



HAL
open science

Lizu (Ersu)

Katia Chirkova

► **To cite this version:**

Katia Chirkova. Lizu (Ersu). Thurgood, Graham and Randy J. LaPolla. The Sino-Tibetan Languages (Second Edition), Routledge, pp.823-839, 2016, 9781138783324. hal-01485386

HAL Id: hal-01485386

<https://hal.science/hal-01485386>

Submitted on 8 Mar 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

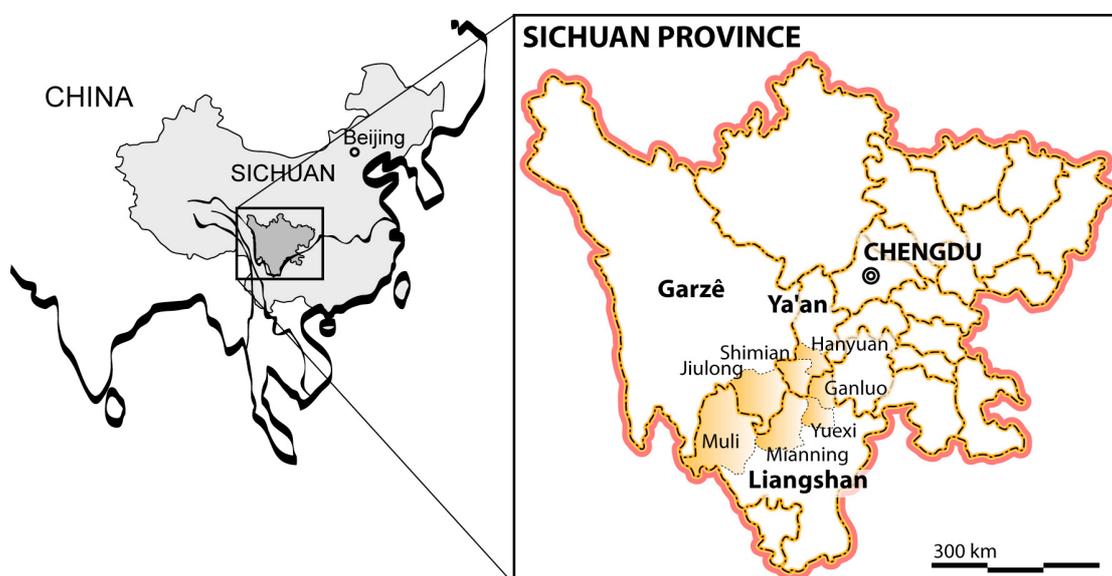
L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Lizu (Ersu)

Katia Chirkova (CNRS-CRLAO)

1. Introduction

Lizu is one of three closely related Tibeto-Burman languages spoken in Sìchuān 四川省 Province in the People's Republic of China: Ersu, Lizu, and Duoxu (see Map 1). The three languages are currently classified as dialects of one Ersu language (ISO-639 code *ers*). The Ersu language itself is classified as a member of the Qiangic subgroup of the Tibeto-Burman language family (e.g. Bradley 1997:36-37; Sun 2001).

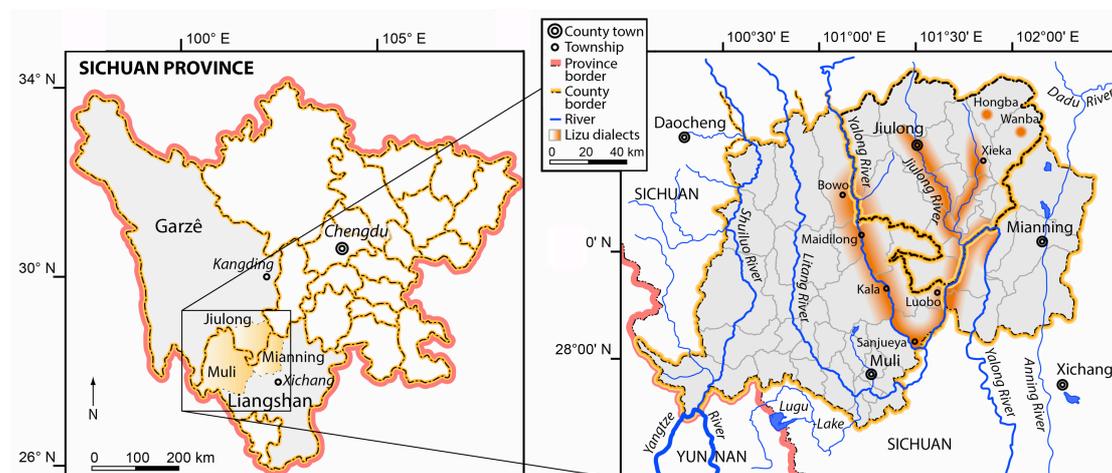


Map 1: Distribution of Ersu, Lizu, and Duoxu (Map by Franz Huber)

The Lizu people refer to themselves as /lî-zû/ or /lÿ-zû/ ‘white people’. In Chinese, the group is variously known as *Lǐrǔ* 里汝, *Lǚsū* 吕苏, or *Lìsū* 栗苏 (Sun 1982; Huang and Renzeng 1991; Wang 2010; Wang 2012); in English, as Lizu or Lyuzu (Chirkova 2008; Ikeda 2009; Yu 2012). The total number of speakers is estimated at 7,000 people (Wang 2010: 3).

Lizu is part of a continuum of closely related linguistic varieties which are spoken in Jiǔlóng County (九龙县, Written Tibetan, hereafter WT, *brgyad zur*), Mùlǐ Tibetan Autonomous County (木里藏族自治县, WT *smi li rang skyong rdzong*) and Miǎnníng County (冕宁县) (see Map 2). Of these three locations, the group has the

longest history of residence in Jiùlóng. Migration to Miǎnníng and Mùlǐ started from the second half of the Qīng 清 dynasty (1644-1911) and was triggered by an influx of Chinese and Yí migrants to Jiùlóng around that time (Wang 2012: 35).



Map 2: Distribution of the dialects of the Lizu language (Map by Franz Huber)

Lizu is spoken in a multiethnic area and has been influenced throughout its history by many languages, most importantly, Tibetan, Southwest Mandarin (hereafter Mandarin), Pǔmǐ 普米, Nàmùyī 纳木依, and Northern Yí 彝.

Lizu is essentially used as the primary language of oral communication in family and community events. Most speakers are bilingual in Mandarin, and the current trend for the school-going generation is to become monolingual in Mandarin.

Lizu is but little documented and described, with only two grammatical sketches to date, both of which focus on the Lizu varieties spoken in Mùlǐ County (Huang and Renzeng 1991; Chirkova 2008). In addition, there are phonological sketches of the Lizu varieties of Miǎnníng, Mùlǐ, and Jiùlóng (Ikeda 2009; Yu 2012; Chirkova and Chen 2013), an analysis of auxiliary verbs in the Lizu variety of Miǎnníng (Lin, Yin, and Wang 2014); and basic vocabulary lists for Mùlǐ and Jiùlóng varieties of Lizu (Sun et al. 1991; Huang et al. 1992; Ikeda 2009). The present overview is based on first-hand fieldwork data on /ʃætɕʰo pæ/ ‘eastern dialect’, as spoken in Kǎlā 卡拉 Township of Mùlǐ County.

2. Phonology

2.1. Initial consonants (39)

	Bilabial	Alveolar	Postalveolar	Alveolopalatal	Velar	Uvular	Glottal
Plosive	p p ^h b	t t ^h d			k k ^h g	q ɢ q ^h	
Affricate		ts ts ^h dz	tʃ tʃ ^h dʒ	tɕ tɕ ^h dʑ			
Nasal	m	n		ɲ	ŋ		
Fricative		s z	ʃ ʒ	ɕ ʑ	x ɣ		ħ
Approximant	w	ɹ		j			
Lateral		l					
Lateral fricative		ɬ					

Table 1. Lizu initial consonants

Velar and uvular stops contrast before /o/, e.g. /kǒ/ ‘beg’ vs. /qô/ ‘hole, pit’.

Elsewhere, they are in complementary distribution. /ɢ/ only occurs in the prenasalized cluster [Nɢ] and only before /o/ and /ɐ/. It shows varying degrees of frication at the beginning of the following vowel, after the release, e.g. /ne-NGê/ [ne-NGɣê] ‘stab’.

The voiced velar fricative has a uvular allophone occurring before /o/, /ɐ/, and /wɐ/, e.g. /ɣô/ [ɣô] ‘wine’.

/ħ/ is a nasal voiceless approximant (e.g. /ħê/ ‘bamboo’). Before /ɐ/, /ɹæ/, and /ɹə/, it is realized as voiced (e.g. /ħê/ [ħê] ‘five’, /ħɹǎ/ [ħɹǎ] ‘mushroom’). Comparative Ersu-Lizu-Duoxu evidence suggests that words with the /ħ/ initial derive from voiceless nasals (*m̥ *ŋ̥ *ɲ̥) at the Proto-Ersu-Lizu-Duoxu level. The set of words manifesting the voiceless nasal correspondence pattern is one shared innovation that can set Ersu, Lizu and Duoxu apart from other languages in the region (Chirkova and Handel 2013).

/ŋ/ is the only syllabic consonant. It only occurs after /k/ and in very few words (e.g. /kŋ/ ‘seven’).

2.2. Initial consonant clusters

Lizu has complex consonant onsets of three types:

- (a) prenasalized clusters with a homorganic nasal (“N”), which may occur before voiced and voiceless aspirated stops and affricates (e.g. /Nbǒ/ ‘hat’, /Np^hǒ/ ‘be diligent’)
- (b) clusters with approximants (j w ɹ) (e.g. /mjǎ/ ‘face’, /xwǎ/ ‘bird’, /mɹǎ/ ‘be tasty’)
- (c) clusters with fricatives (ʒ z ʧ ʃ) (e.g. /bʒê/ ‘fly (v.)’, /ɲîbzê/ ‘green’, /pʧî/ ‘throw’, /pʃê/ ‘Tibetan’). In addition, /pts^h/, is observed before low vowels (e.g. /k^he-pts^hǎ/ ‘taste’).

Elements in the second position in consonant clusters have restricted distribution: (i) /j/ only occurs after bilabials and laterals; (ii) /w/ occurs after postalveolars, velars, uvulars, /h̃/, and /ɹ/; (iii) /ɹ/ is restricted to bilabials and /h̃/; (iv) /ʒ z ʧ ʃ/ are restricted to /b p/.

2.3. Vowels (8)

i	y	u
e	ə	o
æ		ɐ

Table 2. Lizu vowels

Nasalization is not contrastive in vowels. It is observed before prenasalized clusters (e.g. /mêNtʃ^ho/ [mêntʃ^ho] ‘tail’), in the environment of the /h̃/ initial (e.g. /h̃û/ [h̃û] ‘want’), and in recent loanwords from Tibetan and Mandarin, where the donor

language has a nasal coda (-*m*, -*n*, -*ng*) (e.g. /sê mû/ ‘make smoke offering’, WT *bsang*). (In old loanwords, the original nasal element is in most cases lost without compensation, as in /jɛy/ ‘potato’, Mandarin /iaŋ²¹y²¹³/ 洋芋.) Nasalized vowels are also exceptionally found in two native words: /ôwẽ/ ‘goose’, /îjâ/ ‘duck’. Diphthongs are observed in recent loanwords from Mandarin (e.g. /xǎi/ ‘still’, Mandarin /xai²¹/ 还).

2.4. Syllable structure

The syllable structure is (N)(C1)(C2)VT, where N is nasal; C1 can be any initial consonant; C2 can be one of the following set: j, w, ɹ, z, ʒ, ʃ; V is vowel; T is tone; and parentheses indicate optional consonants. The minimum syllable is VT, e.g. /â/ ‘I’. The maximum syllable is NC1C2VT, e.g. /Nbjě/ ‘mountain’. Most syllables have a simple structure C1VT, e.g. /nê/ ‘you, thou’.

Lizu morphemes are generally monosyllabic but words are generally disyllabic (over 80% of the collected vocabulary). Monosyllables are of two types: (i) roots (free and bound), and (ii) affixes. Monomorphemic words are for the most part monosyllabic, e.g. /dʒě/ ‘water’. Polysyllabic words are mostly composite, e.g. /dʒê-k^hwæ/ ‘flood’ (from /dʒě/ ‘water’, /k^hwæ/ ‘be large’), /tôNbu-mu/ ‘nose hair’ (from /tôNbu/ ‘nose’, /mû/ ‘animal hair, fur’). There is also a handful of disyllabic and trisyllabic monomorphemic words, e.g. /mîdzâ/ ‘hare, rabbit’, /ʃêNbêljê/ ‘buttocks’.

2.5. Prosodic system

Lizu has a hybrid prosodic system which combines lexical tone on monosyllabic words and prominence patterns with stress-like and tonal characteristics on polysyllabic words (both monomorphemic and polymorphemic) and compounds. Roots are lexically specified for tone, whereas affixes are toneless.

The two contrastive lexical tones are: rising and falling, e.g. /lě/ ‘be old’ vs. /lê/ ‘be heavy’. The three prominence patterns are:

(a) The Equally-Prominent Pattern: Both syllables sound equally prominent, each syllable has a mid-level pitch contour, though the first is slightly higher than the second, and the second syllable has a falling pattern, e.g. /mîdzê/ ‘hare, rabbit’.

(b) The Left-Prominent Pattern: The first syllable is relatively longer and sounds more prominent. The f₀ peak is typically realized before the end of the first syllable, where the pitch starts to fall and continues to fall in the second syllable, e.g. /mîdzə/ ‘pepper’.

(c) The Right-Prominent Pattern: The second syllable is relatively longer and sounds more prominent. Within the first syllable, there is a mid-level pitch contour with a slight rise. The f₀ peak is realized within the second syllable where there is also a clear fall, e.g. /mutsê/ ‘cat’.

In words, compounds, and combinations of words with clitics (nominal and verbal particles), lexical tones undergo sandhi changes, where only the tonal contour of the domain-initial root or word is retained and realized over the entire domain. If the domain-initial monosyllabic root or word has the rising tone, the resulting pattern is generally Right-Prominent. Examples include /ɹwæ-dzê/ ‘chicken pen’ (from /ɹwǎ/ ‘chicken’, /dzê/ ‘shed, pen’), /dzə = bô/ ‘be eating’ (from /dzǎ/ ‘eat’, the egophoric progressive aspect auxiliary /bo/; tone is not indicated for those forms that do not occur in isolation). If the domain-initial monosyllabic root or word has the falling tone, the resulting pattern is generally Equally-Prominent. Examples include /wô-dzê/ ‘pig shed’ (from /wô/ ‘pig’), /tô = bô/ ‘be looking’ (from /tô/ ‘look’). In domains that begin with a disyllabic root or word, the resulting contours are determined by the tonal contour of the initial disyllabic item. Examples include /sâNgê-mêNtʃhô/ ‘lion’s tail’ (from /sâNgê/ WT *seng ge* ‘lion’, /mêNtʃhô/ ‘tail’), /tôNbu wu-li/ ‘tip of the nose’ (from /tôNbu/ ‘nose’, /wû-li/ ‘head’), /mutsə Ndoqô/ ‘cat’s eye’ (from /mutsê/ ‘cat’, /Ndôqo/ ‘eye’).

In words beginning with (toneless) affixes, words with the root with the rising tone generally have the Right-Prominent Pattern (as in /ne-dzâ/ ‘eat up’, from /dzǎ/ ‘eat’), whereas words with the root with the falling tone generally have the Left-Prominent Pattern (as in /dê-dzə/ ‘give birth’, from /dzâ/ ‘give birth’).

These general rules are not without exceptions. To use reduplicated forms as examples, in addition to the two regular patterns (that is, Right-Prominent and Equally-Prominent, as in /je-jê/ ‘be small’, /çî-çî/ ‘be fine’), some lexicalized reduplicated forms also have the irregular Left-Prominent Pattern (as in /dzô-dzo/ ‘be flat’). Some exceptions are also found in productive compounds and in combinations of words with clitics. Examples include /Nbɹə-mɛNtʃʰô/ ‘horse tail’ (from /Nbɹâ/ ‘horse’), the expected pattern is Equally-Prominent, */Nbɹâ-mɛNtʃʰô/; /æ=î/ ‘my’, (from /â/ ‘I’, the genitive particle /i/), the expected form is */â=î/. For these reasons, prominence patterns on polysyllabic domains are notated phonetically.

3. Morphology

Lizu is isolating (weakly agglutinative). Major word-formation processes include compounding, affixation, and reduplication. The majority of affixes are derivational.

Nominal prefixes and suffixes are restricted to nouns referring to animate referents. They include: (i) one vocative prefix /æ-/ in kinship terms, e.g. /â-wu/ ‘maternal uncle’; (ii) three gender suffixes: (a) one feminine /-mæ/, e.g. /wô-mâ/ ‘sow’; (b) two male /-Npʰæ/ or /-bu/, e.g. /wô-Npʰâ/ ‘boar’, /yâ-bû/ ‘male yak’; and (iii) one diminutive suffix /-je/, e.g. /wô-jê/ ‘piglet’.

Important verbal prefixes include: (i) three directional prefixes: /de-/ ‘upward’, /ne-/ ‘downward’, /kʰe-/ ‘inward’ (as in /dê-ji/ ‘go up’, /nê-ji/ ‘go down’, /kʰê-ji/ ‘go inside, enter’); (ii) one perfectivizing suffix, /tʰe-/ (as in /tʰe-kʰe=ě/ ‘have given’); and (iii) one comparative prefix /jæ-/ ‘more’ (e.g. /(ɲî) jæ-ljê/ ‘(illness) get better’, from /ljě/ ‘be good’).

Reduplication is mostly attested on verbal roots. It is part productive and part lexically idiosyncratic. It displays cross-linguistically recurrent meanings (cf. Moravcsik 1978), such as iterativity and repetition (/tɕ^he-tɕ^hê/ ‘chop’), reciprocity (/wô-wo/ ‘help [each other]’), and intensivity (/ʃɐ-ʃɐ/ ‘be [very] long’).

Inflectional morphological changes are limited. Vocalic alternation is attested in the derivation of the imperative stem of the verb ‘come’: /lî/ (IMP) from /lǎ/. Consonant alternation is observed in a few lexical causative verbs. Such verbs contain voiceless initials, whereas the corresponding non-causative verbs contain voiced initials, e.g. /tsǎ/ ‘feed’ vs. /dzǎ/ ‘eat’; /fû/ ‘dress’ vs. /wû/ ‘wear’. Suppletion is attested in the formation of the verb ‘go’, which has two stems: non-past /jî/ (both egophoric and non-egophoric) vs. past /dǎ/ (non-egophoric).

Lizu has many loanwords from the languages with which it has been in contact, most importantly, Tibetan and Mandarin. Examples include /ŋê^mô/ ‘camel’ (WT *rnga mo*), /qô^mɐ/ ‘emperor’ (WT *gong ma*), /kû^hNts^hê/ ‘coffin’ (Mandarin /kuan⁴⁴ts^hai²¹/ 棺材), /je^y/ ‘potato’ (Mandarin /iaŋ²¹y²¹³/ 洋芋).

Recorded neologisms are coined by extension and meaning shift of native Lizu words, e.g. /zê-tê pimê/ ‘cell phone, lit. speech-transmitting frog-shaped device’, /ʃê-dzû/ ‘plane, lit. iron crane’.

4. The noun phrase

Nouns are those forms that can take (in)definite marking, numeral-classifier phrases, and nominal particles (analytic case markers). Nouns can modify other nouns directly or in a genitive phrase (both in the pre-head position). There is no agreement with nouns of any kind marked on the verb.

The elements of the noun phrase and the order in which they may occur in relation to the head noun (N) are:

Dem Gen phrase/Rel clause N Adj Num Clf Def Particles

- (1) [[ɲô-Ngô ləmû ne-ñukæ = î] jâqê = bî]
 copper-pot INS downward-cover=GEN child=DEF
 ‘the child who was covered with a copper pot’
- (2) tçě de-nê çê-pû
 cloud upward-black three-item
 ‘three black clouds’

Definiteness is expressed by three definite markers (i) /bi/ (singular, both animate and inanimate), e.g. /jâqê = bî/ ‘the child’, /gâmi = bi/ ‘the garment’; (ii) /bo/ (plural, animate), e.g. /jâqê = bô/ ‘the children’; and (iii) /bæ/ (plural, inanimate), e.g. /gâmi = bæ/ ‘the garments’. Alternatively, definiteness can be expressed by the use of a bare classifier, e.g. /mɔ̂ = kâ/ arrow=strip ‘the arrow’. The numeral /tê/ ‘one’ can be optionally used as indefinite marker, as in /mɛjô tê/ ‘a lightning’.

Possession may be expressed by a simple juxtaposition of two nouns or noun phrases, e.g. /lâp^hâ-Ndʒô/ ‘tiger skin’. Alternatively, possession, part-whole relationship and other related meanings may be expressed by the genitive particle /i/, e.g. /lâp^hâ = i mɛNtʃ^ho/ ‘tiger’s tail’. /i/ may fuse with the root vowel of its host, also triggering palatalization on the initial of the host. Some frequent forms that result from this type of fusion include (i) /tç^hĩ/, the genitive form of the third person singular pronoun /t^hê/; and (ii) /dzî/ ‘of the family’ (from /dê/ ‘family’), as in (20).

Other nominal particles, which indicate the semantic and pragmatic roles of the noun phrase in the clause, include:

- (a) Contrastive topic and focus marker /le/, and non-contrastive topic marker /ne/
 /le/ indicates the presence of alternatives to the topicalized or focalized element. It typically occurs in parallel predications, in which two referents are contrasted for

some properties. In (3), /le/ marks clause-initials topics (see also (18), (22), (27), and (31) for more examples).

- (3) [Nbǒ tsu = sŭ = bi le] [k^hwæ-k^hwæ̂]
 hat wear-person=DEF CTR father's.elder.brother-father's.elder.brother
- [o-t^hê tçê ʃe-ʃe-su = bî le]
 that-that hair be.long-be.long-person=DEF CTR
- [ɲâ-ɲâ̂]
 father's.married.sister-father's.married.sister
 'The one wearing a hat is my uncle, that one with long hair is my aunt.'

In (4), /le/ marks contrastive focus in immediate pre-verbal position. It signals that the focused content is different from the hearer's expectation. This sentence is an answer to the suggestion that the speaker, a magic animal, is the one who ate the hearer's father.

- (4) [ne = î â-bâ dzə = sŭ] [â le] mɐ = zî
 2SG =GEN VOC-father eat=NMLZ.AGT 1SG CTR NEG=COP
 'The one who ate your father is not me.'

/le/ can follow another nominal particle, as in (5):

- (5) dzâ̂mæ = bi = ɐ le mǎ tsə = bo = tô
 wife=DEF=N-AGT CTR butter feed=PROG.EGO=MIR
 'As for [Gesar's] wife, [the demon] was apparently feeding her butter [to fatten her in order to eat her].'

The non-contrastive topic marker /ne/ refers to the given information which is shared by the speaker and the hearer. Consider sentence (6), which occurs in a traditional story after sentence (5), and in which ‘butter’, already introduced in the story, is marked by /ne/.

- (6) mě = bi ne zǒ ne-dzê
 butter=DEF TOP 3SG.N-VSB downward-eat
 ‘As for butter, he ate it [himself].’

(c) Non-Agentive Marker /e/ (or /wɛ/, in free variation)

/e/ signals primarily human arguments of the verb (except for agent). It indexes the (definite and animate) patient in monotransitive clauses (as in (7)), and the goal or beneficiary in ditransitive clauses (as in (5)).

- (7) nê = e mɛ = sê sê = e sə = gê?
 2SG=N-AGT NEG=kill who=N-AGT kill=PROG.N-EGO
 ‘If I don’t kill you whom do I kill?’

(d) Coordinative /læ/ ‘and’, as in /tɛjê læ jê-jê/ ‘today and yesterday’

(e) Instrumental /læmû/ (possibly, a combination of /læ/ ‘and’ and the verb /mû/ ‘make’), e.g. /jô-Ngô læmû ne-ñukê/ ‘cover with a copper pot’ (as in (1))

(f) Locative /ke/ ‘at, on’, e.g. /gôpu = ke/ ‘on the plane’

(g) Comparative /pɛ/, as in /tʰê = pê/ ‘like that’. /pɛ/ is also the marker of the basis of comparison in the comparative construction:

- (8) jê-jê teje = pê jæ-de-ts^hê
 previous?-day today=CMPR more-upward-be.hot
 ‘It was hotter yesterday than it is today.’

4.1. Pronouns

Personal pronouns in Lizu distinguish singular, dual, and plural number in all persons. Singular forms are /æ̂/ ‘I’, /nê/ ‘you, thou’, and /t^hê/ and /zǒ/, both meaning ‘he/she/it’. /t^hê/ refers to something or someone visible in the speech situation. It functions as both pronoun and demonstrative. /zǒ/ refers to something or someone absent or out of sight.

Dual forms are formed with the root /dze/, e.g. /æ-dzê/ ‘the two of us’. They may be optionally followed by the expression /ne-t^hê/ ‘two-that’, e.g. /æ-dzê ne-t^hê/ ‘the two of us’.

Plural forms are formed with the root /ɿə/, e.g. /æ̂-ɿə/ ‘we’, /nê-ɿə/ ‘you’, /t^hê-ɿə/ and /zô-ɿə/ ‘they’.

Demonstrative pronouns are /kû-t^hê/ ‘this’ and /o-t^hê/ ‘that’. Plural forms are formed with the plural definite markers /bæ/ and /bo/, /kû-t^hê = bæ̂/ ‘these’, /o-t^he = bô/ ‘those (people)’.

Lizu has one anaphoric pronoun, /jô/ ‘self’. It is typically used in logophoric function in indirect speech:

- (9) jô læ tê-Ndzê = sê ãû dzi = gê
 self and one-ride=INF? want say=PROG.N-EGO
 ‘“I would also like to ride [on the tree branch],” said [the bear].’

/jô/ may be reduplicated to express reflexive meaning:

- (10) milô = i k^hû jo-jo = ê k^he-Ndo = ǎ
 mirror=GEN inside self-self=N-AGT inward-see=CS
 ‘He saw himself in the mirror.’

The main interrogative pronouns include /xâ[-te]/ ‘what, lit. what-one’, /sê/ ‘who’, /k^hâ[-ke]/ ‘where’, /ɲî-k^hâ/ ‘when’, /tɕ^hî-bi/ ‘how many’.

4.2. Numerals

Lizu has a decimal counting system, with numerals for 10, /tɕ^he-tɕ^hê/; 100, /zâ/, WT *brgya*; 1,000, /tû/, WT *stong*; and 10,000, /Nbô/, WT *'bum*. Cardinal numerals one to nine are: /tê/ ‘one’, /ně/ ‘two’, /ɕê/ ‘three’, /zê/ ‘four’, /hě/ ‘five’, /tʃ^hû/ ‘six’, /kɲ/ ‘seven’, /dzê/ ‘eight’, /Ngê/ ‘nine’.

Lizu has a multiplicative-additive number system. For example, the numeral /zê-zə Ngê/ ‘49’ is formed by multiplying ten by four and then adding nine. Numbers above one hundred are formed with the intrusive conjunction /læ/ ‘and’ between the hundred and the adjoined number, e.g. /tê zâ læ tê/ ‘one hundred one’. Numeral formation is mostly regular. Numbers for ‘one’, ‘three’, and ‘ten’ distinguish between free forms (as above) and bound forms: (i) /tɕî/ ‘one’ in /ts^he-tɕî/ ‘eleven’; (ii) /sê/ ‘three’ in /ts^hê-sê/ ‘thirteen’ and /sê-ts^hê/ ‘thirty’; and (iii) three bound roots for ‘ten’: (a) /ts^he-/ in the teen numbers, (b) /-ts^hə/ in /nê-ts^hə/ ‘twenty’ and /sê-ts^hə/ ‘thirty’, and (c) /-zə/ in numbers from forty to ninety.

Ordinal numbers are formed by adding the form /p^hôɕî/ to cardinal numbers, e.g. /p^hôɕî-tê/ ‘first’, /p^hôɕî-ně/ ‘second’, etc.

4.3. Classifiers and measure words

Lizu classifiers and measure words only combine with non-human nouns. They are used together with numerals to count nouns or to substitute for them.

Lizu has two bound classifiers: (i) /pu/ ‘item’ for small objects, e.g. /ɪwâ tê-pû/ ‘one chicken’; and (ii) /kæ/ ‘strip’ for elongated objects, e.g. /bɪǎ tê-kâ/ ‘one rope’. They may occur bare and trigger a definite interpretation (e.g. /bɪǎ = kâ/ ‘the rope’).

Free forms which lend themselves to classifier use can be subdivided into measure words (e.g. /dʒê tê kezê/ ‘one bucket of water’), and repeaters, i.e. classifiers that have the same form as the noun they modify (e.g. /gû tê gû/ ‘one sentence’, /Nbɪê ʒê Nbɪê/ ‘four horses’).

5. The verb phrase

Verbs are those forms that can take directional or perfectivizing prefixes, the causative marker /su/, and the interrogative and negative marking. Verbs can be preceded by adverbial expressions, followed by markers expressing aspect, evidentiality, and modality, and nominalized by one of the nominalizers (see 6.3.1). Most verbal markers behave like suffixes. They fall into two groups: (i) those that can be preceded by negative and question markers (hereafter auxiliaries, e.g. the progressive auxiliaries /bo/ and /ge/), and (ii) those that cannot (hereafter particles, e.g. the inferred particle /sæ/).

Lizu does not have grammaticalized tense. Important types of aspects include perfective, imperfective, change of state, experiential, progressive, resultative, and continuative. For most auxiliaries and particles, the expression of aspect interacts with that of evidentiality. Lizu has a hybrid evidentiality system, which combines specification of source of information (direct, inferred, reported) and specification of speaker’s perspective towards the source of, and access to, information (egophoric vs. non-egophoric). The latter type bears close similarity to the ‘egophoric’ evidential pattern best described for Tibetic languages (e.g. Tournadre 2008; Tournadre and LaPolla 2014). Lizu egophoric markers are prototypically correlated with the overt presence of the first person in an utterance or with its anticipation in direct questions (the answer to which normally uses the first person); non-egophoric markers are used in all other cases. Use of the markers is also correlated with the semantic category of

the verb: (i) controllable (verbs that denote actions performed by knowing agents of their own will, e.g. ‘drink’) vs. (ii) non-controllable (verbs that denote actions over which agents have no direct control, e.g. ‘cough’) (e.g. Tournadre 2008). Controllable verbs may be used with both egophoric and non-egophoric markers, while non-controllable verbs are generally only used with non-egophoric markers. Overall, use of an egophoric marker implies that the speaker is responsible for conceptualizing or observing the reported event or situation and committed to its truthfulness; whereas use of a non-egophoric marker has the opposite effect (see 5.1 for examples).

Adjectives (“lexeme[s] that denote a descriptive property and that can be used to narrow the reference of a noun”, Haspelmath 2010: 670) are formally a subset of verbs (intransitive stative verbs). Like verbs, adjectives function as (intransitive) predicates, take verbal prefixes, and the causative, interrogative, and negative marking. In contrast to other verbs, adjectives can modify a noun directly in the post-head position (e.g. /Nbɪ̃ dɛ-ly/ ‘white horse’), whereas other verbs can modify a noun only in the pre-head position (e.g. /Ndzɛ-Nbɪ̃/ ‘riding horse’).

Lizu has a subclass of existential verbs that categorize S/O arguments in terms of their animacy and orientation in space:

- (a) /dʒô/ ‘have, exist (animate)’, e.g. /jæqê dʒô/ ‘have children’
- (b) /dʒwǎ/ ‘exist (inanimate)’, e.g. /t^hɛ = kɛ læp^hɪ tɛ dʒwǎ/ ‘there is a vase there’
- (c) /bô/ ‘possess (inanimate)’, e.g. /bædʒê bô/ ‘have money’
- (d) /ɲê/ ‘have (abstract)’, e.g. /sê ɲê/ ‘have things to do’
- (e) /hǎ/ ‘exist (be attached)’, e.g. /se-pû tɛ-pû hǎ/ ‘there is a tree [there]’
- (f) /dʒê/ ‘exist (inside a container)’, e.g. /jomô dʒê/ ‘have strength’

Lizu does not have passive voice as a morphological category. To use as examples situations depicted in the “Cut and break clips” (Bohnenmeyer et al. 2001), a situation in which a man tears a piece of cloth (clips cb01chand.mpg) and that in which a piece of cloth gets torn by itself (cb08cspont.mpg) are both described in Lizu with the same verb form: /t^he-tsê dɛ/ PFV-tear N-EGO, respectively /t^hɛ gâmi t^he-tsê dɛ/ 3SG.VSB

garment PRF-break N-EGO ‘he tore the cloth’ vs. /gâmi = bi t^he-tsê dǎ/ garment=DEF PRF-break N-EGO ‘the garment got torn’. The functional equivalent of a passive construction is hence derived by omitting the agent and using a transitive verb ambitransitively. If the agent is not omitted, it may be marked by the nominal expression /le-kê/ ‘hand?-LOC?’:

- (11) kû-t^hê ts^hê = bi (lêp^hâ = i le-kê) ne-dzê dǎ
 this-that goat=DEF tiger=GEN hand?-LOC? downward-eat N-EGO
 ‘This goat was eaten (by a tiger).’

5.1. Aspect and evidentiality

The basic distinction between Lizu perfective and imperfective aspect is expressed by lexical-derivational means (verbal stems and prefixes). Bare verb stems tend to be imperfective. Perfective forms are derived by adding (telicity-inducing) prefixes to bare verb stems (e.g. /dzǎ/ ‘eat’ vs. /ne-dzê/ ‘eat up; have eaten’, /tsǎ/ ‘feed’ vs. /t^he-tsê/ ‘have fed’).

Bare verb stems may be used to refer to generic facts and permanent situations. Prefixed verb stems may be used to refer to iterative bounded events:

- (12) â nê = e xâ-te dzǎ t^hê ne-mû
 1SG 2SG=N-AGT what-one say 3SG.VSB downward-make
 ‘Whatever I tell him, he does.’

References to concrete bounded events often combine the use of a (prefixed) verb form with the change of state particle /e/, which denotes a change of state or situation (e.g. /k^he-Ndo = ǎ/ inward-see=CS ‘saw’, as in (10)). In reference to past events, /e/ stands in opposition to the inferred particle /sæ/ (which denotes that the reported event is not directly witnessed by the speaker, but deduced from sensory observation) and the non-egophoric particle /dǎ/ (likely from the non-egophoric form of the verb

denotes an activity in progress (as in (15)). Used in combination with a controllable verb and the first person actor, /ge/ denotes an activity certain to occur in the immediate future (e.g. /â t^hê = gê/ 1SG look=PROG.EGO ‘I will look.’). Used in combination with a non-controllable verb /ge/ always has a progressive reading, regardless of the person of the actor (e.g. /â ts^hê = gê/ 1SG cough=PROG.N-EGO ‘I am coughing’, /zǒ ts^hê = gê/ 3SG.N-VSB cough=PROG.N-EGO ‘He is coughing’). Conversely, a combination of a non-controllable verb with the first-person egophoric marker implies that the speaker has some control over the execution of the action or that she performs it deliberately (e.g. /â ts^hê = bô/ 1SG cough=PROG.EGO ‘I am coughing [on purpose]’).

Adjectives (which are in their majority prefixed verbal forms) generally do not co-occur with either /bo/ and /ge/. Such combinations may have an inchoative reading (e.g. /mjâpʃə d^hê-nifu = ge/ face upward-be.red=PROG.N-EGO ‘the face is beginning to get red’). Alternatively, they may portray the actor as actively experiencing the reported event (triggering certain pragmatic implications) (e.g. /â de-Np^hje = bô/ 1SG upward-be.cold=PROG.EGO ‘I am feeling cold [please fetch a coat for me].’).

The resultative particle /tɕæ/ is used to indicate the resulting state of an event.

- (16) zǒ pûNgê de-tɛ-tê læ ne-zî = tɕæ
 3SG.N-VSB knee upward-hold-hold and downward-sit=RES
 ‘She sits with her knees pulled up.’

The continuative particle /çi/ indicates that the event is continuous or reiterative.

- (17) â jî de-ŋê çï
 1SG belly upward-be.hungry CONT
 ‘I am still hungry.’

5.2. Modality

Future events are expressed using modal particles and auxiliary verbs. These include:

(a) The epistemic particle /tʃǔ/ ‘likely’, which signals likely and hypothetical situations:

- (18) tɛjê le mǎ ne-Ndê = sâ dê-tsʰæ tʃǔ
 today CTR sky downward-be.good=INF upward-be.hot likely
 ‘Today the weather turned out lovely, it’s going to be a hot day.’

(b) The auxiliary verbs /Ndʒǒ/ ‘know how to’ (expressing the potential to perform an action, in relation to inevitable events, as in (19)) and /pʰǎ/ ‘can’ (expressing possibility, as in (20)). The two auxiliary verbs can be used for both epistemic and deontic readings.

- (19) kû-tʰê ĥɪê = bi ne-dzə = ǎ le nê-Nbzi
 this-that mushroom=DEF downward-eat=CS CTR downward-be.poisoned

Ndʒǒ

know.how.to

‘If you eat this mushroom, you will die.’

- (20) tʰe-dzî wô-tsʰû lỳ mêtʃʰo = i ɕo
 3SG.VSB-family.GEN pig-be.fat year tail=GEN top

de-tsʰû pʰǎ

upward-be.fat can

‘Their pig may fatten by the end of the year.’

(c) Desire to perform an action is expressed by the use of the auxiliary verb /h̃û/ ‘want’. Its use is restricted to first person actors in declarative sentences or their anticipation in direct questions. By contrast, used with second and third person actors, /h̃û/ must be followed by the reported marker /dʒi = gê/ (see 6.3.3):

- (21) zǒ ɲî-wu h̃û dʒi = gê
 3SG.N-VSB house-buy want say=PROG.N-EGO
 ‘He wants to buy a new house.’

Unexpected information is signalled by the mirative particle /to/ (likely from the verb /tô/ ‘look’), which is added as the last element of the verb complex (as in (5)).

5.3. Imperative

The imperative form is the same as the citation form of the verb, but it is distinguished from it by the rising intonation. Both prefixed and unprefixed forms may be used for imperative, as in the following examples. The difference between the two is that the prefixed form implies a definite limit to the demanded action, whereas the unprefixed form has no implication as to whether the demanded action is to attain a definite limit or not.

- (22) ê-wu lêp^hê nê le jæ-k^hwê wûli dzǎ
 VOC-maternal.uncle tiger 2SG CTR more-be.large head eat
 ‘Uncle tiger, you are bigger [than I am], eat the head [of the bear].’

- (23) ɹû-ɹû tê-mê ne-dzê
 much-much one-bit? downward-eat
 ‘Help yourself to more food.’

An imperative can be made more polite by adding the particle /mɛ/ after the verb, as in /ne-dzê mɛ/ ‘please eat up’.

5.4. Causatives

Lizu has two types of causative: (i) non-productive lexical causative (such as /tsǎ/ ‘feed’, /fû/ ‘dress’) and (ii) productive causative with /su/. The former type expresses direct causation, as is common cross-linguistically (e.g. Shibatani and Pardeshi 2002), whereas the latter type can express both direct and indirect causation.

Productive causative derivations can be formed from intransitive verbs (both activity and stative) and transitive verbs. Both types of verbs share the same marking: the causative particle /su/ is added to the verb stem, as in /læ = sũ/ ‘make come’, /dê-dʒu = su/ ‘make dry’, /t^he-le = sũ/ ‘make release’. The causee takes non-agentive marking, if denoting a human referent (as in (24)), or receives no overt case marking, in all other cases (as in (25)).

- (24) â zo = ê ne-zî = su = ǎ
1SG 3SG.N-VSB=N-AGT downward-sit=CAUS=CS
‘I made him sit down.’

- (25) jê ne = t^hê = qo = su
blood downward=PROH=appear=CAUS
‘Do not let any blood out.’

In non-past contexts, a combination of the causative particle and the change of state particle expresses permission: /nê jî = su = ǎ/ 2SG go=CAUS=CS ‘You may go now.’

5.5. Adverbs

High frequency adverbs that modify adjectives include: degree marking adverbs: /t^he-tçi-ê/ ‘very’ (of verbal origin, etymology unclear; e.g. /t^he-tçi-ê Nbrə-Nbrâ/ ‘very tall’) and /dǎzu/ ‘particularly’ (e.g. /dǎzu Nbrə-Nbrâ/ ‘particularly tall’). Greater intensity in adjectives is also commonly expressed by reduplication (also of disyllabic

forms), e.g. /Nbɪə-Nbɪâ/ ‘very tall’, /dê-ly dê-ly/ ‘very white’. The comparative form of adjectives is formed with the comparative prefix /jæ-/ (e.g. /jæ-Nbɪâ/ more-be.tall ‘taller’). The superlative degree of adjectives is formed by adding the form /ɲî-lâ/ to the comparative form, e.g. /ɲî-lâ jæ-Nbɪâ/ ‘the tallest’. The two degree marking adverbs and the comparative prefix may also be used with some stative verbs, e.g. /ʃâNgê=i ɕo ʃâ jæ-ñâ/ thigh=GEN top meat more-be.attached ‘there is more meat on the thighs [of the bear]’.

Manner adverbs are derived from adjectives by adding /mû/ ‘make’, as in /lje-lje-mû/ ‘carefully’ (from /ljě/ ‘be good’).

6. Phrase and clause structure

Lizu is verb-final. Syntax operates predominantly through word order and the use of nominal and verbal particles and auxiliaries. The grammatical relations of subject and object are not grammaticalized. The clause structure is based on the pragmatic relations of topical material (clause-initial) vs. focal material (clause-final). The “unmarked” word order is S/A - DirO - IndO - V. Tracking of referents in discourse often involves the use of zero anaphora. Temporal and local phrases are most often clause initial.

- (26) Nbjê-wu de-tê tê ɲî=î ɕo dǝzu
 mountain-head upward-take one day=GEN top particularly
- mje-mje-mû mû = ly me = ɲê
 many-many-make make=NMLZ.PNT NEG=exist.ABST
- ‘The entire day when [the body of the deceased] is transported up the mountains, [the ritual priest] does not have much to do.’

The verb complex is the only necessary element for an utterance to be considered a clause, and the verb complex may be simply a predicate noun.

6.1. Nominal predicates

Declarative equational sentences juxtapose a subject with a nominal predicate without an overt copula, as in (3). The copula verb /zĩ/ is used in negated equational sentences, as in (4). The use of /zĩ/ in declarative sentences conveys factual or assertive meaning.

- (27) [kû-t^hê pimê le] [çÿzâ] zî
this-that frog CTR deity COP
'That frog was in fact a deity.'

6.2. Negatives and interrogatives

Negative particles include the negative /mɛ/ (as in (7) or (26)) and the prohibitive /t^hɛ/ (as in (25)). They are prefixed just before the main verb (or auxiliary), or after the directional prefix, if there is one.

The interrogative particle distinguishes between (i) a free form, /jê/, which occurs as the last element of the sentence, and (ii) a bound form, /ɛ/, which is prefixed just before the main verb (or auxiliary), or after the directional prefix, if there is one. The free form is used in content questions with nominal predicates (as in (28)) and in disjunctive questions (as in (29)). Disjunctive questions are formed by repeating the entire verb complex, first positive and then negative. The free form of the interrogative particle is inserted in between the two tokens.

- (28) jô â-bâ mê = dʒo tê jê
self VOC-father NEG=exist.ANM one Q
'Am I the one without a father?'

- (29) læ jê mê = læ nê tô
come Q NEG=come 2SG look
'See for yourself if you come or not.'

The bound form is used in polar questions.

- (30) nê jâqê ê = dʒo
 2SG child Q=exist.ANM
 ‘Do you have children?’

The interrogative word appears in the same position as the noun phrase in the declarative form; compare the bold items in the two clauses in (31):

- (31) **sê** le dzi = gê? **jô-dzî** **dzâmæ** dzi = gê
 who CTR say=PROG.N-EGO self-family.GEN wife say=PROG.N-EGO
 ‘ “Who says that?” “My wife says that.” ’

6.3. Complex sentences

Juxtaposition is a typical strategy to combine clauses. It may convey various meanings, including condition (as in (7)), a sequential order of events (as in (12)), or contrastive sense:

- (32) tsêxe de-dzû ɽwǎ mɛ = dũ dzûmæ
 pheasant upward-raise chicken NEG=be.complete fox

 de-dzû tɕ^hê mɛ = dũ
 upward-raise dog NEG=be.complete
 ‘You may feed a pheasant, but it won’t turn into a chicken; you may feed a fox, but it won’t turn into a dog (proverb, A leopard cannot change its spots).’

6.3.1. Noun-modifying constructions

Lizu employs multiple strategies for nominalization, including:

- (a) Nominalization with the genitive particle /i/, as in /jô-Ngô læmû ne-ñukæ = î/
 ‘that covered with a copper pot’ (see (1)).

(b) Nominalization with one of the three nominalizers: (i) agentive /su/ ‘the one who V’ (from the generic noun /sû/ ‘person’), e.g. /dzə = sũ/ ‘the one who eats’; and (ii) two patient nominalizers: /ly/ ‘the one to V’, e.g. /dzə = lÿ/ ‘things to eat’; and /tɕæ/ ‘the one being V’ (from the resultative particle /tɕæ/), e.g. /gæ = tɕæ/ ‘toy, lit. the one being played with’.

(c) Nominalization with definiteness markers (e.g. /dê = bi/ ‘the yellow one’, /Ntʃʰe = bô/ ‘the smart ones’) and classifiers (e.g. /de = nɛ = kʰæ/ ‘the black one’).

Nominalization and relativization constructions are essentially the same type of noun-noun constructions, see (1), (3), and (4) for examples.

6.3.2. Adverbial clauses

Adverbial clauses appear in a topical position. Subordinating morphemes combine native Lizu and borrowed Mandarin conjunctions. These include /kʰæ/ ‘when’ (as in (33)), /læ/ ‘and’ (as in (17) or (33)), /tɕəu/ *jiù* 就 ‘just’, /tsǒ/ *cái* 才 ‘then and only then’.

- (33) æ lǎ kʰæ æ-dzî æ-jê dǎ
 1SG come when 1SG-family.GEN VOC-elder.brother go.N-EGO
 ‘When I came, my brother had already left.’

In conditional clauses, the protasis is marked by the contrastive marker /le/, and the hypothetical verb form is built by adding the change of state particle /ɐ/ to the verb, as in (19). In counterfactual conditionals, the verb of the main clause is also marked by the change of state particle.

- (34) nê læ = gê ĥũsə = ɐ le æ mê = ji = ɐ

2SG come=PROG.N-EGO know=CS CTR 1SG NEG=go=CS

‘If I had known you would come, I would not have left.’

6.3.3. Complement-taking predicates

Complement clauses introduced by complement-taking predicates (Noonan 1985: 110-133) may be connected to the matrix clause hypotactically (as in (35)) or paratactically (as in (36)):

- (35) æ-dzî â-jê Npʃe = su = bî Npʃe = gê
 1SG-family.GEN VOC-elder.brother steal=NMLZ.AGT=DEF steal=PROG.N-EGO

k^he-Ndo = ẽ

inward-see=CS

‘My brother saw the thief stealing.’

- (36) â k^he-Ndo = ẽ zõ dẽ
 1SG inward-see=CS 3.N-VSB go.PST.N-EGO

‘I saw him leave.’

Complements of verbs of speaking and thinking are introduced by the complementizer /dzĩ/ ‘say’, which may be further followed by the egophoric progressive auxiliary /bo/ or the non-egophoric progressive auxiliary /ge/. /dzĩ/ is not a completely grammaticalized element. It continues to be used as a verb of speaking /dzĩ/ ‘say’, as in (12). It may (i) specify the exact author of the information (in combination with either /bo/ or /ge/, as in (9), or (31)); and (ii) be used as a reported marker to signal that the reported situation is based on someone else’s verbal account, so that the speaker is uncommitted to its truthfulness (only in combination with /ge/, as in (21)).

Abbreviations

Abbreviations follow the Leipzig Glossing Rules (LGR, <http://www.eva.mpg.de/lingua/resources/glossing-rules.php>). Non-standard abbreviations (those not included in the LGR) are: ABST = abstract, AGT = agentive, ANM = animate, CMPR = comparative, CONT = continuative, CTR = contrastive, CS = change of state, INF = inferred, EGO = egophoric, PNT = patient, MIR = mirative, VSB = visible.

References

- Bohnmeyer, Jürgen, Melissa Bowerman, and Penelope Brown. 2001. Cut and break clips. In: Stephen C. Levinson and N.J. Enfield (eds.). *Manual for the Field Season 2001*, 90-96. Nijmegen: Max Planck Institute for Psycholinguistics. <http://fieldmanuals.mpi.nl/volumes/2001/cut-and-break-clips/>, accessed February 2014.
- Bradley, David. 1997. Tibeto-Burman languages and classification. In David Bradley (ed.), *Tibeto-Burman languages of the Himalayas (Papers in Southeast Asian Linguistics no.14)*, 1-71. Canberra: Department of Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Chirkova, Katia. 2008. Essential characteristics of Lizu, a Qiangic Language of Western Sichuan. Presented at the Workshop on Tibeto-Burman languages of Sichuan, Institute of Linguistics, Academia Sinica, November 21-22, 2008, Taipei, Taiwan. <https://www.academia.edu/4461913>, accessed December 2014.
- Chirkova, Katia and Yiya Chen. 2013. Lizu: Illustrations of the IPA. *Journal of the International Phonetic Association* 43.1: 75-86.
- Chirkova, Katia and Zev Handel. 2013. Diachronic developments of voiceless nasals in Ersu, Lizu, and related languages. Presented at the 46th International Conference on Sino-Tibetan Languages and Linguistics, Dartmouth College, New Hampshire, August 7-10, 2013. <https://www.academia.edu/7637522/>, accessed December 2014.
- Haspelmath, Martin. 2010. Comparative concepts and descriptive categories in cross-linguistic studies. *Language* 86.3: 663-687.
- Huang Bufan and Renzeng Wangmu. 1991. Lüsüyu [The Lüsü language]. In Dai Qingxia, Huang Bufan, Fu Ailan, Renzeng Wangmu and Liu Juhuang (eds.),

- Zang-Mianyu Shiwu Zhong / Fifteen Tibeto-Burman Languages*, 132-152. Beijing: Beijing Yanshan Chubanshe.
- Huang Bufan, Xu Shouchun, Chen Jiaying, and Wang Huiyin (eds.). 1992. *Zang-Mian Yuzu Yuyan Cihui* [A Tibeto-Burman lexicon]. Beijing: Zhongyang Minzu Daxue Chubanshe.
- Ikeda Takumi. 2009. 200 Basic words of the Lyuzu language (Naiqu dialect). In: Yasuhiko Nagano (ed.) Progressive Report, vol. 3, Project No. 16102001, Grant-in-Aid for Scientific Research (S).
- Lin Youjing, Yin Weibing, and Wang Zhi. 2014. Lüsuyu de zhudongci [Auxiliary verbs in Lizu]. *Minzu Yuwen* [Minority Languages] 2: 48-54.
- Moravcsik, Edith A. 1978. Reduplicative Constructions. In: J. H. Greenberg et al. (ed.), *Universals of Human Language*. Volume 3: Word Structure, 297-334. Stanford: Stanford University Press.
- Noonan, Michael. 1985. Complementation. In: Timothy Shopen (ed.), *Language Typology and Syntactic Description. Volume II: Complex Constructions*, 42-140. Cambridge: Cambridge University Press.
- Tournadre, Nicolas. 2008. Arguments against the concept ‘conjunct’/‘disjunct’ in Tibetan. In: B. Huber, M. Volkart, P. Widmer, P. Schwieger (eds.). *Chomolangma, Demawend und Kasbek. Festschrift für Roland Bielmeier zu seinem 65. Geburtstag*, Band 1, 281-308. Halle (Saale): International Institute for Tibetan and Buddhist Studies GmbH.
- Tournadre, Nicolas and Randy J. LaPolla. 2014. Towards a new approach to evidentiality: Issues and directions for research. *Linguistics of the Tibeto-Burman Area* 37.2: 240-263.
- Shibatani, Masayoshi and Prashant Pardeshi. The causative continuum. In: Masayoshi Shibatani (ed.). *The Grammar of Causation and Interpersonal Manipulation*, 85-126. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Sun Hongkai. 1982. Ersu (Duoxu) hua jianjie [An outline of Ersu (Duoxu)]. *Yuyan Yanjiu* [Linguistic Study] 2: 241-264.
- Sun Hongkai. 2001. Lun Zang-Mian yuzu zhong de Qiang yuzhi yuyan [On the Qiangic branch of the Tibeto-Burman language family]. *Language and Linguistics* 2.1: 157-181.
- Sun Hongkai et al. (eds.). 1991. *Zang-Mianyu Yuyin he Cihui* [Tibeto-Burman Phonology and Lexicon]. Beijing: Zhongguo Shehui Kexue Chubanshe.

- Wang Dehe. 2010. *Ersu Zangzu Wenhua Yanjiu* [Study of Ersu Tibetan culture]. Chengdu: Sichuan University Press.
- Wang Yuqin. 2012. *Yalongjiang Zhong-Xia-You Diqu de Zuqun Hudong yu Rentong-Yi Jiulong "Liru" Zangzu wei Zhongxin de Kaocha* [Ethnic Groups in the Middle and Lower Reaches of the Yalong River: Interaction and Identity, A Case Study of the Lizu Tibetans of Jiulong County]. Beijing: Chubanshe.
- Yu, Dominic. 2012. *Proto-Ersuic*. Ph.D. Dissertation: University of California, Berkeley.