi ²¹	mi ³⁵	pei ³³ ja ³³	pei ³³	*pi: A	*m- (p)ɣiŋ A	Gelao (Sanchong) pɰ ³⁵ , Paha meŋ ³¹
good	好	ʔzi ³³	zi ³³	ʔdei ³³	ʔdei ³³	*dɣj A	*ʔai A	Gelao (Hongfeng) ʔze ⁴²
oil	油	mje ³³	næ ³³	zau ²¹	jaʊ ³¹	*man A	*(m-)ŋəl A	Gelao (Sanchong) ne ³¹

heart	心	lu ³³ tsɿ ³³	-	-	tuaŋ ⁴⁴	*cɤuŋ A	*hlul C	
far	远	ki ⁵³	ki ⁵³	kai ⁵⁵	tɕei ³³	*k.laj A	*k-li A	
chicken	鸡	tu ³³ ki ⁵⁵	tə ³³ kie ⁵⁵	tu ³³ kai ⁵³	ʔdei ³¹ tɕei ⁴⁴	*kaj B	*ki A	
you (sg.)	你	mu ³³	mu ³³	muŋ ³³	məŋ ³¹	*muŋ A	*mə A/B	

Comments:

- ʔa⁵⁵ ‘water’: Many Kra languages have single vowels with no final consonants for ‘water.’ Forms with -a are only found in Red Gelao of Vietnam, which is most similar to an extinct variety of Gelao spoken in Renhuai, northwestern Guizhou. Proto-Kra *ʔuŋ C may have been borrowed from Hmongic. It is not found in any other Kra-Dai branch.
- ju⁵⁵ʔlā³³ ‘salt’: Proto-Kra *ɲo A is found in all Kra languages and also has a cognate in Proto-Hlai. However, this form is not found in Tai or Kam-Sui.
- mzi²¹ ‘year’: This word was alternatively pronounced *mji*²¹ by my Dazhai Buyi informant, with the medial glide -j- having a fricative-like quality to it. The form *mzi*²¹ supports Ostapirat’s reconstruction *m-ɣiŋ A ‘year.’
- ʔzi³³ ‘good’: It is uncertain how the ʔz- initial had developed from Proto-Kra *ʔai A, but there is a close parallel with Hongfeng Gelao ʔze⁴². The fricative z in Hongfeng Gelao was likely developed via ʔze < ʔje < Proto-Kra *ʔai A.
- mje³³ ‘oil’: Most Buyi lects have the form *ju* or *jau*.
- lu³³tsɿ³³ ‘heart’: This form developed from Proto-Kra rather than Proto-Tai. Most Buyi lects have the Sinitic form, with reflexes such as *sim*, *θim*, or *cim*.
- ki⁵³ ‘far’: Where Tai languages have the rhyme -ai, Kra languages typically have -i. Most Kra languages have words for ‘far’ beginning with l-, but Hezhang Buyi preserves the k- pre-syllable.
- tu³³ki⁵⁵ ‘chicken’: Where Tai languages have the rhyme -ai, Kra languages typically have -i.
- mu³³ ‘you (sg.)’: The lack of a final nasal is suggestive of Proto-Kra *mə A/B rather than Proto-Tai *muŋ A.

Table 3: Hezhang Buyi words with rhymes of Kra origin

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai)</i>	<i>Hezhang Buyi (Tiejiang)</i>	<i>Buyi (Jichang)</i>	<i>Buyi (Fa'er)</i>	<i>Proto-Tai</i>	<i>Proto-Kra</i>	<i>Comparisons</i>
dog	狗	tu³³mu⁵⁵	-	tu ³³ mu ⁵³ , tə ³³ k ^h an ⁵³	ʔdei ³¹ ma ³³	* ^h ma: A	*x-ma A	
liver	肝	pi³³tau³³	-	ta ⁵⁵	tak ⁴⁴	*tap D	*təp D	Gelao (Hongfeng) <i>pa</i> ⁴² <i>ʔjau</i> ³⁵

Comments:

- **tu³³mu⁵⁵** ‘dog’: The -ua rime is not found in any Buyi dialect. Proto-Kra-Dai *-a > -ua sound change is suggestive of changes that would usually occur in Gelao languages.
- **pi³³tau³³** ‘liver’: Hongfeng Gelao also has a *p*-nominal prefix and a -au rhyme. Other Gelao languages do not have the rhyme -au for reflexes of ‘liver.’

Table 4: Hezhang Buyi words of likely Kra origin

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai)</i>	<i>Hezhang Buyi (Tiejiang)</i>	<i>Buyi (Jichang)</i>	<i>Buyi (Fa'er)</i>	<i>Proto-Tai</i>	<i>Proto-Kra</i>	<i>Comparisons</i>
no, not	不	mu³³ ... nu³³	-	-	ja ⁴⁴	*mi: A		Ecun Buyang clause-final negator <i>naai</i> ⁵³

nose	鼻子	mei ⁵⁵ ŋlǎ ³³	ma ³⁵ ʔdaŋ ³³	tau ³³ daŋ ³³	ʔdaŋ ³³ ʔdəŋ ³³	*daŋ A	*teŋ C	Lachi (Jinchang) <i>mi55</i> <i>naŋ53</i>
sun	太阳	la ⁵⁵ jaŋ ²¹	-	tæ ³³ taŋ ³³ wæn ²¹	-	-	*(l-)wæn A	Lachi (Jinchang) <i>la44</i> <i>vuaŋ44</i>
mother	母亲	a ³³ nei ⁵⁵	-	-	mi ²⁴	*me: B		Gelao (Hongfeng) <i>ʔa42</i> <i>ne42</i>
eye	眼睛	mei ⁵⁵ ta ³³	ma ⁵⁵ ta ³³	tə ³³ tai ⁵³	ŋwi ⁴⁴ ta ³³	*p.ta: A	*m-ʔa A	

Comments:

- **nu³³** ‘no, not’ (clause-final negator): This form has a parallel with the Mulao clause-final negator *nəu³⁵*. Clause-final negation is not found in any other Tai language except for Yang Zhuang, which itself may have a Kra substratum and also displays clause-final negation (Jackson 2015).
- **mei⁵⁵ŋlǎ³³** ‘nose’: This form is not clearly a direct reflex of the Proto-Kra form, but does show a resemblance with Lachi (Jinchang) *mi55 naŋ53* and Mulao [Kra] *mi53 nə55* (Mulao is a Red Gelao lect, and is not to be confused with the Kam-Sui language Mulam spoken in Guangxi).
- **la⁵⁵jaŋ²¹** ‘sun’: Buyi lects mostly have nominal prefixes beginning with t- rather than l-. An origin from Proto-Kra *(l-)wæn ‘sun’ may be more likely than a borrowing from Mandarin *tài yáng* ‘sun’.
- **a³³nei⁵⁵** ‘mother’: This form does not reconstruct to Proto-Tai, and there is no reconstruction for Proto-Kra. However, there is a close parallel in Hongfeng Gelao *ʔa42 ne42*.
- **mei⁵⁵ta³³** ‘eye’: Buyi lects do not have nominal prefixes with an m- initial prefixed to *ta*. This is typical of Buyang and certain Central Tai languages in southern Guangxi, and is also found in Judu White Gelao. Proto-Kra *m-ʔa A ‘eye’ has the pre-syllable m-, but not Proto-Tai *p.ta: A.

Table 5: Hezhang Buyi words of uncertain origin

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai)</i>	<i>Hezhang Buyi (Tiejiang)</i>	<i>Buyi (Jichang)</i>	<i>Buyi (Fa'er)</i>	<i>Proto-Tai</i>	<i>Proto-Kra</i>	<i>Comparisons</i>
egg	蛋, 鸡蛋	ɲie ²¹ ki ⁵⁵	ɲai ²¹ tɕie ³³	tan ³³ kei ⁵³	ʔdan ³³ tɕei ⁴⁴	*qraj	*təm A	Mulao ze31; Ong Be (Lincheng) <i>num1</i>
ear	耳朵	mã ³³ mã ³³	mã ³³ mã ³³	ta ^{ʔ33} wa ³³	ʔda ³³ ɲi ³³	*k-ra A	*k-ra A	Gelao (Judu) <i>pa35 vei31</i>
hand	手	ka ³³ qəŋ ²¹	kə ³³ kuj ²¹ , kə ³³ kuj ²¹	ki ⁵⁵ vuj ²¹	ʔdei ³³ vəŋ ³¹	*mwu: A	*mja A	Paha <i>ma33 qe45(322)</i>
fire	火	ki ³³	ki ³³	vei ²¹	vei ³¹	*wɤj A	*pui A	
meat	肉	ʔbei ⁵⁵	ʔbei ⁵⁵	mp ^h u ³⁵	nu ²⁴	*n.mɤ: C	*ʔau C	Gelao (Niupo) <i>?vu33</i>
fish	鱼	tu ³³ ɲo ³⁵	tu ³³ ɲo ³⁵	tə ³³ pa ⁵⁵	ʔdei ³¹ pa ³³	*pla: A	*p-la A	
fruit	水果	lu ⁵⁵ ʔdʒei ²¹	-	ləw ³⁵ mai ⁵³	lək ²⁴ ma ⁴⁴	* ^h ma:k D	*C-mak D	Gelao (Bigong) <i>[e31 va31</i>
back	背后	ka ³³ ʔlɔ̃ ³³	ka ³³ ʔlɔ̃ ³³	pei ⁵⁵ lan ⁵³	-	* ^h lan A	*lon A, *dəŋ C	Buyang (Langjia) <i>qa0 ?diŋ24</i>
snake	蛇	tu ³³ nuæ ⁵⁵	tu ³³ ŋəu ⁵⁵	tə ³³ ŋkəu ²¹	ʔdei ⁴² ŋi ³¹	*ŋwu: A	*ŋa A	

Comments:

- **ɲie²¹ki⁵⁵** ‘egg’: The second syllable simply means ‘chicken.’ *ɲie²¹* does not reconstruct to any Kra-Dai proto-language, but there are slight resemblances with Mulao *ze31* and Ong Be (Lincheng) *num1*.

- **mã³³mã³³** ‘ear’: No clear etymologies can be inferred, but Judu White Gelao *pa³⁵ vei³¹* has two syllables that both begin with labials.
- **ka³³qəŋ²¹** ‘hand’: This form does not correspond with either the Proto-Tai or Proto-Kra reconstructions. However, Dazhai Buyi *qəŋ²¹* has a parallel with *qə⁴⁵* in Paha *ma³³ qə⁴⁵(322)*. In Paha, the nominal prefix *ma³³* is highly common (Li & Luo 2010).
- **ki³³** ‘fire’: This is highly unusual for a Kra-Dai language, as ‘fire’ is one of the most stable words in all branches of the Kra-Dai language family. One possible explanation is that there may have been a *k-* nominal prefix that assimilated the initial of the main syllable in the Proto-Kra form, as in *k-pui > kui > ki*. Alternatively, this may be a reflex of Old Chinese, as seen in languages like Bai.
- **?bei⁵⁵** ‘meat’: This form does not directly resemble either Proto-Kra **?au C* or Proto-Tai **n.mɯː C*. It is conceivable that the *m-* in the Proto-Tai form could have been hardened to *?b-*, but this is difficult to imagine given the voiced environment that would have rendered pre-glottalization difficult. There may be a parallel in Niupo White Gelao. The *-v-* in Niupo White Gelao *?vu³³* occurred as a result of consonant excretion, and is a reflex of Proto-Kra **?au C*.
- **tu³³jo³⁵** ‘fish’: This form may have a Old Chinese or Tibeto-Burman etymology rather than a Kra-Dai one.
- **lu⁵⁵?djei²¹** ‘fruit’: No clear parallels can be deduced.
- **ka³³?lã³³** ‘back’: There are no clear etymologies, but there is a look-alike in Buyang (Langjia) *qa⁰ ?diŋ²⁴*, which has a sesquisyllabic prefix with an initial back consonant and a pre-glottalized main syllable.
- **tu³³nuæ⁵⁵** ‘snake’: The Dazhai and Tiejiang speakers gave different forms. The Dazhai form is divergent and has no parallels in Tai, while the Tiejiang form looks closer to the Proto-Kra and Proto-Tai reconstructed forms. Both forms could have evolved from either Tai or Kra.

6. The genetic position of the substrate language within the Kra branch

In this section, I will first present my proposed internal classifications of the Kra branch and the Gelao sub-branch, and then discuss the position of the substrate language in Hezhang within the Kra branch.

Below is my tentative internal classification of the Kra languages as of August 2014, which I have split into the two branches of Northern Kra and Southern Kra. *Northern Kra* in my classification is referred to in Ostapirat (2000) as *South-Western Kra* or *Western Kra*, while *Southern Kra* is referred to as *Central-East Kra* or *Eastern Kra* by Ostapirat. However, I have decided to refer to the Gelao-Lachi branch as *Northern Kra* since all Gelao lects spoken outside Guizhou Province had arrived in their present locations in Guangxi and Yunnan as a result of migrations that had taken place within the past 150 years (Li 2006). Due to its close relationship with Gelao, Lachi was also likely to have been spoken in western Guizhou, although it has only been known to be spoken in the China-Vietnam border region, in Maguan County, Yunnan, China and Ha Giang Province, Vietnam. Furthermore, the loss of Proto-Kra final stop consonants in Lachi points to intensive contact in the northwestern Guizhou region rather than areas further south where final stop consonants are typically preserved. On the other hand, Buyang, Qabiao, and Laha are all likely native to Guangxi, Yunnan, and Vietnam, and they all appear to constitute a unified subgroup.

The classification of Southern Kra is based on Edmondson's online notes on Kra classification (Edmondson 2011).

Kra

1. *Northern Kra*
 - a. Lachi
 - b. Gelao
2. *Southern Kra*
 - a. Guangxi Buyang (Yalhong)
 - b. Laha, Paha
 - c. Qabiao
 - d. Yunnan Buyang: Ecun, Langjia, Nung Ven

Despite the confusing diversity of Gelao lects that exists, Ostapirat (2000) and Edmondson (2011) have shown Gelao to be a coherent language group that can be considered to be a sister taxon of Lachi.

Northern Kra languages have phonologies resembling those of neighboring Tibeto-Burman languages likely due to contact with Nasu, Tujia, Caijia, and Longjia, with tendencies for word compounding, loss of final stops, and lack of vowel length contrast.

Southern Kra languages have phonologies resembling those of Tai languages and Yue Chinese, final stops, and vowel length contrast. Laha of Noong Lay, like Saek and Baisha Hlai, has final -l, possibly due to contact with earlier forms of Lolo-Burmese languages and Austroasiatic languages (most notably Vietic) that tend to preserve final liquids (Ostapirat 1995).

As the Kra-origin words in Hezhang Buyi cannot be traced to any single Kra language, but appear to share some resemblances variously with Red Gelao and Lachi, the substrate of Hezhang Buyi was either (1) a Northern Kra language that was a sister taxon of Lachi and Gelao, or (2) a separate branch of Kra altogether. Below, I will refer to this substrate language as *Hezhang Kra*. Below, Hezhang Kra has been highlighted in bold and underlined.

Possible scenario 1:

Kra

1. *Northern Kra*

- a. Lachi
- b. Gelao
- c. **Hezhang Kra**

2. *Southern Kra*

- a. Guangxi Buyang (Yalhong)
- b. Laha, Paha
- c. Qabiao
- d. Yunnan Buyang: Ecun, Langjia, Nung Ven

Possible scenario 2:

Kra

1. *Hezhang Kra*
2. *Northern Kra*
 - a. Lachi
 - b. Gelao
3. *Southern Kra*
 - a. Guangxi Buyang (Yalhong)
 - b. Laha, Paha
 - c. Qabiao
 - d. Yunnan Buyang: Ecun, Langjia, Nung Ven

7. Implications for the linguistic history of western Guizhou

I consider there to be two likely scenarios for how Hezhang Buyi had come to be a mixed Tai-Kra language.

1. Buyi speakers from the southeast migrated into Hezhang County and assimilated the local Kra speakers.
2. Buyi speakers mixed with Kra speakers in an area to the southeast of Hezhang County, most likely in what is currently either Bijie or Liupanshui prefectures. The mixed group then migrated to Hezhang County.

It is difficult to ascertain which scenario had happened. However, I suspect that scenario (1) might be the more likely one. The Kra substrate language in Hezhang Buyi appeared to have been in contact with Red Gelao and Lachi, which both likely originated in the far northwestern area of Guizhou. The original location of Lachi in Guizhou is unknown, but Edmondson & Li (2003) have speculated that the Lachi may have been connected to the Bo people of southern Sichuan, located not far from the location of the currently extinct Renhuai Gelao, a Gelao lect most closely related to the *Vandu* Red Gelao language of Vietnam. Additionally, Hezhang Buyi and Maza, which both have Kra substrata, show very similar proportions of basic vocabulary items of

Kra origin, and both also display circumfixal negation. As Maza was a likely product of the *in situ* Qabiao language that had become gradually relexified by the surrounding Lolo-Burmese languages due to intense daily bilingualism, the same also likely happened with Hezhang Buyi as the local Kra language became relexified by a Northern Tai lect.

Below, Map 2 shows the probable location of either the Buyi superstratum or the unknown Kra language, as well as the names and locations of the various Kra languages spoken in Guizhou.

Map 2: The probable location of either the Buyi superstratum or the unknown Kra language, highlighted in purple. Vandu (Renhuai Gelao), Red Gelao, Mulao, and Bo (possibly identical to the Lachi) are labeled in red. Hagei (Blue/Green Gelao), Telue (White Gelao), and Qau (Central Gelao) have also been labeled. Hezhang Buyi is labeled in green, and is flagged by the red marker, centered in Kele Township, Hezhang County.



7.1. Western Guizhou: the linguistic past

Focusing on lesser-known languages, this section explores the linguistic story of western Guizhou, and highlights why Kra languages are so important towards understanding the linguistic past of western Guizhou.

Buyi, Miao, and Yi (Nasu) are the most widely spoken minority languages in western Guizhou, but have relatively low internal linguistic diversity, pointing to a relatively recent incursion into western and central Guizhou. These ethnic groups, listed below and in Map 3, had migrated to western and central Guizhou en masse within the last 1,000 years, mostly during the Ming Dynasty (1368–1644) and Qing Dynasty (1636–1912). This is also confirmed by various Chinese historical sources and gazetteers, including Guizhou (2003). A detailed account of the Sinicization of Guizhou can be found in Herman (2007).

1. Buyi (Northern Tai speakers) migrated from Guangxi, located to the south.
2. Miao (Hmongic speakers) migrated from Hunan, located to the east.
3. Yi (Loloish speakers) migrated from Yunnan, located to the west.
4. Han Chinese (Southwestern Mandarin speakers) migrated Sichuan and Hubei, located to the north and east respectively.

The Yi had migrated from eastern Yunnan to western Guizhou within the past several hundred years, and turned the local Gelao into their feudal subjects (Tapp, et al. 2003). As a result, Yi loanwords are found in Gelao languages, but due to the relatively recent interaction between the Yi and Gelao, these loanwords are only sporadic (Li 2010).

The following languages would have been widely spoken before the Ming Dynasty, and can be considered to be the autochthonous, albeit lesser-known, languages of Guizhou.

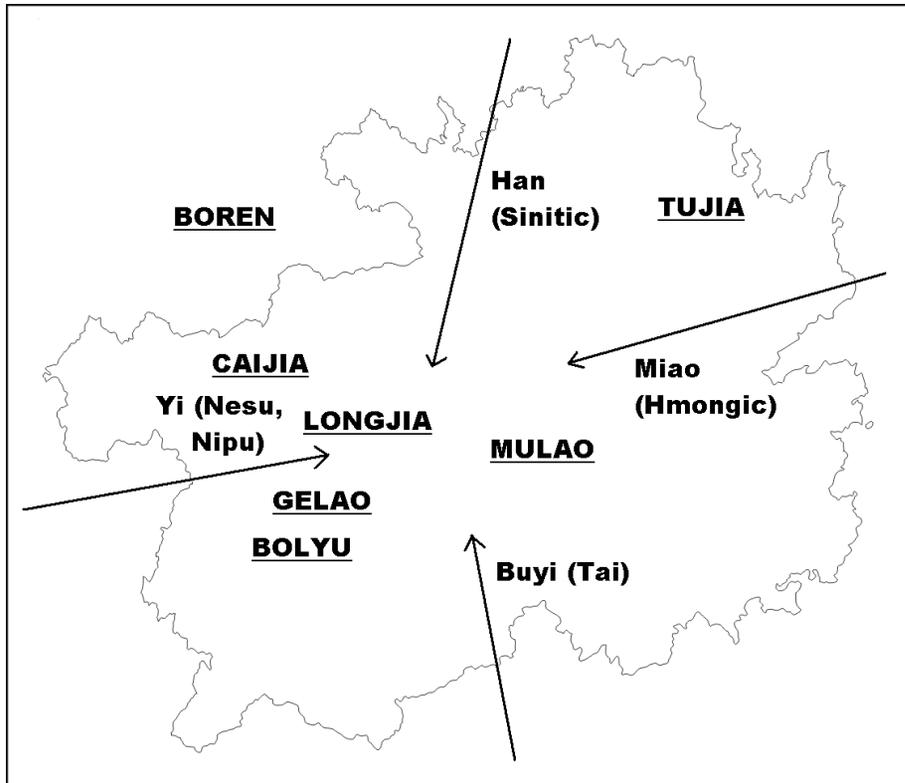
1. The **Tujia** of Guizhou are now Sinicized and do not speak the Tujia language. However, Tujia is still spoken in small pockets in Xiangxi Prefecture, northwestern Hunan province.

2. **Longjia**, **Caijia**, and **Luren** are related Tibeto-Burman languages of uncertain affiliation within Tibeto-Burman. I consider them likely to form a coherent branch of Tibeto-Burman, which I will tentatively call *Cai-Long*. The Longjia and Caijia are classified as ethnic Bai, while the Luren are classified as ethnic Manchu. Longjia and Luren are likely now extinct, while Caijia has perhaps 1,000 speakers. There is considerable linguistic diversity among the Cai-Long languages, and they are highly scattered in wide areas of western Guizhou. Zhengzhang (2010) suggests that Caijia be a sister language to Bai.
3. **Gelao** languages (or lects) display high internal linguistic diversity, much more so than Buyi, to the point that cognates for basic vocabulary items can often be difficult to find across different Gelao lects. Gelao lects are scattered across a very wide area of Guizhou. The Gelao traditionally occupied the best agricultural land in western Guizhou due to their early presence in the region, whereas the Buyi and Miao, who arrived later, were tended to occupy the more marginal lands (Zhou 2004). Cai-Long and Gelao languages occupy approximately the same areas of western Guizhou, although Cai-Long languages have a more northern distribution and are more heavily concentrated in Bijie Prefecture, while Gelao languages tend to be distributed further to the south and are more heavily concentrated in Anshun Prefecture.
4. The **Bolyu** language, which belongs to the Pakanic branch of the Austroasiatic language family, is now found only in western Guangxi, but are not native to Guangxi. The Bolyu had migrated with the White Gelao people from western Guizhou Province to Guangxi Province during the 1800's, around the time of the Taiping Rebellion and Opium War during the Qing Dynasty. At this time, many ethnic minorities from Guizhou and Guangxi provinces had migrated southward to the Sino-Vietnamese border region, forming what Jerold Edmondson calls a "language corridor" (Edmondson 1998). Bolyu presence in southwestern Guizhou is attested by many toponyms there that bear the name "Lai" (来). Bolyu oral tradition claims that the Bolyu had migrated from western Guizhou Province, including the area between Anshun City and Guanling County, and Xingren County (Li Xulian 1999). Another source of the Guizhou origin of Bolyu is that Bolyu has various loanwords from White Gelao, a Kra language which is spoken today in Judu village, Liuzhi Special District, west-central Guizhou Province, but used to have a much wider distribution throughout western Guizhou. Gelao loanwords include *tshē*¹ 'person', from Judu Gelao *tshu*²¹⁴ (which is in turn borrowed from Loloish languages), and the post-verbal negator *?o*², from Judu Gelao *?o*⁵⁵ (Ni 2010). Post-verbal negation is typologically rare in southern China, and is a defining feature of Kra

languages. On the other hand, sporadic Pakanic loanwords have also been found in White Gelao of Fengyan, Malipo County, Yunnan, such as *bu*³⁵*mai*³¹ ‘nose’, cognate with Manlong Bagan *pu*⁵⁵*maŋ*³¹ ‘nose’ (cf. Bolyu *lɔŋ2mi6*).

Map 3 shows the migrations of ethnic groups into Guizhou during the Ming and Qing Dynasties, and the names and locations of the ethnic groups that were resident in Guizhou prior to the Ming and Qing demographic expansions.

Map 3: Migrations of ethnic groups into Guizhou during the Ming and Qing Dynasties. Autochthonous ethnic groups that were present in Guizhou before the Ming Dynasty are labeled in upper-case letters and underlined.



Chamberlain (2016) proposes that Kra speakers had historically occupied all of western Guizhou, as well as much of eastern Yunnan and northwestern Vietnam. Hezhang Kra, the substrate of Hezhang Buyi, would have occupied the northwestern periphery of the territories formerly occupied by Kra speakers. Chamberlain (2016) also notes Kra speakers had been gradually replaced by Tai speakers over time, with Chamberlain (1992) specifically noting the case of Laha being replaced by Tai Dam in northwestern Vietnam.

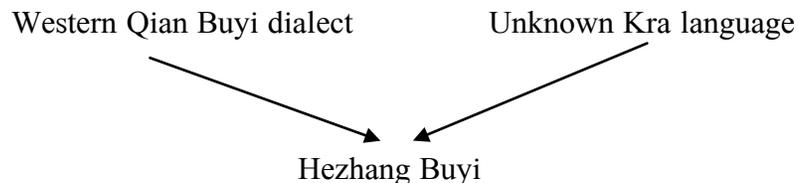
In Xingyi, southwestern Guizhou and Xilong Prefecture, northwestern Guangxi, Northern Tai speakers had replaced Kra speakers who were the earlier residents of the area, and were reported to have opened up rice fields in the area prior to the arrival of the Northern Tai speakers (Holm 2003). Today, the local Northern Tai speakers still place offerings to the Buyang spirits. Holm (2003) also reports that in Donglan County, Guangxi, the Buyang, like the Bo people of Sichuan, had built hanging coffins over the cliffs of the Hongshui River; in Donglan County, the Buyang have now been completely replaced by Northern Tai-speaking Zhuang, but toponyms suggestive of a former Buyang presence still remain in the area (Li Jinfang 1999). Among Tibeto-Burman speakers, the Luren were also reported to have dug up the bones of their ancestors and ritually washed them before re-burying them (Guizhou 2003), while the Loloish-speaking Ku [*ku55*] of Qiubei County, Yunnan, who claim descent from the Bo people of Yibin County, Sichuan, continue to build hanging coffins today (Hsiu 2013 field notes; Hsiu 2017d). It could be that the Bo were Lachi speakers who were then linguistically assimilated by Lolo-Burmese speakers who had migrated northward and eastward. These cultural practices are predominant among Austronesian speakers, most notably the Bontok of Sagada, Luzon and the Toraja of Sulawesi who are famed for their hanging coffins. The Malagasy, who are Austronesian speakers that originated from Borneo, practice the tradition of digging up bones of their ancestors.

Today, hanging coffins are found in throughout the steep river cliffs of Chongqing, southeastern Sichuan, and western Hubei provinces of south-central China. The Gelao of Sinan County, Guizhou were also known to have built hanging coffins, which can still be seen today in parts of Sinan County (Sinan 1992). If the Austro-Tai [Austronesian-Kra-Dai] (Benedict 1975; Ostapirat 2005; Blench 2008) connection is accepted, then this would mean that these cultural practices had likely originated among Kra-speaking

peoples rather than Tibeto-Burman speakers, and only became practiced by Tibeto-Burman-speaking peoples due to linguistic assimilation, cultural diffusion, or perhaps a combination of both.

The examples above show that Hezhang Buyi is only one of the many Kra-speaking communities to have been assimilated by speakers of other language branches, particularly Tai and Lolo-Burmese. The following figure summarizes the mixed origins of Hezhang Buyi.

Figure 1: Mixed origins of Hezhang Buyi



As already mentioned in section 4 which covers circumfixal negation, Hezhang Buyi is not the only language with a Kra substratum. Maza, a Lolo-Burmese language of Funing County, Yunnan and Yang Zhuang, a Central Tai language both also display circumfixal negation, a syntactic feature that in China is usually found only in Kra languages and Tujia. However, whereas Maza displays many lexical items of Kra origin, Kra lexical items have yet to be found in Yang Zhuang.

Intriguingly, the Kele Archaeological Site is located only several kilometers away from the Hezhang Buyi village of Dazhai. Kele has generated considerable attention among Chinese historians and archaeologists, who have speculated that it may have been the capital of the Yelang Kingdom, reported by Chinese historical texts to have existed over 2,000 years. My view is that the Yelang Kingdom, if it were indeed centered in western Guizhou, would have likely had a mix of Kra, Cai-Long (Tibeto-Burman), and perhaps even Pakanic (Austroasiatic) speakers. The famous Chinese four-word expression *Yèláng zì dà* (夜郎自大), literally meaning “Yelang thinks of itself as great”, is a reference to the arrogance of Yelang when it asked the Han Empire, “Which is

greater, Han or us Yelang? (漢孰與我大?)” However, Li Hui (2002) has suggested that it seems like *Yèláng zì xiǎo* (夜郎自小) may now be a more suitable expression, since the last cultural and linguistic vestiges of what may have been the descendants of the Yelang are now fading into extinction at the turn of the millennium.

8. Conclusion

In conclusion, Hezhang Buyi is a previously undocumented Northern Tai language that has absorbed elements of an unknown Kra language, which has left its effect on the phonology, lexicon, and syntax of Hezhang Buyi. Comparisons with a Buyi dialect of Jichang Township, Zhijin County, Guizhou that I had documented indicate that Hezhang Buyi is most closely related to Buyi dialects spoken just to the southeast of Hezhang County.

“Hezhang Kra,” the substrate language of Hezhang Buyi, was likely to have been part of an extensive dialect chain of Kra lects that would have been spoken from northern Vietnam up to as far north as southeastern Sichuan, China. No exact classification within Kra can be deduced for Hezhang Kra, but it was likely in contact with Kra languages spoken in the far northwestern areas of Guizhou, including various Red Gelao lects and perhaps also Lachi.

Field documentation of Hezhang Buyi is now more urgent than ever, with fewer than 10, or perhaps even fewer than 5, elderly speakers remaining. Although we can never revitalize this language, Hezhang Buyi contains vital clues to the ethnolinguistic history of western Guizhou and surrounding regions, as it is one of the “relict languages” of Guizhou being rapidly absorbed by Southwestern Mandarin. It is my sincere hope that we can see more of this language documented before it forever sinks into the shadows of unrecoverable history.

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Appendix 1: Comparative word list

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
one	一	du ³⁵ jou ²¹	du ³⁵ jou ³³	tɕie ⁵⁵	jit ⁴⁴ , ʔdieu ³³
two	二	sõ ³³ du ²¹	sõ ³³ du ²¹	ŋei ³⁵	ŋei ²⁴ , son ³³
three	三	san ³³ du ²¹	san ³³ du ²¹	san ³³	saŋ ³³
four	四	sei ⁵⁵ du ²¹	sei ⁵⁵ du ²¹	sei ⁵⁵	sei ³³
five	五	xa ²¹ du ²¹	xa ²¹ du ²¹	xa ²¹	xa ⁴²
six	六	sau ⁵⁵ du ²¹	sau ⁵⁵ du ²¹	so ⁵⁵	sok ⁴⁴
seven	七	tsei ⁵⁵ du ²¹	tsei ⁵⁵ du ²¹	tsæ ⁵⁵	tsat ⁴⁴
eight	八	pjei ⁵⁵ du ²¹	pjei ⁵⁵ du ²¹	pjæ ⁵⁵	pie-t ⁴⁴
nine	九	k ^h u ²¹ du ²¹	k ^h u ²¹ du ²¹	k ^h u ²¹	k ^h eu ⁴¹
ten	十	tsɣ ³⁵ du ²¹	tsɣ ³⁵ du ²¹	tsu ³⁵	tsek ²⁴
ant	蚂蚁	tu ³³ ma ⁵⁵ pien ³³			ʔdei ³³ mae-t ⁴²
ashes	灰	tu ³⁵ tæ ³³		ky ³⁵ vei ²¹	
autonym	自称	pu ⁵⁵ ʔzei ³³	pu ⁵⁵ ʔzei ³³	pu ³³ dzi ³³	
back	背后	ka ³³ ʔlã ³³	ka ³³ ʔlã ³³	pei ⁵⁵ lan ⁵³	
bad	不好, 坏	mu ³³ ʔzi ²¹ nu ³³			ja ⁴⁴
bamboo	竹	tu ⁵⁵ ʔei ³³			
bean	豆	tu ³³ mua ³³			læk ²⁴ pei ²⁴
belly	肚子	tu ³³ tuã ²¹	ʔu ³³ tun ²¹		ʔdei ³³ ton ⁴²
big	大	ʔlau ²¹		lau ⁵³	lo ⁴²

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
bird	鸟	tu ³³ zau ³⁵ nei ⁵⁵	zau ³⁵ ne ³³	tə ³³ zə ³⁵	ʔdei ⁴² ʒək ³⁵
black	黑	wa ²¹		wæ ³³	van ⁴²
bleed	流血	u ⁵⁵ lui ³⁵			
blood	血	lui ³⁵	ʔa ⁵⁵ lue ³³	lue ³⁵	luət ²⁴
bone	骨头	k ^h a ²¹ ʔdo ⁵⁵	k ^h ə ³³ ʔdo ⁵⁵	k ^h au ³³ tu ⁵⁵	ʔdu ⁴⁴
butterfly	蝴蝶	zi ⁵⁵ ʔba ²¹			
centipede	蜈蚣	tu ³³ nua ⁵⁵ ka ³³ zei ²¹			
egg	蛋, 鸡蛋	ŋie ²¹ ki ⁵⁵	ŋai ²¹ tɕie ³³	tan ³³ kei ⁵³	ʔdan ³³ tɕei ⁴⁴
chicken	鸡	tu ³³ ki ⁵⁵	tə ³³ kie ⁵⁵	tu ³³ kai ⁵³	ʔdei ³¹ tɕei ⁴⁴
child	孩子	tu ³³ nei ⁵⁵			lək ²⁴ kə ³¹ nei ⁴⁴
chopsticks	筷子	sa ²¹ tu ³⁵			
cloud	云	ju ⁵⁵ fu ²¹		fu ³³	fu ⁴²
cogon grass	茅草	ja ⁵⁵			
corn	玉米	u ⁵⁵ buŋ ³³			
cow	牛	tu ³³ tsɿ ²¹ nei ⁵⁵			tsə ³¹
cry	哭	mu ⁵⁵ t ^h ie ²¹	t ^h ei ²¹	ɕau ⁵⁵ t ^h ai ³³	
(river name)	(河名)	ka ³³ da ³⁵ lou ²¹			
day	天	t ^h a ²¹ ʔbi ⁵⁵			
Dazhai village	大寨 (村名)	k ^h ə ³³ pu ³⁵			
die	死	tei ³³	tai ³³	tai ⁵⁵	tɛ ³³
dog	狗	tu ³³ mua ⁵⁵		tu ³³ ma ⁵³ , tə ³³ k ^h aŋ ⁵³	

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
small dog	小狗		ma ³³ nei ⁵⁵		
door	门	pu ⁵⁵ tu ³³ lou ²¹			
dream	做梦	bũ ³³	mə ⁵⁵ bui ³³	tu ⁵⁵ fei ²¹	
drink	喝	kĩ ⁵⁵	kĩ ⁵⁵	tæ ³³	ʔda-t ⁴⁴
wine, liquor	酒	ʔu ²¹	ʔu ²¹	lau ²¹	lau ⁴¹
dust	灰尘	tu ³⁵		mein ³⁵ tau ³³	tau ²⁴
ear	耳朵	mã ³³ mã ³³	mã ³³ mã ³³	ta ^{ʔ33} wɑ ³³	
eat	吃	kĩ ⁵⁵	kĩ ⁵⁵	kēi ⁵⁵	kən ³³
rice (cooked)	饭	ʔu ²¹	ɣu ²¹	ɣo ³³	ɣeu ⁴² naŋ ⁴¹
eye	眼睛	mei ⁵⁵ ta ³³	ma ⁵⁵ ta ³³	tə ³³ tai ⁵³	ŋwi ⁴⁴ ta ³³
far	远	ki ⁵³	ki ⁵³	kai ⁵⁵	tçei ³³
father	父亲	ʔa ³³ ba ⁵⁵			pvu ²⁴ , pfu ²⁴
field, dry	旱田	lu ³³ ʒɿ ³⁵			
field, wet	水田	lu ³³ na ²¹			na ³¹
fire	火	ki ³³	ki ³³	vei ²¹	vei ³¹
fish	鱼	tu ³³ ŋo ³⁵	tu ³³ ŋo ³⁵	tə ³³ pa ⁵⁵	ʔdei ³¹ pa ³³
flower	花	ʔdei ³³	ʔu ³³ ʔdai ⁵³	vu ⁵⁵ ʔdai ³⁵	ʔde ⁴⁴
fly (insect)	苍蝇	tein ²¹ na ³³ ni ³³			naŋ ³¹ ʔdoŋ ⁴⁴
fly (verb)	飞	ʔbi ³³			ʔbən ³³
leg	腿	ka ³³ qa ⁵⁵	ka ³³ qa ⁵⁵	ki ⁵⁵ ka ³³	ʔdei ³³ ka ³³
frog	青蛙	u ⁵⁵ pu ⁵⁵ çiu ³³			

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
fruit	水果	lu ⁵⁵ ʔdjei ²¹		ləu ³⁵ mai ⁵³	lək ²⁴ ma ⁴⁴
goodbye	再见	va ²¹ mu ³³		wai ²¹ mə ⁵⁵ va ²¹	ʔdei ³³
good	好	ʔzi ³³	zi ³³	ʔdei ³³	
grass	草	ɲa ⁵⁵			ɲa ³³
green	绿	ɕu ⁵³		ɕau ³³	ɕɕu ³³
hair, head	头发	pən ⁵⁵ k ^h u ²¹	pon ⁵⁵ k ^h u ²¹	pein ³³ k ^h au ²¹	pən ³³ k ^h au ⁴¹
Han Chinese	汉族	pu ³³ xa ⁵⁵			
hand	手	ka ³³ qəŋ ²¹	kə ³³ kuŋ ²¹ , kə ³³ kuŋ ²¹	ki ⁵⁵ vuŋ ²¹	ʔdei ³³ vəŋ ³¹
head	头	tu ³³ k ^h u ²¹	ʔu ³³ k ^h u ²¹	t ^h əu ²¹	ʔdei ³³ k ^h au ⁴¹
heart	心	lu ³³ tsɿ ³³			tuəŋ ⁴⁴
hello (lit. 'you good')	你好	mu ³³ ʔzi ²¹	mu ³³ ʔzi ³³	mu ³³ ʔdei ⁵⁵	
hen	母鸡	mjei ³³ ki ⁵⁵	mje ³⁵ kie ⁵⁵	mzi ³⁵ kei ⁵⁵	
he	他	mu ³³	mu ³³	nde ⁵⁵	pu ³³ ɛ ²⁴
horse	马	tu ³³ ma ²¹			ʔdei ³³ ma ⁴²
small horse	小马	tu ³³ ma ²¹ nei ³³			
hot	热	ʔda ⁵⁵ jæŋ ³³			ʔdət ⁴⁴
house	房子	lu ⁵⁵ zæ ²¹	ʔu ⁵⁵ zæ ²¹	tau ³³ zæn ²¹	zæ-n ³¹
husband	丈夫	lou ³³ tɕi ²¹ mu ³³			tɕi ⁴² kwe ³¹
I know him.	我认识他。	ku ³³ zu ²¹ mu ³³			

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
intestines	肠子	tɕu ³³ sei ²¹	tɕu ³³ sei ²¹	sai ⁵⁵ ; sai ⁵⁵ (tu ³³ wei ²¹)	sei ⁴¹
I	我	ku ³³	ku ³³	ku ³³	kɕu ³³
Kele Town	可乐乡	lei ³³ tɕi ^{h:55} k ^h o ²¹ lo ²¹			
kill	杀	k ^h a ²¹	k ^h a ²¹	k ^h a ³³	k ^h a ⁴¹
knee	膝盖	xu ³³ to ²¹			mau ³¹ fu ⁴⁴
lake	湖				
land leech	蚂蟥	tu ³³ mua ⁵⁵			
laugh	笑	ɕu ⁵³	su ³³	ɕu ⁵⁵	ɕiəu ³³
leaf	叶	pu ⁵⁵ wein ²¹	pu ⁵⁵ wein ²¹	ba ³³ vei ²¹	ʔba ³³ ve ⁴²
left side	左边	la ³⁵ ʔbaŋ ³³			pɛ- ²⁴ fɛ ⁴⁴
liver	肝	pi ³³ tau ³³		ta ⁵⁵	tak ⁴⁴
louse, body	虱子	tu ³³ ŋɛ ³³	tu ³³ nae ³³	tu ³³ ntæ ²¹	ʔdei ³³ nan ³¹
louse, head	头虱	tu ³³ su ⁵⁵		tu ³³ sau ⁵⁵	
man, male	男生	pu ³³ t ^h a ²¹ xəu ³³			
meat	肉	ʔbei ⁵⁵	ʔbei ⁵⁵	mp ^h u ³⁵	nu ²⁴
Miao	苗族	pu ³³ ʒou ³³			
monkey	猴子	tu ³³ luŋ ³³			ʔdei ³¹ ləŋ ³¹
moon	月亮	mje ³⁵ ʔdau ⁵⁵	mje ³⁵ ʔdau ⁵⁵	ʔdau ³³ ʔduei ³³	ʔduən ³³ , ʔdau ³³
month	月		kau ⁵³ mou ³³		
mosquito	蚊子	tu ³³ ŋã ²¹			ʔdei ⁴² ŋaŋ ³¹

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
mother	母亲	a ³³ nei ⁵⁵			mi ²⁴
mountain	山	k ^h a ³³ po ⁵⁵			
rat, mouse	老鼠	tu ³³ fa ⁵⁵	tu ³³ fa ⁵⁵	tu ³³ fau ³³	ʔdei ⁴² nai ⁴⁴
mouth	嘴巴	tu ³³ pa ⁵⁵	tu ³³ pa ⁵⁵	ta ³³ pa ³⁵	naŋ ³³ pa ⁴⁴
mud, earth	土	nɔ ³⁵			naŋ ²⁴
my dog	我的狗	tu ³³ mua ⁵⁵ ku ⁵⁵			
name	名字			dzu ³⁵ tə ³³ wei ²¹	tsu ²⁴
near	近	k ^h u ³³	k ^h u ²¹	k ^h a ²¹	k ^h a ⁴²
neck	脖子	tu ³³ ʔo ³³	tu ³³ ʔo ³³	k ^h au ³³ vu ²¹	k ^h en ⁴² vuo ³¹
new	新	mu ⁵⁵	mu ⁵⁵	mbu ³⁵	mu ⁴⁴
new clothes	新衣服	tu ³³ pu ³⁵ mu ⁵⁵			
new year	新年	lu ⁵⁵ ŋe ³³			
next year	明年	mi ²¹ mu ⁵⁵			
No one knows him.	没有人认识 他。	mu ³³ zu ²¹ mu ³³ nu ³³			
nose	鼻子	mei ⁵⁵ ŋā ³³	ma ³⁵ ʔdaŋ ³³	tau ³³ daŋ ³³	ʔdaŋ ³³ ʔdaŋ ³³
oil	油	mje ³³	næ ³³	zau ²¹	jeu ³¹
painful	痛	tɕi ⁵⁵ jen ²¹			
person, human	人	tu ³³ wi ²¹		tu ³³ wei ²¹	tɕi ⁴² ven ³¹
pig	猪	tu ³³ mu ³⁵	tu ³³ mu ³⁵	tə ³³ mu ⁵⁵	ʔdei ³¹ mɛu ³³
pig oil	猪油	mje ³³ mu ⁵⁵			

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
to plant corn	种玉米	nɔ ⁵³ pun ³³			
to plant vegetables	种菜	tã ²¹ bo ³³			
to rain	下雨	t ^h u ³³ hwēi ⁵⁵	t ^h u ³³ hwēi ⁵⁵	hwei ⁵³	wə + n ³³
red	红	ʔdɔŋ ²¹		ʔduŋ ³³	ʔdɔŋ ³³
rice (grain)	大米 (谷 物)	ʔu ³³ xau ⁵⁵			yeu ⁴² sae-n ³³
right side	右边	pai ³⁵ sui ⁵³			pe- ²⁴ ci ³³
river	河	ka ³³ seŋ ³³			
road	路	tu ³³ wæ ⁵³	ka ³³ sæ ³³	ka ³³ sã ³³	laŋ ³³ sa:n ³³
rooster	公鸡	tau ³⁵ ki ⁵⁵	pu ²¹ kje ³³	pu ²¹ kei ³⁵	
rope	绳	tu ³⁵ wæ ⁵³			
salt	盐	ɲu ⁵⁵ ʔlã ³³	ɲu ⁵⁵ ʔlã ³³	ky ⁵⁵	mən ⁴⁴ ku ³³
sesame	芝麻	p ^h je ⁵⁵ ʔdei ²¹			
sheep	羊	tu ³³ ʒuŋ ³³			
shoulder	肩膀	ka ²¹ ʔba ⁵⁵	ka ²¹ ʔba ⁵⁵	kaŋ ²¹ ba ⁵³	yaŋ ³¹ ʔbã ⁴⁴
sick	生病	tu ³³ tɕi ⁵⁵	tɕi ⁵⁵	ʒa ⁵⁵ tɕu ³⁵	
skin	皮肤	tu ³³ ɲa ⁵⁵		naŋ ⁵⁵ wei ²¹	naŋ ³³
sky	天空	k ^h a ²¹ ʔbi ⁵⁵	k ^h a ²¹ ʔbi ⁵⁵	ken ²¹ bei ³³	
sleep	睡觉	ni ³³ fã ⁵⁵	ni ³³ fã ⁵⁵	tu ⁵³ nei ²¹	
small	小	ni ⁵⁵	ni ⁵⁵	nei ³⁵	nei ⁴⁴
snake	蛇	tu ³³ nuæ ⁵⁵	tu ³³ ŋəw ⁵⁵	tə ³³ ŋkəw ²¹	ʔdei ⁴² ŋi ³¹

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
spider	蜘蛛	tu ³³ mu ³⁵			kwɔŋ ⁴⁴ kwɔ ³³
stairs	楼梯	tɕu ²¹ fu ³³			
star	星星	ʔdau ³³ ʔdi ⁵⁵	ʔdau ³³ ʔdjei ⁵⁵	dau ³³ dui ³⁵	ʔdo ³³ ʔdei ⁴⁴
stomach	胃			ʔda ³³ ʔduŋ ²¹	
stone	石头	k ^h a ²¹ sēi ⁵⁵	k ^h u ²¹ sēi ⁵⁵	ta ³³ sēi ²¹	mɐu ³³ sen ⁴⁴
sun	太阳	la ⁵⁵ jaŋ ²¹		tæ ³³ taŋ ³³ wæn ²¹	
tease	笑(人家)	ɕu ⁵⁵ mu ³³			
thank you	谢谢	pu ²¹ ji ³⁵ mu ⁵⁵		jaŋ ³³ muŋ ³³	
that one	那个	tu ³³ mu ³³		ki ⁵⁵ md ²¹	ki ⁴⁴ kie ²⁴
they	他们	ku ⁵⁵ ʂu ³³		koŋ ³⁵ pu ²¹ le ³³	kwɔŋ ⁴⁴ pei ²⁴
thick	厚	na ⁵³	na ³³ bjei ⁵³	ʔna ³³	na ³³
thin	薄	ʔbɔ̃ ⁵³	bũ ³³ mjei ⁵³	baŋ ³³	ʔbaŋ ⁴⁴
this one	这个	tu ³³ nei ³³		ki ⁵⁵ ni ³³	ki ⁴⁴ nei ⁴²
this year	今年	mzi ²¹ ni ²¹			
(these) three dogs	(这)三只 狗	sæn ³³ tu ²¹ mua ³⁵ ni ³³			ʔdei ³³ ma ³³
tiger	老虎	tu ³³ ma ⁵⁵ ni ³³			ʔdei ³³ kok ⁴⁴
tongue	舌头	ka ³³ lin ²¹	ka ³³ lin ²¹	pa ³³ lei ²¹	ʔba ³³ lan ⁴²
tooth	牙齿	ka ³³ ɕu ²¹	ka ³³ ɕu ²¹	ka ³³ ɕau ²¹	ka ³³ ɕau ⁴²
tree	树	ku ³³ wein ²¹	ku ³³ wein ²¹	vai ²¹	ku ³³ ve ⁴²
very hot	很热	ʔda ⁵⁵ jaen ³³		luŋ ³⁵ t ^h u ⁵⁵	

<i>English gloss</i>	<i>Chinese gloss</i>	<i>Hezhang Buyi (Dazhai 大寨 speaker)</i>	<i>Hezhang Buyi (Tiejiang 铁匠 speaker)</i>	<i>Buyi (Dawan 大湾, Jichang Township)</i>	<i>Buyi (Fa'er, Shuicheng)</i>
wall	墙壁	tsɿ ³³ na ³⁵			
water	水	ʔa ⁵⁵	ʔa ⁵⁵	zaŋ ²¹	za:ŋ ⁴²
we	我们	ku ⁵³		ki ⁵⁵ zau ²¹	ki ⁴⁴ tɛu ³³
white	白	xo ²¹		xau ⁵⁵	xo ³³
wife	妻子	mu ³³ pu ²¹ ku ³³			ma ⁴² pa ⁴²
wind	风	zəŋ ²¹ t ^h u ²¹	zəŋ ²¹ t ^h u ²¹	zuŋ ²¹	zəŋ ³¹
woman	女人	mei ³³ t ^h au ²¹ wæ ²¹			
year	年	mji ²¹ , mzi ²¹	mi ³⁵	pei ³³ ja ³³	pei ³³
yellow	黄	ɕien ²¹		ɕie ³³	ɕen ⁴¹
Yi	彝族	pu ³³ ʔjaŋ ⁵⁵			
you (pl.)	你们	ku ⁵⁵ ʂu ³³		ki ⁵⁵ su ³³	ki ⁴⁴ sɛu ³³
you (sg.)	你	mu ³³ ; kwou ³³ (?)	mu ³³	muŋ ³³	mə:ŋ ³¹