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Ekaterina Chirkova

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## Essential characteristics of Lizu, a Qiangic language of Western Sichuan<sup>1</sup>

Katia Chirkova (CRLAO, CNRS)

### 1. Introduction

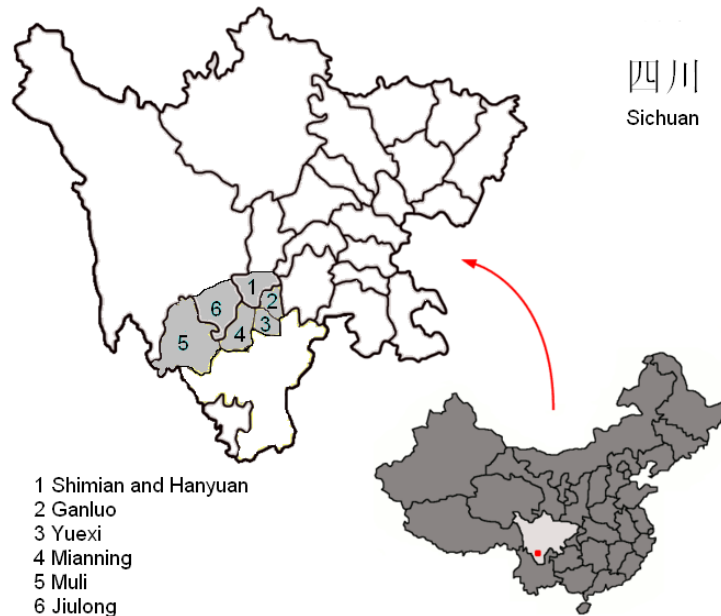
#### 1.1. The Lizu-Tosu-Ėrsū relationship and the Ėrsū language: Previous research and outstanding challenges

This paper reports on the Lizu language (Lisū 栗苏), as spoken by approximately 4,000 people who reside in Mùlǐ Tibetan Autonomous County 木里藏族自治县 (WT *smi li rang skyong rdzong*), which is part of Liángshān Yí Autonomous Prefecture 凉山彝族自治州 in Sìchuān Province 四川省 in the People's Republic of China.

In current scholarship on Sino-Tibetan linguistics, Lizu is held to be one of the three dialects of the Ėrsū 尔苏 language, as researched and described by Sūn Hóngkāi 孙宏开 in the early 1980s (Sūn 1982, 1983: 125-139). The remaining two dialects of Ėrsū are Tosu (Duōxù 多续) and Ėrsū proper. In this conception (Sūn 2001: 159), Ėrsū (in the totality of its dialects) is a language spoken by over 20,000 people in (i) the counties of Shímíán 石棉 and Hànyuán 汉源 of Yǎ'ān 雅安 municipality (1 on the Map); (ii) the counties of Gānlùò 甘洛, Yuèxī 越西, Miǎnníng 冕宁 and Mùlǐ 木里 of the Liángshān Yí Autonomous Prefecture (2 to 5, respectively, on the Map), and (iii) in the county of Jiǔlóng 九龙 of the Gānzī Tibetan Autonomous Region 甘孜藏族自治县 (6 on the Map), all in the province of Sìchuān.

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<sup>1</sup>The work reported in this study has been supported by the Agence Nationale de la Recherche (France) as part of the research project “What defines Qiang-ness? Towards a phylogenetic assessment of the Southern Qiangic languages of Muli” (ANR-07-JCJC-0063). I am thankful to my principal Lizu language consultant, Mr. Wáng Xuécái 王学才, for his work with me, for his enthusiasm for this project as well as for the warm welcome he gave me into the Lizu community. I am grateful to Sūn Hóngkai 孙宏开 and Huáng Xíng 黄行 of the Chinese Academy for Social Sciences, and to Mr. Lǚróng Duōdīng 鲁绒多丁 [Ldʒi-Hsɛ̃ Hlu-Hzũ Hto-Hdĩ] and the local authorities of Mùlǐ Tibetan Autonomous County, for support in the organization of my fieldwork in March-April 2008. I also thank Alexis Michaud for his assistance during recording sessions, useful post-recording exchanges as well as for his companionship during this stay in Mùlǐ.



Map 1. Location of the Ėrsū language (Map adapted from <http://sedac.ciesin.org/china/admin/bnd90/t5190.html>)

Of these dialects of the Ėrsū language, Ėrsū, spoken in Gānlùò, Yuèxī, Hànyuán and Shímíán counties, is the eastern dialect; Tosu, spoken in the counties of Mùlǐ and Jiǔlóng, is its central dialect; whereas Lizu is the western dialect of Ėrsū. All three names, Ėrsū, Lizu and Tosu are reported to mean ‘white people’, the joint autonym of the group. (Overall, this interpretation holds for Ėrsū and Lizu; but not in the case of Tosu. The precise meaning of “Tosu”, the autonym of the Tosu people, is currently unclear. It is in any case synchronically unrelated to the word for ‘white’ in this variety (Kristin Meier, p.c.). The second morpheme (*su* or *zu*) is in all cases the marker of agentive nominalization, ‘one who V’, as in Lizu, [ʰʂe-l-tsv=ʰsv] ‘ironsmith’, literally, ‘one who forges iron’.

While Sūn conducted fieldwork on all three dialects of the Ėrsū language, he released only his eastern dialect data (based on the Ėrsū variety of Gānlùò) in the form of a grammatical sketch (Sūn 1982, 1983) and a 1,000-item vocabulary list (Sūn et al. 1991).

The central dialect, Tosu, was studied by Nishida Tatsuo in the 1970s based on Chinese and Tibetan transcriptions of Tosu vocabularies recorded in the *Xīfān yìyǔ* 《西番译语》 [*Vocabularies of Western Barbarian languages*] during the Qiánlóng 乾隆 reign (1736-1796) of the Qīng 清 dynasty (Nishida 1973). In his later work, Nishida (1976, quoted from Bradley 1979: 16) suggests a close link between Tosu and Lolo-Burmese languages, on the one hand, and between Tosu and Tangut, on the other hand, proposing a separate Tangut-Tosu subgrouping within Lolo-Burmese. Further research on Tosu has until recently been unfeasible due to the complete absence of data. (To my knowledge, no field data on Tosu have even been published, except for a 30-item word-list in Nishida and Sūn 1990: 17.)

Finally, Lizu, the western dialect of the Ėrsū language (the variety spoken in the county of Mùlǐ: Kālā 卡拉乡 and Luǒbō Townships 倮波乡), has been investigated by Huáng Bùfán 黄布凡 and Rénzēng Wāngmǔ 仁增旺姆, who published a short grammatical sketch (Huáng and Rénzēng 1991) and a 1,800-word list (Huáng et al. 1992). Huáng and Rénzēng refer to the language-object of their study as [lɯ<sup>55</sup>zɯ<sup>53</sup>] (Lǚsū, 吕苏语) by the autonym of the people, [lɯ<sup>55</sup>zɯ<sup>53</sup>] ‘white people’.

In sum, little information on the three varieties is currently available. Sūn, the proponent of this grouping, notes that Ěrsū, Tosu and Lizu are not mutually intelligible and share only 50% cognacy (among a further unspecified word sample) (Nishida and Sūn 1990: 15). At the same time, Sūn stresses that salient structural similarities between the three varieties in all linguistic sub-systems leave no doubt that the three stand in a dialectal relationship to each other (Sūn 1982: 241). A comparison of available Ěrsū and Lūsū data and my Lizu data indeed suggests that the three are very similar in the lexicon and grammatical organization, as shown throughout the paper. Conversely, how exactly Tosu relates to Ěrsū, Lūsū and Lizu is less evident, due, again to the absence of data.

The Ěrsū language, with Ěrsū, Lizu and Tosu as its alleged dialects, is currently held to be a member of the southern branch of the putative Qiangic subgrouping within the Sino-Tibetan language family (Bradley 1997: 36-37, Thurgood 2003: 17). Notably, the Ěrsū language appears to occupy a prominent place among other southern Qiangic languages, as it constitutes a separate node (Ěrsū yúzǔ 尔苏语组), which comprises the Ěrsū, Nàmùyì 纳木义 and Shǐxīng 史兴 languages, as shown in Figure 1:

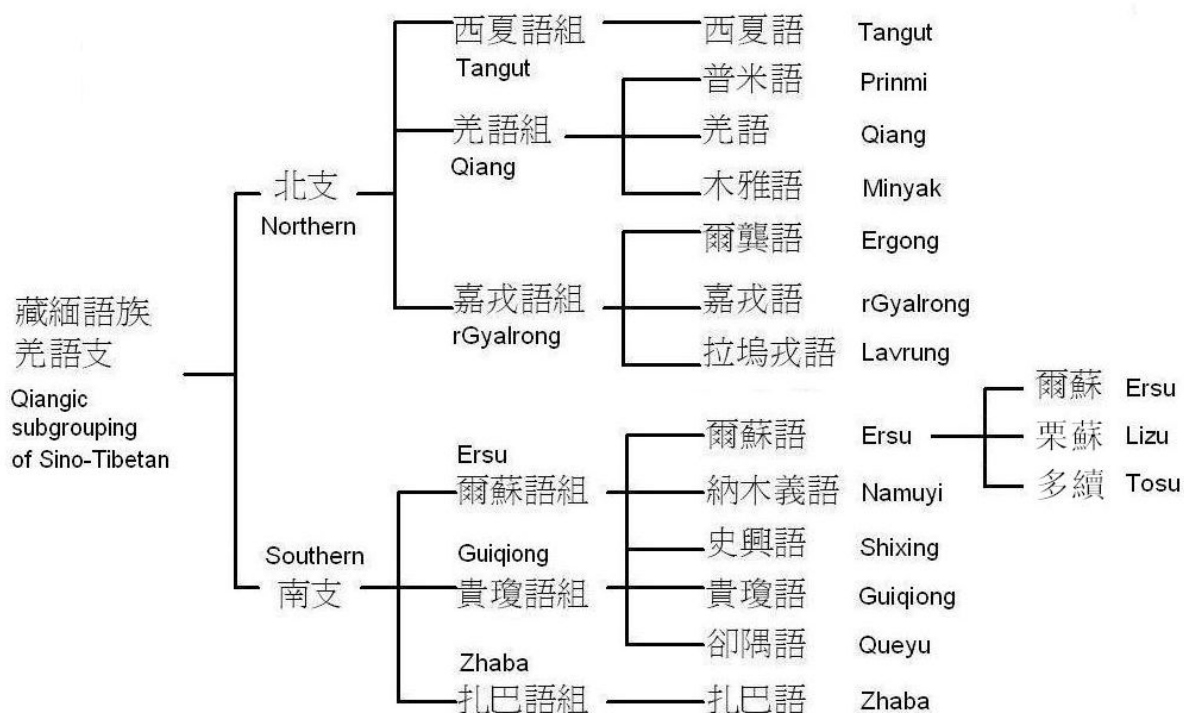


Figure 1: Qiangic subgrouping of the Sino-Tibetan language family (adapted from Sūn 2001: 160)

Overall, this grouping implies that the Ěrsū language possesses some special characteristics that are also shared by Nàmùyì and Shǐxīng and that set these three languages apart from other subgroupings within Qiangic. Unfortunately, the precise criteria underlying this grouping of Ěrsū, Nàmùyì and Shǐxīng in one node have never been made explicit. The lack of available data on these languages currently renders the hypothesis of a particularly close relationship that obtains between them unproven.

Recent years have witnessed an upsurge of interest in Qiangic languages and linguistics. Fieldwork research is presently carried on all three alleged dialects of the Ěrsū language (Sūn Hóngkāi on Ěrsū; Kristin Meier of Leiden University on Tosu; Dominic Yu of the University of California at Berkeley on the Miǎnníng variety of Lizu; and myself on the Mǔlǐ variety of Lizu) as well as on the Nàmùyì and Shǐxīng languages. Needless to say, more

data are bound to improve our understanding of the relationship between the said languages and to contribute to the evaluation of the tenability of the existing hypotheses: (i) Ěrsū-Tosu-Lizu as three dialects of a single language, and (ii) Ěrsū-Nāmùyì-Shǐxīng as one genetic node. The present outline of the essential characteristics of the Lizu variety spoken in Kǎlā Township of Mùlǐ county aims to contribute to these objectives.

## 1.2. Data sources and goals

This paper is based on a total of one and a half month of linguistic fieldwork on Lizu in the town of Qiáowǎ 乔瓦, the administrative seat of the Mùlǐ Tibetan Autonomous County, in March-April 2008. The language data and most of the background information have been provided by my principal language consultant Mr. Wáng Xuécái 王学才, Tibetan name [ʰsi-ʰnā ʰrē-ʰltɕʰi] (WT *bsod nams rin chen*), a native of the Kǎlā Township in Mùlǐ County. The Lizu variety of Kǎlā is closely related to that described in Huáng and Rénzēng (1991), Lǚsū. These two varieties essentially vary in their respective tonal make-up. For example: (in my transcriptions, [H] roughly corresponds to the tone value “55”, and [L] to “33” in Chao Yuen Ren tone letters) ‘horse’: Lizu [ʰnbə̃], Lǚsū [nbou<sup>35</sup>]; ‘colt’: Lizu [ʰnbə̃-ʰje], Lǚsū [nbou<sup>33</sup>jɐ<sup>53</sup>]; ‘onion’: Lizu [ʰfɿ-ʰbɿ], Lǚsū [fu<sup>33</sup>bu<sup>53</sup>].

This paper is a fieldwork report; that is to say that the provided analysis is constrained by and restricted to the recorded data (a 2,000-item word-list, five annotated and translated traditional stories, sentences elicited from Chinese) and the phenomena therein. In view of these limitations, this paper certainly does not aspire to provide an exhaustive account of the linguistic organization of Lizu. Neither is it conceived as an all-encompassing description of the collected data — in an effort not to double the information that equally applies to Lizu, Lǚsū and Ěrsū, but is already provided in Sūn (1982, 1983) and Huáng and Rénzēng (1991), e.g. the organization of the pronominal system, the expression of negation or the formation of questions. Instead, I concentrate on the analysis of Lizu nominal and verbal marking (postpositions and enclitics), i.e. tangible manifestation of its grammatical make-up. In this paper, I am primarily concerned with two questions: (i) what grammatical relations and grammatical features are encoded in Lizu; and (ii) by what means. In connection to the latter issue, I divide all discussed markers in sets based on the grammatical features that they encode and pay close attention to the internal organization of these sets: types of relationships that obtain between various markers: grammatical paradigms, if any, or any other kind of patterning (semantic, syntagmatic). These grammaticalized features together with their associated markers are set out for comparative purposes: (i) Lizu-Ěrsū-Tosu and (ii) Lizu-Nāmùyì-Shǐxīng, as outlined in §1.1.

The remainder of the paper is structured as follows. Section 2 provides general information on Lizu: location, origins, dialect variation and endangerment. Section 3 details Lizu phonetic, phonological and tonal make-up and presents the transcription system adopted in this study. Sections 4 and 5 focus on Lizu nominal and verbal marking, respectively. The paper is concluded by a preliminary comparison between Lizu, Lǚsū and Ěrsū, on the one hand, and Lizu and Shǐxīng, on the other, in section 6.

## 3. Lizu: General information

The geographical distribution of Lizu, as suggested by my language consultants, partially overlaps with that proposed for the Ěrsū language by Sūn, thus confirming Sūn’s claim of a continuum of closely related varieties, located between Yǎ’ān, Gānzī and Liángshān. According to my language consultants, the Lizu language is spoken in Jiǔlóng, Miǎnníng, Yuèxī and Mùlǐ (Kǎlā and Luǒbō Townships) by approximately 7,000 speakers.

According to the oral history of the group, the Lizu originate in the area near Chamdo 昌都 in Tibet. The tradition holds that they migrated to the areas of their current settlement roughly 15 generations ago. The migration route allegedly passed through Qīnghǎi 青海, Yuèxī, Miǎnníng and Luǒbō (a township at the border of the present-day Miǎnníng and Mùlǐ counties) and Mùlǐ, the latter being the most recent place of settlement.

The Lizu language is reportedly a dialect continuum, consisting of no less than 7 distinct varieties. Interestingly, the variety of the Nàmùyì language, spoken in Luǒbō Township of Mùlǐ, is considered by my language consultants as one of Lizu dialects. The seven dialects of Lizu (including Nàmùyì) are:

1. [ʰsæ-ʰtɕʰo ʰlpæ] ‘western dialect’, spoken in Kǎlā and Luǒbō Townships of Mùlǐ County. This is the native language of my principal language consultant, and the subject of the present description.
2. [ʰnbo-ʰlu ʰlpæ], Kǎlā Township, Mùlǐ County
3. [ʰngo-ʰræ ʰlpæ], Luǒbō Township, Mùlǐ County (Nàmùyì)
4. [ʰmi-ʰtɕʰu ʰlpæ], Miǎnníng County
5. [ʰsō-ʰdzi ʰlpæ], Yuèxī County
6. [ʰndzu-ʰji ʰlpæ], Jiǔlóng County
7. [ʰndzi-ʰsu ʰlpæ], Jiǔlóng County.

The autonym of the Lizu means ‘white people’. In fact, my principal language consultant vacillated between two forms of this name: [ʰli-ʰzu] and [ʰly-ʰzu]. In my analysis, this variation is likely to be due to the sound change of the word for ‘white’ from /li/ to /lju/ in his dialect (‘white’ in the Lizu of Mùlǐ is [ʰlju]).<sup>2</sup> Consequently, the word for ‘white’ in [ʰsæ-ʰtɕʰo ʰlpæ] no longer matches the morpheme ‘white’ in the autonym, viz. /li/ in [ʰli-ʰzu], with the result that it is at times hypercorrected to /lju/, i.e. [ʰlju-ʰzu].

Among the seven Lizu dialects, [ʰndzu-ʰji ʰlpæ] deserves a special note. Jiǔlóng County, where this dialect is spoken, is the scene of action of many a traditional Lizu stories. The protagonists of these stories are consequently locals of Jiǔlóng and speak [ʰndzu-ʰji ʰlpæ] as their native dialect. Therefore, whenever a character in a traditional story is quoted literally, my language consultants use [ʰndzu-ʰji ʰlpæ], despite the fact that the story is narrated in [ʰsæ-ʰtɕʰo ʰlpæ]. Such quotations give a glimpse of the diversity of Lizu, as salient phonological, lexical and grammatical differences obtain between [ʰndzu-ʰji ʰlpæ] (at least in the rendering of my language consultants) and [ʰsæ-ʰtɕʰo ʰlpæ], the Lizu variety-object of this study. Consider the following sentence quoted from the story “The Pata-tree, a witch and

<sup>2</sup> That Lizu [y] in some cases developed through the diphthongization of /i/ is supported by Huáng and Rénzēng’s (1991: 137) observation of a free variation between [i] and [iu] before the initial l- in Lǔsū, e.g. [ku<sup>33</sup>liu<sup>53</sup>] vs. [ku<sup>33</sup>li<sup>53</sup>] ‘donkey’. Interestingly, Lǔsū [li]~[liu] in some occasions interplays with Lizu [ə], e.g. ‘donkey’: Lǔsū [ku<sup>33</sup>li<sup>53</sup>] ~ [ku<sup>33</sup>liu<sup>53</sup>] vs. Lizu [ʰku-ʰlɛ]; whereas Lizu combinations of the initial l- with the high front vowel /i/ or the glide -j- interplay with Ěrsū [ə], e.g. ‘white’: Lizu [ʰlju], Ěrsū [ə<sup>55</sup>]; the autonym of the group: Lizu [ʰli-ʰzu], Ěrsū [ə<sup>55</sup>su<sup>55</sup>]; ‘rob, loot’: Lizu [ʰlju], Ěrsū [ə<sup>55</sup>]; ‘wind’: Lizu [ʰme-ʰlje], Ěrsū [mɛ<sup>55</sup>ə<sup>55</sup>]; ‘crow’: Lizu [ʰqwa-ʰlje], Ěrsū [ka<sup>33</sup>ə<sup>55</sup>]; ‘ashes’: Lizu [ʰli], Ěrsū [ə<sup>55</sup>].

a clever little girl”; the upper transcription line represents [ʰsæ-ʰtɕʰo ʰlpæ], the second transcription line — [ʰndzu-ʰji ʰlpæ]:

- (1)    ʰme    ʰne-ʰnde,                    ʰngwæ    ʰze    ʰge.  
          ʰmi    ʰtɕʰa                        ʰrua       ʰtɕu  
          sky   downward-clear   rain       fall       N-CTRL

‘The sky is clear, but it’s raining.’

The Lizu people of Mùlǐ reside among the Chinese, and have essentially adopted their lifestyle and customs. Most Lizu’s are bilingual in Chinese and their language has numerous Chinese loanwords, especially in the cultural lexicon, e.g. [ʰtv] ‘beans’ (*dòu* 豆), [ʰtɕa-ʰtã] ‘yoke’ (*jiādàn* 枷档/枷担), [ʰciã-ʰciã] ‘box’ (*xiāng* 箱).<sup>3</sup> The Lizu’s of Mùlǐ are also in close contact with the Prinmi, the local ethnic majority, and many Lizu’s are also fluent in this language. The Lizu practice Tibetan Buddhism along with local shamanist religions, and their language also has some Tibetan loanwords, either adopted through Prinmi or borrowed directly from the local varieties of the Tibetan language, e.g. [ʰnba] ‘mask’ (WT *bag*, [mba<sup>55</sup>] in the local Tibetan dialect, Kami Tibetan), [ʰsi-ʰnge] ‘lion’ (WT *seng ge*, Kami Tibetan [si<sup>55</sup>ngi<sup>55</sup>]).

Lizu is an endangered language due to the decreasing number of fluent speakers and the ongoing shift towards Chinese. The younger generation speaks Lizu increasingly less, preferring Chinese instead for interpersonal communication. Inter marriages of the Lizu with other ethnic groups are on the increase, and mixed couples often adopt a third language for family communication, mostly Prinmi or Chinese, so that Lizu is not passed on to children as a result. Finally, the pressure from Chinese intensifies progressively, good proficiency in Chinese being valued as a necessary precondition for success in seeking employment and education opportunities.

Fortunately, Lizu seniors, with whom I came in contact, are highly aware of the value of their language and culture and are convinced of the necessity to keep them alive, despite the aforementioned negative trends. The Lizu as spoken in Mùlǐ is relatively robust, and even coins neologisms, such as [ʰzæ-ʰta-ʰpi-ʰme] ‘mobile phone’ (< [zæ] ‘chat (bound root)’, [ta] ‘transmit (bound)’, [pi] ‘?utensil’, [me], nominal suffix) or [ʰbo-ʰnbə] ‘bicycle’ (< [ʰbo] ‘kick, step on’, [ʰnbə] ‘horse’).

### 3. Phonology, phonetics and tone system

Lizu has a simple syllabic structure, conforming to the areal syllable type. It can be summarized as (C)(G)V, with an associated tone; where C stands for the initial consonant or consonant cluster; G stands for either of the two Lizu glides, -j- or -w-, both with a restricted distribution; and V stands for vowel; brackets indicate optional constituents. For example, [ʰlje] ‘good’, [ʰrwæ] ‘chicken’, [ʰne] ‘thou, second person singular pronoun’, [ʰæ] ‘I, first person singular pronoun’.

<sup>3</sup> The Chinese dialect of Mùlǐ tentatively belongs to the Chéngyú 成渝 subgroup of the Southwestern Mandarin group (Wurm, Li et al. 1987: Map B6). Chinese donor words are here provided in the Hànyǔ Pīnyīn 汉语拼音 system of transcription.

Lizu initial consonant clusters include (i) 14 nasal-stop and nasal-affricate clusters, e.g. [L<sup>H</sup>nde] ‘good, clear (of the sky)’, [L<sup>H</sup>ndzɔ] ‘Chinese’; (ii) three bilabial-fricative and one bilabial-retroflex cluster, viz. bz, pz, pɕ~p<sup>h</sup>ʒ and pʂ, e.g. [L<sup>H</sup>bzæ] ‘develop’, [L<sup>H</sup>pɕæ~L<sup>H</sup>p<sup>h</sup>ʒæ] ‘sweep’, [L<sup>H</sup>pzæ] ‘hang’, [L<sup>H</sup>pɕe~L<sup>H</sup>zæ] ‘young’; and (iii) five clusters of the bilabial stop or nasal or of the voiced glottal fricative /ɦ/ with the alveolar approximant /r/ (the latter combination, viz. /ɦr/, always co-occurs with a nasal vowel), e.g. [L<sup>H</sup>de~L<sup>H</sup>bræ] ‘ignite’, [L<sup>H</sup>de~L<sup>H</sup>præ] ‘arrive’, [L<sup>H</sup>se~L<sup>H</sup>p<sup>h</sup>ræ] ‘timber’, [L<sup>H</sup>mræ] ‘tasty’, [L<sup>H</sup>ɦræ] ‘obtain’.

I describe Lizu syllable structure in the traditional terms of initials and rhymes, where rhymes include a medial and a nucleus (nuclear vowel). Based on the areal syllable type, which is typically analyzed as commonly including the medials, -j-, -w-, and -r- (e.g. Written Tibetan; Old Chinese, Baxter 1992: 178-180; Lolo-Burmese, Bradley 1979: 117-119), I regard the Lizu glides -j- and -w- and the alveolar approximant /r/ in consonant clusters as medials. This unconventional approach—modern analyses of syllable structure disallow a separate medial node in a syllable—is adopted, as it allows to account for many patterns of phoneme distribution in modern Lizu as well as for many correspondences between Lizu, Lǔsū and Ěrsū, as discussed below.

This section consists of three parts. Part 1 (§3.1) sums up initial and rhyme inventories of Lizu (phonemes with their most common allophones) for the ease of comparison with those in Lǔsū (Huáng and Rénzēng 1991: 133-138) and Ěrsū (Sūn 1982: 242-247, 1983: 125-127). On the basis of these inventories, a new phonological analysis is proposed in Part 2 (§3.2). Part 3 (§3.3) describes Lizu tone system.

### 3.1. Initial and rhyme inventories of Lizu

#### 3.1.1. Initials

Table 1 presents Lizu initials (phonemes with their most common allophones). “n” in nasal-stop and nasal-affricate clusters stands for a homorganic nasal, i.e. m, n, ŋ, ɲ, ɳ and ɴ.

	bilabial	labiodentals	dental	retroflex	palatal	velar	uvular	glottal
<b>stop</b>	b p p <sup>h</sup> nb np <sup>h</sup> bz pz p <sup>h</sup> ʒ~pɕ br pr p <sup>h</sup> r pʂ		d t t <sup>h</sup> nd nt <sup>h</sup>			g k k <sup>h</sup> ng nk <sup>h</sup>	q q <sup>h</sup> ŋɣ <sup>h</sup> nq <sup>h</sup>	
<b>nasal</b>	m mr		n		ɲ	ŋ		
<b>affricate</b>			dz ts ts <sup>h</sup> ndz nt <sup>h</sup>	dz tʂ tʂ <sup>h</sup> ndz ntʂ <sup>h</sup>	dz tɕ tɕ <sup>h</sup> ndz ntɕ <sup>h</sup>			
<b>fricative</b>		f	s z	ʂ ʐ	ɕ ʑ	x ɣ	ʁ	h ɦ ɦr
<b>lateral fricative</b>			ɬ					
<b>approximant</b>	w		r		j			
<b>lateral approximant</b>			l					

Table 1. Lizu initials

The following observations concerning Lizu initials are in order:



(i) the initial w- is sometimes realized close to the velar voiced fricative [ɣ], e.g. [ʰˡwɔ]~[ʰˡɣɔ] ‘pig’, [ʰˡwɔ-ˡkɛ]~[ʰˡɣɔ-ˡkɛ] ‘that’. Moreover, some of w-initial words in Lizu correspond to ɣ-initial words in Ěrsū, e.g. [ɣu<sup>35</sup>] ‘pig’. The interplay between w- and ɣ- initials has also been noted in Tosu (Meier, p.c.).

(ii) in addition to its variation with w-, ɣ- is also in interplay with the initial g-, when the latter is followed by [u], e.g. [ʰɣu-ˡɲi]~[ʰgɯ-ˡɲi] ‘intestines’.

In sum, [ɣ] synchronically functions only as allophone of /w/ and /g/.

(iii) the combination of the initial ŋ- with an oral vowel is in free variation with that of the initial h-, followed by a nasal vowel, e.g. [ʰˡŋɔ] ~ [ʰˡhõ] for ‘bear’, [ʰˡŋu] ~ [ʰˡhũ] for ‘cry’ (note also the Lizu word for ‘five’, [ʰˡhã], for a widely shared Tibeto-Burman cognate with the velar nasal root-initial, cf. WT *lnga*).

(iv) [f] occurs only with the syllabic /ɣ/, e.g. [ʰfɣ-ˡmɛ] ‘tooth’, [ʰfɣ-ˡɸ] ‘onion’.

(v) uvulars:

Lizu has two uvular stops, [q] and [qʰ], one uvular fricative, [ɣ], and two uvular nasal-stop clusters, [ŋɣ<sup>ɛ</sup>] and [ŋqʰ], of which the former is strongly affricated.

Uvulars are generally held to be secondary development of the Sino-Tibetan velar series (Matisoff 2003: 20). From a comparative perspective, no uvulars are posited either for Ěrsū in Sūn (1982, 1983) or for Lūsū in Huáng and Rénzēng (1991). Sūn (1982: 243), however, notes that a number of Ěrsū velars are realized as uvulars, especially in the speech of older speakers, but he reports having found no contrastive pairs.

In Lizu, the uvular stops [q] and [qʰ] contrast with the velar stops [k] and [kʰ] before /o/, e.g. [ʰqɔ-ˡqɔ] ‘hole’ (root /ʰqɔ/) vs. [ˡne-ˡko] ‘put, place’ (root /ko/), and [ˡqʰɔ-ˡzɪ] ‘tadpole’ vs. [ʰkʰɔ-ˡje] ‘key’.

(vi) in addition to being initials, /w/, /r/ and /j/ can also function as medials, all three with a restricted distribution. The medial -r- clusters only with bilabial initials and the voiced glottal fricative h- (the latter combination, viz. [hr], only occurs with nasal vowels), see examples above. The medial -j- clusters only with bilabial initials and the initial l-, e.g. [ʰˡbjɛ] ‘pile’, [ʰˡpjɛ] ‘medicine’, [ʰˡphjɛ] ‘ice’, [ˡmje-ˡmje] ‘much, many’, [ˡljɛ] ‘good’. The medial -w-, on the other hand, has a broader distribution and can cluster with the initial r-, retroflexes, velars and uvulars, e.g. [ʰˡrwæ] ‘chicken’, [ʰˡʂwɔ] ‘mosquito’, [ʰne-ˡkwæ] ‘wither’, [kʰwæ] ‘big, large (bound root)’, [ʰxwæ-ˡmu] ‘yawn, gape’, [ˡhqwɔ] ‘thin, skinny’, [ʰˡqʰwɔ] ‘lake, see’. The co-occurrences of these three medials with vowels are discussed in the following section.

### 3.1.2. Rhymes

Table 2 summarizes Lizu rhymes (oral vowels with their most common allophones, as well as their combinations with the three medials, -w-, -r- and -j-).

i (ɨ/ɤ) y	ɤ ɨ	u
e (w), je	ə	o
æ, jæ, ræ, wæ		a, wa

Table 2. Lizu rhymes

All 8 oral vowels in Table 2 have nasal counterparts, viz. ɨ̃ ỹ ẽ æ̃ ǣ̃ ũ õ ã. These nasal vowels co-exist in the phonemic system of Lizu with a rich inventory of nasal-stop and nasal-affricate clusters, viz. nb np<sup>h</sup> nd nt<sup>h</sup> ng nk<sup>h</sup> ndz nts<sup>h</sup> ndʒ ntʂ<sup>h</sup> ndʒ ntɕ<sup>h</sup> ng<sup>ɣ</sup> nq<sup>h</sup>. This coexistence effectively poses a problem of consistently distinguishing between nasalization as the feature of the vowel (nasal vowels) and nasalization as the feature of the initial (nasal-stop and nasal-affricate clusters) in polysyllabic words with a nasal-stop or nasal-affricate cluster in word non-initial position, e.g. ‘foolish, stupid’: [ʰdĩ-l-bæ̃] or [ʰdi-l-nbæ̃]. This issue can be easily solved in those cases, where the vowel of the root can be isolated, i.e. in words consisting of free roots, e.g. [ʰhẽ-ʰl-nbo] ‘bamboo rainhat’ (< [ʰhẽ] ‘bamboo’, [ʰl-nbo] ‘hat’); or those that can be reduplicated, e.g. [ʰdĩ-ʰdĩ-ʰbæ̃-ʰbæ̃] ‘very stupid’, hence [ʰdĩ-l-bæ̃] ‘foolish, stupid’. Conversely, it is more complex in the case of words consisting of bound roots, e.g. [ʰtæ̃-ʰts<sup>h</sup>i] or [ʰtæ̃-ʰnts<sup>h</sup>i] ‘pen, stick’; in which case I have chosen to treat nasalization as the feature of the initial, e.g., I transcribe the word ‘pen, stick’ as [ʰtæ̃-ʰnts<sup>h</sup>i].

The following observations regarding Lizu rhymes are in order:

(i) [ɨ] and [ɤ] are allophones of /i/ after dental and retroflex fricatives, respectively, e.g. [ʰl-zɨ] ‘son’, /ʰzi/; [ʰl-hndzɤ] ‘skin’, /ndzi/

(ii) [w] is an allophone of /e/ after velars, e.g. [ʰl-kw] ‘eagle’, /ʰke/

(iii) in native Lizu words, [y] appears only after the initial l-, as in [ʰl-y] ‘rob, loot’; and its nasal counterpart [ỹ] only after the initial h-, as in [ʰhỹ-ʰso] ‘the next morning’ or [ʰde-l-hỹ] ‘fragrant, tasty’. In addition, [y] appears in a number of Chinese loanwords, e.g. [ʰy] ‘fish’ (yú 鱼).

(iv) in addition to vowels, the following consonants can function as syllable nucleus in Lizu: (a) /ŋ/, as in [ʰl-tŋ] or [ʰl-kŋ] ‘seven’ and [ʰl-kŋ-ʰræ̃] ‘snot’; and (b) the voiced fricative /v/, e.g. [ʰy] ‘buy’, [ʰk<sup>h</sup>e-l-y] ‘wear’, [ʰk<sup>h</sup>y-ʰp<sup>h</sup>o] ‘inside’. Similar to the syllabic /v/ in Yǒngníng Nà (Michaud forthcoming), /v/ in Lizu can only occur as a rhyme. Consequently, /v/ is hereafter used without the IPA under-stroke diacritic /, / in my transcriptions, viz. /v/.

(v) the syllabic /v/ has a tendency towards trilling after bilabial and dental stop initials and is realized in that environment close to [ɸ], e.g. [ʰfv-l-ɸ], /bv/, ‘onion’; [ʰse-ʰl-pɸ], /pv/, ‘tree’;

[<sup>H</sup>ldɓ], /dv/, ‘plumage’; [<sup>H</sup>ltɓ], /tv/, ‘beans’. Overall, the presence of /v/ in the vowel inventory and its tendency to trill after bilabial and dental stops are areal features, common also in Yǒngníng Nà (Michaud forthcoming), and Northern Ngwi (Bradley 1979: 70).

(vi) Lizu appears to contrast /v/, /u/ and /o/, e.g. [<sup>H</sup>lmv] ‘fur, animal hair’, [<sup>H</sup>lmv] ‘make’, [<sup>H</sup>lmo] ‘tomb’; [<sup>L</sup>hnq<sup>h</sup>v] ‘silk’, [<sup>L</sup>hnq<sup>h</sup>u] ‘hook’ and [<sup>L</sup>hnq<sup>h</sup>o] ‘lock’. Overall, it is plausible that the presence of /v/ in the phonemic system of Lizu is due to areal convergence, whereas the /u/-/o/ contrast is inherent to the system: a hypothesis to be tested in future fieldwork.

(vii) in terms of medial-vowel sequences, -j- has the broadest distribution (see Table 2); -w- co-occurs only with low vowels and -r- only with /æ/.

(viii) the rhyme /wæ/, e.g. [<sup>L</sup>hngwæ] ‘rain’, is to be distinguished from the combination of the vowels /u/ and /æ/, i.e. [uæ], in past forms of verbs with the root vowel /o/ or /u/. (Past forms of verbs in Lizu are formed by adding the past marker /æ/ to the verb stem, see §3.3.1 and 5.2. The addition of the past marker /æ/ causes the preceding vowel to unround.) For example, [<sup>L</sup>hngo] ‘lift’ + the past marker /æ/ > [<sup>L</sup>hnguæ] ‘lifted’. To distinguish between the rhyme /wæ/ and the combination /u+/æ/, I use a dot to separate the vowel of the root and the past marker in the latter case, e.g. [<sup>L</sup>hngu.æ] ‘lifted’.

### 3.2. Phonological analysis

The consonant and rhyme inventories of Lizu and their interrelationships as outlined in §§3.1.1-3.1.2, present a complex and somewhat irregular picture (e.g. co-existence of many nasal vowels with many nasal-stop and nasal-affricate clusters, complex distribution patterns of the medials). In this section, based on the observed patterns of phoneme distribution in Lizu as well as on some comparisons between Lizu, Lǔsū and Ěrsū, I propose a new phonological analysis leading to a more economic and better balanced system, which hopefully also throws light on some diachronic developments in Lizu phonology.

The first observation which can be made about the initial and rhyme inventories of Lizu as presented in §3.1.1 and §3.1.2, respectively, is that there is a considerable unevenness between bilabial initials and the initial l- and the rest of the system in terms of co-occurrence with the three Lizu medials -j-, -r- and -w-, more precisely:

- (i) The medial -r- clusters only with bilabial initials
- (ii) The medial -j- clusters only with bilabial initials and the initial l-
- (iii) The medial -w- does not cluster with either bilabial initials or the initial l-, but can cluster with a wide range of other initials
- (iv) In addition, only bilabials can form clusters with fricatives and retroflexes, viz. bʒ, pʒ, pɕ~pʰɕ and pɕ.

Overall, bilabial initials and the initial l- regularly contrast rhymes /e/ and /je/, i.e. with and without the medial -j-, e.g. [<sup>H</sup>be-<sup>L</sup>be] ‘climb’ vs. [<sup>H</sup>lje] ‘pile’; [<sup>L</sup>k<sup>h</sup>e-<sup>H</sup>pe] ‘stick, glue’ vs. [<sup>H</sup>lje] ‘medicine’; [<sup>L</sup>me-<sup>H</sup>lje] ‘wind’ vs. [<sup>L</sup>mje-<sup>H</sup>mje] ‘many’; [<sup>L</sup>he] ‘old’ vs. [<sup>L</sup>lje] ‘good’.

(In addition, the phoneme [y], which co-occurs only with the initial l-, is likely to have developed through diphthongization of /i/ (see footnote 2) and can consequently be analyzed as a diphthong, viz. /ju/. Hence, words with the initial l- also regularly contrast /u/ and /ju/, e.g. [ʰlu-ʰlu] ‘bark (of dogs)’ vs. [ʰljʊ] ‘white’. [ỹ] in words with the initial h- is discussed below.) Conversely, bilabial initials do not co-occur with the rhyme /jæ/. This gap in the distribution can be explained, if the three Lizu bilabial-palatal clusters [bʒ], [pʒ] and [pʰʒ~pɕ] are taken into account and considered as developed from bilabial-medial -j- clusters. Hence, Lizu [bʒæ] is here analyzed as /bjæ/; [pʒæ] as /pjæ/; [pʰʒæ~pɕæ] as /pʰjæ/, so that /pɕæ/ developed from /pʰjæ/ through the following stages: [pɕæ]<[pʰʒæ]</pʰjæ/.

Overall, I propose that the range of options synchronically observed on Lizu bilabials gives an indication of the range of possibilities available on all initial series of the system at an earlier stage. This entails that the medials -j- and -r- used to have a more balanced distribution within the system and could cluster with all initial series and possibly co-occur with all oral vowels. Conversely, the cross-linguistically common phonological changes that these two medials triggered (palatalization in the case of the medial -j- and retroflexion in the case of the medial -r-) led to the phonemicization of palatals and retroflexes in modern Lizu, subsequently obscuring the presence of -j- and -r- in some environments. The following set of hypotheses is built on this assumption.

#### *Distribution of the medials -j- and -r-*

Given that modern Lizu has no combinations of dentals and velars with the medial -j- or the high front oral vowel /i/, I propose that Lizu palatals developed from dentals and velars, when followed by the medial -j- and the high front vowel /i/, respectively.<sup>4</sup> This can be seen from comparisons between Lizu and Lǔsū, where velars followed by the rhyme /i/ have escaped palatalization: ‘ladder’: Lizu [ʰtɛ-ʰtɕi], Lǔsū [ʰi<sup>33</sup>kɿ<sup>53</sup>]; ‘ask’: Lizu [ʰmɛ-ʰntɕʰɛ], Lǔsū [tɛ<sup>53</sup>mɛ<sup>53</sup>nkʰi<sup>31</sup>]; ‘thunder’: Lizu [ʰmɛ-ʰdʒɛ], Lǔsū [mɛ<sup>53</sup>gi<sup>53</sup>]; ‘(cow) pen’: Lizu [ʰzu-ʰŋu-ʰdʒɛ], Lǔsū [ŋu<sup>53</sup>gi<sup>53</sup>].

Furthermore, I propose that retroflexes in modern Lizu developed from dentals and velars, both clustered with the medial -r-, in a fashion similar to that of the development of palatals. This is again supported by comparisons with Lǔsū, where the medial -r- is re-analyzed as rhoticization of the following vowel: ‘star’: Lizu [ʰltʂɿ], Lǔsū [kəɿ<sup>35</sup>]; ‘gall bladder’: Lizu [ʰltʂɿ], Lǔsū [kəɿ<sup>53</sup>]; ‘skin’: Lizu [ʰndʒɿ], Lǔsū [ngəɿ<sup>35</sup>]; ‘tail’: Lizu [ʰmɛ-ʰntʂʰo], Lǔsū [mu<sup>33</sup>kəɿ<sup>53</sup>].

By analogy with the development of the [pɕ] cluster from an initial-medial cluster, i.e. /pʰj/; I take the cluster [pʂ] to derive from the cluster /pʰr/ through the following stages: [pʂ]>/pʰz/ > /pʰr/. The name of the Prinmi group in Lizu, Lizu [ʰlpʂɿ] from Prinmi [pʰz̥<sup>55</sup> mi<sup>55</sup>] (Lù 2001: 1), supports this assumption.

Let us now turn to the distribution of -r- with bilabial initials. Notably, the medial -r- synchronically appears only with the low front vowel /æ/; whereas the rhyme inventory of

<sup>4</sup> Synchronically attested combinations of dentals with the high front nasal vowel /i/, as in [ʰdʰi-ʰbæ] ‘foolish, stupid’, are discussed below.

Lizu has one rhotic vowel, viz. [ə̃], e.g. [ʰpə̃] ‘grain’. Given the present assumption of the originally even distribution of the medial -r- in the phonemic system of Lizu, I presume that the rhotic vowel has developed in connection with the medial -r-. (That this is the case is overall supported by the appearance of [ə̃] in stable Sino-Tibetan cognates with this medial, such as [ʰLnbə̃] ‘horse’ (\**mraŋ* Matisoff 2003: 654) or [ʰLbə̃-Lə̃] ‘snake’ (WT *sbrul*).)

Given the assumption of the development of the rhotic vowel [ə̃] in connection with the medial -r- as well as the synchronic distribution of -r- with the low front vowel only, [ə̃] is likely to stand for a range of possible combinations of this medial with high and mid-high vowels, viz. /-ri/, /-re/, /-ru/; all missing in modern Lizu. Provided that it is synchronically impossible to ascertain the exact provenance of [ə̃] in each particular case, whereas it is to be expected that it is a combination of the medial -r- with a high vowel, I use the unspecified vowel /ə̃/ to stand for this high vowel and re-write [ə̃] as [rə̃] in my transcriptions, e.g. [ʰLnbə̃] ‘horse’ is hereafter re-written as [ʰLnbərə̃].

So far, we have established that the rhotic vowel [ə̃] developed from combinations of the medial -r- with high vowels. Synchronically, the medial -r- co-occurs with the low front vowel /æ̃/. In view of the present assumption of an even distribution of the medial -r-, clustering with all types of initials and combining with all oral vowels, the absence of sequences of the medial -r- with mid-low and low back vowels requires an explanation.

In this connection, I propose that the affrication in the uvular cluster [ŋɕʰ] is an indication of the presence of the medial -r-. In other words, the cluster [ŋɕʰ] is in fact an earlier /ngr/, developed through the intermediate stage of affrication. This is again supported by comparisons with Lǔsū, e.g. ‘kill (a human being)’: Lizu [ʰLŋɕʰɑ̃], Lǔsū [ŋgaɿ<sup>53</sup>]. This development further suggests that other uvular phonemes in Lizu also derive from combinations of velars with the medial -r-, again, through the intermediate stage of affrication, i.e. [q]<[qʰ]</kr/ and [qʰ]<[qʰʰ]</kʰr/; with the subsequent loss of affrication and phonemicization of uvulars. The synchronically observed uvular-velar contrast before /o/, e.g. [ʰqo-Lqo] ‘hole’ vs. [Lne-ʰLko] ‘put, place’, and [Lqʰo-ʰLzɿ] ‘tadpole’ vs. [ʰkʰo-Lje] ‘key’; is, hence, that between a plain velar and a velar-medial -r- cluster, i.e. /k/ vs. /kr/. That uvular stops and uvular velars synchronically do not contrast before other vowels in Lizu points to (i) an earlier development of the rhotic vowel [ə̃], which further did not contribute to the process of retroflexion of the initials (e.g. Lizu has [kə̃], as in [ʰkə̃-ʰwə̃] ‘spider’, but no [qə̃]) as well as (ii) to the re-analysis of the velar vs. velar-medial -r- contrast as that of the frontness vs. backness of the vowel, hence Lizu /kra/ developed into modern [qã]; whereas /ka/ developed into modern [kæ̃].

Overall, the fate of the medial -r- after velar initials is different in Lizu, Lǔsū and Ěrsū, leading (i) to the development of a separate uvular series in Lizu; (ii) to the development of rhotic vowels with the subsequent loss of rhoticization in some cases in Lǔsū, and (iii) retroflexion in Ěrsū. Consider some examples: ‘steelyard’: Lizu [ʰLqã] (/ʰkra/), Lǔsū [kaɿ<sup>55</sup>] and Ěrsū [tɕɛ<sup>55</sup>]; ‘child’: Lizu [ʰjæ-ʰLqã] (/ʰkra/), Lǔsū [ja<sup>53</sup>ka<sup>53</sup>] and Ěrsū [ja<sup>55</sup>dʒɛ<sup>55</sup>]; ‘tremble’: Lizu [ʰŋɕʰɑ̃-ʰLŋɕʰɑ̃] (/ʰŋgra/), Lǔsū [ŋga<sup>33</sup>ŋga<sup>53</sup>], Ěrsū [ndʒɛ<sup>33</sup>ndʒɛ<sup>55</sup>].

Parallel to the development of Lizu uvular stops from velars clustered with the medial -r-, the uvular fricative [ɣ] in modern Lizu is likely to derive from a cluster of the medial -r- with a velar fricative, either /x/ or /ɣ/, so that /xr/ stands for both possibilities in my transcriptions. This is again supported by comparisons between Lizu, Lǔsū and Ěrsū, e.g. ‘needle’: Lizu [ʰᵐᵐᵐ] (/ʰxra/), Lǔsū [ɣu³⁵/ɣa³⁵], Ěrsū [xau⁵⁵].

#### *Allophones of /x/ and /ɣ/*

Building up on the assumption of the presence and even distribution of the medials -j- and -r- in the phonemic system of Lizu, I propose the following sets of allophones for the velar fricatives /x/ and /ɣ/.

##### *Allophones of /x/:*

- (a) [f] before the syllabic /v/, e.g. [ʰfv-ʰᵐᵐᵐ] ‘tooth’, /xv-me/; [ʰfv-ᵐbv] ‘onion’, /ʰᵐᵐᵐ-xv-bv/ (note a similar development in Yǒngníng Nà, Michaud forthcoming)
- (b) [h] before nasal front vowels, e.g. [ʰtsʰe-ʰhě] ‘this year’, /xě/; [ʰde-ᵐhỹ] ‘fragrant, tasty’, /ʰxjũ/
- (c) [ɕ] before the vowel -i- and the medial -j-
- (d) [x] in all other cases.

##### *Allophones of /ɣ/:*

- (a) [ɦ] clustered with the medial -r- before nasal vowels, [ʰɦrě] ‘mushroom’, /ɣrě/; [ʰɦræ̃] ‘obtain’, /ɣræ̃/
- (b) [ʐ] before the high front vowel -i- and the medial -j-

Finally, modern Lizu [ɣ] is the allophone of either /x/ and /ɣ/, followed by the medial -r- and an oral vowel.

Additionally, the initial w- (as in [ʰᵐwo]~[ʰᵐyo] ‘pig’), followed by an oral vowel, is also tentatively an allophone of /ɣ/. Given the marginal status of the phoneme /ɣ/ in modern Lizu as described in §3.1.1 and the unclear conditioning factors responsible for its allophonic variation with /w/, I keep /w/ unchanged in my transcriptions.

#### *Nasal vowels and nasal-stop and nasal-affricate clusters*

/x/ and /ɣ/ taken each as one phoneme (in the totality of its allophones as above), co-occur with both oral and nasal vowels, e.g. /xi/ ([ɕi]) vs. /xĩ/ ([ɦĩ]); /xe/ ([xe]) vs. /xě/ ([hě]); /xæ/ ([xæ]) vs. /xæ̃/ ([xæ̃]); /xu/ ([xu]) vs. /xũ/ ([xũ]) and /xju/ ([ɕu]) vs. /xjũ/ ([hỹ]). This suggests that the oral-nasal contrast in vowels is inherent to the system and was probably observed on most initials at an earlier stage. Notably, in connection to the pairs /xi/ ([ɕi]) vs. /xĩ/ ([ɦĩ]) and /xju/ ([ɕu]) vs. /xjũ/ ([hỹ]), it appears that after the phonetic difference between the initials ɕ- and h- was phonemicized, (i) the nasal vs. non-nasal contrast on the vowel was lost in the new environment (i.e. Lizu has [ɕi], but no [ɕĩ], and [ɦĩ], but no [hi]), and (ii) the nasal vs. non-

nasal contrast on the vowel was transphonologized as a contrast of initials instead (cf. similar developments in the Nàxī of Lijiāng, Michaud 2006: 35-38). The same processes, viz. the loss of the nasal vs. non-nasal contrast on vowels and its transphonologization into the nasal vs. non-nasal contrast of initials, are likely to have affected a broad range of initials, contributing to the proliferation of nasal-stop and nasal-affricate clusters in Lizu, e.g. [ʰntɕʰe] ‘glue’ from WT *spyin*, tentatively through the intermediate stage /tɕʰẽ/ in the Tibetan donor dialect. Conversely, the nasality of the vowel blocked palatalization of the initial in some cases, e.g. when followed by the high front vowel /i/, with the result that while modern Lizu has no combinations of dentals with the oral high front vowel /i/, it has combinations of dentals followed by the nasal high front vowel /ĩ/, e.g. [ʰdĩ-˦bæ] ‘foolish, stupid’.

#### *Distribution of the medial -w-*

Finally, let us turn to the distribution of the medial -w-, which is synchronically attested with a wide range of initials, viz. /r/, retroflexes, velars and uvulars. Provided that Lizu uvulars are allophones of velars, the medial -w- appears to cluster predominantly with velars. This suggests its origin in labialized velars, i.e. kʷ, kʰʷ, ɡʷ, xʷ, ɣʷ. The instances of the appearance of the medial -w- with the retroflex series in modern Lizu, e.g. [ʰɬɕwa] ‘wasp’ and [ʰɬɕwa] ‘mosquito’, can be explained as derived from labialized velar initials clustered with the medial -r-, i.e. /kʷr/, /kʰʷr/, /ɡʷr/ etc. The co-occurrence of the initial /r/ with the medial -w-, viz. [rw]; on the other hand, is here analyzed as the labialized initial /ɣʷ/, based on Lǔsū [ɣua<sup>35</sup>], e.g. [ʰrwæ] ‘chicken’ is hereafter re-written as [ʰɣʷæ]. Combinations of labialized velars with high initials, missing in the system, are currently left unexplained.

The phonemic inventory of Lizu as used in my transcriptions is summarized in Tables 3 and 4.

	<b>bilabial</b>	<b>dental</b>	<b>retroflex</b>	<b>palatal</b>	<b>velar</b>
<b>stop</b>	b p pʰ nb npʰ	d t tʰ nd ntʰ			g k kʰ ng nkʰ ɡʷ kʷ kʰʷ ngʷ nkʰʷ
<b>nasal</b>	m	n		ɲ	ŋ
<b>affricate</b>		dz ts tsʰ ndz ntsʰ	dʒ tʂ tʂʰ ndʒ ntʂʰ	dʒ tɕ tɕʰ ndʒ ntɕʰ	
<b>fricative</b>		s z	ʂ ʐ	ɕ ʑ	x ɣ xʷ ɣʷ
<b>lateral fricative</b>		ɬ			
<b>approximant</b>	w	r		j	
<b>lateral approximant</b>		l			

*Table 3. Lizu initials: New analysis*

i	ɣ ŋ	u
e, je	ə rə	o, jo, ro
æ, jæ, ræ		ɑ, rɑ

Table 4. *Lizu rhymes: New analysis*

Lizu has 7 nasal vowels, viz. *ĩ*, *ẽ*, *æ̃*, *ẽ̃*, *ũ*, *õ*, *ã*. The syllabic /v/ is likely to be a recent addition to the system, initially introduced as an allophone of /u/; /v/, therefore, does not have a nasal counterpart. Overall, /æ/ and /ɑ/ are likely to derive from an earlier /a/, but the exact conditioning factors of this development require further investigation; the distinction between the two, viz. /æ/ vs. /ɑ/, is therefore kept in my transcriptions.

### 3.3. Tone system

Lizu has a restricted tone system, which can be described in terms of just one tone value, viz. /H/. The tonal system of Lizu is subject to constraints of obligatoriness (at least one tone per tone domain), privativity (the presence of tone versus its absence) as well as metrical constraints (tone is subject to reduction in compounding or when out of focus) (cf. Voorhoeve 1973, quoted from Hyman 2007: 661; Hyman 2006, 2007; Evans 2008).

The one tone value described here for Lizu, /H/, has two realizations: (i) [H] in connected speech and (ii) [HL] in careful speech or in isolation. Furthermore, the single Lizu tone value /H/ distinguishes between three different tones:

- (i) a lexical tone; assigned to words in the lexicon. Hence, Lizu monosyllables can be divided into (a) those lexically specified for tone and (b) toneless (including both roots and affixes);
- (ii) a post-lexical tone, assigned to the right edge of underlyingly toneless words, to satisfy the obligatoriness constraint; and
- (iii) dynamic accent or stress, realized as [H] tone and assigned to the prominent constituent within a phrase, consisting of three or more words.

In underlyingly toneless monosyllabic words, the post-lexical tone is attached to the right edge of the syllable, creating a rising contour, viz. [LH]. Hence, the contrast between the presence or absence of tone on monosyllables is realized as [H]~[HL] versus [LH], as in the following examples in Table 5:



lexically specified for tone	realisation	toneless	realisation
<sup>H</sup> ndza	<sup>HL</sup> ndza	ndza	<sup>LH</sup> ndza
'Chinese'		'drum'	
<sup>H</sup> zi	<sup>HL</sup> zi	zi	<sup>LH</sup> zi
'son'		'shoes'	
<sup>H</sup> se	<sup>HL</sup> se	se	<sup>LH</sup> se
'otter; iron; blood'		'excrement'	
<sup>H</sup> rə	<sup>HL</sup> rə	rə	<sup>LH</sup> rə
'laugh'		'write'	
<sup>HL</sup> ɣwæ	<sup>HL</sup> ɣwæ	ɣwæ	<sup>LH</sup> ɣwæ
'shout, yell'		'chicken'	
<sup>H</sup> ŋu	<sup>HL</sup> ŋu	ŋu	<sup>LH</sup> ŋu
'cow'		'silver'	

Table 5. Minimal pairs of monosyllabic words, lexically specified for tone and toneless

In underlyingly toneless words of two syllables or more, the post-lexical tone is assigned to the final syllable of the unit, e.g. [<sup>L</sup>mu-<sup>L</sup>tsi <sup>L</sup>jæ-<sup>HL</sup>kra] 'kitten' (< [<sup>L</sup>mu-<sup>HL</sup>tsi] 'cat', [<sup>L</sup>jæ-<sup>HL</sup>kra] 'child').

Overall, Lizu is phonologically monosyllabic, so that all units of two syllables or more (words and phrases) are formed from combinations of monosyllabic morphemes, which are of two types: (i) free and bound roots (the majority), e.g. /zo/ 'third person singular animate pronoun', /<sup>H</sup>tɕ<sup>h</sup>v/ 'earth', /lje/ 'good'; and (ii) affixes. Lizu has few affixes, of which most are synchronically unproductive. Some important derivational suffixes are:

(i) animal gender suffixes: (a) the feminine nominal suffix /-mæ/ and (b) the male nominal suffixes /-np<sup>h</sup>e/ and /-bv/, e.g. /<sup>H</sup>tɕ<sup>h</sup>e/ 'dog': [<sup>H</sup>tɕ<sup>h</sup>e-<sup>L</sup>np<sup>h</sup>e] '(male) dog' vs. [<sup>H</sup>tɕ<sup>h</sup>e-<sup>L</sup>mæ] 'bitch'; /mu-<sup>L</sup>tsi/ 'cat': [<sup>L</sup>mu-<sup>L</sup>tsi-<sup>HL</sup>mæ] 'female cat, pussycat' vs. [<sup>L</sup>mu-<sup>L</sup>tsi-<sup>HL</sup>bv] 'male cat, tom';

(ii) the diminutive suffix /-je/, e.g. [<sup>L</sup>ɣ<sup>w</sup>æ-<sup>H</sup>je] 'chicken', possibly also in [<sup>H</sup>zɛ-<sup>H</sup>je] 'daughter';

(iii) the nominal suffix /-me/, e.g. [<sup>H</sup>se-<sup>L</sup>dzu-<sup>L</sup>me] 'log'; [<sup>L</sup>næ-<sup>H</sup>nk<sup>h</sup>æ-<sup>L</sup>me] 'sky'; [<sup>H</sup>zæ-<sup>L</sup>ta-<sup>L</sup>pi-<sup>L</sup>me] 'mobile phone'.

Prefixes include: (i) the nominal vocative prefix /æ-/ (in kinship terms), e.g. [<sup>H</sup>æ-<sup>H</sup>mæ] 'mother', [<sup>H</sup>æ-<sup>H</sup>pæ] 'father'; (ii) four directional and aspectual prefixes in verbs and adjectives: /de-/ 'upward', /ne-/ 'downward', /k<sup>h</sup>e-/ 'inward' and /t<sup>h</sup>e-/ 'outward', e.g. [<sup>L</sup>de-<sup>HL</sup>ts<sup>h</sup>v] 'fat, become fat', [<sup>L</sup>ne-<sup>HL</sup>brə] 'tired', [<sup>L</sup>k<sup>h</sup>e-<sup>HL</sup>li] 'enter, come inside', [<sup>L</sup>t<sup>h</sup>e-<sup>H</sup>nk<sup>h</sup>æ] 'sell'; and (iii) the comparative prefix in adjectives /jæ-/, e.g. [<sup>L</sup>jæ-<sup>HL</sup>lje] 'better' (< /lje/ 'good').

Similar to its neighboring languages (e.g. Shǐxīng, Chirkova and Michaud 2008), Lizu has a strong tendency towards disyllabicity in its lexicon through affixation, compounding and reduplication, so that the majority of Lizu words are disyllabic, e.g. [<sup>H</sup>zɛ-<sup>H</sup>je] 'daughter'. Trisyllabic and quadrisyllabic words are rare and are mostly compounds, e.g. [<sup>H</sup>se-<sup>L</sup>tsv=<sup>H</sup>sv]

‘ironsmith’, literally, ‘one who forges iron’ (< /<sup>H</sup>se/ ‘iron’, /tsv/ (bound) ‘beat, knock’, /sv/ agentive nominalizer), or [Lmu-Ltsi Ljæ-HLkra] ‘kitten’ (< /mu-tsi/ ‘cat’, /jæ-kra/ ‘child’).

Tone patterns in units of two syllables or more (both words and phrases) are assigned based on the nature of the unit and its composition:

(i) a content word (lexical item, formed through affixation or reduplication) or a phrase consisting of a word followed by a clitic. Clitics or function words in Lizu are toneless, e.g. the progressive markers /bo/ and /ge/. Clitics attach to their host words, with which they form a single tone pattern, as shown below.

(ii) a compound, including (a) words formed through compounding and (b) phrases, consisting of two words (modifying noun-noun and noun-adjective compounds; object-verb phrases)

(iii) a phrase, consisting of three or more words

Derivations with the lexical tone are restricted to the first and second cases, the third case being the domain of intonation (stress).

### 3.3.1. Tone pattern derivation in content words and phrases consisting of a word and a clitic

The following tone rule operates in the case of content words, formed through affixation and reduplication; and combinations of a word and a clitic:

*The tone of the root of the word or the tone of the word in the case of combinations of a word and a clitic determines the tone pattern of the output unit by adjusting to the number of syllables in the output unit from left to right.*

For example, in verbs formed through prefixation (with one of the directional prefixes): if the verb root is lexically specified for tone, the resulting tone pattern of the word is [HL], e.g. [<sup>H</sup>ne-Lko] ‘wither’ (root /<sup>H</sup>ko/), [<sup>H</sup>de-Lnts<sup>h</sup>æ] ‘lead (cow)’ (root /<sup>H</sup>nts<sup>h</sup>æ/). If, on the other hand, the tone of the verb root is toneless, the tone pattern of the resulting compound is [LH], e.g. [Lne-<sup>H</sup>ko] ‘put’ (root /ko/), [Lde-<sup>H</sup>nts<sup>h</sup>æ] ‘itch’ (root /nts<sup>h</sup>æ/). Consider also some examples of nouns and verbs formed through affixation and reduplication: [<sup>H</sup>ni-Lme] ‘sun’, [Lxv-HLme] ‘tooth’; [<sup>H</sup>k<sup>h</sup>v-Lp<sup>h</sup>o] ‘inside’, [Lno-HLp<sup>h</sup>o] ‘outside’, [<sup>H</sup>læ-Llæ] ‘roll, tumble’, [Lts<sup>h</sup>æ-HLts<sup>h</sup>æ] ‘magpie’. Consider also some combinations of a word and a clitic:

(2) /<sup>H</sup>se/ ‘otter’ + the genitive particle /ji/ > [<sup>H</sup>se=Lji] ‘of the otter’

(3) /zo/ ‘third person animate singular pronoun’ + the genitive particle /ji/ > [Lzo=<sup>H</sup>ji] ‘his, her’

Two Lizu clitics, the nominal animate object marker /æ/ and the verbal past marker /æ/ (detailed in §4.1.2 and §5.2, respectively) deserve a special note. Both fuse with their host word, extending the root of the verb stem by one vowel, e.g. [Lne-L<sup>H</sup>dzi.æ] ‘ate’ (< /dzi/ ‘eat’). Alternatively, if the root vowel is [æ] or [ɑ], the nominal animate object marker /æ/ and the

verbal past marker /æ/ merge with it in one lengthened vowel, e.g. [Lne-<sup>LH</sup>dzæ.æ] ‘fell’ (< [Hne-<sup>L</sup>dzæ] ‘fall’). Both markers thus create a contour tone on a monosyllable.

The nominal animate object marker creates a contour tone, depending on the tone of its host word, in accordance with the tone rule above. For example: [H<sup>L</sup>t<sup>h</sup>e.æ] ‘to him’ (< /H<sup>L</sup>t<sup>h</sup>e/ distal demonstrative pronoun and third person singular pronoun), [H<sup>z</sup>e-H<sup>je</sup> # Lne-<sup>LH</sup>t<sup>h</sup>e.æ] ‘[tell] the two daughters’ (< /ne-t<sup>h</sup>e/ ‘the two of’).

The past marker /æ/, on the other hand, always creates a rising [LH] contour on the verb stem, irrespective of its inherent tone. In [LH] verbs, the resulting contour is [L.LH], e.g. [Lne-<sup>LH</sup>dzi.æ] ‘ate’ (< /dzi/ ‘eat’), [Lde-<sup>LH</sup>ŋu.æ] ‘cried’ (< /ŋu/ ‘cry, weep’). In [HL] verbs, on the other hand, the resulting contour is [H.LH]. For example, [Hne-<sup>LH</sup>t<sup>h</sup>e.æ] ‘drank’ (< /Ht<sup>h</sup>e/ ‘drink’).

### 3.3.2. Tone pattern derivation in compounds (words and phrases, consisting of two content words)

The tone pattern in words formed through compounding and phrases consisting of two content words is determined by the following rule:

*The tonal pattern of the unit is determined by the lexical tone of its first constituent.*

If the first element is lexically specified for tone, the tone pattern of the resulting compound is [H.H]~[H.HL]. For example:

- (4) /H<sup>se</sup>/ ‘iron’ + /H<sup>dzi</sup>/ ‘pan’ > /H<sup>se</sup> dzi/ ([H<sup>se</sup> H<sup>dzi</sup>]) ‘iron pan’
- (5) /H<sup>ræ</sup>/ ‘yak’ + /<sup>se</sup>/ ‘excrement’ > /H<sup>ræ</sup> <sup>se</sup>/ ([H<sup>ræ</sup> H<sup>se</sup>]) ‘yak excrement’
- (6) /H<sup>ræ</sup>/ ‘yak’ + /H<sup>L</sup>me-nt<sup>h</sup>o/ > /H<sup>ræ</sup> me-nt<sup>h</sup>o/ ([H<sup>ræ</sup> H<sup>me</sup>-H<sup>L</sup>nt<sup>h</sup>o]) ‘yak tail’
- (7) /H<sup>si</sup>-nge/ ‘lion’ + /H<sup>mv</sup>/ ‘fur’ > /H<sup>si</sup>-nge mv/ ([H<sup>si</sup>-H<sup>nge</sup> H<sup>L</sup>mv]) ‘lion fur’
- (8) /H<sup>si</sup>-nge/ ‘lion’ + /ndzi/ ‘skin’ > /H<sup>si</sup>-nge ndzi/ ([H<sup>si</sup>-H<sup>nge</sup> H<sup>L</sup>ndzi]) ‘lion skin’

Conversely, if the first element is toneless, the tone pattern of the resulting compound is [LH], where [H] is the post-lexical tone. For example:

- (9) /mu-tsi/ ‘cat’ + /H<sup>t</sup>co-rə/ ‘footprint’ > /mu-tsi tco-rə/ ([L<sup>mu</sup>-L<sup>tsi</sup> L<sup>t</sup>co-H<sup>L</sup>rə]) ‘cat pawprints’
- (10) /ku-rə/ ‘donkey’ + /ndzi/ ‘skin’ > /ku-rə ndzi/ ([L<sup>ku</sup>-L<sup>rə</sup> H<sup>L</sup>ndzi]) ‘cat skin’

In the case of modifying noun-noun compounds, if this second constituent is of two or more syllables in length, Lizu dissimilates two adjacent [H] tones at the boundary between the two constituents of the unit by deleting [H] tone of the second constituent. Compare the following two compounds with the word [H<sup>me</sup>-Lnt<sup>h</sup>o] ‘tail’:

- (11) /H<sup>n</sup>brə/ ‘horse’ + /H<sup>L</sup>me-nt<sup>h</sup>o/ ‘tail’ > /H<sup>n</sup>brə # me-nt<sup>h</sup>o/, [H<sup>n</sup>brə L<sup>me</sup>-H<sup>L</sup>nt<sup>h</sup>o] ‘horse tail’
- (12) /H<sup>si</sup>-nge/ ‘lion’ + /H<sup>L</sup>me-nt<sup>h</sup>o/ ‘tail’ > /H<sup>si</sup>-nge # me-nt<sup>h</sup>o/, [H<sup>si</sup>-H<sup>nge</sup> L<sup>me</sup>-H<sup>L</sup>nt<sup>h</sup>o] ‘lion tail’

### 3.3.3. Tone pattern derivation in phrases, consisting of three elements

In the case of phrases, consisting of three or more words, [H] tone is assigned based on the following rules:

(i) *If a phrase contains one of the following elements: the question marker, the negation marker or the prohibitive marker, assign [H] tone to these elements, leaving the rest of the phrase unstressed.*

For example:

(13)  $H\text{æ} \# L\text{t}\phi^he = Hm\text{æ} = Lndzu.$  vs.  $H\text{æ} \# Ldzi = Hm\text{æ} = Lndzu.$

$H\text{æ}$	$L\text{t}\phi^he = Hm\text{æ} = Lndzu$	$H\text{æ}$	$Ldzi = Hm\text{æ} = Lndzu.$
1SG	drink=NEG=be.able	1SG	drink=NEG=be.able

‘I can’t drink.’ (< / $H\text{t}\phi^he$ / ‘drink’) vs. ‘I can’t eat.’ (< / $dzi$ / ‘eat’)

(14)  $H\text{æ} \# Lne = Hm\text{æ} = L\text{t}\phi^he.$  vs.  $H\text{æ} \# Lne = Hm\text{æ} = Ldzi.$

$H\text{æ}$	$Lne = Hm\text{æ} = L\text{t}\phi^he$	$H\text{æ}$	$Lne = Hm\text{æ} = Ldzi$
1SG	downward=NEG=drink	1SG	downward=NEG=drink

‘I did not drink.’ (< / $H\text{t}\phi^he$ / ‘drink’) vs. ‘I did not eat.’ (< / $dzi$ / ‘eat’)

(15)  $H\text{a}-Hm\text{æ} \# H^h\text{æ} = L\text{t}\phi^hv \ Ldzi = Lge = Hne \# \text{t}\phi iu \# L\text{t}\phi^hv = Hm\text{æ} = Lno\#.$

$H\text{a}-Hm\text{æ}$	$H^h\text{æ} = L\text{t}\phi^hv$	$Ldzi = Lge = Hne$	$\text{t}\phi iu$	$L\text{t}\phi^hv = Hm\text{æ} = Lno.$
VOC-mother	PROH=open	speak=N-CTRL=RLV	CH: just	open=NEG=dare

‘[The two daughters said to themselves, they can’t open the door, since] their mother had told them not to do so, and so they did not dare to open’ (< / $H\text{t}\phi^hv$ / ‘open’)

(ii) *If a phonological phrase contains none of the above elements, assign [H] tone to the first syllable of the phrase.*

For example:

(16)  $Hne \# Hx\text{æ}-Lte \ L\text{t}\phi^he = Lbo?$  vs.  $Hne \# Hx\text{æ}-Lte \ Ldzi = Lbo?$

$Hne$	$Hx\text{æ}-Lte$	$L\text{t}\phi^he = Lbo$	$Hne$	$Hx\text{æ}-Lte$	$Ldzi = Lbo$
2SG	what-?one	drink=CTRL	2SG	what-?one	drink=CTRL

‘What are you drinking?’ (< / $H\text{t}\phi^he$ / ‘drink’) vs. ‘What are you eating?’ (< / $dzi$ / ‘eat’)

The application of these two rules in continuous speech yields long strings of [HL...L] sequences that reveal nothing of the underlying tones, thus conforming to the native speaker’s intuition that “Lizu has no tones”.

Overall, similar to Shǐxīng (Chirkova and Michaud 2008), Lizu distinguishes between lexical tone and the associated tone pattern derivation strategies in the lexicon, on the one hand, and stress and intonation in its grammar, on the other hand. As Lizu is phonologically

monosyllabic with a tendency towards disyllabicity, its lexicon and grammar overlap at the level of polysyllabic words and phrases that consist of two elements, since polysyllabic words in Lizu are phrase-like in their structure, and phrases consisting of two elements are word-like by virtue of their consisting of two elements, thus formally conforming to the two-morpheme prototype word in the lexicon. Conversely, while words are associated with a fixed tone pattern in the lexicon; phrases of two elements can avail themselves of the totality of tone pattern derivation strategies existing in Lizu (both lexical and phrasal), as illustrated by the following phrases with the word /<sup>HL</sup>me-ntɕʰo/ ‘tail’:

(i) word-like tone derivation: spreading of the tone of the first constituent:

/<sup>H</sup>ræ/ ‘yak’ + /<sup>HL</sup>me-ntɕʰo/ > /<sup>H</sup>ræ me-ntɕʰo/ ([<sup>H</sup>ræ <sup>H</sup>me-<sup>HL</sup>ntɕʰo]) ‘yak tail’

(ii) juxtaposition of the two words, [H] tone dissimilation:

/<sup>H</sup>nbræ/ ‘horse’ + /<sup>HL</sup>me-ntɕʰo/ ‘tail’ > /<sup>H</sup>nbræ # me-ntɕʰo/, [<sup>H</sup>nbræ <sup>L</sup>me-<sup>HL</sup>ntɕʰo] ‘horse tail’

(iii) phrasal stress:

/<sup>H</sup>ŋu/ ‘cow’ + /<sup>HL</sup>me-ntɕʰo/ ‘tail’ > [<sup>H</sup>ŋu <sup>L</sup>me-<sup>L</sup>ntɕʰo] ‘cow tail’.

## 4. Nominal marking

### 4.1. Grammatical relations and case marking

The grammatical relations of subject and object are not grammaticalized in Lizu. Instead, its clause structure is based on the pragmatic relations of topical vs. focal material, in a fashion very similar to that in Chinese (as presented in LaPolla 1993, forthcoming; LaPolla and Poa 2001). This entails that (i) Lizu word order primarily serves to signal semantic and pragmatic factors rather than grammatical relations, and that (ii) interpretation of the speaker’s communicative intention relies on inference. The unmarked word order in Lizu is agent-initial (topical), as in the following example:

(17) <sup>H</sup>ke # <sup>LH</sup>y<sup>w</sup>æ # <sup>L</sup>de-<sup>LH</sup>pjæ.

<sup>H</sup>ke      <sup>LH</sup>y<sup>w</sup>æ      <sup>L</sup>de-<sup>LH</sup>pjæ.

eagle    chicken    upward-catch.PST

‘The eagle caught a chicken.’

Overall, the semantic categories of “animate” and “inanimate” tend to be cross-linguistically associated with the semantic roles of agent and patient, respectively. Given the unmarked agent-initial (topical) word order in Lizu, the agent requires no special marking, even when non-prototypical (inanimate). (Overall, the topical status of an element can be signaled by the topic marker, as discussed in §4.1.1.)

In the case of non-topical patients, on the other hand, those which are non-prototypical, i.e. animate (and especially human), need to be marked by means of the animate object marker /æ/, as detailed in §4.1.2.

Other types of relationships of a noun to a verb encoded in Lizu by means of postpositions (analytic case markers) are:

(a) genitive, signaling alienable possession, part-whole relationship and other related meanings, /ji/;

(b) locative, coding location in a place (with inanimate nouns); and dative, indicating the beneficiary of an action, denoted by the verb (with animate nouns), both signaled by the marker /ke/ ‘at’ and ‘for’;

(c) instrumental, signaling the instrument with which the action in question is performed, /læ=mu/; and

(d) comparative, marking the standard of comparison with comparative adjectives, /pæ/.

These markers are outlined in this order presently.

#### 4.1.1. Topic marker /le/

The topical status of an element (either agent, patient or any other, non-core, argument of the verb, i.e. phrases indicating the physical or temporal location of the event) can be signaled by the topic marker /le/. Consider the following examples:

(i) topic=agent:

(18) <sup>H</sup>nts<sup>h</sup>o-<sup>L</sup>lo # <sup>L</sup>mæ-<sup>L</sup>mo <sup>L</sup>bi=<sup>H</sup>le # <sup>L</sup>rə-<sup>L</sup>ke=<sup>H</sup>ke # <sup>L</sup>k<sup>h</sup>e-<sup>H</sup>lo...

<sup>H</sup> nts <sup>h</sup> o- <sup>L</sup> lo	<sup>L</sup> mæ- <sup>L</sup> mo	<sup>L</sup> bi= <sup>H</sup> le	<sup>L</sup> rə- <sup>L</sup> ke= <sup>H</sup> ke	<sup>L</sup> k <sup>h</sup> e- <sup>H</sup> lo
man-eating	woman-old	DEF=TOP	road-half=at	inward-wait

‘As for the witch, she was waiting for the old mother halfway between the old mother’s parents’ house and her own house.’

(ii) topic=patient:

(19) <sup>H</sup>ts<sup>h</sup>o-<sup>H</sup>mo=<sup>H</sup>bi=<sup>H</sup>le # <sup>H</sup>nts<sup>h</sup>o-<sup>L</sup>lo # <sup>L</sup>mæ-<sup>HL</sup>mo # <sup>L</sup>ne-<sup>LH</sup>dzi.æ.

<sup>H</sup> ts <sup>h</sup> o- <sup>H</sup> mo= <sup>H</sup> bi= <sup>H</sup> le	<sup>H</sup> nts <sup>h</sup> o- <sup>L</sup> lo	<sup>L</sup> mæ- <sup>HL</sup> mo	<sup>L</sup> ne- <sup>LH</sup> dzi.æ.
man-old=DEF=TOP	man-eating	woman-old	downward-eat.PST

‘As for the old man, he was eaten by the man-eating witch.’

(iii) topic=location of the event in space:

(20) <sup>L</sup>rə-<sup>L</sup>ke=<sup>L</sup>ke=<sup>H</sup>le # <sup>H</sup>nts<sup>h</sup>o-<sup>L</sup>lo <sup>L</sup>mæ-<sup>L</sup>mo # <sup>L</sup>k<sup>h</sup>e-<sup>L</sup>lo=<sup>H</sup>sæ...

<sup>L</sup> rə- <sup>L</sup> ke= <sup>L</sup> ke= <sup>H</sup> le	<sup>H</sup> nts <sup>h</sup> o- <sup>L</sup> lo	<sup>L</sup> mæ- <sup>L</sup> mo	<sup>L</sup> k <sup>h</sup> e- <sup>L</sup> lo= <sup>H</sup> sæ
road-half=at=TOP	man-eating	woman-old	inward-wait=PRF

‘As for the place halfway between the old mother’s parents’ house and her own house, the witch had been waiting for the old mother there...’

(iv) topic=location of the event in time:

(21) <sup>H</sup>jæ=<sup>L</sup>ji # <sup>H</sup>jæ=<sup>L</sup>ji # <sup>H</sup>k<sup>h</sup>æ=<sup>L</sup>le # <sup>H</sup>ku-<sup>L</sup>t<sup>h</sup>e #, <sup>H</sup>nts<sup>h</sup>o-<sup>L</sup>lo # <sup>L</sup>mæ-<sup>HL</sup>mo...

<sup>H</sup> jæ= <sup>L</sup> ji	<sup>H</sup> jæ= <sup>L</sup> ji	<sup>H</sup> k <sup>h</sup> æ= <sup>L</sup> le	<sup>H</sup> ku- <sup>L</sup> t <sup>h</sup> e,	<sup>H</sup> nts <sup>h</sup> o- <sup>L</sup> lo	<sup>L</sup> mæ- <sup>HL</sup> mo
past=GEN	past=GEN	time.when=TOP	this-?	man-eating	woman-old

‘Long long time ago, [there was] a man-eating witch.’

In addition to /le/, Lizu has another topic marker, /ne/, mostly attested in story narrations. I provisionally analyze it as a loanword from Chinese (the topic marker *ne* 呢). Overall, my Lizu language consultants, all bilingual in Chinese, use many stopgaps borrowed from the latter language, e.g. [tɕiu] *jiu* 就 ‘just, then’, [ʰxai-sə] *háishi* 还是 ‘still’, [ʰɕi-ʰtɕai] *shízài* 实在 ‘really’, [ʰmu-ʰlai-ʰxo] *mò nàihé* 莫奈何 ‘have no alternative, but (to...)’; so it is in a way unsurprising that the high frequency Chinese topic marker *ne* has been borrowed among these.

/ne/ can serve to mark secondary topic, as in example (22). More broadly, it indicates the contextual relevance of the preceding expression (i.e. that the information conveyed by this expression is the speaker’s response to some expectation on the part of the hearer), just like the marker *ne* in Chinese.

- (22) ʰtɕʰo # ʰæ-ʰmæ=Lbi # ʰji=Lkʰæ=Lle#, ʰze-ʰje # ʰne-ʰtʰe.æ#: ʰngæ-ʰpv ʰne-Ltɕe#, ʰtsʰo  
 ʰlæ=Lne#, ʰngæ Ltɕv-Ltɕv=Lkʰæ#, ʰtʰæ=Ltɕʰv#.
- |             |                |                  |          |                   |
|-------------|----------------|------------------|----------|-------------------|
| ʰtɕʰo       | ʰæ-ʰmæ=Lbi     | ʰji=Lkʰæ=Lle,    | ʰze-ʰje  | ʰne-ʰtʰe.æ:       |
| that.GEN.on | VOC-mother=DEF | go=time.when=TOP | daughter | two-?that=OBJ.ANM |
- 
- |          |               |        |          |      |                       |
|----------|---------------|--------|----------|------|-----------------------|
| ʰngæ-ʰpv | ʰne-Ltɕe,     | ʰtsʰo  | ʰlæ=Lne, | ʰngæ | Ltɕv-Ltɕv=Lkʰæ,       |
| door-?   | downward-bolt | person | come=RLV | door | knock-knock=time.when |
- 
- ʰtʰæ=Ltɕʰv.
- 
- PROH=open

‘So, earlier, when still at home, the old mother had told her two daughters: “Bolt the door well. If anybody comes and knocks at the door, do not open.”’

#### 4.1.2. Animate object marker /æ/

The marker /æ/ signals animate (primarily human) arguments of the verb (except for agent). Consider its use as the direct and indirect object of the verb, respectively, in the following examples:

- (23) ʰæ ʰne.æ=Ldzi=Lxũ.  
 ʰæ ʰne.æ=Ldzi=Lxũ.  
 1SG 2SG.OBJ.ANM=eat=want  
 ‘“I want to eat you,” [said the witch.]’
- (24) ʰæ # ʰne.æ # ʰde-ʰdzi#=ʰmi.  
 ʰæ ʰne.æ ʰde-ʰdzi ʰmi  
 1SG 2SG.OBJ.ANM upward-speak EXP  
 ‘I told you this long time ago.’

The clitic /æ/ mostly fuses with the root of its host verb, creating a contour tone. In addition, it can also function as a separate, extrametrical syllable to be counted for metrical purposes in songs. Consider the following line, composed in two-syllable feet:

- (25) <sup>H</sup>ni-<sup>H</sup>me#, <sup>H</sup>tæ-<sup>H</sup>p<sup>h</sup>e#, <sup>H</sup>a=<sup>L</sup>wæ # <sup>L</sup>de-<sup>HL</sup>ngo#.  
<sup>H</sup>ni-<sup>H</sup>me, <sup>H</sup>tæ-<sup>H</sup>p<sup>h</sup>e, <sup>H</sup>a=<sup>L</sup>wæ <sup>L</sup>de-<sup>HL</sup>ngo.  
 son-NM moon-NM 1SG=OBJ.ANM upward-lift

‘Sun and moon, lift me up!’

It appears that the marker /æ/ can be used with some inanimate entities as a kind of honorific (i.e. presenting an inanimate entity as possessing a human status). For instance, it is used with the noun [<sup>H</sup>dza] ‘yak butter tea’, an important part of the Lizu diet, e.g. [<sup>H</sup>dza.a <sup>L</sup>ke] ‘prepare yak butter tea’.

#### 4.1.3. Genitive marker /ji/

Genitive relation (alienable possession, part-whole relationships and related semantic functions) is expressed by means of the genitive marker /ji/—the formal marker of dependency of a noun or noun phrase on another noun or noun phrase in Lizu. For example: [<sup>L</sup>æ=<sup>H</sup>ji # <sup>LH</sup>nbo] ‘my hat’; [<sup>L</sup>næ-<sup>H</sup>nk<sup>h</sup>æ-<sup>L</sup>me=<sup>L</sup>co=<sup>L</sup>ji # <sup>LH</sup>tce] ‘clouds on the sky’. (In addition, inalienable possession can be expressed in Lizu by a simple juxtaposition of two nouns or noun phrases, e.g. /<sup>H</sup>nbrə # me-nts<sup>h</sup>o/ ‘horse tail’ (< /<sup>H</sup>nbrə/ ‘horse’).)

The genitive clitic /ji/ can fuse with its host word, triggering palatalisation of the initial of the latter. Some common forms resulting from this type of fusion with the genitive marker are:

- (i) /dʒi/ ‘of the family’ (< [de] ‘family’), e.g. [<sup>L</sup>æ <sup>H</sup>dʒi# <sup>LH</sup>ne] ‘our family house’, [<sup>L</sup>æ <sup>H</sup>dʒi # <sup>L</sup>se-<sup>HL</sup>pv] ‘our family tree’;
- (ii) /ni/, the genitive form of the second person singular pronoun /<sup>H</sup>ne/, e.g. [<sup>H</sup>ni <sup>H</sup>ze-<sup>H</sup>je] ‘your daughters’; and /tʃi/, the genitive form of the distal demonstrative pronoun and the third person singular pronoun /<sup>H</sup>t<sup>h</sup>e/, e.g. [<sup>L</sup>tʃi=<sup>H</sup>ji <sup>L</sup>tʃe-<sup>H</sup>tʃe] ‘her elder sister’ ([<sup>L</sup>tʃe-<sup>H</sup>tʃe] ‘elder sister’, Chinese, *jiějie* 姐姐);
- (iii) /tʃo/ ‘then’ in story narrations. This form is tentatively a fusion of the distal pronoun /<sup>H</sup>t<sup>h</sup>e/ ‘that’, the genitive particle /ji/ and the locative noun /co/ ‘on’ (see example sentence (22) above).

#### 4.1.4. Locative and beneficiary marker /ke/

The marker /ke/ indicates the goal of the event denoted by the verb. Its precise interpretation depends on the animacy of the noun it modifies. If the noun is inanimate, /ke/ ‘at’ indicates the location of the situation. For example:



- (26) <sup>h</sup>nts<sup>h</sup>o-<sup>l</sup>lo # <sup>l</sup>mæ-<sup>l</sup>mo # tɕiu # <sup>l</sup>rə-<sup>l</sup>ke=<sup>h</sup>ke # <sup>l</sup>k<sup>h</sup>e-<sup>h</sup>lo.  
<sup>h</sup>nts<sup>h</sup>o-<sup>l</sup>lo      <sup>l</sup>mæ-<sup>l</sup>mo      tɕiu      <sup>l</sup>rə-<sup>l</sup>ke=<sup>h</sup>ke      <sup>l</sup>k<sup>h</sup>e-<sup>h</sup>lo.  
man-eating      woman-old      CH:just      road-half=at      inward-wait

‘The witch was waiting [for the old mother] halfway between the old mother’s parents’ house and her own house.’

If, on the other hand, the preceding noun is animate (human), it is to be interpreted as the beneficiary of the event denoted by the verb, so that /ke/ is to be read as a beneficiary marker ‘for’, as in the following example:

- (27) <sup>h</sup>æ-<sup>h</sup>mæ # <sup>l</sup>ze-<sup>l</sup>je=<sup>l</sup>ke # <sup>h</sup>gæ-<sup>l</sup>mi # <sup>l</sup>ne-<sup>h</sup>nts<sup>h</sup>e.æ.  
<sup>h</sup>æ-<sup>h</sup>mæ      <sup>l</sup>ze-<sup>l</sup>je=<sup>l</sup>ke      <sup>h</sup>gæ-<sup>l</sup>mi      <sup>l</sup>ne-<sup>h</sup>nts<sup>h</sup>e.æ  
VOC-mother      daughter-small=for      clothes-?      downward-wash.PST

‘The mother washed her daughter’s clothes.’

#### 4.1.5. Instrumental marker /læ=mu/

The instrumental case, “the case of the inanimate force or object causally involved in the state or action identified by the verb” (Fillmore 1968: 24) is signaled in Lizu by the combination of the conjunction /læ/, followed by the verb /mu/ ‘make’, viz. /læ=mu/, literally ‘perform [an action] with some [NP]’. For example:

- (28) <sup>h</sup>nbu-<sup>l</sup>ts<sup>h</sup>æ <sup>l</sup>læ=<sup>l</sup>mu # <sup>h</sup>se <sup>l</sup>ku.  
<sup>h</sup>nbu-<sup>l</sup>ts<sup>h</sup>æ      <sup>l</sup>læ=<sup>l</sup>mu      <sup>h</sup>se      <sup>l</sup>ku.  
axe      CONJ=make      wood      chop

‘Chop wood with an axe.’

#### 4.1.6. The comparative marker /pæ/

The usual word order in a comparative construction in Lizu is as follows:

*The noun phrase, to be compared, + the noun phrase, which is the standard of comparison, + the comparative marker /pæ/ + predicate.*

The comparative marker /pæ/ is tentatively grammaticalization from the verb meaning ‘measure against’ or ‘compare’ (so far not found in fieldwork).

If added to animate nouns, /pæ/ requires to be preceded by the animate object marker /æ/. For example:

- (29) <sup>l</sup>æ=<sup>h</sup>ji # <sup>h</sup>je-<sup>l</sup>na # <sup>h</sup>gi-<sup>l</sup>me # <sup>l</sup>nbrə-<sup>h</sup>l  
<sup>l</sup>æ=<sup>h</sup>ji      <sup>h</sup>je-<sup>l</sup>na      <sup>h</sup>gi-<sup>l</sup>me      <sup>l</sup>nbrə-<sup>h</sup>l  
1SG=GEN      small-younger.brother      body-NM      tall-tall

‘My younger brother is tall.’

- (30)  $^Ht^he \# ^Hæ=Lpæ \text{ } ^Llæ\# \text{ } ^Ljæ\text{-}^{HL}nbro.$   
 $^Ht^he \quad ^Hæ=Lpæ \quad \quad \quad ^Llæ \quad ^Ljæ\text{-}^{HL}nbro$   
 3SG 1SG.OBJ.ANM=CMPR CONJ CMPR-tall

‘He is taller than I am.’

- (31)  $^Hæ \# \text{ } ^Lt^he.æ=^{HL}pæ \# \text{ } ^Lmæ=^{HL}nbro.$   
 $^Hæ \quad ^Lt^he.æ=^{HL}pæ \quad \quad \quad ^Lmæ=^{HL}nbro$   
 1SG 2SG.OBJ.ANM=CMPR NEG=tall

‘I am not as tall as he is.’

- (32)  $^Læ=^Hdzi \text{ } ^Hæ\text{-}^{HL}jæ \# \text{ } ^Lt^he.æ=^Hp^ho \# \text{ } ^Lte=Lpæ \text{ } ^{HL}nbro.$   
 $^Læ=^Hdzi \quad \quad \quad ^Hæ\text{-}^{HL}jæ \quad \quad \quad ^Lt^he.æ=^Hp^ho \quad \quad \quad ^Lte=Lpæ \quad \quad \quad ^{HL}nbro$   
 1SG=family.GEN VOC-elder.brother 3SG.OBJ.ANM=side one=CMPR tall

‘My elder brother is as tall as he is.’

#### 4.2. Number (plural and dual) and definiteness

Lizu nouns are unspecified for number. If the precise number of the entities in question is to be indicated, this is done by adding a relevant numeral, optionally followed by a classifier, e.g. [ $^Hse\text{-}^Lpv \text{ } ^Lte \text{ } ^Lkæ$ ] ‘one rope’. No classifier is required after Lizu demonstrative pronouns, e.g. [ $^Hku\text{-}^Lt^he \# \text{ } ^Ljæ\text{-}^{HL}kra$ ] ‘this child’ [ $^Hwo\text{-}^Lt^he \# \text{ } ^Ltæ\text{-}^{HL}ntshi$ ] ‘that pen’.

Contrary to previous analyses, I argue that Lizu has a moderately developed numeral classifier system. A ‘classifier’ (both measure words and classifiers proper, as detailed below) is here understood as a form which has to accompany a numeral in counting.

First, a numeral in Lizu does not require to be followed by a classifier if the noun that it modifies is animate, e.g. [ $^Hndza \text{ } ^Lte$ ] ‘one Chinese’, [ $^Hmæ\text{-}^Hmo \# \text{ } ^{HL}te$ ] ‘one old woman’, [ $^Hze\text{-}^Hje \# \text{ } ^{HL}ne$ ] ‘two daughters’, [ $^Hts^ho \# \text{ } ^{HL}ze$ ] ‘four people’. In the case of inanimate nouns, a classifier is not required with the numeral [ $^{HL}te$ ] ‘one’, e.g. [ $^Hse\text{-}^Ldzu\text{-}^Lme \text{ } ^Lte$ ] ‘one log’.

Second, most of Lizu numeral classifiers are in fact free forms, which denote a measure and can also lend themselves to classifier use, e.g. [ $^Hdze \text{ } ^Lte \# \text{ } ^Lke\text{-}^{HL}zi$ ] ‘one bucket of water’, [ $^Hdze \# \text{ } ^Lte\text{-}^{HL}nt^a$ ] ‘one drop of water’, [ $^Hgv \text{ } ^Lte \# \text{ } ^{HL}gv$ ] ‘one sentence’.

As to classifiers in the proper and restricted sense of the term, i.e. bound forms, (i) that bear no morphophonemic relation to any free noun and are used uniquely as classifiers, and (ii) that serve to mark a noun as member of a specific semantic class, Lizu has only two: (a) the classifier for elongated objects / $kæ$ / ‘strip’, e.g. [ $^Hdze \text{ } ^Lte \text{ } ^Lkæ$ ] ‘river’, [ $^Hbræ \text{ } ^Hte \text{ } ^Hkæ$ ] ‘one rope’; and (b) the classifier for non-human objects / $pv$ / ‘item’, e.g. [ $^Hy^wæ \text{ } ^Lte \text{ } ^Lpv$ ] ‘one chicken’, [ $^Hse\text{-}^Hpv \text{ } ^Hte \text{ } ^Hpv$ ] ‘one tree’, [ $^Hnbu\text{-}^Lto \text{ } ^Lte \text{ } ^Lpv$ ] ‘one knife’, [ $^Lsæ\text{-}^Lwu \# \text{ } ^Lte \text{ } ^{HL}pv$ ] ‘one sheet of paper’.

Indefiniteness in Lizu can be expressed by adding the numeral / $^Hte$ / ‘one’, accompanied by an appropriate classifier, to the modified noun. This combination serves to

denote the meaning ‘a certain’ and is often used in this meaning in story narrations, whenever, for instance, a new object or character is introduced in the storyline. For example:

- (33)  $\text{L}^{\text{tso}}\text{Hne} \# \text{H}^{\text{nae-Hnk}}\text{ae-Lme}=\text{L}^{\text{co}} \# \text{t}^{\text{ciu-si}} \# \text{H}^{\text{se-Lpv}} \text{Lte}=\text{L}^{\text{kæ}}\#, \text{H}^{\text{se-Ldzu-Lme}} \text{Lte}\#,$   
 $\text{H}^{\text{y}^{\text{w}}}\text{æ} \text{Lte}=\text{L}^{\text{pv}}.$
- |                                   |   |                            |                            |
|-----------------------------------|---|----------------------------|----------------------------|
| $\text{L}^{\text{tso}}\text{Hne}$ | $\text{H}^{\text{nae-Hnk}}\text{ae-Lme}=\text{L}^{\text{co}}$ | $\text{t}^{\text{ciu-si}}$ | $\text{H}^{\text{se-Lpv}}$ |
| that.GEN.on=RLV                   | sky=on  | CH:just-COP                | woolen.rope-?              |
- 
- |                                    |                                 |               |  |                                    |
|------------------------------------|---------------------------------|---------------|--|------------------------------------|
| $\text{Lte}=\text{L}^{\text{kæ}},$ | $\text{H}^{\text{se-Ldzu-Lme}}$ | $\text{Lte},$ | $\text{H}^{\text{y}^{\text{w}}}\text{æ}$ | $\text{Lte}=\text{L}^{\text{pv}}.$ |
| one=strip                          | wood-log-NM                     | one           | chicken                                  | one=CLF                            |

‘Then, from the sky, a woolen rope, a log and a chicken [were thrown to her].’

While the exact number of entities in question as well as indefiniteness can be expressed in Lizu by a number-classifier phrase, the expression of definiteness and plurality depends on special markers.

Definiteness is expressed in Lizu by means of the definite marker /bi/, which serves the anaphoric function, referring to something mentioned in the context. /bi/ co-occurs with both animate and inanimate nouns, both singular and plural in the context; e.g.  $[\text{H}^{\text{æ-Hmæ}}=\text{H}^{\text{bi}}]$  ‘the mother’ (vs.  $[\text{H}^{\text{æ-Hmæ}} \text{H}^{\text{Lte}}]$  ‘one mother’),  $[\text{H}^{\text{nbu-Lts}}\text{æ}=\text{L}^{\text{bi}}]$  ‘the axe’ (vs.  $[\text{H}^{\text{nbu-Lts}}\text{æ} \text{Lte}=\text{L}^{\text{pv}}]$  ‘one axe’),  $[\text{H}^{\text{le-Ldzi}}=\text{L}^{\text{bi}}]$  ‘those fingernails’ (vs.  $[\text{H}^{\text{le-Ldzi}} \text{Lte}=\text{L}^{\text{pv}}]$  ‘one fingernail’). In addition, the classifier for non-animate entities /pv/ can also lend itself to the anaphoric use, e.g.  $[\text{L}^{\text{se-Lpv}}=\text{H}^{\text{Lpv}}]$  ‘the tree’. The use of /pv/ is, however, distinct from that of /bi/, as (i) when appearing without a numeral, /pv/ implies the singularity of the noun it modifies and (ii) /pv/ is restricted to inanimate nouns.

The definite marker /bi/ appears to be the base form for the two plurality markers in Lizu, as the use of the latter implies the definiteness of the modified noun:

(a) /bo/ ‘group, flock’ for animate entities,  $[\text{H}^{\text{ts}^{\text{h}}\text{o}}=\text{H}^{\text{bo}}]$  ‘(those) people’,  $[\text{H}^{\text{ŋu}}=\text{H}^{\text{bo}}]$  ‘(those) cows’ vs.  $[\text{H}^{\text{ŋu}} \text{Lte}=\text{L}^{\text{bo}}]$  ‘one flock of cows’;  $[\text{H}^{\text{t}^{\text{h}}\text{e}}=\text{L}^{\text{bo}}]$  ‘they; those [animate]’; and

(b) /be/ for inanimate entities, e.g.  $[\text{H}^{\text{tæ-Lnts}^{\text{h}}\text{i}}=\text{L}^{\text{be}}]$  ‘(those) pens’,  $[\text{H}^{\text{le-Ldzi}}=\text{L}^{\text{be}}]$  ‘(those) fingernails’,  $[\text{H}^{\text{ku-Ht}^{\text{h}}\text{e}}=\text{H}^{\text{Lbe}}]$  ‘these’,  $[\text{H}^{\text{wo-Ht}^{\text{h}}\text{e}}=\text{H}^{\text{Lbe}}]$  ‘those’.

While the three forms are related through the feature definiteness, the semantic difference between /bi/, on the one hand, and /bo/ and /be/, on the other hand, consists in: (a) the anaphoricity and referentiality of /bi/ (irrespective of the contextual singularity or plurality of the noun in question), (b) plurality and animacy of /bo/, and (c) plurality and inanimacy of /be/. Compare, for example:  $[\text{H}^{\text{le-Ldzi}}=\text{L}^{\text{bi}}]$  ‘(those) fingernails (mentioned earlier)’ and  $[\text{H}^{\text{le-Ldzi}}=\text{L}^{\text{be}}]$  ‘(those) fingernails (plural)’.

The three forms, viz. /bi/, /bo/ and /be/, are tentatively related by inflection, but the underlying inflectional processes are not yet understood.

Duality can be expressed in Lizu by means of (a) the marker /dze/ for animate entities (nouns and personal pronouns), e.g. [<sup>H</sup>p<sup>h</sup>æ-<sup>L</sup>mæ=<sup>L</sup>dze] ‘father and mother, the two of them’, [<sup>H</sup>jo-<sup>L</sup>dze] ‘the two of us (inclusive)’, [<sup>L</sup>ne-<sup>H</sup>dze <sup>L</sup>ne-<sup>L</sup>h<sup>e</sup>] ‘the two of you’; and (b) the marker /dze/ ‘pair’ for inanimate entities, e.g. [<sup>H</sup>zi=<sup>L</sup>dze] ‘a pair of shoes’. (These two markers are also probably related by inflection: tentatively, /dze/ > /dzre/.)

To conclude this section on nominal marking, the semantic feature of animacy appears to be the most important conditioning factor in the coding of nominal grammatical categories in Lizu (case, number and definitiveness). Only animate arguments require case marking and it is again the animacy of the noun that determines the choice of a classifier or plurality marker. In terms of patterning of the markers, the definite and plural markers /bi/, /bo/ and /be/, on the one hand, and the dual markers, /dze/ and /dze/, on the other hand, are likely to be connected by inflection.

## 5. Verbal marking

Verbal marking in Lizu encodes the features of tense, aspect, evidentiality and modality. Based on the distribution of the associated markers and the factors that condition their use, these four features can be viewed as three distinct, but interrelated and overlapping systems: (i) tense, (ii) aspect and (iii) evidentiality and modality.

Lizu has a tense system, which locates the time of the reported situation relative to the time of the utterance. (‘Situation’ is used here as a cover-term for states, processes, and events Comrie 1976: 13.) The essential temporal division is that between present (situations ongoing at the time of the utterance) and past (situations prior to the time of the utterance). The encoding of this opposition is characterized by markedness (LaPolla 1995): the present is unmarked (bare verb stem); whereas the past is marked: (i) simple past by means of the marker /æ/, combined with one of the two aspectual verbal prefixes: /de-/, marking the ingressive aspect; and /ne-/, marking the perfective aspect; and (ii) remote past by means of the marker /mi/. For example, /ŋu/ ‘cry, weep’ (non-past) vs. [<sup>L</sup>de-<sup>LH</sup>ŋu.æ] ‘cried, started to cry’ (past); /dzi/ ‘eat’ (non-past) vs. [<sup>L</sup>ne-<sup>LH</sup>dzi.æ] ‘ate, finished eating’ (past); [<sup>L</sup>dzi=<sup>LH</sup>mi] ‘once ate, used to eat’.

The expression of aspect (“the internal temporal consistency of a situation”, Comrie 1976: 3) by means of verbal markers is possible in Lizu only in relation to ongoing situations (present). This category is expressed in Lizu by the markers /bo/ and /ge/, which signal the progressive aspect (referring to ongoing situations) and the inchoative aspect (referring to situations soon to take place). The expression of aspect in Lizu is closely intertwined with the features of evidentiality (source of information) and modality (the speaker’s attitude towards the communicated information). The expression of the three (aspect, evidentiality and modality) is conditioned in Lizu by the features of controllability, volitionality and egophoricity:

### (i) controllability vs. non-controllability (semantic features of the verb)

A controllable verb is used when the agent has control over the action described by the verb. In other words, controllable acts are performed by the knowing agent of his own free will (e.g. ‘eat’, ‘drink’). Consequently, a non-controllable verb is used when the subject has no direct

control over the situation, that is, a situation rather imposed on the subject and of which he is a passive participant (e.g. ‘cough’, ‘hiccup’, ‘yawn’, ‘dream’, ‘perceive’).

(ii) volitionality vs. non-volitionality (meaning conveyed by verbal markers)

Volitionality is characterized by the volitional intent on the part of the speaker to perform the action in question; whereas non-volitionality is characterized by the absence of such intent. Accordingly, volitional acts are those initiated by volition on the part of the speaker (both ongoing and planned situations). Non-volitional acts, on the other hand, are those in which the speaker is a passive participant or witness.

(iii) egophoric or self-person vs. other person (types of utterances)

Egophoric or self-person utterances express personal knowledge or intention on the part of the speaker. They are mostly linked with the overt presence of the first person in an utterance or with its anticipation, i.e. in the case of direct questions, the answer of which normally uses the first person. Other person utterances are consequently those linked to the non-first person.

These features are all shared by Lizu with Tibetic languages (Sun 1993, Tournadre 2008), where they condition the expression of evidentiality, which constitutes “one of the most prominent pan-chronic and pan-dialectal traits of the Tibetan language” (Sun 1993: 946).

In contrast to Tibetan with its complex evidentiality system, which grammaticalizes both the source of information (direct, indirect, quotative) and also the time of acquisition (assimilated vs. new information); Lizu encodes only the information source, and, furthermore, only non-firsthand information, more precisely: (i) inferential knowledge, based on perception or personal knowledge (the marker /dæ/); and (ii) reported speech (the marker /dʒi=ge/). Situations not marked for non-firsthand information are unspecified with respect to the source of information.

Finally, Lizu has one modal marker /dzu/, which expresses the uncertainty of the speaker about the feasibility of the reported situation.

The remainder of this section details the expression of aspect (progressive and inchoative), tense (simple and remote past), evidentiality and modality, in that order.

### **5.1. Present situations: control and intent**

Lizu has two aspectual markers /bo/ and /ge/, indicating both the progressive and the inchoative aspect. /bo/ occurs only in egophoric utterances, whereas /ge/ can occur in both egophoric and other person utterances. Given their distribution and semantics, I analyze them as being governed by the features “control” and “intent”, both linked to the speaker. The former, control, refers to the speaker’s control over the execution of the situation in question (irrespective of the type of the verb, controllable or non-controllable). The latter feature, intent, indicates the speaker’s intent to initiate the situation in question. This feature does not apply when a non-controllable verb is used in an egophoric utterance, given that one cannot intend to perform something imposed on him. Neither does it apply in the case of other person utterances, given that the speaker in Lizu appears to have no access to the knowledge of the volition or intention on the part of another person, as discussed below.

Combinations of these two features, control and intent, produce the four types of situations summarized in Table 6:

	<b>control</b>	<b>no control</b>
<b>intent</b>	[A] speaker-agent, progressive	[C] speaker-agent, inchoative
<b>no intent</b>	[B] speaker-patient, exercising some control over the situation; progressive	[D] (a) speaker-patient, progressive (b) other person-agent and other person-patient; progressive
<b>marker</b>	bo	ge

*Table 6. Types of situations encoded by the markers /bo/ and /ge/*

The situations grouped in the first column are signaled by the marker /bo/. The two types of situations (Type A and Type B) are characterized by the control over the situation on the part of the speaker and are both progressive.

Situation Type A. This type of situations includes situations featuring controllable verbs. The use of /bo/ signals that the speaker is a conscious instigator of the situation in question and has full control over its execution. For example:

- (34)  $\text{H}\text{æ} \# \text{H}\text{to}=\text{HLbo.}$   $\text{H}\text{æ} \# \text{H}^{\text{t}}\text{e}-\text{Lnt}^{\text{h}}\text{e}=\text{Lbo.}$   $\text{H}\text{æ} \# \text{Lse-HLpv} \# \text{Lbe-Lbe}=\text{HLbo.}$   
 $\text{H}\text{æ}$   $\text{H}\text{to}=\text{HLbo.}$   $\text{H}\text{æ}$   $\text{H}^{\text{t}}\text{e}-\text{Lnt}^{\text{h}}\text{e}=\text{Lbo.}$   $\text{H}\text{æ}$   $\text{Lse-HLpv}$   
1SG look=CTRL 1SG outward-jump=CTRL 1SG tree-?  
 $\text{Lbe-Lbe}=\text{HLbo.}$   
climb-climb=CTRL

‘I am looking. I am jumping. I am climbing the tree.’

The following sentences are egophoric by anticipation (direct questions, of which the answers are in the first person):

- (35)  $\text{Hne} \# \text{Hso-Lni} \text{L}\text{æ}=\text{L}\text{æ}=\text{Lbo?}$   
 $\text{Hne}$   $\text{Hso-Lni}$   $\text{L}\text{æ}=\text{L}\text{æ}=\text{Lbo?}$   
2SG next-day come=Q=CTRL

‘Will you come tomorrow?’

- (36)  $\text{H}^{\text{t}}\text{e} \# \text{Hk}^{\text{h}}\text{æ} \text{L}\text{zi}=\text{Lbo?}$   
 $\text{H}^{\text{t}}\text{e}$   $\text{Hk}^{\text{h}}\text{æ}$   $\text{L}\text{zi}=\text{Lbo?}$   
3SG where live=CTRL

‘Where does he live?’ (or, rather, ‘Do you know where he lives?’)

Situation Type B. This type of situations includes those with non-controllable verbs, i.e. those in which the intent on the part of the speaker does not apply. The use of /bo/ in such cases implies that although the situation has not been initiated by volition (the use of a non-

controllable verb), the speaker has some degree of control over the manner in which it is executed. For example:

- (37)  $H\text{æ} \# Hts^he=Hbo.$  vs.  $H\text{æ} \# Hts^he=Hge.$   
 $H\text{æ} \quad Hts^he=Hbo \quad \quad H\text{æ} \quad Hts^he=Hge.$   
 1SG cough=CTRL 1SG cough=N-CTRL

‘I am coughing (on purpose).’ vs. ‘I am coughing.’

The types of situations grouped in the second column (situation types C and D) are all signaled by the marker /ge/.

Situation Type C. This type includes those situations that the speaker intends to perform, i.e. those which have not yet been initiated (and for which, consequently, the feature “control” does not apply) (the inchoative aspect). These situations are those featuring controllable verbs and referring to the near future.

- (38)  $H\text{æ} \# Hso-Lni \# L\text{æ}=HLge.$   $H\text{æ} \# Hso-Lni Hto=HLge.$   $H\text{æ} \# Hso-Lni \# Lbe-Lbe=HLge.$   
 $H\text{æ} \quad Hso-Lni \quad L\text{æ}=HLge. \quad \quad H\text{æ} \quad Hso-Lni \quad Hto=HLge.$   
 1SG next-day come=N-CTRL 1SG next-day look=N-CTRL  
  
 $H\text{æ} \quad Hso-Lni \quad Lbe-Lbe=HLge.$   
 1SG next-day climb-climb=N-CTRL

‘I will come tomorrow. I will look tomorrow. I will climb tomorrow.’

Situation Type D. In this final type of situations, both features of control and intent are not applicable. It includes non-controllable situations in the case of egophoric utterances and all types of situations (irrespective of their controllability; i.e. both, other person as agent and other person as patient) in the case of other person utterances. Both kinds of situations are progressive. For example:

- (39)  $H\text{æ} Hts^he=Hge.$  vs.  $Hzo Hts^he=Hge.$   
 $H\text{æ} \quad Hts^he=Hge. \quad \quad Hzo \quad Hts^he=He$   
 1SG cough=N-CTRL 3SG.ANM cough=N-CTRL

‘I am coughing.’ (progressive) vs. ‘He is coughing.’ (progressive)

- (40)  $H\text{æ} \# H^the-Lnt^he=Lge.$  vs.  $H^the \# H^the-Lnt^he=Lge.$   
 $H\text{æ} \quad H^the-Lnt^he=Lge. \quad \quad H^the \quad H^the-Lnt^he=Lge.$   
 1SG outward-jump=N-CTRL 3SG outward-jump=N-CTRL

‘I will jump.’ (inchoative) vs. ‘He is jumping.’ (progressive)

## 5.2. Past situations: Simple past and remote past

In its tense system, Lizu draws a distinction in terms of the proximity of the situation in question to the deictic now, distinguishing between (i) simple past, signaled by the past marker /æ/ in combination with the aspectual prefixes /de-/ and /ne-/; and (ii) remote past, signaled by the experiential marker /mi/. Both markers operate on all types of situations, regardless of the verb type (controllable vs. non-controllable), utterance type (egophoric vs. other person), as well as regardless of the control and intent on the part of the speaker, given that all these features can condition only present situations, as noted above.

Consider the following examples with the simple past marker /æ/, featuring controllable and non-controllable verbs in both egophoric and other person sentences:

- (41)  $^H\text{æ} \# \text{Lne-}^{\text{LH}}\text{dzi.æ.}$  vs.  $^H\text{t}^{\text{h}}\text{e} \# \text{Lne-}^{\text{LH}}\text{dzi.æ.}$   
 $^H\text{æ}$   $\text{Lne-}^{\text{LH}}\text{dzi.æ.}$   $^H\text{t}^{\text{h}}\text{e}$   $\text{Lne-}^{\text{LH}}\text{dzi.æ.}$   
 1SG downward-eat.PST 1SG.PFV downward-eat.PST  
 ‘I ate.’ vs. ‘He ate.’
- (42)  $^H\text{æ} \# \text{Læ-}^{\text{H}}\text{dzi} \# ^H\text{æ-}^{\text{H}}\text{mæ} \# \text{Lne-}^{\text{Lje-}}^{\text{LH}}\text{ma.}$   
 $^H\text{æ}$   $\text{Læ-}^{\text{H}}\text{dzi}$   $^H\text{æ-}^{\text{H}}\text{mæ}$   $\text{Lne-}^{\text{Lje-}}^{\text{LH}}\text{ma.}$   
 1SG 1SG-family.GEN VOC-mother downward-dream-see?.PST  
 ‘I dreamt of my mother.’
- (43)  $^H\text{t}^{\text{h}}\text{e} \# ^H\text{jæ-}^{\text{Hx}^{\text{w}}}\text{æ} \# ^H\text{æ-}^{\text{H}}\text{mæ} \# \text{Lne-}^{\text{Lje-}}^{\text{LH}}\text{ma.}$   
 $^H\text{t}^{\text{h}}\text{e}$   $^H\text{jæ-}^{\text{Hx}^{\text{w}}}\text{æ}$   $^H\text{æ-}^{\text{H}}\text{mæ}$   $\text{Lne-}^{\text{Lje-}}^{\text{LH}}\text{ma.}$   
 1SG past-evening VOC-mother downward-dream-see?.PST  
 ‘He dreamt of his mother last night.’

The past form of the verb (formed with the past marker /æ/) is a common source for many Lizu function words (nominal and verbal postpositions). Take, for instance, the perfect marker /sæ/, which indicates the lasting result of an accomplished situation, as in examples (44) and (45). This marker is likely to be of verbal origin, related through the past marker /æ/ to a verb, that so far has not yet been found. For example:

- (44)  $^H\text{nts}^{\text{h}}\text{o-}^{\text{L}}\text{lo} \text{Lmæ-}^{\text{L}}\text{mo} \# ^{\text{L}}\text{t}^{\text{h}}\text{e}^{\text{H}}\text{ji} \# ^{\text{L}}\text{t}^{\text{h}}\text{je-}^{\text{H}}\text{t}^{\text{h}}\text{je} \# ^{\text{H}}\text{t}^{\text{h}}\text{e-}^{\text{L}}\text{p}^{\text{h}}\text{æ-}^{\text{L}}\text{bi} \# ^{\text{L}}\text{t}^{\text{h}}\text{e}^{\text{H}}\text{ke} \# ^{\text{H}}\text{ts}^{\text{h}}\text{e-}^{\text{L}}\text{læ-}^{\text{L}}\text{sæ.}$   
 $^H\text{nts}^{\text{h}}\text{o-}^{\text{L}}\text{lo}$   $\text{Lmæ-}^{\text{L}}\text{mo}$   $^{\text{L}}\text{t}^{\text{h}}\text{e}^{\text{H}}\text{ji}$   $^{\text{L}}\text{t}^{\text{h}}\text{je-}^{\text{H}}\text{t}^{\text{h}}\text{je}$   $^{\text{H}}\text{t}^{\text{h}}\text{e-}^{\text{L}}\text{p}^{\text{h}}\text{æ-}^{\text{L}}\text{bi}$   
 man-eating mother-old 3SG.GEN=GEN CH: elder.sister belly=DEF  
 $^{\text{L}}\text{t}^{\text{h}}\text{e}^{\text{H}}\text{ke}$   $^{\text{H}}\text{ts}^{\text{h}}\text{e-}^{\text{L}}\text{læ-}^{\text{L}}\text{sæ.}$   
 that=at wash=come=PRF

‘[When the day broke, the clever girl saw from the tree that] the witch had come to the



well to wash her big sister's intestines.'

(45)  $^H\text{æ} \# ^H\text{jæ-Lji} \# ^L\text{æ}=\text{HLk}^h\text{æ} \# , ^H\text{t}^h\text{e} \# ^L\text{dæ}=\text{Hsæ}.$

$^H\text{æ}$        $^H\text{jæ-Lji}$        $^L\text{æ}=\text{HLk}^h\text{æ}$                        $^H\text{t}^h\text{e}$        $^L\text{dæ}=\text{Hsæ}.$   
 1SG      past-day      come.PFV=time.when      3SG      go.PST=PRF

'When I came yesterday, he had already left.'

The remote past is signaled in Lizu by the marker  $[\text{L}^H\text{mi}]$ . (This marker carries a clear rising contour, viz.  $[\text{LH}]$ . This suggests that this marker derives from a fusion of two elements, tentatively the verb /mu/ 'make' and a clitic, yet to be identified.) The use of  $[\text{L}^H\text{mi}]$  implies a rupture between the present and the reported past situation, i.e. it refers to situations that took place in the remote past. For example:

(46)  $^H\text{æ} \# ^H\text{mo} \# ^L\text{ne-Hmu}\#=\text{L}^H\text{mi}.$

$^H\text{æ}$        $^H\text{mo}$        $^L\text{ne-Hmu}\#=\text{L}^H\text{mi}$   
 1SG      soldier      downward-make=EXP

'I once served as a soldier.'

### 5.3. Marking of non-firsthand information and modality

The present and past situations considered so far and signaled by the markers /bo/, /ge/, /æ/, /sæ/ and /mi/, are unspecified for the source of information. Direct knowledge of the situation appears to be implied in most cases, and particularly in those where the control marker /bo/ is used. The latter is likely to be the case, because the speaker is naturally assumed to have direct knowledge of the situation, the execution of which he controls. In fact, it is precisely the knowledge of the speaker that is questioned in example sentence (36)  $[\text{Ht}^h\text{e} \# ^H\text{k}^h\text{æ} \text{ } ^L\text{zi}=\text{Lbo?}]$  'Where does he live?' or 'Do you know where he lives?'. Notably, my language consultant hesitated to accept this sentence with the marker /ge/, viz.  $[\text{Ht}^h\text{e} \# ^H\text{k}^h\text{æ} \text{ } ^L\text{zi}=\text{Lge?}]$ ; and finally accepted it with the reservation that the subject of the sentence lives somewhere very far. The reluctance of my language consultant to accept this sentence with /ge/ clearly results from the fact that by using /ge/ in this context (egophoric utterance by anticipation), the speaker negates the addressee's access to the information, that the speaker is himself seeking; which is a strange situation indeed (in terms of my language consultant's explanation, the subject lives somewhere very far, i.e. in a location unknown to the addressee). The use of /bo/ therefore implies direct knowledge of the situation; whereas in case of other markers, the source of information is simply unspecified, and can be either direct or indirect.

At the same time, Lizu has means to signal that the speaker's information on the reported situation comes from non-firsthand sources. Accordingly, Lizu distinguishes between presenting the knowledge of the situation as (i) inferred, signaled by the marker /dæ/ (for both past and present situations) or (ii) reported or quotative, expressed by /dzi=ge/ (for both past

and present situations). Finally, in case of those situations which are not actualized (both real situations planned in the future and hypothetical situations); the modal marker /dzu/ is used, which expresses the uncertainty of the speaker as to their feasibility.

(i) The inferential marker /dæ/

The inferential marker /dæ/ is likely to have developed from the past form of the verb ‘go’, /dæ/. (The verb ‘go’ in Lizu has a suppletive paradigm, consisting of the non-past form /<sup>H</sup>ji/ and the past form /dæ/.) The use of /dæ/ signals that the speaker does not possess firsthand information about the reported event. Instead, a proposition with this marker presents the speaker’s conjecture regarding the reported event (as opposed to direct observation), based on some relevant cues, whatever the nature of the information channel: (a) sensory (visual, auditory, tactile, intuition, etc.) or (b) inferential (e.g. based on personal knowledge). When used in reference to past situations, /dæ/ replaces the perfective marker /æ/.

Consider some examples of this marker in sentences denoting accomplished and non-accomplished situations:

(47) <sup>L</sup>ng<sup>w</sup>æ <sup>L</sup>zæ=<sup>H</sup>læ=<sup>L</sup>ge=<sup>L</sup>dæ.

<sup>L</sup> ng <sup>w</sup> æ	<sup>L</sup> zæ= <sup>H</sup> læ	<sup>L</sup> ge= <sup>L</sup> dæ.
rain	fall=come	N-CTRL=IFR

‘It seems like it is going to rain.’

(48) <sup>H</sup>zo # <sup>H</sup>ni-<sup>L</sup>ke # <sup>L</sup>de-<sup>L</sup>ts<sup>h</sup>e.æ <sup>L</sup>k<sup>h</sup>æ=<sup>L</sup>le, <sup>H</sup>ts<sup>h</sup>e # <sup>H</sup>mæ=<sup>L</sup>ge=<sup>L</sup>dæ.

<sup>H</sup> zo	<sup>H</sup> ni- <sup>L</sup> ke	<sup>L</sup> de- <sup>L</sup> ts <sup>h</sup> e.æ	<sup>L</sup> k <sup>h</sup> æ= <sup>L</sup> le,	<sup>H</sup> ts <sup>h</sup> e
3SG.ANM	day-half	upward-cough.PST	time.when=TOP	cough

<sup>H</sup>mæ=<sup>L</sup>ge=<sup>L</sup>dæ  
NEG=N-CTRL=IFR

‘He has been coughing for a while, but it seems like he is coughing no longer.’

(49) <sup>H</sup>t<sup>h</sup>e # <sup>L</sup>ne-<sup>L</sup>dzi=<sup>L</sup>Hdæ. <sup>H</sup>t<sup>h</sup>e # <sup>H</sup>ne-<sup>L</sup>tɕ<sup>h</sup>e=<sup>L</sup>dæ.

<sup>H</sup> t <sup>h</sup> e	<sup>L</sup> ne- <sup>L</sup> dzi= <sup>L</sup> Hdæ.	<sup>H</sup> t <sup>h</sup> e	<sup>H</sup> ne- <sup>L</sup> tɕ <sup>h</sup> e= <sup>L</sup> dæ.
3SG	downward-eat=IFR	3SG	downward-drink=IFR

‘It seems like he has eaten. It seems like he has drunk.’

(ii) The quotative marker /dzi=ge/

Similar to quotative markers in Tibetan dialects (e.g. in the Mdzo-dge variety of Amdo Tibetan, Sun 1993: 981-984), Lizu’s quotative construction consists of a quote clause (either including the original speaker, who made the original statement or not) followed by the quotative element /dzi/ ‘speak’, which is, in turn, followed by the marker /ge/. By using /dzi=ge/, the speaker signals that the reported situation is based on someone else’s verbal account. For example:

- (50)  $\text{H}^{\text{h}}\text{e} \# \text{Hjæ-}^{\text{H}}\text{x}^{\text{w}}\text{æ} \# \text{Hæ-}^{\text{H}}\text{mæ} \# \text{Lne-}^{\text{L}}\text{je-}^{\text{LH}}\text{ma} \text{Ldzi=}^{\text{L}}\text{ge}.$   
 $\text{H}^{\text{h}}\text{e} \quad \text{Hjæ-}^{\text{H}}\text{x}^{\text{w}}\text{æ} \quad \text{Hæ-}^{\text{H}}\text{mæ} \quad \text{Lne-}^{\text{L}}\text{je-}^{\text{LH}}\text{ma} \quad \text{Ldzi=}^{\text{L}}\text{ge}$   
 1SG past-evening VOC-mother downward-dream-see?.PST speak=N-CTRL

‘He says that he dreamt of his mother last night.’

(iii) The modal marker /dzu/

The modal marker /dzu/ signals that the speaker is uncertain about the feasibility of the reported situation. Its use groups together real situations (statements about planned actions of other persons, events not yet actualized) and those situations that are hypothetical. In both cases, the use of /dzu/ implies the lack of the speaker’s conviction about the reported situation, given that in the former case (real situation involving other people); he appears to have no access to the knowledge of the intent of other people; conversely, the lack of conviction in the latter case (hypothetical situations) is simply due to the hypothetical nature of the situations in question. In sum, both types of situations imply the lack of the knowledge of the intent of the instigator of the reported situation on the part of the speaker. Consider some examples:

- (51)  $\text{H}^{\text{h}}\text{e} \# \text{Hso-}^{\text{L}}\text{ni} \# \text{Hlæ=}^{\text{L}}\text{dzu}.$   
 $\text{H}^{\text{h}}\text{e} \quad \text{Hso-}^{\text{L}}\text{ni} \quad \text{Hlæ=}^{\text{L}}\text{dzu}$   
 3SG next-day come=N-INT

‘He will come tomorrow.’

- (52)  $\text{L}^{\text{ng}}\text{wæ} \text{Lze=}^{\text{H}}\text{dzu}.$   $\text{Hso-}^{\text{L}}\text{ni} \# \text{L}^{\text{ng}}\text{wæ} \text{Lze} \text{Hlæ=}^{\text{L}}\text{dzu}.$   
 $\text{L}^{\text{ng}}\text{wæ} \quad \text{Lze=}^{\text{H}}\text{dzu}.$   $\text{Hso-}^{\text{L}}\text{ni} \quad \text{L}^{\text{ng}}\text{wæ} \quad \text{Lze} \quad \text{Hlæ=}^{\text{L}}\text{dzu}.$   
 rain fall=N-INT next-day rain fall come=N-INT

‘It might rain. It will probably rain tomorrow.’

Given the distribution and semantics of /bo/, /ge/ and /dzu/, the speaker in Lizu can have direct knowledge only of those situations (either actual or planned), of which he is a participant and observer. Hence, he can (i) control an ongoing situation (the use of /bo/), (ii) observe situations of which he is a passive participant and (iii) monitor his own intent to perform new situations (the latter two marked by /ge/). Conversely, he can only observe ongoing situations involving others (the use of /ge/) and has no access to the knowledge of the other person’s intent to initiate a new situation. Hence, when speaking about future situations involving other people, /dzu/ has to be used.

To conclude this overview of the expression of tense, aspect, evidentiality and modality markers in Lizu, Lizu verbal system is markedly different from that in Tibetan, despite the fact that Lizu shares with the latter some of the features underlying the verbal system, i.e. controllability, volitionality and egophoricity. Lizu appears to have a tense system, which Tibetan lacks. Lizu marks only non-firsthand information, whereas Tibetan systematically encodes both firsthand and non-firsthand information. The application of the

features controllability, volitionality and egophoricity shared between Lizu and Tibetan is centered on non-past situations in Lizu, whereas it is on the contrary, in the domain of past situations that Tibetan manifests a richer system of contrasts. In sum, even though similar in some respects on first sight, the two types are markedly distinct and probably unrelated, as discussed below.

#### 5.4. Existential verbs

Many languages of Sīchuān are known to have rich inventories of existential or locative verbs used for purposes of nominal sub-classification. In my fieldwork, I recorded six existential verbs in the Lizu variety of Mǔlǐ, which forms, phonologically and semantically, for the most part correspond to the existential verbs recorded by Huáng and Rénzēng for Lǔsū (1991: 148) and by Sūn for Ěrsū (1982: 255-256, 1983: 135), as summarized in Table 7. The three varieties use these various existential verbs to differentiate between entities based on their animacy (further distinguishing among inanimate entities between those abstract, large, valuable and the rest) as well as on the nature of the space in which these entities exist (inside a container vs. the rest).

Verbs	Lizu	Lǔsū	Ěrsū
animate	<sup>H</sup> dzu	dzu <sup>53</sup>	dʒo <sup>55</sup>
container	<sup>H</sup> dze	dzu <sup>53</sup>	
movable	dzuæ	dzuæ <sup>31</sup>	dʒo <sup>55</sup>
general	bo	bo <sup>31</sup>	bo <sup>55</sup>
abstract	ne	ne <sup>35</sup>	no <sup>55</sup>
unmovable	xæ	hiæ <sup>31</sup>	xæ <sup>55</sup>

Table 7. Existential verbs in Lizu, Lǔsū and Ěrsū

In Lizu, the principal distinction is that between animate (<sup>H</sup>dzu/ ‘exist’) vs. inanimate (the rest) entities. Within the latter group, there is a further differentiation, based on the relation of the entity in question to the speaker: (i) possession: (a) of concrete entities, /bo/ ‘have’; and (b) of abstract objects or inner states, /ne/ ‘have’, e.g. [<sup>LH</sup>rə # <sup>HL</sup>ne] ‘have a way to deal with a situation’; and (ii) existence of inanimate entities, unrelated to the speaker, /xæ/ ‘exist’. Consider some examples:

- (53) <sup>H</sup>æ # <sup>H</sup>zi-<sup>L</sup>je <sup>L</sup>dzu. <sup>H</sup>æ # <sup>H</sup>ndze=<sup>L</sup>bo. <sup>L</sup>æ=<sup>H</sup>ji # <sup>HL</sup>si # <sup>L</sup>mæ=<sup>HL</sup>ne. <sup>H</sup>æ # <sup>H</sup>ne <sup>L</sup>xæ.  
<sup>H</sup>æ      <sup>H</sup>zi-<sup>L</sup>je      <sup>L</sup>dzu.      <sup>H</sup>æ      <sup>H</sup>ndze=<sup>L</sup>bo.      <sup>L</sup>æ=<sup>H</sup>ji      <sup>HL</sup>si  
1SG   son-small   exist.ANM   1SG   money=exist.CTRL   1SG=GEN   CH: matter  
<sup>L</sup>mæ=<sup>HL</sup>ne.      <sup>H</sup>æ      <sup>H</sup>ne      <sup>L</sup>xæ.  
NEG=exist.ABST   1SG   house   exist.LRG

‘I have sons. I have money. I have nothing to do. I have a house.’

- (54) <sup>L</sup>dze=<sup>H</sup>bi # <sup>H</sup>de-<sup>L</sup>su.æ=<sup>L</sup>le#, <sup>LH</sup>mo # <sup>L</sup>ts<sup>h</sup>o=<sup>L</sup>ji <sup>L</sup>rə-<sup>H</sup>na # <sup>H</sup>t<sup>h</sup>e=<sup>L</sup>ke # <sup>LH</sup>dze#, <sup>L</sup>dze=<sup>H</sup>bi #  
<sup>L</sup>ne-<sup>LH</sup>nts<sup>h</sup>u.æ=<sup>L</sup>le#, <sup>LH</sup>mo # <sup>L</sup>ts<sup>h</sup>o=<sup>L</sup>ji <sup>L</sup>rə-<sup>H</sup>na # <sup>L</sup>mæ=<sup>HL</sup>dze.

<sup>L</sup>dʒe=<sup>H</sup>bi      <sup>H</sup>de-<sup>L</sup>ʃu.æ=<sup>L</sup>le,      <sup>LH</sup>mo    <sup>L</sup>ts<sup>h</sup>o=<sup>L</sup>ji      <sup>L</sup>rə-<sup>H</sup>na  
water=DEF    upward-clear.PST=TOP    again    person=GEN    ?shadow-black

<sup>H</sup>te=<sup>L</sup>ke    <sup>LH</sup>dʒe,    <sup>L</sup>dʒe=<sup>H</sup>bi    <sup>L</sup>ne-<sup>LH</sup>nts<sup>h</sup>u.æ=<sup>L</sup>le,      <sup>LH</sup>mo  
that=at    contain    water=DEF    downward-muddy.PST=TOP    again

<sup>L</sup>ts<sup>h</sup>o=<sup>L</sup>ji      <sup>L</sup>rə-<sup>H</sup>na      <sup>L</sup>mæ=<sup>H</sup>Ldʒe.  
person=GEN    ?shadow-black    NEG=contain

‘When the water in the well was still, the witch could clearly see the reflection of a human figure, but every time she tried to grab it, she only splashed the water and the figure was no longer to be seen.’

Two observations concerning the inventory of existential verbs in Lizu are in order:

(i) The existential verbs, /<sup>H</sup>dʒu/ for animate entities, /dʒuæ/ for movable entities and /<sup>H</sup>dʒe/ for entities located in contained space, are possibly derivations of the same stem. While the link between the verb /<sup>H</sup>dʒe/ and the other two verbs is currently obscure, that between /<sup>H</sup>dʒu/ and /dʒuæ/ is likely to be that of derivation with the past marker /æ/. In other words, /dʒuæ/ (/dʒu.æ/) is likely to be the past form of the verb /<sup>H</sup>dʒu/. The semantics of the verbs /<sup>H</sup>dʒu/ and /dʒuæ/, support this assumption: the verb /<sup>H</sup>dʒu/ signals the existence of an animate entity, i.e. that which is capable of moving and changing locations; its past form, /dʒu.æ/, indicates that an animate entity changed of location. The latter meaning is likely to have generalized to that more abstract, implying a change of state, regardless of the animacy of the modified noun.

(ii) The existential verb /bo/, used to indicate possession of inanimate entities, and the existential verb for animate entities /<sup>H</sup>dʒu/ are homophonous with the progressive aspect control marker /bo/ and the modal uncertainty marker /dʒu/, respectively. Furthermore, the latter two, /bo/ and /dʒu/, are likely to have developed from the former two, /bo/ and /<sup>H</sup>dʒu/.

The link between these two existential verbs of possession and existence of animate entities and the two markers of control and uncertainty, respectively, can be conceptualized as that of the degree of control that the speaker can exercise over the entity in question. Possessing small inanimate entities (/bo/) entails that the possessor has absolute control over them. Animate entities, whose existence is signaled by the verb /<sup>H</sup>dʒu/, on the other hand, have their own will and are therefore beyond the speaker’s control.

This development from existential verbs to aspect markers is likely to be triggered by the processes of extension (context-induced reinterpretation) and desemanticization (generalization in meaning content) (cf. Heine and Kuteva 2007: 23-28). Hence, the use of the existential verbs /bo/ and /<sup>H</sup>dʒu/ was extended from their usual, concrete context (existential and locative utterances) to a more general context (all types of utterances). This development was accompanied by the generalization of their meaning via metaphorical transfer from the domain of physical objects (real world entities) to the more abstract domain of aspectual

relations. This development tentatively proceeded along the following lines. In the case of the verb /bo/: from the meaning ‘There obtains a situation, in which the speaker possesses a small non-animate entity.’ to a more abstract and generalized meaning of /bo/ as a proposition marker: ‘There obtains a situation, of which the speaker has high degree of control.’ In the case of the verb /<sup>h</sup>dzu/: from the initial meaning ‘There obtains a situation, in which there exists an animate entity (this entity is beyond the speaker’s control by virtue of possessing its own will).’ to a more abstract and generalized meaning of /dzu/ as a proposition marker: ‘There obtains a situation, of which the speaker has no control.’ The grammaticalization of these two markers is arguably triggered by the contact influence of Tibetan with its highly developed evidentiality system, anchored in the features controllability, volitionality and observability. Under this contact pressure, /bo/ and /dzu/ were adapted to accommodate these features in Lizu. That the non-past forms of the verbs /bo/ and /<sup>h</sup>dzu/ have grammaticalized into proposition markers has led to the current situation of the Tibetan-like features of control and intent centered in Lizu on the domain of non-past situations.

## 6. Lizu-Lǔsū-Ėrsū and Lizu and Shǐxīng: A preliminary comparison

This paper brings together most nominal and verbal markers, recorded during my fieldwork on Lizu. Considered in their totality, these markers reveal a language with a topic-comment clause structure, strictly governed by animacy in its nominal marking and by deixis in its verbal marking (tense), and whose aspect, evidentiality and modality systems, conditioned by the features of controllability, volitionality and egophoricity, exhibit an independent development, possibly triggered by close contact with Tibetan.

Overall, many individual markers are shared by Lizu with its neighboring languages, e.g. (i) the genitive marker /ji/, attested, among other languages, also in Shǐxīng (Chirkova forthcoming) and Quèyù (Wáng 1991: 62), both /ji/; (ii) the locative marker /ke/, recorded also in Shǐxīng, /kɜ/; and nDrapa (Shirai 2006: 40), /gə/; (iii) the marker /ge/, implying intent on the part of the speaker and referring to events soon to take place, attested also, for instance, in Quèyù /rguə/ (Wáng 1991: 59) or Shǐxīng /gɜ/. These individual markers shared among the languages of Sìchuān are expected to be retention from their common ancestors or evidence of a shared substratum, just like the expression of topography-based spatial deixis or elaborate inventories of existential verbs, all pervasively present in the languages of the region.

On the other hand, if taken as sets of markers organized by the grammatical features that they encode, one set of nominal markers and one set of verbal markers considered in this paper possibly single Lizu out from its adjacent languages, notably: (i) the definite and plural markers /bi/, /bo/ and /be/ and the dual markers /dze/ and /dʒe/, both sets possibly linked through inflection, respectively; and (ii) the aspect and modality markers /bo/ and /dzu/ as developed from the existential verbs /bo/ and /<sup>h</sup>dzu/.

If confirmed in future fieldwork, these features together with their markers may constitute evidence of an innovative development in Lizu to set it apart from its geographic neighbors. This section uses these two features for a test comparison of Lizu with Lǔsū and Ėrsū, on the one hand, and with Shǐxīng, on the other hand.

### 6.1. Lizu-Lǔsū-Ėrsū

Lizu, Lǔsū and Ėrsū appear to be remarkably close in their basic lexicon and grammatical organization, as seen from the examples in the paper. This overall feeling of relatedness of the

three to each other is nonetheless difficult to quantify to a reliable degree of accuracy, based on the existing descriptions of Lǔsū and Ěrsū. No matter how valuable, the existing outlines are too brief and general to be conclusive as to the exact particulars of these two languages, and the heavy reliance on elicitation underlying both studies may potentially have resulted in accidental omission of some relevant phenomena. Consequently, no definite conclusions about the presence or absence of the two supposed Lizu specific features in Lǔsū and Ěrsū can currently be made. While some plural and dual markers corresponding to the forms attested in Lizu are mentioned in both varieties, i.e. one dual marker [dza<sup>31</sup>] in Lǔsū (Huáng and Rénzēng 1991: 141) and two, animate and inanimate, dual markers [dzi<sup>55</sup>] and [dze<sup>55</sup>], respectively, in Ěrsū (Sūn 1983: 128-129); one plural marker [wæ<sup>53</sup>] in Lǔsū (ibid.) and one plural marker [bɛ<sup>55</sup>] in Ěrsū (Sūn 1983: 128); no definite marker is proposed in either Lǔsū or Ěrsū, and the provided data are inconclusive as to the overall expression of plurality and definitiveness in both (too few examples, no natural texts).

In relation to the expression of aspect, only the marker /ge/ is provided in both studies: [ge<sup>31</sup>] in Lǔsū (Huáng and Rénzēng 1991: 144-145) and [gɛ<sup>55</sup>] in Ěrsū (Sūn 1983: 136). Given that all quoted sentences in both sources are in the third person, it is unclear what marker is used in egophoric utterances in these varieties and, more generally, whether these varieties distinguish between egophoric and other person utterances at all. Notably, in his recent fieldwork on the Miǎnníng variety of Lizu, Dominic Yu (2008) mentions two progressive aspect markers, possibly corresponding to /bo/ and /ge/ in the Mǔlǐ variety in Lizu, as described presently, viz. [bo<sup>55</sup>] and [gw<sup>55</sup>]. Yu analyzes [bo<sup>55</sup>] and [gw<sup>55</sup>] as first and non-first person progressive markers, thus confirming the egophoric-other person distinction in utterances in the Lizu of Miǎnníng. Interestingly, Yu also notes past forms of these markers (formed with the past marker [a]), [ba<sup>24</sup>] and [ga<sup>24</sup>], but the overall make-up of the aspect system and the role of [ba<sup>24</sup>] and [ga<sup>24</sup>] therein are currently unspecified.<sup>5</sup>

In sum, more research on Lǔsū, Ěrsū and Lizu is needed to complete the existing descriptions, as well as hopefully, to isolate a set of clearly defined and assessable parameters to render these languages measurable against each other as well as against their geographic neighbors.

## 6.2. Lizu and Shǐxīng

While Lizu is tentatively closely related to Lǔsū and Ěrsū, it appears to be strikingly distinct in all its linguistic sub-systems from its close geographical neighbor and its presumed close genetic kin in Sūn (2001) classification of the Qiangic languages, the Shǐxīng language.

Dissimilar to the topic-comment type clause structure, characteristic for Lizu, Shǐxīng employs a system reminiscent of the direct-inverse type, in which encoding of the semantic roles of agent and patient is governed by their respective ranking on the empathy-animacy hierarchy: speaker (1st person) > hearer (2nd person) > non-participant (3rd person) > non-human animate > inanimate (Silverstein 1976). The system is operated by the agent marker /rě / and the animate patient marker /sɿ/, of which the latter only marks the non-prototypical patient (i.e. animate patient). The agent is unmarked, if an action is directed from the first and

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<sup>5</sup> Notably, Sun (1983: 132) also notes the past form of the marker [gɛ<sup>55</sup>], [gɔ<sup>13</sup>] (note the contour tone on this marker, triggered by the past marker [ɔ] in this variety). Unfortunately, the exact meanings and functions of this marker are, again, not specified.

second person to the third person (direct). Conversely, the agent is marked, if an activity is directed from the third person to the first or second person (inverse). In transitive clauses with two third person participants, both agent and patient are marked with their respective markers.

Again, in contrast to Lizu with its complex patterning of the definite and the two plural markers, Shǐxīng does not grammaticalize the feature definitiveness at all and it has only one, optional plural marker for animate nouns, viz. /<sup>L</sup>mə-<sup>H</sup>zi/.

Verbal marking in Shǐxīng does not encode tense and evidentiality, and is oriented to the expression of aspect and modality instead. Notably, the features controllability, volitionality and egophoricity play no role in the expression of either aspect or modality in Shǐxīng. Furthermore, in contrast to Lizu, Shǐxīng has a fully grammaticalized category of irrealis mood (marked by /ʌõ/), which applies to a broad range of contexts of non-actual events, including optatives, predictive and counterfactual conditionals and polite imperatives (Mithun 1995: 377, 386; Sun 2007: 798, 814). Lizu, on the other hand, does not grammaticalize the category of irrealis and uses the modality marker /dzu/ to refer to both real future and hypothetical situations.

While several Shǐxīng markers derive from existential verbs, the grammaticalization path is in each case different from that observed in Lizu.

In sum, I have so far not found a single grammatical feature, complete with its associated marking, that is shared between Lizu and Shǐxīng; whereas only this type of evidence (i.e. whole systems or subsystems with some degree of internal organization, and involving not only categories but particular shared markers for them) is taken as probative of relatedness (Nichols 1996: 48, Sun 2000: 229-230). While more data on and more fine-grained analysis of both languages are naturally needed to capture the essential characteristics of their respective organization in order to draw more reliable conclusions about their relationship to each other; the hypothesis of a particularly close genetic connection between Lizu and Shǐxīng should probably be revised and other testable hypotheses should be preferred, such as, for instance, that of a close link between Shǐxīng and Nà languages (Chirkova forthcoming).

The relationship of Lizu to Nàmùyì, the supposed “dialect” of Lizu, in my language consultants’ assessment, is at present equally unsettled, but I hope that some light on this issue can be thrown at this very workshop.



## Abbreviations

1,2,3	first, second, third person pronoun
<	derived from
>	shows the outcome of a derivation
-	separates morphemes within a word
=	separates a word from clitics
#	indicates a juncture between two tone domains
?	indicates a morpheme or word whose meaning is unclear
~	indicates free variation between two forms
ABST	abstract
ANM	animate
CH:	Chinese loanwords
CLF	classifier
CMPR	comparative
CONJ	conjunction
COP	copula
CTRL	control
DEF	definite
EXP	experiential
GEN	genitive
IFR	inferential
INT	intent
LRG	large
N-	non- (e.g. NON-PAST, NON-CONTROL)
NEG	negation
NM	nominal
OBJ	object
PL	plural
PRF	perfect
PROH	prohibitive
PST	past
Q	question
RLT	contextual relevance
SG	singular
TOP	topic
VOC	vocative
WT	Written Tibetan

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