

**HANDOUT:**  
**Language contact and areal diffusion in rural Yunnan:**  
**A comparative case study on Azha Yi and Nong Zhuang<sup>1</sup>**

毕哲明

王明富

江子扬

Jamin Pelkey

Wang Mingfu

Eric Johnson

La Trobe University  
Yuxi Teacher's College

Wenshan Ethnic Affairs Commission  
Yunnan Zhuang Studies Council

SIL International,  
East Asia Group

*Abstract*

The diverse, thriving ethnic patchwork of Yunnan Province features intricate networks of language contact that span thousands of years. Migration, commerce, intermarriage, and other factors have contributed to the dispersal and borrowing of linguistic features throughout East and Southeast Asia alike. Although numerous broad-based studies (e.g., Bradley 1979, Matisoff 1996, Bisang 1996, Yu 2000, LaPolla 2002, Huang 2005) have noted the prevalence and mechanics of contact and diffusion in the region, few concentrated studies have been undertaken that examine distinct languages in contact at the local level. To provide a local-level case study on language contact and areal diffusion, this paper focuses on Azha Phula of the Yi Nationality and Nong Zhuang of the Zhuang Nationality—both inhabiting numerous villages of Bingle District, Northeast Wenshan County. Although the Zhuang and Yi nationalities are of widely diverse stock ethnolinguistically, the two groups have been in contact in southeast Yunnan since the Tang and Song Dynasties 618-1234AD (WSZZ 2000:339-88, WSXZ 1999:184). Through lexical, semantic, phonological, and sociolinguistic comparisons, the paper demonstrates ways in which Southern Zhuang and Azha Yi have both yielded to areal linguistic influences and ways in which the two have influenced each other. While both varieties have been impacted from historic contact with the linguistic macroregion, and while both languages have influenced each other lexically, the phonology of Azha Yi spoken in Xiaopingba in particular has been reconfigured by extended contact with Nong Zhuang through space and time.

## 1. INTRODUCTION

Paper Objectives:

1. **Advances ongoing linguistic documentation efforts in the region.**
2. **Reinforces the idea that a consideration of contact induced change and areal diffusion between divergent languages that frequently interact is essential for adequate linguistic comparison.**

Field research for the paper was carried out in Bingle District, Wenshan County, Wenshan Prefecture, Yunnan Province, China (中国云南省文山州文山县秉烈乡) during August 2005 in the villages of 迷勒湾 Milewan, 小平坝 Xiaopingba, and 罗家邑 Luojiayi.

## 2. ETHNOHISTORICAL BACKGROUND

- **The Zhuang Nationality:** population: 16 million; wide distribution from eastern Yunnan through Guangxi to western Guangdong and as far south as the highlands of central Vietnam; Zhuang-Dai (Tai) branch of the Zhuang-Dong (Tai-Kadai) family.
- **The Yi Nationality:** population 8 million; spread over Yunnan, Sichuan, Guizhou, and northwestern parts of Guangxi Zhuang autonomous prefecture; Tibeto-Burman, Sino-Tibetan.

### *Historical interaction between Azha Yi and Nong Zhuang*

- Zhuang have lived in what is now Wenshan Prefecture since ancient times.
- Ancestors of Azha begin to migrate to Wenshan region as early as the Nanzhao Kingdom period of the Tang Dynasty.
- Azha Yi and Nong Zhuang frequently united to wage war against intruders or to fight off outside governing forces that sought to control them.
- Since founding of PRC, Azha and Nong interact on a daily basis; trade and intermarriage is common.

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## Modern Demographics

- Azha population: 80,000—95,000 (cf. Wu 1996, Pelkey in press); c. 25–30% of total Yi population for Wenshan Prefecture.
- Nong population: c. 530,000 (cf. WSZC 2004, WNFB 2005); c. 53% of total Zhuang population for Wenshan Prefecture.
- Wenshan county has around 74,000 Yi (Azha and Nisu) and 92,000 Zhuang (Nong and Tu). (cf. WSZC 2004, WNFB 2005).

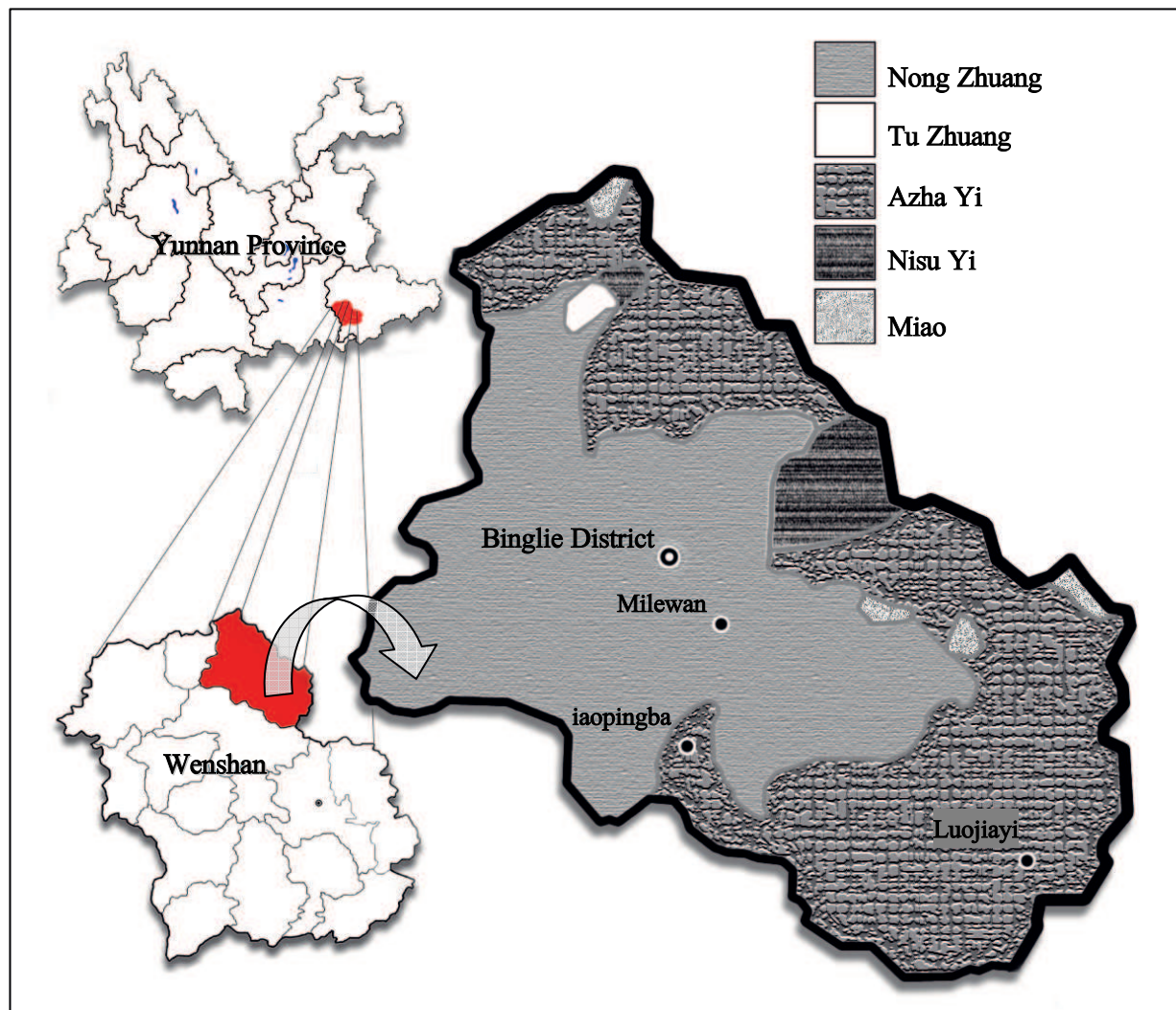


Figure 1. Distribution of Bingle District's ethnic populations

Official Nationality	Bingle Population	% of Total Population
Han	1,120	5.0%
Zhuang	12,508	56.1%
Yi	8,454	37.9%
Miao	201	0.9%

Table 2. Ethnic composition of Bingle District (WNFB 2005)

## 3. SOCIOLINGUISTIC BACKGROUND

- Azha Yi village of Xiaopingba has over 300 households with a total population of 1,400
- Nong Zhuang village of Milewan has 128 households with a total population of 576.
- Xiaopingba and Milewan are about 3km apart.

- Both Azha and Nong language vitality is strong in XPB and MLW, respectively, with all children learning the ethnic language first.
- Children of mixed marriages reportedly learn mother's L1 first, then father's.
- Majority of XPB Azha can understand and/or speak Nong to some degree.
- Only a few MLW Nong can understand or speak Azha.

#### 4. PHONOLOGICAL ORIENTATION

##### Binglie Nong (BLN) Phonology

Of all the previously published Zhuang data, the Binglie Nong (BLN) pronunciation appears most similar to the dialect spoken by the Nong of Yanshan County data as published in Yan 1994 and Zhang et al. 1999.

##### *The Syllable*

<i>Syllable Type</i>	<i>BLN</i>	<i>Chinese</i>	<i>English</i>
CVT	mi <sup>33</sup>	有	have
CVCT	lam <sup>33</sup>	风	wind
CVVT	tɕ <sup>h</sup> ei <sup>11</sup>	蛋	egg
CVVCT	liak <sup>33</sup>	铁	iron
CVVVT	t <sup>h</sup> uei <sup>11</sup>	汗	sweat

Table 3. The Nong Zhuang syllable template

##### *Consonants*

BLN has 22 phonemic consonants at seven places of articulation, of which six (p, t, k, m, n, ŋ) can form syllable codas:

p	t	k	
		tɕ	
p <sup>h</sup>	t <sup>h</sup>	k <sup>h</sup>	
		tɕ <sup>h</sup>	
ʔb	ʔd		
m	n	ŋ	
f	θ	ɕ	h
v	ð		
	l		
		j	

Table 5. BLN phonemic consonants

<i>Initial</i>	<i>BLN</i>	<i>Chinese</i>	<i>English</i>	<i>Initial</i>	<i>BLN</i>	<i>Chinese</i>	<i>English</i>
p	pa <sup>24</sup>	鱼	fish	ŋ	ŋa <sup>33</sup>	芝麻	sesame
p <sup>h</sup>	p <sup>h</sup> a <sup>24</sup>	石	stone	f	fa <sup>33</sup>	天	sky
ʔb	ʔba <sup>11</sup>	肩	shoulder	v	vai <sup>33</sup>	水牛	water buffalo
t	tap <sup>55</sup>	肝	liver	h	ha <sup>22</sup>	五	five
t <sup>h</sup>	(luk <sup>33</sup> ) t <sup>h</sup> a <sup>24</sup>	眼睛	eye	tɕ	tɕa <sup>22</sup>	秧苗	rice seedling
ʔd	ʔda:u <sup>24</sup> ʔdi <sup>11</sup>	星星	star	tɕ <sup>h</sup>	tɕ <sup>h</sup> ai <sup>11</sup>	蛋	egg
k	ka <sup>22</sup> ðo <sup>33</sup> ʔdi <sup>55</sup>	什么时候	when	l	lam <sup>33</sup>	风	wind
k <sup>h</sup>	k <sup>h</sup> ai <sup>24</sup>	卖	sell	ɕ	ɕa <sup>55</sup> baŋ <sup>33</sup> nai <sup>41</sup>	如果	if
m	ma <sup>24</sup>	狗	dog	θ	θa <sup>24</sup>	纸	paper
n	na <sup>33</sup>	田	field	ð	ðaŋ <sup>33</sup>	一些	some
ŋ	na <sup>22</sup>	草	grass, hay	j	ja <sup>31</sup> niŋ <sup>33</sup>	妻子	wife

Table 6. BLN consonant initials in context

Vowels and Codas

	i	u	ɯ	e	o	ɔ	a	aː
Vowel	ʔdi <sup>24</sup>	tu <sup>33</sup>	tu <sup>55</sup>	te <sup>22</sup> ɔat <sup>55</sup>	to <sup>11</sup> nam <sup>55</sup>	tɔ <sup>31</sup>	ʔdaŋ <sup>24</sup>	ʔdaŋ <sup>24</sup>
BLN								
Chinese	里 (面)	帽子	大	结(果子)	蜜蜂	河	鼻	身体
English	in (side)	hat	big	to bear(fruit)	bee	river	nose	body

Table 7. BLN vowels in contrastive context

Coda	BLN Example	Chinese Gloss	English Gloss	Coda	BLN Example	Chinese Gloss	English Gloss
i	pi <sup>24</sup>	年	year (calendar)	uk	au p <sup>h</sup> uk <sup>55</sup>	捆绑	tie; bundle
ie	t <sup>h</sup> ie <sup>24</sup>	跑	to run	ɯ	ku <sup>24</sup>	盐	salt
iu	fei p <sup>h</sup> au <sup>11</sup> tɕiu <sup>55</sup>	弯 (用火)	to bend (using fire)	uun	ɔuun <sup>33</sup>	房子	house
io	ɕio <sup>55</sup>	尿	urine	ut	ʔdu <sup>t</sup> <sup>55</sup>	喝	drink
im	ʔim <sup>11</sup>	饱	full, satiated	uk	lu <sup>k</sup> <sup>31</sup>	挑选	select
in	tɕin <sup>24</sup>	吃	eat, to	uun	kuun <sup>55</sup>	吞	swallow
iŋ	liŋ <sup>33</sup>	猴子	monkey	uŋ	t <sup>h</sup> uŋ <sup>24</sup>	糖	sugar
iem	ʔiem <sup>24</sup>	茅草	thatch	e	te <sup>22</sup> ɔat <sup>55</sup>	结(果子)	bear (fruit)
ien	tɕ <sup>h</sup> ien <sup>11</sup>	切(肉)	cut (meat), to	ei	tɕei <sup>11</sup>	鸡	chicken
iaŋ	t <sup>h</sup> iaŋ <sup>24</sup>	千	thousand	en	hen <sup>22</sup>	黄	yellow
ip	θip <sup>55</sup>	十	ten	eŋ	ʔdeŋ <sup>24</sup>	红	red
iap	liap <sup>33</sup> k <sup>h</sup> a <sup>24</sup>	爪子	claw	o	ʔbo <sup>11</sup> mi <sup>33</sup>	黄牛	not yet
it	ʔdit <sup>55</sup>	吸	suck, to	oi	noi <sup>55</sup>	少	few
iet	fiet <sup>55</sup>	扔	throw (a ball), to	ou	kou <sup>33</sup>	曲, 弯曲	crooked
ik	pik <sup>55</sup>	翅膀	wing	om	ɲom <sup>55</sup> p <sup>h</sup> aŋ <sup>24</sup>	染(布)	to dye
iak	liak <sup>55</sup>	铁	iron	oŋ	moŋ <sup>55</sup>	鸟窝	bird's nest
iau	miau <sup>11</sup>	猫	cat	ok	tok <sup>33</sup> pak <sup>11</sup>	嘴巴	mouth
iou	ɲiou <sup>55</sup> muŋ <sup>33</sup>	手指	finger	ɔ	ʔɔ <sup>33</sup> nei <sup>31</sup>	这里	here
ioŋ	ɲioŋ <sup>33</sup>	蚊子	mosquito	oi	θoi <sup>11</sup>	蒜	garlic
u	ɔu <sup>55</sup> ɲin <sup>33</sup>	听见	hear, to	ot	pɔt <sup>11</sup>	肺脏	lungs
ua	p <sup>h</sup> ua <sup>24</sup>	羽毛	feather	ok	mɔk <sup>55</sup>	埋	cover up; bury
uan	huan <sup>24</sup>	割(绳子)	to cut; to trim	om	p <sup>h</sup> om <sup>24</sup> t <sup>h</sup> u <sup>24</sup>	头发	hair (on head)
uei	t <sup>h</sup> uei <sup>11</sup>	汗	sweat	on	mɔn <sup>24</sup> t <sup>h</sup> u <sup>24</sup>	枕头	pillow
uun	p <sup>h</sup> a <sup>11</sup> huun <sup>33</sup>	破	to break (a bamboo	oŋ	ʔdɔŋ <sup>24</sup>	森林	forest; woods
uot	ʔbuot <sup>11</sup>	瞎	blind	au	ʔda:u <sup>24</sup> ʔdi <sup>11</sup>	星星	star
uok	huok <sup>55</sup>	做	to do	am	nam <sup>24</sup>	刺(植物上的)	thorn
uon	ʔuon <sup>11</sup>	年轻	young (boy)	aŋ	wa:n <sup>24</sup>	甜	sweet
uoŋ	kuoŋ <sup>22</sup> tɕ <sup>h</sup> it <sup>55</sup>	冷(天气)	cold (weather)	aŋ	kaŋ <sup>33</sup>	下巴	chin
uŋ	nuŋ <sup>31</sup>	穿	put on, wear				

Table 8. Syllable coda combinations in BLN

Tone Cat.	1	2	3	4	5	6	7	9	8	10
Proto-Tai	A1	A2	C1	C2	B1	B2	D1S	D1L	D2S	D2L
BLN Tone	24	33	22	55	11	31	55	11	33	31
BLN	pi <sup>24</sup>	pi <sup>33</sup>	ʔbi <sup>22</sup>	p <sup>hi</sup> 55	pi <sup>11</sup>	pi <sup>31</sup>	p <sup>hak</sup> 55	pak <sup>11</sup> kou <sup>33</sup>	pak <sup>33</sup> ɲin <sup>33</sup>	ʔa <sup>33</sup> pak <sup>31</sup>
Chinese	年	肥 (肉)	蝴蝶	慢	笛子	哥, 姐	蔬菜	百	听	打哈欠
English	star	fat (meat)	butterfly	slow	flute	elder sibling	vegetable	hundred	to hear	to sneeze
BLN	ma <sup>24</sup>	ma <sup>33</sup> tei <sup>33</sup>	ma <sup>22</sup>	ma <sup>55</sup>	ma <sup>11</sup>	ja <sup>31</sup> ɲin <sup>33</sup>	nak <sup>55</sup>	mak <sup>11</sup>	mak <sup>33</sup> wi <sup>24</sup>	mak <sup>31</sup>
Chinese	狗	来	生长	马	泡米	妻子	重	果子	梳子	滑
English	dog	to come	to grow	horse	to soak rice	wife	heavy	fruit	comb	slippery

Table 11. BLN's ten tone categories with examples

## Xiaopingba Azha Yi (XPA) Phonology

Syllable Type	XPB	Chinese	English
VT	œ <sup>44</sup>	蛋	egg
VVT	a <sup>44</sup> ie <sup>33</sup> mɔ <sup>33</sup>	影子	shadow
CVT	t <sup>h</sup> œ <sup>31</sup>	厚	thick
CVVT	xiε <sup>44</sup>	累	tired

Table 12. XPA syllable types with examples

<b>p</b>	<b>t</b>				<b>k</b>	
<b>p<sup>h</sup></b>	<b>t<sup>h</sup></b>				<b>k<sup>h</sup></b>	
<b>m</b>	<b>n</b>	<b>ɲ</b>			<b>ŋ</b>	
<b>f</b>	<b>s</b>	<b>ç</b>	<b>ʃ</b>	<b>ʂ</b>	<b>x</b>	<b>h</b>
<b>v</b>	<b>z</b>	<b>ʒ</b>	<b>l</b>	<b>ʐ</b>	<b>ɣ</b>	
	<b>ts</b>	<b>tç</b>	<b>tʃ</b>	<b>tʂ</b>		
	<b>ts<sup>h</sup></b>	<b>tç<sup>h</sup></b>		<b>tʂ<sup>h</sup></b>		

Table 13. XPA phonemic consonant initials

Initial	XPB	Chinese	English	Initial	XPB	Chinese	English
<b>ɒ</b>	pi <sup>33</sup>	衣服	clothes	<b>v</b>	i <sup>44</sup> ɣu <sup>21</sup>	肠子	intestines
<b>p<sup>h</sup></b>	p <sup>hi</sup> 33	白	mortar	<b>t</b>	te <sup>33</sup>	爬	climb
<b>m</b>	mi <sup>44</sup>	土	soil	<b>t<sup>h</sup></b>	t <sup>h</sup> e <sup>33</sup>	快	sharp
<b>n</b>	ni <sup>33</sup>	红	red	<b>ts</b>	tse <sup>44</sup> zo <sup>22</sup>	醒	star
<b>ɲ</b>	ɲi <sup>33</sup>	饿	hungry	<b>ts<sup>h</sup></b>	ts <sup>h</sup> ε <sup>22</sup>	掉	fall
<b>ŋ</b>	ŋi <sup>44</sup>	喝	drink	<b>tç</b>	tçε <sup>44</sup>	煮	cook
<b>f</b>	ni <sup>44</sup> fi <sup>44</sup>	雾	fog	<b>tç<sup>h</sup></b>	tç <sup>h</sup> ε <sup>33</sup>	抓	scratch
<b>v</b>	vi <sup>33</sup>	远	far	<b>tʃ</b>	tʃε <sup>33</sup>	满	full
<b>s</b>	si <sup>44</sup>	木	wood	<b>ʃ</b>	ʃœ <sup>21</sup>	白	white
<b>z</b>	zi <sup>44</sup>	闪	flash	<b>l</b>	le <sup>21</sup>	来	come
<b>ç</b>	çi <sup>44</sup>	编织	weave	<b>tʂ</b>	tʂi <sup>33</sup>	缝	sew
<b>ʒ</b>	zi <sup>44</sup>	割	reap	<b>tʂ<sup>h</sup></b>	tʂ <sup>h</sup> œ <sup>33</sup>	焚	burn
<b>ʂ</b>	ʂi <sup>33</sup>	七	seven	<b>k</b>	mɯ <sup>33</sup> kœ <sup>22</sup>	屁股	buttocks
<b>ʐ</b>	ʐu <sup>33</sup>	数	count	<b>k<sup>h</sup></b>	k <sup>h</sup> ε <sup>21</sup>	个	CLF(general)
<b>x</b>	xi <sup>33</sup>	八	eight	<b>h</b>	he <sup>21</sup>	窝	nest

Table 14. XPA consonant initials in context

		<b>i</b>			
	<b>i</b>			<b>ɯ</b>	<b>u</b>
		<b>y</b>			
			<b>ʉ</b>		
	<b>ɛ</b>	<b>œ</b>		<b>ɜ</b>	<b>ɔ</b>
				<b>ʌ</b>	
					<b>ɔ</b>
				<b>a</b>	

Table 15. XPA vowel phonemes

<i>Vowel</i>	<i>XPA</i>	<i>Chinese</i>	<i>English</i>	<i>Vowel</i>	<i>XPA</i>	<i>Chinese</i>	<i>English</i>
<b>i</b>	ni <sup>44</sup>	系	tie: bind	<b>ɜ</b>	tɕ <sup>h</sup> v <sup>33</sup> nɜ <sup>21</sup>	腐烂	rot
<b>y</b>	ny <sup>44</sup>	绿	green	<b>ʌ</b>	lʌ <sup>22</sup> pa <sup>33</sup>	枪	gun
<b>ɛ</b>	nɛ <sup>44</sup>	早	early	<b>ɔ</b>	nɔ <sup>33</sup>	多	many
<b>œ</b>	nœ <sup>33</sup>	软	soft	<b>a</b>	na <sup>33</sup>	湿	wet
<b>i</b>	ni <sup>44</sup>	想要	want to (do)	<b>ie</b>	dy <sup>33</sup> ly <sup>33</sup> mie <sup>21</sup>	脐	navel
<b>ʉ</b>	mʉ <sup>33</sup> kœ <sup>22</sup>	屁股	buttocks	<b>uo</b>	muɔ <sup>33</sup> tɕ <sup>h</sup> y <sup>33</sup> mɔ <sup>33</sup>	寡妇	widow
<b>ɯ</b>	lu <sup>21</sup>	轻	light	<i>Other</i>	<i>XPA</i>	<i>Chinese</i>	<i>English</i>
<b>u</b>	nu <sup>21</sup>	你	2S(you)	<b>ɟŋ</b>	mɟŋ <sup>35</sup>	铜锣	gong

Table 16. XPA vowel phonemes in context

Toneme	35	44	33	22	21
Suprasegmental Features	glottalized and/or constricted	modal voice	modal voice	modal voice	laryngealized or nasalized
Phonetic Contrasts	[ni̠ <sup>35</sup> ]	[ni <sup>44</sup> ]	[ni <sup>33</sup> ]	[ny <sup>22</sup> ]	[ni <sup>21</sup> ] ~ [ni̠ <sup>21</sup> ]
Phonemicized Minimal Pairs	/ni <sup>35</sup> /	/ni <sup>44</sup> /	/ni <sup>33</sup> /	/ny <sup>22</sup> /	/ni <sup>21</sup> /
Chinese	坐	系	口	绿	有
English	sit	bind	mouth	green	EXIST

Table 17. XPA tonemes with examples

## 5. AREAL DIFFUSION

	Chinese	BLN	Mandarin	Cantonese	Proto-Tai
bronze gong	铜锣	(tɕoŋ <sup>22</sup> ) la <sup>33</sup>	t <sup>h</sup> ɔŋ <sup>35</sup> luɔ <sup>35</sup>	lɔ <sup>31</sup>	*dɔŋ <sup>A2</sup> = copper
candle	蜡烛	la <sup>31</sup> tɕu <sup>31</sup>	la <sup>51</sup> tɕu <sup>35</sup>	la:p <sup>11</sup>	no protoform
elephant	大象	ta <sup>33</sup> ɕiaŋ <sup>33</sup>	ta <sup>51</sup> ɕiaŋ <sup>51</sup>	tɕeuj <sup>11</sup>	*dʒaŋ <sup>C2</sup>
lime	石灰	hoi <sup>24</sup>	xuei <sup>55</sup>	fui <sup>55</sup>	no protoform
float (on water)	浮	fiut <sup>55</sup>	fu <sup>35</sup>	fau <sup>31</sup>	*loi <sup>A2</sup>
heel	脚跟	nien <sup>55</sup> tɕiou <sup>22</sup>	tɕiau <sup>21</sup> kən <sup>55</sup>	kan <sup>55</sup>	*son <sup>C1</sup>
oil	油	ju <sup>33</sup>	ju <sup>35</sup>	jau <sup>31</sup>	no protoform
to fry	炒	tɕ <sup>h</sup> au <sup>22</sup>	tɕ <sup>h</sup> au <sup>55</sup>	tɕ <sup>h</sup> au <sup>35</sup>	no protoform
road	路	lo <sup>31</sup>	lu <sup>51</sup>	lou <sup>11</sup>	*xruum <sup>A1</sup> , *daŋ <sup>A2</sup>
rattan	藤子	t <sup>h</sup> ou <sup>24</sup>	t <sup>h</sup> ɔŋ <sup>35</sup> zɿ <sup>21</sup>	t <sup>h</sup> aŋ <sup>31</sup>	*hwai <sup>A1</sup>
shoes	鞋子	hai <sup>33</sup>	ɕjɛ <sup>35</sup> zɿ <sup>212</sup>	hai <sup>31</sup>	no protoform
gun	枪	tɕoŋ <sup>11</sup>	tɕ <sup>h</sup> jaŋ <sup>55</sup>	tɕ <sup>h</sup> euj <sup>55</sup>	no protoform
to pay	交	ɕuei <sup>11</sup>	tɕjau <sup>55</sup>	kiu <sup>35</sup>	no protoform
to push	推	toi <sup>55</sup>	t <sup>h</sup> wɛi <sup>55</sup>	t <sup>h</sup> eui <sup>11</sup>	no protoform
friend	朋友	toŋ <sup>33</sup> pən <sup>31</sup>	t <sup>h</sup> ɔŋ <sup>35</sup> pan <sup>51</sup> (同伴)	t <sup>h</sup> uŋ <sup>31</sup> pun <sup>11</sup>	no protoform
green	绿	lɔk <sup>33</sup>	lu <sup>51</sup>	luk <sup>11</sup>	*xiau <sup>A1</sup>
hundred	百	pak <sup>11</sup> kou <sup>33</sup>	pai <sup>214</sup>	bak <sup>33</sup>	no protoform
thousand	千	t <sup>h</sup> iaŋ <sup>24</sup>	tɕjɛn <sup>35</sup>	tɕin <sup>55</sup>	no protoform
hard, difficult	难	nan <sup>55</sup>	nan <sup>35</sup>	nan <sup>31</sup>	*jak <sup>D1L</sup>

Table 18: Chinese loanwords in BLN

English	Chinese	XPA	Mandarin	Proto-Ngwi
candle	蜡烛, 洋蜡	ja <sup>31</sup> la <sup>21</sup>	jaŋ <sup>35</sup> la <sup>51</sup>	no protoform
elephant	大象	ta <sup>22</sup> ɕã <sup>34</sup>	ta <sup>51</sup> ɕjaŋ <sup>51</sup>	*ʔ-ya <sup>3</sup>
socks	袜子	va <sup>53</sup> tsi <sup>33</sup>	wa <sup>51</sup> tsi <sup>21</sup>	no protoform
flat	平	p <sup>h</sup> i <sup>21</sup>	p <sup>h</sup> iŋ <sup>25</sup>	*ʔ-bra <sup>2</sup>
surname	姓	ɕi <sup>22</sup>	ɕjiŋ <sup>51</sup>	no protoform
sing	唱歌	tɕ <sup>h</sup> a <sup>44</sup> ko <sup>33</sup>	tɕ <sup>h</sup> aŋ <sup>55</sup> kə <sup>51</sup>	*mi <sup>1</sup> & *ʔka <sup>3</sup>

Table 19: Chinese loanwords in XPA

<sup>2</sup> The Wenshanhua (the Wenshan county dialect of Southwest Mandarin, 西南官话文山县方言) pronunciation of ‘shoes’ is [hai<sup>33</sup>].

The Challenge of Separating Chinese Loan Words from Proto-Tai Reflexes

English	Chinese	BLN	Standard Mandarin	Wenshanhua tone reflex	Standard Cantonese	Proto-Tai	Expected Tonal Reflex for BLN
head	头	t <sup>h</sup> u <sup>24</sup>	t <sup>h</sup> ɔ <sup>35</sup>	42	t <sup>h</sup> au <sup>35</sup>	*t <sup>h</sup> rue <sup>A1</sup>	24
buttocks	屁股	ku <sup>33</sup> tɕ <sup>h</sup> i <sup>33</sup>	p <sup>h</sup> i <sup>51</sup> ku	211	p <sup>h</sup> ei <sup>33</sup> ku <sup>24</sup>	*kɯuŋ <sup>C1</sup>	22
pus	脓	nɔŋ <sup>24</sup>	nɔŋ <sup>35</sup>	42	nuŋ <sup>31</sup>	*hnɔŋ <sup>A1</sup>	24
early	早	tɕou <sup>55</sup>	tsau <sup>214</sup>	44	tɕou <sup>35</sup>	*d̥zau <sup>C2</sup>	55
cat	猫 <sup>3</sup>	miau <sup>11</sup>	mau <sup>55</sup>	55	ma:u <sup>55</sup>	*meu <sup>A2</sup>	33
medicine	药	ja <sup>24</sup>	jau <sup>51</sup>	211	tɕau <sup>11</sup>	*ʔjɯa <sup>A2</sup>	33
ginger	姜	tɕ <sup>h</sup> iŋ <sup>24</sup>	tɕjaŋ <sup>55</sup>	55	keuŋ <sup>55</sup>	*xiŋ <sup>A1</sup>	24
to chop (meat)	切(肉)	tɕ <sup>h</sup> ien <sup>11</sup>	tɕ <sup>h</sup> ie <sup>51</sup>	211	tɕ <sup>h</sup> ai <sup>33</sup>	*t <sup>h</sup> ram <sup>C1</sup>	22
bow	弓	kɔŋ <sup>24</sup>	kɔŋ <sup>55</sup>	55	kuŋ <sup>55</sup>	*koŋ <sup>A1</sup>	24
gold	金	tɕim <sup>24</sup>	tɕin <sup>55</sup>	55	kam <sup>55</sup>	*ɣam <sup>A2</sup>	33
mortar	臼	tɕuɔk <sup>33</sup>	tɕjo <sup>51</sup>	211	kau <sup>13</sup>	*grɯk <sup>D2S</sup>	33
needle	针	tɕ <sup>h</sup> am <sup>24</sup>	tɕɔn <sup>55</sup>	55	tɕam <sup>55</sup>	*khjem <sup>A1</sup>	24
tax	税	ɕuei <sup>11</sup>	ɕ <sup>w</sup> ei <sup>51</sup>	211	seui <sup>33</sup>	*suai <sup>B1</sup>	11
bury	埋	mɔk <sup>55</sup>	mai <sup>35</sup>	42	ma:i <sup>31</sup>	*hmok <sup>D1S</sup>	55
yellow	黄	he:n <sup>22</sup>	x <sup>w</sup> aŋ <sup>35</sup>	42	wɔŋ <sup>31</sup>	*hlwɔŋ <sup>A1</sup>	24

Table 20: BLN words of unclear origin

English	Chinese	Standard Mandarin	Standard Cantonese	Proto-Tai	BLN	Expected Tonal Reflex for BLN
horse	马	ma <sup>214</sup>	ma <sup>13</sup>	no protoform	ma <sup>55</sup>	-
chicken	鸡	tɕi <sup>55</sup>	kai <sup>55</sup>	*kɔi <sup>B1</sup>	tɕei <sup>11</sup>	11
ride	骑(马)	tɕ <sup>h</sup> i <sup>25</sup>	kei <sup>31</sup>	*khuɿ <sup>B1</sup>	k <sup>h</sup> i <sup>11</sup>	11
wash	洗(手)	ɕi <sup>214</sup>	sai <sup>35</sup>	*suai <sup>A2</sup>	θi <sup>11</sup>	33
name	名字	miŋ <sup>24</sup> /miŋ <sup>24</sup> z <sub>1</sub>	miŋ <sup>31</sup>	*d̥zɯ <sup>B2</sup>	min <sup>55</sup> tɕu <sup>31</sup>	-
wide	宽	k <sup>hw</sup> an <sup>55</sup>	k <sup>w</sup> ɔŋ <sup>55</sup>	*kwaŋ <sup>C1</sup>	kaŋ <sup>33</sup>	22
three	三	san <sup>55</sup>	sa:m <sup>33</sup>	*sam <sup>A1</sup>	θam <sup>24</sup>	24
four	四	sɿ <sup>51</sup>	sei <sup>33</sup>	*si <sup>B1</sup>	θi <sup>11</sup>	11
six	六	ljo <sup>51</sup>	luk <sup>11</sup>	*xrok <sup>D1S</sup>	tɕ <sup>h</sup> ɔk <sup>55</sup>	55
seven	七	tɕ <sup>h</sup> i <sup>55</sup>	tɕ <sup>h</sup> at <sup>55</sup>	*tɕet <sup>D1S</sup>	tɕ <sup>h</sup> iet <sup>55</sup>	55
eight	八	pa <sup>55</sup>	pat <sup>33</sup>	*pet <sup>D1L</sup>	piet <sup>11</sup>	11
nine	九	tɕjo <sup>214</sup>	kau <sup>35</sup>	*kɿəu <sup>C1</sup>	kou <sup>22</sup>	22
ten	十	ɕɿ <sup>25</sup>	sap <sup>11</sup>	*sip <sup>D1S</sup>	θip <sup>55</sup>	55

Table 21. Confirmed Chinese loans in BLN via Proto-Tai

<sup>3</sup> Of course, the similarity between the forms for ‘cat’ are likely due to onomatopoeia.



## Areal Loans in Nong Zhuang and Azha Yi

English Gloss	Chinese Gloss	Proto-Ngwi	<b>XPAzha</b>	Proto-Tai	Expected Tonal Reflex for BLN	<b>BLNong</b>	Cantonese	Putonghua
sand <sup>4</sup>	沙	*say <sup>2</sup>	lu <sup>44</sup> sa <sup>44</sup>	*zai <sup>A2</sup>	33	θai <sup>33</sup>	sa <sup>55</sup>	sa <sup>55</sup>
cloth	布	*pa <sup>1</sup>	p <sup>h</sup> ɔ <sup>21</sup>	*p <sup>h</sup> ua <sup>C1</sup>	22	p <sup>h</sup> aŋ <sup>24</sup>	pou <sup>33</sup>	pu <sup>51</sup>
pants	裤子	*ʔ-/k-la <sup>2</sup>	ke <sup>44</sup> pe <sup>22</sup>	no protoform	-	k <sup>h</sup> a <sup>11</sup>	fu <sup>33</sup>	k <sup>h</sup> u <sup>51</sup> zɿ
ride	骑(马)	*dzi <sup>2</sup>	tsɿ <sup>33</sup>	*khu <sup>i</sup> <sup>B1</sup>	11	k <sup>h</sup> i <sup>11</sup>	kei <sup>31</sup>	te <sup>h</sup> i <sup>25</sup>
blanket	被子	*[boɿ]	kɿ <sup>44</sup> pu <sup>33</sup>	no protoform	-	fa <sup>33</sup>	pei <sup>11</sup>	pei <sup>51</sup> zɿ <sup>21</sup>
tea	茶	*la <sup>1</sup>	ts <sup>h</sup> a <sup>21</sup>	*tɕa <sup>A2</sup>	33	tɕa <sup>33</sup>	te <sup>h</sup> a <sup>25</sup>	te <sup>h</sup> a <sup>31</sup>
thin, flimsy	薄(纸)	*ba <sup>2</sup> & *C-jok <sup>L</sup>	pɔ <sup>22</sup>	*ʔbaŋ <sup>A1</sup>	24	ʔbaŋ <sup>24</sup>	pɔk <sup>66</sup>	pao <sup>25</sup> , pɔ <sup>25</sup>
crooked	曲	*gok <sup>L</sup>	kɿ <sup>33</sup>	*guot <sup>D2S</sup>	33	kou <sup>33</sup>	te <sup>h</sup> y <sup>55</sup>	kuk <sup>55</sup>

Table 22. A Summary of Areal Loans in Nong Zhuang and Azha Yi

## 6. LEXICAL INFLUENCE

### Nong Loans in Azha

English	Chinese	Proto-Tai	BLN	XPA	Proto-Ngwi	Sani Yi <sup>5</sup>
fat (meat)	肥(肉肥)	*bi	pi <sup>33</sup>	pu <sup>44</sup>	*tsi <sup>1</sup>	ts <sup>h</sup> z <sup>33</sup>
dust	灰尘	*tem + *hmon	nam <sup>31</sup> mu <sup>55</sup>	ny <sup>44</sup> my <sup>33</sup>	no protoform	q <sup>h</sup> o <sup>11</sup> ɬɔ <sup>33</sup>
knee	膝盖	*xou	t <sup>h</sup> u <sup>24</sup> k <sup>h</sup> ou <sup>11</sup>	pu <sup>35</sup> ko <sup>33</sup>	*du <sup>3</sup>	py <sup>2</sup> tsz <sup>55</sup>
matches	火柴	*vuəŋ	jaŋ <sup>33</sup> fat <sup>33</sup> tɕu <sup>31</sup>	ja <sup>21</sup> pa <sup>21</sup> tɕ <sup>h</sup> u <sup>21</sup>	no protoform	m <sup>11</sup> ty <sup>55</sup> ts <sup>h</sup> a <sup>2</sup> χo <sup>55</sup>

Table 24. A Summary of Nong Loans in Azha

(No clear examples of XPA loans in BLN identified to date)

## 7. PHONETIC AND PHONOLOGICAL INFLUENCE

- A loan nasal final in in XPA [mɜŋ<sup>24</sup>] ‘gong’ (铜锣)
  - No other Proto-Ngwi nasal finals are preserved in this dialect of Azha (cf. \*baŋ<sup>1</sup>→/pu<sup>33</sup>/ ‘deaf’; \*m-gaŋ<sup>1</sup>→/ku<sup>21</sup>/ ‘pull’; \*woŋ<sup>2</sup>→/ve<sup>44</sup>/ ‘round’).
  - Neither are any other Azha varieties known to exhibit a nasal final (or nasalization) on this or other lexemes. Luojiayi Azha, another, reportedly intelligible, Azha variety spoken in Binglie district that has slightly less contact with Nong Zhuang pronounces this ‘gong’ lexeme with the phonetic shape [ma<sup>33</sup>].
- Allophonic variation of XPA /s/ between [s] and [θ]:

[si <sup>44</sup> ]-[θi <sup>44</sup> ]	三	‘three’
[sɿ <sup>44</sup> ɿ <sup>44</sup> vi <sup>22</sup> ]-[θɿ <sup>44</sup> ɿ <sup>44</sup> vi <sup>22</sup> ]	棉花	‘cotton’
[to <sup>44</sup> se <sup>44</sup> ]-[to <sup>44</sup> θe <sup>44</sup> ]	龟	‘turtle’

Note that in BLN the phoneme /θ/ (corresponding to Li Fang Kuei’s (1977) proto-Tai \*s) has two allophones [θ] and [s] which are in free alternation when preceding a non-front, unrounded vowel (also /u/→ i / s \_\_). Elsewhere this phoneme surfaces as [θ]. (/θ/ → [θ], [s]/ \_\_ u, i):

[si<sup>11</sup>], [θu<sup>11</sup>] 老虎 tiger

<sup>4</sup> Of these items, ‘Sand’, ‘cloth’ and ‘tea are recognized by Bradley (1979) as area loanwords.

<sup>5</sup> These items are taken from Dai (1992) and are offered in order to provide a comparative context from a nearby Yi language and in order to fill in the gaps in the absence of reconstructed etyma for Proto-Ngwi.

- Loss of contrastive phonation in XPA preserved as a suprasegmental feature of two tonemes—one with glottal stop.
- Odd proliferation of diphthongs including the following allophonic possibilities:
  - [øœ]: /œ/ conditioned by initial segments that are [+continuant].
  - [iɜ]: /i/ conditioned by glottalized tone /<sup>β5</sup>/.
  - [aΛ]: /a/ conditioned by glottalized tone /<sup>β5</sup>/.
  - [ɛi]: /ɛ/ conditioned by glottalized tone /<sup>β5</sup>/.
  - [ʰə]: /ʰə/ conditioned by glottalized tone /<sup>β5</sup>/.

In contrast, Wu (1996) describes only three diphthong possibilities for Gaodeng Azha—[ʰɛ], [ʰə] and [ʰɑ]—only the first two of which are phonemic (/uɛ/ and /ua/).

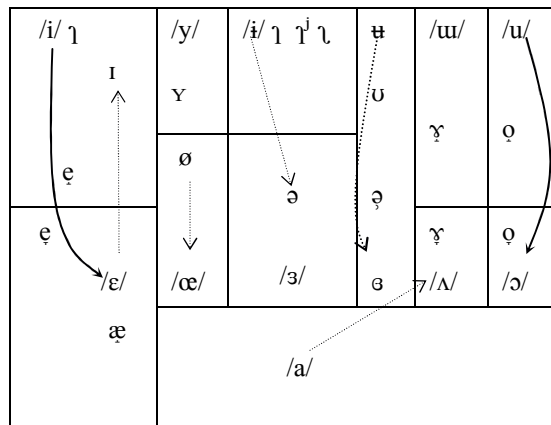


Figure 2. XPA diphthongs and allophonic space

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