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Tonal alternations in the Pumi verbal system¹

Guillaume Jacques, CNRS-INALCO

Summary: This paper presents two hitherto unnoticed sets of alternations in the tonal systems of Northern Pumi. First, in some verbs, rising tone in the citation form alternates with falling tone in the perfective. Second, the verb "to go", when combined with other verbs, presents tonal alternations which are not found elsewhere in the verbal system. A sample text is added in the appendix to illustrate the tonal phenomena discussed in the article.

Keywords: Pumi, Tonal alternation, Directional prefixes

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1. Introduction

Like most Qiangic languages (apart from Northern Qiang and Japhug Rgyalrong), Pumi dialects² have tonal contrasts. On monosyllables, either two tone categories (Lu 2001:21, Matisoff 1997) or three (Ding 2001, 2003, Lu 2001: 97) are found depending on the dialect.

Earlier work on Pumi (Lu 1983:15-20, Fu 1998:18-20, Lu 2001) analyzes the tonal system of this language on the model of Chinese, transcribing all syllables as if they had an inherent tone. They do, however, mention some cases of sandhi and interaction between stems and affixes (Fu 1998:28-9, 88-9).

Matisoff (1997) is the first article to use Africanist transcription instead of the Chao Yuen-ren system for transcribing Pumi tones, a system which is better suited for a language typologically closer to the African type than to the Chinese one (Hyman 2007, Evans 2008). Although the focus of this article was mainly on comparative linguistics, he nevertheless offers a valuable description of tonal sandhi and tonal alternation phenomena at the word level.

Ding (2001, 2006, 2007) analyzes the Pumi tonal system as a Pitch-accent system³ and compares it to various Japanese dialects. Since his analysis is considerably more developed than those of his predecessors, it is worthwhile to describe it in more detail.

In the variety described by Ding, as in other dialects described by Lu (2001), monosyllables have three surface realizations: high (H), falling (F) and rising (R). He analyzes these categories as underlying H, HL and LH respectively. This analysis is justified by the patterns of tone spreading when an enclitic is added after a monosyllabic noun, as shown in Table 1:

Table 1: Analysis of Pumi tones in monosyllables according to Ding (2006:13)

Citation form	Realization with an enclitic	meaning
\int i $^{\mathrm{F}}$	∫i ^H ge ^L H.L	louse
$\int\! i^H$	∫i ^H ge ^H H.H	hundred
$\int\!\!i^R$	∫i ^L ge ^H L.H	new

The fact that the same tonal categories are realized as contour tones in citation form but appear as series of High and Low when a clitic is attached shows that an analysis in terms of syllable tone is not tenable for Pumi dialects, and that all contour tones of this language must be analyzed as combinations of high and low tones.

In polysyllabic words, the range of attested possibilities for a word of n syllables is much lower than 3^n , the number of categories which would be expected if each syllable had an underlying tone. Ding (2003:590 and 2007:14) describes the following categories (where F, H, L and R represent the surface realizations of the tones, respectively falling, high, low and rising): only four patterns on disyllabic words (instead of an expected $3^2 = 9$), six patterns on trisyllabic words (instead of 27) and seven on quadrisyllabic words.

Table 2: Realization of the tonal categories in Xinyingpan Pumi (Ding 2007:14).

² Pumi (a.k.a. Prinmi) is a cluster of at least two distinct languages spoken across Yunnan and Sichuan, mainly in Lanping county, Ninglang county (Yunnan), Muli county and Jiulong county (Sichuan). The total number of speakers is above 30,000. In Muli county, it is the main language among ethnic Tibetans, and speakers of Shixing, Kami Tibetan and other languages also learn it as a second language (Chirkova 2009:3).

³ Since the category of 'Pitch Accent' is difficult to define rigorously cross-linguistically (Hyman 2009), we will avoid this term in the present paper.

category	spread	1	2	3	4
A 1	-	F	HL	HLL	HLLL
B 1	+	Η	HH	HHL	HHLL
C 2	-	R	<u>LH</u>	LHL	LHLL
D 2	+		<u>LH</u>	LHH	LHHL
E 3	-		LR	<u>LLH</u>	LLHL
F 3	+			<u>LLH</u>	LLHH
G 4	X			LLR	LLLH

The categories C and D on bisyllabic words on the one hand and E and F on trisyllabic words are distinct only when a clitic or a compound word is added: with C and E categories, the high tone does not spread onto the next syllable, while it does with D and F categories. For instance, $t\tilde{o}^Lpu^H$ 'donkey' and $t\int_{\tilde{e}}^{\tilde{e}} \tilde{u}^H$ 'dog hair' pattern differently when a subsequent syllable is added: with $t\tilde{o}^Lpu^H$, which belongs to category D, the subsequent syllable has a high surface tone (for instance $t\tilde{o}^Lpu^Hk'u^H$ "donkey head"), whereas with $t\int_{\tilde{e}}^{\tilde{e}} \tilde{u}^H$, which belongs to category C, it has a low surface tone (no example provided in Ding's papers).

According to Ding's analysis, two underlying properties are enough to yield the observed categories: the place of the high tone in the prosodic domain, and whether this high tone can spread on the next syllable. The number in the first column indicates which syllable in the prosodic domain is the locus of the high tone, and in the second column, + indicates that the high tone can spread, – indicates that it cannot, and X that either is possible in free variation. The underlying high tone spreads rightwards, so that syllables situated on its left are realized with a low tone. If the number of syllables in the prosodic domain is inferior to the place of the high tone (for instance, category C with a monosyllable, the high tone should be placed on the second syllable, but only one syllable is present in the prosodic domain), a rising tone results.

This analysis elegantly accounts for the data of the Xinyingpan variety; however, it will be shown below that some tonal alternations found in other Pumi dialects are difficult to explain using this model.

Since the regular tonal alternation patterns in nominal compounding observed in these Pumi dialects do not seem to exhibit exactly the same behavior as in the variety described by Ding, I will lay out basic facts about the tonal system of Shuiluo Pumi and describe tonal alternations in nouns (which are simpler) before discussing the problematic phenomena observed in the verbal system in the following sections.

2. Segmental inventory.

The dialects investigated in this study are the Mudiqing (木底箐, Ninglang, Lijiang, Yunnan) and Shuiluo (水洛, Muli, Liangshan Yi autonomous prefecture, Sichuan) varieties, which belong to the Northern Pumi language (see Figure 1).⁴ The tonal alternation patterns in both dialects are almost identical. These dialects are related to the Xinyingpan dialect, with which they are mutually intelligible according to my informants' opinion. The data was collected during two field trips in July-August 2008 and February-March 2009 respectively. The present paper will mostly use data from the Shuiluo dialect.

⁴ My Mudiqing Pumi consultant Mr. Cao was born in 1962 and lives in Yongning township in a community of speakers of the Na language (see Michaud 2008 for more information about this language). He speaks Chinese, Na and Pumi. My Shuiluo Pumi consultant Ngag-dbang was a retired cadre. He lived in Qiaowa (the seat of the government in Muli county), was married to a speaker of Taoba Pumi (a very close variety) and spoke the language on a daily basis, though Chinese was naturally his main language.

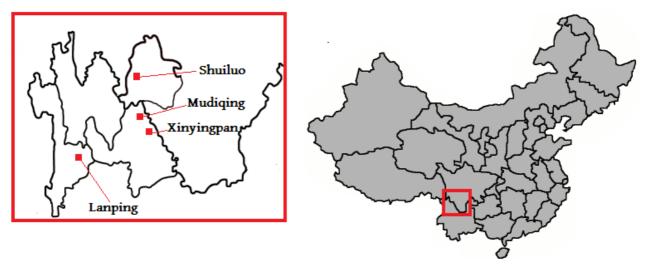


Figure 1: The location of Lanping, Shuiluo, Mudiging and Xinyingpan Pumi dialects.

Since the segmental phonology of Shuiluo Pumi differs from all previously described varieties (including the eight dialects in Lu 2001, among which it is closest to Taoba), I will first present a basic account of the vocalic and consonantal inventory of this language. The basic syllabic structure is C(r)(G)V(G), where C, V and G stand for consonant, vowel and glide respectively.

This syllabic structure is simpler than the one found in Lanping of Xinyingpan, as most consonant clusters have disappeared. The only attested clusters are br- and pr-, and br- freely alternates with dzw- in some words.

The list of attested rhymes is the following:

Table 3: The rhymes of Shuiluo Pumi.

	i	e	3	ә	3	a	u	0	ĩ	ĩ	ã	ã	õ
V	i		3	Э	3	a	u	0	ĩ	$\tilde{\epsilon}$	ã	ã	õ
Vu				-əu				-ou					
Vi		-ei											
-jV		-je	-jε	-jə	-јз	-ja	-ju	-jo				-jã	-jõ
-wV	-ui		-we	-wə	-w3	-wa			-wĩ	-wε̃		-wã	
		-wei		-jəu									

The phonetic realization of these rhymes is not entirely straightforward: /wə/ is realized [\mathfrak{u}], the glide -w- is realized [- \mathfrak{u} -] after a coronal consonant and before a front vowel. /ə/ has three allophones: [1] after dental fricatives and affricates (as in $ts\delta$ "to milk" [ts_1^{55}]), [1] after retroflex fricatives and affricates (as in $ts\delta$ "gall bladder", [ts_1^{55}]) and as the labial trill [\mathfrak{B}] after bilabial stops (as in $p\delta$ "to dig" [$p\mathsf{B}^{55}$]). As in other attested forms of Pumi, no final consonants are found.

There are 40 consonant phonemes in Shuiluo Pumi:

Table 4: The initial consonants of Shuiluo Pumi.

p	t			k
p^{h}	th			$\mathbf{k}^{\mathbf{h}}$
Ъ	d			g
	ts	tç	tş	

⁵ This analysis is preferred because the non-egophoric infix <w> added to a stem in -ə yields the surface vowel [u]: şô 'to jump' > [şû] şwô.

	tsh	tc^h	tş ^h		
	dz	dz	tջ ^հ dzլ		
	s	Ç	Ş	x	h
	sh	$\boldsymbol{\mathcal{c}}^{\mathrm{h}}$	$\mathbf{S}^{\mathbf{h}}$		
	Z	Z	Z L	γ	ĥ
m	n			ŋ	
ů	ņ			ņ	
	1		r		
	ļ				

Unlike other Pumi dialects, Shuiluo Pumi has aspired fricatives,⁶ and has a real trill [r] contrastive with the voiced fricative [z]. The velar fricatives /x/ and /y/ are realized as uvulars before back vowels, and as palatal fricatives before /i/.

3. The tone system of Shuiluo Pumi

Like the Niuwozi Pumi dialect studied by Ding, Shuiluo Pumi has three surface tonal categories on monosyllables, that can be described as high, falling and rising in isolation. This basic system on monosyllables is also remarkably similar to that of Shixing (Chirkova and Michaud 2009). For convenience, I use the Africanist tone marks (like Matisoff 1997), as summarized in the following table. Low pitch (which is either the effect of an underlying low tone or the realization of an absence of tone) will be transcribed with a grave accent.

Table 5: Tonal categories on monosyllables in Shuiluo Pumi.

	example	meaning	Underlying analysis
ŷ	njε̂	eye	A: 1, -spread
ý	njέ	red	B: 1, +spread
ť	njĚ	black	C: 2, -spread

For the time being, I follow Ding's analysis. However, we will see that the analysis of the rising tone is not straightforward. On disyllabic nouns, four distinct patterns are attested:

Table 6: Tonal categories on disyllables in Shuiluo Pumi.

	example	meaning	Ding's analysis
ớờ HL	rwábồ	willow	A: 1, -spread
ý ý ΗΗ	rwśmi̇̃	mare	B: 1, +spread
ờý LH	rwàmi̇́	female yak	C/D: 2
ờٽ LR	ràdzě	alcohol	E: 3, -spread

We find here the same four surface categories presented by Ding (C and D can only be distinguished if a subsequent syllable is added). For trisyllables and quadrisyllables, there are not enough words in my lexicon to provide a comprehensive account of the possible surface forms. Contour tonal patterns are restricted to the last syllable of a phonological word, following a general cross-linguistic

⁶ These aspirated fricatives come from {s+aspirated affricate} clusters.

tendency (Zhang 2004:929).

In compound words of two syllables, the following rule can be used to predict the tonal pattern of the resulting disyllable (rows indicate the first element and columns the second element of the compound):

Table 7: Examples of regular tonal change in composition.

	dó 'back'	rê 'skin'	sěi 'blood'
gwî 'bear'	gwấ dó	gwấ rớ	gwî séi
kw3 'cow'	kw3 dó	kw3 rá	kw3 séi
γwi̇̃ 'horse'	γwì̀ dó	γwῒ rá	γwi̇̀ séi

The tonal patterns observed in Table 7 can be described as follows:

Table 8: Regular tonal change in composition.

	Н	F	R
Н	НН	НН	НН
F	LH	LH	LH
R	LH	LH	LH

Only two patterns are found: high-high and low-high. The tonal pattern of the disyllable only depends on the first syllable. A similar, though not identical rule is found in the neighboring Shixing language (Chirkova and Michaud 2009:549). However, this productive rule has a few exceptions, such as bíp³ 'sand' from bí 'sand' and p³ 'flour, powder' (the expected form would be *bíp³). These exceptions are best considered as older compounds, to which the regular rule is not applicable. The composition rules presented above do not only apply to compound nouns, but sometimes also to object+verb compounds, though the exact environment where these occur still deserves further research.

4 Regular alternations in the verbal system

The Pumi verb is very rich in affixes, most of which are monosyllabic. The longest suffix -mədərə is three syllables long, made from the nominalizing suffix -mə (itself a grammaticalized form of the noun mɔ̂ 'man'), the copula dɔ̂ and the progressive suffix -rə. It is an evidential marker used in stories to report facts that the speaker has not witnessed himself. Although the etymology of this trisyllabic suffix is still synchronically transparent, it is fully grammaticalized, and the lexical tone of the verb spreads over the three syllables.⁸

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⁷ The word Mtsa.by 'flour, powder' in Yongning Na, whose second syllable is possibly related to pš (either as a cognate or as a loanword) also presents irregular tonal patterns (Michaud and Latami 2009:14).

⁸ If it were not fully grammaticalized, one would not expect the tone spreading patterns described in this section. The copula, when it appears with nouns, does not show such peculiar behaviour: the high tone of monosyllabic nouns does not spread on the copula. In isolation, the copula followed by the progressive is realized dớ-rà (or rather dô-ra), but in fluent speech it is often realized as low tone on both syllables as an effect of the intonation.

Suffixes are toneless, and the intrinsic tone of the verbal stems spreads onto it.⁹ The following table shows tonal spreading patterns with a monosyllabic suffix (the progressive -rə) and with the trisyllabic -mədərə:¹⁰

Table 9: Tonal spreading with monosyllabic verbs.

Basic form	Monosyllabic suffix	realization	Trisyllabic suffix	realization	meaning
z wí̇́	zwí-rə	zwĩ-rớ	zwĩ-mədərə	zwī́-mə́də́rə́	observe
z ĉ	zê-rə	zé-rè	zê-mədərə	zé-mèdèrè	stay
tă	tǎ-rə	tà-rớ	tă-mədərə	tà-mèdèrě	arrive

The tonal spreading patterns of the first two tonal categories are straightforward. They can be represented in the following way:

The high tone is a single H tone underlyingly. It associates to the stem and spreads rightwards to all following suffixes, which are toneless.

The falling tone is underlying composed of two tonal elements H and L. When suffixes are added to the stem, the high tone remains in situ, while the low tone is reassociated to the following suffix. The same analysis cannot be proposed for the rising tone if it is analyzed as LH, as the following result would be expected:

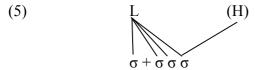
We would obtain *tà-mɔ́dərə́, an impossible form. In order to explain the attested form tà-mɔ̀dərə́, a solution would be to analyze the surface rising tone as an underlying low tone. The form tà-mɔ̀dərə́ would be as such:

⁹ Apart from the suffixes, directional prefixes and many discourse particles are toneless; in the appended story, toneless affixes and particles have no tone marks in the underlying form. The idea that underlying low-tone syllables must be distinguished from toneless syllables in Pumi is found in Greif (2010).

¹⁰ Many examples of verbs with this suffix can be found in the story in the appendix.



A rule against low-tone words (or rather the obligatory presence of a high tone in phonological words as in other Qiangic languages, see Evans 2008:484) would then change the last syllable of the word into a surface rising tone by insertion of a postlexical high tone.



A similar rule has been described for Yongning Na (Michaud 2008:186).¹¹ In this analysis, low-rising words such as r3dzð 'alcohol' cited in section 1 must be analyzed with a low tone pattern L as the underlying form. The only problem with this theory is the form of verbs with monosyllabic suffixes: the suffix is realized with a high tone, not a rising one. If the analysis of rising tone monosyllabic verbs as having an underlying low tone were correct, we would expect the form *tà-rð instead of attested tà-ró:



I do not have any elegant explanation to propose to solve this problem. Two analyses are possible.

First, one could analyze rising tone monosyllables as underlying LH, and add a rule according to which a high tone following a low tone is deleted if it has to spread on more than one syllable. However, this analysis is problematic as it increases the complexity of the basic form and requires the addition of an arbitrary rule.

Second, if one maintains the analysis of the monosyllables as low tones, one must account for the high tone by a special rule. A possible solution is to suppose that low tone fails to spread on one-syllable suffixes, and that the postlexical high tone (automatically added in words without underlying high tone) associates with a toneless syllable. Therefore, no surface rising tone occurs.¹²



I will adopt the second option in this paper.

Disyllabic verbs have a much simpler pattern: the suffixes are always realized with low pitch, except with low-rising disyllabic verbs (that is, underlying low tone verbs), as the last syllable of the verb undergoes the same change as for monosyllabic verbs.

^{11 &#}x27;[...] the L+L sequence cannot surface as such, due to a general prohibition against all-L phonological words (and a fortiori all-L utterances) in Na. The all-L sequence is avoided by post-lexical addition of a final M tone, which modifies L+L to L+LM[...]'

¹² This idea was suggested by Alexis Michaud, but I remain responsible for any error in the analysis set out in this section.

Table 10: Tonal spreading with disyllabic verbs.

Basic form	tone	meaning	realization
sení	LH	to hear	sèní mèdèrè
máçé	Н	to search	máçw ϵ màdàrà 13
súdju	HL	to think	súdjù mèdèrè
kətsěi	L	to be small	kətsèi mədərə

Most prefixes are toneless, and are realized with a surface low tone,¹⁴ the default realization for toneless syllables. Among the directional prefixes, only the 'up' prefix has a high tone:

Table 11: Pumi directional prefixes.

direction	Shuiluo Pumi
up	tớ-
down	n3-
out	k ^h ə-
in	h3-
cislocative	də-
translocative	t ^h 3-

The tone of this prefix regularly spreads rightwards onto the verb stem and the verb's own tone is disassociated (the same phenomenon has been noted in Fu 1998:28-9 for a different dialect). However, the high tone of the prefix can only cross one morpheme boundary: the suffix will remain toneless, and ends up with a surface low pitch.

(8)
$$\begin{array}{ccc} H (H,HL,L) & & H (H,HL,L) \\ & \downarrow & & \rightarrow & \\ & \sigma + \sigma + \sigma & & \sigma + \sigma + \sigma \end{array}$$

This phenomenon can be observed from the following examples (the perfective forms have either the egophoric 15 -sã suffix or the non-egophoric one -çi).

Table 12: Spread of the high tone from the directional prefix.

basic form	meaning	perfective	expected
tçú	sour	tá-tçú-çì	*tà-t¢ú-¢í
$\mathcal{G}^{\mathrm{h}}\mathbf{\hat{1}}$	wake up	tớ-¢¹í-sầ	*tà-¢¹í-sằ
gjŏ	lift	tá-gjó-sầ	*tà-gjò-sấ

¹³ This form has the non-egophoric volitive infix \leq w \geq .

¹⁴ Unlike Shixing where the tone of the verb spreads leftwards onto the prefix (Chirkova and Michaud 2009:550-551).

¹⁵ I adopt here Tournadre's (2008) terminology rather than the terms 'conjunct/disjunct'.

5 Irregular alternations

In the previous section, I have presented a basic account of the regular tonal alternations observed in the verbal system of Shuiluo Pumi. In the present section, I will turn to two sets of alternations that cannot be accounted for synchronically by a set of simple rules and are lexically determined.

5.1 Rising tone monosyllabic verbs

We observe that several rising tone monosyllabic verbs undergo tonal alternation in the perfective form, when a directional prefix is added. The directional prefix has low surface tone, the verb stem high surface tone and the suffix low surface tone (the first example suă in the table is a non-alternating verb):

Table 13: Examples of alternating rising tone verbs.

Basic form	Perfective form (1sg or 3sg)	expected	meaning
swǎ	kʰà-swà-sấ		I counted
t¢ĭ	n3-tçí-sầ	*n3-tçì-sấ	I poured
lěi	n3-léi-sầ	*n3-lèi-sấ	I ploughed
¢ ^h ằ	tʰà-çʰấ́-sằ́	*tʰ̀̀з-çʰ̀à̀-sấ́	I scooped
gĭ	n3-gí-sầ	*n3-gì-sấ	I wore (clothes)
těi	n3-téi-sầ	*n3-tèi-sấ	I wore (a hat)
z ť	də̀-zî-çì	*də̀-zì-çí	It became lighter

The resulting perfective forms with LHL tone pattern look like perfective forms of falling tone verbs. Unlike the alternations observed with the prefix tá-, which can be explained as cases of assimilation, there is no evidence that the tone change observed here is caused by the directional prefixes. Some disyllabic verbs with low-rising tone pattern, such as kàtsěi 'small', also present this alternation: the perfective form of this stative verb is realized as nà-kàtséi-çì 'it became small'.

These alternations are observed both in running speech (recorded stories, as the one in the appendix) and isolated sentences. Therefore, it cannot be an effect of intonation.

Alternating verbs should be synchronically analyzed as a fourth lexical tonal class, distinct from both falling tone and rising tone, with a distinct underlying representation. However, an analysis in terms of H and L tones cannot easily account for the data presented above. Since falling and rising tone verbs have been respectively analyzed as H, HL and L in the previous section, we are left with only two possibilities: either to consider alternating verbs as underlying LH, or to suppose the existence of a contrast between L and underlyingly toneless verbs. ¹⁶

Proposing a category LH has one obvious advantage: we could unify the four tonal patterns found on monosyllables with those of disyllables shown in Table 4. However, the discussion in

¹⁶ One anonymous reviewer suggested that the alternation could be explained by assuming that the alternating verbs were LH underlyingly, with a leftward spread of the L tone on the prefix. He pointed out that such cases of leftward spread are attested in Pumi dialects (see for instance Ding 2001:76 concerning the ε- prefix with the kinship terms). However, one would still have to explain why LH spreads leftwards with some verbs, and rightwards with others, and why in HL verbs the H tone does not spread leftwards. Besides, allowing leftward spread in the verbal system would unduly increase the complexity of the analysis. We adopt here the idea that only rightward spread is allowed.

section 3 has already shown that LH would account poorly for the spreading rules observed when various suffixes are added to the verb stem.

The other alternative, which I will adopt in this article, is to hypothesize that of the alternating and non-alternating rising tone verbs, one category is toneless and receives a default low tone like affixes or sentence particles, and the second one has an underlying L tone. According to the analysis in section 3, we would expect a prefixed monosyllabic verb with underlying Low tone to have the surface form LLH:



Non-alternating verbs are therefore verbs with underlying L tone. With toneless verbs, on the other hand, the insertion of a high tone is not accounted for by the rules presented in section 3. The surface tonal pattern LHL looks as if the HL had been inserted on the toneless verbal stem (a simple H tone would not do, as it would result in an LHH pattern):

This process could be interpreted either as a kind of polarity.¹⁷ However, a simpler solution might be possible. As mentioned in section 3, a postlexical H tone must be inserted in all-low phonological words. Since toneless syllables are normally realized with a surface low tone, the high tone insertion would have to appear in a word whose syllables are all underlyingly toneless.¹⁸ To explain the LHL tone pattern, we only need to add two specifications to the postlexical High tone insertion rule:

- (i) In verbal forms where all syllables are underlyingly toneless, the postlexical H tone is inserted on last syllable of the morpheme that contains the second syllable, regardless whether it is an affix or a verbal stem.¹⁹
- (ii) Postlexical H tones cannot spread.

We need an additional rule to explain why toneless and Low tone verb stems share the same tonal patterns in non-prefixed verb forms:

(iii) In non-prefixed verb forms (when the verb stem is the first syllable of the phonological word), an L tone is inserted on toneless verbal stems.

Without rule (iii), we would expect the bare stem form to be realized with a high tone (13), and the form suffixed with -modoro to be realized as LLLH (14).



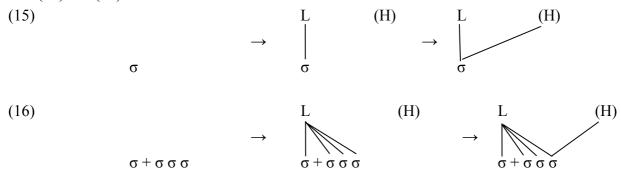
¹⁷ Presence of polarity in Pumi would be one further argument in favor of Evans' (2008:484-5) idea that Qiangic languages, including Pumi, present tonal features thought to be characteristic of African tone languages.

¹⁸ Note that in this hypothesis, toneless verb stems do not follow the same tone rules as toneless affixes or sentence particles.

¹⁹ In disyllabic verbal stems such as *n³-kàtséi-cì* "it became small' mentioned above, the high tone is placed on the second syllable.

$$\sigma + \sigma \sigma \sigma$$
 $\sigma + \sigma \sigma \sigma$

With rule (iii), the non-prefixed verbal forms of toneless stems are virtually identical to L tone stems as in (15) and (16):



These alternations have never been described for Pumi dialects with three tones, but similar phenomena have been mentioned by Matisoff (1997) and Fu (1998), who both worked on two-tone dialects. Matisoff (1997:209) presents the following data:

Table 14: Alternating verbs in Matisoff (1997).

Meaning	Basic form	Prefixed form
carry on shoulder	t ŭ	tá-t ú
collapse	p ^h yě	t ^h ə-p ^h yé
drop	d ľ	nə-d í
dry	ĸγŭ	tə-ĸүú
get	3d3ĭ	t3d3í / ε-3d3ĭ
hang	ş ŭ	tá-ş ú
hide	nŏN	t ^h ə-nớN
mislay	mĭ	t ^h ə-mí
pull out	łwě	tá-łwá / tʰə-łwǎ
rot	bd ʒ ĭ	nə-bdʒí
satiated	kwĭ	tð-kwí
sew	d ěi	tə-déi
take with one	zʒĎ	ná-zʒɒ́
understand	tşờ ʃĭ	tʰə-tʂờ-∫í
wear heat	twă	t ó -twá
wear clothes	gwĭ	t ó -gwí

Matisoff (1997:209-10) only briefly comments on this phenomenon: "In what appears to be the majority of cases, a verb under the low tone acquires the high tone after a directional prefix in Dayang [Pumi]". In the light of the Shuiluo Pumi data, it seems that Matisoff's examples actually conflate two distinct phenomena: the systematic high-tone assimilation of the 'up' prefix tá- on the one hand (these cases have been shaded in grey in the table) and the genuine tonal alternation occurring with all other directional prefixes (only seven examples in all).

Fu (1998:88-9) notices 21 verbs in her corpus which undergo tone change when a directional

prefix other than tó- is added. Her list includes the following (all tone 24, low rising tone):

Table 15: Alternating verbs in Fu (1998).

Meaning	Basic form	Meaning	Basic form
烂 rotten	b z i	换 change	3d3u
天阴 dark	d əuŋ	还 give back	ts ^h ue
(棍子)断 break	фэn	垮 collapse	bie
脱落 to get off	ga	撕 tear off	t ^h e
脱臼 dislocate	łi	卖 sell	∫t∫i
剩余 remain	xa	弄垮 cause to collapse	$p^{h}ie$
听见 hear	noŋ	拿 take	Jua
灭 destroy	go	送 give	∫t∫yn
采 pick up	$q^{h}\alpha$	跑 run	bzin
抽烟 smoke (= drink)	$t^{\mathrm{h}}in$	扔 throw	vba
连接 link	∫t∫ʰuɑ		

Several etyma are found in both Matisoff's and Fu's lists: "rot" and "collapse", but since their fieldwork research was based on entirely different wordlists, relatively few comparable etyma are found. By contrast, I collected vocabulary on Shuiluo and Mudiqing Pumi using the same basic list, and as a result find many common etyma between these two varieties, allowing a better evaluation of how stable the tonal alternation is across Pumi dialects. In my data, I find the following list of examples belonging to the fourth category:

Table 16: Alternating verbs in Shuiluo and Mudiqing Pumi.

	Shuiluo	Mudiqing
scoop	$oldsymbol{c}^{ ext{h}}oldsymbol{\check{ ilde{ ii}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	tşʰằ̃
leak	ζð	d z ě
ride	dzěi	dzěi
plant	lěi	lěi
wear (hat)	těi	těi
pour	t¢ĭ	
wear	gĭ	gǔ
remember	tṣž	
drink	$t^h \check{\tilde{1}}$	$t^{\mathrm{h}}i\check{\check{\mathrm{e}}}$
flee	tsʰŧ̇̃	
break	dzį̇̃	dzệ
light	z ť	dzĚ (no alternation)
fat	$ts^hw\check{\eth}$	ts ^h ə̂
flee		$p^h\check{\tilde{e}}$
fly		biě
run		dzĚ

bear on the back		kŭ
do		dzŭ
sell	çî	kĭ
hide	şû	tşŭ
understand		nỗ
use	zəzá	zǎ
obtain		rĭ
give		tçyễ

From this list, we observe that not all verbs are alternating in both dialects, even when we find cognates. Five exceptions are found (out of 13 verbs with cognates in both dialects). In Mudiqing there are two falling tone verbs $dz\tilde{e}$ 'break' and $ts^h\hat{e}$ 'fat' corresponding to alternating tone verbs in Shuiluo, and one rising tone verb $dz\tilde{e}$ 'light' without alternation (past $k^h\hat{e}-dz\tilde{e}-c\hat{i}$) whereas its cognate in Shuiluo has alternation. Similarly, in Shuiluo we find two falling tone verbs $c\hat{i}$ 'sell' and $s\hat{u}$ 'hide' corresponding to alternating verbs in Mudiqing.

The tonal correspondences are even more complex if Fu's (1998) data are taken into consideration. Although a few items in her list correspond to alternating verbs in Shuiluo or Mudiqing ('give', 'hear' = 'understand', 'smoke' = 'drink'), in other cases they correspond to falling tone verbs, for instance ts^hue²⁴ 'give back', whose cognates are ts^hwê in Shuiluo and ts^hwî in Mudiqing.

These puzzling exceptions can be accounted for by supposing a process of analogical leveling at the expense of the alternating verbs: alternating verbs, which are much less numerous than either rising tone or falling tone verbs, tend to become falling tone verbs (or in one case, a rising tone verb) by generalizing the surface tone found on the prefixed verbal forms. In this hypothesis, whenever a verb has tonal alternation in any Pumi dialect, regardless of the fact that other dialects may have falling tone in the corresponding etymon, the verb in question ought to be reconstructed in proto-Pumi as belonging to the fourth tonal category, that is alternating verbs.

We find no cases of a correspondence between a high tone verb and an alternating verb across dialects, ²⁰ and this is expected since alternation verbs never behave like high-tone verbs either in prefixed and non-prefixed form; an analogical change from high-tone to alternating or vice-versa would not be motivated phonetically.

In summary, for the Northern Pumi dialects under investigation, I propose that we must distinguish four, not three tonal classes on monosyllabic verbs:

Table 17: Monosyllabic verbs.

toneless	Basic form	Perfective 1sg	meaning
Н	pá	n³-pá-sấ	to dig
HL	kô	nà-kó-sằ	to win
L	bǔ	กร้-bù-sấ์	to bury
toneless	gť	nà-gí-sầ	to wear

For disyllabic verb stems, we find five tonal categories:

Table 18: Disyllabic verbs.

²⁰ As was pointed out by an anonymous reviewers.

tone	Basic form	Perfective 1sg (or 3sg)	meaning
LH	règí	hà-règí-sằ	to hug
Н	çúwá	nià-çúwá-sằ	to wring
HL	t¢éşwà	kʰà-t¢ɛ́şwà-sằ	to throw
L	кọqо́	kʰð-ʁòdò-sấ	to step across
toneless	kètsěi	nà-kètséi-çì	to be small

No direct evidence of a toneless category has been found in either monosyllabic or disyllabic nouns, which seem to lack this kind of tonal alternation at least in Shuiluo Pumi, but traces of it could potentially be found in seemingly irregular nominal compounds (such as those mentioned in section 2). No definite historical explanation for this phenomenon can be given until the issue of Pumi tonogenesis has been properly addressed. This topic lies beyond the scope of this paper, as it would require a systematic comparison with other Qiangic languages.

5.2 The verb 'to go'

When a monosyllabic verb is suffixed with the non-egophoric form \$\hat{3}\$ of the verb 'to go', this verb undergoes unusual tone changes:

Table 19: Tonal alternations with the verb "to go".

Basic form	Suffixed with the verb 'to go'	expected	meaning
dzấ	dzấ-şấ-mádárá	*dzấ-şấ-màdàrà	went to sit
tô	tó-ṣầ-màdàrà	id.	went to see
z ð	zð-şấ-mádárá	*zə̀-şɔ̃́-mə̀də̀rə̀	went to sleep

When the basic verb is high tone, the tone of $\$\hat{\vartheta}$ is assimilated, and the high tone propagates again onto the suffix, quite unlike the high tone of the directional tá-, which, as we have seen, cannot propagate across more than one morpheme boundary.

When the verb is falling tone, $\xi \hat{\vartheta}$ becomes low-toned, and so does the following prefix. This form is expected from the rules proposed in section 2:

(17)
$$\begin{array}{ccc} HL (HL) & HL (HL) \\ & \downarrow & & \\ g+g+ggg & & g+g+ggg \end{array}$$

Finally, when the preceding verb is in the rising tone, we observe an entirely unexpected alternation: $\$\hat{\vartheta}$ becomes high tone, and this high tone spreads onto the following suffix. No matter which underlying representation one chooses for $\$\hat{\vartheta}$, one cannot explain this phenomenon. Even assuming that $\$\hat{\vartheta}$ were a toneless stem for instance, one would expect L-L-LLR $*z\hat{\vartheta}$ - $\$\hat{\vartheta}$ -m $\hat{\vartheta}$ d $\hat{\vartheta}$ r $\hat{\vartheta}$, not L-H-HHH.

As with the preceding alternation, I have no theoretical analysis to propose that would solve this problem. In present-day Shuiluo Pumi, this verb is highly irregular: it has four unpredictable forms ¢ô- (basic form) ¢ŏ- (egophoric with directional prefixes), §ô (non-egophoric) and ¢ô

(imperative).²¹ Whether these unpredictable forms are the result of preservation of ancient alternations or secondary idiosyncrasies must be left for future investigations.

6. Conclusion

This article has documented and analyzed several tonal alternations in the verbal system of Shuiluo Pumi. It demonstrated that four tonal classes must be distinguished for monosyllabic verbs, and five for disyllabic verbs. The issue of tonal alternations in noun phrases (including tri- and quadric-syllabic nominal compounds), and of the effect of intonation on tone realization is left for further research. An important issue would be to determine whether evidence for the contrast between toneless vs. L tonal classes found in verbal morphology can be brought to light in the domain of nominal morphology.

Properly understanding the alternation patterns of Pumi is not only of interest for historical linguistics and theoretical phonology, it also has a considerable practical importance for transcribing Pumi stories correctly, as is illustrated in the excerpt from a Pumi traditional story presented in the Appendix.

16

²¹ Most of these forms are attested in the story in the appendix.

Appendix: A sample story in Shuiluo Pumi²²

The glosses generally follow the Leipzig Glossing Rules, except for the following:

agentive **AGENT ASSER** assertive Т egophoric **EGO** modal MOD narrative NAR non-egophoric N.EGO oblique OBL VOL volitive simultaneous SIMULT

Clitics, indicated by = rather than -, differ from genuine suffixes in that only the rising tone can spread on them, the high tone cannot spread rightwards on clitics in this variety of Pumi, unlike in the variety described by Ding (2003).

The story of the one who made divination with a pig head.

02 hmž gjeljě úní
$$= k^h$$
je dz $\hat{\epsilon}$ -mədərə hmž **gjèljě** úní $= k^h$ jè dz $\hat{\epsilon}$ -mədərə beg while this_way time go-NAR He was begging around.

²² A partially similar story is found in the Tibetan *ro-sgrung* cycle (Robin and Klu-rgyal 2005:177-193). This story was recorded from Ngag-dbang in Muli in February 2009. We present here only one fourth of the entire story, for want of space. The recording will be made available on the LACITO Archive (http://lacito.vjf.cnrs.fr/archivage/) eventually.

One day, he arrived at a place where there was a household of yak herders.

04
$$rw\hat{s}$$
- t i- $h\tilde{o}b\check{a}$ \check{u} - bje $rw\hat{s}$ $ts\acute{o}$ - $r\ddot{o}$ $=k^hj\epsilon$ $z\hat{\epsilon}$ - $m\ddot{o}d\ddot{o}r\ddot{o}$ $rw\hat{s}$ - t i- t

06 utí
$$rw\hat{s}$$
- t i- $h\tilde{o}b\check{a}$ $rw\hat{s}$ $ts\acute{o}$ - t cwi $p^h\check{a}=w\tilde{o}$ t i- t i-

07 rǐ
$$gap^h$$
á n3-yâ $=nj\epsilon$ $=bo$
rǐ $gàp^h$ á n3-yâ $=nj$ è $=b$ ò
turquoise one_half PFV:DOWN-fall $=AGEN$ $=TO$

one half of her turquoise pendant fell down.

09 kí=wõ nз-tçĩ =
$$\mathbf{k}^{h}$$
jɛ tsấ \mathbf{k} í=wồ nз-tçĩ = \mathbf{k}^{h} jè tsấ pasture-LOC PFV:DOWN-fall when he

She did not notice it when it fell on the grass.

10
$$t3-t\S^h\check{\tilde{\epsilon}}$$
 = bo $rw\hat{s}$ = $nj\hat{\epsilon}$ $x\hat{e}i$ $t3-p\check{s}$ $t\acute{s}-t\S^h\check{\tilde{\epsilon}}$ = bò $rw\hat{s}$ = $nj\hat{\epsilon}$ $x\hat{e}i$ $t\mathring{s}-p\mathring{s}$

one-moment = TOP yak = AGENT dung one-CL

$$ts\tilde{a}$$
 = t ì rì = k hú n³- x < w >eì-mèdèrě $ts\tilde{a}$ = t i rǐ = k hu n³- x < w >eǐ-mədərə

he = this turquoise = on PFV:DOWN-defecate < N.EGO:VOL > -NAR

At that moment, the yak defecated on her turquoise.

11 utí hm
$$\tilde{i}$$
 = mə = ti t \tilde{a} -mədərə u-tí hm \tilde{i} = m \tilde{a} = tì t \tilde{a} -mədərə this beg = NMLZ this see-NAR

The beggar saw it.

12 t3bó t3-t
$$\S^h\check{\epsilon}$$
 rw3 tsó tshá = $k^hj\epsilon$ = bo t3bó t3-t $\S^h\check{\epsilon}$ rw3 tsó tshá = $k^hj\dot{\epsilon}$ = bò now one-moment yak milk end when TOP After a while, as she finished milking her yak,

13 rw
$$\hat{\textbf{3}}$$
- $\mathring{\textbf{4}}$ ĭ- $\mathring{\textbf{h}}$ õb $\mathring{\textbf{a}}$ $\mathring{\textbf{n}}$ e $\mathring{\textbf{b}}$ $\mathring{\textbf{i}}$ u = po $\mathring{\textbf{h}}$ 3-z $\hat{\textbf{a}}$ = $\mathring{\textbf{k}}$ $\mathring{\textbf{h}}$ j $\hat{\textbf{c}}$ = bo rw $\hat{\textbf{3}}$ - $\mathring{\textbf{4}}$ f- $\mathring{\textbf{h}}$ õb $\mathring{\textbf{a}}$ $\mathring{\textbf{n}}$ e $\mathring{\textbf{b}}$ $\mathring{\textbf{h}}$ i $\mathring{\textbf{d}}$ u = pó $\mathring{\textbf{h}}$ 3-z $\mathring{\textbf{a}}$ = $\mathring{\textbf{k}}$ $\mathring{\textbf{h}}$ j $\mathring{\textbf{c}}$ = b $\mathring{\textbf{o}}$ yak herd girl milk tent = under PFV:IN-take = when = TO

the shepherdess took the milk to her tent.

təbo, hmǐ-ṣɔ̃-mədərə t**àbò hmĩ-ṣɔ̃-mədərɔ́** then beg-go-NAR

The beggar went inside her house to beg.²³

15 "tɜbó bêi tɜ-kʰwǎ sĩtçʰě tɜ-zɪ́ çʰě-ku tàbó bêi tɜ-kʰwǎ sr̂tçʰě tɜ-zɪ́ çʰè-kú now rice one-bowl breakfast one-CL feed-IMP
$$t^h 3z ilde{\epsilon} hm \check{t}-ku" tc < w > 5-mədərə$$

²³ This sentence shows an example of the alternation treated in section 5.2. Note also the irregular form h₃-ç₅ of the verb "to go".

 t^h àzê hmữ-kú" tç < w > à-màdàrð

thank_you beg-IMP say < N.EGO: VOL > -NAR

He said, 'Please, give me a bowl of rice for breakfast.'

16
$$\check{\mathbf{u}} = \mathbf{k}^{\mathbf{h}} \mathbf{j} \epsilon$$
 məkəbə = nj ϵ bêi tá-z $\check{\mathbf{i}}$ tha- $\mathbf{c}^{\mathbf{h}} < \mathbf{w} > \check{\mathbf{e}}$ -mədərə $\check{\mathbf{u}} = \mathbf{k}^{\mathbf{h}} \mathbf{j} \dot{\boldsymbol{\epsilon}}$ məkəbə = nj $\check{\mathbf{e}}$ bêi tá-z $\check{\mathbf{i}}$ tha- $\mathbf{c}^{\mathbf{h}} < \mathbf{w} > \check{\mathbf{e}}$ -mədərə

that-time family = AGEN rice one-CL PFV-feed < N.EGO:VOL > -NAR

T

Then, the people from this family gave him a meal.

17
$$ts\hat{a}$$
 $b\hat{e}i$ $dz\hat{a}$ -tçui $p^h\check{a}=w\~{o}$ $ts^h\hat{a}$ $=k^hj\epsilon$ $=bo$ $ts\hat{a}$ $b\hat{e}i$ $dz\acute{a}$ -tçuì $p^h\grave{a}=w\~{o}$ $ts^h\hat{a}$ $=k^hj\grave{e}$ $=b\grave{o}$ he rice eat-PROG half-LOC time $=when$ $=TO$

As he was halfway through his meal,

xá kǔ-mədərə xá **kù-mədərə**

understand understand-NAR

The shepherdess noticed that her turquoise pendant was missing.

19 "tɜbó â = ti rǐ ú-ní
$$p^h$$
ǔ $nj\hat{\epsilon} = ma$
tàbó â = tì rǐ ú-ní p^h ǔ $nj\hat{\epsilon} = ma$
now me = this turquoise this_way price valuable = NMLZ

$$= d\vartheta = k^h j \varepsilon,$$

$$= d\vartheta = k^h j \varepsilon,$$

$$= COP = when$$

tṩ̃-mədərə

tşì-mədərə

^{&#}x27;My turquoise is so valuable,

think-NAR

now, it is lost, what can I do?", she thought.

21
$$\text{m\'ec} < \text{w} > \text{\'e}\text{-m\'ed}$$
 $\text{d\'ec} = \text{w\~o}$ $\text{hi\'u} = \text{w\~o}$ lj\~alja $\text{m\'ec} < \text{w} > \text{\'e}\text{-m\'ed}$ $\text{t\'e\'e} = \text{w\~o}$ $\text{hi\'u} = \text{w\~o}$ lj\~alj\~a $\text{search} < \text{N.EGO:VOL} > \text{-NAR}$ house- LOC tent-LOC all

 $m \acute{s} \leqslant w > \acute{\epsilon}$ -mədərə

search < N.EGO:VOL >-NAR

She searched for everywhere in the house, in the tent,

The turquoise was lost.

25 â rǐ ú-ní
$$ts^hwi=m\vartheta=d\vartheta=k^hj\epsilon$$

â rǐ ú-ní $ts^hwi=m\vartheta=d\vartheta=k^hj\epsilon$
I $turquoise$ $this_way$ $good=NMLZ=CO=when$

t3bó nj3-mî-şã **t3bó nj3-mí-şã** now PFV-disappear-N.EGO

"My turquoise was so beautiful, and it is lost.

26
$$t c^h \acute{a} p \acute{a}$$
 $n \vec{3} - dz \hat{\vec{a}} - \vec{s} \vec{\hat{o}}$ $t c \breve{o}$ = təbo xwéi-tcétcé-mədərə $t c^h \acute{a} p \acute{a}$ $n \vec{3} - dz \hat{\vec{a}} - \vec{s} \vec{\hat{o}}$ $t c \breve{o}$ = təbo xwéi-tcétcé-mədərə

waste PFV-become-N.EGO say = then cry-about_to-NAR What a waste!" she said, and was about to cry.

tc < w > ð- mədərə

tç < w > à- màdàrǎ

say < N.EGO: VOL > -NAR

wouldn't you know how to practice divination, by any chance ?"

29
$$\check{\mathbf{u}} = k^h j \epsilon$$
 = bo utí hm $\check{\mathbf{n}} = m \circ$ = nj ϵ "pá r $\hat{\mathbf{u}}$ = $k^h j \acute{\epsilon}$ = b $\hat{\mathbf{o}}$ ùtí hm $\check{\mathbf{m}} = m \acute{\bullet}$ = nj $\hat{\mathbf{e}}$ "pá r $\hat{\mathbf{u}}$ this_time = TOP this beg = NMLZ = AGEN divination divinate

hálốti= bo
$$\mathfrak{y}\hat{u}$$
"tç < w > ě-mədərəhálốtì= bò $\mathfrak{y}\hat{u}$ "tç < w > è-mèdèrěa_little= TOPknowsay < N.EGO:VOL > -NAR

Then the beggar said "I know divination a little."

30
$$ts\tilde{a}$$
 $pədzí$ $rw\hat{a}-x\hat{e}i$ $=p\check{a}$ $=po$ $r\check{i}$ $\check{u}=po$ $ts\tilde{a}$ $p\grave{e}dzí$ $rw\hat{a}-x\acute{e}i$ $=p\acute{a}$ $=p\acute{o}$ $r\check{i}$ $\check{u}=p\acute{o}$ he just_before yak-dung $=CL$ $=under$ turquoise it=under

Just before, he had seen the turquoise going under the yak dung.

31
$$ts\tilde{a}$$
 $gj\tilde{a}=w\tilde{o}$ $xw\hat{s}$ = po dzwá tṣǎ-mədərə $ts\tilde{a}$ $gj\tilde{a}=w\tilde{o}$ $xw\hat{s}$ = pò dzwá tṣà-mèdèrě he heart=LOC heart = under smooth very-NAR He was not worried at all.

33 nãdj
$$\acute{\epsilon}$$
 that $\acute{\epsilon}$ nj $\acute{\epsilon}$ pá tì rú-kù then please you = AGEN divination a_little divinate-IMP

34 nj
$$\hat{a}$$
 mj $\hat{\epsilon}$ k^hŭ la ă-bə k^hĩ-şa bo nj \hat{a} mj $\hat{\epsilon}$ k^hŭ **là à-b k^hĩ-şá** bò you what need all my-house give-FUT TOP we will provide you with anything you need,

35 nj
$$\hat{\rho}$$
 pá r \hat{u} = $k^h j \hat{\epsilon}$ mj $\hat{\epsilon}$ ti $k^h \check{u}$ w $\hat{\delta}$, nj $\hat{\rho}$ pá r \hat{u} = $k^h j \hat{\epsilon}$ mj $\hat{\epsilon}$ tì $k^h \check{u}$ w $\hat{\delta}$, you divination divinate = when what a_little need modal pá r \hat{u} -s $\hat{\delta}$ mj $\hat{\epsilon}$ kh \check{u} w $\hat{\delta}$ '' pá r \hat{u} -s $\hat{\delta}$ mj $\hat{\epsilon}$ kh \check{u} w $\hat{\delta}$ '' divination divinate-NMLZ:OBL what need modal

 $tc < w > \check{a}$ -mədərə

tç < w > à-màdàrǎ

say < N.EGO: VOL > -NAR

whatever you need when you divinate, whatever you use to divinate."

what

hmi̇̃-mə 36 utí ti tsá tséi-mədərə hmì-má ùtí tì tsá tséi-módóró beg-NMLZ this this meat want_to_eat-NAR

The beggar wanted to eat meat.

k^hətí k^h ŭ mǎ-wô 37 pá rû-sỹ bo tanjě bo rú-sề k^hàtí k^h ŭ mà-wố pá bò tànjě bò divination divinate-NMLZ:OBL TOP other some need **NEG-modal** TOP "To do divination, I don't need anything else,

[&]quot;In this case, please make a divination,

- ǎ-kʰž̃ ts3khuð tjá-jấ dzå-kei 38 bo à-kʰí́ tsàk^huð tjá-jấ dzầ-kéi bò one-CL Q-give TOP fine-OPT pig_head if you give me the head of a pig, it will be just fine.
- 39 tsak^hwě tjá-jấ jš" tç < w > ě-mədərə
 tsàk^hwě tjá-jấ jš" tç < w > è-mèdèrě
 pig_head one-CL bring say < N.EGO:VOL > -NAR
 Bring me a pig's head,
- 40 ts3khwě tjá-jấ khử" tç<w>ð-mədərə
 ts3khwě tjá-jấ khử" tç<w>ð-mèdèrě
 pig_head one-CL need say<N.EGO:VOL>-NAR
 I need a pig's head."
- "áláçi" tṣʰấ́ $=k^hj\epsilon$ $tsзk^hw$ ў 41 $tc < w > \check{a}$ -mədərə tsʰấ́ $=k^hj\hat{\epsilon}$ álácì tc<w>à-màdàrǎ tsàk^hwð thank_you say < N.EGO: VOL > -NAR quick = when pig head

tj \acute{a} -j \acute{a} ts \acute{a} -bje t h 3-k h <w> \mathring{i} -mədərə tj \acute{a} -j \acute{a} ts \acute{a} -bj \acute{e} t h 3-k h <w> \mathring{i} -mədər \mathring{o} one-CL he-DAT PFV-give < N.EGO:VOL > -NAR

They said "Thank you", and immediately gave him a pig's head.

42 tsấ tsзk^huð-bje tзbó =nj ε sзkзradzwí tá-tsá tsấ tàbó ts3khu3-bjé sàkàràdzwí tá-tsá =nj $\hat{\epsilon}$ he = AGEN pig_head-DAT wood_stick one-CL now T

 h3-tsî
 təbo

 h3-tsî
 tàbò

 PFV-insert
 then

Then, he inserted a wood stick into the pig head,

- ts3khuð hз-s^hwěi ŭ-k^hu 43 təbo hз-tsî təbo tsàk^huð hà-shwěi ù-k^hú tàbò hà-tsî tàbò PFV-pierce then this-above pig head **PFV-insert** then he pierced the pig head, and inserted (the wood stick) into it.
- 44 tabó gutố = wõ páró-mədərə

tàbó gùtố=wồ pớró-màdàrà now hearth-LOC burn-NAR Then, he cooked it on the hearth.

- 45 tstcĭ k^hətí swǎ-rõ ·····' $tc < w > \check{o}$ -mədərə ··...; tstçĭ k^hətí swà-rố tç < w > à-màdàrǎ also some recite-DUR say < N.EGO: VOL > -NAR He also recited something like "....",
- 46 swă-ji tsấ-bje mă-bô-mədərə bo tjŏ la tsấ-bjé mà-bố-màdàrà tjŏ swà-jí bò là NEG-be there-NAR recite-NMLZ:MOD he-DAT all TOP any it was not at all what had to be recited.
- 47 xaswaməswá pê tşâ pâ-mədərə
 xàswàmèswá pê tşâ pá-mèdèrè
 recite_nonsense do trick do:N.EGO:VOL-NAR
 He was reciting nonsense, deceiving them.
- ts3khw3 t^hjě hmť-rə ts^hŝ 48 tзbó bo hmì̇̀-rə́ tàbó tsàk^hwě thiě ts^hŝ bò pig head almost cooked-PROG time now TOP As the pig head was about to be cooked,
- 49 ts3khw3 kзradzwí $=k^h u$ diẫ-mədərə, k^hə-tsŏ təbo utí tsàk^hwð kàràdzwí $=k^h \hat{u}$ djấ-màdàrà, k^hà-tsŏ tèbò ùtí pig_head stick =on be_there-NAR PFV-take_out this then he took out the pig head from the stick where it was.
- kô 50 swǎ-rã bo lwš рŝ nã kô swà-rấ nà bò lwš рŝ recite-SIMULT do etc valley thrust TOP

jấ lwờ pâ-mədərə jấ lwờ **pá-m**əd**ðrð**

mountain crest thrust do:N.EGO:VOL-NAR

While he was reciting, he thrust (the stick) around in a disorderly way.

51 hj
$$\check{\mathbf{u}} = \mathbf{w}\tilde{\mathbf{o}}$$
 təra, g $\check{\mathbf{o}}$ təra, t $\check{\mathbf{o}}$ -bjie t $\check{\mathbf{o}}$ -l $\mathbf{w}\check{\mathbf{o}}$
hj $\check{\mathbf{u}} = \mathbf{w}\check{\mathbf{o}}$ t $\check{\mathbf{o}}$ -t $\check{\mathbf{o}}$, g $\check{\mathbf{o}}$ t $\check{\mathbf{o}}$ -t $\check{\mathbf{o}}$, t $\check{\mathbf{o}}$ -bj $\check{\mathbf{e}}$ t $\check{\mathbf{o}}$ -l $\check{\mathbf{w}}\check{\mathbf{o}}$
tent = LOC these:GE inside these:GE here one-thrust

He thrust it in all directions, towards the inside of the tent, towards the outside, on the altar,

52
$$\check{\mathbf{u}} = \mathbf{po}$$
 $kj\check{\mathbf{a}}$ $z\hat{\mathbf{e}}$ -bje t3-lw $\check{\mathbf{e}}$, $\check{\mathbf{u}}$ ní $= k^h j \varepsilon$
 $\check{\mathbf{u}} = \mathbf{po}$ $kj\check{\mathbf{a}}$ $z\acute{\mathbf{e}}$ -bj $\check{\mathbf{e}}$ $t\grave{\mathbf{e}}$ -lw $\check{\mathbf{e}}$, $\check{\mathbf{u}}$ ní $= k^h j \check{\mathbf{e}}$
 $it = under$ door corner-DAT one-thrust this_way = time

He thrust it on the corner of the door.

After a while, as he knew that the turquoise was under the yak dung,

54 hjǔ kj
$$\check{a}$$
 = w \check{o} k^h \eth -lw $\check{\delta}$ k^h \eth -z \hat{i} ,

hjǔ kj \check{a} = w \check{o} k^h \eth -lw $\check{\delta}$ kh $\check{\delta}$ -z \hat{i} ,

tent door = LOC PFV:OUT-thrust PFV:OUT-come

$$ts^h \hat{i} = w \hat{o}$$
 $k^h \hat{o} - lw \hat{o}$ $k^h \hat{o} - z \hat{i}$ $= nj \epsilon$ bo $ts^h \hat{i} = w \hat{o}$ $k^h \hat{o} - lw \hat{o}$ $k^h \hat{o} - z \hat{i}$ $= nj \hat{e}$ bò pasture = LOC PFV:OUT-thrust PFV:OUT-come = AGEN TOP

T

he thrust it outside the tent, on the pasture.

55 rw3-xêi=rə =to la lw5-rõtçə

rwà-xéi-ró = tò là lwà-rồtcó

yak-dung-PL = on all thrust-pretend

He pretended to thrust it towards many yak dungs.

56 t_3 - t_5 h $\check{\tilde{\epsilon}}$ = $k^h j_{\epsilon}$ bo utí rw \hat{s} - $x\hat{e}i$ r \check{t}

tà-tş h ž = k h j $\dot{\epsilon}$ bò ùtí rwà-xéi rǐ

one-moment = when TOP this yak-dung turquoise

kwî-sẽ ti =to t3-lwě =nj ϵ bo

kwí-s $\dot{\tilde{z}}$ tì =tò t \dot{z} -lw \dot{z} =nj \dot{z} bò

be_there-NMLZ:OBL this = on one-thrust = AGENT TOP

After a while, he thrust it towards the yak dung where the turquoise was.

57 njô-bǎ rǐ təpǒ â-mə-kwî-rə ǎ"

njè-bǎ rǐ tèpǒ á-mè-kwí-rè ǎ"

you-house:GEN turquoise on_the_ground Q-NEG-be_there-PROG INT

tç < w > ð-mədərə

tç<w>à-màdàrǎ

say < N.EGO: VOL > -NAR

He said: "Isn't it your turquoise here on the ground?"

58 m3k3-b3 nj3-gj \check{u} = nj ϵ bo

тэкэ-bə́ пjэ-gjǔ = njè bò

house PFV-glad = AGEN TOP

T

The people of this house were very glad.

59 mskš-bě dzí njs-zû, njs-gjǔ = nj ε "álá ε i,

màkà-bá $dz\tilde{i}$ njà-zû, njà-gjǔ = njè áláçì

house true PFV-believe PFV-glad = AGEN thank you

T

 $t \circ s \circ t \circ h \circ t$ ni \hat{s} = bo m \hat{s} m \hat{s} -dz \hat{s} t \hat{t} d \hat{s} - \hat{s} - \hat{t} ,

 $t c \acute{o} sot c^h \acute{i}$ $ni \hat{e} = b \grave{o}$ $m \hat{e}$ $m \grave{a} - dz \hat{a}$ $t \check{i}$ $d \acute{e} - c \grave{i}$

my respects you = TO man NEG-same one COP-EVD

P

áláçi" $t\phi < w > \delta$ -mədərə áláçi $t\phi < w > \delta$ -mədərə

thank_you say < N.EGO: VOL > -NAR

These people believed it was true and said: "Thank you so much, how extraordinary, you are an uncommon man, thank you!"

tsấ 60 tзbó рá rû ηû-rə t¢š, tsấ tàbó pá rû ŋú-rè t¢š, divination divinate know-PROG now he say

médzá pá rû ŋû-rə tçě médzá pá rû **ŋú-rè** tçě poor_man divination divinate know-PROG say

They said that he knew divination, that the poor beggar knew divination.

61 ljowá-bje thз-lóz < w > э́-mədərə

ljòwá-bjé thà-lóz<w>á-mèdèrè

all-DAT PFV-tell < N.EGO: VOL > -NAR

They told everyone.

References

- Chirkova, Katia 2009. Shixing, a Sino-Tibetan language of South-West China: A grammatical sketch with two appended texts, *Linguistics of the Tibeto-Burman Area* 32.1:1-89
- Chirkova, Katia and Alexis Michaud 2009, Approaching the Prosodic system of Shixing, *Language* and *Linguistics* 10.3:539-568.
- Ding, Picus Sizhi 2001. The Pitch-accent system of Niuwozi Prinmi, *Linguistics of the Tibeto-Burman Area*, 24.2:57-83.
- Ding, Picus Sizhi 2003. Prinmi, in Graham Thurgood and Randy LaPolla (eds) *The Sino-Tibetan Languages*, London: Routledge, pp.558-601.
- Ding, Picus Sizhi 2006. A typological study of tonal systems of Japanese and Prinmi: Towards a definition of pitch-accent languages. *Journal of Universal Language* 7.1:1-35.
- Ding, Picus Sizhi 2007. The use of perception test in studying the tonal system of Prinmi dialects: a speaker-centered approach to descriptive linguistics. *Language Documentation and Conservation*, 1.2.
- Evans, Jonathan 2008. African Tone in the Sinosphere, Language and Linguistics, 9.3:463-490.
- Fu Ailan 1998. *Pumiyu dongci de yufa fanchou* [the categories of the Pumi verb], Beijing: Zhongguo wenshi chubanshe.
- Greif, Markus 2010. Tones and intonation in Prinmi a first survey, STUF, 63.3:221-251.
- Hyman, Larry M. 2007. Kuki-Thaadow: an African tone system in Southeast Asia. Berkeley: UC Berkeley. UC Berkeley Phonology Lab Annual Report. 1-19.
- Hyman, Larry. 2009. How (not) to do Phonological Typology: The Case of Pitch-Accent, *Language Sciences*, 31.2-3:213-238.
- Lu Shaozun 1983. *Pumivu jianzhi*. Beijing: Minzu chubanshe.
- Lu Shaozun 2001. Pumiyu fangyan yanjiu, Beijing: Minzu chubanshe.
- Matisoff, James A. 1997. Dayang Pumi phonology and adumbrations of comparative Qiangic. *Mon-Khmer Studies* 27:171-213.
- Michaud, Alexis 2008. Phonemic and tonal analysis of Yongning Na. *Cahiers de linguistique Asie Orientale* 37.2: 159-196
- Michaud, Alexis and Dashi Latami 2009. *A description of endangered phonemic oppositions in Mosuo (Yongning Na)*, paper presented at the Academic Session on Issues of Language Endangerment, 16th Int. Conf. of Anthropological and Ethnological Sciences (ICAES 2009), Kunming, China http://halshs.archives-ouvertes.fr/halshs-00512028/
- Robin, Françoise and Klu-rgyal Tshe-ring 2005. *Les contes facétieux du cadavre (mi ro rtse sgrung)*, Paris: L'asiathèque.
- Tournadre Nicolas 2008. Arguments against the Concept of 'Conjunct'/'Disjunct' in Tibetan, in Chomolangma, Demawend und Kasbek. Festschrift für Roland Bielmeier zu seinem 65. Geburtstag. B. Huber, M. Volkart, P. Widmer, P. Schwieger, (Eds), Vol 1. p. 281-308.
- Zhang Jie 2004 Contour Tone Licensing and Contour Tone Representation. *Language and Linguistics* 5.4: 925-968.