

# 神戸市外国語大学 学術情報リポジトリ

## A sketch of Buyuan Jino tones and their development

メタデータ	言語: eng 出版者: 公開日: 2013-03-01 キーワード (Ja): キーワード (En): 作成者: 林, 範彦, Hayashi, Norihiko メールアドレス: 所属:
URL	<a href="https://kobe-cufs.repo.nii.ac.jp/records/1467">https://kobe-cufs.repo.nii.ac.jp/records/1467</a>

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 International License.



# A Sketch of Buyuan Jino Tones and Their Development\*

Norihiko HAYASHI

Keywords: Jino (Jinuo), Buyuan Jino, Youle Jino, Xishuangbanna (Sipsongpanna), China, Lolo-Burmese, Tibeto-Burman, Tonal development, Word tonalization

## 1 Introduction: The Buyuan dialect of Jino and the goal of this paper



The Buyuan dialect of the Jino language (henceforth “Buyuan Jino”) is a Lolo-Burmese (henceforth “LB”) language of the Tibeto-Burman linguistic family spoken in the northeastern part of Xishuangbanna (Sipsongpanna) autonomous state in Yunnan province, China (See Figure 1<sup>1</sup>).

Figure 1: The Jino villages, Yunnan

\* An earlier version of this paper was presented at the 18<sup>th</sup> meeting of the Linguistic Circle for the Study of Eastern Eurasian Languages, held at Aoyama Gakuin University (Tokyo, Japan) on February 20, 2011. I thank Prof. Mitsuaki Endo and the participants for their insightful comments. All errors and misunderstandings are, of course, of my own.

<sup>1</sup> This map is cited from Kato (2000) and revised by the present author. The shaded portion is Xishuangbanna (Sipsongpanna) autonomous state in Yunnan province, China.

The total Jino population in China amounts to 20,899 (2000 census), but the present author estimates that only 70 to 80 percent are fluent speakers of the Jino language. Ten percent of these speakers can be considered to speak Buyuan Jino, and the remainder Youle Jino (As for the genetic affiliation, see Figure 2).

Buyuan Jino has two main subdialects, namely Bagang-Banan and Kelian; these are mutually intelligible, though many differences can be found even in basic lexicons. In this paper, Bagang-Banan data drawn from my field research in 2004–2011 will be employed.<sup>2</sup>

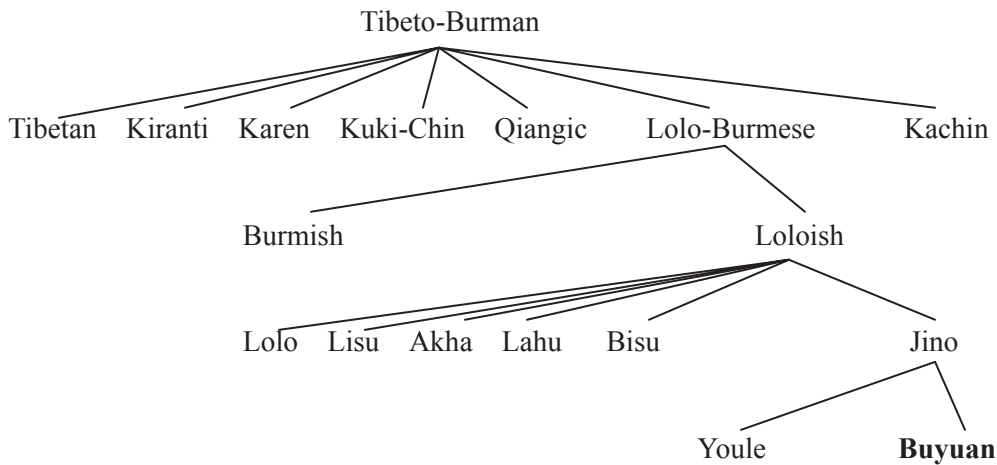


Figure 2: The genetic affiliation of Buyuan Jino (a simplified model of Matisoff [2003])

This paper aims to describe the tonemes and tonal patterns (or tonal alternation) of Buyuan Jino, and attempts to undertake a tentative analysis of their historical development through comparison between Buyuan Jino and neighboring LB languages.

---

<sup>2</sup> The present study has been supported by several Grants-in-Aid for Scientific Research from the Japan Society for the Promotion of Science (Nos. 05J10264, 20720111, 22320079, and 23720209). The present author expresses gratitude for this financial support. This paper is based mainly on data collected by the author (2004–2011).

## 2 Previous Work: Gai (1986)

Gai (1986) is the only previous published work on Buyuan Jino, and states that there are eight tonemes in the language (See Table 1). Some tonemes have the function of distinguishing lexical meanings, and others, grammatical meanings.

**Table 1: Gai's (1986: 125–126) tonemes and examples**

	Tone value	Example	Gloss
[1]	55; high level	vu55tsə35vu55nə44	‘diarrhea’
[2]	44; second high level	vu44	‘hatch’
[3]	33; mid level	vu33	‘sell’
[4]	42; mid falling	vu42mə44	‘belly’
[5]	31; low falling	vu31	‘buy’
[6]	13; low rising	vu13	‘cap (v.)’
[7]	11; low level	a31vu11	‘startle’
[8]	53; high falling	vu53	‘(the sound of a horn)’

Gai also describes the tonal correspondences between Youle Jino and Buyuan Jino, and remarks that the tones (and even the tone values) of these two dialects basically correspond. He gives two corresponding sets, as seen below (Gai 1986: 130–131).

(1) a. Mid falling tone 42 in Youle corresponds to high level tone 55 in Buyuan.

Youle Jino a44çə42; Buyuan Jino a31çə55 ‘near’

Youle Jino tʃo31ja42; Buyuan Jino tsə31ja55 ‘sparrow’

b. Mid level tone 33 in Youle corresponds to low falling tone 31 in Buyuan.

Youle Jino mə33tʃhə33; Buyuan Jino mə33tshɤ31 ‘friend’

Youle Jino khe33khə33; Buyuan Jino tçhə31khu31 ‘garden’

Gai's (1986) phonological analysis and my own<sup>3</sup> are totally different; therefore, the data presented by Gai is irrelevant to the discussion in the present paper; and in addition, Gai does not discuss tonal development from Proto-Lolo-Burmese to Buyuan Jino. These are the main differences between Gai (1986) and the current paper.

### 3 Synchrony of Buyuan Jino tones

Based on my field data, I argue that there are at present five tones in Buyuan Jino, which can be exemplified as follows (Hayashi forthcoming).

(2) a. **55 (High level tone)** : high and level. It tends to exhibit vowels that are phonetically shortened.

/ja55/ 'weave', /fu55thu55/ 'trousers', /wu55/ 'sell', /a31na55/ 'sticky',  
/ŋɔ55tɻ31/ 'fish'

b. **44 (Mid level tone)** : lower than 55, though still high.

/ja44/ 'sweep', /fu44/ 'roll/ maggot', /ŋɔ44/ 'five'

c. **31 (Low falling tone)** : low.

/ja31/ 'take', /fu31/ 'deceive', /wu31/ 'buy', /ŋɔ31/ 'I (1p singular)'

d. **35 (Rising tone)** : rising. Found in relatively few words.

/a31fu31fu35/ 'very hot', /na35/ 'cry', /ŋɔ35/ 'genuine, true'

e. **53 (High falling tone)**: falling from the top level.

/tsɔ53/ [t̪sɔ53] '(perfect marker)', /mi31çao53/ [mi31çɔ53] 'beautiful',  
/xɔ55tɔ44mjɛ53/ [xɔ55tɔ44mjɛ53] 'how'

---

<sup>3</sup> **Phonological Inventory of Buyuan Jino (Except Tonemes)** by the present author (Hayashi forthcoming):

Consonants: /p, ph, t, th, k, kh; ts, tsh, tɕ, tɕh; m, n, ŋ, l; f, s, ç, x; w, j/

Vowels: /i, e, ɛ, a, ɔ, ɻ, o, u/

Syllable Structure: (C1)(C2)V1(V2)(V3)(C3)/T <C2: -j-, C3: -n or -N>

[53] is a tone value which should be considered to place at the special position; in fact, it is difficult to tell whether this is a distinctive toneme or not. Following are some examples of the [53] tone. Note that the examples in (3) are illustrated on the phonetic level.

- (3) a. [tso53] ‘(perfect)’, [k<sup>h</sup>ʁ31tso53] ‘(have) arrived’, [mo55ko55tso53] ‘(I am) defeated’, etc.
- b. [mi31ɕɛo53] ‘beautiful’, [mɣŋ55ɕɛo53] ‘depressed’, etc.
- c. [xo55to44mje53] ‘how’, [m31ko53] ‘complete’, [sɐ44mo55le53] ‘tell’, etc.

As demonstrated in (3), the tone value [53] occurs at the end of a ‘morphological word’. It seems to be found in grammatical morphemes (*tso53* functions as an aspectual marker, *ɕao53* as an ending for stative verbs, etc.). In addition, the tonal patterns of disyllabic words reveal that there have not yet been found words beginning with [53], as seen in Table 2.

**Table 2: Tonal patterns of Buyuan Jino disyllabic words**

		Second Syllable (S2)				
		55	44	31	35	53
First Syllable (S1)	55	○	○	○	△	△
	44	△	○	×	×	×
	31	○	○	○	△	△
	35	△	△	△	△	△
	53	×	×	×	×	×

(○: frequently found, △: seldom found, ×: not found so far)

The tonal patterns of disyllabic words are limited, probably because the morphophonology of this language has also been affected by disyllabization and word tonalization. Hence, it seems that the 53 tone can be better analyzed as being

influenced by positional constraints, with a relatively low functional load in the phonology of Buyuan Jino, though at present it should still be marked (/53/), because it cannot be analyzed as an allotone of any other toneme.

#### 4 Development of Buyuan Jino tones

In historical LB linguistics, the tonal correspondences with Written Burmese (henceforth “WB”) forms can be considered most useful to the scholar. The proto-tones of Proto-Lolo-Burmese (henceforth “PLB”) established by Bradley (1979) and Matisoff (2003) basically correspond to Written Burmese tones.<sup>4</sup> Proto-Tone 1 of PLB corresponds to WB tone 1 (corresponding to the level tone<sup>5</sup> in Colloquial Burmese), Proto-Tone 2 of PLB to WB tone 2 (corresponding to the heavy tone in Colloquial Burmese), and Proto-Tone 3 of PLB to WB tone 3 (corresponding to the creaky tone in Colloquial Burmese).

Hereafter, we will demonstrate the tonal correspondence between LB languages and WB and discuss the development of Buyuan Jino tones. Tonal sets corresponding to the unchecked WB syllables will be examined in 4.1 and to the checked syllables in 4.2.

##### 4.1 Sets corresponding to unchecked WB syllables

First, we will investigate the tonal correspondence of Buyuan Jino and LB languages to unchecked WB syllables. The following tables (Tables 3 to 5) show tonal sets corresponding to WB tones 1, 2 and 3.

---

<sup>4</sup> It would be useful to utilize the Old Burmese (OB) forms for comparison of Lolo-Burmese tones if this were possible, but as we lack tonal information for this language, we employ WB forms in place of OB ones.

<sup>5</sup> The terminology for colloquial Burmese tones is adopted from Okell (1969).

## 4.1.1 Tonal sets corresponding to WB tone 1

Table 3 illustrates the tonal correspondence between Buyuan Jino (hereafter “BJ”) tones and those in other LB languages.

**Table 3: Tonal sets corresponding to WB tone 1**

Gloss	BJ	YJ	H	ACH	ZW	WB
‘die’	a55si31	fi42	si55	ɕi55	fi51	sei-
‘enter’	u31	o42	(thø33)	oŋ55	vaŋ51	wang-
‘come’	lɔ31	lɔ42	la55	(zə35)	le55	laa-
‘look for’	xɔ31li55	fo42	(tcho33mo55)	tuai55xɔ31- zua35	mjaŋ51xo31	hra-
‘rain (v.)’	fu31	xo42	ɔ31ze55- ze55	zɔ55	vo51	ywaa-
‘iron’	ɕe31xɔ55	fe42	sɔ55	ɕam55	fam51to <sup>2</sup> 55	sam
‘1SG NOM’	ŋɔ31	ŋɔ42	ŋa55	ŋɔ55	ŋo51	ngaa
‘ten’	tshɤ31	tshɤ42	tshe55	tche55	tshe51	chay
‘thick’	a55tha31- la31	a33thu55	thu55	(kan31)	thu51	thuu-
‘name’	a55mi31	a33mɛ55	tsho55mjo55	a31niŋ55	mjiŋ51	mañ
‘guts’	a55vu31	a33vu55	u55	a31u55	u51	uu
‘bear (animal)’	a55jɤ31	a33ø55	xɔ31ɔ55	ɔm55	vam51	wam
‘water’	i31tshu55	ji33tʃho55	u55tɕu31	(ti55)	vui51	rei
‘nose’	nɔ31pje31	nɔ33to55	na55me55	ŋɔŋ55	no51	hnaa-khong:
‘mosqui- to’	~si31tɕɤ31	ɕo33kjə55	ja55go31	(phɔp55)	(kjaŋ51)	yang
‘long’	ɕu44mju31 -lu31	jo55fuu55	(mo55)	səŋ55	xiŋ51	hrañ-
‘sweet’	a55tshi31	a33tʃhi55	tɕhu55	(uai31)	tʃhui31	khyo-



‘foot’	a55tɕhi31	ʃɔ55khi55	a31khtu55	tɕhi55	khji51	khrei
‘fly’	pje35	pre42	bjɔ55	tɕam55	taŋ21	pyaŋ-
‘painful’	nɔ35	nɔ42	(kɔ31)	(xɔ31)	no51	naa-
‘pointed’	a31tɕhi55	a33tɕhø55	tɕhe33	(liam31)	tʃhun51	khyon-
‘white’	a31pja55	a33phru55	phju55	phzɔ55	phju51	phruu-
‘red’	a55nɣ44	a33nɣ55	nɪ55	na55	ne51	nii-/ a-nii
‘green’	a55ni44	a33nu55	nɪ55	nau55	nju51	ño-

The first section of this table (from ‘die’ to ‘ten’) show that Buyuan Jino 31 tone corresponds to Youle Jino (YJ) tone 42, Hani (H [Loloish: spoken in China, Myanmar, Laos, Thailand, and Vietnam]) 55, Achang (ACH [Burmish: China, Myanmar]) 55, Zaiwa (ZW [Burmish: China, Myanmar]) 51 or 55, and WB tone 1. The second section (from ‘thick’ to ‘foot’) shows essentially the same correspondences as the first section, though YJ in the second section has a 55 tone, likely caused by (morphological) disyllabization.<sup>6</sup>

However, as can also be seen in Table 3, there are some irregularities in tonal correspondences. In the words for ‘fly’ and ‘painful’, BJ has a 35 tone, not 31. Further, the last two columns show two BJ tones (namely, 55 and 44) corresponding to WB tone 1. These cases demand further analysis.

---

<sup>6</sup> For a more detailed discussion of the influence of disyllabization on tonal alternation in YJ, see Hayashi (2009b).

## 4.1.2 Tonal sets corresponding to WB tone 2

Table 4 illustrates the tonal correspondences between LB languages and WB tone 2.

**Table 4: Tonal sets corresponding to WB tone 2**

Gloss	BJ	YJ	H	ACH	ZW	WB
‘walk’	ju55	zo55	zu31	so31	so21	swaa:-
‘eat’	tso55	tso55	dza31	tɕo31	tso21	caa:-
‘steal’	tɕha55ja31	khju55	xo31	xau31	khau21	kho:-
‘hear’	tɕo55	kjo55	ga31	kzua31	vo55kjo21	kraa:-
‘give’	pi55	pi55	bi31	tsi31	pji21	pei:-
‘expensive’	phja55	phu55	phø31	(ko55)	phau21	a-pho: [‘price’]
‘horse’	mju55	mjo55	mo31	ɱzɔŋ31	mjaŋ21	mrang:
‘fire’	mi55	mi55	mi31dza31	(poi31)	mji21	mii:
‘bitter’	a55kho55	a55kho55	xa31	xo31	kho21	khaa:-
‘feces’	a55tɕhi55	a55khri55	ɕi31	tɕhi31	khji21	khyei:
‘salt’	tshɤ55lɤ44	tshə55khə42	tsha31dɤ31	tɕhə31	tsho55	chaa:
‘bee’	pji55ji55	pjə55jə55	bja31si55	tɕua31ɕəŋ31	pjə21jaŋ21	pyaa:
‘fruit’	a55si55	a55stu55	a55si31	ʂə31	ʃi21	a-sii:
‘liver’	a55tshi55	a33tshu55	tshə31	a31ʂəŋ31	siŋ21	a-saŋ:
‘dog’	khɤ55no55	khui33ni55	a31khui31	xui31	khui21	khwei:
‘slippery’	a31ka55la55	a33krə55	dzu55lu55ne33	ne <sup>2</sup> 35	tʃʉt55	khyo:-
‘five’	ŋə44	ŋə55	ŋa31	ŋə31	ŋə21	ngaa:
‘nine’	tɕa44	kju55	ɣə31	kau31	kau21	ko:
‘wash’	ja55tshi44	tshi55	tshi31	(phəp55)	chi21	chei:-

The examples in the first section of Table 4 (from ‘walk’ to ‘slippery’) show that Buyuan Jino 55 tone corresponds to YJ 55, H 31, ACH 31, ZW 21/55 and WB tone 2, a corresponding set that should be the most stable in this paper. The ones in the

second section (‘five’ and ‘nine’) seem to have a different correspondence from those in the first section, which might relate to the fact that these two words are numerals.<sup>7</sup> The word for ‘wash’ also has a 44 tone, like the words in the second column. This could be as a result of the influence of word tonalization or tone sandhi, though this is an issue that still needs further analysis.

#### 4.1.3 Tonal sets corresponding to WB tone 3

Table 5 illustrates the tonal correspondences between LB languages and WB tone 3.

**Table 5: Tonal sets corresponding to WB tone 3**

Gloss	BJ	YJ	H	ACH	ZW	WB
‘ripe’	mju44	mjɣ44	mjɔ33	ŋeŋ35	mjiŋ55-	hmañ.-
‘full’	pju44	a55pru44	bjɔ33	pzəŋ35	pjiŋ55	prañ.-
‘moon’	pja55xɔ44	pu55lɔ44	la33si31	pau51lɔ35	lɔ55mo55	la.
‘day’	a31ni44	ŋ55	nɔ33	nɛn31	ŋji55	nei.
‘seed’	a31tsi44	a33tsu55	a55zɔ31	(a31nau31)	(a21mji21)	a-cei.
‘open’	phu55tɛi55	phɔ55	phɔ33	phɔŋ35	phoŋ55	phwang.-
‘know’	si55tɕha53	su55	xɣ33	sa35	se55	si.-
‘fall (v.)’	kɔ31	krɔ44	ja33	kzua35	kjo55	kya.-

There are considerably fewer examples of sets corresponding to WB tone 3 than of those to tones 1 and 2. The examples in the first column of Table 5 (from ‘ripe’ to ‘seed’) show that the 44 tone in Buyuan Jino basically corresponds to YJ 44, H 33, ACH 35/31, ZW 55, and WB tone 3, which constitutes a regular correspondence with the exception of the word for ‘seed’.

There are, of course, different set of tonal correspondences from the one shown in

<sup>7</sup> The cardinal numbers in Youle Jino (especially from one to nine) also have irregular correspondences with PLB, in the sense that one would expect their tones to have been leveled to 55.

the first column. As for the words for ‘open’ and ‘know’, BJ 55 corresponds to YJ 55, H 33, ACH 35, ZW 55, and WB tone 3, and in ‘fall’, BJ 31 corresponds to YJ 44, H 33, ACH 35, ZW 55, and WB tone 3. Considering the stability of tonal correspondences among H, ACH, and ZW, it is clear that the tones of these three examples from BJ developed independently after divergence from YJ.

#### 4.2 Sets corresponding to Written Burmese checked syllables

Secondly, we will investigate the tonal correspondence of Buyuan Jino and LB languages to WB checked syllables. Table 6 shows tonal sets corresponding to WB checked syllables.

Matisoff (1972) divided the tonal sets of checked syllables in LB into two types—a HIGH group and a LOW group—which Bradley (1979) utilized for the reconstruction of PLB. The former group has higher tone values than the latter in most modern LB languages, though in some languages there can be found tonal flips. According to the reconstruction performed by Matisoff (1972) and Bradley (1979), Group A in Table 6 exemplifies the tonal sets corresponding to the LOW group (PLB \*L) and Group B to the HIGH group (PLB \*H).<sup>8</sup>

In Group A, BJ 55 corresponds to YJ 55, H 31, ACH 55, and ZW 21 or 55, whereas in Group B, BJ 55 or 44 or 31 corresponds to YJ 42 (or 33), H 33, ACH 55, and ZW 21 or 55, which might lead us to conclude that Group A has much more stable correspondences than Group B.

At this moment, it is not possible to state with a large degree of confidence which BJ tone in Group B participates in regular correspondence, but it is arguable that the BJ tonal sets in Group B are in the process of merging into tone 55, though of course it should be noted that the words for ‘ascend’, ‘bird’, and ‘eye’ are disyllabic words

---

<sup>8</sup> As can be seen in Table 6, Zaiwa tones do not correspond straightforwardly to PLB checked syllables. Nishi (1999) puts the tonal correspondences of Burmish checked syllables in order, based on tone values of the Maruic languages.

and may not be affected by this process.

**Table 6: Tonal sets corresponding to Written Burmese checked syllables**

Group	Gloss	BJ	YJ	H	ACH	ZW	WB
A	‘kill’	ɕe55	se55	se31	sat55	sat21	sat-
	‘pig’	wa55	va55	a31 <u>ya</u> 31	o <sup>2</sup> 55	va <sup>2</sup> 21	wak
	‘sew’	tɕa55	kju55	gu31	xzop55	khjup55	khyup-
	‘lick’	mje55	mrə55	mje31	liap55	jo <sup>2</sup> 21	lyak-
	‘sleep’	i55thi55	ji55	ju31	e31	jup55	ip-
	‘two’	ni55	ŋ55	ni31	(sək55)	i55	hnac
	‘six’	tɕhu55	khjo55	ku31	xzo <sup>2</sup> 55	khju <sup>2</sup> 55	khrok
	‘deep’	a31na55la55	a33ŋa55	na31	(lək55)	nik21	nak-
	‘new’	a31si55	a33ji55	sɿ31	sək55	a21sik55	sac-
	‘hand’	la55pu44	la55pu44	a31 <u>la</u> 31	lo <sup>2</sup> 55	lo <sup>2</sup> 21	lak
	‘be bent’	tɔ31khu55	a55kho44	yu31	kok55	koi55	kək-
‘eight’	ɕi44	xɛ55	ɕe31	ɕet55	ʃit55	hrac	
B	‘chicken’	ja55	ja42	a31xa33	kzua <sup>2</sup> 55	vo <sup>2</sup> 21	krak
	‘sharp’	tha55	tha42	ta33	tho <sup>2</sup> 55	tho <sup>2</sup> 55	thak-
	‘black’	a55na55	a55na42	na33	(lək55)	no <sup>2</sup> 21	nak-
	‘fear’	tɕhi55lo55	khø44	gu33	zo <sup>2</sup> 55	kju <sup>2</sup> 21	krək-
	‘pick up’	ku44	ko42	(u31)	ku <sup>2</sup> 55	kui51	kək-
	‘wrap’	the44	thø42	to33	tshet55	(kje <sup>2</sup> 21)	thup-
	‘ascend’	ta31ji31	ta42	da33	to <sup>2</sup> 55	to <sup>2</sup> 21	tak-
	‘bird’	ŋa31jo55	ŋa33zo55	(a55dzi55)	mo <sup>2</sup> 55	ŋo <sup>2</sup> 55	hngak
‘eye’	mja31tsi44	mja33tsi55	mja33	no <sup>2</sup> 55tsi <sup>2</sup> 55	mjo <sup>2</sup> 21tʃi55	myak-cei	

## 5 Concluding Remarks

As shown in the discussion above, BJ has four distinctive tonemes and one positional tone (/53/); the tonal correspondences between BJ and LB languages can be summarized as in Table 7.<sup>9</sup>

**Table 7: Summary of tonal correspondences between BJ and LB languages**

PLB		BJ	YJ	H	ACH	ZW
Unchecked Syllables	*1	<b>31</b> /35/55/44	<b>42</b> /33/55	55	55	51/21
	*2	<b>55</b> /44	<b>55</b> /33	31	31	21/55
	*3	<b>44</b> /55/31	<b>44</b> /55/42	33	35/31	55
Checked Syllables	*L	55	55	31	55	21/55
	*H	<b>55</b> /44/31	<b>42</b> /33	33	55	21/55

The toneme written in boldface in each column should be understood to indicate the regular correspondence in the relevant language. The tones 31 and 44 in BJ may be derived from PLB tones \*1 and \*3 respectively, while 55 in BJ may be traceable to PLB tones \*2, \*L, and \*H. Tone 35 in BJ may be traceable back to PLB tone \*1, which would indicate that PLB tone \*1 had split up into 31 and 35 in BJ after the divergence from YJ.

From the viewpoint of tone values, BJ seems to be very similar to YJ in unchecked syllables but not in checked syllables. This may imply that the tones in the unchecked syllables of BJ and YJ developed in the same way, whereas those in checked syllables developed independently after the split into two dialects.

As is widely attested in many Asian languages of several language families, the historical development of tones may relate to onset and/or rhyme groups. However, the tonal development of BJ apparently has nothing to do with those groups at the PLB stage, where the proto-tone system is inherently assigned. There is a relatively

<sup>9</sup> WB tones were replaced with PLB tones in Table 7.

clear correspondence between BJ tones and PLB tones. The irregularities in the corresponding rules may thus be affiliated with morphophonological layers than with phonological ones in narrow sense, a possibility that demands further analysis.

### Data Resources

Achang: Dai and Cui (1985), Huang (1992); Buyuan Jino: my fieldnotes; Written Burmese: Harada and Ohno (1979), Ohno (1995), Hani: Li and Wang (1986), Huang (1992), Dai and Duan (1995); Youle Jino: my fieldnotes (Hayashi 2007, 2009a, 2009b), Zaiwa: Huang (1992).

### Abbreviation

“\*” marks a proto-form. Parenthesized forms in the tables cannot be considered to be cognate.

ACH: Achang, BJ: Buyuan Jino, H: Hani, PLB: Proto-Lolo-Burmese, WB: Written Burmese, YJ: Youle Jino, ZW: Zaiwa

### Bibliography

- Bradley, David (1979) *Proto-Loloish*. London: Curzon Press.
- Dai Qingxia (戴庆厦) and Cui Zhichao (崔志超) (1985) *Achangyu jianzhi*. 阿昌语简志 Beijing:Minzuchubanshe. [*Outline of Achang Grammar* (in Chinese)].
- Dai Qingxia and Duan Kuangle (段颢乐) (1995) *Haniyu gailun*. 哈尼语概论 Kunming:Yunnan Minzuchubanshe. [*An Introduction to the Hani Language* (in Chinese)].
- Gai Xingzhi (盖兴之) (1986) *Jinuo-yu jianzhi*. 基诺语简志 Beijing: Minzu Chubanshe. [*Outline of Jino Grammar* (in Chinese)].
- Harada, Masaharu (原田正春) and Toru Ohno (大野徹) (1979) *Biruma-go ziten*. ビルマ語辞典 Osaka: Nihon Biruma Bunka Kyokai. [*A Burmese Dictionary* (in Japanese)].

- Hayashi, Norihiko (林 範 彦) (2007) *Tino-go Yuuraku-hougen no kizyututeki-kenkyuu*. チノ語悠楽方言の記述的研究 PhD dissertation (Kyoto University, Japan) [*A Descriptive Study on the Youle Dialect of Jino* (in Japanese)].
- (2009a) *Tino-go Bunpou (Yuuraku-hougen) no kizyutu-kenkyuu*. チノ語文法 (悠楽方言)の記述研究 Monograph Series in Foreign Studies No. 43. Kobe: Research Institute of Foreign Studies, Kobe City University of Foreign Studies. [*A Descriptive Study on the Grammar of the Jino Language (Youle Dialect)* (in Japanese)].
- (2009b) The Historical Development of Youle Jino. In Yasuhiko Nagano (ed.), *Issues in Tibeto-Burman Historical Linguistics (Senri Ethnological Studies 75)*, pp. 255–280. Suita (Osaka): National Museum of Ethnology.
- (2010) A Phonological Sketch of Buyuan Jino: A Preliminary Analysis. Circulated at the 43rd International Conference on Sino-Tibetan Languages and Linguistics, Lund University (Lund, Sweden; October, 2010).
- (forthcoming) Jinuoyu Buyuanhua yinxi jianjie. 基诺语补远话音系简介 In Naoki Yamasaki and Takashi Takekoshi, (eds.), *Ota Itsuku Kyoju/Furuya Akihiro Kyoju Kanreki Kinen Tyuugokugogaku Ronshu*. Tokyo: Kobun Shuppan. [An overview of Buyuan Jino Phonology (in Chinese)].
- Huang Bufan (黄布凡) (ed.) (1992) *Zangmiananyuzu yuyan cihui*. 藏缅语族语言词汇 Beijing: Zhongyang Minzu Xueyuan Chubanshe. [*A Tibeto-Burman Lexicon* (in Chinese and English)].
- Kato, Kumiko (加藤久美子) (2000) *Bonti sekai no kokka-ron*. 盆地世界の国家論 Kyoto: Kyoto University Press. [*Kingdoms in the Basins* (in Japanese)].



- Li Yongsui and Wang Ersong (王尔松) (eds.) (1986) *Haniyu jianzhi*. 哈尼语简志 Beijing: Minzu Chubanshe. [*Outline of Hani grammar* (in Chinese)].
- Matisoff, James A. (1972) *The Loloish Tonal Split Revisited*. (Research Monograph No. 7.) Berkeley: Center for South and Southeast Asia Studies, University of California.
- (2003) *Handbook of Proto-Tibeto-Burman: System and Philosophy of Sino-Tibetan Reconstruction*. Berkeley: University of California Press.
- Nishi, Yoshio (西義郎) (1999) *Four Papers on Burmese: Toward the History of Burmese (the Myanmar Language)*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies.
- Ohno, Toru (大野徹) (1995) *Nihon-go Biruma-go ziten*. 日本語ビルマ語辞典 Tokyo: Daigaku Syorin. [*A Japanese-Burmese Dictionary* (in Japanese)].
- Okell, John (1969) *A Reference Grammar of Colloquial Burmese* (2 volumes). Oxford: Oxford University Press.

#### Acknowledgements/鸣谢

The author expresses his deepest gratitude to the Buyuan Jino people (勐旺乡基诺族), the Jinghong municipal government (景洪市勐旺乡人民政府), Yunnan Nationalities Museum (云南民族博物馆), the Xishuangbanna Bureau of Nationalities (西双版纳傣族自治州民族宗教局), and the Yunnan Nationalities Committee (云南省民族事务委员会).