

Phonology and Morphosyntax of Pubarong Queyu

by

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DISSERTATION ABSTRACT

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Title: Phonology and Morphosyntax of Pubarong Queyu

This dissertation is a description and analysis of the phonology and morphosyntax of Queyu (Qiangic < Tibeto-Burman, ISO 639: qvy. Queyu is spoken in Western Sichuan, China, in a region recognized as the Ethnic Corridor, where there have been frequent interactions among different ethnic groups throughout history and which boasts an abundance of ethnic and linguistic diversity (Sun 2013. Despite such rich resources for linguistic, historical, and ethnographic research, studies on this region are rare. Among the languages spoken there, Queyu is one of the least studied.

The Queyu language contains an elaborated set of onset clusters and a highly reduced set of codas, which is an unusual combination. The loss of codas also contributes to the uncommon distinctions of vowels. In addition to the complicated phonological system, the morphosyntax of Queyu poses interesting issues as well. For example, although surrounded by and related to Rgyalrong languages with a hierarchical alignment system, Queyu has a nominative-accusative alignment system. While some features of Queyu are typologically rare, they are common in the local region.

With around 6,000 speakers and a low intergenerational transmission rate, the Queyu language is in danger of dying out (Lu 1985. This situation is particularly concerning for Queyu speakers from Pubarong township, whose speech is under examination here, as they

have been relocated to nearby counties due to a local dam construction project, which will expedite the endangerment process. Documenting Queyu would, therefore, contribute to Trans-Himalayan and typological studies, as well as descriptions of languages spoken in the Ethnic Corridor. This dissertation is also the first detailed description and analysis of the Pubarong variety of Queyu.

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LIST OF ABBREVIATIONS

1	first person	ISM1	information structure marker 1
2	second person	ISM2	information structure marker 2
3	third person	ISM3	information structure marker 3
ABL	ablative	KN	<i>kʰi=ni</i> ‘at the time’
ASS	assumptive	L	low
CL	classifier	LOC	locative
COM	comitative	NEG	negation
CONC	concessive	NF1	non-final 1
COND	conditional	NF2	non-final 2
COP	copula	NMLZ	nominalizer
DEO	deontic	NOM	nominal stem
DIR	direct observation	NPST	non-past
DIRC	directional prefix	NUM	numeral
DOWN	downward	OCP	Obligatory Contour Principle
DS	downstream	ORT	orientation
DU	dual	PST	past
EGO	egophoric	PTH	proto-Trans-Himalayan
EXP	experiential	PL	plural
F	falling	PN	proper name
GNR	generic	PROG	progressive
H	high	PROP	propositive
IN	inward	PTH	proto-Trans-Himalayan
IND	indicative	R	rising
INE	inessive	RED	reduplication
INS	instrumental	SAP	speech act participant

SG	singular
SIM	simultaneous
SPEC	speculative
SUP	superlative
SUPE	superessive
TB	Tibeto-Burman
TBU	tone bearing unit
TH	Trans-Himalayan
TM	<i>tʰə̌mə̌ʰ</i> ‘afterwards, then’
TMKN	<i>tʰə̌mə̌ʰ kʰí=ɲí</i> ‘afterwards, then’
TV	<i>tʰì ví</i> ‘this way’
TZ	<i>tʰə̌ zí</i> ‘this way’
UP	upward
US	upstream
-	morpheme boundary
=	clitic boundary
< >	non-Latin writing script
//	phonemic transcription
[]	phonetic transcription

CHAPTER 1

INTRODUCTION

This is a dissertation on the phonology and morphosyntax of the Queyu variety that is spoken in the Pubarong Township (Tibetan <ཕུགས་པ་རོང་ཤང་།> *phugs pa rong shang*; Chinese <普巴绒乡> *Pubarong*), Nyagqu County (Tibetan <ཉག་ཚུ་རྫོང་།> *nyag chu rdzong*; Chinese <雅江县> *Yajiang*), Garzê Tibetan Autonomous Prefecture (Tibetan <དཀར་མཛེས་བོད་རིགས་རང་སྐྱོང་ཁུལ།> *dkar-mdzes bod-rigs rang-skyong khul*; Chinese <甘孜藏族自治州> *Ganzi*) of Sichuan Province, China. This dissertation is divided into the following chapters: Chapter 1 introduces basic information about Queyu speakers, including their population, residence, traditions and lifestyle. Previous literature on other Queyu varieties is also discussed at the end of the chapter. Chapter 2 describes the segmental phonology of Queyu, with a focus on its unusual vowel inventory and its complex onsets. Chapter 3 describes and analyzes the suprasegmental phonology of Queyu using the autosegmental framework. Chapter 4 discusses major and minor word classes in Queyu, with an emphasis on establishing two main categories, Nouns and Verbs. Property concept words are considered a subclass of Verbs. Chapter 5 describes the noun phrase morphosyntax of Queyu, while Chapter 6 focuses on both inflectional and derivational verbal morphosyntax. Chapter 7 describes evidentiality and other clause-level morphosyntax. Chapter 8 concludes this dissertation.

1.1 The Queyu speaking area

Speakers of Queyu are ethnically Tibetan, but the language Queyu does not belong to the Tibetic branch of the Trans-Himalayan (TH) family. Though several previous studies put it under the Qiangic branch, the validity of Qiangic is still controversial (Chirkova 2012). Speakers of Queyu spread over several counties. The literature reports that they mainly reside in the counties of Xinlong, Litang, and Yajiang (Lu 1985:67; Wang 1991:46; Sun 2001:1459; Nishida 2008:77). In a footnote, Lu (1985) mentions that Liu Huiqiang <刘辉强> from <四川省民族研究所> Sichuan Ethnic Studies Institute reported that some Queyu

speakers also resided in Jiulong, Kangding, Yidun, Batang, and Mangkang Counties at the time (67).

Located at 29° 03' 30"-30° 30' 44" N and 100° 19' 55"-101° 20' 20" E, the Nyagqu County borders Kangding on the east, Xinlong and Daofu on the north, Muli County on the south, and Litang County on the west, and is 513km away from Chengdu, the capital city of Sichuan Province (Yearbook 2023). The locations of Garzê (Ganzi) and Nyagqu (Yajiang) within Sichuan, and Sichuan's location in China, are indicated in the map below, adopted from Chen (2017).

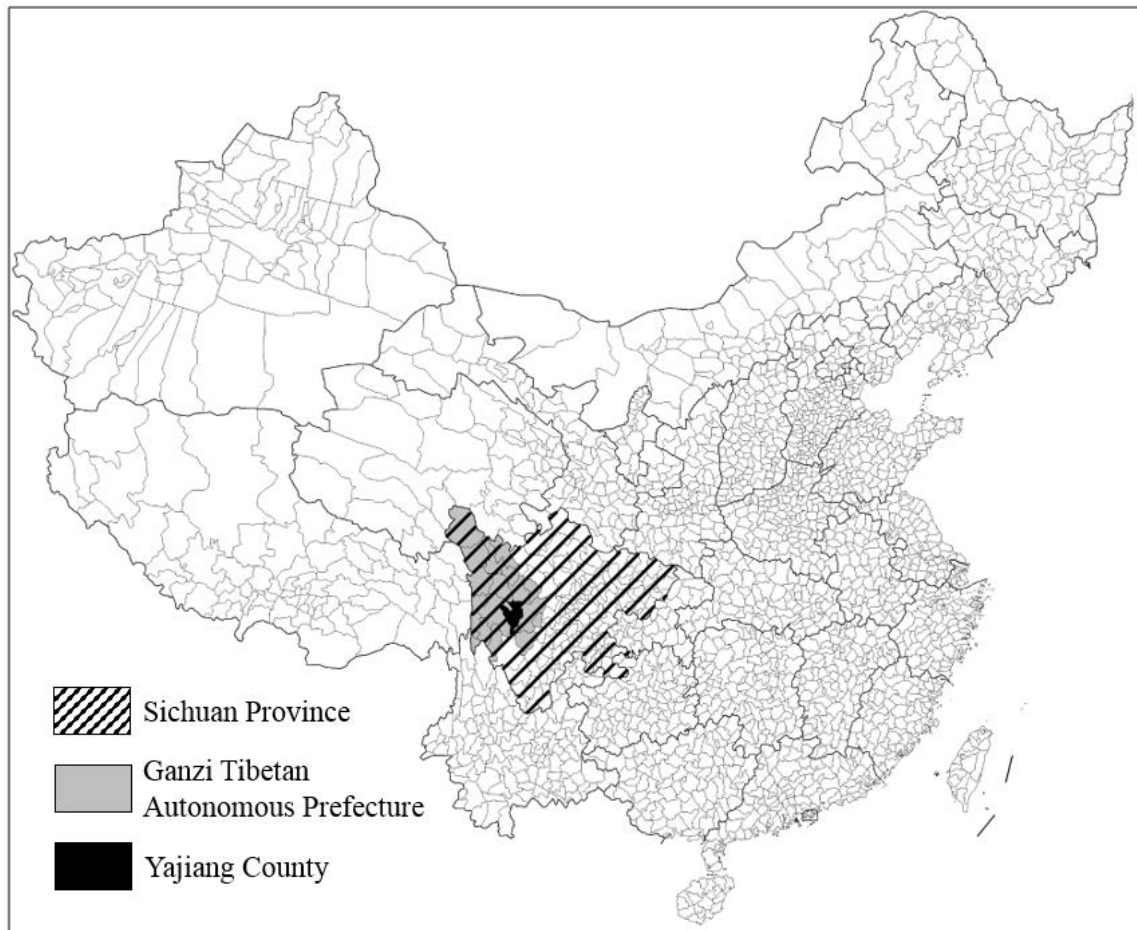


Figure 1.1: Location of Nyagqu (Yajiang) (Chen 2017:124)

Within Nyagqu County, various Tibetan varieties and other languages are spoken in addition to Queyu. These different languages and varieties are indicated in the map below.

There are three main Tibetan varieties: the *rung skad* variety, which is spoken in the south; and the *sgang skad*, which is spoken in the east. These two varieties are mutually intelligible. The other Tibetan variety, *washul*, is a nomadic variety (*vbrog skad*) that is spoken in the west. *Washul* Tibetan is not intelligible with the other two varieties (Yeshe Vodgsal Atshogs 2023). A mixed language, or creole, called Daohua is composed of Chinese vocabulary and Tibetan syntax, and is spoken mainly in Hekou Town, Bajialou Township, and Gala Township (Yeshe Vodgsal Atshogs 2004). Another Qiangic language, Zhaba (nDrapa), is spoken in the north (Shirai 2008).



Figure 1.2: Linguistic diversity within Nyagqu (Yajiang) County¹

Queyu speakers from Nyagqu County have long resided in Pubarong Township, which is 64 km away from the county seat (Yearbook 2023). Other varieties of Queyu are also reported to be spoken in Gala Township and Hekou Town. Pubarong is divided into several communities, which lie alongside of the Nyag Chu River (Tibetan <ཉག་ཆུ> *Nyag Chu*; Chinese <雅砻江> *Yalong Jiang*). These are divided into four administrative villages, or production brigades in (Chinese <生产大队> *Shengchan Dadui*) in the old term. They are <日孜> <འབྲི་ཐི་གྲོང་> *Vbri Thi Grong*, <普古> <ཕོ་ཁུག་གྲོང་> *Pho khug grong*, <甲德> <འཇམ་སྟོན་གྲོང་> *Vjam stod grong* and <亚中> <ཡར་གྲོང་གྲོང་ཚོ་> *Yar grong grong tsho* from upstream to downstream. Table 1.1 summarizes the names and spellings of these four villages in both Tibetan and Chinese.

Table 1.1: Names and spellings of the four administrative villages in Pubarong

Tibetan	Tibetan transcription	Chinese	Chinese pinyin
འབྲི་ཐི་གྲོང་	vbri thi grong	日孜	Rizi
ཕོ་ཁུག་གྲོང་	pho khug grong	普古	Pugu
འཇམ་སྟོན་གྲོང་	vjam stod grong	甲德	Jiade
ཡར་གྲོང་གྲོང་ཚོ་	yar grong grong tsho	亚中	Yazhong

Each of these administrative villages contains several natural villages and/or subvillages, many of which have had to relocate to a new location in recent years. Some of them may not have a corresponding Tibetan/Chinese name. Therefore, when referring to specific villages, the Chinese Pinyin or IPA transcription of the village name will be used. Table 1.2 provides a list of village and subvillage names from each administrative village.

¹The town and township administrative units were referenced from the Yajiang County map from the Yajiang County Yearbook (2023). The illustrations of various language locations were created by Katie Gao.

Table 1.2: Names and spellings of the natural villages in Pubarong

Administrative village	Queyu village name	Chinsese	Chinese Pinyin
Rizi	<i>pfíni</i>	应龙	Yinglong
	<i>mdzízi</i>	日孜	Rizi
	<i>vətǝfý</i>	NA	NA
	<i>kòβzó</i>	各让	Gerang
Pugu	<i>lèté</i>	勒德	Lede
	<i>ǰó</i>	曲入	Quru
	<i>p^hùkú</i>	普古	Pugu
Jiade	<i>dzə̀stǝjé</i>	甲德	Jiade
	<i>mətǝfý</i>	NA	NA
	<i>q^wə́li</i>	瓜里	Guali
Yazhong	<i>βə̀^hptǝó</i>	乙扎	Yizha
	<i>xúli</i>	亚中	Yazhong
	<i>qə́^hvə̀</i>	NA	NA
	<i>rə̀^hβə́^h</i>	NA	NA
	<i>xló/xlówù</i>	索衣	Suoyi
	<i>lá^hxtò</i>	拉冬	Ladong

For the Rizi group, *vətǝfý* is a subvillage with around three or four households originally from *mdzízi*. For the Jiade group, *mətǝfý* is a subvillage with around seven or eight households originally from *dzə̀stǝjé*. For the Yazhong group, both *qə́^hvə̀* and *rə̀^hβə́^h* are subvillages with several households originally from *xúli*. Lastly, *lá^hxtò* is a subvillage with around four or five households originally from *xló*. See Figure 1.3 for the relative locations of these villages. Suoyi, the village my main consultants come from, is located at the right-most side

of the figure.

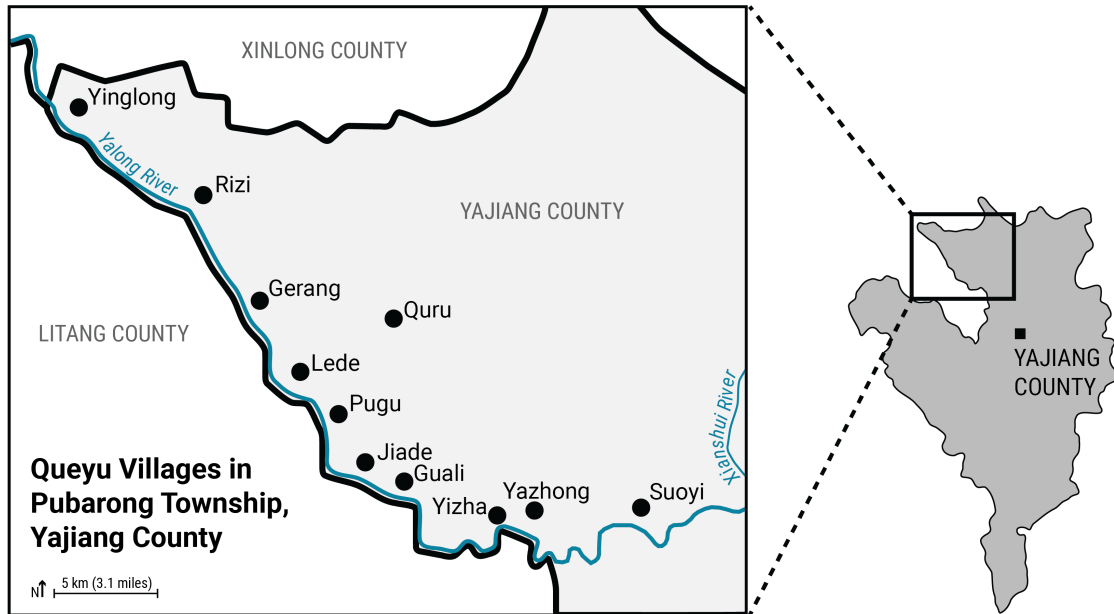


Figure 1.3: Location of Pubarong villages²

Currently, after the construction of the Lianghekou Hydroelectric Project, there is a dam downstream of the Nyagchu River. The valley is now a reservoir and the river rises above the level of many prior villages. Therefore, all villages are now relocated to either nearby county (seats) or to a higher location that is near the original place, except for one village, Quru, that is high up on the mountain and is not affected by the water level rise.

All villages in the Yazhong group (Yizha, Yazhong, Suoyi) have moved to the county seat. For the Rizi group, one village moved to the county seat, and the other two moved to a nearby higher location. For the Pugu group, one village moved to the county seat, one village relocated to a nearby higher place, and the village of Quru remained in its original place, high on the mountain. For the Jiade group, one village moved to the county seat, while the other two moved back to higher locations near where they were originally.

The main consultants in this study are from the Yazhong group, the village of Suoyi (*xló*) and Yazhong (*xúli*).

²Map credit goes to Katie Gao.

1.2 Consultants who contributed to this dissertation

The main consultants for this study are Dorje (Tibetan <རྫོ་རྗེ> *rdo rje*; Chinese <多吉> *Duoji*) and his family. Dorje, as well as his wife Sonam Lhamo (Tibetan <བསོད་ནམས་ལྷ་མོ> *bsod nams lha mo*; Chinese <斯朗拉姆> *Silang Lamu*), are from Suoyi,. Both of them were in their late 50s during the time I was doing my field work. Most of my data and transcriptions are based on their speech. However, their son, Tashi (Tibetan <བཀྲ་ཤིས་> *bkra shis*; Chinese <扎西> *Zhaxi*), also helped out when he was not working, or when Dorje was not available. Tashi's wife, *à^mmó^fhè* (Chinese <阿西> *A Xi*), took care of me during my stay in Nyagqu by showing me around local places and sharing her knowledge of the Queyu language and culture with me, as well. She is from the neighbouring village Yazhong, and has lived as a nomad before. I thus was able to learn about the details of pastoral life from her.

Another person who helped me out a lot is *à^mmó^fhè*'s niece, Chimed Drolma (Tibetan <འཛི་མེད་སྣོལ་མ་> *vchi med sgrol ma*; Chinese <青美卓玛> *Qingmei Zhuoma*), who was in her early 20s when we first met, and who has also lived as a nomad. I worked with both Dorje and Chimed Drolma together during my sessions, so Chimed Drolma was able to explain things that I did not quite understand as a curious outsider. She was able to accurately appreciate the differences between different Queyu varieties in a non-judgemental, objective way, a skill that has always inspired me.

Other Queyu speakers who helped me include Dawa Drolma (Tibetan <ལྷ་བ་སྣོལ་མ་> *zla ba sgrol ma*; Chinese <达瓦志玛> *Dawa Zhima*, <林晓达> *Lin Xiaoda*), whom I met through a mutual friend Tashi Chotso (Tibetan <བཀྲ་ཤིས་ཚོས་མཚོ> *bkra shis chos mtsho*; Chinese <扎西青措> *Zhaxi Qingcuo*). Dawa Drolma is the first Queyu speaker I met, and is also from Suoyi. She helped me during the initial stage of my field work, and later introduced Dorje to me.

San Mei (Chinese <三妹> *San Mei*) and her family helped at the initial stage of my research, as well. I was able to connect with San Mei's family through the help of Prof.

Yeshe Vodsai Atsok. San Mei is from Suoyi, and is Sonam Lhamo's cousin. She is a good story teller, and I learnt a lot about Pubarong traditions from her.

I would also like to thank all the other Queyu speakers I have ever met and talked to, for welcoming me to their community and selflessly sharing their knowledge with me.

1.3 Speaker information and language variation

Though Queyu speakers reside in different counties along the valley of Nyagchu River, speakers I talked to told me that they understand the Queyu speech from other counties. Within Pubarong, the Nyagchu River's course looks like the shape of the letter L. The Yazhong group are located on the downstream shorter end of the L shape, and the other three groups are on the upstream longer end. The speech of the Yazhong group is called *vəndzə́ xkə̀* by my consultants, and they call themselves *vəndzə́pi*. The *və-* part of the word contains space information that is associated with the downstream direction (detailed discussion can be found in Chapter §6.3 where directional prefixes are described), and *-pi* is a common suffix that means 'person'. The word *xkə́* means 'speech, voice' and correspond to Tibetan *skad*. Therefore, it is reasonable to assume that *vəndzə́ xkə̀* means 'downstream speech' and *vəndzə́pi* means 'downstream people'.

These 'downstream' people call villagers from other three upstream groups *ləndzə́pi* and their speech *ləndzə́ xkə̀*. The *lə-* part of the word is the directional prefix that is associated with the upstream direction. By the same token, it is reasonable to assume that *ləndzə́pi* means 'upstream people' and *ləndzə́ xkə̀* means 'upstream speech'. According to my consultants, the upstream speech and the downstream speech are mutually intelligible.

Though Queyu varieties across different counties and within Pubarong are mutually intelligible, I observed the presence of rich variation and diversity during my field trips.

Both intra- and inter-speaker variation is quite common for Queyu speakers. For instance, an example of intra-speaker variation would be the pronunciation of 'to knead.1SG'. In 2019, my main consultant Dorje's pronunciation was *hpǒ*, while in 2021 this changed to *ɣpǒ*. Another example would be the pronunciation of 'pancake', which I have heard people

pronounce as both *tèpí* and *tjèpí* in their speech.

There are several types of inter-speaker variation. These may be attributed to both village level differences and idiosyncratic features of individual’s speech habits. Systematic variations are found between villages. For example, the locative enclitic =xə in Suoyi village corresponds to =yə in Yazhong. Lexical variations between villages exist as well. While for Yazhong speakers, the pronunciation of ‘fish’ and ‘powder for offering’ is the same—*xsú*—Suoyi speakers have different pronunciations for these two: *xs^hí^s* for ‘fish’, and *xsú* for ‘powder for offering’.

Variations within the same village are found, too. The [ɣ] and [x] can be free variants at the preinitial position of a syllable for some speakers (terminologies and their explanations of syllable structure can be found in Section §2.4). For my consultants Sonam Lhamo and Tashi, an [ɣ] preinitial is produced in some words while in Dorje’s speech an [x] is found. A lexical example of this would be ‘shy’. Sonam Lhamo’s pronunciation for this word is *ɣkwæ*, and Dorje’s is *xkwæ*. In San Mei’s speech, the word for ‘third floor’ is *íŋgù*, while in Dorje’s family that word is *éŋgù*. For allomorphs of the upward directional prefix, San Mei has *í-* and *í^h-*, while Dorje’s family has an additional allomorph *é-*.

These individual variations are observed among different generations, too. On the syllable level, while the middle-aged generation’s speech still contains preinitials, the younger generation seem to have a difference in perception. For example, the word for ‘smoke’ is *xkú* in the speech of Dorje’s generation. However, some younger generation cannot perceive the preinitial [x], despite having this preinitial sound in their own speech. Speakers of even younger ages who moved out of the village during her early life would say this word as *kú*, dropping the preinitial completely. The difference between the two allomorphs of the inward directional prefix, *ké-* and *qé^h-*, is not perceivable to some younger generation speakers, too. Therefore, it is likely that the Queyu language’s structure is trending towards simplification, at least phonologically, for the *vəndzə* variety. Given that preinitials and the morphophonological alternations of morphemes provide rich clues and evidence for com-

parative studies, it is imperative to document all these minute details of Queyu while the *və̀ndzə́* variety is undergoing rapid transition.

The situations described above demonstrate the rich variations within the Queyu community. As all speech forms uttered by native speakers are valid, I have preserved each speaker's pronunciation as it was when transcribing data, instead of 'correcting' my transcription based on a more 'standard' speech, for such a thing simply does not exist.

1.4 Origins of the name

The name of Queyu came from Wang (1991), where he mentions that the Queyu speakers from Xinlong call their language *təho⁵⁵ kɛ⁵⁵*, and the region where *təho⁵⁵ kɛ⁵⁵* is spoken is called *təho⁵⁵ y⁵⁵* (46). Wang (1991) suspects that *-kɛ⁵⁵* and *y⁵⁵* came from Tibetan loan word *-skad* (language) and *-jul* (place), hence this language should be called 'Que language' and the place where it is spoken should be 'Que place' (46). The name of the language, Queyu, is coined by Wang (1991), for the Chinese character <却> *que* [tɕʰɥɛ] resembles the pronunciation of *təho⁵⁵*, and <域> *yu* [y] means 'realm, domain'.

The name /tɕʰo ji/ or similar pronunciations are mentioned in several articles. Suzuki and Sonam Wangmo (2019:101) noted that the ancestors of Tibetans currently residing in Thamkhas Hamlet came from the present-day Queyu-speaking area of Xinlong County, based on traditional oral stories. They reported that the Lhagang Choyu speaker they interviewed mentioned the name /tɕʰo ji/, the place name from which their ancestors came. The exact location of /tɕʰo ji/ in Xinlong is not identifiable. Another Choyu-speaking monk told the first author of Suzuki and Sonam Wangmo (2019) that 'Choyu' refers to Zituoxi Township in Xinlong; it is confirmed that the toponym 'Choyu' does not refer to a place within Litang County (Suzuki and Sonam Wangmo 2019:101).

Song and Piao (2022) mentions that the name Queyu comes from speakers' endonym *tʃʰə⁵⁵ ji⁵³*. However, my consultants from both Suoyi and Yazhong rejected this endonym, and told me that *tʃʰə⁵⁵ ji⁵³* refers to another place. They call themselves *Pubarong-pi*, *və̀ndzə́-pi*, or *xló-pi/xúlí-pi*, instead of *tʃʰə́ji-pi* (*-pi* is a common suffix that means 'person',

which corresponds to Tibetan *-pa* in many loanwords). Additionally, a Queyu speaker from Litang told me that their community refers to Queyu speakers from Xinlong as *tʰɛ ji be*. Given that Song and Piao (2022) investigates the Queyu variety spoken in the Rizhi village, a village located in the upstream portion of Pubarong Township and close to Xinlong, it is likely that the name *tʰɛ⁵⁵ ji⁵³* refers to a place in or near the Xinlong region.

My consultants refer to their language as *rò^ʳ xkə́* ‘farmland language’ (Tibetan rong skad), or <地角话/地脚话/地区话> *Dijiao Hua/Dijiao Hua/Diqu Hua* ‘regional language’. In the following text introducing information about COVID, San Mei’s daughter used this exact word ‘Pubarong farmland language’ to refer to this language (see 1.1). For this particular variety that I am describing in this dissertation, speakers use the terms *və̀ndzə́-pì xkə́* or *və̀ndzə́ xkə́*, possibly ‘the downstream speech’. An example of this name appears in the text where Tashi was naming different Pubarong villages and talking about dialects within the township (see 1.2).

(1.1) Speakers use *rò^ʳ xkə́* to refer to their language

tiri kətʰə́ nɔ́=xə́ lə̀dzý ɲə́ əntsʰə́^ʳ pʰùpá^ʳroŋ rò^ʳ xkə́
 now this disease=LOC source 1SG 1PL.LOC **Pubarong farmland language**

nə̀-vó ní tɛ́-pfə́ rə́ tsí
 DOWN-do.1SG NFl one-say.NOM throw.SAP EGO

‘As for the history of this disease, I’m going to introduce in our Pubarong’s regional language.’

这次这个疾病的相关情况，我用我们普巴绒的家乡话说一下 (QVY-163: 1)

(1.2) Speakers call their language variety *və̀ndzə́-pì xkə́*

və̀ndzə́-pì xkə́ nə̀-pfə́-sʰi=tʂá^ʳ=tə́ lə̀ndzə́-pì=tʂá^ʳ
downstream-person language DOWN-say-NMLZ=PL=ISM1 upstream-person=PL

nə́ nǐ ɲù tʂí xó kù tʂí jǒ pfə́ ɲù tʂí
 also say.3 be.capable.3 GNR know know.3 GNR also say be.capable.3 GNR

‘The downstream people’s speech, upstream people also understand, know, and are able to speak.’

下游的人的全部的话，上游的人全部都听得来，也懂，会说 (QVY-326: 12)

For the lack of a better term, I adopt the name Queyu in this dissertation, following previous literature. I also use place names to distinguish varieties within a language. Therefore, the term Pubarong Queyu is used in this study to refer to the *və̀ndzə̀pɪ̀* (downstream people) variety.

1.5 Tradition and lifestyle

Queyu speakers follow the lifestyle of other Tibetans in the region. For example, they practice Tibetan Buddhism, and celebrate traditional Tibetan festivals like Losar (Tibetan New Year) and the holy month of Saga Dawa (Tibetan <ས་ག་ལྷ་བ་> *sa ga zla ba*). Their staple food is barley and dairy products from yaks, such as cheese, yogurt, and butter. Their main beverage is butter tea. Based on my own experience, different Tibetan regions also have different tea-preparing methods. For example, in Nyagqu, people add salt into the butter tea, while in Golog and Ngawa (other nearby Tibetan Autonomous Prefectures) people do not.

Traditionally, Tibetan communities are divided into farmers and nomads. For Queyu speakers living in Pubarong, most of the region belongs to a farming area, though a few families in various villages possess large enough yak herd that they can't keep them inside the village and keep them on nearby grassland. Pubarong Queyu speakers grow crops like barley and corn for their own use. They also raise yaks for economic purposes.

A typical day in the village starts with boiling water and making tea in the morning. Villagers generally milk the cows twice a day. The first time happens after the morning tea, around seven or eight o'clock. Then they will drive the cows to the mountain to pasture them. The cows will come back home in the afternoon, which is when people milk them for the second time, around five or six o'clock. During the warm season, there is abundant grass on the mountain, so there is no need to feed the cows. While cows are wandering around the grassland, villagers will cut grass and to dry on the top floors of their houses. The resulting hay and fodder will then be stored on the second floor, and will be fed to the cows during the cold season when there is no more food out there on the mountain. There

are different grasses that can be made into fodder, such as *règú*, *qə̀ró* and *ʃivé* (for pigs). Corn stalks can be fodder, too. Feeding happens twice a day during that time. People dump the fodder for cows once in the morning after milking and once in the afternoon when the cows come back.

Villagers process milk everyday, too. These days they pour the milk into a machine to separate the butter, and make other dairy products such as yogurt and cheese. People start ploughing and planting fields after the new year. They grow corn, wheat, barley, potatoes, and soy beans for their own use, and not to sell.

The most important source of income for Queyu speakers is foraging natural resources. Every year, they climb up the mountain and dig caterpillar fungus and matsutake mushrooms. The former is considered to have great medicinal value while the latter is considered a valuable and delicious food. The caterpillar fungus season begins around April or May each year, and lasts until June. The matsutake mushroom season follows right after, usually taking place between June and August. The exact start and end point of these two seasons varies each year. During these seasons, villagers go up to the mountain and stay in shacks built for that purpose throughout the whole time. Each village has its own designated mountain for foraging. Trespassing or digging resources from other villages' mountains may cause serious problems.

1.6 Farmers and different yak breeds

As Pubarong is traditionally a farming area, domestic animals are important to people's daily life. Above all, bovines are the most important, for they are not only working animals but also provide food, including both meat and milk. Bovines are divided into three kinds: yaks, cattle, and the yak-cattle hybrid. Each of them has different names and uses.

The male yak in Queyu is called *ptʃó*, while the female yak *βrá*. For cattle, males are called *áʎlè* and the females *ηú/ηùxkú*. The male cattle *áʎlè* and the female yak *βrá* can mate and give birth to a hybrid, *kwàʎí* for males and *zqé* for females. The calves of the female hybrid *zqé*, called *xtə̀mbwé*, are not capable of producing useful offspring. The said

offspring's name is $\acute{a}^{\text{b}}\chi\text{q}\acute{o}$. It cannot be used to plough fields nor as pack animals. It also does not produce much milk. All $\acute{a}^{\text{b}}\chi\text{q}\acute{o}$ are therefore to be killed not long after their birth.

Table 1.3: Names for different bovine

	Male	Function	Female	Function
Yak	$p\text{t}\xi\acute{o}^{\text{b}}$ (castrated)/ $t^{\text{h}}\acute{a}^{\text{b}}$	ploughing	$\beta\text{r}\acute{a}^{\text{b}}$	milking, breeding
Cattle	$\acute{a}^{\text{b}}\text{l}\acute{e}^{\text{b}}$	breeding	$\eta\acute{u}/\eta\acute{u}\text{xk}\acute{u}$	milking, breeding
Hybrid	$\text{b}\text{w}\acute{a}^{\text{b}}\text{z}\acute{i}$	pack animal	$\text{z}\eta\acute{e}$	milking
Hybrid			$\text{x}\text{t}\acute{\alpha}\text{m}\text{b}\text{w}\acute{\alpha}$	
Hybrid	$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$		$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$	

Table 1.4: Results of the breeding

	Male	Female	Result	
			Male	Female
Yak	$p\text{t}\xi\acute{o}^{\text{b}}$	$\beta\text{r}\acute{a}^{\text{b}}$	$p\text{t}\xi\acute{o}^{\text{b}}$	$\beta\text{r}\acute{a}^{\text{b}}$
Cattle	$\acute{a}^{\text{b}}\text{l}\acute{e}^{\text{b}}$	$\eta\acute{u}$	$\acute{a}^{\text{b}}\text{l}\acute{e}^{\text{b}}$	$\eta\acute{u}$
Hybrid	$\acute{a}^{\text{b}}\text{l}\acute{e}^{\text{b}}$ (cattle)	$\beta\text{r}\acute{a}^{\text{b}}$ (yak)	$\text{b}\text{w}\acute{a}^{\text{b}}\text{z}\acute{i}$	$\text{z}\eta\acute{e}$
Hybrid	$\acute{a}^{\text{b}}\text{l}\acute{e}^{\text{b}}$ (cattle)	$\text{z}\eta\acute{e}$ (hybrid)	$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$ (hybrid)	$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$ (hybrid)
Hybrid	$t^{\text{h}}\acute{a}^{\text{b}}$ (yak)	$\text{z}\eta\acute{e}$ (hybrid)	$\text{x}\text{t}\acute{\alpha}\text{m}\text{b}\text{w}\acute{\alpha}$ (hybrid)	$\text{x}\text{t}\acute{\alpha}\text{m}\text{b}\text{w}\acute{\alpha}$ (hybrid)
Hybrid	$t^{\text{h}}\acute{a}^{\text{b}}$ (yak)	$\text{x}\text{t}\acute{\alpha}\text{m}\text{b}\text{w}\acute{\alpha}$ (hybrid)	$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$ (hybrid)	$\acute{a}^{\text{b}}\chi\text{q}\acute{o}$ (hybrid)

Queyu speakers consider the hybrids $\text{b}\text{w}\acute{a}^{\text{b}}\text{z}\acute{i}$ and $\text{z}\eta\acute{e}$ as the best type of bovine. They have a larger body build than other kinds. The male hybrid $\text{b}\text{w}\acute{a}^{\text{b}}\text{z}\acute{i}$ are used for ploughing, and the female hybrid $\text{z}\eta\acute{e}$ produces more milk than other cows. Yaks are ranked second by speakers. The male yak $p\text{t}\xi\acute{o}^{\text{b}}$ are used as pack animals, and the female yak $\beta\text{r}\acute{a}^{\text{b}}$ can be used for milking as well. Pure cattle are the least useful, according to the speakers, but they are important for breeding purposes.

The yaks and the hybrids are also called $g\check{\text{v}}\text{ }k^{\text{h}}\text{m}\acute{i}$, which literally means ‘grassland bovine’. They can pasture on high altitude grasslands. In contrast cattle, also known as $r\check{\text{v}}^{\text{b}}\text{ }k^{\text{h}}\text{m}\acute{i}$ with a literal meaning of ‘farmland bovine’, can only handle relatively low altitude farmland.

1.7 House structure

A typical house in a Pubarong village consists of six stories with a yard and shelter on the ground right outside of the house. The shelter in the yard is called *dʒáʳβrè*. This is where people store the chopped Qinggang (Chinese <青冈>, a kind of oak) leaves, which is called *těʳ*, that can be used as manure.

The first storey of a house is called *χqəʳwə/xkəwə*. This is the place where people keep domestic animals like cows and pigs. The second storey, called *pəxkʰó*, is the storage place for dried grass that people cut during the summer so that they can still feed the domestic animals downstairs in winter. The third floor is called *éŋgù*. This is where people live, sleep and cook. Going up from the third floor, there is *éndjéxò*, an open roof area. On the level of *éndjéxò*, the open plain area in the middle is where people can have things like food or clothes sun dried. That space is referred to as *xpwə*. On the edge there is a room called *ǰəkʰò* (literal meaning ‘Buddha room’). This is where people place religious sculptures and where monks recite scriptures for all sorts of events. The roof of the *ǰəkʰò* is called *tʰòzǐ*. On the same level of *tʰòzǐ* (usually extending from there), there is another layer, made of sticks, called *pʰsʰáʳ*. The sticks are laid closely together, so that people can put food like corn up there for drying purposes. From *tʰòzǐ*, one may go up to the highest surface of the house, *úxó*, the place where religious flags are raised.

The stairs connecting the first through the third floors are called *dʒəxkə̀*. They are steep, but with handrails for people to hold onto. While starting from *éndjéxò*, people use a ladder carved out of a log for climbing from *éndjéxò* to *tʰòzǐ*, and from *tʰòzǐ* to *úxó*. The wood ladder is called *xlikí*, and has no handrail.

In Figure 1.4, the structure of the house from *éndjéxò* is presented. This is a picture of Tashi standing on *éndjéxò*. The place where he is standing is *xpwə*. Right behind the woman is the scripture room *ǰəkʰò*, and the ladder *xlikí* is on the right. The roof area to the left of the ladder is *tʰòzǐ*, and the area on the right of *xlikí* is the layer of sticks, *pʰsʰáʳ*. The highest level, *úxó*, is not shown in this picture. But we can see in the picture that the *xlikí*

from *t^hòzi* is leading to *úxó*.



Figure 1.4: A picture of Tashi standing on *éndjéxò*.

1.8 New Year celebration

The new year celebration lasts for at least three days. On new year's eve, Queyu speakers pay a visit to the graves of their ancestors. In addition to sweeping tombs, they burn tsampa (roasted barley flour) there as well. Villagers will also bring food and alcohol to offer as sacrifices.

For the first three days of the new year, villagers need to go to the sacred mountain (called *zìbdjé*). Only the men in a family can go; women are not allowed. Climbers will wear white clothes, and on new year's eve, the night before climbing, their clothes and bags will be washed clean and left outside of the window. As they will bring prayer flags to the sacred mountains, the flags will be left outside, too.

When on top of the sacred mountain, whose name is *pó^vlò*, climbers will hang the prayer flags and make a smoke offering by setting fire to a pile of leaves and branches of special plants used for the purpose. Each of them will bring a bottle of alcohol (called *t^hóp^hè*, whose name is different from *lè^vpt^hó*—the alcohol for people to drink) and butter (called *κè^vmó*), both of which are specifically for sacrifice purposes only. Climbers will bring incense and rice for the sacred mountain, too. Once they return from the mountain and go back to the village, climbers have to dance three dances before entering their homes. Other people are not allowed to dance until the climbers have danced first.

The whole village will later gather in the public house where they sing and dance to celebrate the new year.

1.9 Wedding tradition

Arranged marriage was popular in the past, there are still some families that take an active role in choosing their children's spouses. There are several factors that are taken into account when parents or relatives are deciding their children's marriages. The first would be the personality of the proposed partner. If both man and woman get along, then this proposal may be accepted. The second factor is whether or not the two families are related. Some people prefer to marry a relative, so that property can stay in the family. The third factor is the physical appearance of the intended match. Of course, people generally prefer a good-looking partner.

Once all these factors have been taken into account, then the arrangement may move on to the next step. Family members and relatives would start discussing candidates among themselves. Once they think it is time, a relative will step up to be the match maker to talk to the other person's family. If the two families reach an agreement, they can start to discuss the details of the wedding. To do this, the bride's family will bring a bottle of liquor to the bridegroom's family, and they would sit down and decide the date of the wedding.

Once a date is settled, both families will invite the other villagers to come over for an engagement ceremony of wine drinking. After that, villagers join in to help brewing around

300~400 jīn (equivalent to 150~200 kg) of distilled liquor to prepare for the wedding, itself. This amount of alcohol is necessary to slake the thirst of the guests for the upcoming ceremony.

When the day has come, the bridegroom's uncles go to the bride's family to pick up the bride. They need to stay there for two nights. During these two days, the bridegroom's relatives and the bride's brothers need to visit all the families in that village, each of which will have to host them and present them with one bottle of liquor and a hunk of beef. These things will be given to the bride's family. The bride's family later on will share some of the liquor and beef with bridegroom's relatives. The celebration then moves to the bride's village and lasts for two days, during which people dance, sing and drink.

As the bride and her brothers and relatives are leaving with the bridegroom's relatives, villagers see them off by laying desks in the field, upon which the are placed bottles of liquor, with hunks of butter stuck on top, for the bride's family.

The next stage of the celebration takes place in the bridegroom's village and lasts for three days. The bride, her relatives, the bridegroom, his friends and relatives need to visit the whole village, too. At the same time, the bridegroom's family will host other guests at their house. Guests and hosts dance all night long. While the new couple and their friends and relatives are paying visits to each of the family in the village the next day, other guests will gather in a big house, to celebrate by dancing, singing, and drinking.

Once the ceremony at the bridegroom's side is over, the bride will go back home and stay there for one more night as part of the ritual. It is important for hosts and guests to dance till the dawn, and they will even be asked if the dancing performance lasted until daybreak. In this way, the wedding ceremony does not end before six nights. Now that some of the villages are relocated to the county seat, some weddings will take place in a hotel where people dance and sing there instead.

1.10 Funeral traditions

When someone passes away, the body will remain in the house for three days before people take it out. During those three days, the exact time to take out the body is calculated by divination, and the family of the dead will invite as many monks as they can to come over. The monks will stay in the living room on the third floor (the floor called *éηgù*), where they will recite the scriptures for three days. At the same time, they are going to burn roasted barley powder for offering (called *xsù*), and light butter lamps.

After three days, people will take the body of the passed one to either Litang or Seda to perform sky burial. Some people choose cremation instead.

For those who remain in the village, the remaining family members will ask some monks to stay and continue to read scriptures for forty-nine days. There is no limit on how many monks should be invited to stay. Two to three is a common number. Some families will ask as many as six or seven monks, if they can afford them. The whole village will gather every seven days at the passed one's family to recite the scriptures. One person from each family in the village will go. Villagers will also bring barley powder to burn. The family of the deceased will provide food and drink.

The service will last for forty-nine days if the dead one is a young person. It will last fifty days for an elder.

1.11 The speakers and language situation

According to several assessments, the status of Queyu is 'threatened' (Eberhard, Simons, and Fennig 2024; 'Queyu' 2024). The vitality of the language is assessed through factors like domains of use, intergenerational transmission rate, language use and identity, speaker number, etc.

If we use UNESCO's nine factors (UNESCO 2003) to evaluate the vitality of Queyu, the assessment is 'definitely endangered', while according to the Expanded Graded Intergenerational Disruption Scale, or EGIDS (Lewis and Simons 2010), Queyu's status is 'threatened'. The Language Endangerment Index, or LEI (Lee and Van Way 2016)'s esti-

mation, adopted by the Catalogue of Endangered Languages, is that Queyu is threatened with 20% certainty.

The Queyu language is not used in schools, government nor any social media. While this language is mainly used at home and in the village, the dam construction further affected the environments in which the language is used. For villages that relocated to the county seat, the only domain of use for this language is now at home.

There are people marrying both into and outside of the Pubarong villages. People who married into Pubarong villages are said to adopt Queyu in daily communication. For those who marry outside of Pubarong Township, the languages spoken at home are mostly Tibetan and Mandarin. Polygamy and polyandry were common in the past due to poverty. This was when a woman was married to two or three brothers in a family, or multiple sisters were married to one husband. It seems polygamy and polyandry are no longer practiced.

Different sources list different population numbers for Queyu speakers. In Lu (1985), it was estimated that there are around 20,000 speakers in total, while in Wang (1991), this number is 7,000. Ethnologue (Eberhard, Simons, and Fennig 2024) gives a population of 7,000 from an unknown source published in 1995. According to a local official I interviewed in 2016, the total population is around 10,000, of which approximately 60% can still speak Queyu. Song and Piao (2022) give a more detailed population breakdown. Based on their 2016 field trip, there are around 13,000 speakers. Among those 1,3000 speakers, about 6,200 of them reside in Nyagqu County, 4,200 in Xinlong, and 2,500 in Litang. There are around 2,000 people residing in Pubarong and Zituoxi, and that makes them the two towns with the most Queyu-speaking population (Song and Piao 2022:55). As for Pubarong Township alone, according to the 2023 Nyagqu County Yearbook, the current population is 2018.

For Queyu speakers, fluency level varies for different generations. Khams Tibetan (the local Tibetan variety) and Mandarin are also used locally. According my consultants, elders are mostly fluent in Queyu, though they also can speak Tibetan and some Mandarin. Most of those who are over 30 are also still fluent in Queyu. The younger generation is

becoming less fluent in their heritage language, and phonological reductions, such as the deletion of preinitials, are observed in young people's speech.

1.12 Literature review

Queyu is spoken in Western Sichuan, China, a region recognized as the Ethnic Corridor, characterized by frequent interactions among different ethnic groups throughout history and boasting an abundance of ethnic and linguistic diversity (Sun 2013). The hypothesis of a Qiangic sub-branch of Tibeto-Burman (TB) language has a relatively short history. This idea was first proposed in the 1960s, and only covered three languages, which are Qiang, Pumi, and Rgyalrong. Eight new languages were discovered at the end of the 1970s, with a final addition of Tangut in the early 90s (Sun 1991). Now the proposed Qiangic branch contains thirteen languages, divided into northern and southern branches. The northern branch includes Qiang, Pumi, Muya (Minyag), Ergong (Horpa), Rgyalrong, Lavrung (Khroskyabs), and Tangut, and the southern branch includes Zhaba (nDrapa), Choyo (Queyu), Guiqiong, Ersu, Namuyi, and Shixing (Sun 2001:160). For a brief history of the development of the Qiangic branch hypothesis, see Sun (2001). The mentioned languages that are spoken in this region are listed and indicated in the map below.

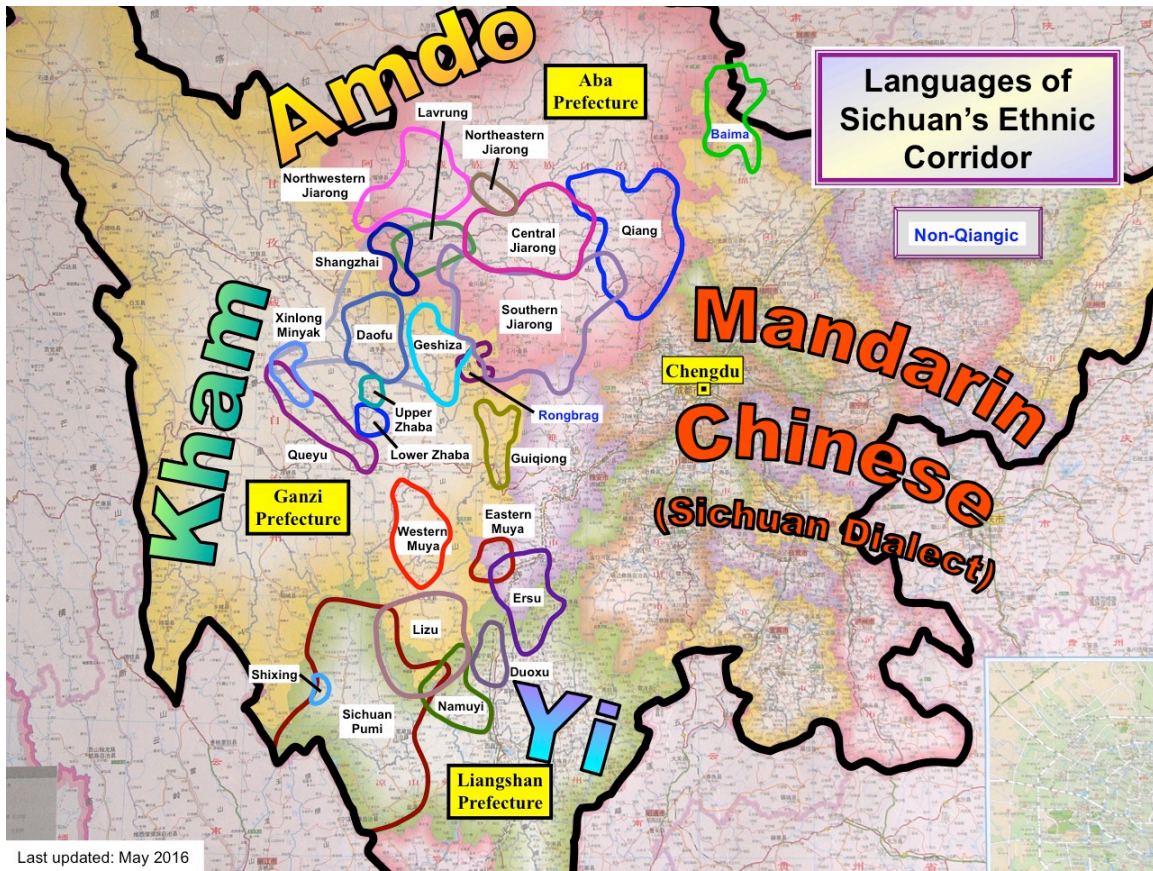


Figure 1.5: Languages spoken in the Ethnic Corridor region.³

Despite the wide acceptance of Sun (1983, 2001)’s classification on Qiangic, the hypothesis is still disputed by some. Sun (1983, 2001) divided Qiangic into a Northern and Southern group. His northern group contains Qiang, Pumi, Muya (Minyag), Ergong (Horpa), Rgyalrong, Lavrung (Khroskyabs), and Tangut, which are phonologically and morphologically more complex, and his southern group includes Zhaba, Choyo (Queyu), Guiqiong, Ersu, Namuyi, and Shixing, and are less complex in terms of phonology and morphology (Sun 2001: 160). However, Sun (2000a; 2000b) argues that Horpa (Ergong), Lavrung (Khroskyabs) and Rgyalrong form a tighter subgroup within Qiangic, based on three striking parallelisms in verbal morphology, which are past-tense marking via glottal-ity inversion, ablaut, and transitivity marked by vocalic alternation in the orientation (directional) prefixes. LaPolla (2005; 2017), on the other hand, proposed that Rgyalrong is not a

³The map is adopted from <https://www.sichuanzoulang.com/en/>.

Qiangic language, but forms another group, called Rung, with Kiranti languages (Bantawa, Athpare [Athapariya], Dumi, Khaling, Camling), Dulong-Rawang-Anong, the Kham languages, and the Western Himalayan languages (Kinnauri, Rongpo, Chaudangsi, Darmiya) based on morphological evidence in person marking systems. The Qiangic group (excluding Rgyalrong) and the Rung group form a higher-level branching called Qiangic-Rung. The similarities between Rgyalrong and the rest of the Qiangic languages are attributed to areal influence (LaPolla 2017:49). Chirkova (2012:137) argues that features (proposed by Sun 2001:166–170) shared by Qiangic languages, such as shared vocabulary, a large set of consonant phonemes, uvular phonemes, vowel harmony, directional prefixes, are areal features that can also be found in other non-Qiangic languages. For directional prefixes, the majority of the languages spoken in the Ethnic Corridor contain a set of them, and they are also obligatory in perfective and imperative contexts (Shirai 2009). Other reasons against the Qiangic hypothesis include the low percentage of shared lexicon and the absence of shared innovations (Chirkova 2012:137–138). The classification of Qiangic languages thus still remains controversial. Even within Sun’s hypothesis, the position of Queyu is unclear, as it possesses features of both Northern and Southern groups (Sun 2001:160).

The subgrouping of Queyu and its related languages are therefore still under debate. For example, while Sun (2016:4) put thirteen languages under the Qiangic branch, Jacques and Michaud (2011) propose a Na-Qiangic sub-branch containing 25 languages. Figure 1.6 illustrates Sun’s (2016) classification, and Figure 1.7 is adapted from Jacques and Michaud (2011).

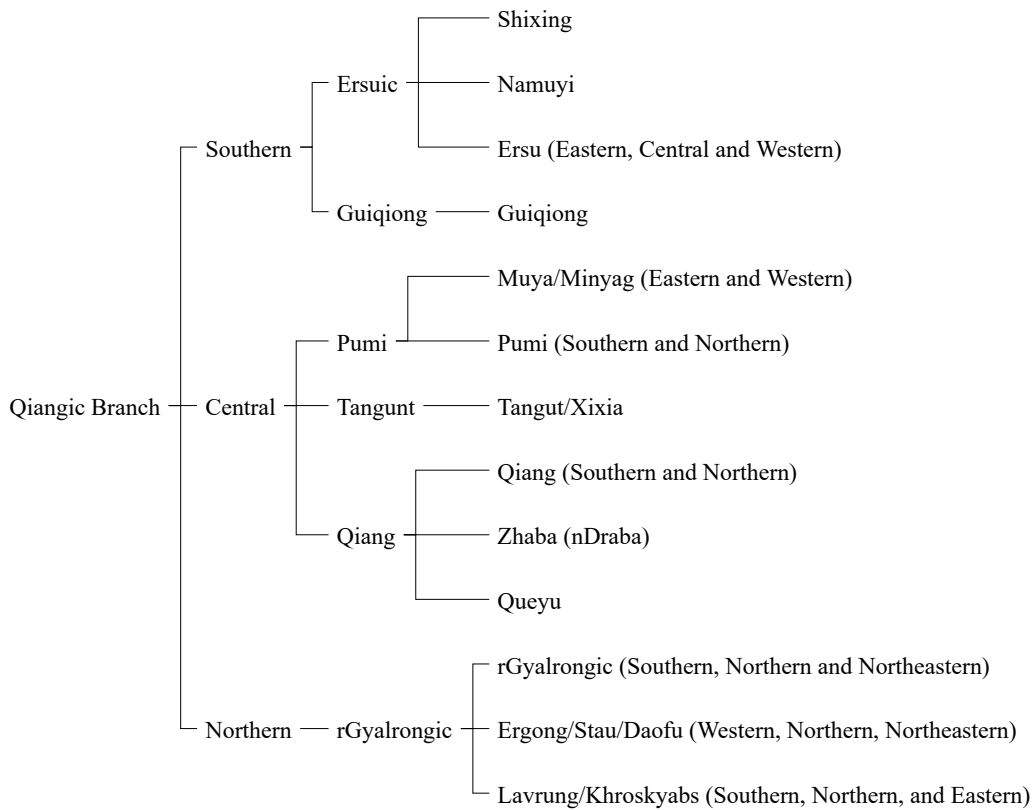


Figure 1.6: Classification of Queyu in Qiangic branch (Sun 2016: 4)

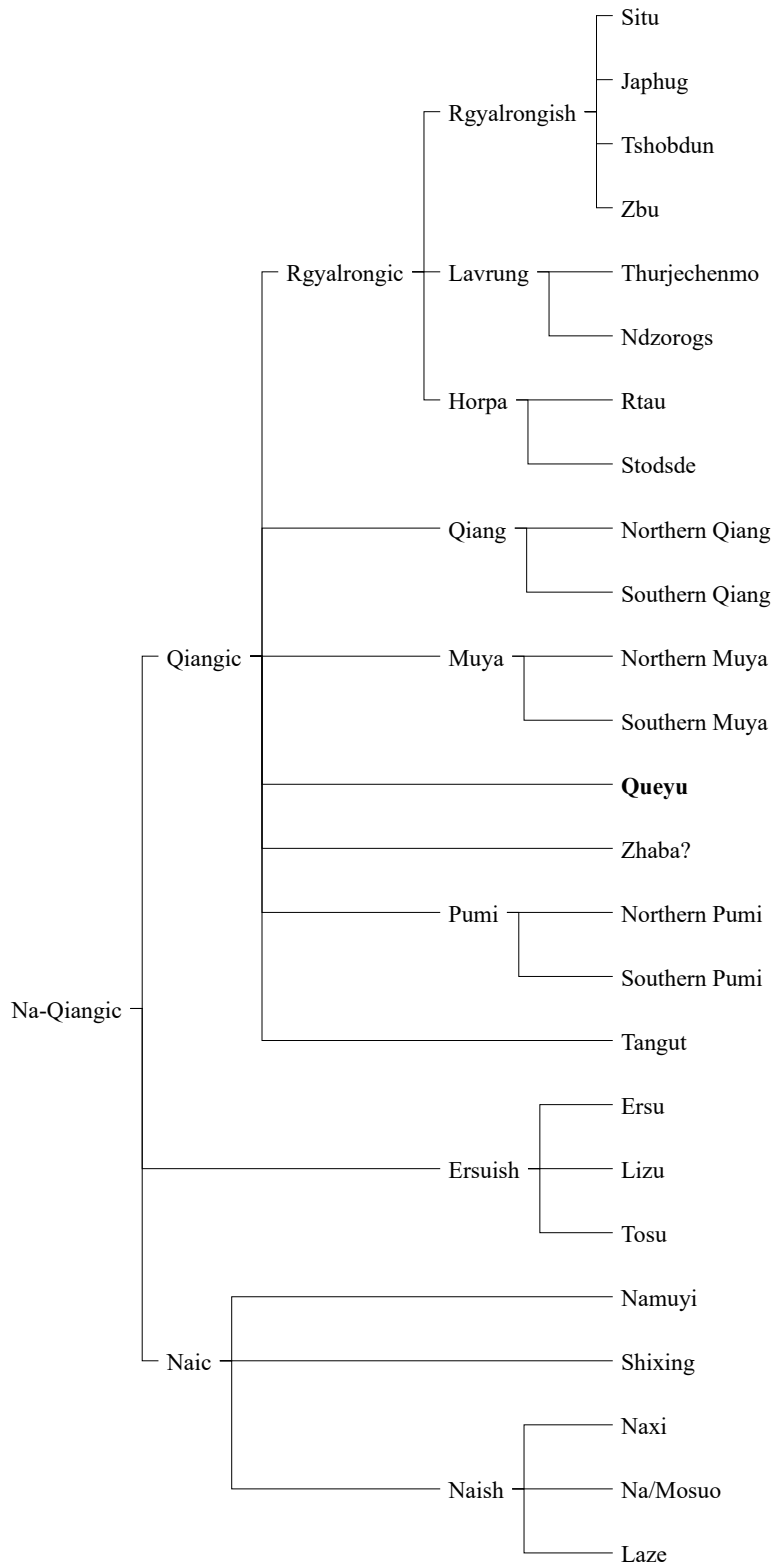


Figure 1.7: Classification of Queyu and its related languages in Jacques and Michaud (2011: 6)

Part of the reason for this subgrouping and classification controversy arises from the scarce documentation of these languages, especially Queyu. Other nearby (Qiangic) languages are relatively better described. Languages for which we have major descriptions and grammars include Ersu (Chirkova et al. 2015; Zhang 2013), Rgyalrongic languages (Khroskyabs by Lai 2017, Situ by Zhang 2020, Zbu by Gong 2018), Stau (Geshiza by Honkasalo 2019, Mazur by Gates 2021), and Munya (Gao 2015 and Bai 2019).

Compared to Rgyalrongic and other languages in the proposed Qiangic group, Queyu has received relatively little attention and is one of the least studied languages in the area. To date, only a few grammar sketches of a handful of Queyu varieties are available. They cover basic descriptions of two varieties spoken in Nyagqu, two varieties spoken in Litang, one variety spoken in Xinlong, and a moribund variety in Kangding.

Lu (1985) is a grammar sketch of the Queyu spoken in Tuanjie Town (now Gala Town), Nyagqu County. Though the language is called Zhaba in Lu's sketch, it is later corrected as Queyu in a reprint in Lu (2007). In Lu (1985), the phoneme inventory, syllable structure, lexicon structure, word classes, basic verbal morphosyntax (argument indexation, TAM), and sentence structure of Tuanjie (Gala) Town Queyu are described.

Wang (1991) is the first article that mentioned the name Queyu <却域> [te^hqe y]. Wang's grammar sketch describes the variety that is spoken in Youlaxi Town, Xinlong County, and focuses on the phoneme inventory, basic word classes and their morphology, with a emphasis on the verbal morphosyntax, and word order.

Nishida (2008) is a phonological sketch of the Queyu spoken in Litang, Rongba Town. Phoneme inventory, consonant clusters, and tones are described in this sketch. Nishida (2018) is an overview of the sociolinguistic situation of the Rongba Queyu. Zheng (2023) is a more detailed description and analysis of the Rongba Queyu phonology, where the phoneme inventory, phonotactics, vowel harmony, pitch contours as well as their related verbal morphology are described.

Nagano and Prins (2013) provide a wordlist containing 407 words from the Queyu

variety spoken in Gala Town, Yajiang County.

Recently a moribund variety of Queyu was identified near Yajiang County in Lhagang, Kangding County. Suzuki and Sonam Wangmo (2016) provides a sociolinguistic overview of this variety and discusses the reasons for its endangerment and why it remained undiscovered for so long. A 700-item wordlist of this variety was published in Suzuki and Sonam Wangmo (2018). Later, Suzuki and Sonam Wangmo (2019) give a more detailed phonological sketch of Lhagang Queyu based on that word list.

Song and Piao (2022) is the most recent article on the existential verbs in the Queyu variety spoken in Rizi, Pubarong Township in Nyagqu County.

Guan (Forthcoming) provides a detailed description and analysis of the uvularized vowels in Pubarong Queyu as spoken in Nyagqu County. Chapter 2 in this dissertation is based on that work.

1.13 Transcription notes for examples used in this dissertation

Pubarong Queyu speakers that I worked with are multilingual to various degrees. Most of them can speak Southwest Mandarin, and would incorporate some of the Mandarin words into the morphosyntactic system. Whenever there are Mandarin loanwords, I transcribe them using Pinyin, and enclose them in angular brackets.

For natural speech examples, in addition to providing transcription, gloss, and English free translation tiers, I include the Mandarin translation as the fourth tier, to provide further information for readers who can benefit from Mandarin, the language through which most of the field work was done.

In natural speech, speakers use temporal adverbials a lot. To facilitate transcription, I adopt a series of abbreviations; for example, TZ for *tʰə zɿ* ‘this way’, KN for *kʰɿ=ɲɿ* ‘at the time of...’. A list of these abbreviations can be found at the beginning of the dissertation.

When citing data from other people’s work, I preserve their own transcription style, and some of their practice may be different from my own. For example, when marking tones, I use symbols such as acute or grave marks on vowels, while other authors may use

numerals to indicate pitch value.

When citing data from the texts that I collected and transcribed, I will also leave a note at the end indicating the number of the text as well as the sentence number so readers can locate that utterance. For example, if I leave (QVY-002: 2) at the end, QVY-002 is the numbering of the text, and 2 indicates that this is the second sentence/utterance in that text. All my materials are deposited in the Endangered Languages Archive (ELAR) and can be found at: <https://www.elararchive.org/dk0561>

If an example does not have a label or note at the end, then it is either an utterance I observed from daily interaction with Queyu speakers, or collected through elicitation.

CHAPTER 2

PHONETICS AND SEGMENTAL PHONOLOGY

2.1 Introduction

In this chapter, the phoneme inventory, syllable structure as well as several phonological processes in Queyu are presented, with a special focus on some cross-linguistically rare, but locally common phenomena. There are uvular consonants and uvularized vowels in Queyu, both are relatively rare cross-linguistically. These sounds are, however, commonly found in Rgyalrongic and Qiangic languages. There are different labels for the unique vowel qualities found within Rgyalrongic, Qiangic and other nearby languages, such as velarization and pharyngealization.

Besides the rare sounds in the phoneme inventory, the Queyu language contains an unusual combination of elaborate onset clusters and highly reduced codas. The reduced coda is associated with the unusual vowel quality found in the phoneme inventory.

Another phonological process that is related to uvular consonants and uvularized vowels is vowel harmony. Vowel harmony is not prevalent in TB languages. However, it is prevalent in Qiangic and Naic branches of TB that are spoken in Southwest China.

In addition to describing rare phonological phenomena in Queyu that are areal features, this chapter looks at Queyu segmental phonology from both comparative and typological perspectives. It examines possible origins of uvulars in Queyu and other languages of the region, as well as vowel harmony and syllable reduction. These processes are associated with uvularization and are commonly found in neighboring languages.

In this chapter, the phoneme inventory is given in Section §2.2 and Section §2.3. Section §2.4 provides a description of the syllable structure and examines the complex onsets typologically. Section §2.5 and Section §2.6 describe two morphophonological processes. Section §2.7 concludes this chapter.

2.2 Consonants

2.2.1 Overview

There are forty-three consonants in Pubarong Queyu, which are given in Table 2.1.

Table 2.1: Consonant inventory of Pubarong Queyu

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar
Plosive	p ^h		t ^h				k ^h [k ^h , q ^h]
	p [p, φ]		t				k [k, q]
	b [b, β]		d				g [g, ɠ]
Affricate	ts	tʃ	ts ^h	tʃ ^h	tʂ ^h		
	dz	dʒ	tʂ				
			dʒ				
Fricative	s	ʃ	s ^h	ʃ ^h	ʂ ^h		x ^h
	v	z	ʂ		x [x, χ, h]		
			ʒ			ɣ [ɣ, ʁ]	
Nasal	m̥		n̥			ɲ̥	[ŋ̥]
	m		n			ɲ	ŋ [ŋ, ɴ]
Liquid			l̥		r		
Glide	w [w, ʋ]					j	

For stop consonants, there are nine phonemic stops at three different places of articulation: bilabial, alveolar, and velar, each with a three-way contrast between voiceless aspirated, voiceless unaspirated, and voiced. Affricates occur at three different places with a three-way contrast. Queyu has a rich inventory, with twelve phones at five places of articulation: alveolar, post-alveolar, and velar fricatives have a three-way contrast like stops; the retroflex set has a two-way contrast in aspiration; the labio-dental set has a single voiced fricative. Notice that there is no voiceless labio-dental fricative, a phoneme commonly absent from inventories of the area. There are eight nasals occurring in four different places of articulation: bilabial, alveolar, palatal, and velar. There is a two-way contrast in voicing in nasals, which, again, is a common feature in the Tibetan-speaking region. There are five approximants, with the lateral liquids contrasting in voicing. Voiceless sonorants are com-

mon among TB languages (Chirkova, Basset and Amelot 2019: 18). In Queyu, they start with a voiceless period, so are also inherently aspirated.

Consonants in parentheses are predictable allophones. Some of the allophones only occur in certain positions in a syllable or occur in certain phonological environments. For example, velar consonants (except for /x^h/) have uvular allophones conditioned by a following uvularized vowel. Some allophones only occur in the preinitial position in a syllable. When that is the case, their intensity and duration are much shorter than regular consonants

All allophones will be addressed in the respective subsequent subsections.

2.2.2 Stop sounds

Table 2.2 presents example words containing each stop sound (including allophones).

Table 2.2: Example words containing stops

Phoneme	Allophone	Example	Gloss
p ^h	p ^h	<i>p^hó</i>	escape.1SG
p	p	<i>pó</i>	chilly
	ɸ	<i>ɸló</i>	weave.1SG
b	b	<i>bǒ</i>	pour, throw.1SG
	β	<i>βló</i>	do.1SG
t ^h	t ^h	<i>t^hí</i>	drink.2
t	t	<i>tǐ</i>	then
d	d	<i>dǐ</i>	to fly
k ^h	k ^h	<i>k^hó</i>	sun dry.1SG
	q ^h	<i>q^hó^ʷ</i>	head
k	k	<i>kś-</i>	inward
	q	<i>qś^ʷ-</i>	inward
g	g	<i>gǒ</i>	need.1SG
	g	<i>ngwé^ʷ</i>	sprain

Phonetically speaking, Queyu stops occur at four places of articulation (bilabial, alveolar, velar and uvular). However, uvular consonants in Queyu are allophones of velar

consonants when followed by a uvularized vowel. As can be seen in Table 2.2, the uvular stops occur in front of uvularized vowels.

While allophones of velar stops are conditioned by the quality of the following vowel, allophones of bilabial stops, /p/ and /b/, are conditioned by their position in a syllable. Detailed discussion of allophones can be found in Section §2.4 on syllable structure.

2.2.3 Affricate sounds

Table 2.3 presents example words containing each affricate sound.

Table 2.3: Example words containing affricates

Phoneme	Example	Gloss
ts ^h	=ts ^h i	=PL
ts	tsǎ	EGO
dz	dzìpú	very
tʃ ^h	tʃ ^h ó	a set (of jewelry)
tʃ	tʃó	classifier
dʒ	dʒó	Han Chinese
tʂ ^h	tʂ ^h ó	pattern on the wood
tʂ	tʂó	cold
dʒ̥	dʒ̥ó	enemy

Affricates in Queyu also have a three-way contrast occurring in three different places: alveolar, post-alveolar, and retroflex. Worth noting is the voiced retroflex affricate /dʒ̥/. The sound [z] is an allophone of /r/, and also occurs in the affricate /dʒ̥/.

For post-alveolar affricates, another issue that needs to be noted is their perceptual qualities before plain and uvularized vowels. Perceptually, when a post-alveolar consonant precedes a uvularized vowel, it will sound like a retroflex to the ears of Mandarin speakers. However, when comparing minimal pairs, the difference between a post-alveolar and a retroflex affricate is clear. An example minimal pair would be ptʃ^háʷ ‘fodder’ and ptʂ^háʷ

‘stick layer’. Though this may only be an illustration of Mandarin speaker’s categorical perception of retroflex sounds, a perception and articulation study on this phenomenon would be useful for exploring the properties of uvularized vowels and rhotics.

2.2.4 Fricative sounds

Table 2.4 presents example words containing each fricative sound.

Table 2.4: Example words containing fricatives

Phoneme	Allophone	Example	Gloss
v	v	vó	powder
s ^h	s ^h	s ^h ǒ	spirited
s	s	sǒ	feed.1SG
z	z	zÓ	collect debt.1SG
ʃ ^h	ʃ ^h	ʃ ^h í	go.2PL
ʃ	ʃ	ʃí	place, put aside.2PL
ʒ	ʒ	ʒí	house
ʂ ^h	ʂ ^h	ʂ ^h íʂ ^h ó	tear.1SG
ʂ	ʂ	ʂítsí	handgun
x ^h	x ^h	x ^h ó	meat
	x	=xə	LOC
x	χ	χǒ ^ʁ	forget
	h	hméí	medicine
ɣ	ɣ	ɣÓ	finish.1SG
	ɣ	ɣǒ ^ʁ	peach

There are twelve fricatives in Queyu that could possibly occur in seven places, labio-dental, alveolar, post-alveolar, retroflex, velar, uvular and glottal. For the last three places of articulation, the respective sounds occurring there are allophones of the velar consonants in different environments. Uvular fricatives are, again, conditioned by the following uvularized vowels. The aspirated voiceless velar fricative /x^h/ is the only velar phoneme in Queyu whose uvular counterpart is not found. The /x^h/ phoneme is also marginal in this

language, as it has only been documented in three words in my data so far: $x^h\acute{e}$ ‘(rainbow) appear’, $x^h\acute{o}$ ‘meat’ and a homophonous word $x^h\acute{o}$ ‘strength’. All three words are Tibetan loans, suggesting that this is a loan phoneme corresponding to the Tibetan letter <ཤ> /ʃ/.⁴

In addition to /x^h/, the retroflex fricative /ʂ/ and /ʂ^h/ also do not show up frequently. Affricates containing these two fricatives, /tʂ/ and /tʂ^h/, are more frequent in my data than these two phonemes occurring as simplex onsets.

The last variant of /x/, which is the voiceless glottal fricative [h], occurs only in Tibetan loanwords and corresponds to the *s* prefix in Tibetan before nasals. In known Tibetan loanwords in Queyu, this *s* prefix changes to [x] when preceding other consonants, but to [h] when preceding nasals. Examples demonstrating these environments are given in Table 2.5. The *s* prefix in Written Tibetan corresponds to [x] for ‘tiger’ and ‘language’ in Queyu, which is followed by a non-nasal consonant, and to [h] for ‘doctor’ and ‘ripe’, followed by a nasal sound.

Table 2.5: The correspondence of Written Tibetan *s* prefix in Queyu

Gloss	Written Tibetan	Queyu
tiger	<i>stag</i>	<i>x tá^x</i>
language, voice	<i>skad</i>	<i>x k á</i>
doctor	<i>sman pa</i>	<i>hmémbi</i>
ripe	<i>smin po</i>	<i>hmé</i>

The contrastiveness of dorsal fricatives varies within Queyu, as well. While [x] and [h] also do not contrast in Youlaxi (Xinlong) like Pubarong Queyu, these two sounds, however, are separate phonemes in Tuanjie/Gala (Lu 1985:68; Wang 1991:48). What is worth noting (and in common with Pubarong Queyu) is that in both these two varieties, [h] also

⁴Here, a word is referred to as a ‘Tibetan loan’ if it reflects either the phonology of a Written Tibetan form, or the phonology of the local Khams Tibetan farming dialect. It should be noted that various historical layers of Tibetan loans entering the language via Buddhism and contact with neighboring Tibetan dialects may be identified. However, with the present state of research it is not always possible to date loanwords or to distinguish loans from cognate forms.

occurs mostly in Tibetan loanwords.

Another issue concerning contrastiveness is aspiration. Though aspiration in fricatives contrasts in Pubarong, it does not always do so within Queyu. In Tuanjie/Gala, /s/ and /ɕ/ can be pronounced with strong aspiration and sound like [s^h] and [ɕ^h], but [s] and [s^h], [ɕ] and [ɕ^h] do not contrast (Lu 1985:67). The same phenomenon has been documented in Youlaxi (Xinlong County) Queyu, which has voiceless fricatives are usually pronounced as aspirated (Wang 1991:48).

Like post-alveolar affricates, post-alveolar fricatives are also perceived differently by Mandarin speakers when preceding vowels of different qualities. They sound like their retroflex counterparts when a uvularized vowel follows. However, the distinction is still clear when contrasting minimal pairs. An example pair would be ʒi^ʁ ‘water’ and rɿ^ʁ ‘corpse’.

Lastly, that Pubarong Queyu contains twelve fricatives is also typologically rare. Out of the 317 languages sampled in UPSID, most languages (311 out of 317) contain less than twelve fricatives. Only two languages have twelve fricatives while four other languages have more than twelve (Maddieson 1984:43).

2.2.5 Nasal sounds

Table 2.6 presents example words containing each nasal sound.

For nasal sounds, there are eight of them occurring in five places phonetically, with the uvular nasals [ŋ] and [ŋ̠] being the allophones of the velar ones. They form four pairs that contrast in voicing, except for /ŋ̠/. In current data, no lexical item containing [ŋ̠] has been observed. But the [ŋ̠] only precedes uvularized vowels, which obeys the distribution pattern of uvular consonants. Therefore, the uvular sound [ŋ̠] is not considered to instantiate a separate phoneme from /ŋ̠/, but an allophone of the velar consonant /ŋ̠/, paralleling other uvular sounds which are allophones of velar phonemes.

Voiceless nasals are typologically rare. Maddieson (1984:235–239) reports that only twelve out of the 317 languages he surveyed contain voiceless nasals. However, they are

Table 2.6: Example words containing nasals

Phoneme	Allophone	Example	Gloss
m	m (voiced bilabial nasal)	<i>má^ʰ</i>	bamboo
ᵿ	ᵿ (voiceless bilabial nasal)	<i>ᵿá^ʰ</i>	a kind of Tibetan pheasant
n	n (voiced alveolar nasal)	<i>nǎ</i>	2SG
ᵿ	ᵿ (voiceless alveolar nasal)	<i>ᵿǎ</i>	blue, green
ɲ	ɲ (voiced palatal nasal)	<i>ɲí</i>	2SG.REFL
ᵿ	ᵿ (voiceless palatal nasal)	<i>ᵿí</i>	red
ŋ	ŋ (voiced velar nasal)	<i>ŋǎ</i>	1SG
	ɴ (voiced uvular nasal)	<i>ɴǎ^ʰ</i>	yellow
ᵿ	ᵿ (voiceless velar nasal)	N/A	N/A
	ᵿ (voiceless uvular nasal)	<i>ᵿǎ^ʰ</i>	gold

widely present in TB languages (Chirkova, Basset, and Amelot 2019:2). Bhaskararao and Ladefoged (1991) describe two types of voiceless nasals. The first one, which Chirkova, Basset, and Amelot (2019:17) term voiceless unaspirated nasals or pre-aspirated nasals, is characterized by a short period of voicing at the end of the voiceless nasal before the vocalic onset, and is found in Burmese and Mizo (a TB language spoken in Northeast India), among others. The second type, described as a voiceless aspirated nasal, lacks the voicing period towards the end of the voiceless nasal. Therefore the whole segment is voiceless, and is in Angami, another TB language spoken in Northeast India (Bhaskararao and Ladefoged 1991), among others. The mechanisms of these two types are illustrated in Figure 2.1, adopted from Chirkova, Basset, and Amelot (2019:4) citing Blankenship et al. (1993).

The first type of voiceless nasal has been extensively examined in Burmese. Meanwhile, Chirkova, Basset, and Amelot (2019) explored the phenomenon in various other TB languages and compared the differences and similarities between the two types of voiceless nasals. They reported that the second type—the voiceless aspirated nasal—appears to be more common among TB languages, and is found in several Qiangic languages in Southwest China (Chirkova, Basset, and Amelot 2019:18). The Queyu data follow this ob-

	Nasal	Vowel
Burmese		
Velic stricture	-----open----- -----closed-----	
Articulatory stricture	----open----- closed-- -----open-----	
Glottis	--voiceless----- -----voiced-----	
Angami		
Velic stricture	-----open----- -----closed-----	
Articulatory stricture	----closed----- -----open-----	
Glottis	-----voiceless----- -----voiced-----	
**		

Figure 2.1: Structures of the two types of voiceless nasals.

servation, and present properties that align with the voiceless aspirated nasals. Figure 2.2 shows the spectrograms of a minimal pair that contrasts /m/ (*má^h* ‘bamboo’) and /ṃ/ (*má^h* ‘a kind of Tibetan pheasant’). There is no voicing during the nasal /ṃ/, which confirms that at least the bilabial voiceless nasal in Queyu is more of the second type, i.e., it is phonetically ‘aspirated’.

The duration of the nasals is worth noting, too. The results from Chirkova, Basset, and Amelot (2019:9–12) show that in Xumi, Burmemese and Tibetan, voiceless nasals are significantly longer than their voiced counterparts. Impressionistically this may not be the case for Queyu. In the example pair shown in Figure 2.2, the duration of /m/ is longer than that of /ṃ/. But this needs to be verified by acoustic measurements, which awaits future study.

Comparing similar phenomena and phonemes among related languages leads to another interesting issue, which is the different developments of loan words and/or cognates from a common source. In Xumi and Khams Tibetan, the word for ‘medicine’ is *m̥e⁵⁵* that corresponds to Written Tibetan form *sman* (Chirkova, Basset, and Amelot 2019:5). The

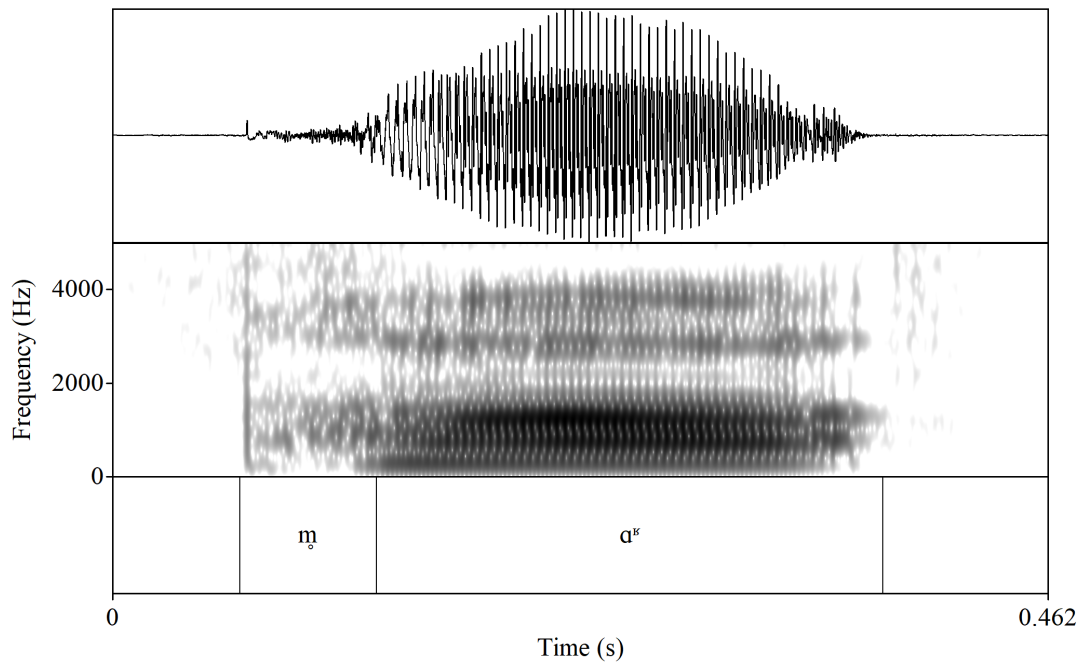
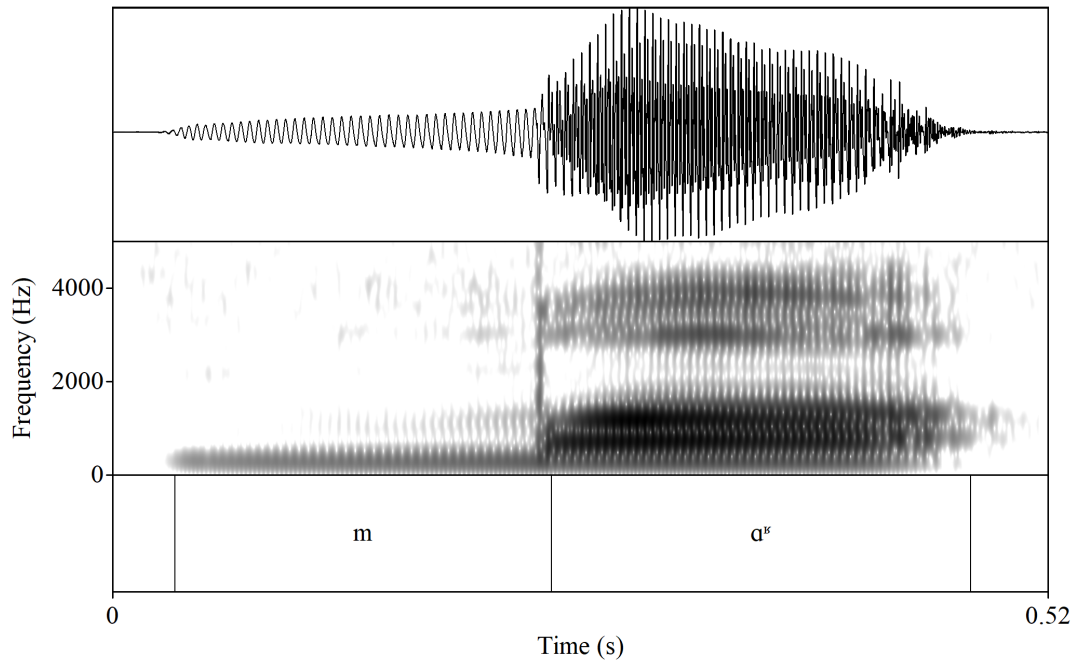


Figure 2.2: Bilabial nasal /m/ and voiceless bilabial nasal /m̥/

word for ‘ripe’ is *m̥e* in Burmese, and *da³³m̥e⁴⁴* in Lizu, another TB language, that corresponds to Written Tibetan *sm̥in po* (Chirkova, Basset, and Amelot 2019:25). These Tibetan loan words are present in Queyu, too. Instead of dropping the *s* in the *sN* cluster and devoic-

ing the following nasal like Xumi and Burmese do, the *s* changed to a fricative preinitial in Queyu (*hmeí* for ‘medicine’ and *hmé* for ‘ripe’).

Pre-aspiration of voiced nasals is common in Queyu, alongside voiceless nasals. The distinction between pre-aspirated nasals and voiceless nasals is also clear. Figure 2.3 demonstrates the spectrograms for *hpi* ‘possess, exist’ and *ji* ‘red’. While /j/ presents a period of voicelessness during the articulation of the nasal sound, /hp/ starts with a burst of air and transitions to the voiced nasal /p/.

2.2.6 Liquids

Table 2.7 presents example words containing each liquid.

Table 2.7: Example words containing liquids

Phoneme	Example	Gloss
l	<i>lí</i>	field
l̥	<i>lí</i>	month
r	<i>rí</i>	skin

The lateral liquids have a voicing distinction. Again, this is common in the local region. The voiced retroflex approximant /r/ has several phonetic realizations. When this sound occurs in an affricate, it is realized as a fricative [z]. When /r/ is pronounced word-initially, speakers can pronounce it as either a trill or a fricative. Figure 2.4 presents the two pronunciations of /r/ in the word initial position by the same speaker. In [zɔ́] ‘exist’, the /r/ is pronounced as a fricative, while in [ráʳ] ‘copper’, the same speaker pronounced it as a trill. It is yet not clear if any factors are conditioning these variants.

Multiple realizations of the /r/ sound is also observed in neighboring languages. For example, in Wobzi Khroskyabs, the /r/ consonant can be realized as a fricative [z] or retroflex approximant [ɽ] when pronounced as an initial (Lai 2017:34). In Kyom-kyo Rgyal-rong, the /r/ consonant is realized as a voiced alveolar flat [r] when pronounced finally, and

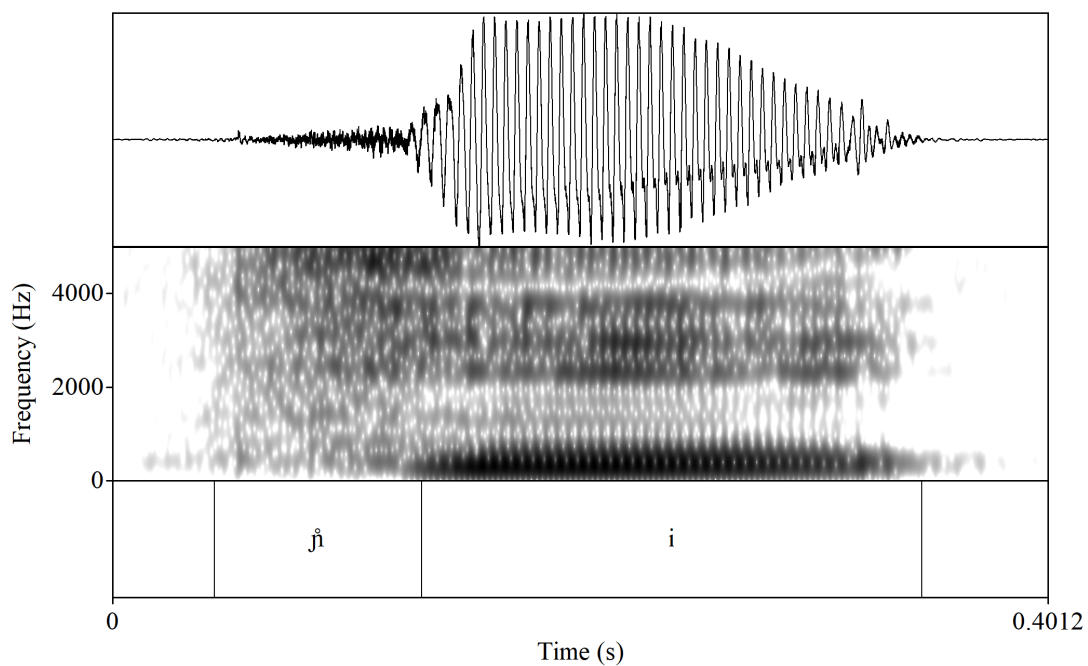
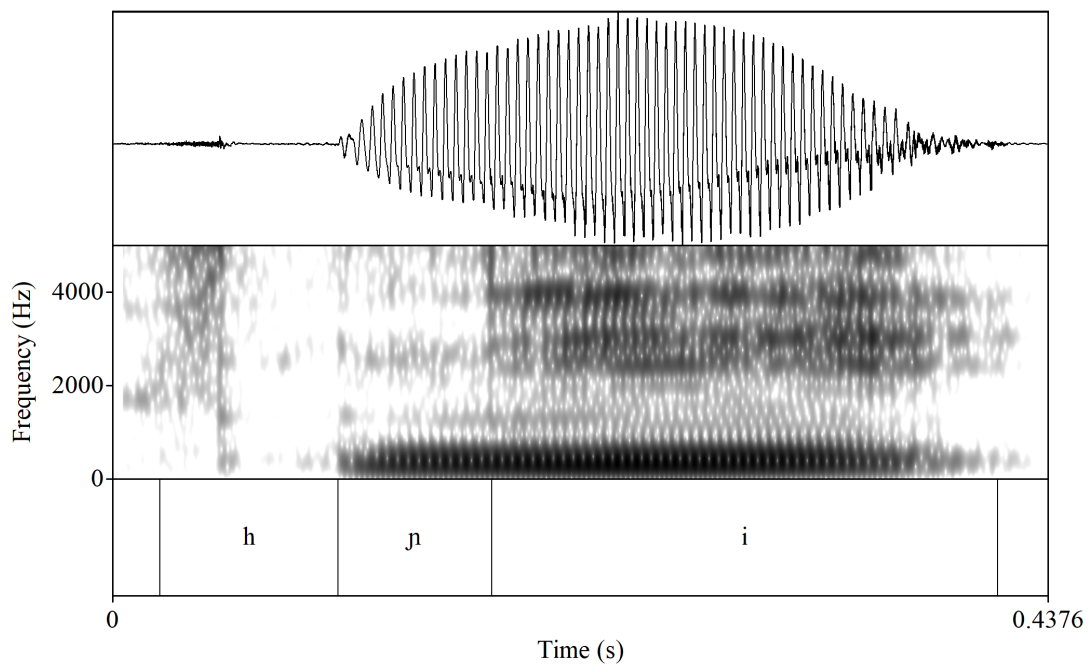


Figure 2.3: Pre-aspiration /hɲ/ and voiceless nasal /j̥/

as an approximant when in consonant clusters (Prins 2017:22). In Japhug Rgyalrong, the /r/ is pronounced as a trilled retroflex voiced fricative or just a simple voiced fricative [z] in onset, but is devoiced to [s̥] in clusters when preceding a voiceless consonant (Jacques

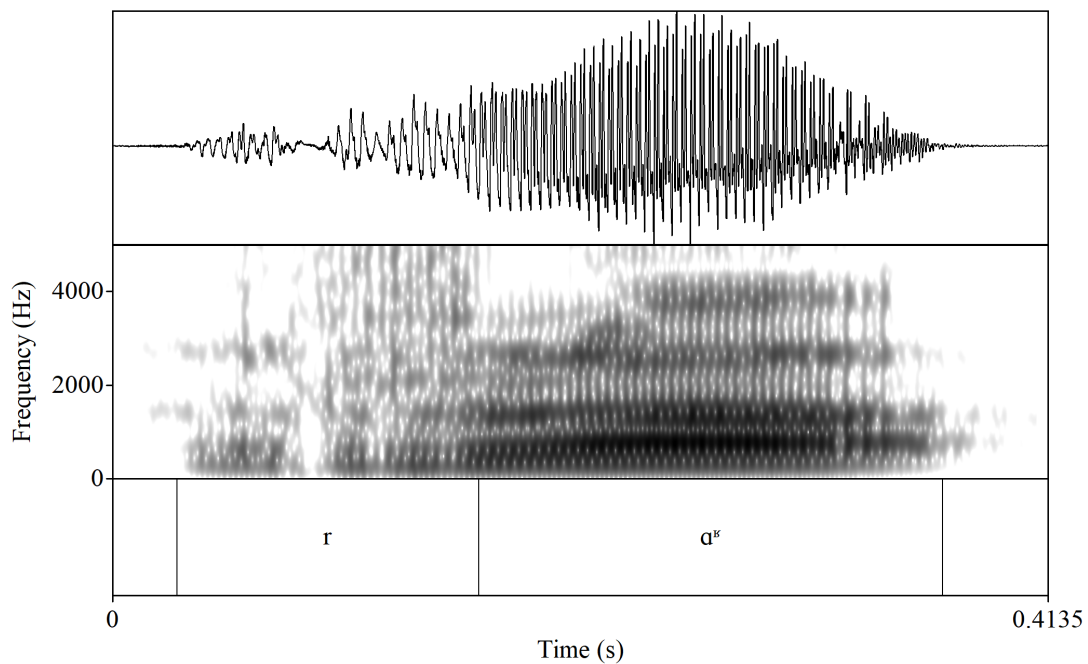
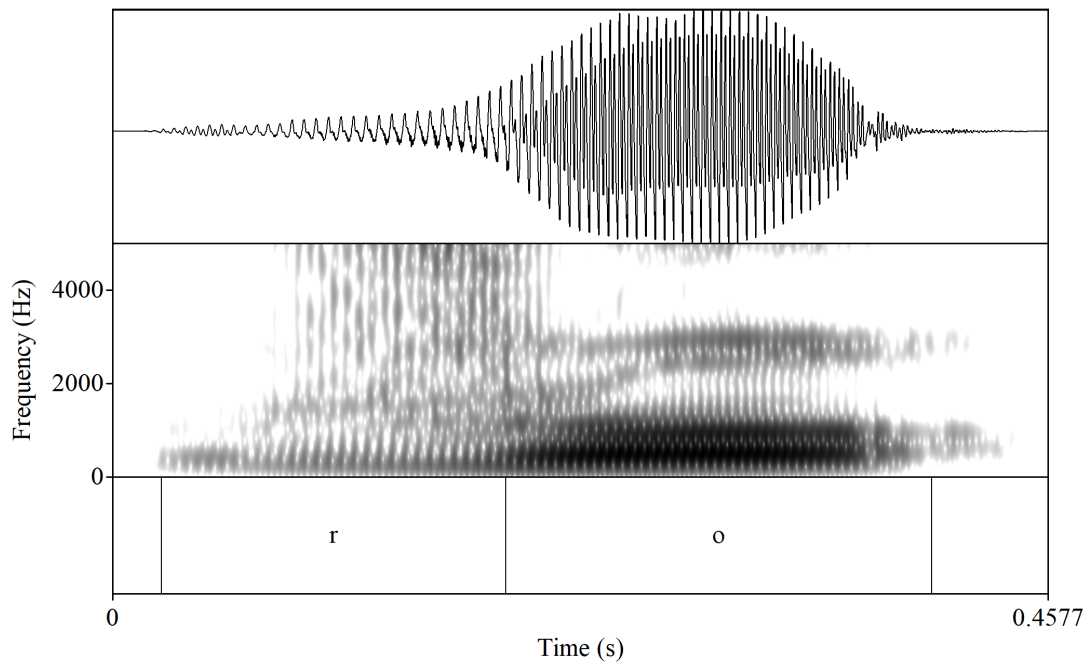


Figure 2.4: [zó] ‘exist’ and [ráʁ] ‘copper’

2021:48). And in Mazur Stau, the retroflex rhotic /r/ can be pronounced as [ʒ] or [ɹ] when in a word initial CV structure, but it is realized as [r] or [ɹ] intervocalically (Gates 2021:53).

Within Queyu, multiple realizations of /r/ are common, too. In Tuanjie/Gala, [r] and

[z] are free variations, but /r/ is always pronounced as [r] when it is the onset in the second syllable of a word (Lu 1985:68). However, /r/ and /z/ contrast in Rongba (Renda village), where /r/ can be realized as [r], [ɾ], and [z], but /z/ is never realized as [r] (Zheng 2023:5).

2.2.7 Glides

Three possible glide phones are found in Queyu data. Table 2.8 presents example words containing each glide.

Table 2.8: Example words containing glides

Phoneme	Allophone	Example	Gloss
w	w	<i>xtwǝʰ</i>	to give, hand.3
	ɥ	<i>xtɥí</i>	lean.3
j	j	<i>ljé</i>	hand

The glide /w/ can have two realizations depending on the contexts. The [w] allophone occurs when it is following a velar consonant, and/or preceding a non-front vowel. When followed by a front vowel, this glide is realized as [ɥ]. The distribution of /j/ is limited. It mostly occurs before the /e/ vowel.

2.3 Vowels

2.3.1 Overview

For monophthongs, there are thirteen plain vowels, which are illustrated in Table 2.9.

Table 2.9: Contrastive vowel inventory of Pubarong Queyu

	Front	Central	Back
High	i y	ɨ ʉ	u
	ɪ ʏ	ə	ʊ
Mid	e	ə	o
Low		æ	

In addition to these thirteen plain monophthongs, there is a set of nine uvularized vowels in Queyu, which are /i^ɣ, i^ɣ, u^ɣ, ɪ^ɣ, ə^ɣ, ʊ^ɣ, e^ɣ, ə^ɣ, a^ɣ/. These vowels are marked by a superscript *ɣ* on the upper right corner, following Evans et al. (2016). They are listed in Table 2.10.

Table 2.10: Uvularized vowels in Queyu

	Front	Central	Back
High	i ^ɣ ɪ ^ɣ	i ^ɣ u ^ɣ ə ^ɣ	ʊ ^ɣ
Mid	e ^ɣ	ə ^ɣ	
Low		a ^ɣ	

Among the thirteen plain vowels, four of them, /y, ʏ, u, o/, do not have a uvularized counterparts. The vowels /u, o/ will be addressed in Section §2.6.3 where exceptions to uvularization are discussed. For /ʏ/, there is only one occurrence of it in my data, *nʏ* ‘rest.3’. It is reasonable to assume that this is the result of a fusion of the stem vowel and the third person suffix *-u*. Since *nʏ* does contrast with other words like *nə* ‘2SG’, /ʏ/ is considered a phoneme.

The high front rounded vowel /y/ occurs frequently in my data. This is another vowel that does not have a uvularized counterpart. One possible account for this is that the uvularized /y/ is not found yet, or it does not exist. The other explanation is that phonetically this phoneme is realized as /y/, but phonemically it is another phoneme and/or the uvularized counterpart of /y/ is not ‘matched’ to this phoneme yet. An example demonstrating the phonetic and phonological mismatch would be the vowel pair /æ a^ɣ/. They sound like [æ a] and were previously transcribed that way in Queyu. However, morphophonological evidence show that when certain morphemes alternate under different conditions, the vowel they contain alternates between /æ/ and /a^ɣ/, such as the question prefix *æ-/a^ɣ-* and the imperfective negation prefix *mæ-/ma^ɣ-*. Details of these allomorphic alternations can be found

in Section §2.6.2. This evidence suggests that /æ/ and /ɑ̃/ form a harmonic pair and belong to different harmonic sets. Evans et al. (2016:5) note something similar, that in Yunlinsi and Mawo Qiang, /a ã/ sound like [æ a], and /u ũ/ pair sound like [u o]. Phonetically, these phonemes do not sound like they belong to different sets like plain and nasalized vowels, or plain and rhotacized vowels. However, phonologically (and maybe morphophonologically) they behave so.

The last uvularized vowel that needs to be addressed is /ĩ/. This vowel also only occurs once in my data, in *xs^hí̃* ‘see clearly’. This word reflects the Written Tibetan *gzhigs* ‘to see’.⁵

Table 2.11 provides example words for each vowel. The two vowel sets are listed separately, with plain vowels on the left column and uvularized vowels on the right column.

Table 2.11: Example words for each vowel.

Plain vowel	Lexicon	Gloss	Uvularized vowel	Lexicon	Gloss
i	<i>fí</i>	EXIST	ĩ	<i>xs^hí̃</i>	see clearly
y	<i>fý</i>	garlic	N/A	N/A	N/A
ɪ	<i>fí</i>	feed.2PL	ɪ̃	<i>xtí̃</i>	close.2
ʏ	<i>nÿ</i>	rest.3	N/A	N/A	N/A
e	<i>p^hě</i>	half	ẽ	<i>mé̃</i>	scar, wound
æ	<i>p^hǣ</i>	allow, let.1PL	ɑ̃	<i>má̃</i>	bamboo
ɨ	<i>s^hí</i>	and	ɨ̃	<i>s^hí̃</i>	blood
ʉ	<i>xtɕ^húxtɕ^hə</i>	to break repeatedly.3	ʉ̃	<i>xt^hǔ̃</i>	stab.3
ə	<i>kə́-</i>	INWARD	ə̃	<i>qə́̃-</i>	INWARD
ə	<i>kə</i>	give me	ə̃	<i>qə̃</i>	shout, cry
u	<i>xtǔ</i>	hit, pound.3	N/A	N/A	N/A
ʊ	<i>tǔ</i>	come.1SG	ʊ̃	<i>xtó̃</i>	meet.1SG
o	<i>tɕó</i>	be cold	N/A	N/A	N/A

There is one diphthong, /eɪ/, that is attested mostly in Tibetan loanwords thus far (e.g. *hmér* ‘medicine’, from Tibetan *sman*; *méitqé* ‘flower’ from Tibetan *mentog*). This is also a vowel that does not have a uvularized counterpart. Other potential diphthongs, such as

⁵In this dissertation I use a modified version of Wylie’s transliteration system for Written Tibetan (Wylie 1959).

[ye, ui, uə, uɑ̃, ie, iæ, iɑ̃] have been analyzed and transcribed here as the consonant-vowel sequences /qe, wi, wə, wɑ̃, je, jæ, jã/, respectively.

As stated above, in Pubarong, there is a distinction in vowel quality between plain and uvularized vowels. This distinction may not be present in other varieties. For example, Youlaxi (Xinlong County) only contains plain vowels, Tuanjie/Gala contrasts plain and nasalized vowels, and Rongba (Zengda village) distinguishes plain vowels from rhoticized and nasalized vowels (Lu 1985; Wang 1991; Nishida 2008). The Lhagang variety contains four different vowel qualities, plain, nasalized, velarized, and labialized vowels, and Rongba (Renda village) is similar to Pubarong in that there is only a distinction on uvularity in vowels (Suzuki and Sonam Wangmo 2019; Zheng 2023).

The rest of the section on vowels will be dedicated to the description and discussion of uvularized vowels. This phenomenon is typologically rare, but prevalent in related languages spoken in the region. Therefore, language data from other nearby languages will also be drawn on for comparative purposes.

A brief summary of uvularized vowels and similar vowel qualities in the TB family is given in Section §2.3.2, followed by an examination of the articulation of uvularized, velarized, and pharyngealized vowels in Section §2.3.3. Section §2.3.5 reviews acoustic and ultrasound studies done in Qiangic and Rgyalrongic languages, summarizing the acoustic characteristics of the marked vowels in comparison with their plain counterparts. Section §2.3.6 discusses possible origins of phenomena relevant to uvularization.

2.3.2 Uvularized vowels in Queyu

Articulatorily speaking, uvularized vowels tend to be lower and further back in the vowel space than their plain counterparts. Therefore, theoretically their F1 should be higher, and F2 should be lower than the plain ones. A comparison of the F1 and F2 values between four vowel pairs was conducted with mixed results.

Four pairs of monosyllabic words/morphemes with the syllabic structure CV (except for *xS^htʰ* ‘see clearly’) were selected. Each pair contrasts vowels that differ only in terms of

vowel quality. All eight words/morphemes have high level surface tone, but all four pairs are in different phonetic environments, in which the consonants preceding the vowels are not identical in each pair. A single speaker was recorded pronouncing these eight words. Each word was repeated three times. The recordings were processed in Praat. Measurements of the formant value was taken at the midpoint where formant pitch is level. The word list as well as the results of the measurements are given in Table 2.12 and Table 2.13, respectively. The first two pairs are of independent words. The words in the last two pairs are embedded in two phrases, *mæ-s^hi=rɪ* ‘won’t die’ and *má^u-xs^hi^u=rɪ* ‘couldn’t see clearly’.

Table 2.12: Several example pairs contrasting plain and uvularized vowels

Vowels	Queyu	Gloss	Queyu	Gloss
/ə ə ^u /	<i>lɔ</i>	seed	<i>lɔ^u</i>	highland wheat
/ʊ ʊ ^u /	<i>rɔ</i>	dry	<i>rɔ^u</i>	rolling stone
/æ æ ^u /	<i>mæ-</i>	NEG	<i>mæ^u-</i>	NEG
/i i ^u /	<i>s^hi</i>	die	<i>xs^hi^u</i>	see clearly

Table 2.13: F1-F2 values for the four vowel pairs

Plain vowel	F1	F2	Uvularized vowel	F1	F2
ə	474.4	1587.7	ə ^u	518.9	1100
ʊ	328.2	822.3	ʊ ^u	428.4	580.6
æ	606.1	1837	æ ^u	724.5	1216.5
i	236.1	2366.3	i ^u	250.6	1914.9

A paired-samples *t* test was conducted to measure the differences in F1 and F2 between the two vowel groups. For F1, $p = 0.06 > 0.05$. Though F1 values for uvularized vowels are greater than those for plain vowels, the difference is not significant. However, for F2, $p = 0.01 < 0.05$, which means F2 drops significantly in uvularized vowels, compared to their plain counterparts. The results of the acoustic measurements match some of the previous studies on the same or similar phenomenon in other languages. For example, Lin, Sun, and Chen (2012) also does not find F1 change to be significant between plain and

velarized vowels. More details on the acoustic studies on vowel quality can be found in the following Section §2.3.5.

Examining only four pairs is surely not enough to draw the full picture of the vowel system in Queyu. Basing the results from one speaker is not, either. A more systematic comparison between such sets of vowels in the same phonetic environments is needed before a more thorough acoustic analysis can be done. Future research on the articulation and acoustics of uvularized vowels should include all vowels. The measurement results should be based on multiple speakers. Words and morphemes of the other tone should be examined, too.

Below are several illustrations and charts on the eight vowels examined. Figure 2.5 is a vowel chart based on the measurements from Table 2.13. Figure 2.6 through Figure 2.8 are spectrograms of the words and morphemes under examination.

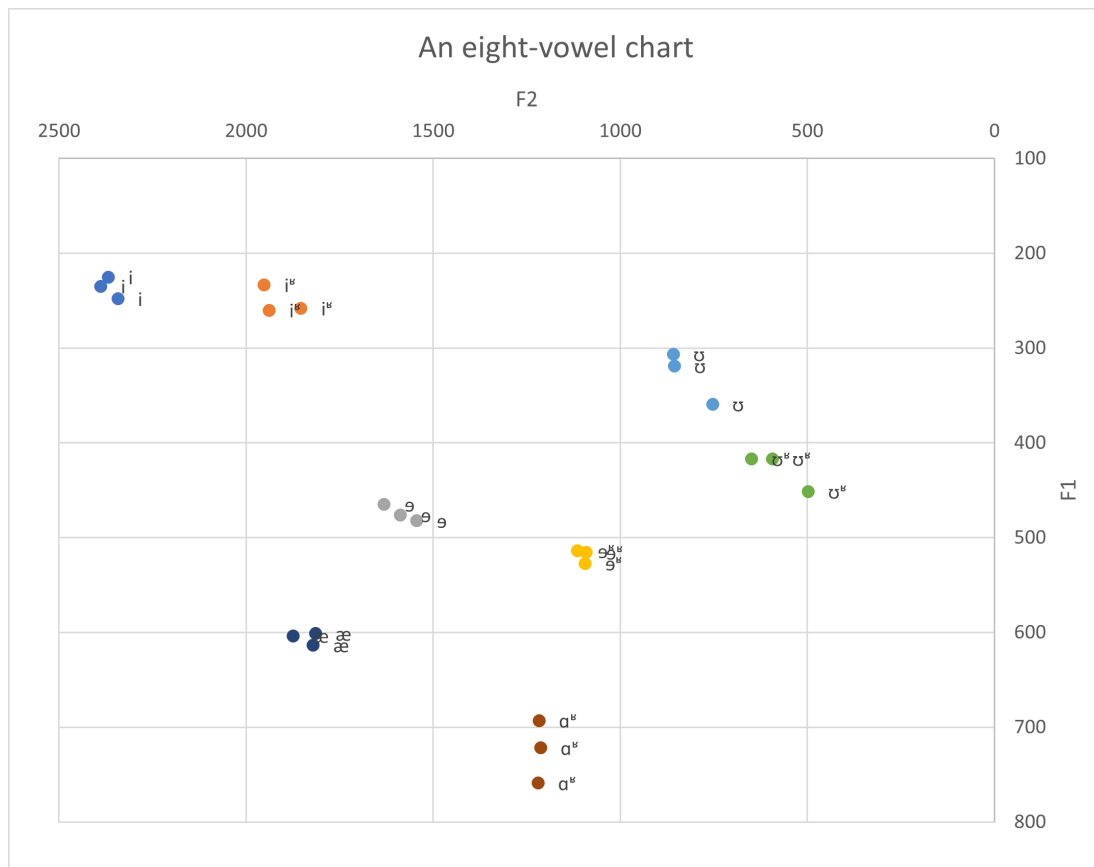


Figure 2.5: A vowel chart based on the four pairs

Figure 2.6 compares the spectrograms for the first vowel pair, /ə/ and /əʳ/.

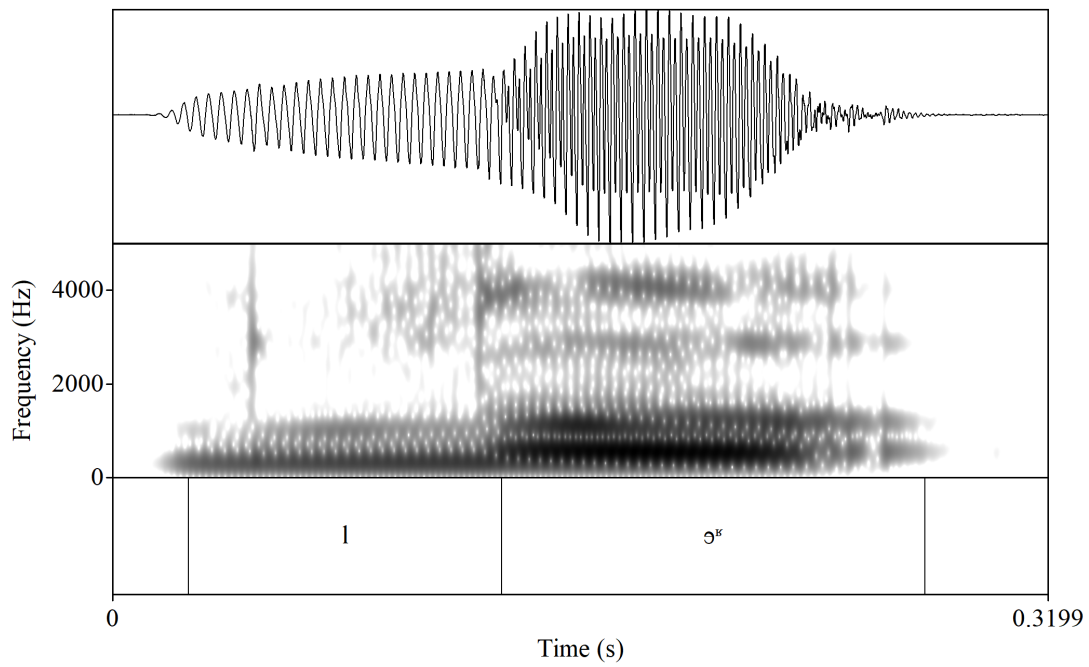
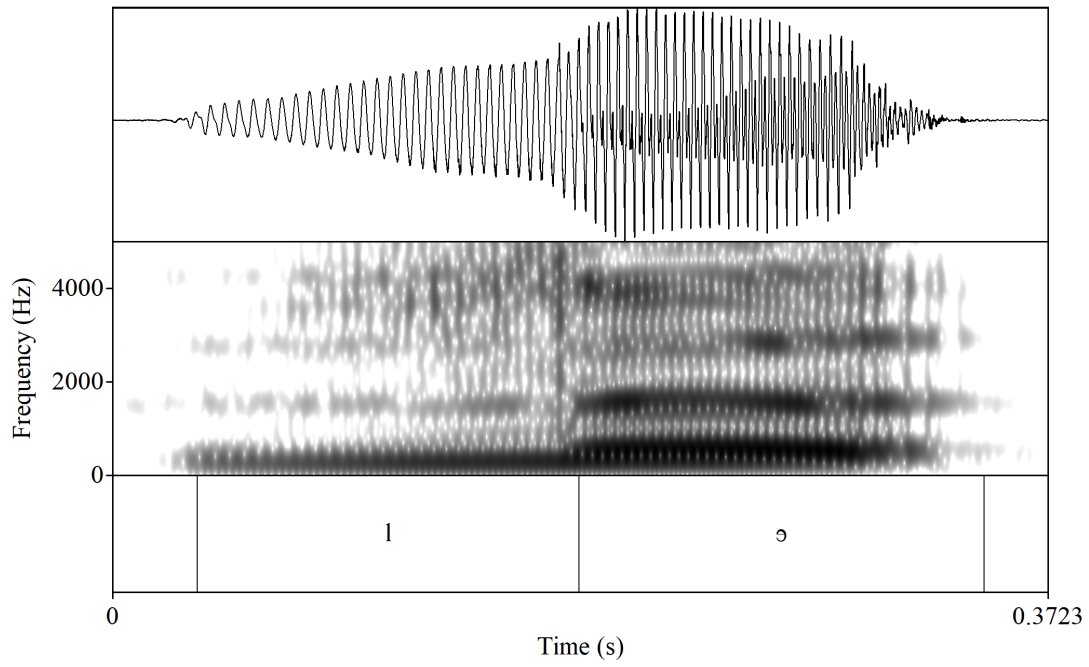


Figure 2.6: /ə/ 'seed' vs. /əʳʰ/ 'highland wheat'

Figure 2.7 compares the spectrograms for the second vowel pair, /*ʊ*/ and /*ʊ*^ʁ/.

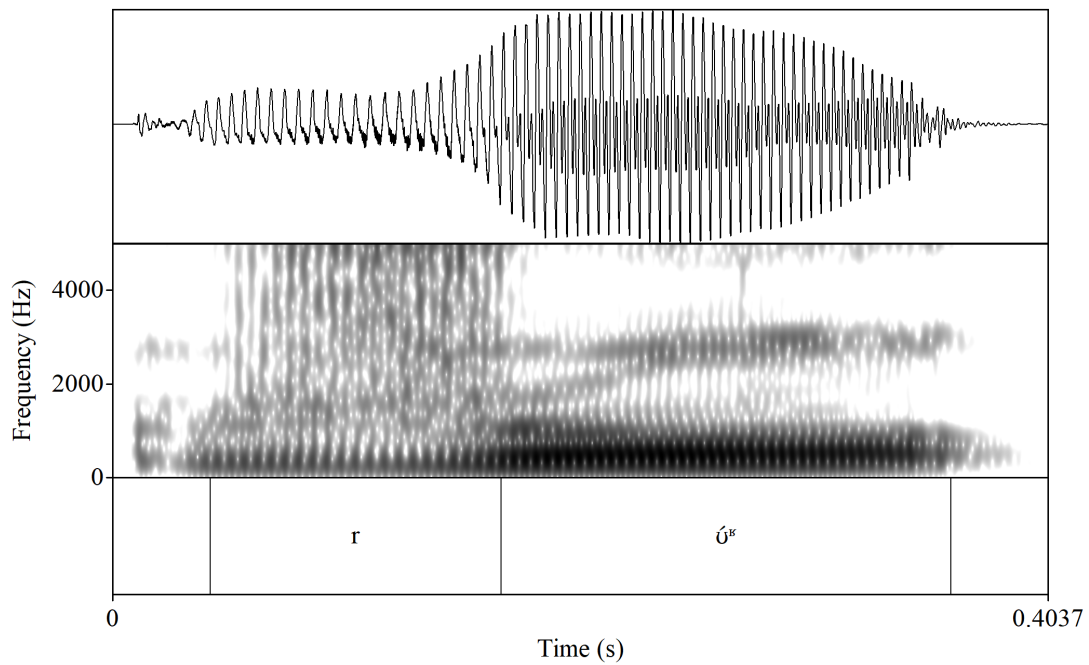
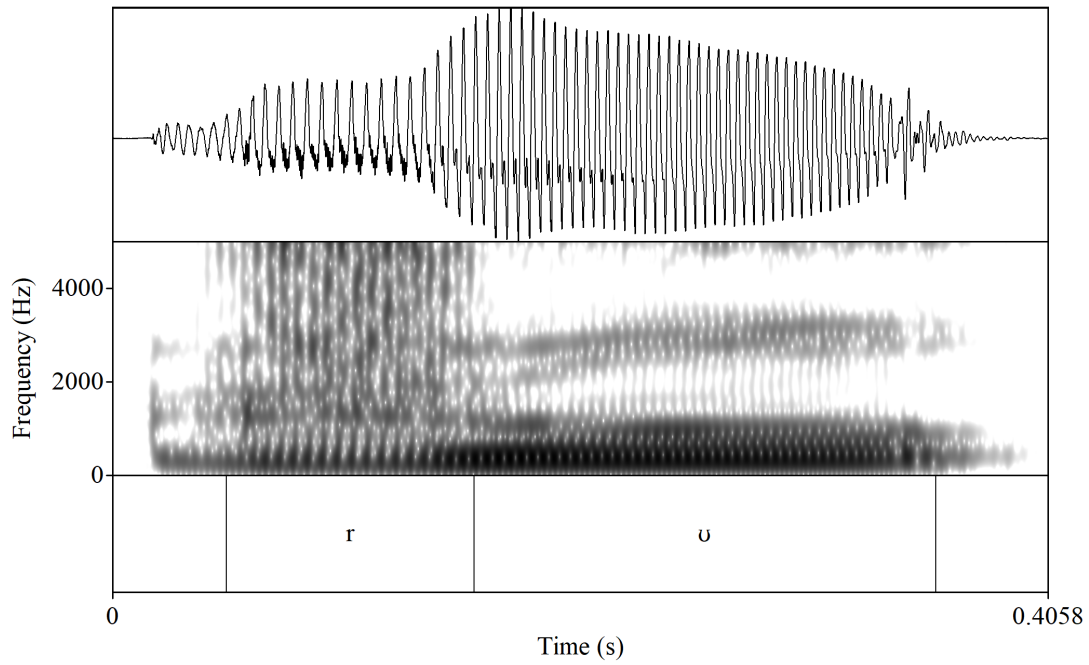


Figure 2.7: *ró* 'dry' vs. *ró^ʁ* 'rolling stone'

Figure 2.8 compares the spectrograms for the last two vowel pairs, /æ/ and /ɑʰ/, /i/ and /iʰ/. Notice that they occur in a phrase.

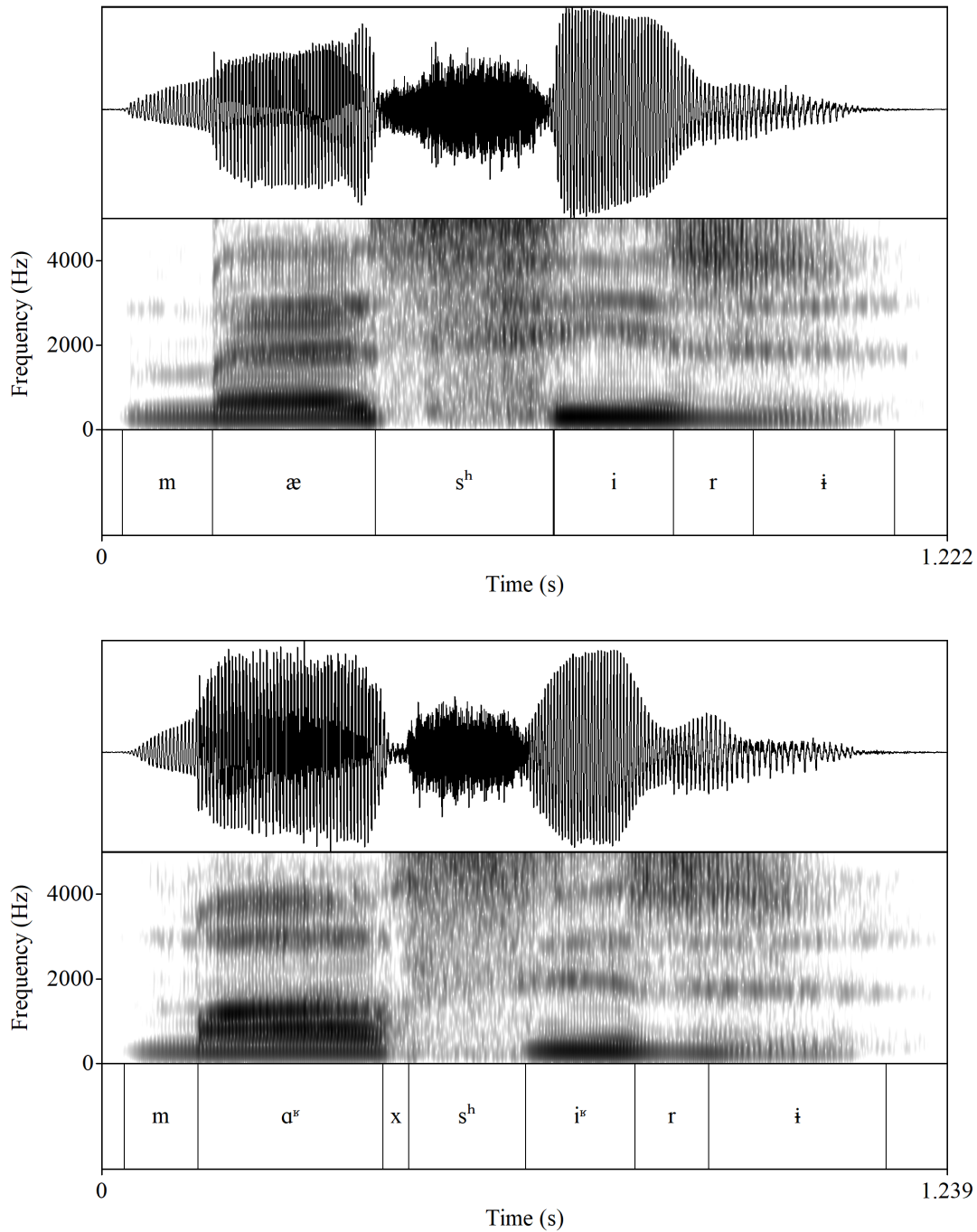


Figure 2.8: *mæ*- vs. *mɑʰ*- 'neg', *sʰi* 'die' vs. *xsʰiʰ* 'see clearly'

Similar vowel qualities are documented in neighbouring Queyu varieties. Velarized

vowels in Lhagang Queyu are mentioned in Suzuki and Sonam Wangmo (2019:115), where they describe three pronunciations of velarized counterparts of some vowels, which are velarized vowels [V^v], vowels followed by a velar approximant [Vu], and vowels followed by a palatal approximant [Vj]. Uvularized vowels also exist in Rongba (Renda village), and so far they are limited to non-front vowels (Zheng 2023:19). Some words containing velarized and uvularized vowels from these varieties correspond to Pubarong words with uvularized vowels. See Table 2.14 for specific examples. The first column lists names of the non-Pubarong Queyu variety, and the second column gives data from the respective languages. The third column presents corresponding words from Pubarong.

Table 2.14: Vowel correspondence among different Queyu varieties (Suzuki and Sonam Wangmo 2019:115; Zheng 2023:19–20)⁶

	Example	Pubarong	Gloss
Lhagang	$\bar{n}\epsilon^v$	$n\acute{o}^v$	milk
	$\bar{h}t\alpha^v$	$xt\acute{\alpha}^v$	tiger
	$\bar{s}\partial^v$	$s^h\acute{f}^v$	blood
	$\bar{p}t\partial^v$	$pt\acute{s}\acute{o}^v$	yak
	$\bar{h}l\partial^v$	$xl\acute{o}^v$	skin (cow)
Rongba (Renda)	tso^{vH}	$ts\acute{o}^v$	bridge
	$\chi p\epsilon^{vH}$	$xp\acute{\epsilon}^v$	officer
	$\chi t^h\partial^{vH}$	$xt^h\acute{f}^v$	dog

2.3.3 Similarities among uvularized, velarized, and pharyngealized vowels noted in the literature

The data presented above show that Pubarong Queyu contrasts plain and uvularized vowels. This and following sections present data from closely-related languages attesting similar phenomena. Vowel qualities similar to what is described here as uvularized are mentioned in descriptions and analyses of related neighboring languages. These vowel qualities have been variously termed as pharyngealization, velarization, tenseness, and rhotacization

⁶Markings of tone will be explained in Chapter 3, Section §3.2.

(cf. Gong 2020:193; Chirkova 2024:8). The similarities among these vowel qualities have been noted by several authors (Evans 2006a:94; Evans 2006b:737; Suzuki 2011:492; Suzuki 2013:30; Gong 2020:194). In this chapter, I withhold judgement about whether these various vowel qualities represent differing descriptions of a common set of acoustic features which have yet to be systematically defined, or are indeed truly distinct.

Literature on other Qiangic languages is introduced first. It is important to note that different terms have been used to label marked vowel qualities, similar to Queyu's uvularized vowels, in Qiangic and Rgyalrongic languages. There is no consensus among Tibeto-Burmanists about how to describe and analyze the phenomena associated with uvularization and other similar vowel qualities. Moreover, detailed comparison among each author's suggestions is beyond the scope of this chapter and dissertation. Therefore readers are suggested to consult the original works mentioned here for further reference. Section §2.3 merely presents a summary of the current available literature on this topic within Qiangic and Rgyalrongic. Tables and data from other languages in this section are reproduced from other works with no changes made to transcription or glossing style.

This overview of the literature has two aims. The first is to introduce the current state of the analysis of uvularization and relevant phenomena within Qiangic and Rgyalrongic. The second is to show discrepancies in current findings on this topic that have not been well explained and draw attention to the need for more acoustic studies and systematic explanations.

While velarization and pharyngealization are usually secondary articulations associated with consonants (Ladefoged and Maddieson 1996:360, 365), these qualities are vowel features in Qiangic languages such as Puxi Stau (Lin, Sun, and Chen 2012:87). The similarity between velarization and pharyngealization is noted in Ladefoged and Johnson (Ladefoged and Johnson 2011:236), who point out that there is no language that phonemically distinguishes these two qualities. This similarity is also brought up several times in the descriptions of Qiangic languages summarized below.

The rare vowel distinction discussed here is first mentioned for a TB language in Sun's (2000b) description of verbal inflection in the Puxi variety of Stau, under the term 'velarization'. Evans (2006b; 2006a) describes the vowel quality in the Hongyan variety of Northern Qiang as 'pharyngealization' and discusses the feature's origins. Evans (2006b) is the first study that addresses pharyngealization in TB languages. Evans (2006b:94; 2006a:737) mentions that Jackson Sun, through personal communication, has pointed out the phonetic similarity between velarized vowels in Rgyalrongic languages and pharyngealized vowels in Hongyan Qiang. In a later study, Sun and Evans (2013) revisit the vowel quality issue in Yunlinsi (Hongyan) Qiang, and amend the analytical umbrella label to 'uvularization' rather than 'pharyngealization'.

In a study on uvularization in Tangut, an extinct Qiangic language, Gong (2020:193–194) reconstructs uvularized vowels, describing uvularization in Qiangic languages as a case of guttural secondary vocalic articulations (GSVA), and notes that this distinction is similar to one found in Eastern Minyag, which is described as a lax/tense distinction by Huang (1985) and as an ATR/RTR (Advanced tongue root/Retracted tongue root) distinction by Gao (2015).⁷ In Eastern Minyag, velar consonants only occur preceding lax/ATR vowels, and uvular consonants only occur preceding tense/RTR vowels. The Eastern Minyag tense/RTR vowels, to Gong's ear, sound as though they contain pharyngealization (Gong 2020:194).

Pharyngealized vowels are also found in non-Qiangic languages of the region. Suzuki (2011) presents data on pharyngealized vowels in Gagatang Tibetan and examines their origins by comparing data from Written Tibetan, adjacent Tibetan varieties, and Naxi, a local Naic language. He discusses the connection between pharyngealization and rhotacization in vowels and points out in a later study (Suzuki 2013:29–31) that rhotacized vowels in Naxi are velarized or pharyngealized in some varieties. He also notes that the tense vowels

⁷However, the literature that Gong (2020) cited, Huang (1985) and Gao (2015), are based on Minyag spoken in Kangding, which is classified as the Western variety of Minyag instead of Eastern. This dissertation keeps the original wording of the source literature when citing them. But the mismatch of the terminology use should be noted.

in Naxi brought up by Yang (1984; 1991) correspond to rhotacized vowels in other scholars' descriptions. It is worth noting that the pharyngealized vowels found in Gagatang Tibetan are unique among Tibetic varieties (Suzuki 2011:489). Furthermore, Gagatang Tibetan is spoken in Yunnan Province, near the border of Sichuan Province, just to the south of where the Qiangic languages are spoken. The languages within the family attested to have these vowel distinctions are therefore spoken roughly within the same geographical region. Suzuki (2011:492–493) suggests that the development of pharyngealization in Gagatang Tibetan vowels may come from the influence of neighboring languages, possibly from Naxi. The spreading of uvular consonants is also suggested to be due to contact by Urban and Moran (2021:27) in Sino-Tibetan.

2.3.4 The articulation of uvularized vowels and similar vowel qualities

Ladefoged and Johnson (2011:235–236) state that the back of the tongue is raised during velarization, while pharyngealization involves the narrowing of the pharynx during articulation. Uvularized vowels are characterized by constriction of the styloglossus and other muscles, which draws the tongue dorsum towards the uvula (Evans et al. 2016:1). Other vowel qualities such as velarization and pharyngealization mentioned in related languages have similar articulatory gestures. Sun (2000b:215) points out that the articulatory gestures of velarized vowels in Puxi Rgyalrong are characterized by the dorsum of the tongue arching towards velum. Evans et al. (2016) use ultrasound imaging to explore the articulatory gestures of uvularized vowels in Mawo and Luhua, two Northwestern Qiang varieties spoken in Heishui Town. In terms of articulation, ultrasound imaging shows that the tongue is retracted towards the uvular region when producing a uvularized vowel, in juxtaposition with a plain vowel counterpart (Evans et al. 2016:22). An ultrasound imaging study on pharyngealized vowels in two Northern Horpa (aka Stau, Ergong, Daofu) varieties shows that the tongue body retracts and forms double bunching when producing pharyngealized vowels (Chiu and Sun 2020:2398).

In sum, these articulations involve a stricture at the velum, uvula, or pharynx region,

and the tongue body is usually retracted. The acoustic characteristics of these vowels are also similar, as will be addressed in Section §2.3.5. The correlation between articulatory features and acoustic measurements will be discussed in the next subsection.

2.3.5 Acoustic properties of uvularized, velarized, and pharyngealized vowels in Qiangic languages

Lin, Sun, and Chen (2012:88) acoustically examine velarized vowels in Puxi Stau, finding that velarized vowels have a significantly lower F2 and a raised F3 when compared to their plain vowel counterparts. Though change in F1 is not significant, lower F2 indicates retraction of the tongue root, which matches the articulatory gesture identified for velarized vowels (Lin, Sun, and Chen 2012:88–89).

Sun and Evans (2013) re-examine the vowel system in Mawo Qiang, a Northern Qiang variety with a series of uvularized vowels, finding the most prominent acoustic feature of uvularized vowels to be a lowered F2 (Sun and Evans 2013:141). Both F1 and F3 are raised in uvularized vowels as compared to their plain-vowel counterparts.

Evans et al. (2016) also acoustically examine vowel uvularization in Mawo and Luhua Qiang. Compared to their plain counterparts, uvularized vowels have higher F1 (significant for non-schwa vowels), lower F2, and increased difference between F3 and F2.

van Way (2018) is a description and analysis of the phonetics and phonology of another Qiangic language, Nyagrong Minyag. He examines uvularization in vowels, and provides acoustic measurements which show a raised F1 value for uvularized high vowels compared to their plain counterparts ([i], [y], and [u]). He also finds a lower F2 for uvularized non-high vowels ([ə], [ɔ], and [a]). F3 is slightly increased in all uvularized vowels except for [i^ʷ] and [a^ʷ] (Way 2018 103). All in all, drop in F2 is found to be the most salient acoustic cue for uvularized vowels in Nyagrong Minyag (van Way 2018:123).

Chiu and Sun (2020) examine pharyngealized vowels in two Northern Horpa (Stau) varieties—Rtsangkhog and Yunasche. In addition to the articulatory study mentioned in Section §2.3.4, which found tongue retraction, backing, and double bunching during the

production of pharyngealized vowels (Chiu and Sun 2020:2938), the authors conducted an acoustic study. The results showed that F1 is higher in pharyngealized vowels than in plain vowels and that this higher value corresponds to the lowering of the tongue (Chiu and Sun 2020:2939). The change observed for F2 is not as consistent as that of F1, in that F2 is lowered substantially for most pharyngealized vowels, but not for [u^ɕ] in Rtsangkhog or [o^ɕ] and [u^ɕ] in Yunasche (Chiu and Sun 2020:2941). For F3, the formant frequency increases for certain vowels ([ə^ɕ], [ɐ^ɕ], [o^ɕ] and [u^ɕ] in Rtsangkhog, [ɐ^ɕ], [o^ɕ] and [u^ɕ] in Yunasche), and decreases for front vowels (Chiu and Sun 2020:2941–2942).

Table 2.15 summarizes the results from previous studies on the comparison of formants between two sets of vowels (plain and uvularized/velarized/pharyngealized) in different Qiangic languages. Blank cells indicate that the study did not address a property specifically.

2.3.6 Origins of uvularized, pharyngealized, and velarized vowels

The origins of the velarization, uvularization, and pharyngealization attested in different TB languages have been discussed in previous studies (Sun 2000b; Evans 2006a; Lin, Sun, and Chen 2012; Gong 2020). The most common proposed source for these uncommon vowel distinctions is the loss of a velar or uvular initial and/or coda (that is, a preceding or following consonant). Much of the Queyu data are examples of this type. Evidence can be found in Tibetan loanwords such as ‘leopard’ *gzig* and ‘farming area’ *rong*, which are *ɣzi^ɕ* and *rɔ̃^ɕ* in Queyu, respectively. A similar phenomenon can also be observed in related languages like Tangut, in which reconstructed uvularized syllables correspond to Japhug Rgyalrong words with uvular codas or initials (Gong 2020). In fact, syllable reduction is an areal feature where Queyu is spoken. In Easterday’s typological study on syllable structures, based on synchronic, historical, or comparative evidence, 24 out of 100 languages were observed to have gone through a change from more simple to more complex structures (2019:290). Queyu shows the opposite diachronic pathway, supported by evidence from comparison with Written Tibetan and contemporary TB languages such as

Table 2.15: Acoustic differences in Qiangic languages between uvularized/velarized/pharyngealized vowels and their plain counterparts

Sources	Language	Vowel quality	F1	F2	F3	F3-F2
Lin, Sun, and Chen (2012)	Puxi Stau	Velarization	No significant change	Decrease	Increase	N/A
Sun and Evans (2013)	Mawo Qiang	Uvularization	Increase	Decrease	Increase	N/A
Evans et al. (2016)	Mawo Qiang	Uvularization	Increase (significant for non-schwa vowels)	Decrease		Increase
	Luhua (Yunlinsi-Hongyan)	Uvularization	Increase (significant for non-schwa vowels)	Decrease		Increase
van Way (2018)	Nyagrong Minyag	Uvularization	Increase	Decrease	Increase (except for [i ^h] and [ɑ ^h])	Increase
Chiu and Sun (2020)	Rtsangkhog Horpa	Pharyngealization	Increase	Decrease (except for [u ⁱ])	Increase (significant for [ə ^h], [ɐ ^h], [o ^h] and [u ^h])	
	Yunasche Horpa	Pharyngealization	Increase	Decrease (except for [u ⁱ] and [o ⁱ])	Increase (significant for [ɐ ^h], [o ^h] and [u ^h], little difference for [e ^h] and [ə ^h])	

Khroskyabs (see Section §2.3.6.1). The dominant local language, Khams Tibetan, has a less complex syllable structure compared to Written Tibetan and Amdo Tibetan.

The connection between velar/uvular sounds and rhotic sounds is addressed in Section §2.3.6.2, as is the possibility that the various vowel qualities discussed here may have come from the same historical source.

2.3.6.1 Sources of uvularization, velarization, and pharyngealization in Qiangic languages

Sun (2000b) suggests that one important source of vowel velarization in Puxi Stau is rounding in the rimes of proto-words, with evidence in comparative Rgyalrongic data given in Table 2.16. In Table 2.16, velarized vowels in Puxi Stau correspond to rounded rimes in other Rgyalrongic languages.

Table 2.16: Comparative Rgyalrongic data (Sun 2000b:215)⁸

Puxi (Stau)	Geshizha (Stau)	Mu'erzong (Khroskyabs)	Caodeng (Rgyalrong)	Zhuokeji (Rgyalrong)	Gloss
<i>lmə̣^v</i>	<i>lmu</i>	<i>lmoʔ</i>	<i>tə-rmu</i>	<i>tə-rmo</i>	hail
<i>ts^hə̣^v</i>	<i>ts^huə̣</i>	<i>ts^hoʔ</i>	<i>ts^ho</i>	<i>ts^ho</i>	to be fat
<i>dʒvə̣^v</i>	<i>dzə̣</i>	<i>dzə̣</i>	<i>ⁿdʒwiʔ</i>	–	to melt
<i>znə̣^v</i>	<i>snə̣</i>	<i>mnə̣</i>	<i>‘nos</i>	<i>nos</i>	to dare

Evans (2006a:114–118) on the basis of data from several Qiangic languages in comparison to Proto-Southern Qiang (PSQ) and Proto-Tibeto-Burman (PTB) argues that pharyngealized vowels may have come from PTB *-w- that led to the retraction of the tongue root. Table 2.17 is adapted from Evans (2006a:114) showing only Hongyan Qiang (HY), PSQ, and PTB data. However, note that Sims (2022) argues that comparisons with -w- by Evans (2006a) are not really convincing and that plain vs. uvular corresponds to high vs. low tone in different dialects of Rma (Qiang).

⁸An underscore beneath a vowel in the Puxi Stau data indicates a low tone (Sun 2000a:166).

Table 2.17: Hongyan pharyngealized vowels corresponding to PTB *-w- (Evans 2006a:114)

Gloss	Hongyan Qiang	Proto-Southern Qiang	Proto-Tibeto-Burman
pig	<i>pji^ɕ</i>	<i>*pia</i>	<i>*pwak</i>
yellow	<i>χa^ɕ</i>	<i>*χa-χa</i>	<i>*hwa:r</i>
water	<i>tsə^ɕ</i>	<i>*tsuə</i>	<i>*twəy</i>
light, bright	<i>ei^ɕ</i>	<i>*eya</i>	
sole of foot	<i>pa^ɕ</i>		<i>*p^wa-n</i>

Evans (2006a:119) also suggests that the development of pharyngealized vowels in Hongyan Qiang may be due to the influence of velarized vowels in nearby Rgyalrongic languages. Lin, Sun, and Chen (2012) point out that the source of some velarized vowels in Puxi may be the dropping of a velar consonant in consonant clusters. Evidence can be found in related languages like Khroskyabs and Stau. For example, ‘to buy’ is *rə^v* in Puxi, *γdə* in Xiaoyili Khroskyabs, and *γruʔ* in Yelong Khroskyabs, while ‘horse’ is *ri^v* in Puxi, but *ryi* in Stau (Lin, Sun, and Chen 2012:90). These authors also argue that velarization may be a feature inherited from Proto-Rgyalrong, as the three modern Rgyalrongic languages that preserve velarized vowels show correspondence in cognates. This is strong evidence suggesting that Proto-Rgyalrong contrasted plain and velarized vowels (Lin, Sun, and Chen 2012:90). Examples are given in Table 2.18.

Table 2.18: Velarization correspondence in three modern Rgyalrongic languages (Lin, Sun, and Chen 2012:90).

Gloss	Puxi Stau	Xiaoyili Khroskyabs	Showu Rgyalrong
ice	<i>lvδ^v</i>	<i>rp^hə^vm</i>	<i>ta-lvā^vm</i>
(man’s) sister	<i>snō^v</i>	—	<i>tə-snā^vm</i>
wide	<i>lō^v</i>	<i>lə^vm</i>	<i>kə-lā^vm</i>
neck tumor	<i>zvâ^vγ</i>	<i>zvΛ^vv</i>	<i>tə-zbâ^vv</i>
spicy	<i>lts^hâ^vv</i>	<i>lts^ha^vv</i>	<i>kə-vartsā^vv</i>
deep	<i>nΛ^vv</i>	<i>nâ^vv</i>	<i>kə-nô^vγ</i>

Gong (2020) also argues that uvularized syllables should be reconstructed for Tangut.

The uvularized syllables he reconstructs correspond to Japhug Rgyalrong words with a uvular initial or coda. Comparative data supporting his argument are given in Table 2.19.

Table 2.19: Reconstructed uvularized syllables in Tangut corresponding to Rgyalrongic uvular initials and codas (Gong 2020:199)

Gloss	Tangut examples	Japhug Rgyalrong	Other Rgyalrong
weave	{ <i>la^ʁ</i> }	/-taʁ/	Zbu /-têʁ/, Khroskyabs /dâɣvi/
be thirsty	{ <i>pa^ʁ</i> }	/ɛpaʁ/	Zbu /-sphjéʁ/, Stau /spar/
brain	{ <i>no^ʁ</i> }	/tu-rnoʁ/	Zbu /tə-rnôʁ/
winter	tsu ^ʁ r	/qartsu/	Zbu /qərtsóʔ/, Khroskyabs /rtsô/
frog	{ <i>pfi^ʁ</i> }	/qaɛpa/	Zbu /qəchiʔ/, Stau /spəŋcher/
buy	{ <i>lwə^ʁ</i> }	/-χtu/	Zbu /-χtê/, Khroskyabs /jdê/, Stau /rə/
sun	{ <i>bi^ʁ</i> }	/kmbɣi/	Stau /ɣbə/

From Table 2.19, we see that Tangut uvularized syllables correspond to Japhug Rgyalrong words with either uvular codas (for ‘weave’, ‘be thirsty’, and ‘brain’) or uvular initials (for ‘winter’, ‘frog’, ‘buy’, and ‘sun’). Miyake (Miyake2012) uses the term ‘compression effect’ to describe this spreading of a feature from the syllable periphery over the entire syllable. In fact, this phenomenon applies to rhotacized syllables (syllables with an *-r* ending) in Tangut, too, as rhotacized syllables developed from both preinitial **r-* and coda **-r* (Jacques 2014:23–29). For example, ‘put inside’ in Tangut is *kur*, corresponding to *-rku* in Japhug, and ‘sour’ in Tangut is *tšhwər*, corresponding to *-teur* in Japhug (Gong 2020:199).

Pubarong Queyu has a similar story with respect to the origins of uvularization. Comparison between cognates and loanwords between Queyu and neighbouring related

languages shows that uvularized vowels in Queyu are related to the loss of a velar or a uvular consonant in either initial or coda position. Table 2.20 compares loanwords from Tibetan in Queyu alongside their forms in Written Tibetan. For ‘tiger’, ‘see (clearly)’ and ‘leopard’, the Tibetan words contain a velar coda, which corresponds to the uvularized vowel in the Queyu loanword forms. The case of ‘leopard’ and ‘Tibetan agate’ is tricky, in that these words are homophonous in Queyu (both uvularized), whereas Tibetan ‘leopard’ contains a velar coda, but ‘Tibetan agate’ does not.

Table 2.20: Comparing Tibetan loan words in Queyu and Written Tibetan

Gloss	Written Tibetan	Queyu
tiger	<i>stag</i>	<i>xɬáʷ</i>
see clearly	<i>gzhigs</i> (‘see’)	<i>xSʰíʷ</i>
leopard	<i>gzig</i>	<i>ʏZíʷ</i>
Tibetan agate	<i>gzi</i>	<i>ʏZíʷ</i>

Table 2.21 presents data from Khroskyabs (Yunfan. Lai, p. c., July 6, 2021) and Queyu. The word ‘to rot’ in Khroskyabs has a velar coda that is lost in Queyu, which results in vowel uvularization. In ‘to close eyes’, ‘asleep’, and ‘scar’, uvularized vowels in Queyu correspond to a velar/uvular initial in Khroskyabs words.

Table 2.21: Comparing Khroskyabs and Queyu data

Gloss	Khroskyabs	Queyu (Pubarong)
to rot	<i>pɔ́ɣ</i>	<i>pɔ́ʷ</i>
to close eyes (vt)	<i>χsmɔ́</i>	<i>hmɔ́ʷ</i>
asleep	<i>ʋmɔ́</i> (‘close (eyes), vi’)	<i>mɛ́ʷ</i>
scar	<i>ɣmí</i>	<i>méʷ</i>

2.3.6.2 Rhotacization and other phenomena relevant to uvularization

The correspondence between uvularized syllables in Tangut and other Rgyalrongic languages addressed in Gong (2020), together with the comparative data shown for Queyu

and related languages, raises questions about the relation between uvularization and rhotacization.

Notions of vocalic rhotacization, velarization, pharyngealization, and tenseness are confounded in synchronic studies (Evans 2006a; Evans 2006b; Gong 2020; Chirkova 2024), and seem to be connected to historical changes. In his study examining pharyngealized vowels in Gagatang Tibetan, Suzuki (2011) points out that one important source of pharyngealized vowels is the initial or medial *r* from Written Tibetan. For example, ‘mountain’ *ʃɪzʰ* in Gagatang corresponds to *ri* in Written Tibetan. In a later study, he describes sound changes related to the medial *r* in Tibetan with a focus on how they affected vowel quality (Suzuki 2013). He concludes that the dropping of initial or medial *r* can result in vowel pharyngealization or rhotacization among the Tibetan varieties spoken in Gagatang. Suzuki (2013:30–31) also discusses several similar and overlapping phenomena in nearby languages and bring up the issue of using different terminologies for these phenomena. He argues that this is due to the fact that ‘rhotacization’ and ‘tenseness’ are umbrella terms that cover multiple characteristics and articulatory gestures. Ladefoged and Johnson (2011:229–230) point out that r-colouring in American English can also have multiple gestures, all of them involving a narrowing of the pharyngeal cavity and characterized by a marked lowering of F3. Zhu (2010:106) also notes that the terms ‘tense/lax’ have been used to describe as many as sixteen different phenomena in the TB literature. Suzuki (2013:31) then suggests that the term ‘tense vowels’ covers velarized or pharyngealized vowels, and ‘rhotacized vowels’ may refer to rhotacized vowels, but also to velarized and pharyngealized vowels. Vowel velarization and pharyngealization, therefore, overlap in the terminology with rhotacization and tenseness.

2.3.7 Summary on uvularized vowels

This subsection examines phonological, typological, and diachronic features of uvularized vowels, all of which contrast with plain vowels in Queyu. Many Qiangic languages contain two similar classes of vowels that differ in terms of vowel quality and vowel har-

mony processes. In different languages, specific vowel quality may differ slightly in terms of articulation and acoustics. Terms like ‘velarization’, ‘uvularization’, and ‘pharyngealization’ are used to describe these similar phonological phenomena in different languages. It is unclear to what extent these different terms reflect distinct synchronic phenomena (both in terms of actual pronunciation and phonological patterns) as opposed to being different ways of talking about the same or similar phenomena.

The articulation of these non-plain vowels involves a constriction of the root of the tongue towards the velum, uvula, or pharynx wall. Vowels that are supposed to be pronounced with a retracted tongue root can be phonologically grouped in a harmonic set with several phonetic manifestations. Among the latter, higher F1 (which is at the same time also a correlate of tongue height) and pharyngealization are the two most important (Sylak-Glassman 2014: 75, Barrere and Janhunen 2019: 54).

Variation in the acoustic measurements for marked vowels exists not only in TB languages, but in languages with similar vowel qualities or phonological processes. Within TB languages, Lin, Sun and Chen (2012), Sun and Evans (2013), and van Way (2018) found the change in F2 to be the most prominent acoustic cue for a marked vowel, while Chiu and Sun (2020) found a change in F1 to be more consistent than F2. Lin, Sun and Chen (2012) did not find a significant change in F1, but Evans, Sun, Chiu and Liou (2016) found higher F1, lower F2 and increased difference between F3-F2 to be defining acoustic properties of marked vowels. There is more variation found in F3 values across languages, with Puxi Stau and Nyagrong Minyag having a raised F3, and no consistent pattern for Mawo and Luhua Qiang, or Rtsangkhog and Yunasche Stau (Lin, Sun and Chen 2012, Evans et al. 2016, van Way 2018, Chiu and Sun 2020).

For non-TB languages, studies show variation in the acoustic measurements for pharyngealized vowels as well. For example, F3 rises in pharyngealized vowels in Arabic (Yeou 2001) and Upper Saxon (Khan and Weise 2013) but decreases for Amis (Maddieson and Wright 1995) and !Xóõ (Ladefoged and Maddieson 1996). In a study on advanced and re-

tracted tongue root (ATR) harmony in Akebu, a Niger-Congo language spoken in Togo and Ghana, F1 is found to be the most robust acoustic correlate for [+ATR] vowels among other phonetic properties measured. However, F1 alone is not enough to differentiate [+/-ATR] from vowel height or tenseness (Makeeva and Kuznetsova 2022).

Inconsistency in the acoustic properties of the members within a harmonic set might explain the inconsistency in transcriptions and nominations across studies. In fact, members of the vowel pair /æ a^ʷ/ sound like [æ a] in Queyu and was previously transcribed that way in my work. This is also the case in Qiang, as Evans et. al (2016: 5) notes that both in Yunlinsi and in Mawo Qiang, /a a^ʷ/ sounds like [æ a], and the /u u^ʷ/ pair sounds like [u o]. These instances suggest that the vowel quality discussed here as ‘uvularization’ may be more of a phonological than a phonetic feature, and one which has spread with different phonetic manifestations across languages.

While vowel uvularization may have arisen due to the loss of a velar or uvular initial and/or coda in Queyu and other Qiangic languages, the origins of uvular consonants in TB languages are still controversial. In Gagatang Tibetan, the development of vowel pharyngealization corresponds to an initial and medial *r* in Written Tibetan.

More descriptions of Queyu, as well as other Qiangic languages, are needed to investigate the uvularization phenomenon and others like it. A particularly important direction for future research on Queyu is the systematic acoustic and articulatory analysis of vowel qualities in order to see how the articulation and acoustics of uvularized vowels pattern in comparison to those found in other related and unrelated languages of the region. Such studies would help to determine the extent to which acoustic properties of vowel quality may themselves be areal features.

2.4 Syllables

2.4.1 Overview

Having described and discussed the phoneme inventory of Queyu, this subsection is devoted to the syllables. The syllable structure of Queyu is: (P) (C) (G) V. The simplest syllable type is V, while the most complex structure is PCGV. Other possible syllable types are CV, GV, PCV, and CGV.

P stands for preinitial. A preinitial is the first consonant of two non-glide consonants in the onset. Their intensity and duration are much shorter than regular consonants. For example, for the [p] preinitial, only a gesture of closed lips remains, no audible [p] sound can be heard. One has to see the mouth of a speaker to observe the presence of the [p] preinitial. If the lip-closing is not done when pronouncing words such as *ptś* ‘pour (water).3’, then it is not distinguishable from *tś* ‘pour (water).SAP’. Hence, the argument information of this verb will be missing. It may be strange to non-TB specialists that the first segment is not the initial segment. But the term preinitial is used in this dissertation as a useful label to indicate the position of the sound in a syllable, and it does not mean anything different from other common labels such as C1. The consonants allophones that can appear in the preinitial position are limited to twelve: [p, b, ɸ, β, x, ɣ, χ, h, n, m, ŋ, ɴ]. Some of their distribution are predictable and will be explained in the following subsections.

C stands for consonant, which can be any member of the consonant phoneme inventory. G represents a glide. Two consonants can fill the glide spot. These are [j, w, ɥ], with [ɥ] being an allophone of /w/ conditioned by a following front vowel. Below are example words for each combination.

- (2.1) a. V *í-* ‘UPWARD’
b. CV *vś* ‘flour, powder’
c. GV *jǎ-* ‘UP.Q’
d. PCV *xp^hí* ‘dust, ash’
e. CGV *vjé* ‘pig’
f. PCGV *xpjé* ‘rough, coarse’

The majority of the remaining subsection will be dedicated to describing different syllable types with a focus on the complex onsets of Queyu syllables. The last subsection on syllables, Section §2.4.6.3, is a typological overview of syllabic structures in TB studies, and brings in the Queyu data to enrich this field.

2.4.2 Constraints and exceptions on the distribution of uvularized vowels in syllables containing CV structure

For the simple syllables with a CV structure, there is not much restriction on what can occur in the onset position. All consonants could occur as a simplex onset. However, notice that /x^h/ is a marginal phoneme that has only been documented in Tibetan loan words so far, with only three occurrences observed. These are x^hǽ ‘(rainbow) appear’ and x^hé́ ‘meat’/ ‘strength’.

Another constraint on the CV structure of syllables has something to do with dorsal consonant and vowel quality. Queyu has two sets of vowels, plain and uvularized. Previous section has provided ample minimal pairs of plain and uvularized vowels contrasting each other in multiple environments, such as ĺ ‘seed’ vs. ĺ^u ‘highland wheat’, ŕ ‘dry’ vs. ŕ^u ‘rolling stone’, ṕ ‘wet’ vs. ṕ^u ‘to rot’. The two types of vowels clearly contrast, and determine complementary distribution of the velar versus uvular articulations of the preceding dorsal consonants. Velar pronunciations only precede plain vowels, while uvular pronunciations precede uvularized vowels only. Uvular consonants are therefore speculated to be the allophones of velar consonants, conditioned by vowel quality. Table 2.22 lists several pairs showing this distribution.

There are two vowels, however, that are exceptions to this constraint, and they are /u/ and /o/. For /o/, this vowel can occur after both velar (*gó* ‘be happy’) and uvular consonants (*qǒ* ‘fall, drop’), violating the complementary distribution rule that other uvularized vowels follow. See Table 2.23 for specific examples. If /o/ could occur after uvular sound, it would be evidence that this vowel behaves like a uvularized vowel. But if uvular consonants in

Table 2.22: Plain and uvularized vowels follow velar and uvular consonants, respectively

Velar consonant + plain vowel	Gloss	Uvular consonant + uvularized vowels	Gloss
<i>k^hó</i>	fence	<i>q^hó^ʙ</i>	head
<i>gǒ</i>	grassland	<i>NGWé^ʙ</i>	sprain (ankle)
<i>xú</i>	rain	<i>χǒ^ʙ</i>	forget
<i>yó</i>	finish.1SG	<i>ʙó^ʙ</i>	peach
<i>ŋǒ</i>	1SG	<i>Né^ʙ</i>	yellow

Pubarong Queyu are allophones of velar sounds triggered by uvularized vowels, then the fact that ‘happy’ *gó* starts with a velar consonant rather than a uvular consonant suggests that /o/ behaves like plain vowel here.

Table 2.23: The vowel /o/ can occur after both velar and uvular consonants

Queyu	Gloss
<i>gó</i>	be happy
<i>qǒ</i>	fall, drop
<i>χqǒ</i>	carve, engrave

Between velar and uvular consonants, the vowel /u/ is found only after velar ones so far. Therefore, evidence of /u/ behaving both ways is not phonological. For /u/, the evidence is morphosyntactic rather than phonological, and will be demonstrated and discussed in Section §2.6.3, where (exceptions of) uvularity spreading is addressed.

2.4.3 PC onsets

There are few restrictions for the simple CV structure. Restrictions arise as onsets increase in complexity. In this subsection, the PC onsets will be examined first.

There are twelve possible preinitials in Queyu, which are given below with an example for each.

There are certain rules on the distribution of preinitials, and they are conditioned

Table 2.24: Preinitials with examples in Queyu

	Preinitial	Lexicon	Gloss
Bilabial	p	<i>ptɕ^hó^ɕ</i>	white
	b	<i>bdí</i>	to be right, correct
	ɸ	<i>ɸlwǎ</i>	to arrive
	β	<i>βrá^ɕ</i>	female yak
Velar	x	<i>xló^ɕ</i>	cow skin
	ɣ	<i>ɣzǎ^ɕ</i>	chisel
Uvular	χ	<i>χqó</i>	to scold
Glottal	h	<i>hmǎ</i>	bottom part
Nasal	n	<i>ndjé</i>	to weave.1/2
	m	<i>mɲé</i>	eye
	ŋ	<i>ŋgwǎ</i>	front, before
	ɴ	<i>ɴq^hǎ^ɕ</i>	to stick, to congregate

by the voicing and place of the following consonant. In general, voiceless preinitials are found before voiceless consonant onsets, and voiced preinitials are found before voiced ones. There are three exceptions here, which are preinitial [h], those preinitials that can occur in front of [l], and pre-nasalization. The preinitial [h] (or pre-aspiration) occurs in front of nasals so far. As for [l], both voiceless and voiced preinitials can occur in front of it. Examples are *xló^ɕ* ‘cow skin’, *ɣló^ɕ* ‘to sunbath.lsg’, *ɸló* ‘to weave, to knit.lsg’ and *βló* ‘do.lsg’.

The voicing agreement is also observed in several other Queyu varieties. Though combinations like /pʑ/ and /phʑ/ exist in Tuanjie/Gala Queyu, the /ʑ/ is realized as /ɕ/ in this position (Lu 1985:68). Exceptions to this voicing agreement in other varieties are also the same or similar to the Pubarong variety, such as pre-aspiration and pre-nasalization (Lu 1985; Wang 1991; Suzuki and Sonam Wangmo 2019; Zheng 2023). What is interesting is that this agreement does not also apply to the lateral sound /l/ in Rongba (Renda) Queyu. Thus, /xl/ and /ɣl/ in this variety can occur in a contrastive environment (Zheng 2023: 7).

Preinitial nasals, or pre-nasalization, are mostly conditioned by place of articula-

tion of the following consonant. Preinitial [m] can occur in front of bilabial, and coronal consonants, such as *mbǎ* ‘bug’, *mpé* ‘eye’. [n] can only occur in front of coronal sounds, such as *ndzó* ‘be the same’ and *ndǎndǎ* ‘to shiver’, with only one exception *ncó* ‘female genital’. While [ŋ] only occurs in front of another velar consonant, such as *ŋgévi* ‘blacksmith’ and *ŋk^hó* ‘be pretty’, [N] only appears in front of another uvular consonant, such as *nq^hǎ^hlò* ‘hand-held prayer wheel’. Nasal preinitials occur in front of aspirated voiceless and voiced consonants. So far, there is no contrast between prenasalized voiceless stop and voiced stop such as *nts* and *ndz* found in Rgyilarong. To summarize, [ŋ] and [N] only occur before homorganic consonants, the distribution of [m] and [n] partially overlap. Possible environments for [m] and [n] to occur in are listed below.

- For [m]:
 - /p^h, b, t^h, d, ts^h, dz, dʒ, tʃ^h, dʒ, n, ɲ/
- For [n]:
 - /t^h, d, ts^h, dz, tʂ^h, dʒ, tʃ^h, dʒ, ɠ/

Both preinitials can occur before /t^h, d, ts^h, dz, dʒ, tʃ^h, dʒ/. Hence, the place distinction for nasal preinitials is neutralized in every place except for coronal onset. There is only one environment that needs to be addressed, which is the /nɠ/ onset. Only one instance of this onset is found in the data, which is *ncó* ‘female genital’. The form of this word violates several constraints. Instead of having a homorganic [N] preinitial, this word has [n]. Though uvular consonants only occur before uvularized vowels, /ʊ/ is a plain one, and it follows [ɠ]. Consider the sensitive nature of the semantics of this word, both the unusual form as well as its frequency make sense.

One last note on the transcription of nasal preinitials is whether or not they should be treated as separate phonemes, or as part of a prenasalized feature. Prenasalized sounds are common in the area, and in descriptions of some languages they are analyzed along with the sound they follow as a single unit, such as Japhug (Jacques 2021) and MunyaClick or

tap here to enter text. (Gao 2015:57; Bai 2019:40). In some descriptions of other languages, they are treated as clusters, such as Geshiza (Honkasalo 2019:169) and Mazur Stau (Gates 2021:73). In this dissertation, the nasals are analyzed as preinitials for several reasons. However, in terms of duration, a single voiced onset lasts almost as long as a prenasalized onset, as is seen in Figure 2.9, which may justify a simplex treatment. In spite of this, preinitial nasals can play a role in verbal conjugation, as many verbs having a prenasalized onset have an /n/ preinitial for the first and second person forms, but /m/ for third person form (refer to Chapter §6.2 for details). In fact, several other bilabial preinitial consonants have the same function, such as [ɸ] (*lǎʰ* vs. *ɸlǎʰ* ‘release’) and [p] (*tǎ* vs. *ptǎ* ‘pour, dump’). Since they belong to the same PCV syllable category, it is more economic to analyze these as instances of consonant clusters, instead of introducing too many single phonemes such as [pt], [mb] and [βr] into the consonant inventory.

Affricates, however, are treated differently than prenasalized sounds. They are analyzed as a single unit, for their distribution is more limited. While [m] and [n] can occur in front of various consonants, affricates are limited to ‘alveolar stop + coronal fricative’ combinations whose two members also have to agree with voicing. They also behave as a unit in the sense that affricates can have a three way contrast among voiceless aspirated, voiceless and voiced. For nasal preinitial, the nasal sound will not be devoiced if followed by a voiceless consonant. Lastly, analyzing affricates as a single phoneme will make words like *xtsjé* ‘axe’ still follow the syllable canon, saving the trouble of adding another optional consonant slot to the syllable template.

For bilabial preinitials, while [p] could occur in front of a wider range of consonants, such as stops *ptǎʰ* ‘to chop’, affricates *ptʂʰóʰ* ‘white’, and fricatives *psó* ‘pad’, [b] is only found before stops *bdí* ‘to be correct, right’ and affricates *bdʒǎ* ‘be full’. [ɸ] only precedes laterals, and preinitial [β], on the other hand, can also occur in front of retroflex approximant *βrí* ‘horse’ and *βʒě* ‘take out.3’ in addition to the lateral approximant.

Similar phenomena are observed in other varieties, too. Non-nasal bilabial preini-

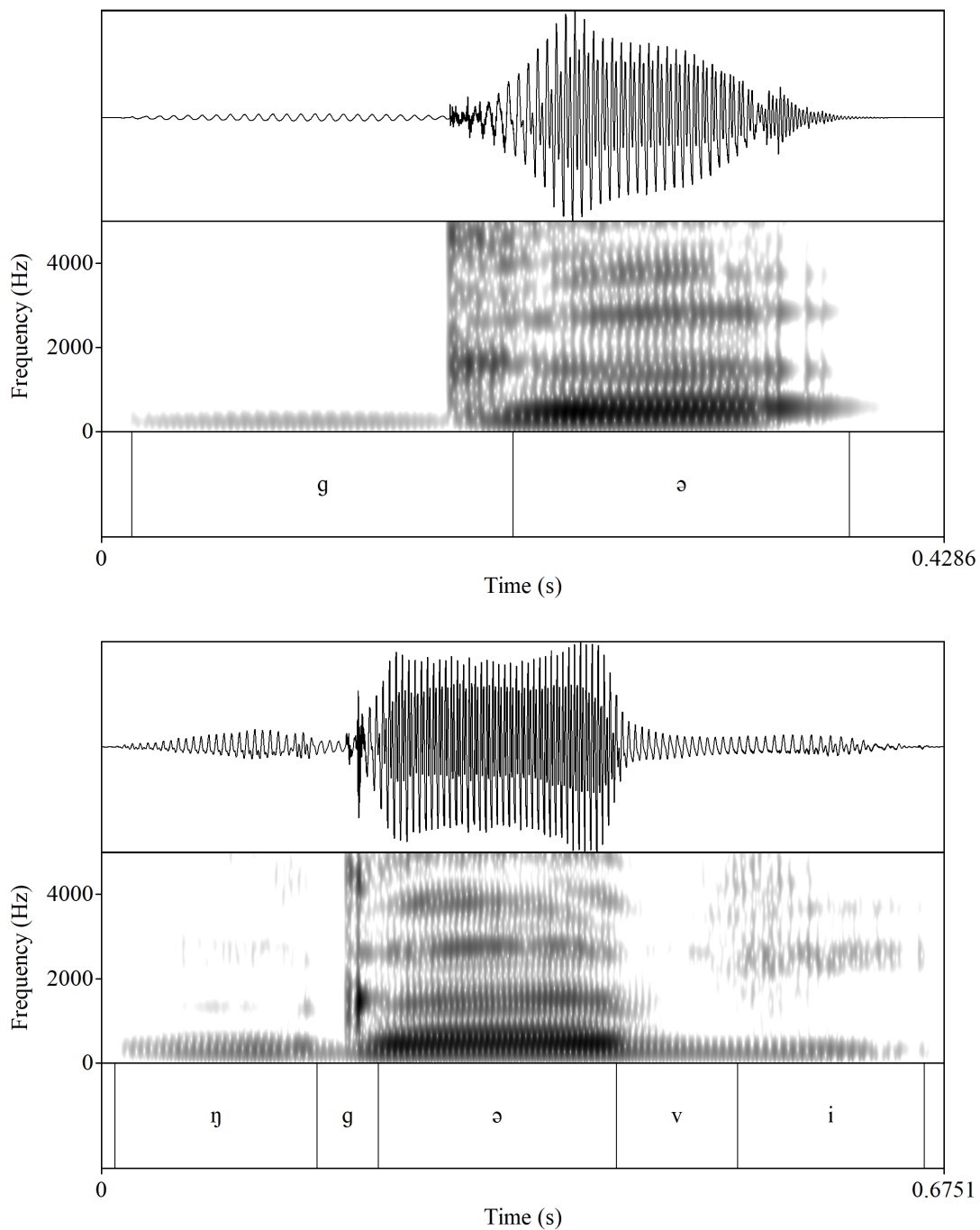


Figure 2.9: Compare *gə* ‘hot’ and *ŋgəvi* ‘blacksmith’

tials can have multiple realizations under different environments. For example, in Youlaxi (Xinlong County), /p/ is realized as [p] before stops and affricates, [f] before /h/, and [ɸ] before other fricatives. The voiced bilabial /b/ remains as [b] before stops and affricates, is

realized as [v] before /l, r/, and [β] before other fricatives (Wang 1991:49–50). In Rongba (Renda village) Queyu, /p/ and /b/ are pronounced as [p] and [b] before stops and affricates, and as [ϕ] and [β] before fricatives and liquids (Zheng 2023:13).

Velar preinitial, [x] has the widest distribution and can occur in front of stops like *xpó* ‘to soak’, affricates *xtsí* ‘almost’, and fricatives *xsǒʰ* ‘pine root’. [ɣ] is different in that it occurs in front of fricatives *ɣzǒʰ* ‘be spicy’, and lateral *ɣlǒʰlù* ‘the year of ox’, but not stops or affricates. The [χ] preinitial is an allophone of /x/, which only occurs in front of uvular consonants, for example, *χqǒʰ* ‘to carve’ and *χqʰǒʰ* ‘feces’. Two free variations of the /x/ preinitial are found in native speakers’ speech. These are [ɕ] and [ɬ]. For example, *xkwǎ* ‘to be shy, polite’ can also be pronounced as *ɕkwǎ*, and *xlǎ* ‘lightning’ can be *ɬǎ*. It is worth noting that this phenomenon of multiple realizations of /x/ exists in other varieties like Rongba (Renda village), where /x/ can be pronounced as [x, ɕ, ç, ʃ] (Zheng 2023:8). What is even more interesting is the correspondence among multiple fricative preinitials within and across various Queyu varieties. While [ɕ] and [x] are free variations in the preinitial position in Pubarong, the /x/ may correspond to other fricative preinitials in Queyu dialects spoken elsewhere. For example, /x/ in Pubarong can correspond to /s/ (*xkí* vs. *skí*⁵⁵ ‘tooth’), /ʃ/ (*xkʰú* vs. *ʃkʰu*⁵⁵ ‘smoke’), and /ʃ/ (*xtʃhíʰ* vs. *ʃtʃhi*⁵⁵ ‘dog’) in Youlaxi (Xinlong County) (Wang 1991:51–52).

Possible PC onsets with example words are listed below. For this and the following tables in the rest of this subsection, some possible but non-existent onsets will also be listed, but the corresponding cells are blank and shaded.

Table 2.25: PC onsets with preinitial /p/

Phoneme	Allophone	PC onset	Example	Gloss
p	p	pt ^h	pt ^h ó	take off (clothes).3
		pt	ptó	pour, dump.3
		pts ^h	ts ^h ópts ^h ə	flurried, flustered
		pts	ptsó	sit.3
		ptɕ ^h	ptɕ ^h ó	fast, quick
		ptɕ	ptɕí	wander.3
		ptʃ ^h	ptʃ ^h ó	hang.1SG
		ptʃ	ptʃó	grind.1SG
		ps ^h	ps ^h ó	hone, polish.1SG
		ps	psó	hold back.1SG
		pɕ ^h	ɕ ^h íps ^h í	tear.3
		pɕ		
		pʃ ^h	pʃ ^h ó	spread out
		pʃ	pʃó	say, talk
	ɸ	ɸ	ɸl	ɸló
ɸl̥			ɸl̥ó ^s	release.3

Table 2.26: PC onsets with preinitial /b/

Phoneme	Allophone	PC onset	Example	Gloss
b	b	bd	bdó	drive, herd.1SG
		bdʒ	bdʒǒ	spread, lie on stomach.1SG
	β	βz	βzó	lead along.1SG
		βʒ	βʒó	sleep.3
		βl	βló	do, make.1SG
		βr	βró	throw.3

Table 2.27: PC onsets with preinitial /x/

Phoneme	Allophone	PC onset	Example	Gloss	
x		xp ^h	xp ^h ó	extinguish (fire).1SG	
		xp	xpǒ	see sb. off.1SG	
		xt ^h	xt ^h ǎ ^ʙ	saliva	
		xt	xtǎ ^ʙ	hit, pound.1PL	
		xk ^h	xk ^h ś	foot	
		xk	xkś	language, voice	
		xts ^h	xts ^h ǎ ^ʙ qó	phlegm, sputum	
		xts	xtsǎ ^ʙ pś ^ʙ	leprosy	
		xʈ ^h	xʈ ^h ś	to break.SAP	
		xʈ	xʈś	treat (with meal).SAP	
		xtʃ ^h	xtʃ ^h ǎ ^ʙ	dog	
		xtʃ	xtʃǎ ^ʙ	curse	
	x		xs ^h	xs ^h ǒ ^ʙ	think.1SG
			xs	xsǒ ^ʙ	light a fire.1SG
			xʂ ^h		
			xʂ	xʂú	cut open.3
		xʃ ^h	xʃ ^h ǎ ^ʙ	pour, dump.SAP	
		xʃ	xʃǎ ^ʙ		
		xl	xlí	tongue	
χ			χq ^h	χq ^h ǒ ^ʙ	take apart.1SG
			χq	χqǒ ^ʙ	boil, cook.1SG
h			hm	hméI	medicine
		hn	hnś	mouth	
		hɲ	hɲó	weaving	
		hŋ	hŋó	borrow.1SG	
		hN	hNǎ ^ʙ	poisonous plant	

Table 2.28: PC onsets with preinitial /ɣ/

Phoneme	Allophone	PC onset	Example	Gloss
ɣ	ɣ	ɣd	<i>ɣdí</i>	flow, bleed
		ɣg		
		ɣdz	<i>ɣdzǒʰ</i>	squeeze in.1SG
		ɣdʒ		
		ɣdʒ		
		ɣz	<i>ɣzúʰ</i>	be similar
		ɣʒ	<i>ɣʒóʰ</i>	hit.SAP
		ɣɲ	<i>ɣɲǎ</i>	rub (dough).3
		ɣl	<i>ɣlǒʰ</i>	bear, hold back.1SG
		ɣr		

Table 2.29: PC onsets with preinitial /m/

Phoneme	Allophone	PC onset	Example	Gloss
m	m	mp ^h	<i>mp^hí</i>	shoulder
		mb	<i>mbó</i>	bug
		mt ^h	<i>mt^hǎ</i>	sing.3
		md	<i>mdí</i>	see.3
		mts ^h	<i>mts^híxtsi</i>	paint (n.)
		mdz	<i>mdzó</i>	room
		mtʂ ^h		
		mdr	<i>mdrú</i>	dragon
		mtʃ ^h	<i>mtʃ^hǒ</i>	use, apply
		mdʒ	<i>mdʒú</i>	swallow
		mn	<i>mnó</i>	dare.3
		mɲ	<i>mɲé</i>	eye

Table 2.30: PC onsets with preinitial /n/

Phoneme	Allophone	PC onset	Example	Gloss		
n	n	np ^h				
		nb				
		nt ^h	<i>nt^hǒ</i>	sing.1SG		
		nd	<i>ndó</i>	see.1SG		
		nts ^h	<i>nts^hǒ^ʷ</i>	nest		
		ndz	<i>ndzǎ</i>	component, part		
		ntʂ ^h	<i>ntʂ^hó</i>	hatch (egg)		
		ndr	<i>ndró</i>	be the same		
		ntʃ ^h	<i>ntʃ^há^ʷló^ʷ</i>	chew.1SG		
		ndʒ	<i>ndʒǒ^ʷ</i>	arrest, catch.1SG		
		ng	<i>ngó</i>	female genital		
		ŋ	ŋ	ŋk ^h	<i>ŋk^hó</i>	beautiful
				ŋg	<i>ŋgú</i>	make decision, lead
		N	N	Nq ^h	<i>Nq^há^ʷró^ʷ</i>	scratch.1SG
				NG	<i>á^ʷNGò</i>	inner side of the female thigh

2.4.4 CG onsets

For CG onsets, more restricted combinations are found, for there are more consonants that could occur in the preinitial position, as compared to glides. Not all consonants occur with both glides. Currently-attested CG combinations are given in the following tables.

Glides can occur before these stop sounds: /p^hw, pj, pw, bw, t^hj, t^hw, tj, tw, dj, dw, k^hj, k^hw, q^hw, gj, gw/. While /w/ could occur after sounds in all places, /j/ cannot follow uvular sounds. From an articulation perspective, it is reasonable that uvular consonants do not precede /j/. See Table 2.31 for examples with CG onsets that start with a stop initial.

Fewer affricates can precede a glide. Only five such onsets are attested. They are /tsj, tsw, tʃw, dʒw, tʃ^hw/. See Table 2.32 for examples with CG onsets that start with an affricate initial.

For fricative + glide onsets, the attested cases are /vj, vw, sj, zw, ʃ^hw, ʃw, χw, ʁw/. See Table 2.33 for examples with CG onsets that start with a fricative initial.

For sonorants that can take a following glide, possible onsets are /mw, nw, ŋw, nw, lj, lj, lw, rj, rw/. Among the possible combinations, only /mj/ and /lw/ are not found. See Table 2.34 for examples with CG onsets that start with a sonorant initial.

Table 2.31: CG onsets with a stop initial

Phoneme	CG onset	Example	Gloss
p ^h	p ^h j		
	p ^h w	<i>p^hwá</i>	cut open, rip open
p	pj	<i>pjèrí</i>	Tibetan
	pw	<i>pwá</i>	crack open
b	bj		
	bw	<i>bwàrí</i>	a kind of headwear
t ^h	t ^h j	<i>t^hòt^hjé</i>	rope
	t ^h w	<i>t^hɣe</i>	stall.3
t	tj	<i>tjé</i>	upon
	tw	<i>tɣé</i>	tired, sick of sth.
d	dj	<i>tépédjè</i>	moving
	dw	<i>dɣé</i>	organize, tidy up
k ^h	k ^h j	<i>k^hjéri</i>	tongue coating
	k ^h w	<i>k^hwí</i>	sun dry.3
	q ^h j		
	q ^h w	<i>q^hwǎ^s</i>	cut.3
k	kj	<i>kje</i>	slope
	kw	<i>kwá</i>	year
	qj		
	qw	<i>qwá^s</i>	shout, yell
g	gj	<i>gjě</i>	pass by
	gw	<i>sígwá</i>	dew
	cj		
	cw		

Table 2.32: CG onsets with an affricate initial

Phoneme	CG onset	Example	Gloss
ts ^h	ts ^h j		
	ts ^h w		
ts	tsj	<i>q^hwó^ʰtsjé</i>	jump.sap
	tsw	<i>tswó^ʰ</i>	deer
dz	dzj		
	dzw		
tʂ ^h	tʂ ^h j		
	tʂ ^h w		
tʂ	tʂj		
	tʂw	<i>tʂwǎ</i>	luck
dr	drj		
	drw	<i>drwó</i>	cramp
tʃ ^h	tʃ ^h w	<i>tʃ^hɥǎ</i>	leave, depart
tʃ	tʃw		
dʒ	dʒw		

Table 2.33: CG onsets with a fricative initial

Phoneme	CG onset	Example	Gloss
v	vj	<i>vjé</i>	pig
	vw	<i>vwǎ</i>	carry on the back (human)
s ^h	s ^h j		
	s ^h w		
s	sj	<i>sjésjé</i>	generous
	sw		
z	zj		
	zw	<i>zjé</i>	female hybrid yak
ʃ ^h	ʃ ^h j		
	ʃ ^h w		
ʃ	ʃj		
	ʃw		
ʒ	ʒj		
	ʒw		
x	xw		
	χw	<i>χwáʳ</i>	mouse
ɣ	ɣw		
	κw	<i>κwǎʳ</i>	open one's mouth.3

Table 2.34: CG onsets with a sonorant initial

Phoneme	CG onset	Example	Gloss
m	mj		
	mw	<i>dzýmwó</i>	intestines
ɲ	ɲw	<i>ɲɥé</i>	mistaken
ŋ	ŋw	<i>ŋwàŋéné</i>	very shy
N	NW	<i>NWá^ɣ-rò^ɣ</i>	five
l̥	lj	<i>ljé</i>	thick
	lw		
l	lj	<i>ljé</i>	hand
	lw	<i>lwě</i>	peel (vi.)
r	rj	<i>rjé</i>	rock, cliff
	rw	<i>rwó</i>	pick, shave.SAP

2.4.5 PCG onsets

As for the most complex onsets, PCG, possible combinations are even fewer. Only forty-five patterns are observed. Some combinations have a relatively low frequency. Onsets like /xpw/, /xfw/, /hmj/, and /mdw/ only occur once in my data, and /xtsw/, /xtfw/ and /xs^hw/ only twice. What is interesting is that some two-consonant combinations exist in PCG onsets, but not in simpler PC or CG onsets. For example, /pt_ɕ^hj/ exists while /t_ɕ^hj/ does not; /ɣʒw/ exists while /ʒw/ does not. Each possible onset with its corresponding example is given in tables below. Due to the limited number of attested PCG onsets, possible but non-existing PCG combinations are not listed in the tables below.

For PCG onsets with a /p/ preinitial, ten patterns are found. They are /ptj, ptsj, pt_ɕ^hj, pt_ɕ^hw, pt_ɕw, pt_ɕw, ps^hj, ps^hw, p^hw, φlw/. See Table 2.35 for examples with PCG onsets that start with a preinitial /p/.

Table 2.35: PCG onsets with a preinitial /p/

Phoneme	Allophone	PCG onset	PCG eg.	Gloss
p	p	ptj	<i>ptjě</i>	chase.3
		ptsj	<i>ptsjé</i>	sift
		pt _ɕ ^h j	<i>pt_ɕ^hjé</i>	untie
		pt _ɕ ^h w	<i>t_ɕ^həpt_ɕ^hwó</i>	rash
		pt _ɕ w	<i>pt_ɕwǎ</i>	consult, discuss.3
		pt _ɕ w	<i>pt_ɕwé</i>	pinch (by hand).3
		ps ^h j	<i>ps^hjé</i>	comb
		ps ^h w	<i>ps^hwèlú</i>	saw
		p ^h w	<i>p^hwé</i>	kow tow
	φ	φlw	<i>φlwó</i>	arrive

For PCG onsets with a preinitial /b/, there are only two of them, which are /βʒw/ and /βrw/. Examples are given below in Table 2.36.

25 PCG onsets with a preinitial /x/ are found with three allophones. Examples are given below in Table 2.37.

For PCG onsets with a preinitial /ɣ/, there are only two patterns. Examples are given

Table 2.36: PCG onsets with preinitial /b/

Phoneme	Allophone	PCG	PCG eg	Gloss
b	β	βʒw	<i>βʒyé</i>	pare w/ a knife
		βrw	<i>xpúβrwó</i>	burn, scald

Table 2.37: PCG onsets with preinitial /x/

Phoneme	Allophone	PCG	PCG eg	Gloss		
x	x	xpj	xpjé	compare		
		xpw (1)	xpwə	move, take a way		
		xtj	xtjé	level		
		xtw	xtwǐ	lean on.3		
		xk ^h w	xk ^h wí	stand.3		
		xkj	xkjé	solidified butter		
		xkw	xkwí	believe.3		
		xts ^h w	xts ^h wǎ ^ʰ (only 2)	cough		
		xtsj (1)	xtsjé	axe		
		xtsw (2)	xtswó	link.3		
		xʈ ^h j (1)	xʈ ^h jé	eagle, hawk		
		xʈ ^h w (1/2)	xʈ ^h wó	break.3		
		xʈsw	xʈswó	test.3		
		xtʃ ^h w (1)	xtʃ ^h wó	kneel.3		
		xtʃw (2)	xtʃwó	milk.3		
		xs ^h w (2)	xs ^h wǐ ^ʰ	think.3		
		xʃ ^h w (2)	xʃ ^h wǎ ^ʰ	dump, pour.3		
		xʃw (1)	xʃwǎ ^ʰ	squeeze, push.3		
		χ	χ	χq ^h w	χq ^h wá ^ʰ	take apart.3
				χqw	χqwá ^ʰ	boil, cook.3
h	h	hmj (1)	hmjéhmjé	deep		
		hmw (1)	hmwéhmwé	deep		
		hnw (1)	hnwǎ ^ʰ	light (lamp).3		
		hɲw (1)	hɲwí	borrow.3		
		hnw	hnwǎ ^ʰ	bite		

in Table 2.38 below.

There are six PCG onsets with a nasal preinitial, illustrated below in Table 2.39 and Table 2.40.

Table 2.38: PCG onsets with a preinitial /ɣ/

Phoneme	Allophone	PCG	PCG eg	Gloss
ɣ	ɣ	ɣzw	ɣzwǎ ^{sr}	thread a needle.3
		ɣʒw(3)	ɣʒwǎ ^{sr}	hit.3

Table 2.39: PCG onsets with a preinitial /m/

Phoneme	Allophone	PCG	PCG eg	Gloss
m	m	mdw(1)	mdwák ^{ho}	colour
		mɲw	mɲyé	pea

Table 2.40: PCG onsets with a preinitial /n/

Phoneme	Allophone	PCG	PCG eg	Gloss
n	n	ndj(1)	éndjéχò	4th fl.
	ŋ	ŋk ^{hw}	ŋk ^{hw} əló	spin, revolve.1sg
		ŋgw	ŋgwǎ	front, before
	N	NGW	NGWǎ ^{sr}	sprain, wrench

2.4.6 Complex syllables and onsets from a typological perspective

2.4.6.1 Complex onsets in TB languages

There are dramatic differences in TB languages in terms of syllable structure, even across fairly closely-related languages. Some TB languages spoken in South China or South-east Asia have relatively simple syllable canons, such as Akha, whose basic syllable structure is (C)V (Hansson 2017), or Lahu, whose basic syllable structure is (C)VT, where T represents tone (Matisoff 2017). TB languages with more complex structures tend to be found in the north. In Northern Sichuan, examples can be found in Rgyalrongic languages such as Tshobdun Rgyalrong, whose syllable structure is (C)(C)(C)V(C)(C) (Sun 2017) or Wobzi Khroskyabs, whose syllable structure is (C_{p6})(C_{p5})(C_{p4})(C_{p3})(C_{p2})(C_{p1})Ci(C_m)R, where C_p represents preinitial, C_i represents initial, C_m represents medial, and R represents rime (Lai 2017).

Among the highly diversified TB languages, Old Burmese and Old Tibetan, two conservative languages with long written traditions, are of special importance for comparative purposes (Jacques and Michaud 2011). Though Written Tibetan is often used as a reference when studying the diachrony of contemporary Tibetan varieties or related languages, the interpretation of the Tibetan data for comparative purposes is controversial. For example, The sounds represented by the letters ཨ and འ ‘a-chung’ in particular have been the subject of much discussion (Hill 2005; Hill 2009; Jacques 2012).

Old Tibetan syllable margins are also difficult to interpret. Within the (Cp)C(G)V(C)-(s/t) syllable canon proposed by DeLancey (2017:372), possible combinations of consonant clusters, such as *dk* in *dka* ‘difficult’, *bsŋ* in *bsŋo* ‘blessing’, and *rk* in *rkaŋ* ‘foot, let’, violate the Sonority Sequencing Principle (SSP), which states that within a syllable, segments are ordered based on the sonority scale (Beckwith 2006). The most accepted sonority scale is:

(2.2) vowels > glides > liquids > nasals > obstruents

In this scale, vowels are the most sonorous and obstruents the least (Clements 1990; Parker 2008). The nucleus of the syllable bears the most sonority, and the sonority level increases from the onset to the nucleus, then decreases from the nucleus to coda (Sievers 1885; Parker 2008).

Studying these complex syllable margins is important for both phonological and typological purposes, as they concern issues like cross-linguistic syllable constraints and SSP, in addition to providing valuable evidence for reconstruction at the Qiangic level and beyond.

2.4.6.2 *Complex onsets in Qiangic languages*

Cross-linguistically unusual onset sequences are famously present in Written Tibetan; less well-known is their contemporary existence in many Qiangic languages. Huang (2003:208) compares the phonological information made available in previous sketches of the Qiangic languages. Table 2.41 is adapted from Huang (2003:208) and only the information on onsets is presented here.

Table 2.41: Consonant and consonant cluster numbers in Qiangic languages

Language	Total	Simple consonant	Consonant cluster
Qiang	95	45	50
Rgyalrong	236	34	202
Stau (Ergong, Daofu)	300	49	251
Queyu	193	50	143
nDrapa	124	53	71
Guiqiong	52	39	13
Muya (Minyag)	49	42	7
Pumi	54	46	8
Ersu	63	41	22
Namuyi	65	42	23
Shixing	58	52	6

While Qiangic languages tend to have a large consonant inventory that is between 40 and 50, the inventory size of consonant clusters has a greater variation, ranging from six (Shixing) to 251 (Stau). One phenomenon that is present in all these languages (except for Qiang proper) is the pre-nasalized onset, which is the combination of a nasal (usually /n, m, ŋ/) plus other consonant(s), such as m-(b), n-(dz, d, dz_ɔ, dz), ŋ-(g), N-(G) in Muya (Huang 2003:188) and n-(m, ts, ts^h, dz, t, t^h, d, dz_ɔ, tʃ, tʃ^h, dʒ, cç, ɲ, j, k, k^h, ŋ), m-(p, p^h, b, ts, ts^h, dz, s, t, t^h, d, n, tʃ, tʃ, cç, k), ŋ-(kr, k^{hr}, gr, gl) in Rgyalrong (Huang 2003:184–185). Both voiceless and voiced consonants can occur after the nasal sound.

In addition to pre-nasalization, other kinds of consonant cluster onset types found in Qiangic include continuant initials, such as ʂ-(p, ts, ɲ, k, q) in Qiang and z_ɔ-(p, ph, b) in Pumi; and stop initials, such as k-(p, ts, t, tʃ, tʃ^h, cç) in Rgyalrong and b-(d, dz_ɔ, z_ɔ, dz, z, ʃj) in nDrapa (Huang 2003:183–191). All of the onset patterns mentioned contain sequences that violate the SSP, and have been previously discussed and analyzed. For example, Beckwith (2006) discusses Old Tibetan syllable margins, and Duanmu (2009) provides a discussion on the limit of syllable structures, devoting a whole chapter to the Rgyalrongic languages.

2.4.6.3 *Complex onsets in phonological typology*

Having mentioned problems and discussions of onsets in TB languages, as well as the comparative issues that come with them, there is also an interesting typological question that needs to be addressed: namely, that these languages have some very unusual initial consonant sequences. The universal syllable type is CV, with only one consonant before the nucleus. This is dramatically different from the many possible onset combinations found in Qiangic languages (Easterday 2019:4). This raises typological questions such as whether or not languages with unusual syllable margins form a class, and if they do, what are their defining characteristics? While these languages do pose interesting typological, phonological, and comparative questions, much research is “influenced by an overrepresentation of data from European languages” (Easterday 2019:16). Easterday’s recent work (2019) presents a typological framework for talking about unusual syllable margins, and addresses two main questions:

- (2.3) whether or not languages with highly complex syllable structures form a linguistic type;
- (2.4) what are the diachronic development and natural mechanisms in the formation of their syllable structures. (Easterday 2019:21)

To answer (2.3), one has to define what it means for a syllable to be complex. Easterday’s (2019) categorization on syllable complexity is based on Maddieson (2013a), where he classifies languages in terms of their syllable structure complexity. He divides them into three categories, simple, moderately complex, and complex. A language is classified as simple when it only allows a (C)V syllable pattern. A moderately complex language is a language that allows one more consonants in either the onset or coda position. For this type, when there are two consonants in the onset, the second one can only be either a liquid or a glide. The last type is complex languages. The syllable of a complex language allows a maximum of two consonants with freer combination (the second consonant need not a glide nor liquid), or allows an onset larger than two consonants, and/or a coda larger than two consonants. Easterday (2019:37) further divides the complex category proposed by Maddieson

(2013a) into ‘complex’ and ‘highly complex’ types. Click or tap here to enter text. A highly complex language is a language whose “maximal onset or coda consists of three obstruents, or four or more Cs of any kind; and/or in which syllabic obstruents occur, resulting in word-marginal sequences of three or more obstruents”.

Easterday’s work examines phonetic and phonological properties of the sampled languages from the perspectives of syllable patterns, segmental inventories, suprasegmental properties, vowel reduction, and consonant allophony (Easterday 2019:23). Easterday (2019) concludes that languages with highly complex syllables do form a typological class, for which she summarizes phonetic and phonological features. Below is an overview of the results of her study, with a focus on syllable margins, especially onsets.

2.4.6.4 Findings in Easterday (2019)

For syllable patterns, the more complex a syllable can be in a language, the more likely that that language contains large consonant clusters at both side of the syllable margins (67), and the more likely that it has complex vocalic nuclei (long vowels, diphthongs, and/or vowel sequences) (70). In addition, obligatory onsets, syllabic consonants, as well as morphologically complex patterns are significantly more likely to occur as syllable complexity increases in a language (68, 75, 78). Morphological complex patterns here refer to “sequences derived by any morphological process” (76). It is also more likely that where syllabic consonants are found in a given language, they are grammatical elements (82).

In examining phoneme inventories, Easterday (2019) surveyed both vowels and consonants. In addition to vowel inventory size, Easterday (2019) also looks at vowel qualities, such as height, backness/frontness, roundness, length, and nasalization (Maddieson 2013b; Easterday 2019:106). For consonants, she examined articulatory elaborations as well. In a survey on 317 languages, Maddieson (1984) found the twenty most frequent consonants in sampled languages are:

(2.5) /p, b, *t, *d, k, g, ʔ, tʃ, f, *s, ʃ, h, m, *n, ɲ, ŋ, w, *l, *r, j/ (Maddieson 1984:12)

Elaborated articulations are consonants more complicated than those listed in (2.5). Their properties are summarized by Lindblom and Maddieson (1988), and are given in Table 2.42 below.

Table 2.42: Lindblom and Maddieson (1988:67) and Easterday (2019:105)

Phonation	Manner	Place
breathy voice	prenasalization	labiodental
creaky voice	nasal prelease	palatoalveolar
voiced fricatives/affricates	lateral release	retroflex
voiceless sonorants	ejectives	uvular
pre-aspiration	implosives	pharyngeal
post-aspiration	clicks	palatalization
		labialization
		pharyngealization
		velarization

Easterday (2019) tested four hypothesis regarding the relationship between phoneme inventory and the level of syllable complexity:

- (2.6) As syllable structure complexity increases, languages will have larger inventories of vocalic nuclei;
- (2.7) As syllable structure complexity increases, so does the size of consonant phoneme inventories;
- (2.8) As syllable structure complexity increases, so does the number of articulatory elaborations present in consonant phoneme inventories;
- (2.9) Languages with differing degrees of syllable structure complexity will exhibit different consonant contrasts in their phoneme inventories. (Easterday 2019:109–111)

For vowels, two properties were examined, which are vowel quality size and vowel inventory size. No significant correlation was found between the range of vowel quality inventory and syllable complexity (119). Among the vowel qualities examined, the presence of vowel length contrast is the only vowel quality that is positively related to increased syllable complexity (120). However, vowel length contrast for all vowels, as well as nasalization, and phonation contrasts are negatively related to syllable complexity (122-123). Vowel in-

ventory size, in addition to the vowel quality inventory, also does not show any significant correlation with syllable complexity (125).

For consonants, hypothesis (2.7) is supported by the patterns summarized in the Table 2.43 below:

Table 2.43: Syllable complexity and number of consonant phonemes in a language (Easterday 2019: 127)

C phoneme inventory size	Syllable structure complexity			
	S N = 24	MC N = 26	C N = 25	HC N = 25
Mean	20.8	21.7	21.8	26.1
Median	17	21.5	21	23
Range	6-55	11-32	12-40	10-54

The third hypothesis is supported by the results summarized in Table 2.45 and Table 2.44 below. Both the number of elaborated consonants as well as the number of elaborations in the consonant inventory are positively correlated with increased syllabic complexity.

Table 2.44: Syllable complexity and the number of elaborated consonants (Easterday 2019: 131)

N elaborated consonants	Syllable structure complexity			
	S N = 24	MC N = 26	C N = 25	HC N = 25
Mean	7.3	7.0	7.0	11.8
Median	3	5	5	10
Range	0-38	1-16	1-24	0-37

For elaborated articulation in terms of phonation, voicing in obstruents is negatively correlated with increased syllabic complexity (137), and no pre-aspiration was found in any of the languages sampled (136).

Table 2.45: Syllable complexity and the number of elaborations in the consonant inventory (Easterday 2019: 132)

N elaborations in C inventory	Syllable structure complexity			
	S N = 24	MC N = 26	C N = 25	HC N = 25
Mean	2.9	2.8	2.6	3.9
Median	2	2.5	2	4
Range	0-10	1-8	1-6	0-7

For elaborated articulation in terms of place, palate-alveolar and uvular sounds are significantly positively associated with more complex languages (143). Post-velar articulations such as pharyngeal, pharyngealization, and velarization are found only in highly complex languages (143). Palatals, on the other hand, are negatively associated with increased syllable complexity (140).

For elaborated articulation in manner, while affricates and ejectives are positively associated with more complex languages, flat/tap and prenasalization are negatively associated (149).

As for suprasegmental patterns, as syllable complexity increases, the number of languages containing tones decreases (191). However, the number of languages with only word stress and no tones increases with increased syllable complexity (193).

The presence of vowel reduction, and the number of vowel reduction processes are also positively correlated with increased complexity (226). On the other hand, the allophonic processes that contribute to the formation of complex syllable structures are negatively correlated with increased syllable complexity; occurring more frequently in simple languages than in complex ones (259-261).

2.4.6.5 *Situating Queyu data*

Based on Easterday (2019)'s discussion, Queyu belongs to the complex language category. Queyu, however, is interesting in that not all of its features align with the tendencies found in Easterday (2019)'s study.

With increased syllable complexity, it is likely for syllables to have complex consonant clusters at both margins, but Queyu contains only open syllables. Another feature commonly related to complex syllables is the presence of syllabic consonants, though Queyu does not have any. Morphologically complex clusters are also more likely to occur with highly complex syllables. For Queyu, though morphological processes do sometimes contribute to syllable complexity, particularly in relation to verbal conjugation and casualization of verbs, they do not make Queyu syllables more complex than morphologically simple syllables. Table 2.46 and Table 2.47 demonstrate these two processes.

Table 2.46: Queyu’s verbal paradigm

Gloss	1SG	1DU/PL	2SG	2DU/PL	3
to throw	<i>ró</i>	<i>ró</i>	<i>ró</i>	<i>ró</i>	<i>βró</i>
to eat	<i>tʰjó</i>	<i>tʰjǎé</i>	<i>tʰí</i>	<i>tʰí</i>	<i>ptʰí</i>
to stand	<i>xkʰǔ</i>	<i>xkʰǎé</i>	<i>xkʰǎ</i>	<i>xkʰǎ</i>	<i>xkʰwǎ</i>
to roll up	<i>ylǔʰ</i>	<i>ylǎʰ</i>	<i>ylǎʰ</i>	<i>ylǎʰ</i>	<i>ylwǎʰ</i>

For the verbs demonstrated in Table 2.46, the strategy to form the third person form of is either adding a labial preinitial or inserting a labial glide before the vowel. However, these verbs can still maximally have PCG onsets.

Table 2.47: Queyu causative verbs

Gloss	Lexicon	Gloss	Lexicon
to be wet	<i>pó</i>	to soak	<i>xpó</i>
to peel (vi.)	<i>lqé</i>	to peel (vt.)	<i>φlqé</i>
to fall (vi.)	<i>lóli</i>	to push down.2	<i>šlóšli</i>

For the verbs given in Table 2.47, the fourth column contains causative versions of the second column, they all have a preinitial added to the beginning of the syllable. In ‘to push down.2’, the [ʂ] preinitial is added to the beginning of both syllables. These fricative preinitials may be related to the TB causative prefix *s- (Mei 2012). However,

this morphological process is not productive, as it is found to be in related Rgyalrongic languages, and the maximal onset in these cases is still PCG.

A regionally relevant typological feature of the Qiangic languages is its large consonant inventory. While the mean number of consonants for highly complex languages is 26.1, Queyu, is above the average at 43 consonants. Among the articulatory elaborations summarized in Lindblom and Maddieson (1988), Queyu has eight. In terms of phonation types, Queyu has voiced fricatives/affricates [dz, dʒ, dʒ, v, z, ʒ, ʧ, ʥ], voiceless sonorants [m̥, n̥, ɲ̥, ɳ̥, l̥], and pre-aspiration [hm, hn, hp, hɳ, hN]. In terms of manner, Queyu has pre-nasalization [mp^h, mb, mt^h, md, mts^h, mdz, mtʃ^h, mdr, mn, mp, np^h, nb, nt^h, nd, nts^h, ndz, ntʃ^h, ndʒ, ndʒ, nɣ, ɲk^h, ɲg, nq^h, nɣ]. As for place, Queyu has labiodental [v], palatoalveolar [ʃ, ʃ^h, ʒ, tʃ, tʃ^h, dʒ], retroflex [ʂ, ʂ^h, r], and uvular [q, q^h, ɢ, ɣ, ʁ]. Both the number of elaborations (eight in Queyu) and the number of elaborated consonants (57 in Queyu) far exceed the mean for even highly complex languages (3.9 and 11.8, respectively for the highly complex languages surveyed in Easterday's (2019) study).

What is worth noting in Queyu is that it contains pre-aspiration, which is a phenomenon that does not show up in Easterday (2019)'s sample languages. Additionally, pre-nasalization is negatively associated with increased syllable complexity. However, as a complex language Queyu has pre-nasalized consonants. In fact, both pre-aspiration and pre-nasalization are common phenomena in the region where Queyu is spoken.

Queyu has a rich inventory of uvular consonants. It is in accordance with Easterday (2019)'s finding, that as syllable complexity increases, the number of elaborated articulations increases, too. Uvular consonants are also an areal feature. Hill (2009:124) describes the region as a “uvular prone Sprachbund” and considers the presence of uvular sounds in local Tibetic and Mongolic languages as the influence of a Qiangic substrate. A study on the relationship between altitude and ejectives and uvulars also suggests that language contact plays an important role in the development of uvular sounds in TB languages (Urban and Moran 2021:27).

2.4.6.6 Queyu onsets diachronic and comparative problems, and conclusion

Though Queyu is a complex language, its syllable structure is going through a simplification process. Evidence can be found through comparisons of Queyu and related languages who preserve more complicated structures, such as Old Tibetan and Khroskyabs, as is already demonstrated in Section §2.3.6 where origins of uvularized vowels are discussed. It is clear that Written Tibetan contains codas that are lost when borrowed into Queyu. A comparison between Written Tibetan and Tibetan loans in Queyu is restated here in Table 2.48.

Table 2.48: Written Tibetan and Queyu syllable structure

Gloss	Written Tibetan	Queyu
language, voice	<i>skad</i>	<i>xkɔ́</i>
tiger	<i>stag</i>	<i>xtá</i>
the seventh day of a month	<i>tshes bdun</i>	<i>ts^hé dè</i>
leopard	<i>gzig</i>	<i>ɣzɪ^ʁ</i>
farming area	<i>rong</i>	<i>rɔ̃^ʁ</i>
power	<i>dbang cha</i>	<i>ʁò^ʁntʃ^hɛ́</i>

Another interesting areal feature that needs some discussion here is the uvular consonants and the correspondences regarding uvulars across related languages. While uvulars can be reconstructed to Proto-Rgyalrong level (Jacques 2004), or even maybe at Proto-Qiangic level (Hill 2009:124), there is no letter in the Tibetan alphabet that represents uvular phonemes. However, there seems to be a phonological connection between *w* in Tibetan and *ɣ/ʁ* in many of the family’s daughter languages (A. Conrad, personal communication, Nov. 6, 2021; Hill 2009). For example, the Written Tibetan *db* cluster is pronounced as [w] in contemporary Tibetan, while the name *Dbangmo* in Tibetan is pronounced *yamo* in Western Minyag, and *dbang tcha* ‘power’ is *ʁò^ʁntʃ^hɛ́* in Queyu, where the *db* corresponds to [w] in modern Tibetan and [ʁ] in Queyu and Western Minyag. Written Tibetan velar codas *g* and *ng* also seem to correspond to uvularized vowels in Queyu, and many Tibetan velar series

such as *k*, *kh*, *g*, *ng* have a connection with uvulars in Minyag (Wang and Conrad 2021). It is also interesting to compare uvular sounds correspondences between related languages. See the comparison between Minyag and Queyu below.

Table 2.49: Minyag and Queyu uvulars (Minyag data from Wang and Conrad 2021)

Gloss	Eastern Minyag	Western Minyag	Queyu
needle	<i>wa</i>	<i>ka</i>	<i>q^hó^ʷ</i>
head	<i>alo/walo</i>	<i>kalø/wuli</i>	<i>q^hó^ʷ</i>
crow	<i>kada</i>	<i>qara</i>	<i>qàlś</i>
hard	<i>nganga</i>	<i>NGANGA</i>	<i>qé^ʷqé^ʷ</i>
five	<i>nwali</i>	<i>nali</i>	<i>nwá^ʷrò^ʷ</i>

Another common correspondence between Old Tibetan and other related contemporary languages is the Tibetan prefix *s* and pre-aspiration/fricatives, which is briefly addressed in Section §2.2.4 and §2.2.5. While in some languages the dropping of *s* prefix corresponds to a voiceless nasal, some other languages preserved the *s* prefix and it changed to a pre-aspirated fricative. Examples are presented below.

Table 2.50: Written Tibetan and Ersu (Chirkova et al. 2015:198)

Gloss	Written Tibetan	Ersu
to be empty	<i>strong pa</i>	<i>htóNba</i>
to turn, to circle	<i>skor ba</i>	<i>hkwàra</i>

Table 2.51: Written Tibetan and Queyu

Gloss	Written Tibetan	Queyu
medicine	<i>sman</i>	<i>hméi</i>
ripe	<i>smin po</i>	<i>hmé</i>
language, sound	<i>skad</i>	<i>xkǎ</i>
tiger	<i>stag</i>	<i>xtá^ʷ</i>

The examples and discussions presented above have demonstrated several sound

correspondences in Queyu and related languages, especially in onsets. One last issue that needs to be addressed that also concerns syllable onsets is the development of syllable structure. Easterday (2019) examines the diachronic path of syllable complexity development for highly complex languages. The presence of vowel reduction and the number of vowel reduction processes are positively related to increasing syllable structure complexity. Hence, complex syllable structure is most commonly derived from vowel reduction and the direction of syllable change is from more simple structure to more complex ones. This is the case for 24 languages out of 100 languages in the survey (Easterday 2019: 290). Queyu, on the other hand, is going through a simplification process. Evidence for this can be found through comparison between Queyu and its relatives who preserve more complicated syllable structures, such as Khroskyabs. This simplification process is on-going, as Queyu speakers have now relocated from their villages due to a dam construction project nearby, and speakers no longer have environments in which to speak Queyu outside of the household. As an endangered and obsolescing language, it is observed that the younger generation will sometimes drop the preinitial consonant when speaking Queyu, hence further simplifying the syllable structure. An example mentioned in the introduction chapter is that one of my consultant's younger daughter's pronunciation of 'smoke' is /k^hú/ instead of /xk^hú/, which is my consultant's way of speaking. While it is common for obsolescing languages to go through structural changes such as phonological reduction (Campbell and Muntzel 1989; Palosaari and Campbell 2011), structural simplification also seems to be an areal pattern where Queyu is spoken. The local dominant language, Khams Tibetan, also has less complex syllable structure compared to Written Tibetan or Amdo Tibetan.

Therefore, some of the phonological properties of Queyu conform to the cross-linguistic tendencies found in complex and highly complex languages, while other properties do not. It is interesting to see how areal features play a role here. Some areal features, such as the prevalence of uvular sounds, match the characteristics of highly complex languages, while other features, such as the presence of pre-aspiration, pre-nasalization, and

syllable simplification, go against the tendencies observed in Easterday (2019). Those characteristics in Queyu and languages spoken in the nearby region demonstrate interesting comparative problems and present a dynamic picture of language use and language change.

Hence, examining syllable margins gives us some idea of the possible diachronic development of proto-languages into modern languages. There are still questions which remain unanswered and should be further explored, such as the origin of the uvular sounds, how vowel quality interacts with them, and how these discussions may influence classification within the family.

2.5 Vowel fusion

A common morphophonological process in Queyu involves vowel fusion. Some morphemes (sometimes two affixes, and sometimes an affix and a free morpheme) can fuse and form a portmanteau morpheme. There are a few major types, these being the fusion of the LOC enclitic =xə, the fusion of verbal prefixes, the fusion that involves information structure marker, and the fusion of argument indexation on verbs. Each situation is examined in the following subsections, except for the argument indexation on verbs. That topic will be addressed in Section §6.2.

2.5.1 The fusion of a noun and following LOC enclitic

The LOC enclitic =xə can sometimes fuse with the previous noun. The resulting syllable is the noun's last vowel becoming an /æ/ or /e/ vowel. Such as rɪ=xə 'mountain=LOC' can be reduced to ræ 'mountain.LOC', and ŋə=xə '1SG=LOC' to ŋæ '1SG.LOC'. The only exception to this rule is when the noun is first person plural pronoun. The vowel of the fused syllable is /ɑʷ/ instead of /æ/ or /e/ (see Example (2.13)).

A pair showing the use of the non-fused morphemes and the portmanteau morpheme is given in (2.10) and (2.11). Notice that the speaker of (2.10) is from Yazhong Village (xúli), and in their speech the LOC marker is =yə instead of =xə. The separate and fused versions of 1PL and LOC morphemes are exemplified in (2.12) and (2.13).

(2.10) noun and the LOC enclitic remain separate

jö k^himí=yə rú s^hí kó-ptə
again cow=LOC grass and IN-dump.3

‘Then dump some grass and the like to cows.’
再给牛倒一些草料等等

(QVY-329: 96)

(2.11) noun and the LOC enclitic are fused

mə^xlǝ^x=tə vjé=xə k^himjê tə-fə tsì tʂí
crust=ISML pig=LOC cow.LOC feed-NMLZ EGO GNR

‘Crust are (things) to feed pigs and cows.’
谷子外壳喂给猪和牛的（东西）。

(QVY-050: 9)

(2.12) IPL and the LOC enclitic remain separate

<*xiāngxià*> *ənts^hí=xə jép^hí t^hə zí tsì tʂí*
rural.area IPL=LOC past that way EGO GNR

‘In the rural country our past was like this.’
乡下我们的过去是这样的。

(QVY-048: 10)

(2.13) IPL and the LOC enclitic are fused

jəndzǐ=tə ts^ho ənts^hà^x ərə^x i-tú-s^hà^x tsì tʂí
conduit.tube=ISML now IPL.LOC liquor DS-come.3-NMLZ EGO GNR

‘Now the conduit tube is where the liquor flows out from.’
现在引酒管就是我们的酒流出来的地方。

(QVY-330: 39)

2.5.2 The fusion of verbal prefixes

There are two constructions that may involve this process, the perfective question construction and the prohibitive construction. Perfective questions are formed by prefixing a question and a directional prefix. These two prefixes are always fused, and no separate morphemes are found in this construction. The fused portmanteau morpheme is composed by the onset of the directional prefix and the question marker *æ-/a^x-*. In (2.14), a perfective statement, a question that only involves the question prefix, and a perfective question where the two morphemes fuse are demonstrated to show this morphophonological process. More

examples of perfective questions and other questions can be found in Section §3.5 where tones are addressed.

- (2.14) a. a perfective statement with directional prefix

i-k^hí
DS-sun.dry.2SG

‘You sun dried.’

- b. the use of question prefix

ǎ-k^hí
Q-sun.dry.2SG

‘Do you sun dry (are you going to sun dry)?’

- c. a perfective question with a fused directional and question portmanteau prefix

jǎ-k^hí
DS.Q-sun.dry.2SG

‘Have you sun dried?’

The prohibitive construction is formed by prefixing a directional prefix (the selection of prefix depends on the verb) and a prohibitive prefix *tǎ-/tá^h-*. These two morphemes are like the noun + LOC combination, in that they can either remain separate, or form a fused morpheme. A fused morpheme takes the form of CV, where C is the onset of the original directional prefix, and the V is [ǎ] or [á^h] depending on the vowel quality of the verb. Example (2.15) and (2.16) illustrate these two situations. So far, no semantic or pragmatic difference has been found between these two expressions.

- (2.15) the directional prefix and the PROH marker remain separate

í-tǎ-k^hí
DS-PROH-sun.dry.2SG

‘Don’t sun dry.’

(2.16) the directional prefix and the PROH marker are fused

jæ-k^hi
DS.PROH-sun.dry.2SG

‘Don’t sun dry.’

2.5.3 The fusion that involves information structure marker (ISM)

There are three information structure markers in Queyu, and two of them can fuse when they co-occur, which are =*tə* and =*i*. These two can occur as individual suffixes, as (2.17) shows. They can also fuse and form the portmanteau morpheme =*ti*, as can be seen in (2.18).

(2.17) ISM1 and ISM2 are separate

bà^xxpé ndzũ^xndzũ^x=tə=i tə^x-hɲiq^hwə^x t^hə qé^x nə-ptsú ɲi
frog big.RED=ISM1=ISM2 NEU-angry this here DOWN-sit.3 NFl

‘The big frog sat by the river bank angrily.’

大青蛙生气地坐在岸边。

(QVY-334: 20)

(2.18) ISM1 and ISM2 are fused

xɬf^hi^x s^hi tʃælæ=tɪ t^hə=tjé bằ^xxpé=tjè ɣqó=rì
dog and all=ISM1.ISM2 3=SUPE frog=SUPE scold=DIR

‘The dog also scolded the big frog.’

小狗也骂了大青蛙。

(QVY-334: 12)

In addition to nouns, the LOC enclitic =*xə* can also follow the ISM1 enclitic =*tə*. They can, again, remain separate, as in (2.19), or combine and create a fused morpheme, as in (2.20). The vowel of the fused morpheme is /æ/, just like other cases where the LOC marker combine with the previous noun.

(2.19) ISM1 and LOC are separate

KN ək^hú tʃit^hó mdí ɲi tĩ p^həs^ha^x=tə=xə tʃipwə nə-lí
time uncle PN see.3 NFl then young.man=ISM1=LOC quick DOWN-come.2

mt^hərè ɪwà^xzɪ əwə rùwəf^hi xtsi wú=rì nə-f^hi wú
otherwise bull downside underground plan do.3=DIR DOWN-go.2SG finish.3

tsipwə nə-lí tə-ní ə-qwəʰ tʂǐ nǐ tʂí
 quick DOWN-come.2 NEU-say.3 UP-yell.3 GNR say.3 GNR

‘Then Uncle Trotung saw it, and yelled at the young man: “Come down immediately! Otherwise the bulls are going into the ground. Come down quickly!”’

这时候晁通看到了，就对年轻人喊道：‘你快点下来，否则牛就要钻到地底下去了，快点下来。’ (QVY-335: 9)

(2.20) ISM1 and LOC are fused

TM *ʃʰopʃʰí baʰxpé zəzə=tə nǐ və mə-mnə=rǐ*
 then child frog small.RED=ISM1.LOC bad do.NOM NEG-dare.3=DIR

‘Then the big frog no longer dared to bully the small frog.’

然后小孩（应该是大青蛙）不敢欺负小青蛙了 (QVY-334: 36)

2.6 The spreading of uvularization and other features in Pubarong Queyu prefixes

Uvularization in Pubarong Queyu can spread leftward across a morpheme boundary within a word. This is most clearly seen in the alternation of two sets of verbal prefixes, plain and uvularized.

One way to analyze the alternation of prefixes is through the lens of vowel harmony. Though not common in TB languages, vowel harmony is consistently reported in Qiangic and Naic languages within the TB family (Chirkova 2024:729). However, some Queyu data presents patterns that do not fit the traditional definition of vowel harmony; this is examined in more detail in Section §2.6.2.

This section presents data on the spreading of uvularity and other features in Queyu prefixes. A brief typological overview on vowel harmony will be presented first in Section subsec:VowelHarmonyEurasia. Information given in these sections will serve as a background for demonstrating and discussing how allomorphs of prefixes are conditioned in Subsection §2.6.2.

2.6.1 A brief overview of vowel harmony and uvulars in the Eurasian context

Traditionally speaking, vowel harmony refers to the agreement among all vowels in a word (or the harmonic domain) for some feature (van der Hulst 2016). Vowel harmony patterns can vary based on different parameters, including static vs. dynamic harmony, root-controlled vs. dominant-recessive harmony, and directionality (Makeeva and Kuznetsova 2022). In terms of static vs. dynamic harmony, Pubarong Queyu uvularized vowels in verbs can trigger the appearance of uvularized verbal prefixes, indicating that Queyu belongs to the dynamic harmony type. As for the second and third parameters mentioned above, vowels in the verbal prefixes are subject to harmony, while suffix vowels are not, indicating that Queyu data demonstrate regressive root-controlled harmony. In addition to the vowels in the verb base, a voiced velar preinitial in the verb base can also trigger a uvularized prefix, which is not commonly seen in vowel harmony cases. Furthermore, this feature spreading can affect the onset consonant of the prefix, which is also not typical for vowel harmony. Lastly, three verbal prefixes are not subject to this harmony process, despite the fact that two of the hypothetical uvularized versions are phonetically and phonologically possible in Queyu, while two vowels, /u/ and /o/, behave like plain vowels in some verbs and uvularized vowels in other verbs.

Geographically speaking, vowel harmony is a major areal feature in Eurasian languages spoken in Northeast Asia (Barrere and Janhunen 2019:47). There are two major types of vowel harmony systems in languages spoken in Eurasia: palatal-velar harmony (PVH) and tongue root harmony (TRH) (Barrere and Janhunen 2019:47). Palatal-velar harmony distinguishes palatal (front) and velar (back) vowels and is prevalent in languages spoken in the western part of Eurasia, while tongue root harmony distinguishes vowels with advanced vs. retracted tongue root (ATR/RTR) and is prevalent in languages spoken in the eastern part of Eurasia. The Mongolic family is in a transitional state with both types of harmony systems (Barrere and Janhunen 2019:47–48). There is controversy regarding which type is more archaic, with some studies arguing for the greater antiquity of TRH (Ko

2012; Ko, Joseph, and Whitman 2014) and other studies arguing that TRH is merely an ancient areal feature introduced from the Northeast Pacific Rim (Barrere and Janhunen 2019). TRH presents a type of harmony comparable with that present in Queyu and other Qiangic languages.

The presence of uvular consonants in Southwest China is also considered to be an areal feature. As stated earlier in this chapter, Hill (2009:124) describes the region as a ‘uvular-prone Sprachbund’ and considers the presence of uvular sounds in local Tibetan and Mongolian languages to reflect the influence of a Qiangic substrate. Similarly, post-velar consonants are commonly reported as phonemes or allophones of velar consonants in Mongolic and other Northeast Asian languages (Nugteren 2011:30–33; Sylak-Glassman 2014:32–36). The phonological phenomenon of vowel harmony related to post-velar consonants is also one of the major areal features of languages spoken in that region (Barrere and Janhunen 2019:47; Robbeets 2020:129). It is suggested that language contact plays an important role in the development of uvular sounds in TB languages (Urban and Moran 2021:27).

2.6.2 Vowel harmony in Pubarong Queyu prefixes

Uvularization in Pubarong Queyu can spread regressively across morpheme boundaries. This is most clearly seen in the verbal prefixes that are given in Table 2.54 in comparison with prefixed verb base examples in Table 2.53. For most prefixes, there are two sets which can be conditioned by the vowel quality in the verb stem. Table 2.52 illustrates the plain and uvularized (if possible) versions of those prefixes, which include six directional prefixes (prefixes that indicate the direction of motion), a question marker, a prohibitive marker, and three negation prefixes that are used in different TAME contexts. Among them, only two directional prefixes and a negation prefix do not have uvularized forms, and they are the ‘downstream’ and the three allomorphs for ‘upward’ prefixes, as well as the *mér*-negation marker. The tonal behavior of the prefixes will be addressed in Chapter 3, and the morphosyntactic behavior of the prefixes will be discussed in detail in Chapter 6.

Table 2.52: Prefixes in Queyu

Queyu prefix	Uvularized version	Gloss
<i>í-, rí-, ó-</i>	-	upward
<i>nǎ-</i>	<i>nǎʷ-</i>	downward
<i>lǎ-</i>	<i>lǎʷ-</i>	upstream/left
<i>ǐ-</i>	-	downstream/outward/right
<i>kǎ-</i>	<i>qǎʷ-</i>	inward
<i>tǎ-</i>	<i>tǎʷ-</i>	NEU
<i>ǣ-</i>	<i>aʷ-</i>	Q
<i>tǣ-</i>	<i>taʷ-</i>	PROH
<i>mǣ-</i>	<i>maʷ-</i>	NEG
<i>mǧ-</i>	<i>mǧʷ-</i>	NEG
<i>mél-</i>	-	NEG

Table 2.53 presents examples of prefixed verbs with plain vowel bases. Notice that the directional prefixes can also function as perfective and imperative markers in addition to indicating the direction of motion. When this is the case, the change in meaning is explained in the translation according to the context.

Table 2.53: Prefixes with verbs containing plain vowel suffixes

Queyu	Gloss	Translation
<i>í-tǐ</i>	UP-go.3	‘Go upwards.’
<i>nǎ-tǐ</i>	DOWN-go.3	‘Go downwards.’
<i>lǎ-tǐ</i>	UPSTREAM-go.3	‘Go upstream.’
<i>ǐ-tǐ</i>	DOWNSTREAM-go.3	‘Go downstream.’
<i>kǎ-pǎ</i>	IN-wet	‘got wet.’
<i>tǎ-k^hwí</i>	NEU-give.3	‘he/she/it gave.’
<i>ǣ-k^hǐ</i>	Q.give.2	Do you give?
<i>ǣ-zǐ</i>	Q-delicious	‘Is it tasty?’
<i>tǎ-zǐ</i>	NEU.Q-good	Is it good now?
<i>nǎ-mò</i>	NEU.Q-dream	Did you dream?
<i>tǣ-p^hǎt^hǐ</i>	PROH-scatter.2	‘Don’t scatter.’
<i>kǎ-sǐ</i>	IMP-feed.2	You feed (animals)
<i>mǣ-s^hǐ</i>	NEG-die	‘won’t die.’
<i>kǎ-mǎ-pǎ</i>	IN-NEG-listen.1SG	‘I didn’t listen.’
<i>mél-ndò</i>	NEG-see.1SG	‘I didn’t see it.’

Uvularized prefixes can be triggered by the vowel quality of the vowel in the verb base. In Table 2.54, examples of prefixes with verbs containing a uvularized vowel are presented. From the examples below, we see that the vowels in the prefixes are uvularized (except for the three situations mentioned above). Uvularized prefixes can be triggered by the vowel quality of the vowel in the argument suffix. In examples of prefixes with verbs containing a uvularized vowel are presented. From the examples below, we see that the vowels in the prefixes are uvularized (except for the three situations mentioned above).

Table 2.54: Prefixes with verb bases containing uvularized vowels

Queyu	Gloss	Translation
<i>í-zò^ʁ</i>	UP-take away.1SG	‘I took.’
<i>nə^ʁ-χqó^ʁ</i>	DOWN-boil.1SG	‘I boiled.’
<i>lə^ʁ-xp^{hə}</i>	UPSTREAM-vomit	‘(someone) threw up.’
<i>ì-xtó^ʁ</i>	DOWNSTREAM-closed (door).1SG	‘I closed the door.’
<i>qə^ʁ-pə^ʁ</i>	IN-rot	‘(It is) rotten.’
<i>tə^ʁ-hmó^ʁ</i>	NEU-close (eyes).1SG	‘I closed (eyes).’
<i>á^ʁ-xs^{hí}</i>	Q-see clearly	‘Can you see clearly?’
<i>á^ʁ-zè^ʁ</i>	Q-take.2	Are you taking it?
<i>qǎ^ʁ-xtè^ʁ</i>	NEU.Q-encounter.2	Did you encounter?
<i>tǎ^ʁ-tʂò^ʁ</i>	NEU.Q-become	Has it become?
<i>já^ʁ-zè^ʁ</i>	PROH.DOWNSTREAM-take.2	‘Don’t take it.’
<i>qə^ʁ-xtí^ʁ</i>	IMP-close.2	(You) close
<i>má^ʁ-xs^{hí}</i>	NEG-see clearly	‘Can’t see it clearly.’
<i>nə^ʁ-mə^ʁ-χqò</i>	DOWN-NEG-trouble	‘You are welcome.’
<i>méri-mə^ʁ</i>	NEG-hear	‘I didn’t hear it.’

Beyond the vowel, it is worth noting that for the ‘inward’ prefix *kə-*, the plain form has a velar initial consonant. When the verb stem contains a uvularized vowel, uvularity not only spreads to the vowel in the prefix, but also to the initial stop, change it to a uvular, hence the form *qə^ʁ-*. Examples ‘got wet’ *kə-pə* from Table 2.53 and ‘rotten’ *qə^ʁ-pə^ʁ* from Table 2.54 illustrate this alternation. This alternation is the reason I term this phenomenon in Queyu ‘uvularization’ instead of ‘velarization’ or ‘pharyngealization’. In addition, this allomorphic alternation is one piece of evidence that Queyu data do not present a typical

case of vowel harmony, as consonants also undergo uvularization.

Uvularization does not spread progressively, as suffixes containing plain vowels remain plain when following a stem that contains uvularized vowels. Examples with a plain vs. uvularized root are given in (2.21) and (2.22). The patient nominalizer *-fə̃* contains a plain vowel, regardless of the vowel quality in the preceding root.

(2.21) *tʰí-fə̃*
eat-NMLZ

‘food’

(2.22) *ptə̃^ʁ-fə̃*
chop-NMLZ

‘things to be chopped’

Uvularized prefixes can also be triggered when the stem contains a voiced velar preinitial, which is demonstrated in examples (2.23-2.25). The vowels in verb bases are plain in (2.23-2.25), but these verbs still pair with uvularized prefixes. The only thing these verbs share is that they contain a voiced velar preinitial. The fact that uvularized prefixes can be conditioned by consonants, in the absence of a uvularized vowel, is further evidence indicating that uvularity spreading in Pubarong Queyu may not be vowel harmony in the classical sense.

(2.23) *nə̃^ʁ-ɣnó*
DOWN-knead.1SG

‘I kneaded (the dough)’

(2.24) *tə̃^ʁ-ɣʒó*
NEU-toss.1SG

‘I tossed (something)’

(2.25) *f^hòpʰí qə̃^ʁ-ɣʒɛ̀*
child IN-raise, feed

‘I raised (provide food and materials for) kids.’

There is another type of vowel alternation in verbal prefixes unrelated to uvularization. See (2.26) and (2.27), where the directional prefixes *lǎ-* turns into *lǎ-* when followed by *mǎ-* and *tǎ-*, and *nǎ-* into *nǎ-* when followed by *tǎ-*. This type of alternation differs from those just described. The verb stem vowel does not seem to play a role in conditioning the prefixes, as can be seen in the comparison between (2.26a) and (2.26b). The verb stem vowel remains the same, but the vowel in the directional prefix changes. However, as uvularity spreading is root controlled, meaning the feature in the verb stem determines the prefix vowel quality, the changed prefixes can still have a uvularized counterpart. This is demonstrated in (2.28) and (2.29), where the uvularized *lǎʷ-*, *mǎʷ-*, and *taʷ-* occur. For this type of vowel change, with only limited examples so far, no concrete conclusion can be drawn. More data are needed for further exploration of this type of prefix alternation.

(2.26) the *lǎ-* prefix changes to *lǎ-* when preceding *mǎ-* and *tǎ-*

- a. *lǎ-fʰó*
US-go.1SG

'I went upstream.'
- b. *lǎ-mǎ-fʰó*
US-NEG-go.1SG

'I didn't go upstream.'
- c. *lǎ-tǎ-fʰí*
US-PROH-go.2SG

'Don't go upstream.'

(2.27) the *nǎ-* prefix changes to *nǎ-* when preceding *tǎ-*

- a. *nǎ-fʰó*
DOWN-go.1SG

'I went down (to Chengdu's direction).'
- b. *nǎ-tǎ-fʰí*
DOWN-PROH-go.2SG

'Don't go (to Chengdu's direction).'

(2.28) the *lʰəʷ-* and *məʷ-* prefixes can also be uvularized

a. *lʰəʷ-xpʰəʷ*
US-vomit

‘(Someone) vomited.’

b. *lʰəʷ-məʷ-xpʰəʷ*
US-NEG-vomit

‘(Someone) hasn’t vomited yet.’

(2.29) the prohibitive marker *taʷ-* can also be uvularized

a. *ə-zəʷ*
UP-take.2

‘(You) take it.’

b. *í-tàʷ-zəʷ*
UP-PROH-take.2

‘Don’t take it.’

Uvularization harmony exists in Rongba (Renda), too. Zheng (2023:21–22) documented the leftward spreading of uvularization from stem to prefixes. In addition to question, non-past negative, prohibitive, and orientation (directional) prefixes, uvularity can also spread from classifiers to the preceding numeral ‘one’. This is not found in Pubarong. See the comparison in Table 2.55, where the vowel in numeral ‘one’ in Rongba (Renda) assimilates in terms of vowel quality with the following classifier, while the vowel quality for ‘one’ in Pubarong remains the same regardless of the following vowel’s uvularity.

2.6.3 Exceptions to vowel harmony

Section §2.4.2 discusses how /o/ behaves as both a plain and uvularized vowel phonologically, in that it can follow both velar and uvular consonants. Note that it does NOT mean the dorsal consonant preceding /o/ can alternate between velar and uvular freely. For example, *gó* ‘happy’ cannot be pronounced as *gó*, and *qǒ* ‘missing a piece from the whole’

Table 2.55: Vowel harmony in classifier constructions (data adopted from Zheng 2023:21)

Plain vowel classifier-Rongba (Renda)	Gloss	Uvularized vowel classifier-Rongba (Renda)	Gloss
<i>tə^H yu^H</i>	a bundle (of wood)	<i>tə^{ɬL} xso^{ɬH}</i>	a liang (tael)
<i>tə^L tsə^H</i>	a piece (of bamboo)	<i>tə^{ɬL} s^hɜ^{ɬH}</i>	a pail (of water)
<i>tə^L zɛ^H</i>	a bowl (of rice)	<i>tə^{ɬL} q^ha^{ɬH}</i>	a package (of tobacco)
Plain vowel classifier-Pubarong	Gloss	Uvularized vowel classifier-Pubarong	Gloss
<i>tʰ-pó</i>	one (book, notes)	<i>tʰ-pó^ɬ</i>	one (pile)
<i>tʰ-tsi</i>	one (layer, storey)	<i>tʰ-βrá^ɬ</i>	one (drop)
<i>tʰ-ʒá</i>	one (bowl)	<i>tʰ-q^hò</i>	one (bag)

cannot be pronounced as *kǒ*. In fact, minimal pairs such as *k^hó* ‘fault’ and *q^hó* ‘cowskin bag’ exist. Historical reasons can account for the distribution of /o/ after dorsal consonants, and velar and uvular consonants elsewhere are still allophones of each other. This subsection discusses how /o/ and /u/ behave both ways morphophonologically.

While plain and uvularized vowels in a verb stem can trigger different sets of prefixes, there are two vowels that do not follow this pattern: /o/ and /u/. Some verbs containing these two vowel suffixes pair with plain prefixes, while others trigger a uvularized allomorph. As shown in Table 2.56, verbs containing /o/ and /u/ can pair with uvularized prefixes. Morphologically speaking, the /o/ and /u/ phonemes in these cases trigger uvularized prefixes, which is strong evidence suggesting that /o/ and /u/ belong to the uvularized set of vowels.

However, in some verbs /o/ and /u/ behave like plain vowels. From Table 2.57, we see that *gó* ‘happy’, *dʒó* ‘dance’, and *xtú* ‘hug’ pair with a plain prefix. If /o/ and /u/ were behaving like uvularized vowels in these words, they would trigger the uvular allomorphs of the prefixes.

Table 2.56: Vowels /o/ and /u/ exhibiting uvularized vowel behavior

Lexicon	Gloss	Translation
<i>qó^u-dò</i>	IN-tie	‘tied up, chained up’
<i>á^u-tšó</i>	Q-cold	‘Is it cold?’
<i>tǎ^u-xtù</i>	NEU.Q-hit.3	‘Did he hit?’

Table 2.57: Vowels /o/ and /u/ exhibiting plain vowel behavior

Lexicon	Gloss	Translation
<i>má^o-gó</i>	NEG-be.happy	‘unhappy’
<i>má^o-džó</i>	NEG-dance	‘won’t dance’
<i>jǎ^o-xtù</i>	NEU.Q-hug.3	‘Did he hug?’

Another piece of morphosyntactic evidence suggesting that /u/ behaves both as a plain and a uvularized vowel comes from verbal paradigms. In a verb paradigm, all the different verb form(s) contain vowels of the same quality. That is, a verb containing a plain vowel only has forms in plain vowels, and a verb containing a uvularized vowels only in uvularized vowels. The only exception in my data is *ʃ^hí* ‘to go’, whose 1PL form is *ʃ^há^u*. There are both plain and uvularized verbs whose third person forms end with a *-u* suffix. That *-u* can occur in the paradigms of both types of verbs indicates that /u/ also behaves both ways. The two tables below show several example verbs of each kind.

Table 2.58: Plain 3rd person verb forms ending with /u/

Gloss	1SG	1PL	2SG	2PL	3
to read	<i>lǔ</i>	<i>lǎ</i>	<i>lǐ</i>	<i>lǐ</i>	<i>lǔ</i>
to feed	<i>sǔ</i>	<i>sǎ</i>	<i>sǐ</i>	<i>sǐ</i>	<i>sǔ</i>
to buy	<i>xkó</i>	<i>xkǎ</i>	<i>xkí</i>	<i>xkí</i>	<i>xkú</i>
to know	<i>kǔ</i>	<i>kǎ</i>	<i>kǐ</i>	<i>kǐ</i>	<i>kǔ</i>
to pull out	<i>pó</i>	<i>pǎ</i>	<i>pí</i>	<i>pí</i>	<i>pú</i>

Since /o/ and /u/ may behave like either plain vowels or uvularized vowels, this is

Table 2.59: Uvularized 3rd person verb forms ending with /u/

Gloss	1SG	1PL	2SG	2PL	3
to burn, light a fire	<i>xsǒʷ</i>	<i>xsǎʷ</i>	<i>xsěʷ</i>	<i>xsěʷ</i>	<i>xsǔ</i>
to hit, pound	<i>xtǒʷ</i>	<i>xtǎʷ</i>	<i>xtǐʷ</i>	<i>xtǐʷ</i>	<i>xtǔ</i>
to infect	N/A	N/A	N/A	N/A	<i>xt^hu</i>

further evidence that analyzing this data from a traditional vowel harmony perspective can be problematic. That /o/ and /u/ behave like both plain and uvularized vowels suggests that historically for each there may have been two sets of vowels, plain and uvularized, that have merged into /o/ and /u/ respectively.⁹ Phonetically there is no distinction now, and the only trace of this possible merger is morphophonological evidence.¹⁰

2.6.4 Vowel harmony in Qiangic

There are occasional mentions of the similarities among uvularized, velarized, and pharyngealized vowel qualities in the literature on TB languages spoken in Southwest China. There are also mentions of the fact that these vowels can trigger vowel harmony. Despite the fact that different terms are used to describe vowel qualities in the Rgyalrongic/Qiangic languages reviewed in Sections §2.3.3, these vowel contrasts behave similarly in that they participate in a similar phonological process, vowel harmony. Vowel harmony is not common among TB languages, with most cases reported in Qiangic, and only a few in the Naic and Tibetan languages of the Himalayish subgroup (Chirkova 2024:729). Sun (2016:10) considers vowel harmony to be a feature of the Qiangic branch. While vowel harmony is commonly reported in languages spoken in the Middle East, Africa, Northeast Asia, and the Pacific Northwest coast of North America, information on vowel harmony in Qiangic and Naic is limited. Chirkova (2024:730) asserts that these latter languages are ‘virtually unknown in literature on vowel harmony’. Examining the relationship between vowel harmony and

⁹Personal communication with Dr. Lin You-jing and Dr. Lai Yunfan.

¹⁰However, we cannot rule out the hypothesis that /o^w/ and /u^w/ still exist. Further acoustic measurements are required to investigate this issue. I would like to thank Dr. Spike Gildea for pointing this out.

uvularized vowels in Queyu in the contexts of both TB linguistics and other languages can contribute to typological as well as phonological understandings of vowel harmony.

There is great diversity among the vowel harmony systems of Qiangic languages (Chirkova 2024:730–731). For example, Yadu Qiang, reported in Evans and Huang (2007), has five vowel harmony processes: front, low, ATR, round, and rhotic. On the other hand, Ersu, another Qiangic language spoken in South Sichuan, only has low vowel harmony (Chirkova et al. 2015). In the rest of this section, I will examine vowel harmony processes in Qiangic and other languages, specifically harmony processes triggered by post-velar consonants and/or by vowel quality.

In a typological phonological study of post-velar consonants, Sylak-Glassman (2014:75) states that ‘[p]ost-velar harmony processes are neither consonant nor vowel harmony, but consonant-vowel (CV) harmony systems’, and that the phonetic form of post-velarization can be either uvularization (as in the case of Arabic) or pharyngealization (as in the case of Nakh-Daghestanian languages). This statement also fits the situation of many Qiangic languages.

Gong (2020:193) divided Rgyalrongic/Qiangic languages into three types based on their realization of what he terms ‘guttural secondary vocalic articulation’ (GSVA). These are:

- (2.30) uvularity-coupled secondary articulation, where velar and uvular onsets are conditioned by the presence of GSVA and are in complementary distribution. That is, uvular initials occur with uvularized vowels and velar initials occur with plain vowels (Gong 2020:193);
- (2.31) uvularity-decoupled secondary articulation, where GSVA is not phonologically bound with a consonantal velar-uvular distinction; and
- (2.32) absence of GSVA.

Pubarong Queyu is of the first type. Other Qiangic languages of this type include Mawo Qiang and Yunlinsi Qiang (Evans et al. 2016), and Eastern Minyag, as described by Huang (1985) and Gao (2015). Examples of Yunlinsi Qiang phonotactics are given in

Table 2.60. From the example pairs given in Table 2.60, it is clear that uvularized vowels pair with uvular consonants, while plain vowels pair with velar consonants.

Table 2.60: Yunlinsi plain-uvularized vowel harmony (Evans et al. 2016:18)

	i	i^ʷ	u	u^ʷ	ə	ə^ʷ	a	a^ʷ
k-	/ki/		/ku/		/kə/		/kaχu ^ʷ /	
	‘house’		‘turnip’		‘go’		‘koklass pheasant’	
q-		/qi ^ʷ /		/qu ^ʷ /		/qə ^ʷ -/		/qa ^ʷ /
		‘win’		‘afraid’		‘head’		‘1SG’

Languages of the second GSVA type include Zbu Rgyalrong (Sun 2004), where the distinction between the two sets of vowels is analyzed as velarization. This type of GSVA differs from the first one in that in the root, the plain vowel /ɐ/ can appear after both velar and uvular consonants (Gong 2020:194–196). Velarized vowels in roots also trigger regressive vowel harmony in prefixes. Examples demonstrating this type are given in Table 2.61 from the *ɣaltsúʷ?* variety of Rbu Rgyalrong, where /a/ is the velarized allophone of /ɐ/. In ‘my cat’, and ‘my horse’, the feature of velarization is spreading regressively to the prefix vowel. As evident from Table 2.61, however, both velar and uvular consonants can occur with /ɐ/ in roots (Gong 2020:194).

Table 2.61: Rbu Rgyalrong plain-velarized vowel harmony (Gong 2020: 194)

Vowel pair	Plain vowel	Gloss	Velarized vowel	Gloss
/ɐ a/	/ɐ-wɐmê/	‘my cat’	/a- ⁿ brâ/	‘my horse’
	/ɐ-qéʔ/	‘my wheat’	/ɐ-rkê/	‘my mule’

The third type, absence of GSVA, is the most widespread in Qiangic languages (Gong 2020:194). However, it should be noted that uvular consonants are not always simply the result of harmonic processes and are present in all Qiangic languages (Sun 2016:10).

2.7 Conclusion

This chapter has provided a description of the segmental phonology of Pubarong Queyu. This variety contains a large consonant inventory and a distinct set of uvularized vowels in the vowel inventory in addition to plain ones. They form open syllables with possible complex onsets. The syllable structures are described with special reference to its onsets from a typological point of view. Lastly, two more morphophonological processes, vowel fusion and vowel feature spreading, are examined.

This chapter has argued that in Pubarong, uvularized vowels trigger uvular allophones of preceding velar consonants, as well as regressive uvularization in the vowels of certain prefixes. One way to analyze the effect of Queyu uvularized vowels on surrounding phonemes is from the perspective of vowel harmony. However, Queyu feature spreading is not a typical case of vowel harmony because it also involves allophonic variation in consonants and can even be triggered by consonants. In fact, in an article that looks at vowel harmony in Rma/Qiang, Sims (2023) argues that vowel harmony is not a helpful way to look at these alternations and we need a historical lens. What looks like harmony is just regular alternations due to regular sound change.

Besides examining phonological characteristics of Queyu in the context of nearby languages, this chapter has also proposed several directions for future research, including a thorough examination of the articulation and the acoustics of uvularized vowels, as well as the perception studies on the combination of post-alveolar consonants and uvularized vowels. Another area that is worth investigating would be the characteristics of voiceless sonorants and comparing them with similar sounds in other languages.

CHAPTER 3

SUPRASEGMENTAL PHONOLOGY-TONES

3.1 Introduction

Queyu is a tonal language, where the change of pitch can change the morpheme, lexical or construction meanings (Hyman and Leben 2020:45). More than half of the world's languages are tonal, and they are concentrated in three areas, which are Africa, Asia-Pacific, and Americas (Yip 2002:17; Ratliff 2015:245).

The behavior and properties of tones vary cross-linguistically. Pubarong Queyu contrasts two level tones, and tonal sandhi processes are common. This chapter adopts autosegmental framework to approach Queyu tones. Several recent studies on TH languages also adopt this framework to analyze tonal systems spoken in the Asia-Pacific region with fruitful results. Examples include Kuki-Thaadow (Hyman 2007), Mianchi Qiang (Evans 2008), Zhuokeji Rgyalrong (Lin 2012), Pumi (Jacques 2011; Daudey 2014), and Yongning Na (Michaud 2017).

Treating tones on a suprasegmental tier in Queyu will help explain some patterns or tonal processes. Data and my analysis of the tonal system will be presented in the following subsections. Of course, this is by no means the perfect and only correct solution to approach Queyu tones. There are places where I cannot provide a simple and elegant solution, and I also provide alternative analysis in some instances.

The remaining sections of the chapter are divided as follows: Section §3.2 is a brief introduction to the transcription conventions on tones; Section §3.3 goes over tonal descriptions in other Queyu varieties and Section §3.4 talks about the contrastive tones in Pubarong Queyu, and provides a description on tonal patterns of words with different length; Section §3.5 walks through tonal sandhi processes; and Section §3.6 brings up remaining issues that need to be investigated for future research.

3.2 Basics and conventions

Before getting into the description and analysis of Pubarong Queyu tones, it is necessary to go over those in previous Queyu literature on other varieties. Each scholar may analyze the tones differently, and hence use different conventions to transcribe and represent tones. Section §3.2 is the summary of descriptions of tones for Queyu varieties spoken in Tuanjie/Gala (Yajiang County), Youlaxi (Xinlong County), Rongba (Zengda village, in Litang County), Lhagang Queyu (Kangding City), and Rongba (Renda village, in Litang County). Explanations to the different tonal transcription conventions used in each study will be provided first.

Many studies of TB languages follow the five-pitch system developed by Chao (1930), whereby the pitch of the tone is positively related to numbers 1 through 5, corresponding to low, half-low, medium, half-high, high, respectively. Hence, a 55 would represent a high level tone, while a 35 a rising tone. Notice that numbers here do not designate a specific F0 or F0 range of the tone. Pitch values are relative to each other, as factors like age, gender and personal habit influence the F0 of how certain speakers pronounce tones. One speaker's 55 tone can have a different F0 from another speaker's 55 tone.

- (3.1) Examples from Mandarin Chinese (Yip 2002:20)
- | | | |
|-------------------------|--------------|----------|
| High level tone | <i>ma55</i> | 'mother' |
| High rising tone | <i>ma35</i> | 'hemp' |
| Low falling-rising tone | <i>ma214</i> | 'horse' |
| High falling tone | <i>ma51</i> | 'scold' |

Like most literature on TB languages, previous research on other Queyu varieties mostly use numbers to represent the pitch differences on words. Some authors use descriptions like 'high' and 'rising' to describe tonal types when a numerical value is not specified for a tone. The descriptions on tonal types like 'high', 'low', 'rising', and 'falling' can be shortened as H, L, R, and F. This is the terminology that this chapter uses to describe tonal types. When it comes to transcription, diacritics are used over vowel symbols. Symbols like acute or grave accent marks above the vowel denote the tone, instead of having numerical

numbers as a superscript on the upper right corner of the vowel. Numbers are not used in this dissertation to represent tones, because there are not multiple tones of the same tonal category, or tonal shapes. That is to say, for monosyllabic words, for example, phonetically since there is only one level tone in this language that contrasts with R tone, there is no need to distinguish if the level tone is 55 or 44. A marking on the tonal category (H, L, R) suffices. The correspondence among tone type, abbreviation, and transcription is given in Table 3.1.

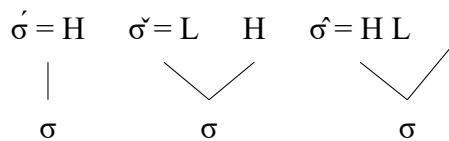
Table 3.1: Tonal notations for Pubarong Queyu used in this dissertation

Tone type	Abbreviation	Transcription
High	H	á
Low	L	à
Rising	R	ǎ
Fall	F	â

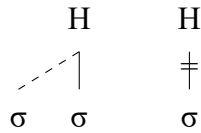
The core of autosegmental framework is the proposal that there exists a separate suprasegmental tier independent of the segmental tier which are connected to each other by association lines. Different tonal processes can thus be represented by rules that link and delink these tiers (Goldsmith 1976).

See (3.2) for how H, R, and F tones are represented by the two tiers connected by the association lines. The dashed line in the first diagram in (3.3) represents the formation of a new association line. The deletion of an existing association line is represented by a double strikethrough on that line in the second diagram (Odden 2013; Snider 2020).

(3.2) Tonal representations for high level, rising, and falling tones



(3.3) Establishing a new association line and delinking an existing one



There are also several principles that govern the association between the segmental and suprasegmental tiers; they are summarized into a well-formedness condition, which states that each tone-bearing unit (TBU) will be associated with a tone, and each tone will be associated with a TBU. An important principle of autosegmental theory is that association lines do not cross (Goldsmith 1976; Odden 2013:290; Snider 2020:7). In Queyu, the tone-bearing unit (TBU) is a syllable. The shape of the syllable does not affect the tonal behavior.

Another principle, or near-universal principle that needs to be addressed is the Obligatory Contour Principle (OCP); this states that underlyingly two adjacent and identical tones are not permitted (Snider 2020:8). This restriction on tones is also known by other names, such as word tone, culminativity, and restricted tone, and is observed in several TB languages (Evans 2009:204; Daudey 2014:65).

The last concept that has to be dealt with before jumping into the tonal analysis of Queyu is the domain in which tones are mapped (Hyman and Leben 2020:47). This concept is also called by different names and has different manifestations across languages. In Shixing, this is called the ‘prosodic word’, which is composed by syllables that are closely connected and pronounced together in real life speech (Chirkova 2007). There could be a pause at the prosodic word boundary, and the length of a prosodic word ranges from one to three or four syllables (Chirkova 2007). In Zhuokeji Rgyalrong, it is called the ‘domain’ and the word is the domain over which the tone are mapped (Lin 2012:630). In Wadu Pumi, it is called the ‘tone group’, which is composed by ‘a group of morphemes within an intonation unit that shares a single underlying tone’ (Daudey 2014:65).

For this dissertation, I adopt the term ‘tonal domain’ to describe the smallest unit within which tonal rules apply. The length of a tonal domain ranges from one to several

syllables or morphemes. Usually a tonal domain is equivalent to a word, but tonal domains comprising two words exist, too. When the latter is the case, the two words also tend to be closely connected with each other morphosyntactically and semantically, and hence are always pronounced together. An example demonstrating a two-word domain is given in (3.4), where *tsǎ* EGO and *tʂǎ* GNR are two independent words that can occur by themselves with a R tone. However, when putting these two together, which is the conventional sentence ending for third person statements, they form this tight phonological and semantic unit hence tonal domain. Evidence can be found in their respective pronunciations in this context: *tsǎ* is pronounced with a surface L tone, and *tʂǎ* with a H tone. The tones on both of morphemes have changed compared to their pronunciation in isolation. The same or a similar phenomenon is observed in the languages mentioned above. For example, in Wadu Pumi, a different surface tone may appear on morphemes when within a single tone group, versus when they occur in separate tone groups (Daudey 2014:66). Chirkova (2007) also mentioned that in Shixing, lexical tones of morphemes are preserved in monosyllabic prosodic words, but the tone on those same morphemes can change in multisyllabic prosodic words. Compare (3.4) and (3.5), where in (3.5) both *nǎ* ‘2SG’ and *ŋǎ* ‘1SG’ preserve their R tone when said adjacent to each other in a sentence. This suggests that not just any configuration of two or more words uttered next to each other can form a tonal domain, only those configurations that comprise a semantic unit.

(3.4) *tsǎ* and *tʂǎ* form a tonal domain

t^{hə}=nts^{hí} <*yígè*> <*dàduì*> *tsǎ* *tʂǎ*
 3=PL one brigade EGO GNR

‘They belong to a production brigade.’
 它们是一个大队

(QVY-326: 3)

(3.5) *nǎ* and *ŋǎ* do not form a tonal domain

nǎ *ŋǎ* *kó-lì*
 2SG 1SG IN-wait.2

‘Wait for me.’

3.3 An overview of Queyu tones

In Tuanjie (Gala) Queyu, Lu (1985:68) found four contrastive tones on monosyllabic words. Though he mentioned that every syllable is specified for a tone (1985:69), he did not talk about tonal behavior or any tonal processes/sandhi for multisyllabic or multimorphemic words. Minimal sets of these four tones are given in Table 3.2.

Table 3.2: Tuanjie (Gala) Queyu tones (Lu 1985:68)

Tone	Pitch value	Example words	Gloss	Example words	Gloss
High level	55	<i>ma</i>	butter	<i>ei</i>	flea
High falling	53	<i>ma</i>	mother	<i>ei</i>	garlic sprout
High rising	35	<i>ma</i>	neg	<i>ei</i>	exist, have
Mid level	33	<i>ma</i>	ramie	<i>ei</i>	mat

For Youlaxi (Xinlong) Queyu, there are three contrastive tones, which are high level, low rising, and low falling (Wang 1991:54). Syllables can also bear a neutral tone, whose pitch value is around 33, and does not get any marking. Though some minimal pairs show contrast for high level and low rising tone, some words' tonal values are not stable. Examples demonstrating these different tones are shown in Table 3.3. Two tonal sandhi rules are observed and stated in (3.6).

Table 3.3: Youlaxi (Xinlong) Queyu tones (Wang 1991:55)

Tone	Pitch value	Example words	Gloss
High level	55	<i>tɕo⁵⁵</i>	live, reside
Low rising	13	<i>tɕo¹³</i>	scatter
Low falling	31	<i>pu⁵⁵tʃa³¹</i>	bug
Atonal	33	<i>p^{hə}55p^{hə}</i>	grey colour

(3.6) Youlaxi (Xinlong) tonal sandhi rules

- a. 55 → 53 or 54 / #σ_#
- b. 13 → 11 or 22 / _ 55

In Rongba (Zengda village) Queyu that is spoken in Litang County, Nishida (2008:83) found two tones, a high level tone (H) and a low level tone (L). A minimal pair of the tonal contrast is given below. A tonal sandhi rule of a H tone changing to L tone is also proposed. Examples demonstrating the tonal sandhi rule are given in (3.7). Though the surface tone for unprefixes *sho* ‘go’ is not given in his data, given that ‘to go’ in Pubarong is *ʃʰí* with a high level tone, and this tonal sandhi rule applies to verb roots with H tone, it is reasonable to assume that the unprefixes *sho* bears a H tone, and changes to L when attached to a prefix. This finding is also compatible to Zheng (2023)’s findings, in which an underlyingly H toned verb would surface as L tone when prefixed to a directional prefix, and form an H-L pattern in Renda village speech, another Rongba Queyu variety spoken nearby.

Table 3.4: A minimal pair contrasting H and L tone in Litang (Rongba Township, Zengda village) Queyu (Nishida 2008:83)

Tone	Pitch value	Example words	Gloss
High level	55	<i>hli⁵⁵</i>	god
Low level	11	<i>hli¹¹</i>	tongue

(3.7) A tonal sandhi rule with examples (Nishida 2008:84)

H → L in prefixed verb roots	
Example	Gloss
<i>ta^Lsho</i>	go upwards
<i>le^Lsho</i>	go downwards
<i>ke^Lsho</i>	go inwards
<i>g^ʔe^Lsho</i>	go outwards

In a following study, Nishida (2018) updated his analysis to four contrastive tones, which are high level, high falling, low falling, and low level. Minimal sets for these four tones are given in Table 3.5.

Table 3.5: Contrastive tones in Nishida (2018:171)

Tone	Example	Gloss
High level	^H <i>mi</i>	female
High falling	^R <i>mi</i>	fire
Low falling	^F <i>mi</i>	heat up
Low level	^L <i>mi</i>	monkey

The Queyu variety spoken in Lhagang, on the other hand, contains a two-way word tonal melody system contrasting four tones (Suzuki and Sonam Wangmo 2018; Suzuki and Sonam Wangmo 2019). The two word melodies are high (phonetically level and falling) and low (phonetically rising and rising falling) (Suzuki and Sonam Wangmo 2018:138–139). The tonal bearing unit (TBU) is only the first two syllables of a word. If the second syllable of a word is atonal, then the first syllable is considered to have a stress on it (Suzuki and Sonam Wangmo 2018:137). Hence, in their analysis, a stress marker in addition to tonal marker is needed for Lhagang Queyu data (Suzuki and Sonam Wangmo 2019:122).

Zheng (2023) has the most detailed description of Rongba Queyu tones so far. Two contrastive tones are found on monosyllabic words, a high tone (tonal value 44 or 42) and a low tone (tonal value 24). See Table 3.6 for specific minimal pairs.

Table 3.6: Contrastive tones on monosyllables in Rongba (Zengda Village) Queyu (Zheng 2023:23)

Tone	Tonal value	Example	Gloss	Example	Gloss
H	44 ~ 42	<i>ᶇa⁴⁴</i>	wind	<i>χtᶇə⁴²</i>	flood
L	24	<i>ᶇa²⁴</i>	wheat sprouts	<i>χtᶇə²⁴</i>	willow

For disyllabic words, four patterns are found, which are H-H, H-L, L-H, and LH-L. However, though these four patterns are observed, only contrasts between L-H and H-L, and L-H and H-H are found. And for the last pattern, LH-L, there are only three instances in the data (Zheng 2023:24). Examples of tonal minimal pairs on disyllabic words are given

in Table 3.7 and Table 3.8.

Table 3.7: Examples of L-H contrasting H-L (Zheng 2023:24)

Tone	Example	Gloss	Example	Gloss
L-H	$f\tilde{r}^L d\vartheta^H$	garlic	$\varepsilon^L k\varepsilon^H$	older brother
H-L	$f\tilde{r}^H d\vartheta^L$	coral	$\varepsilon^H k\varepsilon^L$	tick (parasite)

Table 3.8: Examples of L-H contrasting H-H (Zheng 2023:24)

Tone	Example	Gloss	Example	Gloss
L-H	$xko^L xli^H$	bone marrow	$f\tilde{r}^L m\vartheta^H$	sand
H-H	$xko^H xli^H$	nine months	$f\tilde{r}^H m\vartheta^H$	dried roasted barley

In addition to tonal patterns on mono- and disyllabic words without affixes, Zheng (2023:24–26) also describes tonal patterns on affixed verbs. For directional prefixes, Zheng (2023:24) analyzes them as toneless, as their surface tone is conditioned by the underlying tone of the following verb. For verbs whose underlying tone is H, the prefixed tonal pattern is always H-L. And for verbs whose underlying tone is L, the prefixed pattern is L-H. Selected examples are give in in Table 3.9.

Table 3.9: Perfective prefixed verbs (Zheng 2023:25)

Tone on unaffixed verb root	Example of affixed root	Gloss	Translation of affixed verb
H	$k\vartheta^H - lo^L$	ORT:PFV-plant	I have planted.
H	$\varkappa\vartheta^H - l\vartheta^L$	ORT:PFV-herd	I have herded (sheep).
L	$k\vartheta^L - xto^H$	ORT:PFV-pound	I have pounded.
L	$\varkappa\vartheta^L - \chi no^H$	ORT:PFV-peel off	I have peeled off.

What is interesting is the tonal patterns for the imperative verb forms, for it is formed by affixing the directional prefix, too. But the tonal pattern is different from what is listed in Table 3.9. Compare Table 3.9 and Table 3.10, it is clear that the L toned verbs' tonal patterns

are reversed for these two functions (L-H for perfective, and H-L for imperative), but for H toned verbs only the surface tone on verbs have changed. Zheng (2023:25) proposes that this may be due to the fact that H-H is another surface realization of L. But it requires further investigation.

Table 3.10: Imperative prefixed verbs (Zheng 2023:25)

Tone on unaffixed verb root	Example of affixed root	Gloss	Translation of affixed verb
H	$k\partial^H-l\partial^H$	ORT:IMP-plant	You plant!
H	$y\partial^H-l\partial^H$	ORT:IMP-herd	You herd!
L	$k\partial^H-x\partial^L$	ORT:IMP-pound	You pound!
L	$k\partial^H-\chi n\partial^L$	ORT:IMP-peel off	You peel off!

Tonal patterns for three negation prefixes are also described. For the toneless non-past negation prefix $m\epsilon-$, the prefixed verb's tonal behavior is the same as that of perfective prefixed verbs. See Table 3.11.

Table 3.11: Verbs with non-past negative prefix

Tone on unaffixed verb root	Example of affixed root	Gloss	Translation of affixed verb
H	$m\epsilon^H-l\partial^L$	NEG:NPST-plant	I don't plant.
H	$m\alpha^H-l\partial^L$	NEG:NPST-herd	I don't herd.
L	$m\epsilon^L-x\partial^H$	NEG:NPST-pound	I don't pound.
L	$m\epsilon^L-\chi n\partial^H$	NEG:NPST-peel off	I don't peel off.

The past negative prefix $m\partial-$ always co-occurs with a directional prefix. The tonal pattern for this expression is the same for both types of verbs, which is H-H-L.

The last prefixation pattern concerns the prohibitive marker $t\epsilon-$. This prefix forms a H-L pattern over the whole verb when attached to a H tone verb root, and a LH-L pattern with a L tone verb root. See Table 3.13 for examples.

Table 3.12: Verbs with past negative prefix *mə-* (Zheng 2023:26)

Tone on unaffixed verb root	Example of affixed root	Gloss	Translation of affixed verb
H	<i>kə^H-mə^H-lo^L</i>	ORT-neg:PST-plant	I haven't planted.
H	<i>kə^H-mə^H-s^hɜ^L</i>	ORT-neg:PST-kill	I haven't killed.
L	<i>lə^h-mə^h-qo^h</i>	ORT-neg:PST-pick	I haven't picked.
L	<i>lə^h-mə^h-zo^h</i>	ORT-neg:PST-take away	I haven't taken away.

Table 3.13: Verbs with prohibitive prefix (Zheng 2023:26)

Tone on unaffixed verb root	Example of affixed root	Gloss	Translation of affixed verb
H	<i>tɛ^H-lo^L</i>	PROH-plant	Don't plant!
H	<i>ta^h-jɜ^h</i>	PROH-herd	Don't herd!
L	<i>tɜ^{LH}-xtɔ^L</i>	PROH-pound	Don't pound!
L	<i>ta^h-χno^h</i>	PROH-peel off	Don't peel off!

Rongba (Zengda village) Queyu and Pubarong Queyu share a lot of the tonal patterns. At the same time, there are also some prefixes' underlying tones and patterns for certain constructions that are different. The rest of this subsection is devoted to a brief summary on Pubarong Queyu tones, as well as the framework and the justification of the framework that this chapter uses to analyze them.

3.4 Contrastive tones in Pubarong Queyu

I analyze the Pubarong dialect of Queyu as containing a two-way contrast, /H/ and /L/. Two contrastive tones are found on monosyllabic words, one that I will refer to as a high level tone (H) and another that I will refer to as a rising tone (R). When in isolation, the monosyllabic H tone words can also be pronounced with a high falling tone F. Tonal marks that are between slashes represent the phonemic underlying tone (/H/), while tonal marks that do not have any special bracketing represent the phonetic surface tone (H). Tonal behaviors of both nouns and verbs are demonstrated below (refer to Chapter 4 for an in-depth discussion regarding the establishment of Nouns and Verbs as two major word classes

in Pubarong Queyu).

For monosyllabic and monomorphemic nouns, two phonetic tones are observed when they are pronounced in isolation, H and R. These two classes of nouns behave consistently in various constructions. For example, when followed by the =xə ‘LOC’ enclitic, nouns whose surface tone is H in isolation will yield a H-L pattern, and nouns whose surface tone is R in isolation will yield a L-H pattern. Examples are given in Table 3.14.

Table 3.14: Tonal patterns for nouns in isolation and in the locative construction.

Gloss	Queyu	Surface (phonetic) pitch in isolation	__ =xə __ =LOC
Class 1: /H/			H-L
tongue	<i>xlí</i>	H	<i>xlí=xə̀</i>
pig	<i>vjé</i>	H	<i>vjé=xə̀</i>
dog	<i>xɬʰíʰ</i>	H	<i>xɬʰíʰ=xə̀</i>
Class 2: /L/			L-H
rabbit	<i>xlǐ</i>	R	<i>xlǐ=xə́</i>
water	<i>ʒǐʰ</i>	R	<i>ʒǐʰ=xə́</i>
mountain	<i>rǐ</i>	R	<i>rǐ=xə́</i>

These nouns behave the same when followed by other enclitics, such as =ku ‘INE’, and =qaʰ ‘INS’. Nouns with surface H tone always form a H-L pattern, and nouns with surface R tone always form a L-H pattern. See Section §5.5 for a complete list of possible nominal enclitics. These are evidence suggesting that there are two contrasting tones within nouns.

For monosyllabic and monomorphemic verbs, the situation is the same with nouns. Two phonetic tones are observed when verbs are pronounced in isolation (H and R). When followed by different suffixes and enclitics, these two classes of verbs behave consistently. Surface H-tone verbs always form an H-L pattern, while surface LH-tone verbs form an L-H pattern. Table 3.15 lists these two classes of verbs and their tonal patterns when suffixed by -ʃə ‘patient nominalizer’, and Table 3.16 lists verbs and their tonal patterns when suffixed

by *-mə* ‘agent nominalizer’. These verbs behave the same when followed by other suffixes and enclitics. See Section §6.8 for a complete list of nominalizers.

Table 3.15: Tonal patterns for verbs in isolation and when suffixed by patient nominalizer.

Gloss	Queyu	Surface (phonetic) pitch in isolation	___ <i>-fə</i> ___ -patient NMLZ
Class 1: /H/			H-L
food (things to eat)	<i>tʰí</i>	H	<i>tʰí-fə</i>
woven things	<i>ɸlǎé</i>	H	<i>ɸlǎé-fə</i>
things to be pulled	<i>ʃʰǎβzǐ</i>	H	<i>ʃʰǎβzǐ-fə</i>
things to be scattered	<i>pʰǎtʰí</i>	H	<i>pʰǎtʰí-fə</i>
things to be spun	<i>xkú</i>	H	<i>xkú-fə</i>
things to be sun dried	<i>kʰí</i>	H	<i>kʰí-fə</i>
Class 2: /L/			L-H
things to be carried	<i>xkǔ</i>	R	<i>xkù-fə</i>
things to give	<i>kʰǐ</i>	R	<i>kʰì-fə</i>
things to be used	<i>mtʃʰǔ</i>	R	<i>mtʃʰù-fə</i>
scripture (things to read)	<i>lǒ</i>	R	<i>lì-fə</i>
things/animals to be fed	<i>sǔ</i>	R	<i>sù-fə</i>
song (things to be sung)	<i>ntʰǐ</i>	R	<i>ntʰì-fə</i>

Table 3.16: Tonal patterns for verbs in isolation and when suffixed by agent nominalizer.

Gloss	Queyu	Surface (phonetic) pitch in isolation	___ <i>-mə</i> ___ -agent NMLZ
Class 1: /H/			H-L
eater	<i>tʰí</i>	H	<i>tʰí-mə</i>
plougher	<i>ɸlǎé</i>	H	<i>lí-mə</i>
person who makes things rotate	<i>ʃʰǎβzǐ</i>	H	<i>xkú-mə</i>
Class 2: /L/			L-H
the person who carries	<i>xkǔ</i>	R	<i>xkù-mə</i>
ower	<i>kʰǐ</i>	R	<i>gù-mə</i>
knower	<i>mtʃʰǔ</i>	R	<i>ŋù-mə</i>
runner	<i>lǒ</i>	R	<i>dʒy̌-mə</i>
the person who obtained	<i>sǔ</i>	R	<i>rì-mə</i>

Data from Table 3.15 and Table 3.16 suggest that there are two contrasting tones within verbs. So far, both monosyllabic and monomorphemic nouns and verbs are contrasting two tones, H and R when pronounced in isolation, and their tonal patterns behave the same when suffixed by another morpheme: H-tone word forms a H-L pattern, and the surface R-tone word forms a L-H pattern. I analyze words with surface H tone as having an underlying /H/ tone, and words with surface R tone as having an underlying /L/ tone. The reason for this analysis comes from the tonal patterns of multisyllabic words.

For multisyllabic words, no contour tones are observed except for the perfective yes/no questions (see Section §3.5.4 for details). Phonetically, only H and L are found on each syllable for non-perfective-yes/no questions. In addition, words bearing all surface L sequence are NOT observed in my data, at least one H (including a R tone, which is LH) is obligatory. Therefore, it is reasonable to propose a constraint on all L sequence. Monosyllabic underlying /L/-tone words are pronounced as R to remedy this constraint. Interestingly, a tendency to disprefer all-L sequences is observed in languages spoken in Africa, Oceania, and North Asian, and TB language family (Cahill 2007; Evans 2018:237). However, there are still languages that allow monosyllabic words with surface L tone, such as Kuki-Thaadow (Hyman 2007) and Rongba (Renda) Queyu (Nishida 2008).

Tables below demonstrate phonetic behavior of multisyllabic and monomorphemic nouns and verbs. Table 3.18 and Table 3.17 present tonal patterns of disyllabic nouns and verbs, respectively. A dot is used here to indicate syllable boundary. Note that reduplicated property-concept words behave like nouns, so two examples ('hot' and 'not straight') are included in Table 3.18 (see Chapter 4 for more details regarding property-concept words).

Verb bases are either monosyllabic or disyllabic. Therefore, all examples of trisyllabic and quadrisyllabic words in Table 3.19 and Table 3.20 are nouns. Table 3.19 still include two examples of property-concept words, 'red' and 'round'. Among these three patterns, H.L.L is impressionistically rarer than the other two. I am also not sure about some of the internal morphological complexity for words bearing the H.L.L pattern. For example,

Table 3.17: Tonal patterns for disyllabic nouns.

Gloss	Queyu	Surface (phonetic) pitch in isolation
bovine	<i>k^hímí</i>	H.H
monkey	<i>ægó</i>	H.H
wind	<i>l^oʷbə</i>	H.L
hot	<i>q^háʷq^hàʷ</i>	H.L
not straight	<i>q^hàʷq^háʷ</i>	L.H
intestine	<i>dʒýmwə</i>	L.H

Table 3.18: Tonal patterns for disyllabic verb bases.

Gloss	Queyu	Surface (phonetic) pitch in isolation
look.1SG	<i>ʃéró</i>	H.H
smear.SAP	<i>tʂ^híʷtʂ^həʷ</i>	H.H
pull.1SG	<i>nt^hənt^hó</i>	L.H

for *jík^hik^hi* ‘red’, this is clearly derived from *jí* ‘red’, which also has a reduplicated form *jíjì*. I am not sure how to analyze the *k^hik^hi* part of the word. Another example would be *mqzúqàʷràʷ* ‘centipede’. The first part *mqzú* means ‘dragon’, and the second half *qàʷràʷ* refers to something ‘complicated and messy’ (as in *ʃ^hó qàʷràʷ* ‘iron net’). Given the shape of centipedes and the figure of the traditional oriental dragon (as opposed to western dragons), it is reasonable to assume that some of these words are internally complex with structures that are yet to be explored. Lastly, only one tonal pattern is found in quadrisyllabic words so far, and that is L.H.L.L. Words containing more than four syllables are not found in my data.

3.5 Tonal sandhi in Queyu¹¹

Tonal patterns associated with affixation processes are described and discussed in this subsection. Most of them concern verbal morphology, but some also deal with nomi-

¹¹I would like to thank Dr. Milntra Raksachat and Dr. Kris Ebarb for discussing data with me and providing their insights on the patterns and analysis. I take credit for all remaining errors.

Table 3.19: Tonal patterns for trisyllabic nouns.

Gloss	Queyu	Surface (phonetic) pitch in isolation
sky, heaven	<i>ǎhŋígò</i>	H.H.L
owl	<i>k^húpóli</i>	H.H.L
red	<i>ǰík^hík^hi</i>	H.L.L
circle, round	<i>tó^ʷlà^ʷlà^ʷ</i>	H.L.L
squirrel	<i>qə^ʷtʃí^ʷrò^ʷ</i>	L.H.L
grasshopper	<i>ǎtsípwə</i>	L.H.L

Table 3.20: Tonal pattern for quadrisyllabic nouns.

Gloss	Queyu	Surface (phonetic) pitch in isolation
lizard, gecko	<i>rà^ʷtʃí^ʷpə^ʷχqə^ʷ</i>	L.H.L.L
turtledove	<i>pèpétùtù</i>	L.H.L.L

nal morphology. In Pubarong Queyu, there are only prefixes, suffixes and enclitics. Under certain contexts (e.g. when combining with different prefixes) the /H/ tone of a verb base can surface as L instead, and the /L/ tone of a verb base may have a surface form of H.

In summary, independent morphemes in some environments surface with different tones within a given tonal domain. However, the underlying tone of affixes and clitics is unclear because they do not occur alone. Nonetheless, I still analyze them as bearing underlying tone; My reasoning will be given during the following presentation of data.

I group my tonal patterns of different constructions into three types:

1. suffixation and reduplication patterns (see Section §3.5.1 and §3.5.2);
2. constructions whose tonal patterns are fixed (see Section §3.5.3 through §3.5.5);
3. constructions whose tonal patterns are dependent on affixes or verbs (See Section §3.5.6 and §3.5.7).

3.5.1 Suffixes

Suffixes bear a /L/ tone. Their surface tone is conditioned by the verb base tone they attach to. Both verbs and nouns can take suffixes and enclitics. This section presents limited data, but keep in mind that all suffixes and enclitics follow the same pattern that is presented here.

There are several nominalizing suffixes that can attach to verbs. Examples of two nominalizers are given in Table 3.15 and Table 3.16. The surface tones on those suffixes depend on the preceding verbs. If the verb base bears a /H/ tone, the nominalizing suffix will always surface as L. If the preceding verbs have a /L/ tone, the nominalized verbs will bear a L tone, and the nominalizer will bear an H tone. This tonal contrast can be seen in pairs such as *xkú-fə* ‘things to be spun’ and *xkù-fə* ‘things to be carried (on the back)’, *kʰí-fə* ‘things to be sun dried’ and *kʰí-fə* ‘things to give’ from Table 3.15, and *xkú-mə* ‘person who makes things rotate’ and *xkù-mə* ‘buyer’ from Table 3.16..

Tonal processes for these two types are explained below: For /H/-tone words, they combine with /L/-tone suffixes and enclitics, and form an H-L pattern; for /L/-tone words, when combining with a /L/-tone suffix or enclitic, the second /L/ gets deleted due to OCP that prohibits two identical adjacent tones, and a surface H tone is assigned to remedy the constraint on all-L sequence. Therefore, a final L-H pattern is formed.

3.5.2 Property concept words (stative verbs) and their tonal behavior

Property-concept words are a subclass of verbs. They are mostly monosyllabic and can be followed by a direct observation (DIR) enclitic =*tʰi*. They can also be reduplicated. These two patterns are summarized as below.

For /L/ tone property concept terms, there is no variation. Both the reduplicated version and the root version with =*tʰi* ‘DIR’ bear the L.H or L-H pattern. See examples below.

There are two types of H-tone property terms. For the first type, the tonal pattern of reduplicated forms is H.H, while the root form with =*tʰi* ‘DIR’ forms a H-L pattern. See Table 3.22 for examples.

Table 3.21: /L/ tone monosyllabic property concept terms always expand to L.H when reduplicated

Gloss	In isolation (R)	Reduplicated (L.H)	DIR (L-H)
diligent	<i>lǒ</i>	<i>lǒlǒ</i>	<i>lǒ=rí</i>
few, lack	<i>nǐ</i>	<i>nǐnǐ</i>	<i>nǐ=rí</i>
be effective	<i>p^hěi</i>	<i>p^hěip^héi</i>	<i>p^hěi=rí</i>
not straight	<i>q^hǎ^h</i>	<i>q^hǎ^hq^hǎ^h</i>	<i>q^hǎ^h=rí</i>
tender	<i>mǐǎě</i>	<i>mǐǎěmǐǎě</i>	<i>mǐǎě=rí</i>
tall, high	<i>mt^hǔ</i>	<i>mt^hǔmt^hǔ</i>	<i>mt^hǔ=rí</i>

Table 3.22: /H/ tone monosyllabic property concept terms whose reduplicated forms are H.H

Gloss	Isolated (H)	Reduplicated (HH)	DIR (HL)
thin	<i>t^hé^h</i>	<i>t^hé^ht^hé^h</i>	<i>t^hé^h=rí</i>
yellow	<i>né^h</i>	<i>né^hné^h</i>	<i>né^h=rí</i>
big	<i>ndzú^h</i>	<i>ndzú^hndzú^h</i>	<i>ndzú^h=rí</i>
long	<i>sé^h</i>	<i>sé^hsé^h</i>	<i>sé^h=rí</i>
interesting	<i>mdzǎé</i>	<i>mdzǎémdzǎé</i>	<i>mdzǎé=rí</i>

As for the second type of H-tone property terms, both the reduplicated form and the root form with =rí ‘DIR’ form a H.L or H-L pattern:

Table 3.23: H tone monosyllabic property concept terms whose reduplicated forms are H.L

Gloss	Isolated (H)	Reduplicated (HL)	DIR (HL)
red	<i>ǰí</i>	<i>ǰíǰí</i>	<i>ǰí=rí</i>
white	<i>ptɕ^hó^h</i>	<i>ptɕ^hó^hptɕ^hò^h</i>	<i>ptɕ^hó^h=rí</i>
blue, green	<i>ŋé</i>	<i>ŋéŋé</i>	<i>ŋé=rí</i>
hot	<i>q^hǎ^h</i>	<i>q^hǎ^hq^hǎ^h</i>	<i>q^hǎ^h=rí</i>

The /L/ tone and the second /H/ tone patterns in property terms are easy to explain. The tonal sandhi processes are the same as the suffix pattern in the Section §3.5.1. However, for property concept terms with the first type of /H/ tone pattern, the reduplicated form has an H.H pattern. Both these two types of H-tone property words form an H-L tonal pattern when

being suffixed. It is therefore tricky to explain the H.H and H.L patterns in the reduplication forms. For H.H pattern, the H on the second syllable can be seen as a spreading of /H/ to an adjacent toneless syllable, to fulfill the well-formedness condition. Since the surface H on both syllables comes from the same underlying /H/, the surface H.H form would not violate the OCP. However, one has to account for why the /H/ does NOT spread to the adjacent toneless syllable in the H.L pattern. The existence of H.H and H.L patterns in reduplicated property concept terms might be a good reason to split the /H/ into a /H/ category and a /HL/ category. If this alternative analysis is adopted, then one has to account for why verbs with underlyingly different tones (/H/ and /HL/) yield the same tonal pattern when followed by the same suffix (H-L and H-L).

3.5.3 Directional prefixes

Queyu has a set of directional prefixes (DIRC) that can be grouped into two classes based on their tonal behaviors. The H-tone class of prefixes includes *í-/rí-/é-* ‘upward’, *ĺ-* ‘upstream’, and *ḱ-* ‘inward’, which always surface as H phonetically. The L-tone class includes *ǹ-* ‘downward’, *i-* ‘downstream’, and *t̀-* ‘neutral, perfective’ prefixes, which always surface as L phonetically (and never R).

Table 3.24 is a summary of the directional prefixes just described with their tonal marks.

Table 3.24: Directional markers in Queyu

Tone class	Queyu prefix	Uvularized version	Gloss
H	<i>í-, rí, é-</i>	–	‘upward’/UP
L	<i>ǹ-</i>	<i>ǹ̀-</i>	‘downward’/DOWN
H	<i>ĺ-</i>	<i>ĺ̀-</i>	‘upstream/left’/US
L	<i>i-</i>	–	‘downstream/outward/right’/DS
H	<i>ḱ-</i>	<i>ḱ̀-</i>	‘inward’/IN
L	<i>t̀-</i>	<i>t̀̀-</i>	‘NEU’

Each verb base can have at least one default directional prefix. Some verbs may be

able to pair with multiple directional prefixes, while some other verbs only take a specific one. For example, the verb base ‘sun dry’ typically co-occurs with the L-tone prefix *i-* ‘downstream, outward, right’. In contrast, the verb base ‘go’ may occur with all directional prefixes.

In total there can be four combinations: H-tone DIRC + /H/-tone verb (surface tonal pattern H-L), H-tone DIRC + /L/-tone verb (surface tonal pattern H-L), L-tone DIRC + /H/-tone verb (surface tonal pattern L-H), L-tone DIRC + /L/-tone verb (surface tonal pattern L-H). Table 3.25 lists sample combinations of each type. Example (3.8) through (3.11) demonstrate actual prefixed verb forms.

Table 3.25: Combinations of different directional prefixes and verbs.

Default DIRC	DIRC tone	Verb tone	Tonal pattern	1SG	1PL	2SG	2PL	3	Gloss
<i>i-</i>	L	/H/	L-H	<i>k^hó</i>	<i>k^hé</i>	<i>k^hí</i>	<i>k^hí</i>	<i>k^hwí</i>	sun dry
<i>í-</i>	H	/H/	H-L	<i>xk^hó</i>	<i>xk^hé</i>	<i>xk^hí</i>	<i>xk^hí</i>	<i>xk^hwí</i>	stand
<i>ké-</i>	H	/L/	H-L	<i>ɲǒ</i>	<i>ɲǎ</i>	<i>ɲĩ</i>	<i>ɲĩ</i>	<i>ɲỹ</i>	listen
<i>tə-</i>	L	/L/	L-H	<i>k^hǒ</i>	<i>k^hǎ</i>	<i>k^hĩ</i>	<i>k^hĩ</i>	<i>k^hwĩ</i>	give

As indicated from Table 3.25, when occurring in a directional construction with a directional prefix (DIRC) whose surface tone is H, the following verb always bears a L tone. When the DIRC has a L surface tone, the following verb always bears a H tone, regardless of its underlying tone.¹²

These two patterns may be explained by another concept, that of a grammatical tone or tone pattern – i.e., a grammatical category or construction that has only tonal and no segmental instantiation. Grammatical tones differ from lexical tones that are introduced in Section §3.3, that they encode grammatical functions, such as ‘marking morphological classes, morphological processes, and ultimately syntactic configurations as well as semantic and pragmatic functions such as negation and focus’ (Hyman and Leben 2020:57). Certain con-

¹²This is different from the case of Rongba (Zengda), where the surface tone for DIRC is conditioned by the underlying tone of the verb, not the other way around (Zheng 2023).

structions have a grammatical tonal pattern that is associated with them. In such cases, the grammatical tone is replacive and overrides the lexical tones. In the case of directional prefixes, the H-tone prefixes are associated with a replacive HL tone. While the first H tone is linked to the prefix, the L is associated with the verb based due to well-formedness condition. The L-tone prefixes, on the other hand, are associated with a replacive LH tone. The first L is linked to the prefix, and the second H is associated with the verb base.

In addition to indicating the direction of motion, directional prefixes are obligatory in perfective and imperative constructions. While directional and perfective constructions have exactly the same tonal patterns, for some verbs the imperative construction may have a different one.

An example where the tones of imperative and perfective constructions differ is given in (3.8). The verb base ‘sun dry’ occurs with the *i-* ‘downstream’ prefix in both the imperative and the perfective, respectively. The prefix tone differs while the verb base tone remains constant.

- | | |
|--|-------------------------|
| (3.8) H-tone verb ‘sun dry’ pairs with a L-tone DIRC | |
| a. imperative | b. perfective |
| H-H | L-H |
| <i>i-k^hi</i> | <i>i-k^hi</i> |
| DS-sun.dry.2 | DS-sun.dry.2 |
| ‘(You) sun dry!’ | ‘You sun dried.’ |

In some situations, the imperative and the perfective are homophonous as seen in (3.9) and (3.11). In (3.9) the verb ‘stand’ is paired with the ‘upward’ prefix; the tone pattern is H-L in both the imperative and the perfective. Similarly, in (3.11) the verb ‘listen’ co-occurs with the ‘inward’ prefix. The tone pattern on the whole word is also H-L.

- | | |
|--|--------------------------|
| (3.9) /H/ tone verb ‘stand’ pairs with a H-tone DIRC | |
| a. imperative | b. perfective |
| H-L | H-L |
| <i>ʒ-xk^hi</i> | <i>ʒ-xk^hi</i> |
| UP-stand.2 | UP-stand.2 |
| ‘(You) stand up!’ | ‘You stood up.’ |

(3.10) /L/-tone verb ‘give’ pairs with a L-tone DIRC

a. imperative	b. perfective
H-H	L-H
<i>tʰ-kʰí</i>	<i>tə-kʰí</i>
IMP-give.2	NEU-give.2
‘(You) give!’	‘You gave.’

(3.11) /L/-tone verb ‘listen’ pairs with a H-tone DIRC

a. imperative	b. perfective
H-L	H-L
<i>kʰ-nì</i>	<i>kʰ-nì</i>
IN-listen.2	IN-listen.2
‘(You) listen!’	‘You listened.’

For L-tone directional prefixes (DIRC), the imperative construction differs from perfective. For H-tone DIRC, the imperative and the perfective constructions are homophonous, regardless of the tone on the verb base. See Table 6.28 for a summary.

Table 3.26: Homophonous vs different IMP and NEU constructions

	Gloss	Imperative	Perfective
Different	DS-sun.dry.2	<i>í-kʰí</i>	<i>ì-kʰí</i>
	IMP-give.2	<i>tʰ-kʰí</i>	<i>tə-kʰí</i>
Homophonous	UP-stand.2	<i>ʰ-xkʰì</i>	<i>ʰ-xkʰì</i>
	IN-listen.2	<i>kʰ-nì</i>	<i>kʰ-nì</i>

To account for the tonal patterns of the imperative construction, another grammatical tone is introduced. In imperative construction, an H tone is specified for the first syllable, and does not influence the rest of the syllables in the tonal domain. Hence, only DIRCs with a L-tone are affected by this extra grammatical tone leaving the rest of the data unchanged.¹³

I consider this grammatical tone as part of some constructions. The concept of grammatical tone is described in other literature under names such as morphosyntactically-assigned tone (Lin 2012:648). A similar phenomenon is observed in Rongba (Zengda) va-

¹³Rongba (Zengda) Queyu has a similar situation, as the tone on the first syllable (the DIRC) is always H.

riety, where the past negative monosyllabic verbs always have a H-H-L pattern when they occur with a directional prefix (Zheng 2023).

Different constructions contain different grammatical tones. In fact, they play an important role in expressing different functions. Distinguishing imperative from perfective meanings for some verbs is one of them. The following subsections provide more examples of how they function to contrast meanings.

3.5.4 Questions containing directional prefixes

There are several types of questions in Pubarong Queyu. All of them contain the question prefix *æ-*. For perfective questions like ‘Have you done.../Did you do...?’, the question prefix is fused with the directional prefix and bears a R surface tone (see Section §2.5.2). The following verb base bears a L tone regardless of the underlying tone. See Table 3.27.

Table 3.27: Perfective yes/no questions

	Surface pattern	Queyu	Gloss	Translation
a.	R-L	<i>jǎ-k^hi</i>	DS.Q-sun.dry.2	‘Did you sun dry?’
b.	R-L	<i>jǎ-xk^hi</i>	UP.Q-stand.2	‘Did you stand?’
c.	R-L	<i>tǎ-k^hi</i>	NEU.Q-give.2	‘Did you give?’
d.	R-L	<i>kǎ-ni</i>	IN.Q-listen.2	‘Did you listen?’

There is another type of question that has a similar tonal pattern to this one. When one is asking others for suggestions (e.g. ‘What should I do?’), the prefix is still a portmanteau morpheme of the directional prefix and the question prefix, but the tone on the portmanteau prefix will be a surface L tone. The following verb base bears a H tone regardless of its underlying tone. This is different from when one is asking oneself if one should do something. This type of question will be addressed in Section §3.5.7. See Table 3.28 for the ‘ask for advice’ questions.

For disyllabic verbs, the pattern will be L-H.L regardless of the verb’s tone in iso-

Table 3.28: When asking others for advice

	Surface pattern	Queyu	Gloss	Translation
a.	L-H	<i>jǎ̀-^hó</i>	DS.Q-sun.dry.1SG	‘Do I sun dry?’
b.	L-H	<i>jǎ̀-^hxk^hó</i>	UP.Q-stand.1SG	‘Do I stand?’
c.	L-H	<i>tǎ̀-^hó</i>	NEU.Q-give.1SG	‘Do I give?’
d.	L-H	<i>kǎ̀-^hó</i>	IN.Q-listen.1SG	‘Do I listen?’

lation. See Table 3.29 for examples.

Table 3.29: ‘Asking for advice’ questions with disyllabic verb bases

Verb in isolation	Question	Gloss	Translation
<i>p^hǎ́^hó</i>	<i>tǎ̀-^hp^hǎ́^ht^hó</i>	NEU.Q-scatter.1SG	Do I scatter?
<i>fǎ́^hó</i>	<i>kǎ̀-^hfǎ́^hó</i>	IN.Q-look.1SG	Do I look?
<i>nt^hǎ́^hnt^hó</i>	<i>tǎ̀-^hnt^hǎ́^hnt^hó</i>	NEU.Q-pull.1SG	Do I pull?

The neighboring village, *xúli* (Yazhong), has a slightly different tonal pattern from *xló* (Suoyi). The surface tone on the prefix is H instead of L.

Table 3.30: ‘Ask for advice’ questions in Yazhong speech

	Surface pattern	Queyu	Gloss	Translation
a.	H-H	<i>jǎ́-^hó</i>	DS.Q-sun.dry.1SG	‘Do I sun dry?’
b.	H-H	<i>jǎ́-^hxk^hó</i>	UP.Q-stand.1SG	‘Do I stand?’
c.	H-H	<i>tǎ́-^hó</i>	NEU.Q-give.1SG	‘Do I give?’
d.	H-H	<i>kǎ́-^hó</i>	IN.Q-listen.1SG	‘Do I listen?’

For these two types of questions, tonal patterns are fixed no matter which tone the verb bases bear in other grammatical contexts. These are another two examples where grammatical tones override lexical tone. For perfective questions, the tonal pattern associated with this construction is R-L for monosyllabic verbs, or R-L.L for disyllabic verbs. As for ‘asking for advice’ questions, the tonal pattern is L-H or L-H.L depending on the length of the verb base.

3.5.5 Prohibitive

There are two ways to express a prohibitive sense: one with a directional prefix followed by a prohibitive prefix, the other with a portmanteau morpheme that combines these two. The tonal behaviors of these two methods also follow fixed patterns: H-L-L on the whole verb form for the first one, and H-L on the whole verb form for the second one. The first syllable bears an H tone, while the rest of the syllables within that verbal word is L. Notice that for the fused version, the vowel in the portmanteau prefix is always an /æ/, but the vowel of the directional prefix in the non-portmanteau version can change to a higher position (from /ə/ to /ɔ/), such as *lə-* to *lɔ-*, and *nə-* to *nɔ-*. See Table 3.31 for details.

Table 3.31: Two prohibitive expressions

Pattern 1	Surface pattern	Gloss	Pattern 2	Surface pattern	Gloss	Translation
<i>í-tæ-kʰí</i>	H-L-L	DS-PROH-sun.dry.2	<i>jæ-kʰí</i>	H-L	DS.PROH-sun.dry.2	‘Don’t sun dry.’
<i>é-tæ-xkʰí</i>	H-L-L	UP-PROH-stand.2	<i>jæ-xkʰí</i>	H-L	UP.PROH-stand.2	‘Don’t stand.’
<i>*tə-tæ-kʰí</i>	NA	NEU-PROH-give.2	<i>tæ-kʰí</i>	H-L	NEU.PROH-give.2	‘Don’t give.’
<i>ké-tæ-ŋí</i>	H-L-L	IN-PROH-listen.2	<i>kæ-ŋí</i>	H-L	IN.PROH-listen.2	‘Don’t listen.’
<i>lɔ-tæ-ʃí</i>	H-L-L	US-PROH-go.2SG	<i>læ-ʃí</i>	H-L	US.PROH-go.2SG	‘Don’t go (to Xinlong’s direction).’
<i>nɔ-tæ-ʃí</i>	H-L-L	DOWN-PROH-go.2SG	<i>næ-ʃí</i>	H-L	DOWN.PROH-go.2SG	‘Don’t go (to Chengdu).’

3.5.6 Negation prefixes

There are several negation markers. The imperfective negation prefix *mæ-*, negation prefix *mɔ-* that occurs in non-imperfective contexts, and a negation prefix with a restricted

distribution *méri-*. These occur in different constructions with different tonal behaviors.

The negation marker that occurs in non-imperfective (e.g. perfective) contexts always follows the directional prefix (as DIRC is obligatory in perfective utterances). The tonal pattern for this construction always follows the pattern H-H-L. That is, the directional prefix and the negation marker always bear an H tone, and the following verb base (monosyllabic or disyllabic) always bears a L tone. See Table 3.32.

Table 3.32: Tonal behavior of the elsewhere negation marker *mə-*

Queyu	Surface pattern	Gloss	Translation
<i>í-mé-k^hò</i>	H-H-L	DS-NEG-sun.dry.1SG	‘I didn’t sun dry.’
<i>té-mé-k^hò</i>	H-H-L	NEU-NEG-give.1SG	‘I didn’t give.’
<i>é-mé-xk^hò</i>	H-H-L	UP-NEG-stand.1SG	‘I didn’t stand.’
<i>ké-mé-ɲò</i>	H-H-L	IN-NEG-listen.1SG	‘I didn’t listen.’

The third perfective negation prefix, *mer-*, has a more restricted distribution than the other two negators. So far, this prefix is only observed before verbs such as *ndú* ‘see.1SG’, *mǎ^h* ‘hear’, *ró* ‘find.1SG’, *yó* ‘finish.1SG’, *ndzɥ^h* ‘EXP’, and *tsǐ* ‘EGO’. The tonal pattern is H-L, where the negation prefix always bears an H tone. The following verb base bears a surface L tone regardless of its underlying tone.

Table 3.33: Tonal behavior of another more-restricted negation prefix *méri-*

Queyu	Surface pattern	Gloss	Translation
<i>méri-ndò</i>	H-L	NEG-see.1SG	‘I didn’t see.’
<i>méri-mǎ^h</i>	H-L	NEG-hear.1SG	‘I didn’t hear.’
<i>méri-rò</i>	H-L	NEG-find.1SG	‘I didn’t find.’

The negation form that occurs in the imperfective contexts has a low vowel /æ/, i.e., *mæ-*. This prefix differs from the previous two in that the imperfective negation construction does NOT obscure or supersede the lexical tone of the verb base. Instead, the tone pattern on the whole verb depends on the that of the base. If the base has a /H/ tone, the *mæ-* prefix

will also bear a H tone. If the base has a /L/ tone, the *mæ*- prefix will bear a L tone, and the surface tone on the base will be H. See Table 3.34.

Table 3.34: Tonal behavior of the imperfective negation marker *mæ*-

Queyu	Surface pattern	Gloss	Translation
<i>mæ-k^hó</i>	H-H	NEG-sun.dry.1SG	‘I don’t sun dry.’
<i>mæ-k^hó</i>	L-H	NEG-give.1SG	‘I don’t give.’
<i>mæ-xk^hó</i>	H-H	NEG-stand.1SG	‘I don’t stand.’
<i>mæ-ŋó</i>	L-H	NEG-listen.1SG	‘I don’t listen.’

The *mæ*- prefix is analyzed as toneless. When it precedes a /H/ tone verb base, the /H/ of the base spreads onto the prefix, and forms an H-H pattern. When it precedes a /L/ tone base, the /L/ delinks from the verb and reassociates with the prefix, while an H is assigned to the verb to remedy the no all L constraint, producing a L-H pattern.

3.5.7 Imperfective questions

For imperfective questions, the *æ*- prefix always bears an H tone phonetically, the following verb base bears an H tone or L tone depending on their underlying tone. Verbs with /L/ tone will be pronounced with a L tone in this case. See Table 3.35 for examples.

Table 3.35: Imperfective yes/no question prefix *æ*-

	Queyu	Surface pattern	Gloss	Translation
a.	<i>æ-k^hí</i>	H-H	Q-sun.dry.2	‘Do you sun dry?’
b.	<i>æ-xk^hí</i>	H-H	Q-stand.2	‘Do you stand?’
c.	<i>æ-k^hí</i>	H-L	Q-give.2	‘Do you give?’
d.	<i>æ-ŋí</i>	H-L	Q-listen.2	‘Do you listen?’

The question prefix is similar to the imperfective negation prefix, in that the tonal patterns change depending on the verb. What is different here is that for the imperfective negation construction, the verb always bears a surface H tone (i.e., the tone on the prefix alternates between L and H), while for imperfective questions, the question prefix always

occurs with a surface H, and the verb base's tone changes. I am analyzing the tonal behavior of the question prefix *æ-* as a case of tone polarity, which is when a morpheme itself is toneless, but 'receives its tone by context' (Hyman and Leben 2020:57). The question prefix *æ-* remains toneless before a /H/ tone verb, which is why it yields a H-H pattern just like imperfective negation prefix does. However, when *æ-* precedes a /L/ tone verb, its surface tone alternates to H, hence the H-L pattern.

3.5.8 Summary

Two contrasting tones for monosyllabic free morphemes are proposed for Pubarong Queyu: /H/ and /L/. Below is a list of the affixes and enclitics whose tonal values have been discussed.

- Suffixes and enclitics have an underlying /L/,
- Prefixes that always bear a surface H: *í-* 'upward', *lǎ* 'upstream', *kǎ-* 'inward', *ǎ-* 'Q', *mér-* 'NEG'
- Prefixes that always bear a surface L: *nǎ-* 'downward', *ǎ-* 'downstream', *tǎ-* 'neutral'
- Prefixes that have a \emptyset : *mǎ-* 'NEG'

Here is a series of constraints and associated rules that need to be applied in order to achieve the surface tonal patterns of these different prefix constructions:

1. Obligatory tonal contour, which states that no two adjacent /H/s (or no two identical tones) are allowed. Once there are two /H/s or two /L/s that are next to each other in a morphological derivation, the second tone gets deleted;
2. At least one H per tonal domain needs to be specified, so whenever there is an all L sequence, an H is assigned to the last TBU;
3. Tonal spread: The /H/ in a morpheme can spread to an adjacent toneless morpheme;
4. Grammatical tone: Some construction's tonal patterns are fixed. While some grammatical tone morphemes concern a specific TBU (i.e., the imperative construction), some grammatical tones target the whole tonal domain (e.g. perfective question, prohibitive construction, perfective negation construction, 'asking for suggestion' construction).

3.6 Other issues that need attention

In Section §3.4, tonal patterns of several constructions are described and analyzed. There are still phenomena that would benefit from further investigation, which are not addressed in this chapter. These include tonal patterns for multisyllabic monomorphemic words, compounding patterns, the automatic lowering of the pitch within a tonal domain, and a contrast between phonetic R and L.

Tonal patterns for multisyllabic monomorphemic words are not explained in this chapter. They certainly need to be investigated in future research.

Compounding is pretty common in Queyu. For verbs, there are multi-verb root constructions. For nouns, a noun phrase can consist of several modifiers such as classifiers and property concept terms. How tones behave in these situations and if they form a tonal domain in themselves merit further study.

An example of a compounding tonal pattern that may be different from what has been discussed in previous sections is the lowering of /H/ in some contexts. A common and frequent compounded word is *lí lí-mə̀* ‘planter, plougher’. The first *lí* means ‘field’, the second *lí* means ‘plough’, and the *-mə̀* is the agent nominalizer. The two homophonous *lí* elements both bear a /H/ tone. But when said in sequence, the /H/ on the second *lí* is lower than the /H/ on the first *lí*. This is different from the monomorphemic disyllabic words with HH pattern, or the prohibitive and perfective negation constructions, where the first two syllables are also H, but the two surface H tones are of the same pitch.

A similar phenomenon would be the lowering of pitch in a sequence of /L/. For multisyllabic words, if there are multiple /L/ tone syllables/morphemes following an H within a tonal domain, the pitch will not be the same for all L tones, but will go down gradually. An example is the expression *nə̀-pfǝ-s^{hi}=tə̀* ‘what (upstream people) say’ in (3.12). The element *pfǝ* ‘say’ bears the H tone, and the following suffix and enclitic are each /L/ tone; the pitch on *=tə̀* is lower than on *-s^{hi}*. Articulatorily speaking, this may be the result of the pressure lowering in the vocal tract (Daudey 2014:65). Phonologically speaking, this resembles

downstep or downdrift in some African languages.

(3.12) The lowering of pitch in a sequence of /L/.

lèndzǒ-pì nǎ-pfǒ-s^hí=tǎ *vèndzǒ-pì=tǎ^s=í* *χó* *kù* *tǎí* *nǐ*
 US-person DOWN-say-NMLZ=ISM1 DS-people=PL=ISM2 know know.3 GNR say.3

ŋù *tǎí*
 be.capable.3 GNR

‘What upstream people say, downstream people know, and are able to speak.’
 上游的人说的话，下游的人全部都懂，也会说。 (QVY-326: 11)

The last issue that needs to be addressed is whether there is a contrast between surface R and L. Only one example of this contrast has been observed so far, which is ‘wait up (for me)’ and ‘come here’. Compare (3.13a) and (3.13b). In each, the directional prefix is an H-tone prefix, and the following verb should bear a surface L tone. But for ‘come here’, the surface tone on the verb is R instead of L. What is peculiar about this example is that for the word ‘to come’, *lí* is the suppletive form that is used in the imperative context only. In other contexts and when the person is different, this verb base starts with a /t/ onset (see (3.13c)). This may be just one exception, but it is worth digging into the data to see if there are any more contrasts like that.

(3.13) Possible surface R and L minimal pair

a. *kǎ-lí*
 IN-wait.2

‘Wait up (for me).’

b. *kǎ-lǐ*
 IN-come.2

‘Come here.’

c. *xú tú=rí*
 rain come.3=DIR

‘It is raining.’

CHAPTER 4

PARTS OF SPEECH

This chapter starts by discussing the theoretical framework used to distinguish major word classes, nouns and verbs, with a focus on establishing property concept words as a subclass of verbs. The rest of the chapter will deal with other minor classes whose identity is determined by their morphosyntactic behavior in relation to the major word classes established earlier. Specific phenomena of nominal and verbal morphosyntax are detailed in the following two chapters.

Section §4.1 discusses the notion of parts of speech and the problem of adjectives, and briefly presents Croft's (2001) approach to the problem. Section §4.2 examines typological features of Tibeto-Burman parts of speech and introduces relevant data on Queyu morphosyntax. Specifically, Section §4.4 introduces data to illustrate Queyu verbal morphology, with an emphasis on the structural and functional differences found within the verbal class. Section §4.5 discusses Queyu data in constructions expressing various discourse functions, examining how semantic concepts are expressed via different morphosyntactic strategies to code different functions. Section §4.6 compares and discusses the results from Section §4.5 by incorporating the framework introduced in Section §4.1, and concludes the discussion on major word classes. Section §4.7 presents data on morphology shared by Nouns and Verbs, and Section §4.8 demonstrate other minor word classes.

4.1 Issues with Classifying Parts of Speech and Introduction to Croft's Radical Construction Grammar Framework

Parts of speech, or word classes, refer to the ways in which languages systematically subdivide their lexicons. Members of a single word class will behave similarly in terms of morphosyntax and other linguistic properties. Grouping criteria may be morphological, syntactic, or semantic (Anward 2000:3; Dixon 2004:3; Radford 1988:57; Langacker 1987:189; Schachter and Shopen 2007:1).

A distinction between nouns, verbs, and adjectives as separate and coherent word

classes is common in many of the world's languages. Croft (2001:63) discusses these categories in terms of how traditional grammars sometimes define word classes based on semantics, such that a noun denotes a person (cf. English I, you, Nancy, grandma), a thing (desk, table, house), a place (river, town, there), or any entity (cat, bird, snake); a verb denotes an action (swim, go, sing); and an adjective denotes the property concept or state of a noun (happy, sad, interesting). However, there are a number of languages which do not divide their lexicons this way, and property concept terms are often syntactically incorporated into the noun or verb classes.

This chapter follows Croft (2001), who critiques previous theories of parts of speech for their shortcomings and engaging in 'methodological opportunism', and provides a theoretical framework for categorizing word classes. He proposes that syntactic categories are defined by constructions plus what he calls 'propositional act functions' in individual languages, and integrates Typological Markedness Theory as discussed in Croft (1990b). Typological markedness can be defined on the basis of the morphosyntactic properties as related to their propositional act functions, of each lexical item in a particular language. Croft's (2001) method differs from that of examining morphosyntactic distribution only in that it combines this criterion with constructions expressing different discourse functions. Croft divides morphosyntactic markings into two types, which he calls structural coding and behavior potential. Structural coding refers to function-indicating morphosyntax, e.g. constructions such as 'copula and non-copula constructions, relativizing or other attributive constructions, and nominalization constructions' that 'actually encode the propositional act function' (Croft 2001:86, 88). Behavioral potential, on the other hand, involves inflectional constructions indicating things such as tense, aspect, number, gender, etc. (Croft 2001:90–91). Behavioral potential also includes the number of the constructions, or contexts, in which a lexical item can occur (Croft 1990b:77–84). Croft's criteria for defining typological (un)markedness are listed below:

- (4.1) Markedness criteria (Croft 2001:90–91):

- a. Structural coding: If a language codes a typologically unmarked member of a grammatical category by n morphemes ($n \geq 0$), then it codes a typologically marked member of that category by at least n morphemes.
- b. Behavioral potential: If a construction encoding the behavioral potential of members of a grammatical category is found in that category, then it is found with at least the unmarked member of that category for that construction.

Croft approaches the issue of word class categorization by considering the discourse function of lexical items and how they encode propositional acts (Croft 2001:86–87).¹⁴ In terms of propositional acts, Searle (1969) describes the referring function as identifying an entity (ibid.:85), and the predicating function as the ascription of a property to a referent (ibid.:100). Croft (1991:131) expands upon these descriptions for the modification act. Modification, argued by Croft (1991:131), is an ‘ancillary function to reference and predication’, as modifiers function to enrich or provide additional information about the referent. Therefore, while reference and predication can be understood as the two most primary propositional acts, modification is a kind of secondary act and an ‘intermediate’ between the two, as this function can mimic either reference or predication (Croft 1991:111, 131). We will see that Queyu, like many other Tibeto-Burman languages, uses the same lexical items but different morphological constructions to express predicating and modifying functions. While nouns and verbs in Pubarong Queyu are distinguishable morphosyntactically, property terms share morphosyntactic behaviors with both nouns and verbs in different constructions.

According to Croft (1991, 2001), the semantic classes of what he calls objects, actions, and properties are typological prototypes used for the three propositional act functions of referring, predicating, and attributing. These three functions are the foundations for the traditional three-way distinction among nouns, verbs, and adjectives (Croft 2001:87). These definitions are different from the traditional semantic definitions in which a noun denotes an entity, person or thing; a verb denotes an action; etc. In arguing for universals of semantics and pragmatic function, Croft (2001:36) states:

¹⁴Discussions of propositional acts can be found in Searle (1969) and Croft (1990a).

- (4.2) a. Noun, verb, and adjective are not categories of particular languages,
 b. But noun, verb, and adjective are language universals—that is, there are typological prototypes which should be called noun, verb, and adjective.

For Croft, the semantic class of a lexical item can be evaluated by its relationality, stativity, transitoriness, and gradability. Relationality refers to whether the definition of a lexical item depends on the reference of another concept. Stativity refers to whether a concept denotes a state or process. Transitoriness refers to whether the state or process denoted by the concept is transitory or permanent, and gradability refers to whether the lexical item can be graded along a continuum (2001:87). The three semantic classes of object, action, and property have different combinations of values in terms of the four semantic properties introduced just above. Table 4.1 illustrates the mapping between semantic classes and semantic properties.

Table 4.1: Semantic properties of prototypical parts of speech (Croft 2001:87)

	Relationality	Stativity	Transitoriness	Gradability
Objects	nonrelational	state	permanent	nongradable
Properties	relational	state	permanent	gradable
Actions	relational	process	transitory	nongradable

The relationship between these three semantic prototypes and the three propositional acts can be illustrated in Table 4.2.

Croft’s (2001) theory of parts of speech incorporates three linguistic levels by combining criteria from morphosyntax, semantics and discourse functions. Lexical items that fall into the three semantic prototypes can fulfill three basic propositional acts, and a typologically prototype lexical class is unmarked in certain constructions.

Markedness is defined by both structural coding and behavior potential, which are function-indicating morphosyntax and inflections, respectively. While markedness in struc-

Table 4.2: Overtly marked structural coding constructions for parts of speech (Croft 2001:88)

	Reference	Modification	Predication
Objects	UNMARKED NOUNS	genitive, adjectivalizations, PPs on nouns	predicate nominals, copulas
Properties	deadjectival nouns	UNMARKED ADJECTIVES	predicate adjectives, copulas
Actions	action nominals, complements, infinitives, gerunds	participles, relative clauses	UNMARKED VERBS

tural coding compares the number of morphemes that are needed for coding the function under investigation in a particular construction, markedness in behavioral potential compares the presence of possible inflectional or periphrastic morphology in the said constructions for expressing that function (Croft 2001:91–92). So, nouns are those lexemes that are unmarked in constructions that have a reference function, verbs are those that are unmarked in predication function, and adjectives are those that are unmarked in modification function. Within each category, members that have the most varied behavioral potential, which means, members that are the most ‘versatile’, that possess the most inflectional morphological distinctions and/or can occur in the most syntactic contexts, are the unmarked ones, while members that cannot display the full inflectional distinctions and/or syntactic distribution are marked compared to the ones with more varied behavioral potential.

In the next section, the structural coding and behavioral potential properties of different Queyu lexical items will be described. Focus will be placed on how these lexical items behave in different constructions with reference to their capacity to indicate the three propositional act functions of reference, predication, and modification. Terminology used in the rest of this chapter are consistent with Croft (2001), namely, that cross-linguistic typological prototypes of semantic and pragmatic functions are called noun, verb, and adjective,

and language-specific parts of speech are called Noun, Verb, and Adjective.

4.2 Introduction to Tibeto-Burman Parts of Speech Studies and Queyu

Morphosyntax

In Tibeto-Burman languages, the distinction between Nouns and Verbs is usually clear-cut, while an independent class of Adjectives does not always exist. Post (2008:339–340) and DeLancey (2015:41–42) address the fact that typical Tibeto-Burman property concepts are usually expressed by stative Verbs that behave like finite Verbs in predication constructions but have to be nominalized to modify Nouns. With these descriptions, and Croft’s framework in mind, the discussion of the data presented in this chapter focuses on determining whether or not there is a distinct Adjective class in Queyu. Analysis shows that Queyu is like other TB languages in that two categories, Nouns and Verbs, are clearly distinct from each other based on morphosyntactic behavior. In addition, it does not have a distinct Adjective class. Rather, property concept words are a subclass of Verbs, albeit marked members within the Verb category. The following sections present data on Queyu morphosyntax and arguments for this claim. Some data on the morphosyntax of Nouns and Verbs will be presented and contrasted, as they are distinct from each other. There is still, however, some morphosyntax that both Nouns and Verbs share, and this will be illustrated in Section §4.7. The data on property terms in Pubarong Queyu will be examined against the background of the description of Nouns and Verbs. Both structural coding and behavioral potential constructions will be examined. A more detailed and thorough description on the morphosyntax for Nouns and Verbs is given in Chapter 5 and Chapter 6.

4.3 Nominal Morphosyntax

Nouns in Queyu can take case markers, number marking and information structure markers (ISM). Information structure markers occur in the context of contrasting or emphasizing the entities that are under discussion. A detailed list of nominal markers will be given and discussed in Chapter 5. Below are several examples illustrating uses of bare nouns and

nouns with suffixation.

Example (4.3) demonstrates the use of *mótsi* ‘sun’ as a subject without any additional affixation in a clause, while (4.4) is an example where *mótsi* ‘sun’ serves as the subject with ISM1.

- (4.3) *mótsi* ‘sun’ as the subject with no marking

tĩ pwás^hús^hu tʃò^ʷ tʃí mótsi t^hèkó nè-tsó lə t^hə=té
 then white become GNR sun good DOWN-shine NF2 this=ISM1

‘If it’s sunny (literally: the sun shines well), then it (the cheese) will become white.’

如果太阳好的话，就会变得白白的 (QVY-331: 14)

- (4.4) *mótsi* ‘sun’ as the subject with ISM1 enclitic

mótsi=tə kó-tsə=ni
 sun=ISM1 IN-shine=NF1

‘Then the sun shines.’

太阳就升起来了 (QVY-329: 57)

Examples (4.5) through (4.8) illustrate utterances where *k^hími* ‘cow’ serves as the object. In (4.5), there is no additional marking on *k^hími*. In (4.6) and (4.7), number marking as well as case marking are attached to *k^hími*. These two markers can concatenate, as demonstrated in (4.8).

- (4.5) *k^hími* ‘cow’ as the object with no marking

k^hími nə-xtfǒ vǎ tʃí
 cow DOWN-squeeze.SAP do.1PL GNR

‘We milk the cows.’

我们给牛挤牛奶 (QVY-329: 14)

- (4.6) *k^hími* ‘cow’ as the object with number marking

k^hími=tʃǎ^ʷ jǒ qǎ^ʷ-χq^hǎ^ʷ=ni
 cow=PL again IN-tie.1PL=NF1

‘Tie these cows up again.’

把这些牛再拴起来 (QVY-329: 63)

(4.7) *k^hímí* ‘cow’ as the object with case marking

tǐ k^hímí=xə t^hə zǐ fǐ gá-tǐ tsì tǐ
 then **cow=LOC** this way feed.NOM need.1PL-EXIST EGO GNR

‘Then we need to feed cows like this.’

然后我们需要像这样给牛喂吃的

(QVY-329: 156)

(4.8) *k^hímí* ‘cow’ as the object with with both number and case marking

tǐ mótso tǐ tǐ k^hímí=tǐá^h=xə tǐ t^hə=tǐá^h tə-fá ni
 then cold.season that.time then **cow=PL=LOC** then this=PL NEU-feed.1PL NFI

‘Then when it is the cold season, then we feed cows those grass.’

然后到了冬天的时候，我们就把那些草喂给那些牛

(QVY-329: 154)

4.4 Verbal Morphosyntax

Verbs in Pubarong Queyu cannot take any of the nominal suffixes and enclitics introduced in Section §4.3, unless first followed by a nominalizer. (The seven enclitics and particles that both Nouns and Verbs can take will be introduced in Section §4.7 of this chapter.)

In addition to nominalization suffixes, Verbs can also be prefixed by direction, prohibitive, negation and question markers. Some Verbs can also conjugate for person and number. There are Verbs that can display all of the morphosyntactic properties mentioned above. There are also Verbs that can only display some. While some examples of prefixed Verbs are given in Chapter 3, some of them will be re-introduced in the following subsections for demonstration and discussion on each of these verbal morphosyntactic behaviors.

The verbal template is shown in Figure 4.1.

Directional prefix-	Negation (NEG)-	Verb base (may include argument indexation)	-Nominalizer (NMLZ)
	Interrogative marker (Q)-		
	Prohibitive (PROH)-		

Figure 4.1: The verbal template in Queyu

Maximally there can be two prefixes on Verbs, a directional prefix and a negation, interrogative, or prohibitive marker. In some instances, the two prefixes can fuse, while at other times they cannot (see Section §2.5). The negation, interrogative, and prohibitive markers are in a paradigmatic relationship. What I call ‘Directional’ prefixes sometimes vary depending on the literal direction of the motion, but they also indicate aspect and mood. Negation markers can vary based on aspect. Verb bases are marked for person and number of the subject, and they are not always in parsable segmental affix forms. Certain argument indexation elements (though not all) and nominalizers are the only type of verbal suffix which have been observed. There are different types of nominalizers based on the concept expressed by the nominalization. Specific examples illustrating these variations can be found in Section §6.8.

An utterance in Queyu can take a sentence final particle after the final verb. There are three attested particles: a generic (GNR) marker, an egophoric (EGO) marker, the direct observation marker (DIR). The generic particle marks common practices, such as traditions or actions people do on a regular basis. Sometimes the generic particle is omitted in utterances with a first-person subject. Sometimes the egophoric and a generic marker can co-occur. Examples containing these sentence final particles are given in Section §7.1.

4.4.1 Person and number agreement

Queyu has a somewhat reduced indexation paradigm compared to other languages in its family, but there are still several distinct person-number inflections. Since indexation on Verbs are not always parsable segmental affixes, this dissertation will adopt the term ‘Verb base’ to refer to the unit that takes affixation (see Section §6.2 for detailed discussion). While argument indexes are suffixed to verb roots, they fuse with the vowel in the verb root but do not change the vowel quality of the root. Vowel fusion processes are prevalent in Pubarong Queyu, as has been described in Section §2.5. This subsection merely provides a basic description of the verb base types and argument suffixes to lay the groundwork for discussing the behavior of Verbs.

There are three types of verbs based on their argument conjugation patterns. The first type does not conjugate for person or number. A large class of this type consists of stative verbs, or verbs expressing property concepts. Several examples of this type include *ndzúʳ* ‘big’, *pfǎ* ‘say, speak’, *kʰí* ‘win, beat’, *kwǎ* ‘lock (a door)’, and *pśʳqwǎʳ* ‘dig’.

The second type of verb only distinguishes Speech Act Participants (SAP) and non-SAP, with the non-SAP form containing an inserted bilabial consonant—a relic of an inverse marker still prevalent in nearby Rgyalrongic languages. Examples of this type include ‘throw’ (*rǎ* for SAP form and *βrǎ* for non-SAP form), ‘pay, submit’ (SAP form: *qzǎǎ*, non-SAP form: *qzǎwǎǎ*), ‘cut, saw’ (SAP form: *tǎǎ*, non-SAP form: *ptǎǎ*), ‘wipe’ (SAP form: *dǎ*, non-SAP form: *bdǎ*), ‘release’ (SAP form: *ǰǎʳ*, non-SAP form: *ϕǰǎʳ*), and ‘hand, give’ (SAP form: *xǎʳ*, non-SAP form: *xǎwǎʳ*).

The third type of verb inflect for both person and number. This is the type that shows the most structural diversity. Table 4.3 illustrates several examples demonstrating such complexity. Within this type, first person singular and plural forms end with *-u* and *-ǎ* for plain vowel stems (such as ‘say, speak’ and ‘feed, give’ from Table 4.3), and with *-uʳ* and *-ǎʳ* for uvularized vowel stems, respectively. Only a few verbs with a plain vowel stem contrast number in second person (such as ‘say, speak’), while verbs with uvularized vowels do not distinguish number in second person. Third person forms exhibit the greatest variation. Some third person forms contain an inserted bilabial consonant like the second type of verb described above (e.g. ‘sit’, ‘dip’, ‘hold, take’ from Table 4.3), while others do not (e.g. ‘say, speak’, ‘feed, give’, ‘poke, stab’).

4.4.2 Directional prefixes and aspect marking

Directional prefixes are a set of prefixes indicating the direction of an action. Most Qianguic and Rgyalrongic languages have six markers, which are based on solar, vertical, and riverine systems. Queyu’s directional prefixes do not include markers relating to a riverine system as found in other Qianguic and Rgyalrongic languages. A list of directional prefixes

Table 4.3: Verbs that contrast both person and number

Gloss	1SG	1PL	2SG	2PL	3
say, speak	<i>nǔ</i>	<i>nǎ</i>	<i>nǔ</i>	<i>nǐ</i>	<i>nǐ</i>
feed, give	<i>fǔ</i>	<i>fǎ</i>	<i>fǐ</i>	<i>fǐ</i>	<i>fǔ</i>
sit	<i>tsó</i>	<i>tsǎ</i>	<i>tsí</i>	<i>tsí</i>	<i>ptsó</i>
dip	<i>fǔ^ʰfú^ʰ</i>	<i>fǔ^ʰfá^ʰ</i>	<i>fǔ^ʰfě^ʰ</i>	<i>fǔ^ʰfě^ʰ</i>	<i>fǔ^ʰp^ʰfú^ʰ</i>
hold, take	<i>zǔ^ʰ</i>	<i>zǎ^ʰ</i>	<i>zě^ʰ</i>	<i>zě^ʰ</i>	<i>βzǔ^ʰ</i>
poke, stab	<i>xt^ʰfǔ^ʰ</i>	<i>xt^ʰfǎ^ʰ</i>	<i>xt^ʰfě^ʰ</i>	<i>xt^ʰfě^ʰ</i>	<i>xt^ʰfǔ^ʰ</i>

are already given in Section §2.6.2, and they are re-introduced below as Table 4.4. The tonal behaviors for directional prefixes as well as the rest of the verbal morphosyntactic constructions can be found in Section §3.5.3 on suprasegmental phonology.

Table 4.4: Directional prefixes in Queyu

Queyu prefix	Uvularized version	Gloss
<i>í-, rí, ǎ-</i>	-	upward
<i>nǎ-</i>	<i>nǎ^ʰ-</i>	downward
<i>lǎ</i>	<i>lǎ^ʰ-</i>	upstream/left
<i>ǐ-</i>	-	downstream/outward/right
<i>kǎ-</i>	<i>kǎ^ʰ-</i>	inward
<i>tǎ-</i>	<i>tǎ^ʰ-</i>	NEU
<i>ǎ-</i>	<i>ǎ^ʰ-</i>	Q
<i>tǎ-</i>	<i>tǎ^ʰ-</i>	PROH
<i>mǎ-</i>	<i>mǎ^ʰ-</i>	NEG
<i>mǎ-</i>	<i>mǎ^ʰ-</i>	NEG
<i>mǎ-</i>	-	NEG

Different functions of directional prefixes are illustrated by examples below. Examples (4.9) through (4.11) use the *nǎ-* ‘DOWN’ prefix to demonstrate the directional, perfective, and imperative functions of the ‘DOWN’ directional prefixes. All other directional prefixes can have these three functions. Details of the basic and the extended functions of directional prefixes can be found in Section §6.3.

(4.9) *nǎ-* indicating the direction of the motion

tʰíró=kù nǎ-xfwǎ
bucket=INE **down-pour.3**

‘Pour water into the bucket.’
把水倒入水桶。

(QVY-327: 38)

(4.10) *nǎ-* indicating aspect

tǐ wǎpǎ^ʷ kʰùtsí sʰí=qʰǎ^ʷ nǎ-blǎ=ni
then downside gutter wood=INS **DOWN-do.1PL=NF1**

‘Then the gutter is over there, it’s made by wood (by us).’
然后那边有水槽，（我们）在木头上弄的。

(QVY-327: 17)

(4.11) *nǎ-* indicating imperative

tǐ nǎ βrí=tǎ í-ptʂʰje=ni éwǎ lùpí tʰyè nǎ-ní
then 2SG horse=ISM1 UP-untie=NF1 downside valley bottom **IMP-lead.2**

tǎ-ní=ni
NEU-say.3=NF1

‘Then the rabbit said: “Then you untie the horse and take it to the valley.”’
兔子说：‘然后你把马解开，带到山沟下面。’

(QVY-337: 7)

4.4.3 Question, prohibitive and negation markers

Other prefixes that can attach to a Queyu Verb are interrogative (Q), prohibitive (PROH) and negation (NEG) markers. Interrogative markers have two allomorphs, *a^ʷ-* or *æ-*. When combined with directional prefixes, these two prefixes will merge into one syllable (see Section 2.5). In (4.12) and (4.13), a Q marker and a merged morpheme example are given.

(4.12) the interrogative prefix *æ-*

æ-kʰí
Q-sun.dry.2SG

‘Do you sun dry (are you going to sun dry)?’

(4.13) the fusion of DIR *i-* and interrogative prefix *æ-*

jǎ-k^{hi}

DS.Q-sun.dry.2SG

‘Have you sun dried?’

The two prohibitive constructions mentioned in Chapter §3.5.5 are given below, with (4.14) being the construction in which DIRC and PROH prefixes are separate, and (4.15) the construction in which DIR and PROH are fused.

(4.14) prohibitive marker *tæ-* and DIRC *lǎ-* are separate

lǎ-tæ-f^{hi}

US-PROH-go.2SG

‘Don’t go (to Xinlong’s direction).’

(4.15) prohibitive marker *tæ-* and DIRC *lǎ-* are fused

lǎ-f^{hi}

US.PROH-go.2SG

‘Don’t go (to Xinlong’s direction).’

Negation prefixes can vary based on aspect. See (4.16) through (4.18) for demonstrations of imperfective and two perfective negators, respectively.

(4.16) imperfective negator *mæ-*

tǎ^ʳ t^{hə}=tə *ŋǎ pjɛrjɛ=tə* *xtsɪʃsɪ* *mæ-ŋó*

then this=ISM1 1SG Tib.calendar=ISM1 calculation NEG-be.able.1SG

‘I don’t know how to calculate the calendar.’

那个播种时间藏历的我不会计算

(QVY-329: 133)

(4.17) perfective negator *mə^ʳ-*

<jɪqi>=kù *tǎ^ʳ-mə^ʳ-xtsò-s^{hi}=tə* *kə-fwə-s^{hi}=tə* *ʒǔ*

machine=INE NEU-NEG-process-NMLZ=ISM1 IN-rest.3-NMLZ=ISM1 whole.yogurt

ɲì *ʃsɪ*

say.3 GNR

‘The yogurt that is not processed and fermented in the machine is called *ʒǔ* (whole milk yogurt).’

机器里没有处理就发酵的酸奶叫ʒǔ (全脂酸奶, 里面有酥油)

(QVY-332: 9)

(4.18) perfective negator *mér-*

TMK *bà^hxpé p^hèfó ndzì^h ló mé^hri*
 then frog aside catch.NOM NF2 NEG-find.3

‘Then the frog aside was not caught.’
 然后在一旁的青蛙没有被抓住。

(QVY-333: 13)

4.4.4 Nominalization

There are six nominalizers that a Verb can take. Each nominalizer functions differently. A detailed discussion on nominalization is given in Chapter §6.8. This subsection presents a few examples.

In (4.19), the nominalizer *-mə* is suffixed to *tə* ‘dump’, and refers to the person who dumps (different amounts of yeast for wine brewing).

(4.19) *k^hæfĩ æxtə xtší tə-mə tĩ tší k^hæfĩ á^hnnə xtší*
 some.people eleven peck **dump-NMLZ** EXIST GNR some.people twelve peck
tə-mə nǎ tĩ tší
dump-NMLZ also EXIST GNR

‘Some people dump eleven pecks, there are also some people who dump twelve pecks.’
 有些人倒十一斗的有，有些人倒十二斗的有

(QVY-330: 9)

The *-fə* nominalizer, on the other hand, produces a patient or event nominalization, as can be seen in (4.20), where the thing being soaked is referred to as *nə-xpə-fə*.

(4.20) *ptʃ^há^h ni tší tǎ^h nə-xpə-fə*
 fodder say.3 GNR then **DOWN-soak-NMLZ**

‘The thing being soaked is called fodder.’
 浸泡的东西叫做ptsha

(QVY-329: 48)

Pubarong Queyu has a locative nominalizer *-s^ha^h*. This nominalizer turns the Verb into a Noun meaning ‘the place for doing that action’, as seen in example (4.21). In (4.21), *tə-s^ha^h* refers to the place where food is dumped into. This suffix can also be used as an

instrument nominalizer, turning the Verb in to a Noun that means ‘the tool to do that action’, as in (4.22).

(4.21) *vjé xkú=kù mdú tǎ-sʰǎʷ tsi tʂí*
 pig manger=INE food **dump.SAP-NMLZ** EGO GNR

‘Manger is where you pour the food (for pigs).’
 猪食槽里是倒猪食的地方

(QVY-327: 44)

(4.22) TM *kʰí=ɲí ʷwǎʷzǐ <shǐ> lí lí-sʰǎʷ tsi tʂí*
 then time=ABL OX COP field **plough-NMLZ** EGO GNR

‘Then ox is for ploughing fields.’
 然后公牛是耕地的。

(QVY-049: 16)

The last nominalizer introduced in this subsection is *-sʰǎʷ*. This one can nominalize finite verbs and occurs in perfective contexts. In (4.23), the nominalized finite verb *nǎ-psyǎ-sʰǎʷ=tǎ* ‘the accumulated’ refers to *zǎʷ* ‘manure’, and can even take the ISM1 enclitic *=tǎ* that attaches to noun phrases.

(4.23) *mózi zǎʷ nǎ-psyǎ-sʰǎʷ=tǎ mótsò lí=kù*
 warm.season manure **DOWN-accumulate-NMLZ=ISM1** cold.season field=INE
nǎ-ndzǎé
 DOWN-transport.LPL

‘As for the manure piled up during the warm season, we transfer them into the field during the cold season.’

夏天积累的肥，冬天的时候我们把它运到田里去。

(QVY-329: 113)

4.4.5 Reduplication of verbs

Verbs can be reduplicated, in which case they still reflect person and number of the subject. The reduplicated Verb either means a reciprocal action, repeated action, or an action done by many people at approximately the same time. There are some Verbs whose non-reduplicated and reduplicated forms are both present in my data, while some other Verbs are so far only found in the reduplicated form. Table 4.5 demonstrates two Verb pairs whose

non-reduplicated and reduplicated forms are given, while Table 4.6 lists Verbs with only reduplicated forms attested in the data.

Table 4.5: Non-reduplicated and reduplicated verbs

Gloss	1SG	1PL	2SG	2PL	3
cut, slice	<i>xk^hó</i>	<i>xk^hǎé</i>	<i>xk^hí</i>	<i>xk^hí</i>	<i>xk^hú</i>
(many people) cut, slice	<i>xk^hóxk^hó</i>	<i>xk^hóxk^hǎé</i>	<i>xk^hóxk^hí</i>	<i>xk^hóxk^hí</i>	<i>xk^húxk^hú</i>
change	<i>gǔ</i>	<i>gǎé</i>	<i>gǐ</i>	<i>gǐ</i>	<i>gǔ</i>
exchange	<i>gǎgú</i>	<i>gǎgǎé</i>	<i>gǎgǐ</i>	<i>gǎgǐ</i>	<i>gǎgú</i>

Table 4.6: Reduplicated verbs whose unreduplicated forms are not found in the data

Gloss	1SG	1PL	2SG	2PL	3
push back and forth	<i>xtsǐxtsú</i>	<i>xtsǐxtsǎé</i>	<i>xtsǐxtsǐ</i>	<i>xtsǐxtsǐ</i>	<i>xtsúxtsú</i>
push	<i>tétó</i>	<i>tétǎé</i>	<i>tétí</i>	<i>tétí</i>	<i>típtí</i>
tremble, shiver	<i>ndǎndǎ</i>	<i>ndǎndǎ</i>	<i>ndǎndǎ</i>	<i>ndǎndǎ</i>	<i>ndǎndǎ</i>
wrestle	<i>xlǎ^hxlǎ^h</i>	<i>xlǎ^hxlǎ^h</i>	<i>xlǎ^hxlǎ^h</i>	<i>xlǎ^hxlǎ^h</i>	<i>xlǎ^hxlǎ^h</i>
rub	<i>ts^hí^hts^hǎ^h</i>	<i>ts^hí^hts^hǎ^h</i>	<i>ts^hí^hts^hǎ^h</i>	<i>ts^hí^hts^hǎ^h</i>	<i>ts^hí^hpt^hǎ^h</i>

Several examples of reduplicated verbs from natural speech are given below. Example (4.24) came from the end of a traditional story, where the speaker said that this was the kind of story they used to tell when going up to the mountains when they were still kids. The reduplicated form of the verb *vǎé* ‘do.1PL’ is used in the phrase ‘do (tell) stories’, in the context of ‘many people tell lots of stories’.

(4.24) Reduplication of *vǎé* ‘do’

TV=I# *pfǎ k^hí* *jé^hp^hí énts^hí* *ʃ^hop^hʃ^hí-nv^h* *rǎé* *ʃ^há^h* KN *tǐ*
 this.way=ISM3 say be.custom past 1PL child-PL?? mt.LOC go.1PL time then

nǎ^hpfǎ vǎ^hvǎ^h *tsí tǐ* *jé^hp^hí m^hzǎ^hm^hzǎ^h* *kǎ^hlǎ^h* *pfǎ k^hí*
 story do.1PL-RED EGO then past very something say be.custom

‘There were sayings like that in the past. When we were kids and went up to the mountain, we would tell stories, we told everything, we told a lot.’

以前有这样的说法。我们小的时候去山上，会讲一讲故事，什么都讲，讲很多

(QVY-335: 24)

Example (4.25) is from a text introducing a wine brewing method. The speaker was talking about a process during which brewers would leave the liquor in the container for a certain period of time. The verb *p^hó^h* ‘leave, place’ is reduplicated in that context, where the speaker was introducing how different people would do that step differently, saying that ‘some people would leave it for half a month, while some others would leave it for a month’.

(4.25) Reduplication of *p^hó^h* ‘leave, place’

wæjí=kù *i-ptó* *ni* TMKN *ndè* *xtjé* ***p^hó^hp^hó^h*** *tsì* *tʂí* *k^hæǰí*
 wine.jar=INE DS-dump.3 NFl then what level **leave.RED** EGO GNR some.people
lí *p^hè* *p^hó^h-mè* *nǎ* *tʂí* *tʂí* *k^hæǰí* *tó-lí* *p^hó^h-mè*
 month half leave-NMLZ also EXIST GNR some.people one-month leave-NMLZ
nǎ *tʂí* *tʂí*
 also EXIST GNR

‘After pouring the liquor into the wine jar, then you can leave it there for however long you like. There are people who leave it there for half a month, there are also people who leave it there for a month.’
 在酒缸里倒了酒后，放多久都可以。有人放半个月也是有的，也有人放一个月。
 (QVY-330: 33)

In the text where Example (4.26) is from, the speaker was telling a traditional story about a rabbit and a poor kid. In the story, the rabbit helped his friend, the poor kid, to get married. The bride’s uncles (relatives) went to the poor kid’s house and were tricked into believing that the poor young man’s family was crazy and enjoyed killing relatives (uncles). They became scared and escaped from that house. The verb *p^hí* ‘escape.3’ is reduplicated in the context where many uncles (relatives) escaping from that scene.

(4.26) Reduplication of *p^hí* ‘escape.3’

ójà^h *tí* *æzò=ts^hí* *tí* *tǎ^h* *tǎ^h-kwó^hxtfǎ^h* *ni* *tǎ^h* *kát^hó=ts^hí* *ndě* *kó*
 ok then uncle=PL then then NEU-afraid NFl then this=PL what wisdom
tà^h=rì *ndě* *mér-tsi-s^hí* *æzò=ts^hí* *tʂáélæ=tò* *s^hó-fǎ* *tò-tsí-s^hí*
 wise=DIR what NEG-EGO-NMLZ uncle=PL all=ISML kill.NOM-NMLZ NEU-EGO-NMLZ
tǎ^h-xs^hqí *ni* *æzò=ts^hí* *tǎ^h-kwó^hxtfǎ^h* *tʂáélæ* ***tǎ-p^hí*** *tʂí* *ni* *tʂí*
 NEU-think.3 NFl uncle=PL NEU-afraid all **NEU-escape.RED** GNR say.3 GNR

‘Then uncles got scared. They thought: ‘This family is not some good kind.

Their uncles are to be killed.’ Uncles got scared and all escaped.’
 然后舅舅们就害怕了，心里想：这家子不是啥子好人，舅舅们都是要被杀的。舅舅们
 就都害怕了，一哄而散了 (QVY-337: 53)

In summary, Verbs in Queyu can inflect for person and number, can take affixes (directional prefixes, questions prefix, prohibitive prefix, negation prefix, and nominalizer suffix), and can be reduplicated to convey repeated and/or reciprocal actions. Behavior of property concept term are introduced in the next section, and will be compared with both Nominal and Verbal morphosyntax that are introduced in Section §4.3 and §4.4.

4.4.6 Property Concept Words in Queyu

Words which denote property concepts in Queyu correspond to all the semantic categories of adjectives proposed by Dixon (1982:16). They behave in typical Tibeto-Burman fashion: in predicate function, the root is inflected as a Verb, while for modification or non-verbal predication, a reduplicated form of the root with nominal properties is used. However, some property words in the category of age (‘new’, ‘old’ and ‘young’) and value (‘good’) differ in morphosyntactic behavior from the other property words that will be addressed here. Exceptional cases of property terms cannot be reduplicated. The only attested form of this type of property concept word is non-reduplicated. Aside from the exceptions in the age and value category, non-reduplicated property words take directional prefixes like verbs, and the reduplicated form follows nouns directly.

Below are examples illustrating the two types of property word reduplication—partial and full. Examples (4.27) and (4.28) show full reduplication of property roots ‘small’ and ‘tall’. (4.27) provides examples of the simple root form and the reduplicated form of ‘small’, respectively.

- (4.27) a. *kʰ-zæ=sʰi*
 IN-small=NMLZ
 ‘became small’

- b. *zæzæ tsì tʂí*
 small.RED EGO GNR

‘(something) is small’

Example (4.28) presents instances of the simple root form and reduplicated form of ‘tall’, respectively.

- (4.28) a. *ś-mt^hù=s^hí*
 UP-tall=NMLZ

‘became tall’

- b. *mt^hùmt^hú tsì tʂí*
 tall.RED EGO GNR

‘(something) is tall’

Some property words in Pubarong Queyu only reduplicate partially, as can be seen in (4.29). The two utterances in (4.29) are examples of the root form and reduplicated form of ‘pretty’. In the reduplicated form, the first consonant in the onset (the pre-initial sound) of the root form of ‘pretty’ is dropped. This situation is different from that of ‘tall’ in (4.28), where the pre-initial sound is preserved in the reduplicated form.

- (4.29) a. *ŋǎ jǎ-ŋk^hò=s^hí*
 1SG UP.Q-pretty=NMLZ

‘Have I become pretty?’

- b. *tsǎ k^hóŋk^hó tʂí*
 3SG pretty.RED GNR

‘He is handsome.’

In the following Sections, I will examine several constructions demonstrating how property concept terms behave like Verbs, and a few constructions which distinguish property terms from some Verbs.

4.5 Property Concept Terms, and Constructions in Propositional Acts of Reference, Predication, and Modification

As discussed in Section §4.2, the differences between Nouns and Verbs are relatively clear. Nouns can take case markers, number marking and information structure markers (ISM), while Verbs cannot. Nouns cannot take the morphosyntactic markings of Verbs that are introduced in Section §4.4. We can therefore recognize two distinct syntactic categories, Nouns and Verbs.

In the following subsections, the morphosyntactic behavior of property terms will be compared with Nouns and Verbs across different constructions.

4.5.1 Referential Constructions

Nouns can function as referring forms with or without any additional markers. Verbs, on the other hand, need to have a nominalizer. See the following examples in (4.30) and (4.31) where Nouns serving the reference role may or may not occur with an ISM1 marker.

(4.30) Noun functioning as a referring form without any additional marker

tě^r *nə-xtswə*
Qinggang.leaf down-chop.3

‘Chop the Qinggang (*Cyclobalanopsis glauca*) leaves’
 细细地砍青冈叶子。

(QVY-327: 3)

(4.31) Noun functioning as a referring form with an ISM1 marker

mózi=tə *nə-pfə* *tʂi*
warm.season=ISM1 DOWN-speak GNR

‘I talked about warm season already.’
 暖季也讲了。

(QVY-329: 83)

Example (4.32) illustrates the use of a Verb *xt^hye* ‘press’ in referential function. Notice that the nominalized Verb can be further suffixed by the =ISM1 =*tə*, which is nominal morphosyntax.

(4.32) Verb functioning as a referring form

tʰə=tə nə-xtʰyɛ-sʰi=tə rǔ í-mtʰi
 this=ISML **DOWN-press-NMLZ=ISML** upward UP-take.out.3

‘Remove the pressing thing.’
 把压着的東西取開。

(QVY-330: 60)

Both reduplicated and root forms of property words can occur in referring constructions. The reduplicated form resembles a Noun in that it can directly take a LOC marker, and does not require any more markers to make a reference, as shown in (4.33). Simple roots must occur with a nominalizer to function as a reference, as can be seen in (4.34), where *ndzú^r-mə* ‘the big (one)’ refers to the big frog without the presence of the head noun ‘frog’.

(4.33) The LOC marker =xə can attach to reduplicated property words directly

ŋǎ nini=xə gó=rí
 1SG **red.RED=LOC** like=DIR

‘I like the red one.’

(4.34) Nominalized non-reduplicated property term functioning as referring term

xtʰí^r sʰi ʃhòpʰí sʰi tʃælxə bə^rxpé zəzəé xtʃixtʃí nə-wú kʰɪ
 dog and child and all frog small.RED cherish DOWN-do.3 time

ndzú^r-mə tí tʰə=xə mə-gó=rí
big-NMLZ then this=LOC NEG-happy=DIR

‘The kid and the dog were fond of the little frog, and the big one is not happy about it.’

小孩和狗都很疼爱小青蛙，大青蛙有点不高兴

So, the three semantic categories are distinguished by their morphosyntax when used referentially. Fundamentally referential lexical items are Nouns, and are thus unmarked in the reference construction. Fundamentally-predicating lexical items are Verbs, and need to be nominalized in order to serve as referring forms. Property terms in referential function can be either nominalized or reduplicated.

4.5.2 Predication Constructions

When Nouns serve a predicating function, they always require either an EGO or GNR marker, or both. Verbs do not necessarily require any other additional markings. See (4.35) for an example with a nominal predicate and (4.36) for an example with a verbal predicate.

(4.35) Noun needing EGO and GNR to function as a predicate

TM *tʰə=tjé=ɲí kʰòYZÓʷ=tjè pʰò-fǎ=tó éntsʰàʷ dǎʷtʃí tsì tʃí*
 then this=SUPE=ABL collector=sup cover-NMLZ=ISML 1PL.LOC stone EGO GNR

‘Then on top of it, on top of the collector the thing to cover is our slate.’
 然后在集酒器上面盖的东西是我们的石板

(4.36) Verb functioning as a predicate

tʃí éŋò gǒ rí-tʃí ɲì sʰí nǎʷ-qʰwáʷ
 then above pasture up-go.3 nfl wood down-cut.3

‘Then (we) go to the pasture to cut trees.’
 然后去牧场砍树。

(QVY-327: 35)

Both reduplicated and non-reduplicated property concept words can occur in predication constructions, but they behave differently. Reduplicated property words behave similarly to Nouns in that they require an EGO or GNR marker, or both (see (4.37)). The non-reduplicated form acts like a Verb, as it can take the Q prefix (see (4.38)).

(4.37) Reduplicated property word are like Nouns

ɲíɲí mǎ-tʃí, NéʷNéʷ tʃòʷ tʃí
 red.RED NEG-GNR yellow.RED become GNR

‘Not red, it’ll become yellow.’
 不是红的，是变成黄的了。

(QVY-332: 30)

(4.38) Non-reduplicated property words are like Verbs

ǎ-zí=rí
 Q-tasty=DIR

‘Is it delicious?’
 好吃吗？

The capability to select the particle =*ri*, glossed as DIR (direct observation), is another characteristic of non-reduplicated forms, which is similar to Verbs. Nouns cannot take this particle when predicating. Contrast (4.35) and (4.39) for this difference. The Noun can take EGO and GNR when acting as a predicate (see (4.35)), but not DIR (see (4.39)). See (4.40) for an example where =*ri* follows a Verb and (4.41) where it follows a non-reduplicated property term.

(4.39) Nouns cannot take DIR when predicating

* <*cūnzhǎng*> *tʂə́əʰó=rí*
village.leader PN=DIR

Intended meaning: The village leader is Tashi.

(4.40) =*ri* occurs after Verbs

TM *ʃʰòpʃʰí pʰèʃú kə́-ʃəβri jì àʰxpə́ʰ ríʳ=rí*
then child aside IN-look.3 NFl a.while laugh.3=DIR

‘Then the kid looked at this beside them, and kept laughing.’
然后小孩在旁边看着，不停地笑着。

(QVY-333: 40)

(4.41) =*ri* occurs after non-reduplicated property words

tʰə́ ŋkʰó=rí
3 pretty=DIR

‘S/he’s pretty.’
她/他很漂亮。

Another difference between property concept words and Verbs is illustrated in their reduplicated forms. Property concept words do inflect for neither person nor number in either the reduplicated or non-reduplicated form. See (4.42) for non-reduplicated property concept words examples, in which the root forms of the property word are not inflected for person or number. Recall reduplicated Verb examples in Section §4.4.5, where the Verb is inflected for person and number when reduplicated. Compare examples in Table 4.5, Table 4.6 and (4.42) for an illustration of this difference. Notice that the nominalizer -*sʰi* in

(4.42) is multi-functional and it is behaving as a perfective or past tense indicator here. The functions of *-s^hi* nominalizer can be found in Section §6.8.

(4.42) a. First person

ŋǎ́ í-ndzù^h-s^hi
1SG UP-big-NMLZ

‘I became big (I grew up).’
我长大了。

b. Second person

nǎ́ í-ndzù^h rí tǐ χó ki tʂí
2SG UP-big then then know know.2 GNR

‘You’ll know when you grow up.’
你长大就知道了。

c. Third person

i-ndzù^h-s^hi
DS-big-NMLZ

‘Something became big.’
变大了。

As we have seen, in the predication construction, non-reciprocal and non-pluractional Verbs are unmarked. Property terms require a DIR =*tǐ* for predication when in their simple root form. In order to function as a predicate, nouns and the reduplicated property terms must occur with either an EGO or GNR marker, or both.

4.5.3 Modification Constructions

When Nouns are modifying other nouns, they always require a LOC marker =*xə*. In (4.44), *jép^hi mǎ́* ‘people in the past’ modifies *sú-s^hà^h* ‘place for standing (the flag)’. Verbs need a nominalizer to modify Nouns. In (4.43), *nǎ́-p^hó-s^hi=xə* ‘what’s covering/the covering thing’ modifies *k^hóndǎ́* ‘slate’, and is suffixed by the LOC marker =*xə*. This is morphosyntactic evidence that nominalized Verbs share the properties of Nouns.

(4.43) Noun in a modification construction

jé^hi mǒ=xǎ ptsítà^s sú-s^hà^s
 past **person=loc** flag make.stand-nmlz

‘The place where previous people place the flag (make it stand).’
 前人竖鬼旗的地方。 (QVY-327: 29)

(4.44) Verb in a modification construction with a nominalizer

lúpi tǐ é-tù ni áηù tje nǎ-p^hó-s^hi=xǎ t^hǒ k^hóndǎ=xǎ
 steam then UP-come.3 NFl upside upon **DOWN-cover-NMLZ=LOC** this slate=LOC

t^hǎ=xǎ=jí tǐ zǐ^s rǐlǎ zǐ tǎ^s-tǐó^s ni
 this=LOC=ABL then water drop way NEU-become NFl

‘The steam goes up to the slate that covers, then the water forms drops.’
 蒸汽上升到上面盖的石板上，形成了水滴。 (QVY-330: 49)

Unlike Verbs, property words in their reduplicated form can follow Nouns directly without any other markers such as nominalizers or locative markers. For example, in (4.45), the reduplicated word *zǎzǎ* ‘small’ and *ndzú^sndzú^s* ‘big’ modify *bǎ^sxpé* ‘frog’ directly. The simple root forms of property terms cannot occur in a modification construction unless suffixed by a nominalizer, as can be seen in (4.46). In (4.46), the non-reduplicated property terms *zǎ* ‘small’ and *ndzú^s* ‘big’ must be nominalized and suffixed by the agent NMLZ *-mǎ* in order to modify the head noun *bǎ^sxpé* ‘frog’.

(4.45) Reduplicated property word *zǎzǎ* ‘small’ and *ndzú^sndzú^s* ‘big’ modify the head noun directly

bǎ^sxpé zǎzǎ tǎ-tǎ s^hi tǎ^s bǎ^sxpé ndzú^sndzú^s t^hǎ=nts^hi=p^hè lǎdzý
frog small.RED one-CL and then **frog big.RED** 3=PL=COM story

tǎ-tǎ
 one-CL

‘A story about a small frog and a big frog.’
 一个小青蛙和一个大青蛙的故事。 (QVY-334: 1)

(4.46) Simple root *zǎ* ‘small’ and *ndzú^s* ‘big’ need to be nominalized to modify the head noun

bǎ^sxpé ndzú^s-mǎ s^hi bǎ^sxpé zǎ-mǎ=tǎ kǎt^hǎ zǎzǎ=tǎ tǎk^hi
frog big-NMLZ and **frog small-NMLZ=ISM1** this **small.RED=ISM1** together

nə-ptsú-s^hi *tʃi* *tʃi*
DOWN-sit.3-NMLZ EXIST GNR

‘The big frog and the small frog sat together.’
大青蛙和小青蛙坐在一起。

(QVY-334: 14)

Another way in which property words differ from other Verbs is in their position relative to the Noun being modified. Nouns and nominalized Verbs in modification constructions can precede the head Noun (see (4.43) and (4.44)), while reduplicated property words always follow the Nouns being modified. See (4.45) and (4.46) for examples where the property words in both forms modify and follow the head noun directly.

To summarize, in modification construction, Nouns, Verbs, and property terms all need additional structural coding to serve as a modifier. Nouns need an additional LOC marker. Verbs need to be suffixed by a nominalizer and a LOC marker. Property terms need to be reduplicated or nominalized in order to modify a Noun.

4.6 The word class status of PCT’s in Queyu

In Section §4.1 we saw that Croft (2001) uses a framework that combines semantics and propositional acts to categorize word classes, as opposed to a semantics-only approach. His approach also incorporates Typological Markedness Theory (Croft 1990b). Semantically, lexical items can be grouped into three prototypes: objects, properties, and actions. Objects should be unmarked in reference constructions, properties should be unmarked in modification constructions, and action verbs should be unmarked in predicate constructions. Markedness is defined by two morphosyntactic criteria, structural coding and behavioral potential (Croft 2001).

What I have shown in this chapter is that in Queyu, as in other Tibeto-Burman languages, there are two major categories defined by morphology: in most cases, a word form has, basically, the morphological privileges of a Noun or a Verb. But Croft’s three prototypes of word classes are distinguished in the mapping between form and function. In Pubarong Queyu, roots with object semantics are consistently Nouns, and roots with action semantics

are consistently Verbs, but roots with property-concept semantics show split morphological characteristics according to their syntactic and propositional-act function.

Most property-concept words in Pubarong Queyu have two forms: non-reduplicated and reduplicated. Several exceptions exist which only demonstrate a non-reduplicated form, such as ‘good’ *t^hèkó* and ‘old’ *ge*. Other than that, they are post-nominal modifiers like other property-concept terms.

The simple root and reduplicated forms of property-concept terms behave differently. Non-reduplicated root forms behave more like Verbs, while reduplicated forms act more like Nouns. Both forms of property-concept terms can occur in predication constructions. In such situations, non-reduplicated root forms of property terms are more like Verbs as they can take directional prefixes as well as the DIR enclitic, while the reduplicated forms are like Nouns as they require the EGO particle *tsǎ*. Both forms of property-concept words can occur in reference constructions, and in such instances, reduplicated forms and nominalized root forms can take nominal suffixes like LOC marker directly, just as unmarked Nouns do.

Though Queyu has two major word classes, in modification constructions, property concept words show some differences from both unmarked Nouns and unmarked Verbs. Reduplicated forms can occur in the modification construction, following the head noun directly. Non-reduplicated forms also follow head nouns but need to be nominalized in order to function as modifiers. Both Nouns and Verbs that function to modify (another) noun precede the head noun. Modifying Nouns need to take an additional LOC marker, while Verbs need to be suffixed by NMLZ marker. Reduplicated property words, however, do not need any other special marking to encode this function.

Based on the criteria given by Croft (2001) that were discussed in Section §4.1, as well as the data presented in Sections §4.3 and §4.4, Table 4.7 summarizes the required, overtly marked structural coding constructions attested in Queyu for each semantic prototype in each propositional-act function. For modification column, the modifier’s location in

relation to the head noun (N) is also specified.

Table 4.7: Overtly marked structural coding constructions

	Reference	Modification	Predication
Objects	simple root (=unmarked noun)	LOC marker pre-N	EGO particle and/or GNR particle
Properties	reduplication	reduplication post-N	reduplication + EGO particle
	nominalizer	nominalizer post-N	simple root (=unmarked verb) + DIR particle
Actions	nominalizer	nominalizer + LOC pre-N	simple root (=unmarked verb)

To summarize Sections §4.3 and §4.4, Nouns and Verbs are two distinct categories in Pubarong Queyu on the basis of their distinct morphosyntactic behaviors. Nouns can take case markers, number marking and information structure markers (ISM). Verbs can be prefixed by directional, negation, question, and prohibitive markers. They may be followed by nominalizers, engage in reduplication, and are inflected for person and number. While all Nouns can take the suffixes and enclitics discussed in Section §4.3, Verbs show a greater variation in terms of their morphosyntactic behavior (e.g. for person inflection), as discussed in Section §4.4. Not all Verbs demonstrate the full range of possible verbal morphological modifications. Property terms do not display the full grammatical behavior of an unmarked Verb. They can only take DIRC (directional prefixes) and DIR (direct observation) markers and have only one reduplication strategy (which does not indicate reciprocal or plural/pluractional function). Based on the data presented in previous sections, I conclude that property terms in Queyu are marked Verbs and are best understood as belonging to a sub-category of Verbs.

There are two benefits of adopting a Radical Construction Grammar approach rather than semantics-only approach to understanding property terms in Pubarong Queyu. The first

one is that some lexical items with traditionally ‘adjective’ semantics, such as ‘old’ *gé* and ‘happy’ *gó*, behave differently from lexical items like ‘small’ *zàzzé* and ‘tall’ *mt^hùm^hú* that also express property concepts. Looking only at semantics will not distinguish these two types of lexical items. The second one is that in many other TB languages, property terms are stative verbs (Post 2008:339–340; DeLancey 2015:41–42). In Queyu, lexical items such as ‘old’ *gé* and ‘happy’ *gó* are like Verbs that can take directional prefixes, and they do not share the same morphological behavior of other property terms in that they cannot be reduplicated. Therefore, words like these are in another subcategory of Verbs and do not belong to the same verbal subcategory as other property concept terms.

4.7 Shared morphosyntax between Nouns and Verbs

There are seven morphemes that both Nouns and Verbs can take. This section is a description of all of them. Particles, suffixes, and enclitics that are listed in the table below can follow both Nouns and Verbs. They function on a larger phrase or even clause level. Example uses of each of them are given below.

Table 4.8: Shared morphosyntax between Nouns and Verbs

Queyu	Gloss
<i>ɛni</i>	ablative (ABL), non-final 1 (NF1)
<i>-pi</i>	person
<i>mt^hə(rə)</i>	otherwise
<i>pa^s</i>	conditional (COND)
<i>lə</i>	non-final 2 (NF2)
<i>ts̃</i>	egophoric (EGO)
<i>t̃s̃</i>	generic (GNR)

The ABL enclitic can express both spatial and temporal relations. When following a Noun, it is functioning as an ablative case marker. When following a Verb, it conveys the information that this utterance is not finished yet. Compare the two examples from (4.47).

(4.47) *ɛni* that occurs after both Nouns and Verbs

- a. *tʰǔ=ɲi i-tú kʰi=ɲi látè, ʃó, pʰùkú*
there=ABL ds-come.3 time=ABL Lede Quru Pugu

‘Down from there, then we have Lede, Quru, Pugu.’
 从这儿下来以后就是勒德，曲入，普古。

(QVY-326: 4)

- b. *náʳri rí-fǎè ɲi*
morning UP-get.up NFI

‘(We) Get up in the morning.’
 (我们) 早上起来。

(QVY-329: 3)

The suffix *-pi* ‘person’ can attach to both Nouns and Verbs to denote the meaning of ‘person who does something’. Depending on the phonological context, the onset of *-pi* can be voiced and become *-bi* instead.

(4.48) *-pi* that occurs after both Nouns and Verbs

- a. *kəʳptʃʰó jǔ iró xkó sʰi ləndʒó-pi xkó*
 Yizha downstream afterward language and **upstream-people** language
nəwúlə tsíkə=ri xtfĩ mə-tʃí
 as.for a.little=ISM3 same neg-GNR

‘Down from Yizha, the language is a bit different from the upstream speech.’
 乙扎以下的语言和以上的村民的话有一点点不一样。

(QVY-326: 10)

- b. *tĩ áɲù nəʳkóʳ=xə í-tʃĩ nəʳkóʳ pəxkó é-ɸlwə KN áɲù*
 then upward mountain=LOC UP-go.3 hillside hillside UP-arrive time upward
nəʳkóʳ=tjè=ɲi βrí xtfǎ-pi=rĩ nə-tú tʃĩ ɲi tʃí
 mountain=SUPE=ABL horse **ride-person=ISM3** DOWN-come.3 GNR say.3 GNR

‘Then, when they arrived at the mountainside, they saw a horse riding person coming down.’

然后到了半山腰的时候，(看到) 山上有个骑马的人下来了。

(QVY-337: 2)

The conditional marker *paʳ* only occurs in negated context. It expresses the idea of ‘it’s not OK if...’. Two examples of its usage are given in (4.49).

(4.49) *paʳ* that occurs after both Nouns and Verbs

- a. TM *k^hí jí ʃ^hámɔzè pà^r íngù nè-tú ló rǎ mǎe-tʃí*
 then time NF1 afternoon COND home DOWN-come.3 NF2 capable.1PL NEG-GNR

‘Then not until afternoon can we come back (can’t come back until afternoon).’

然后直到下午（我们）才能回来（不到下午不能回来）。 (QVY-046: 16)

- b. *nə^r-mó=ni nǎ^r-tá^r-mò p^hú pa^r zì-tʃí tsǐ*
 DOWN-mushy=NF1 DOWN-PROH-mushy cause.3 COND good-EXIST EGO

mǎe-tʃí
 NEG-GNR

‘Make it mushy. It’s not OK if it doesn’t become mushy.’

变成软趴趴的，不变成软趴趴的就不行 (QVY-330: 13)

The NF2 marker *lə* also expresses a conditional sense. This marker probably originated from Tibetan locative *la*. Examples of this marker occurring after Nouns and Verbs are given in (4.50).

(4.50) *lə* that occurs after both Nouns and Verbs

- a. *tǎ^r nə=ts^hí ts^híxpi táe-zò tǎ-ví gəpə=xə lə mǎzì*
 then 2SG=PL angry PROH-be.angry NEU-do.2PL old.man=LOC NF2 pregnant

tǎ^r-tʃó^r TMKN p^hǎβzè lə gòŋǎ i-βrǎ
 NEU-become then rooster NF2 egg DS-lay

‘(the daughter-in-law said) ’ “Well you two don’t be mad, the grandpa is pregnant, and rooster laid eggs.” ’

儿媳妇说：“你们不要生气，公公生孩子了，然后公鸡下蛋了。” (QVY-346: 14)

- b. *mózi t^hə zǐ q^hǎ^r lə dègó ɛwə^r tʃí*
 warm.season this way cut.NOM NF2 many EXIST GNR

‘During the warm season, there is a lot of grass to cut like this.’

热天的时候有很多这样子可以割的草。 (QVY-329: 152)

The egophoric marker *tsǐ* occurs after Nouns to indicate the identity or attribution of the speaker. There is progressive reading of the utterance when this marker occurs after Verbs. See (4.51) for the two examples.

(4.51) *tsǐ* that occurs after both Nouns and Verbs

- a. *ŋǎ kʰóŋkʰó tsi*
1SG pretty.RED EGO

‘I’m pretty.’
我很漂亮。

- b. *ŋǎ ŋgwǎ ʃʰó tsi*
1SG first go.1SG EGO

‘I’m leaving now/first.’
我先走了。

As for the generic marker *tʂǎ*, when following Nouns, it can indicate the identity or attribution of the referent. When occurring after Verbs, it indicates that this action occurs on a regular basis, and is taken for granted by the speakers. See (4.52) for examples.

- (4.52) a. *tʂǎ* that occurs after both Nouns and Verbs

tʰǎ gígí tʂǎ
3SG teacher GNR

‘He’s a teacher.’
他是老师。

- b. *móʒí xú tú tʂǎ*
warm.season rain come.3 GNR

‘It rains during the summer.’
夏天会下雨。

4.8 Other minor word classes

4.8.1 Common pronouns

Queyu has both personal pronouns and reflexive pronouns. The pronouns contrast for person and number. They behave like Nouns and can have the same morphosyntax Nouns do, as was mentioned in previous sections. The dual enclitic is =*ndze*. The plural enclitic is =*ntsʰí*. It is worth noting that there is a variant of the plural suffix, which is =*tsʰí*. It is not certain what conditions these two variants. Table 4.9 lists all pronouns in Queyu.

Table 4.9: Queyu pronouns

	SG	DU	PL
1 st	<i>ŋǎ</i>	<i>éndzì</i>	<i>énts^hí</i>
2 nd	<i>nǎ</i>	<i>nèndzé</i>	<i>nènts^hí</i>
3 rd	<i>t^hǎ, tsǎ</i>	<i>t^hèndzé, tsèndzé</i>	<i>t^hènts^hí, tsènts^hí</i>

Since Queyu verb bases can index the subject, these pronouns are optional in utterances. For example, in (4.53), the subject ‘we’ is indexed through the verb form *p^hǎé* ‘cause.1PL’. Hence, though there is no overt separate subject phrase, the subject is still understood by the verbal argument indexation.

(4.53) The subject *énts^hí* ‘1PL’ is omitted

tǎ rí-tǝù tǎ-p^hǎé
tea UP-hot NEU-cause.1PL

‘We heat up the tea.’

(我们) 把茶加热

(QVY-329: 5)

One of the third person pronoun forms, *t^hǎ*, is also a determiner that designates a specific referent. Though translated by speakers as ‘this’, it is not a demonstrative that specifies the distance between the referent and the deictic center. Other uses of *t^hǎ* will be detailed in Section §4.8.2.

Reflexive pronouns are given in Table 4.10. No usage of reflexive pronouns for 1DU, 1PL and 2PL are found in the data so far.

Table 4.10: Queyu reflexive pronouns

	SG	DU	PL
1 st	<i>éŋǎ</i>	–	–
2 nd	<i>ŋí</i>	<i>ŋíndzè</i>	–
3 rd	<i>βzǐ, zǐ</i>	<i>βzǐndzè</i>	<i>βzǐnts^hí</i>

As is the case with pronouns and other Nouns, reflexive pronouns in Pubarong can

take nominal suffixes and enclitics, and form a fused morpheme if suffixed by LOC. See (4.54) and (4.55) for examples of a reflexive pronoun and the fusion of a reflexive pronoun and a LOC. In (4.54), when the subject *æk^{hú} tʂít^{hó}* ‘Uncle Trotung’ is explicitly specified, the reflexive pronoun *βzǐ* ‘3.REFL’ is still present and follows the referent, expressing a sense of emphasis on the subject.

- (4.54) TMKN *t^{hə} kwà^{zǐ} t^{hó} ná^z-rò^z=tə æk^{hú} tʂít^{hó} βzǐ tə-βrǐ tʂǐ nǐ*
 then this bull meat two-CL=ISML uncle PN 3.REFL NEU-obtain.3 GNR say.3
tʂǐ
 GNR

‘Then these two bull’s meat, Uncle Trotung himself obtained.’
 然后这个两头牛的肉，晁通就他自己得到了。 (QVY-335: 20)

- (4.55) *mózi zǎ rǎ tʂǐ lə kwə^z tʂǐ*
 warm.season 3.REFL mt.LOC eat.NOM NF2 EXIST GNR

‘During the warm season, the cow themselves, there are food on the mountain.’
 暖季的时候它（牛）自己山上有吃的。 (QVY-329: 98)

Examples (4.56) and (4.57) illustrate reflexive pronouns taking other nominal suffixes and enclitics. In (4.56) the pronoun is suffixed by a comitative marker, while in (4.57) the reflexive pronoun is marked for number.

- (4.56) *tǐ tǎ-s^{hǐ}-zǐ=xə xlǐ=í t^{hə} xʂòmǎ ʃ^hòpʃ^{hǐ} s^{hǐ} dzəpǎ=ts^{hǎ}z*
 then one-day-way=LOC rabbit=ISM2 this poor child and rich.family=PL.LOC
zò^z=ndzè=xə tʂ^hé kǎ-pts^hə nǐ tǎ^z βzǐ=p^hè s^{hǐ} á^z-lò
 daughter=DU=LOC testing IN-test.3 NF1 then 3.REFL=COM heart Q-together
mə^z-ló kǎ-fǎβrǐ tǐ kálə nǒ tsǐxkə nə-wú ɛndjé kǎ-βzə
 NEG-together IN-look.3 then sth sick pretend DOWN-do.3 upstairs IN-sleep.3
tʂǐ nǐ tʂǐ
 GNR say.3 GNR

‘One day, the rabbit wanted to test the poor kid and the rich family’s daughter, and see if they are of one mind with it. Then it pretended to be sick, and was sleeping upstairs.’

有一天，兔子想考验穷小子和富人家女儿两个人，看看他们跟自己是不是一条心，然后假装自己生了什么病，在楼上睡觉。(QVY-339: 1)

(4.57) TM *tʰə=ntsʰi sʰóʷ-tfò náʷ-tfò sʰóʷ-tfò ptʂú təʷ-tʂóʷ* TM *ʒí=ntsʰi*
 then 3=PL three-CL two-CL three-CL friend NEU-become then **3.REFL=PL**
tʃĩbdzæ nə-xkú
 play DOWN-play.3

‘Then they two, they three, they three became friends, and they themselves played together.’
 然后他们三个两个,他们三个变成朋友, 然后他们一起玩。(QVY-333: 38)

4.8.2 Definite pronouns

The third person pronoun *tʰə* can also be used as a determiner and a definite pronoun. It is similar to English ‘this’, and speakers translate the word this way. However, it is not analyzed as a demonstrative, because there is no distal counterpart of this word. Hence, it functions as a determiner and marks a noun phrase as definite, and can convey exclusive focus of contrast (e.g., ‘this entity as opposed to other entities that exist in this world’). These two uses of *tʰə* are illustrated in the example below. For *tʰə ʒí* ‘this way’ and *tʰə ʃʰə* ‘this barley (the barley that was cooked before)’, *tʰə* is a determiner. For *tʰə=pʰé* ‘with this’, *tʰə* is serving as a definite pronoun, and can take the case marking *=pʰe*.

(4.58) Different uses of *tʰə* ‘this’ in one utterance

tsíkæ pʃylyqé tə-wú ɲi tʰə ʒí tə-wú ɲi tʃ wəpáʷ tʰə ʃʰə
 a.bit lump NEU-do.3 NFl **this way** NEU-do.3 NFl then downside **this barley**
kə-hmè-sʰi=tə=pʰé tʰə=pʰé xsíʷráʷ rí tʂi
 IN-cooked-NMLZ=ISML=COM **this=COM** mix need GNR

‘Make it a bit lump like this, then mix it with the cooked barley.’
 加一点酒和酒曲和在一起, 变成块块的样子, 跟煮熟的青稞和在一起。(QVY-330: 22)

There are several languages with pro-forms whose form and function are similar to the *tʰə* in Pubarong. For example, Yongning Na has a demonstrative *tʰur*³³. The demon-

strative precedes the head noun and makes the noun phrase definite, and is used for disambiguation (Lidz 2010:207).

In Geshiza, there is a demonstrative pronoun *t^{hə}*. Notice that the Geshiza *t^{hə}* can also serve as a third person pronoun. There is no distal or proximal distinction for demonstratives in Geshiza, which is the case in Pubarong Queyu, too (Honkasalo 2019:300). This pronoun in Geshiza also evolved into a neutral topic suffix =*t^{hə}* (Honkasalo 2019:702).

Another determiner in Pubarong is *kət^{hə}*, which may be derived from *t^{hə}*. But the *kə* part is currently unanalyzable, and *kət^{hə}* and *t^{hə}* share the same function and distribution except that the former cannot occur as a third person pronoun.

A definite pronoun in Pubarong that is related to *t^{hə}* is *t^hivínò* ‘these’. This word is derived from *t^hi ví* ‘this way’, which carries the same function of *t^{hə} zǐ*. The distinction between these two phrases is not clear. Here, *zǐ* ‘way, method’ is a phonologically-dependent word whose tone depends on the preceding noun. For example, for *t^{hə} zǐ* ‘this way’ and *énts^{hà} zǐ* ‘our way’, the surface tone on *zǐ* ‘way’ differs due to the preceding word’s tone. The definite pronoun *t^hivínò* is used to refer to specific referent with large amount or various items, hence the translation ‘these’.

The last definite pronoun is also a quantifier, which is *tǎlǎ* ‘(they) all’. This word itself can serve as a pronoun referencing all the referents that were mentioned previously, in addition to serving as a modifier to the head noun. Example (4.59) is a case where *tǎlǎ* serves as a definite pronoun and refers to characters that appeared earlier in that text, the kid, the dog, and the frog. In (4.60), *tǎlǎ* is a quantifier and modifies the head noun *lúpi* ‘steam’.

(4.59) *tǎlǎ* ‘all’ as a definite pronoun

TM *tǎlǎ=tə=i tək^hi nə-wú pʈsǔ tə^h-ʈsó^h wú*
 then **all=ISM1=ISM2** together DOWN-do.3 friend NEU-become finish.3

‘Then they all became friends.’

然后他们都一起变成朋友了。

(QVY-334: 37)

(4.60) *tʃæ̀læ̀* ‘all’ as a modifier to the head noun *lúpi* ‘steam’

TM *tə̀-ḡ^hwá^ʷ* KN *æ̀ŋò* *ròs^há^ʷ=ní* *æ̀ŋò* *k^hòyZó^ʷ=tjè* *p^hǒ*
 then NEU-take.apart.3 time upside immediately=ABL upside collector=SUPE lid
nə̀-bdə̀-s^hi=tə̀ *ròs^há^ʷ* *p^hǒ* *rǒ* *tə̀-xk^hwá* KN *lúpi*
 DOWN-cover-NMLZ=ISML immediately lid upward NEU-uncover time **steam**
tʃæ̀læ̀ *t^hǒ* *rǒ* *é-tù* *tʃí*
all here upward UP-come.3 GNR

‘Then after taking apart the three-peck pot, uncover the lid from the collector above immediately. Then all the steam comes out from there.’
 然后拆了三斗锅后，立刻把上面的集酒器的盖子立刻揭开，然后蒸汽就全部从那儿出来了。
 (QVY-330: 57)

4.8.3 Indefinite pronouns

In addition to common pronouns and reflexive pronouns whose referents are identifiable in the utterance, there is a set of indefinite pronouns that do not refer to a specific entity. A list of them is given below.

Table 4.11: Indefinite pronouns in Pubarong Queyu

Queyu	Gloss
<i>k^hæ̀fí</i>	some people
<i>író</i>	some people
<i>kələ̀</i>	something
<i>mémò^ʷ</i>	other people
<i>mémà^ʷ</i>	other people
<i>tə̀-ró^ʷ</i>	one, other
<i>k^hákhì</i>	oneself, something of its own

Examples of *k^hæ̀fí* ‘some people’ and *kələ̀* ‘something’ are given in (4.61) and (4.62), respectively.

(4.61) *wə̀jì=kù* *i-ptə̀* *ni* TMKN *ndè* *xtjé* *p^hə̀p^hə̀^ʷ* *tsì* *tʃí* *k^hæ̀fí*
 wine.jar=INE DS-dump.3 NFl then what level leave.RED EGO GNR **some.people**
lí *p^hè* *p^hə̀^ʷ-mè* *nǎ* *tʃí* *tʃì* *k^hæ̀fí* *tə̀-lí* *p^hə̀^ʷ-mè*
 month half leave-NMLZ also EXIST GNR **some.people** one-month leave-NMLZ

nə tʃi tʃi
also EXIST GNR

‘After pouring the liquor into the wine jar, then you can leave it there for however long you like. There are people who leave it there for half month, there are also people who leave it there for a month.’

在酒缸里倒了酒后，放多久都可以。有人放半个月也是有的，也有人放一个月。

(QVY-330: 33)

(4.62) *tʃi ɛ-qwəʳ kʰi tʃi ni tʃi ɛntsʰàʳ xli=rí tʃi tʰə=xó kólò*
then UP-yell time GNR say.3 GNR 1PL.LOC rabbit=ISM3 EXIST 3=LOC **sth**

ɲó=rí tǎʳ ndè zí nə-váé kʰi pʰèl=rí tə-ɲí ni ɛ-qwəʳ
sick=DIR then what way DOWN-do.1PL time effective=DIR NEU-say.3 NFL UP-yell

tʃi ni tʃi
GNR say.3 GNR

‘Then he shouted: “We have a rabbit. It is sick with some disease. What should we do to make it effective (to heal the sickness)?” It is said that he shouted like that.’

然后他就喊了，说：‘我们有只兔子，它生了啥子病，我们要怎么做才能有益于它的病。’说是这样子喊了。

(QVY-339: 7)

Lastly, the uses of *tʃ-róʳ* ‘one-CL’ and *kʰákʰi* ‘oneself’ needs to be addressed. The word *tʃ-róʳ* itself means ‘one’, with *-róʳ* being the obligatory classifier in a numeral phrase. It can modify a noun and marks that noun phrase as indefinite, as is shown in (4.63). This word can also function as a pronoun referring to ‘the other entity’, as opposed to the one that was just previously addressed. An example demonstrating this usage is given in (4.64), in which the speaker was introducing the cheese-making process. In the text, the milk containing butter is called *wəɲé* ‘whole milk’, while the other one—the fat-free milk, which is referred as *tʃ-róʳ* ‘one-CL’—is called *wəfǔ* ‘skim milk’. When *tʃ-róʳ* expresses the sense of ‘the other entity’, it can even take nominal number suffixes, despite its original meaning of ‘one’. This is shown in (4.65), in which ‘the other two’ is formed by combining *tʃ-róʳ* and the dual number marker *=ndze*.

(4.63) *tʃ-róʳ* as an indefinite marker

xkáp^hè q^hò^hlò=tə tɛ-ró^h tʂə̀dʒí nə-wú ni
 ten.peck pot=ISM1 one-CL preparation DOWN-do.3 NFI

‘Need to prepare a ten-peck pot.’
 要准备一个十斗锅。

(QVY-330: 3)

(4.64) *tɛ-ró^h* that means ‘the other’

mó tʃy-tʃí lò-tʃí=tə=xə wəpé ni tʂí
 butter EXIST-EXIST with-EXIST=ISM1=LOC whole.milk say.3 GNR

tɛ-ró^h=tə=xə wəfú ni tʂí
 one-CL=ISM1=LOC skim.milk say.3 GNR

‘The one that contains butter is called whole milk, the (other) one is called skim milk.’

有酥油的叫全脂牛奶，另外一个（反之）叫脱脂牛奶。

(QVY-332: 17)

(4.65) *tɛ-ró^h* that means ‘the other’ can take nominal dual suffix -ndze

tʂə̀pə=tə tʃítʃó^h í-tʃí xtsómèi tə-wú TM kǒ kú-tù KN
 tripe=ISM1 wash UP-go.3 clean NEU-do.3 then here IN-come.3 time

tɛ-ró^h=ndzè=xə tǎ^h nə=ndzè í-ʃí ni wùpá^h dʒým wə=tə
 one-CL=DU=LOC then 2SG=DU DS-go.2PL NFI downside intestine=ISM1

tə^h-tʃítʃò^h tə-ní tʂǎ ni tʂí
 IMP-wash.SAP NEU-say.3 GNR say.3 GNR

‘Uncle Trotung went to wash the tripe, and washed it clean, then came back. He said to the other two: “You two go wash the intestines.”’

晁通去洗了毛肚，把毛肚洗得干干净净的，然后回来了。对另外两个说：‘你们两个去把肠子洗一下。’

(QVY-335: 15)

The indefinite reflexive pronoun *k^hák^hi* ‘(one)self, its own’ is similar to the reflexive pronouns introduced in Section §4.8.1, except that it does not refer to a specific person; the listener has to infer the person information from the context. For example, in (4.66), the person is indexed through the verb *ŋk^hǎ* ‘want.1PL’. In some context *k^hák^hi* also conveys the meaning of ‘the other thing, a separate thing’. This usage can be seen in (4.67), where the speaker was talking about making cheese. One speaker mentioned the whole milk yogurt, *ʒǒ*, and another speaker commented that *ʒǒ* is not relevant to cheese making. Here *k^hák^hi* is

used to express the idea that 3ǒ has nothing to do with making cheese. Both the *t^hǒ* in front of *k^hǎk^hi* and *k^hǎk^hi* refer to 3ǒ ‘whole milk yogurt’.

(4.66) *k^hǎk^hi* refers to ‘myself’

t^hǒ k^hǎk^hi=xǎ *ǎrǎ* *ŋk^hǎ=rí* *tǎ^h-xs^hqí^h* KN
 this **self=LOC** liquor want.1PL=DIR NEU-think.3 time

‘When someone thinks: “We want the liquor” ’

自己想要藏酒的时候

(QVY-330: 34)

(4.67) *k^hǎk^hi* refers to ‘a separate thing, something else’

t^hǒ k^hǎk^hi pt^hǎrǎ=xǎ *p^húni* <*chǎnshéng*> *tǎ^h* *mǎ-tǎí*
 this **other** cheese=LOC totally formation EXIST NEG-GNR

‘This (whole milk yogurt) is something else, is totally irrelevant to the formation of cheese.’

这个（全脂酸奶）是另外的，和奶渣子（的形成）完全没有关系。 (QVY-332: 13)

4.8.4 Interrogative pronouns

Interrogative pronouns mostly occur in content questions. For content questions, like many other TH languages, interrogative pronouns in Pubarong replace the answer to the question, and do not move to other places like English question words do. A list of interrogative pronouns is in Table 4.12, with two examples demonstrating the forms and structure of content questions.

Table 4.12: Interrogative pronouns

Queyu	Gloss
<i>jě</i>	who
<i>ndě</i>	what
<i>jětǎí</i>	when
<i>lǎ^h</i>	where
<i>ndè zǎí</i>	how, why
<i>ndè xtǎjé</i>	how much, how many

(4.68) the interrogative pronoun *lǎʷ* ‘where’

nǎ lǎʷ ʃɿ
2SG **where** go.2SG

‘Where are you going?’
你去哪里？

(4.69) the interrogative pronoun *ndè zǐ* ‘how’

tǐ é-qwəʷ kʰɿ tʃǐ ɲì tʃǐ éntsʰàʷ xli=rǐ tʃǐ tʰə=xó kələ
then UP-yell time GNR say.3 GNR 1PL.LOC rabbit=ISM3 EXIST 3=LOC sth

ɲó=rǐ tǎʷ ndè zǐ nə-vé kʰɿ pʰèl=rǐ tə-ɲí ɲì
sick=DIR then **what way** DOWN-do.1PL time effective=DIR NEU-say.3 NFL

é-qwəʷ tʃǐ ɲì tʃǐ
UP-yell GNR say.3 GNR

‘Then he shouted: “We have a rabbit. It is sick with some disease. What should we do to make it effective (to heal the sickness)?” It is said that he shouted like that.’

然后他就喊了，说：“我们有只兔子，它生了啥子病，我们要怎么做才能有益于它的病。”说是这样子喊了。
(QVY-339: 7)

Interrogative expressions do not necessarily have to be a single word. They can be composed by several words together, such as *ndè zǐ* ‘how (what way)’ and *ndè xtjé* ‘how much, how many (what level/extent)’. These words/phrases are categorized together due to the same function that they display. In addition, these words/phrases can occur in contexts other than content questions and combine with other words or particles to form indefinite pronouns, conveying a sense of ‘whatever, wherever’. Two examples of this kind are given below. In (4.70), the concessive particle *naʷ* follows the clause where *lǎʷ* is embedded, and the clause means ‘wherever we herd (the cows) on the mountain’. In (4.71) and (4.72), *ndǎ* ‘what’ combines with reduplicated existential verbs *kwəʷ* and *ʃɿ*, and means ‘whatever, all kinds of things’. This way of forming indefinite pronoun by using interrogative pronoun is noted in languages such as Wadu Pumi (Daudey 2014:136), Geshiza Stau (Honkasalo 2019:309), and Japhug (Jacques 2021:213). While in Wadu Pumi and Geshiza, the other part besides ‘what’ (or any interrogative pronoun) is unanalyzable (*-roro* in *ætəʰəroro* for

Geshiza, *-te^hoŋte^hõŋ* in *míŋte^hõŋte^hõŋ* for Wadu Pumi), in Pubarong, the attested words contain the interrogative pronoun and reduplicated existential verbs.

- (4.70) *rǎ lǎ^ʷ tǎ-bdǎe nǎ^ʷ zǎ tʃ^hí lǎ ɛwǎ^ʷ tʃí*
 mt.LOC **where** NEU-drive.1PL conc 3.REFL eat.NOM NF2 EXIST GNR

‘Wherever we drive the cows on the mountain, they themselves have food.’
 山上不管赶去哪里，它们自己都有吃的。 (QVY-329: 100)

- (4.71) *βrí tǎ k^hǎxkǎ s^hí ndè ɛwǎ^ʷɛwǎ^ʷ tʃǎlǎ ní wú tǎ-wú*
 horse upon luggage and **what EXIST.RED** all bring.NOM finish.3 NEU-do.3
tʃǎ ní tʃí
 GNR say.3 GNR

‘The baggage on the horse and everything was taken.’
 马上的行李和所有东西都被带走了。 (QVY-337: 13)

- (4.72) *TMKN βrí s^hí gǎxtí s^hí t^hivínò ndè jǎjǎ tʃǎlǎ=tǎ ì-rí*
 then horse and saddle and these **what EXIST.RED** all=ISML DS-remain
ǎzǎ=ts^hí tʃǎlǎ tǎ-p^hí tǎ-tʃ^hqǎ wú tʃǎ ní tʃí
 uncle=PL all NEU-escape.3 NEU-leave finish.3 GNR say.3 GNR

‘Then horses, saddles, rugs, things like that were all left. Uncles all escaped.’
 然后马和马鞍地毯这些所有的东西都被剩下了，舅舅们全部都逃离了。 (QVY-337: 54)

4.8.5 Numerals and classifiers

Classifiers are found in some but not all TB languages. Evans (2022) provides an overview of the distribution of classifiers in the family. Queyu contains a rich set of classifiers. When counting numbers in Pubarong, a classifier is obligatory and is suffixed to the numeral, forming a NUM+CL phrase. The default classifiers in Pubarong are *-ru^ʷ* and *-tʃǎ*, which are comparable to Mandarin <个> *gè*. The choice of classifier reflects the properties of the entity that is being quantified.

Most of the numbers below twenty are native Queyu words, while numbers starting from twenty are Tibetan loans. Table 4.13 lists numbers within one hundred in Queyu. Note

that for *dzá^ɛ t^ha^ɛmba^ɛ* ‘one hundred’, the *t^ha^ɛmba^ɛ* part means ‘flat, even’. So this word’s literal meaning is ‘one hundred even’.

Table 4.13: Number 1-31, and 41-100

Queyu	Gloss	Queyu	Gloss
<i>tś-rò^ɛ</i>	one	<i>ǎxtś-rò^ɛ</i>	eleven
<i>ná^ɛ-rò^ɛ</i>	two	<i>ǎnǎ-rò^ɛ</i>	twelve
<i>s^hó-rò^ɛ</i>	three	<i>ǎ^ɛs^hó-rò^ɛ</i>	thirteen
<i>βzǐ-rò^ɛ</i>	four	<i>ǎzǐ-rò^ɛ</i>	fourteen
<i>nwá^ɛ-rò^ɛ</i>	five	<i>ǎ^ɛnó-rò^ɛ</i>	fifteen
<i>x^htš^hǐ^ɛ-rò^ɛ</i>	six	<i>ǎ^ɛx^htš^hǐ^ɛ-rò^ɛ</i>	sixteen
<i>hnǎ^ɛ-rò^ɛ</i>	seven	<i>ǎ^ɛhnǎ^ɛ-rò^ɛ</i>	seventeen
<i>p^hǎ-rò^ɛ</i>	eight	<i>ǎ^hǎ-rò^ɛ</i>	eighteen
<i>xkú-rò^ɛ</i>	nine	<i>ǎxkú-rò^ɛ</i>	nineteen
<i>ǎxtó-rò^ɛ</i>	ten	<i>nýjý t^ha^ɛmba^ɛ</i>	twenty
<i>nýjý xtsà^ɛ xtǐ</i>	twenty-one	<i>s^homt^hǐ s^ho xtǐ</i>	thirty-one
<i>nýjý xtsà^ɛ ní</i>	twenty-two	<i>zi ptǐ ze xtǐ</i>	fourty-one
<i>nýjý xtsà^ɛ s^hó</i>	twenty-three	<i>na^ɛ ptǐ na^ɛ xtǐ</i>	fifty-one
<i>nýjý xtsà^ɛ βzǐ</i>	twenty-four	<i>tš^u ptǐ rǎ xtǐ</i>	sixty-one
<i>nýjý xtsà^ɛ ná^ɛ</i>	twenty-five	<i>de ptǐ de xtǐ</i>	seventy-one
<i>nýjý xtsà^ɛ tšú</i>	twenty-six	<i>dza^ɛ ptǐ dze xtǐ</i>	eighty-one
<i>nýjý xtsà^ɛ bdé</i>	twenty-seven	<i>gu ptǐ gu xtǐ</i>	ninety-one
<i>nýjý xtsà^ɛ ptǎ</i>	twenty-eight	<i>dzá^ɛ t^ha^ɛmba^ɛ</i>	one hundred
<i>nýjý xtsà^ɛ kú</i>	twenty-nine		
<i>s^homt^hǐ t^ha^ɛmba^ɛ</i>	thirty		

Pubarong Queyu has a rich classifier system that is used to modify Nouns of different properties. Classifiers paired with numbers are used to quantify Nouns. When counting, Queyu speakers cannot utter numbers in isolation. A non-exhaustive list of classifiers with example nouns are given in Table 4.14. Corresponding Chinese characters are also given in the third column.

One example of the usage of a classifier can be found below. In (4.73), the Noun for ‘night’ and the classifier for ‘night’ happen to share the same form *ǐ^hé*. The Noun being modified precedes the number + classifier phrase to form a bigger Noun phrase.

Table 4.14: Queyu classifiers

Queyu	Gloss	Chinese
<i>tə-rʊʳ</i>	one-CL (default)	个
<i>tə-tsi</i>	one-CL (layer)	层
<i>xtáʳ tə-lə</i>	wall one-CL	堵, 片
<i>kʰóndá tə-xpjé</i>	slate (plank, paper) one-CL	张
<i>sʰípú tə-xpú/xkí</i>	tree one-CL	棵
<i>rú tə-tfǎ</i>	grass one-CL (handful)	把
<i>jòméi tə-mʈʂʰí</i>	corn one-CL (row)	行, 串
<i>tə-tfó</i>	(pencil, chopsticks, needle, toothpick, pig, pants, river, etc.) one-CL	个
<i>tə-pá</i>	(book, notes) one-CL	本
<i>ptʃàʳláʳ tə-mpʰú</i>	(clothing, one piece) one-CL	一样 (东西), 一条
<i>tə-ntsʰó</i>	one-CL (nest)	窝
<i>tə-kwá</i>	one-CL (year)	年
<i>tə-χqó</i>	one-CL	一把 (手捏起)
<i>tə-qʰo</i>	one-CL (bag)	袋
<i>tə-xtʃí</i>	one-CL (meal)	顿
<i>tə-xkwá</i>	one-CL (time)	回, 次
<i>mdzǎé tə-zǎé</i>	rice one-CL (bowl)	碗
<i>tə-xpó</i>	one-CL (handful)	一捧
<i>tə-féʳto</i>	one-CL (bottle)	一瓶
<i>tə-fʰə</i>	one-CL (song)	一支 (歌)
<i>tə-ku</i>	one-CL (sentence)	一句
<i>tə-púʳ</i>	one-CL (pile)	一堆
<i>tə-ŋá</i>	one-CL (a while)	一阵 (雨, 冰雹等)
<i>tə-xpʰí</i>	one-CL (for field)	一丘/块 (田, 地)
<i>tə-βráʳ</i>	one-CL (drop)	一滴 (水)
<i>tə-só</i>	one-CL (cup, bucket)	一杯 (满)
<i>tə-tʃʰó</i>	one-CL (suit)	一套 (衣服)
<i>tə-tʃʰí</i>	one-CL (pair)	一对
<i>tə-ló</i>	one-CL (arm spread)	臂展长度
<i>tə-ptʃʰí</i>	one-CL (distance between thumb and middle finger)	一拃 (拇指到中指距离)
<i>tə-hnə</i>	one-CL (distance between thumb and index finger)	一拃 (拇指到食指距离)
<i>tə-fí</i>	one-CL (for sleep)	一觉
<i>tə-xʈʂí</i>	one-CL (sheng, measuring unit)	一升
<i>tə-sʊ</i>	one-CL (liang, traditional weight unit)	一两
<i>tə-dzámèi</i>	one-CL (jin, traditional weight unit)	一斤

(4.73) the classifier for ‘night’ *ʃ^hé*

kámé ká-ptə t^hə zí tə-wú qó^h-tʃ^hí^hpò^h tə^h-p^hó^h KN TMKN ʃ^hé
 clothes IN-dump.3 this way NEU-.do3 IN-cover.3 NEU-leave time then night
s^hó-ʃ^hé tʃè ri tírí nó^h ɲù tʃí
 three-CL upon then then smell capable.3 GNR

‘Put the clothes on top to cover it, then after three nights, it will reek (of liquor).’
 把衣服盖在上面放着，然后放三晚以后，就会有（酒的）气味。 (QVY-330:30)

4.8.6 Adverbs

In this dissertation, Adverbs in Queyu are defined by their functions. In Pubarong, Adverbs modify either a predicate or an entire clause. As Schachter and Shopen (2007:20) summarize, Adverbs modify constituents other than Nouns. When a word functions adverbially, it occurs before the constituent that it modifies. When modifying a clause, they occur at the beginning of the clause. When modifying a predicate, they occur before the predicate. Most Adverbs do not take any morphosyntactic marking, except for a few situations to be mentioned below.

The following subsections summarize several common types of Adverbs based on their formation and function.

4.8.6.1 Adverbs derived from other word classes

Some Nouns and property concept terms can be used as Adverbs, in which case they occur in front of the constituent they modify. Example (4.74) is an instance when the Noun *ʃəχqá^h* ‘lame person’ is used as an Adverb to describe how the rabbit acts. Locative nominals can serve as Adverbs, as well. In (4.75), the Noun *p^hèʃó* ‘side’ that expresses spatial relations functions as the Adverb.

(4.74) the Noun *ʃəχqá^h* ‘lame’ is used as an Adverb here

tǐ nə-tú mdí KN tǐ xǐ tə-ní jì tǎ^h tsǎ éndzì qe^h
 then DOWN-come.3 see.3 time then rabbit NEU-say.3 NFl then 3SG 1DU place
nə-tú wú KN tsǎ éli brí-wù=jì ʃəχqá^h ʃəχqá^h vó
 DOWN-come.3 finish.3 time 3SG upstream path-in=ABL lame lame do.NOM

fī ŋgwǎ fʰó tsì KN
SIM first go.1SG EGO time

‘They saw (that person coming down). Then the rabbit said : “When he gets here, I’ll limp on that path.” ’

他们看到那个人下来了，然后兔子就说：‘当他到我们这儿的时候，我在那边路上装
作是瘸子走。’ (QVY-337: 3)

(4.75) the Noun *pʰɛ́fó* ‘side’ is used as an Adverb

TM *fʰòpʰí pʰɛ́fó ká-fǎβrì ni àˀxpáˀ ríˀ=rí*
then child **aside** IN-look.3 NFl a.while laugh.3=DIR

‘Then the kid looked at this beside them, and kept laughing.’

然后小孩在旁边看着，不停地笑着。 (QVY-333: 40)

The two examples in (4.76) demonstrate another productive way of transforming Nouns into Adverbs, which is to add *zì* ‘way’ after the Noun so as to convey the meaning of ‘having the property of that Noun’. In (4.76a), *tʰɔ́ zì* ‘this way’ refers back to the what the rabbit said in (4.74). Example (4.76b) demonstrates that *zì* ‘way’ can be added after other common Nouns. The expression *tʰɛ́kí mǎˀtsíˀ*, literally meaning ‘stove cat’, is a metaphor that describes the state of a person who is as comfortable as a cat lying besides a warm stove and does nothing.

(4.76) *zì* ‘way’ is added after a Noun to form an Adverb phrase

a. *zì* ‘way’ follows the pronoun *tʰǎ* ‘3SG, this’

tǐ tsǎ=tǎ ptjè tʰí KN tsǎ TZ TZ vǎ fī áli
then 3SG=ISM1 chase GNR time 3SG **this.way this.way** do.NOM SIM upstream

tʰáˀrì lǎ-φlwǎ wú kʰì
far.away US-arrive finish.3 time

‘Then he went chasing it, then the rabbit was walking lamely and reached a place far away.’

然后就去追它，然后兔子就这样做一瘸一拐的样子，到了很远的地方。

(QVY-337: 6)

b. *zì* ‘way’ follows the Noun *tʰɛ́kí mǎˀtsíˀ* ‘stove cat’

tʰɛ́kí mǎˀtsíˀ-zì tǎ-vǎ
stove cat-way PROH-do.2SG

‘Don’t be lazy! (Don’t act like a cat resting by the stove)’
不要懒惰!

Property concept words can also be used adverbially. They must be in the reduplicated form and directly precede the Verb that they modify. An example of this is shown in (4.77). No further morphosyntax is required of this conversion from property concept word to Adverb. Notice that there can be multiple Adverbs modifying the same Verb. In the example below, *évvə* ‘downstream direction’ is another Adverb indicating the direction of the action.

(4.77) the reduplicated form *rírí* ‘slow’ is used as an Adverb

f^hòp^fí=ndzè évvə rírí rírí i-φlwə KN t^hə=nts^há^ʷ éngù
child=DU downstream **slow.RED slow.RED** DS-arrive.3 time 3=PL.LOC home
xk^hápə=p^hè éngù pà^ʷ kə-φlwə
footprint=COM home side IN-arrive.3

‘When the two kids slowly and slowly arrived home, the frog also arrived following their footprints.’
两个小孩慢慢慢慢到家的时候，青蛙也跟着脚印到了他们的家。 (QVY-333: 29)

4.8.6.2 Adverbs derived from Verbs

In some situations, certain Verb forms can pair with ‘one’ to express the idea of ‘doing an action a little bit’. Such structure is followed by a main verb, which is very similar to a light verb construction. This one +V construction thus modifies the predicate it directly precedes. The Verb form following ‘one’ is in its nominal stem form. Detailed discussion on various verb forms can be found in Chapter §6.2.

Several examples of this kind are given below. The two examples in (4.78) have *rə* ‘throw’ as the main verb. Example (4.78a) conveys the idea of ‘talk (about wine brewing) a little bit’, while (4.78b) expresses ‘hone (the knife) a little bit’.

(4.78) *rə* ‘throw’ as the main verb

a. The use of ‘to say’ *p/ə* as a

tǎ^ʷ ŋǎ kət^hə énts^hà^ʷ pərə́=tə ndè zí tə-wú ɲi
then 1SG this 1PL.LOC Tib.liquor=ISM1 what way NEU-do.3 NFl

nə̃^ʷ-q^hwá^ʷ-s^hí *tsì* *tʂí* *t^hə̃* *lòdzý=tə̃* *tə̃-pfə̃* *rə̃*
 DOWN-brew.3-NMLZ EGO GNR this history=ISML **one-say.NOM** **throw.SAP**

‘How we brew Tibetan wine, the history (brewing method) I’ll talk a bit.’
 我把那个藏酒是怎样酿出来的，这个酒的历史（做法）我讲一下。

(QVY-330: 1)

- b. The use of ‘to hone’ *bdə̃* and *tə̃-* ‘one’ as an Adverb

tə̃-bdə̃ *tə̃-rə̃*
one-hone NEU-throw.SAP

‘Hone a bit.’
 去磨一下。

As for (4.79), the two uses of *βrá^ʷ* ‘drop’ are illustrated. Example (4.79a) is the situation where *βrá^ʷ* is used as a Verb (‘making the water drop (drain something)’), and example (4.79b) describes the manner of how distilled liquor flows down (‘drop by drop’).

(4.79) two different uses of the Verb *βrá^ʷ* ‘drop’

- a. *βrá^ʷ* ‘drop’ is used as a Verb

ndzɔ́ *mə̃^ʷ-ndzɔ́* *nə̃-wú* *nə̃^ʷ-βrá^ʷ* *tə̃-p^hú*
 same NEG-same DOWN-do.3 **DOWN-drop** NEU-cause.3

‘Drain the water properly.’
 巴巴适适地让水流干。

(QVY-331: 11)

- b. *tə̃-βrá^ʷ* is used as an Adverb

ə́ræ̃ *t^hə̃* *zì* *tə̃-wú* *nə̃-tú* KN *zì* *ŋgwə̃* *nə̃-tú* KN
 liquor this way NEU-do.3 DOWN-come.3 time SUP front DOWN-come.3 time

tə̃-βrá^ʷ *tə̃-βrá^ʷ* *nə̃-tú* *tʂí*
one-drop one-drop DOWN-come.3 GNR

‘The distilled liquor drops down like this. At first it flows down by drops.’
 烧酒就是这样流下来的，最先流下来的时候是一滴一滴的。 (QVY-330: 52)

4.8.6.3 Adverbs that modify Verbs

In terms of semantics, Adverbs that modify Verbs can be divided into three types. The first one are spatial Adverbials. They occur before motion Verbs and indicate the direc-

tion of the action. Table 4.15 is a list of them, with (4.80) as an example demonstrating *ǎŋò* in natural speech. Note that the directional Adverb agrees with the directional prefix of the following verb. For example, ‘upward’, the Adverb, always pairs with ‘upward’, the directional prefix. Likewise, ‘inward’, the Adverb, always pairs with ‘inward’, the directional prefix.

Table 4.15: Directional Adverbs

Queyu	Gloss
<i>rǒ</i>	upward
<i>ǎŋò</i>	upward
<i>ǎwə̀</i>	downward
<i>ǎli</i>	upstream
<i>ǎvə̀</i>	downstream
<i>jǒ</i>	downstream
<i>ǎkù</i>	inward
<i>kǒ</i>	inward
<i>tʰǒ</i>	here (towards the speaker)

(4.80) *ǎŋò* ‘upward’ agrees with *í-* ‘UP’ prefix

dʒáʷβrè=kù nəwúlǎ ǎŋò rǎ í-tʃi pʰəʃhǎʷ nə-mqzǐ
 yard=INE as.for **upward** mt.LOC **UP-go.3** leaf.pile DOWN-transport.3

‘As for the shelter, go up to the mountain, and lay the leaves down from there.’
 棚子里的话，上山把叶子搬下来。 (QVY-327: 2)

Another type of Adverb describes the degree of the action. Table 4.16 provides a limited list of these words, and (4.81) is an example of using *tsíkǎ̀* ‘a little bit’. Notice that (4.81) also demonstrates how Queyu speakers apply Queyu morphosyntax to Chinese loan words. The Noun *dōngtiān* ‘winter’ <冬天> takes the nominal suffix =*tjè* ‘SUPE’, and the Verb *jiǎng* ‘talk, speak’ <讲> takes the directional prefix *rí-* ‘upward’.

(4.81) Degree Adverb

<*dōngtiān*>=*tjè* *tsíkǎ̀* *rí-*<*jiǎng*>
 winter=SUPE **a.bit** UP-speak

Table 4.16: Degree Adverbs

Queyu	Gloss
<i>p^húni</i>	totally, very
<i>díni</i>	totally
<i>mə^hndzǎ^hwà^h</i>	very
<i>dzipú</i>	very
<i>téró^h</i>	very
<i>tsíkǎ</i>	a little, a bit
<i>tʃ^hipú</i>	many

‘For winter, I’ll talk about it a bit.’

冬天稍微讲了一点。

(QVY-329: 86)

Additionally, Pubarong contains a set of Adverbs that describe manners for how the action is completed. An incomplete list is given in Table 4.17, with an example of *didzǒ* ‘crackling, loud noise’ given in (4.82). The context is a description of how the bride’s relatives were playing all sorts of instruments when going from the bride’s house to the place they were told was the bridegroom’s house.

Table 4.17: Manner Adverbs

Queyu	Gloss
<i>tʃipwǎ</i>	quickly, hurry up
<i>hùnt^hé</i>	exert forces
<i>ròs^há^h</i>	immediately, soon
<i>à^hxpé^h</i>	a while, non-stop, continuously
<i>bidzǒ</i>	ideophone, loud sound
<i>didzǒ</i>	ideophone, loud sound
<i>nǎ</i>	also
<i>á^htʃ^hó</i>	for a long time

(4.82) Manner Adverb

p^húni didzǒ *xtá^h jǐ nǎ-tú* *tʃǐ ní tʃǐ*
 very **loud.noise** sound SIM DOWN-come.3 GNR say.3 GNR

‘They were making loud noise while going down.’

(舅舅和伴郎) 这样响彻山谷地下来了。

(QVY-337: 41)

4.8.6.4 Adverbs that modify clauses

Adverbs in Pubarong can also serve a modification function at the clause level. Most of them are time adverbials that concern temporal relations of events. Several examples are given in Table 4.18 and (4.83-4.84). Some temporal Adverbs end with $\neq ni$, which is an ablative enclitic.

Table 4.18: Clause Adverbial

	Queyu	Gloss
Other clausal Adverb	gólèni	overall
	jǒ	again
	ŋǒ	again
	təŋú	still
	tsìmbwó	definitely, regardless
Time Adverb	ŋgwǎ	front, first
	dòmbó	first
	tʰə ^ʷ mə ^ʷ	then, afterwards (TM)
	tʰə ^ʷ mə ^ʷ kʰí \neq ni	then, afterwards (TMKN)
	tíri	then
	kʰí \neq ni	at that time (KN)
	tíkʰí \neq ni	at that time
	tǐ	then
	tǎ ^ʷ	then
	pùtǎy, pùtǎy ^{re}	just then
	psòpsó	almost time
	nìmwá ^ʷ	then
χá ^ʷ là ^ʷ	almost	

(4.83) a clause Adverb *gólèni* ‘overall’

tǐ lǎ-ptʰə KN **gólèni** βzǐ kwə βzǐ ʃʰòpʃʰí tǎ-ró^ʷ i-xtǎí pʰú
 then US-bring.3 time **overall** four year 3.REFL child one-CL DS-bear cause.3

tǎí ni tǎí
 GNR say.3 GNR

‘Then when (Lon Tongtsen) was bringing her (the Han Princess) here, generally

it took four years. She herself gave birth to a child.’

然后（禄东赞）带（汉族公主）过来的时候，总的来说花了四年，她自己生了一个小孩。
(QVY-348: 4)

(4.84) a temporal Adverb *tik^{hí}=ní* ‘at that time’

tik^{hí}=ní *jòmé* (from <yùmǐ>) *xtfě* *tá* *tʂí*
at.that.time=ABL corn stalk dump.SAP GNR

‘At that time, dump corn stalks.’

那时候倒要给牛倒玉米杆杆。

(QVY-329: 65)

4.8.7 Affixes

Affixes in Pubarong can be divided into prefixes and suffixes. Suffixes and enclitics are different in that enclitics can attach to various word classes, and they do not stick to a particular part of speech, but rather attach to the end of a phrase. Affixes, on the other hand, attach directly to certain parts of speech. So far, it appears that Verbs can take both prefixes and suffixes, while Nouns only occur with enclitics and suffixes.

There are both productive and unproductive prefixes. Productive Verbal prefixes include interrogative, directional, and prohibitive markers. The only unproductive prefix found so far is a causative prefix *s- that is only found in a couple of Verbs.

Nominalizers are Verbal suffixes. There are multiple types of them, each with different functions. Details of Verbal morphosyntax can be found in Chapter 6.

4.8.8 Enclitics

As is mentioned in the previous section, enclitics attach to Noun phrases. Three types of enclitics are found in the available data: case markers, number markers, and information structure markers. These are given in the table below. Some of these enclitics can co-occur, following certain patterns. Detailed examples and discussions are provided in Chapter §5.5.7. Below is a list of enclitics.

Table 4.19: Noun phrase enclitics

	Queyu	Gloss
Case marker	=xə	locative (LOC)
	=ɲi	ablative (ABL)
	=p ^h e	comitative (COM)
	=q ^h a ^ʰ	instrumental (INS)
	=ku	inessive (INE)
	=wu	inessive (INE)
	=tje	superessive (SUPE)
Number	=ndze	dual (DU)
	=nts ^h i, =ts ^h i	plural (PL)
	=tʂa ^ʰ	plural(PL)
Information structure marker	=tə	information structure marker 1 (ISM1)
	=i	information structure marker 2 (ISM2)
	=rǝ	information structure marker 3 (ISM3)

4.8.9 Clause ending particles

The last word class addressed here is clause-final particles. In some publications, they are referred to as clause linkers or clause enclitics, while elsewhere in the literature the simple term ‘particle’ is adopted. These morphemes are not called enclitics in this dissertation because their phonological properties are not clear yet, while Pubarong enclitics are phonologically dependent on the phrase they attach to. Therefore, for now this dissertation uses the label ‘clause-ending particle’ to refer to these morphemes. A more thorough investigation of their properties is needed in the future.

A list of these clause-final particles are given in Table 4.20. Their specific behaviors are discussed in Chapter 7.

4.8.10 Coordinating conjunctions

Conjunctions in Pubarong can connect words, phrases, or clauses (Schachter and Shopen 2007:45). So far, three of them are observed in my data, which are listed below.

These three words can connect structures of different levels. The conjunction *s^hǝ*,

Table 4.20: Clause-final particles

Queyu	Gloss
<i>ji</i>	non-final 1 (NF1)
<i>lə</i>	non-final 2 (NF2)
<i>na^ɣ</i>	concessive (CONC)
<i>tʃə, tʃərə</i>	propositive (PROP)
<i>mtʃ^hə, mtʃ^hərə</i>	otherwise
<i>ri</i>	then
<i>pa^ɣ</i>	conditional (COND)
<i>pa^ɣ</i>	assumptive (ASS)
<i>ko</i>	speculative (SPEC)
<i>mʊ</i>	indicative (IND)
<i>s^hɪ</i>	nominalizer (NMLZ)
<i>yæ</i>	deontic (DEO)

Table 4.21: Conjunctions in Queyu

Queyu	Gloss
<i>s^hɪ̃</i>	and
<i>s^hǎ</i>	or
<i>xtəló, xtó</i>	but

‘and’, connects two Noun phrases, or two Nouns within a Noun phrase. In addition, it can also mean ‘and so on’ when following a Noun without preceding another Noun. These three uses can be observed in (4.85). In (4.85a), the Noun phrase is ‘the kid and the dog’. It is marked by the dual marker *-ndze* and ISM2 marker *-i*. The conjunction *s^hɪ̃* connects the Nouns within the phrase (*ʃ^hòpʃ^hɪ̃* ‘child’ and *xtʃ^hɪ̃^ɣ* ‘dog’). In (4.85b), ‘the downstream speech’ and ‘the upstream speech’ are two Noun phrases that are connected. In (4.85c), the speaker would feed cows with both grass and fodder other than grass, but only *rú* ‘grass’ is specified. The other fodder is implied by the use of *s^hɪ̃* ‘and’.

(4.85) Different functions of *s^hɪ̃* ‘and’

- a. *s^hɪ̃* that connects nouns within a noun phrase

ʃ^hòpʃ^hɪ̃ s^hɪ̃ xtʃ^hɪ̃^ɣ=ndzè=i tə^ɣ-xʃé^ɣ nə-tʃɪ̃ ji
child and dog=DU=ISM2 NEU-dash DOWN-go.3 NFL

‘The kid and the dog dashed down.’
小孩和狗一起跑下去。

(QVY-333: 8)

b. *s^hĩ* that connects noun phrases

κə^hptʂ^hó jǒ *irǒ* *xkǒ* *s^hĩ* *lǝndzǒ-pi* *xkǒ*
Yizha downstream afterward language **and** upstream-people language
nǝwúlǝ tsíkǝ=rǐ *xtʂĩ* *mǝ-tʂĩ*
as.for a.little=ism3 same neg-gnr

‘Down from Yizha, the language is a bit different from the upstream speech.’
乙扎以下的语言和以上的村民的话有一点点不一样。 (QVY-326: 10)

c. *s^hĩ* that means ‘and so on’

jǒ *k^himí=xǝ* *rú* *s^hĩ* *kǒ-ptǝ*
again cow=LOC **grass and** IN-dump.3

‘Then dump some grass and the like to cows.’
再给牛倒一些草料等等。 (QVY-329: 96)

The conjunction *s^hǎ* ‘or’ connects Noun phrases (see (4.86a)) and clauses (4.86b)).

(4.86) Different functions of *s^hǎ* ‘or’

a. *s^hǎ* that connects Noun phrases

tjépi *s^hǎ* *pútɥè*
pancake **or** noodle.piece

‘(Do you want to eat) pancake or noodle piece?’
饼还是面块？

b. *s^hǎ* that connects clauses

zí=xǝ *ts^hézu* *wú* *ǎ-tʂi* *s^hǎ* *zǒ^h=xǝ* *ts^hézu* *wú* *tʂi*
son=LOC wedding do.3 Q-GNR **or** daughter=LOC wedding do.3 GNR

‘Is the man getting married or the woman?’
是给男的结婚还是给女的结婚？ (QVY-342: 14)

For *xtǎ/xtǎlǎ*, this conjunction only occurs in the current data as a connector of clauses. An example of this word is demonstrated in (4.87).

(4.87) *xtǎlǎ* that connects two clauses

tǎʷ ni=tsʰáʷ χqó=rì xtəlǎ rì=tǎ dzómèr
 then 2.REFL=PL.LOC trouble=DIR *but* mt=ISM1 scale

nə-wú (intended meaning: *nə-kú* ‘load’) *tǎ-kú nə-rǎ yǎ*
 DOWN-do.3 one-load.3 DOWN-throw.3 DEO

‘“Then, sorry to bother you, but please use the scale to weigh the mountain.”’
 ‘然后，麻烦你们了，但是，麻烦你们用称把山称一下。’ (QVY-346: 15)

Schachter and Shopen (2007:45–46) also mention the phonological property of coordinating conjunctions, namely that the conjunctions can associate with one of the conjuncts more closely than the other. This also appears to be the case in Pubarong. For example, while all three instances of *sʰǎ* ‘and’ in (4.85) bear a surface L tone, in expressions like *ŋə sʰǎ nə* ‘me and you’, the surface tone on *sʰǎ* changes to H, and the surface tone on *ŋə* changes from R to L. This is evidence showing that the *sʰǎ* forms a tonal domain with *ŋə*. Data regarding tonal behavior of the other two coordinating conjunctions are not available yet. Future research focusing on the phonological property of other minor word classes, such as conjunctions, can be used for word class categorization.

CHAPTER 5

NOUN PHRASE MORPHOSYNTAX

This chapter describes noun phrase morphosyntax in Pubarong Queyu. The first section will illustrate the structural template for noun phrases. The following sections present detailed descriptions of each of the possible elements in a noun phrase. These are determiner and prenominal modifier, number marking (Section §5.3), case marking (Section §5.5), information structure marking. Property concept words have already been discussed in Chapter §4.6, so this chapter is not going to devote a separate subsection on nominal modifiers.

5.1 Noun phrase template

The basic noun phrase structure is illustrated below in Figure 5.1. A noun phrase comprised of all possible elements has not yet been found in the dataset. The template is based on the noun phrase structures observed in elicited data as well as natural texts. The order for various noun phrase elements is fairly rigid, except for the last two possible enclitics. The information structure marker and the case marker may switch places. Examples of them are given in Section §5.7.

Determiner	Prenominal modifier	Head noun	Property concept word	Number marking	Quantifier	Case marking	Information structure marker
					Num +Classifier		

Figure 5.1: Noun phrase template

5.2 Determiner and prenominal modifier

There are two determiners in Pubarong, which can also be used as definite pronouns. They are *t^hǎ* and *kǎt^hǎ*, and are introduced in Chapter §4.8.2 already. There are two determiners in Pubarong, which can also be used as definite pronouns. They are *t^hǎ* and *kǎt^hǎ*, and are introduced in Chapter §4.8.2 already.

‘Prenominal modifier’ refers to the modifying form that precedes the head noun.

These are comprised of two major types, possessors and relative clauses. The relative clause can also occur post-nominally, and will be addressed in Chapter §6.8.4. A possessor is a noun functioning as a modifier to the head noun, and is formed by suffixing a LOC marker. An example of this is given in (5.1), where *tʃèzì* ‘bowl’ is modified by *tʰə=ntsʰí* ‘they’.

(5.1) *tʰə=ntsʰí=xə* ‘their’ as the possessor of *tʃèzì* ‘bowl’

tǐ tʰə=ntsʰí=xə tʃèzì=kù tə-xʃʰwəʃ tʃǐ nì tʃí
 then 3=PL=LOC bowl=INE NEU-pour.3 GNR say.3 GNR

‘Then the rabbit poured (the demon woman) into their bowls.’
 兔子就把鬼婆婆倒到了送亲队伍的碗里。 (QVY-337: 48)

An example of a relative clause functioning as a modifier is given in (5.2), where the negated nominalized verb *ndzú* ‘same’ is suffixed by the LOC and precedes the head noun *mó* ‘person’.

(5.2) *mà-ndzú-tʃí* ‘not the same’ serves as the modifier for *mó* ‘person’

tǎ nǚ gəpə=xə tsǎ qé pá kə-li tə-nó mà-ndzú-tʃí=xə
 then 2SG old.man=LOC 3 place side IN-come.2 IMP-say.2 NEG-same-EXIST=LOC
mó tə-tsí-sʰí
 person NEU-EGO-NMLZ

‘Then “You tell the grandpa to come to me, he is an unusual man.” said the businessman.’
 ‘你让老公公到我跟前来，他是个不一样的人’（商人说）。 (QVY-346: 5)

Though determiner and pronominal modifier are listed here as being in a syntagmatic relationship, a noun phrase example with both these two elements has yet to be found. Therefore, it is likely that these two may very well be in a paradigmatic relationship, instead. With current limited data, no definite conclusion can be drawn on the relationship between these two slots yet.

5.3 Number marking

There are three ways to quantify a noun phrase in Pubarong Queyu: number marking, quantifier, and numeral+classifier phrase. This subsection deals with number enclitics.

For dual, there is only one marker, =*ndze*. There are two of plural markers, =*nts^{hi}* and =*tsa^ɣ*. The =*nts^{hi}* marker has a variant =*ts^{hi}*, although the conditioning factor for these two variants is not clear yet. This marker may also suffix to nouns and pronouns to convey the meaning of ‘the family of...’, which is similar to English ‘the Johnsons’. Both =*ndze* and =*nts^{hi}* can mark animate nouns. Examples of =*ndze* and =*nts^{hi}* are given in (5.3a) and (5.3b). In (5.3c), the pronoun *kət^{hə}* is suffixed by the =*ts^{hi}* plural variant, which does not mean 3PL. Here *kət^{hə}* refers to the poor young man and *kət^{hə}=tsⁱ* the family where the poor young man came from.

(5.3) the =*ndze* and =*nts^{hi}* number enclitics

a. the dual enclitic =*ndze*

TM *t^{hə}=ndzé rək^{hi} nə-tʃi ji*
 then 3=DU riverbank DOWN-go.3 NFI

‘Then when they arrived at the river bank.’
 然后他们到了河边。

(QVY-333: 3)

b. the plural enclitic =*nts^{hi}*

TM *t^{hə}=nts^{hi} s^{hó}-tfo ba^ɣxpé s^{hi} xtʃ^{hi} s^{hi} ʃ^hopʃ^{hi} s^{hi} t^{hə}=nts^{hi} s^{hó}-tfo*
 then 3=PL three-CL frog and dog and child and 3=PL three-CL

tʃælxə ptʃú tə^ɣ-tʃó^ɣ
 all friend NEU-become

‘Then they three, the frog, the boy, and the dog, three of them all became friends.’

然后他们三个，青蛙，小孩和狗，他们三个都变成朋友了。

(QVY-333: 41)

c. the plural enclitic =*ts^{hi}* that means ‘the family of...’

tǎ^ɣ t^{hə} zó^ɣ=tə t^{hə} tə-k^{hə} ná^ɣ nə kət^{hə}=ts^{hi} pʃýpù
 then this daughter=ISM1 3.LOC NEU-give.1PL CONC also this=PL rich.man

tə-tsí-s^{hi} tə^ɣ-xs^{hi}qí^ɣ tʃí ji tʃí
 NEU-EGO-NMLZ NEU-think.3 GNR say.3 GNR

‘Even if we give our daughter to him, his family is rich.’

就算我们把女儿给了他，他家也是富人家。

(QVY-337: 29)

The other plural marker, =*tsa^ɣ*, differs from =*nts^{hi}* in that it can mark the quantity

of both animate and inanimate nouns. For =*ndze* and =*nts^{hi}*, they suffix to animate nouns only. An example of =*tsa^s* is given in (5.4).

(5.4) the =*tsa^s* plural enclitic

k^himí=tsà^s jǒ qǎ^s-χq^hà^s ni
 cow=PL again IN-tie.1PL NFI

‘Tie these cows up again.’

把这些牛再拴起来。

(QVY-329: 63)

5.4 Quantifier and numerals

Quantifier here is defined as a word that denotes an approximate number or amount of the head noun, without specifying an exact quantity. Examples include *tʃǎlǎ* ‘all’, *mtʃ^hə* ‘only’, and *ndzətʃ^hǎ* ‘many’. The numeral+classifier phrase, on the other hand, specifies the exact number of the head noun. While number enclitics may co-occur with quantifier or numeral+classifier phrase (see (5.3b) where the noun phrase contains both =*nts^{hi}* ‘plural’ and *s^hó-tʃǒ* ‘three-CL’), no instances where quantifier and numeral+classifier phrase both occur can be found. Therefore, these two are put in the same slot in the noun phrase template and are postulated to be in a paradigmatic relationship.

For numerals, Pubarong has a decimal numeral system. As previously stated, most of the first twenty numbers are native, while numbers above twenty are Tibetan loanwords. Teen numbers start with *ǎ-* or *a^s-*, depending on the vowel quality of the second syllable. The second syllable is derived from the first ten numbers. Transcriptions of 1-20 are given in Table 5.11 for comparison.

Pubarong does not have native expressions for ordinal numbers. Speakers use adverbs like *dòmbǎ* ‘first’, *i ηgwǎ* ‘the earliest’, *t^hǎ^smǎ^s* ‘after that, then’, *tǐ* ‘then’ to express sequences of events or order.

Table 5.1: 1-20 in Pubarong Queyu with the default classifier *-ròʷ*

Queyu	Gloss	Queyu	Gloss
<i>tə-ròʷ</i>	one	<i>áxtə-ròʷ</i>	eleven
<i>náʷ-ròʷ</i>	two	<i>áxnə-ròʷ</i>	twelve
<i>sʰó-ròʷ</i>	three	<i>áʷsʰó-ròʷ</i>	thirteen
<i>βzɪ-ròʷ</i>	four	<i>áʷzɪ-ròʷ</i>	fourteen
<i>nwáʷ-ròʷ</i>	five	<i>áʷNó-ròʷ</i>	fifteen
<i>xʈʂʰɪʷ-ròʷ</i>	six	<i>áʷxʈʂʰɪʷ-ròʷ</i>	sixteen
<i>hnəʷ-ròʷ</i>	seven	<i>áʷhnəʷ-ròʷ</i>	seventeen
<i>pʃəʷ-ròʷ</i>	eight	<i>áʷpʃəʷ-ròʷ</i>	eighteen
V <i>xkú-ròʷ</i>	nine	<i>áʷxkú-ròʷ</i>	nineteen
<i>áxtó-ròʷ</i>	ten	<i>nýʃý tʰáʷmbàʷ</i>	twenty

5.5 Case marking

Pubarong Queyu noun phrases have seven cases: the locative marker (LOC) =*xə*, ablative (ABL) =*ni*, comitative (COM) =*pʰe*, instrumental (INS) =*qʰaʷ*, two inessive marker =*ku* and =*wu* (INE), and superessive =*tje* (SUPE). These case enclitics can even concatenate, with two stacking together at most. The following subsections provide examples for each one, with the last one talking about case stacking.

5.5.1 Locative

Locative marker =*xə* is versatile, occurring in multiple contexts. In addition to marking locations (5.5), it can show up as a dative marker (5.6), after a time adverbial (5.7), functioning as a genitive marker (5.8), or even as an ablative marker (5.9). The locative marker =*xə* sometimes also marks benefactive role (5.10), the patient role (5.11), instrument role, and experiencer (5.13). See examples below for illustrations of each.

(5.5) LOC marker marking locations

rǎ *règú sʰɪ* *làʷdó sʰɪ* *tʰə* *zɪ* *nə* *təʷ-qʰáʷ* *ni* *kʰímí=xə*
mt.LOC RG and LD and this way also NEU-cut.1PL NFl COW=LOC
tʃʰɪ-fə *rɪ-rò* *tə-pʰə*
 eat.NOM-NMLZ UP-dry NEU-cause.1PL

‘There are Regu, Lado and the like, we also cut them and dry them, make them

into food for cows.’

山上有regu, lado等, 也像这样割了之后晒干, 给牛吃。

(QVY-329: 147)

- (5.6) LOC marker occurs in dative context

jö áli zibdjé=xò fʰí gù tʂí
again that.side **sacred.mt=LOC** go.NOM need.3 GNR

‘(Men) need to go to that sacred mountain again.’

又要去那边的神山

- (5.7) LOC marker occurs after a time adverbial

tsʰèxtʂí=xò zibdjé fʰí gə̀ tʂí
first.day=LOC sacred.mt go.NOM need.1PL GNR

‘On the first day, we need to go to the sacred mountain.’

初一要去神山

- (5.8) LOC marker functions as a genitive marker

fivó vjé=xò tʂí-fə́ fivó
SV **pig=LOC** eat.NOM-NMLZ SV

‘*fivó*, the pig’s food *fivó*.’

猪的饲料是酸酸草。

(QVY-329: 148)

- (5.9) LOC marker in an ablative context

zibdjé=xò nò-tú-sʰí tʂáxlə̀=tə̀=i
sacred.mt=LOC DOWN-come.3-NMLZ all=ISM1=ISM2

‘All people come down from the sacred mountain.’

从神山下来的全部的人。

(QVY-051: 72)

- (5.10) LOC morpheme marks benefactive role

kʰímí=xò rí-rò pʰé ni ptʰáʳ tʂí-fə́
cow=LOC UP-dry cause.1PL NFI fodder eat.NOM-NMLZ

‘We make the grass dry for cows, (make them into) fodder, food.’

我们给牛把草晒干, (做成) 饲料, 吃的东西。

(QVY-329: 145)

- (5.11) LOC marks patient role

TM *bàʳxpé=i tʰə̀-ndzə́ náʳ-ròʳ=xò ké-fə́βri*
then frog=ISM2 **3-DU.LOC two-CL=LOC** IN-look.3

‘Then the frog looked at them two.’
 然后青蛙看着他们俩。 (QVY-333: 24)

(5.12) LOC marks instrument

tĩ xtsí=xə í-ptsi
 then **peck=LOC** UP-measure.3

‘Then use peck to measure.’
 然后用斗/抔来量。 (QVY-330: 8)

(5.13) LOC marks experiencer

tʰə kʰókʰi=xə érxè kʰə=rí tə^h-xs^hqí^h KN
 this **self=LOC** liquor want.1PL=DIR NEU-think.3 time

‘When someone thinks: ‘We want the liquor’’
 自己想要藏酒的时候。 (QVY-330: 34)

Something worth noting about this enclitic is that, case markings with similar forms are found in other local languages. While in Suoyi, the locative marker is =xə, in the neighbouring village Yazhong, the locative enclitic is =yə. In Geshiza Stau, there is an unproductive locative marker with limited distribution, -ya, that can also encode both spatial and temporal meanings (Honkasalo 2019:386). This is a cognate to the Mazur locative/allative enclitic =ba that is more productive, and comparable to Wobzi Khroskyabs locative =ba, and Tangut locative marker ya (Lai 2017:189; Gates 2021:307; Lai et al. 2020:184).

5.5.2 Ablative

Ablative marker =ni marks the point of departure, as in (5.14). It occurs after time adverbials, as well.

(5.14) A Noun with ablative marker =ni

tʰə-ní í-tó kʰi=ni lóte, jó, pʰúkú
there=ABL DS-come.3 time=ABL Lede Quru Pugu

‘Down from there, then we have Lede, Quru, Pugu.’
 从这儿下来以后就是勒德，曲入，普古。 (QVY-326: 4)

(5.15) ABL marker following a time adverbial

TM *tə^h-q^hwá^h* KN *éŋò ròs^há^h=ni* *éŋò k^hòyzó^h=tjè* *p^hǒ*
 then NEU-take.apart.3 time upside **immediately=ABL** upside collector=*upon* lid
nə-bdó-s^hí=tə *ròs^há^h* *p^hǒ rǒ* *tə-xk^hwó* KN *lúpi*
 DOWN-cover-NMLZ=ISM1 immediately lid upward NEU-uncover time steam
tʃǎlə̀ t^hǒ rǒ é-tù *tʃǎ*
 all here up UP-come.3 GNR

‘Then after taking apart the three-peck pot, uncover the lid from the collector above immediately. Then all the steam comes out from there.’
 然后拆了三斗锅后，立刻把上面的集酒器的盖子立刻揭开，然后蒸汽就全部从那儿出来了。
 (QVY-330: 57)

This marker sometimes occurs after a noun and expresses a sense of ‘non-final’ meaning, as shown in (5.16). This marker can also occurs after verbs, indicating that the utterance is not finished. It is glossed as non-final (NFI) in that situation.

(5.16) ABL marker following a noun indicating non-final meaning

k^hòyzó^h=q^há^h=ni TMKN *énts^hà^h* *jǎ̀ndzǐ=ni* *té-ró^h rí* *tʃǎ*
 collector=INS=ABL then 1PL.LOC **conduit.tube=ABL** one-CL need GNR

‘Use a collector. Then, (one will) need a conduit tube.’
 用了集酒器，还需要一个引酒管。
 (QVY-330: 38)

5.5.3 Comitative

Comitative marker expresses the accompanying relationship between two arguments, as shown in (5.17).

(5.17) Comitative case example

TM *bà^hxpé=i* *t^hə=ndzǎ* *xk^hǎpǎ=p^hè* *i-tʃí* *ni*
 then frog=ISM2 3=DU.LOC **footprint=COM** DS-go.3 NFI

‘Then the frog followed their footprints.’
 然后青蛙跟着他们俩的脚印走了。
 (QVY-333: 28)

This marker can also be used to mark instruments, as seen in (5.18):

(5.18) Comitative case marker used as instrumental

i-ptʃé^h-s^hi kát^h t^hè zí i-ptʃé^h-s^hi ŋǎ kát^h <huǒguō>=p^hè kǎ-tʃ^hǎè
 DS-bud-NMLZ this this way DS-bud-NMLZ LSG this hot.pot=COM IN-eat.1PL

‘When the soy beans have budded, budded like this, we eat them with hot pot.’
 黄豆发芽，像这样发芽后，我（们）跟火锅一起吃。 (QVY-329: 137)

The comitative morpheme can mark a location as well (5.19). That location can even be a point of comparison or measurement (5.20).

(5.19) COM marking a location

TM *bà^hxpé=i tsíkǎ tǎ^h-tʃó^h ri tǎ^h-q^hwǎ^hptsjè ni ávǎ t^hè=ndzé*
 then frog=ISM2 a.bit NEU-become then NEU-jump.3 NFI there 3-DU

ná^h-tǎ^h=xǎ tǃ^htǃ^hó vǎ-s^hǎ^h=p^hè ndzónndzǎ i-tǃ^h
 two-CL=LOC wash do.NOM-NMLZ=COM same.RED DS-go.3

‘Then after a while, the frog jumped to the place where they were taking the bath, it also went there.’
 然后青蛙过了一会儿，跳到他们俩洗漱的地方那边，一样去了（一样到他们那边去了）。
 (QVY-333: 37)

(5.20) COM marking the point of measurement

<*Ertan Dianzhan=p^hè*> *zi xtsí=tǎ xǎ^hówù t^hè zí nǎwúlǎ*
 Ertan Hydropower.Station=COM SUP be.close=ISM1 Suoyi this way as.for

tǃ t^hè zí tsì tǃ^h
 then this way EGO GNR

‘The closest villages to Ertan Hydropower Station is Suoyi (including Ladong).’
 离二滩电站最近的是索依那两村子（包括拉冬），然后就是这样子的。
 (QVY-326: 14)

Lastly, markers of similar forms and functions are observed in local languages. The comitative enclitic is =p^ha in Geshiza Stau, and =p^hǎ in Mazur Stau (Honkasalo 2019:384; Gates 2021:305).

5.5.4 Instrumental

The noun used as an instrument or tool is suffixed by the instrumental marker =q^ha^h, as shown in (5.21). In neighbouring languages, Mazur Stau’s instrumental enclitic is =k^hǎ,

and Kang.gsar Stau has an instrumental marker =*k^ha*, that are cognate to Tangut locative *kha* that means ‘in the middle of’ (Lai et al. 2020:185; Gates 2021:302).

(5.21) Instrumental case example

tĩ wəpá^ʰ k^hùtsí s^hí=q^há^ʰ nə-βlǎé ni
 then downside gutter **wood=INS** DOWN-do.1PL NF1

‘Then the gutter is over there, it’s made by wood.’
 然后那边有水槽，在木头上弄的。(QVY-327: 17)

5.5.5 Inessive

There are two inessive case markers in Pubarong, =*ku* and =*wu*. The distinction between these two is not yet clear. It is worth noting that expressions related to the concept of ‘inside’ and ‘towards the speaker’ tend to start with a /k/ onset, such as *kó-* ‘inward’, =*ku* ‘inside’, *kùpá^ʰ* ‘the inside position’, *ǎkù* ‘inward’, and *kǒ* ‘towards the speaker’.

(5.22) Inessive case =*ku* example

t^híró=kù nə-xfwó
bucket=INE down-pour.3

‘Pour (water) into the bucket.’
 把水倒入水桶。(QVY-327: 38)

(5.23) Inessive case =*wu* example

tĩ t^hə=wú xta^ʰpú=rĩ nə-kú-s^hí tǝy tǝí
 then **this=INE** stick=ISM3 down-load.3-nmlz have.3 gnr

‘Then, among them there is one that you put sticks in.’
 这里面有一个装了棍子的。(QVY-327: 31)

5.5.6 Superessive

The last case enclitic introduced here is the superessive =*tje*. This enclitic can be translated as ‘on, upon’, and can express both spatial and temporal information. Additionally, this enclitic can mark a patient. Examples in (5.24) demonstrate these three situations, respectively.

(5.24) Superessive enclitic =tje

- a. =tje that marks location

tʰəᵐ mǎᵐ tʰə=tjé áxwǎ í-tfī kʰi=ni áxwǎ=tǎ
then **this=SUPE** top.fl UP-go.3 time=ABL top.fl=ISM1

‘Then above this place is the top floor.’
然后再上去是最上面了。

(QVY-327: 28)

- b. =tje that marks time

ŋǎ tfʰitsʰè pǎ-rov=tjè
again **time** **eight-CL=SUPE**

‘Around eight o’clock.’
八点钟的时候。

(QVY-329: 24)

- c. =tje that marks patient

xtfʰíᵐ sʰi tfǎlǎ=tí tʰə=tjé bǎᵐxpé=tjè χqó=rí
dog and all=ISM1.ISM2 **3=SUPE** **frog=SUPE** scold=DIR

‘The dog also scolded the big frog.’
小狗也骂了大青蛙。

(QVY-334: 12)

5.5.7 Combination of the case markers

Some case markers can combine. There are five types observed so far in the data. These are locative + ablative, instrumental + ablative, comitative + ablative, superessive + ablative, and the combination of two inessive enclitics. Examples are shown below in (5.25) through (5.29), respectively. They all follow a pattern: if the ablative marker is present, it is always the final case marker. As for the stacking of two inessive markers, only one order, =wu=ku, is found so far.

(5.25) Combination of locative + ablative

tʰə=xǎ=ni kʰùzǐ nǎ-wú-sʰi tsí [sǐ]
this=LOC=ABL gutter down-do.3-NMLZ EGO GNR

‘You carve gutter out of wood.’
在木头上弄出水槽。

(QVY-327: 19)

- (5.26) Combination of instrumental + ablative

dà^htʃí=q^hà^h=ni *t^hi ví kó-βrə* *ni ptsítà^h é-sù* *ni*
stone=INS=ABL this way IN-construct.3 NF flag UP-make.stand.3 NFl

‘Use stones, build like this. Then place the flag.’

用石头就这样修起来，把鬼旗竖起来。

(QVY-327: 30)

- (5.27) Combination of comitative + ablative

tǐ t^hə=p^hé=ni *TMKN <Jiangjin Baijiu>* *tsíkæ kó-ptə*
 then **this=COM=ABL** then Jiangjin distilled.liquor a.bit IN-dump.3

‘Then with this pour a bit Jiangjin distilled liquor.’

然后倒一点江津白酒跟酒曲和在一起。

(QVY-330: 21)

- (5.28) Combination of superessive + ablative

dà^hs^hí tʃ^hétʃ^hé *nə^h-q^hwá^h* *ni tǐ t^hə=tjé=ni* *i-k^hwí-s^hí* *tsí tʃí*
 pine thin.RED DOWN-cut.3 NFl then **this=SUPE=ABL** DS-lay.3-NMLZ ego GNR

‘You cut down the thin pine trees, and place wood up there.’

把细细的松树砍下来，然后把木头铺在上面。

(QVY-327: 27)

- (5.29) Combination of two inessive enclitics

tòxkwó=rǐ i-mt^hí *ni t^hə=xó* *βzìvó nə-kú* *tʃí ni tʃí*
 satin=ISM3 DS-take.out.3 NFl this(shoe)=LOC insole DOWN-load.3 GNR say.3 GNR

à^hqé^h=wù=kù *βzìvó nə-kú*
shoe=INE=INE insole DOWN-load.3

‘He took out the satin, and it is said that he put an insole in the shoes, put an insole in the shoes.’

把绸缎拿出来了，说是在鞋子里放了鞋垫，在鞋子里放了鞋垫。

(QVY-337: 18)

5.6 Information structure marking

The last element that can occur in a noun phrase is the information structure marker. There are three information structure markers =tə, =i and =rǐ. At present, there is no clear-cut analysis for them. All three markers are optional in a noun phrase, and, according to speakers, it “doesn’t change the meaning of the utterance if deleted”.

The =tə marker may express a sense of definiteness. Speakers translated this enclitic as ‘that’ and explained that the referent marked by =tə is more limited and has a more narrow range than referents without it. Related languages have nominal markers with similar forms and functions. For example, in Jiaomuzu Rgyalrong, there is a contrast marker tə, that specifies a referent in its context, and is also not obligatory (Prins 2017:185). On the other hand, Nagano (2017:576) analyzes it as part of a referential indefinite demonstrative pronoun. Wobzi Khroskyabs also has a definite enclitic =tə that occurs post-nominally (Lai 2017:184).

It is worth noting that several other languages contain an indefinite marker with the form -tV, in which the tV means ‘one’ in that language. For example, -ti in Wadu Pumi (Daudey 2014:205), tə in Ersu (Zhang 2013:397), ti in Munya (Bai 2019:316), and du in Yongning Na (Lidz 2010:206).

As for the =i and =ri marker, they seem to express focus, or show up in a contrastive setting. The =i enclitic always occurs as the final enclitic in a noun phrase and only marks subjects. In two other Queyu varieties, a marker with similar form is noted. In Tuanjie/Gala, there is a particle ji that marks agent and the tool being used. In Youlaxi, there is a case particle ji¹³ ji⁵⁵ that marks agent (Lu 1985:75; Wang 1991:62). As for Queyu’s =tə, it may be followed by another enclitic and occurs in various contexts, marking different grammatical relations. While =tə and =i can concatenate in some contexts, they never co-occur with the =ri marker.

5.6.1 Examples of =tə and =i

An example of =i is given in (5.30), where the speaker was emphasizing the fact that villagers lives downstream can still understand what upstream people say.

(5.30) An example of =i marking the topic

<i>ləndzə́-pi</i>	<i>nə́-pfə́-s^hi=tə́</i>	<i>və́ndzə́-pi=tʂá^h=i</i>	<i>χó</i>	<i>kù</i>	<i>tʂí</i>	<i>nǐ</i>
US-person	DOWN-say-NMLZ=ISM1	DS-people=PL=ISM2	know	know.3	GNR	say.3
<i>ŋù</i>	<i>tʂí</i>					
be.capable.3	GNR					

‘What upstream people say, downstream people know it, are able to speak it.’
 上游的人说的话，下游的人全部都懂，也会说。 (QVY-326: 11)

As for the information structure marker =tə, it shows up in different contexts, such as after a noun phrase (5.31), a temporal phrase (5.32), a relative clause (5.33). It can also combine with other case markers and the =i marker. So far, the =tə can be followed by the comitative marker =p^{he} (5.34), locative marker =xə (5.35), instrumental + ablative enclitics (5.36), and inessive marker =ku (5.37). Lastly, these two information structure markers can co-occur, always with =i as the final suffix (5.38). When these two morphemes co-occur, they can also form a portmanteau morpheme =ti (5.39).

(5.31) =tə suffixed to a noun

ró=tə kó-lə k^hi ni
 buckwheat=ISM1 IN-grow.1PL time NFI

‘When (we) grow buckwheat.’
 当我们种荞麦的时候。 (QVY-050: 3)

(5.32) =tə suffixed to a temporal phrase

TMKN t^hǎ nó^sshì jǒ tə^s-xtsó KN wəfú fī tʃí t^hǎ
 then this.LOC next.day again NEU-process time skim.milk EXIST GNR this
 tʃó ʃó ndě zǐ mǎ-tʃí t^hǎ ákù q^hò^slò=kù q^s-f^hwə^s pùtʃirè=tə
 yogurt rest what good NEG-GNR 3 inside pot=INE IN-dump.3 just.now=ISM1
 tʃó shì t^hǎ ákù tə^s-xsúra^s ni tə^s-xsúra^s tǐ tə-t^hy p^hú
 yogurt and 3 inside NEU-mix NFI NEU-mix then NEU-boil cause.3

‘Then the next day process the fresh milk, then there will be skim milk. No need to rest the yogurt. Pour the skim milk into the pot, then stir with the yogurt (made yesterday), then boil it.’

然后第二天再处理（刚刚挤的）牛奶，就有脱脂牛奶了。醒酸奶什么的不需要。把脱脂牛奶倒进锅里，再把刚才那个（昨天做的）酸奶和它在锅里搅拌，然后煮开。
 (QVY-332: 22)

(5.33) =tə suffixed to a relative clause

múzi zǎ^s nà-psyé-shì=tə mútsò lí=kù
 warm.season manure DOWN-accumulate-NMLZ=ISM1 cold.season field=INE

nə-ndzæ

DOWN-transport.LPL

‘As for the manure piled up during the warm season, we transfer them into the field during the cold season.’

夏天积累的肥，冬天的时候我们把它运到田里去。 (QVY-329: 113)

(5.34) =tə followed by COM =p^he

tsíkæ pʃylyé tə-wú ni t^hə zí tə-wú ni t̃ wəpá^ʳ t^hə ʃ^hə
a.bit lump NEU-do.3 NFl this way NEU-do.3 NFl then downside this barley

kə-hmè-s^hi=tə=p^hè t^hə=p^hé s̃r̃á^ʳ rí t̃s̃i
IN-cooked-NMLZ=ISM1=COM this=COM mix need GNR

‘Make it a bit lump like this, then mix it with the cooked barley.’

加一点酒和酒曲和在一起，变成块块的样子，跟煮熟的青稞和在一起。 (QVY-330: 22)

(5.35) =tə followed by LOC =xə

bà^ʳxpé ndzú^ʳndzú^ʳ t̃ tsíkæ b̃à^ʳxpé zəzə=tə mə-gó=r̃i
frog big.RED then a.bit frog small.RED=ISM1.LOC NEG-happy=DIR

‘The big frog doesn’t like the small frog.’

大青蛙有点不喜欢小青蛙。 (QVY-334: 6)

(5.36) =tə followed by INS + ABL

ʃ^hə xpu t^hə=tə=q^hà^ʳ=ni ŋgwə q̃s̃-ʃ^hi^ʳpò^ʳ
barley stalk this=ISM1=INS=ABL front IN-cover.3

‘First, use the barley stalk to cover (the cooked barley).’

先用这个青稞杆杆来盖着。 (QVY-330: 28)

(5.37) =tə followed by INE =ku

t̃s̃-r̃ó^ʳ=tə=kù wəʃ^hó
one-CL=ISM1=INE skim.milk

‘In one part is the non-fat milk.’

一个里面是脱脂牛奶。 (QVY-329: 76)

(5.38) =tə and =i co-occur

bà^xxpé ndzú^undzú^u=tə=i tə^u-hɲiq^hwə^u t^hə qé^u nə-ptsú ɲi
 frog big.RED=ISM1=ISM2 NEU-angry this here DOWN-sit.3 NFI

‘The big frog sat by the river bank angrily.’
 大青蛙生气地坐在岸边。 (QVY-334: 20)

(5.39) =tə and =i fused into a portmanteau morpheme -ti and suffixed to ‘all’

xɬ^hɬ^u s^hɬ tʃáɛlæ=tí t^hə=tjé bà^xxpé=tjé χqó=rí
 dog and all=ISM1.ISM2 3=SUPE frog=SUPE scold=DIR

‘The dog also scolded the big frog.’
 小狗也骂了大青蛙。 (QVY-334: 12)

5.6.2 The third information structure marker =ri

The third information structure marker =ri never co-occurs with other information structure markers. The function of it is similar to the previous two ISM, and shows up in a contrastive or emphasis setting. Two examples of =ri are given in (5.40) and (5.41). In (5.40), after elaborating on how to brew wine and make distilled liquor, the speaker concluded that ‘THIS (as opposed to other possible ways) is how you brew wine’. In (5.41), the speakers were talking about cheese making and relevant dairy products. One speaker brought up yogurt and asked if the milk that made the yogurt needed to be boiled. Another speaker answered that the freshly made yogurt needs to be rested ‘when it’s hot (instead of not boiling the milk beforehand)’.

(5.40) =ri after ‘this way’

áɛræ q^hə^u=xtó xtsiwú TMKN áɛræ TZ=rí tsí tʃí
 liquor brew.NOM=method mainly then liquor this.way=ISM3 EGO GNR

‘The brewing method is mainly like that.’
 酿酒的方法主要就是这样子的。 (QVY-330: 63)

(5.41) =ri after a reduplicated property concept word ‘hot’

TM *tsíkæ q^hà^us^hís^hí=rí fǒ gù tʃí*
 then a.bit hot=ISM3 rest.NOM need.3 GNR

‘Then need to rest it while it’s still hot.’

需要在热乎乎的时候醒着。

(QVY-332: 2)

5.7 The order of information structure marking and case marking

As mentioned in the introduction section to this chapter, the order of the last two slots in a noun phrase is not rigid and forms that occur in these slots may switch places. The ISM (information structure marker) enclitics whose position may change are =tə and =tí, while =i always remains the final enclitic if present in the speech. Below are several examples showing both orders of case and information structure marking.

While examples involving =tə in Section §5.6.1 show that =tə can be followed by various case markers, example in (5.42) is an instance where the inessive enclitic =ku precedes =tə, and example (5.43) an instance where locative enclitic =xə precedes =tə.

(5.42) =tə precedes =ku

tǐ χqə^w wə tʂǐ wəpá^s dzá^sβrè tʂǐ t^hə=kú=tə zé^s=tə tóró^s
then GF GNR downside shelter GNR **this=INE=ISM1** manure=ISM1 very
i-mdzǐ i-βzǐ ni wəpá^s lí-wù qó^s-pò^s
DS-transport.3 DS-persist NFl downside field-INE IN-pile.up

‘Then it’s the ground floor. Outside there is the shelter, then bring the manure from the ground floor as well as the yard to the field and pile them up.’
然后是第一层楼。外面是棚棚，然后把第一层和外面棚棚里的牛粪运到田里去堆起来。
(QVY-327: 46)

(5.43) =tə follows LOC =xə

nə-tú KN tǐ ndzǐ gémú=i t^hə mə^sqí=tə=i
DOWN-come.3 time then ghost old.woman=ISM2 this old.woman=ISM1=ISM2
tǎ^s ærəpərə pùtʂírè=tə xlí=ə=tə (=xə=tə) nə-bdél-s^hì o tǎ^s
then real just.then=ISM1 **rabbit=LOC=ISM1** DOWN-correct-NMLZ oh then
tʂəxpí tǔ tə^s-xs^hqí^s tʂǐ ni tʂǐ
robbery come.3 NEU-think.3 GNR say.3 GNR

‘When the send off crowd came down, the demon woman thought: ‘The rabbit just then was right, they came to rob.’’
送亲的人下来的时候，鬼婆婆就想：刚刚的兔子（说）的是对的，真的来打劫了。
(QVY-337: 42)

The two examples in (5.44) show that ISM3 and case enclitic =tje can change their positions in relation to each other.

(5.44) =ri and case marker =tje can also switch places

a. =ri precedes =tje

á^ʳlè^ʳ ηgwǎ́ é-φlwǎ́ nà^ʳ mǎ^ʳ rí-fǎ=tǎ́ kòmt^hó=**ri=tjè**
 ox first UP-arrive CONC behind be.left-NMLZ=ISM1 **bank=ISM3=SUPE**
 rí-tǎ̀-ɸf^hǎ́ ηgwǎ́ tǎ́-p^hǎ́p^hǎ́ rǎ́ tǎ́-gú-s^hǎ́ mt^hǎ́rǎ́
 UP-PROH-go.3 first one-shake.ε.RED throw.NOM NEU-need.3-NMLZ otherwise
 hɲǎ́ mt^húmt^hu tǎ́-tsí-s^hǎ́
 gut very.RED NEU-EGO-NMLZ

‘Though the ox arrived at the bank earlier, but it was left behind. It was because before it went up to the bank, it needed to shake the water off its body, otherwise it was pretty bold.’

即使公牛先到了岸边，但是排在老鼠后面，是因为它没上岸之前，需要抖一抖身上的水，不然它是很胆大的。(QVY-349: 7)

b. =ri follows =tje

t^hǎ́mǎ́^ʳ t^hǎ́ kǎ́-tfǎ́ k^hǎ́ xkǎ́wǎ́ ηú <qímǎ́> nǎ́ ɸfǎ́^ʳ áno-ró^ʳ
 then there IN-go.3 time GF cow at.least seven eight fifteen-CL
 t^hǎ́=**tjé=ri** tfǎ́ t^hǎ́
this=SUPE=ISM3 EXIST GNR

‘Then go up from there, we can place at least 15 cows, that many.’

然后从这儿上去，说是起码放了十五头母牛，就有这么多。(QVY-327: 5)

5.8 Summary

In this chapter, the structure of noun phrases has been described and discussed. Examples have been provided for all possible elements that may occur in a noun phrase. Research that remains to be done is the exploration of information structure markers in noun phrases, for their functions are still not thoroughly explained. For future research, the corpus method may be employed to analyze more textual data containing these markers, so that a more precise account for these markers’ distribution and functions can be obtained.

CHAPTER 6

VERBAL MORPHOSYNTAX

This chapter demonstrates and discusses verbal morphosyntax, which is key to understanding a Pubarong Queyu clause. Several verbal morphosyntactic processes are already introduced in Chapter 3. This chapter will elaborate on these processes and talk about other morphosyntactic behaviors of verbs.

The basic verbal template will be given in Section §6.1, followed by description of argument indexation. Morphological processes are presented in Section §6.3 through Section §6.8. Section §6.9 discusses aspect and modality marking, and Section §6.10 lists the existential verbs in Pubarong.

6.1 Basic verb template

The basic verbal template in Queyu is reintroduced (cf. Section §4.4) and illustrated in Figure 6.1. An example of a full verb form is demonstrated in (6.1), where the verb base *xtso* ‘process’ is prefixed by the neutral direction prefix *təʰ-* and negation *məʰ-*, and suffixed by the nominalizer *-sʰi*. The nominalizer turns this phrase into a noun, and can therefore take *=tə* ISM1 enclitic.

Directional prefix-	Negation (NEG)-	Verb base (may include argument indexation)	-Nominalizer (NMLZ)
	Interrogative marker (Q)-		
	Prohibitive (PROH)-		

Figure 6.1: Verbal template

(6.1) *xtso* ‘process’ has taken all the possible affixes

$\langle j\dot{i}q\dot{i} \rangle = k\dot{u}$ $t\acute{o}^{\nu}-m\acute{o}^{\nu}-xts\acute{o}-s^{h\dot{i}}=t\acute{o}$ $k\acute{o}-f\dot{w}\acute{o}-s^{h\dot{i}}=t\acute{o}$ $z\check{o}$
 machine=INE NEU-NEG-process-NMLZ=ISM1 IN-rest. 3-NMLZ=ISM1

$j\dot{i}$ $t\check{s}^{\dot{i}}$
 whole.yogurt say.3 GNR

‘The yogurt that is not processed and fermented in the machine is called jou (whole milk yogurt).’

机器里没有处理就发酵的酸奶叫 ʒö （全脂酸奶，里面有酥油）。 (QVY-332: 9)

Previous chapters, including Chapter 3 on tone, have already introduced some verbal morphology. This chapter aims to provide a more detailed description on it, in addition to other morphosyntactic behaviors, as well as multi-verb constructions used to express various aspects and modalities.

6.2 Argument indexation

Rgyalrongic languages spoken in the north demonstrate conservative and complex indexation patterns on verbs that also show a dichotomy regarding transitivity. Queyu verbs similarly exhibit complicated indexation paradigms and share similarities with Rgyalrongic languages in terms of verb agreement/indexation; however, they present major differences with regard to the alignment system. As no coherent paradigms can be drawn at the current state of analysis, this chapter will not attempt to propose argument vowel fusion rules to account for the diverse paradigm patterns in Queyu, but will instead catalogue these patterns for future research.

6.2.1 Summary of the three verbal argument indexation types

The summary of the argument pattern types is based on analysis of 305 verbs collected through both elicitation and natural speech texts. Pubarong Queyu presents complex argument indexation patterns. While argument indexes are suffixed to verb roots, they fuse with the vowel in the verb root but do not effect change in the uvular versus plain verb base vowel quality. Vowel fusion processes are prevalent in Pubarong Queyu and this section deals with fusion of the arguments on verbs.

There are three types of verbs based on conjugation patterns. The first type does not conjugate for person or number, or has only 3rd person form (e.g. yǎ ‘bleed, (liquid) flow’). A large number of this type are stative verbs, or verbs expressing property concepts. Several examples of this type can be found in Table 6.1.

Table 6.1: Verbs that do not conjugate for person or number

Gloss	1SG	1PL	2SG	2PL	3
big	<i>ndʒúʰ</i>	<i>ndʒúʰ</i>	<i>ndʒúʰ</i>	<i>ndʒúʰ</i>	<i>ndʒúʰ</i>
say, speak	<i>pʃǎ</i>	<i>pʃǎ</i>	<i>pʃǎ</i>	<i>pʃǎ</i>	<i>pʃǎ</i>
win, beat	<i>kʰĩ</i>	<i>kʰĩ</i>	<i>kʰĩ</i>	<i>kʰĩ</i>	<i>kʰĩ</i>
lock (a door)	<i>kwǎ</i>	<i>kwǎ</i>	<i>kwǎ</i>	<i>kwǎ</i>	<i>kwǎ</i>
dig	<i>pǎʰqwǎʰ</i>	<i>pǎʰqwǎʰ</i>	<i>pǎʰqwǎʰ</i>	<i>pǎʰqwǎʰ</i>	<i>pǎʰqwǎʰ</i>

The second type of verb only distinguishes Speech Act Participants (SAP) and non-SAP, with the non-SAP form containing an inserted bilabial consonant in the onset—a relic of an inverse marker still prevalent in nearby Rgyalrongic languages (Sun 2000b:217). There are seven bilabials that may occur as an inserted consonant, these are [p, b, ɸ, β, m, w, ɥ]. Examples of each possible consonant (except for /m/, whose examples will be given in Table 6.8) are given in Table 6.2.

Table 6.2: Verbs that distinguish SAP and non-SAP

Gloss	1SG	1PL	2SG	2PL	3
cut, saw	<i>tʂǎ</i>	<i>tʂǎ</i>	<i>tʂǎ</i>	<i>tʂǎ</i>	<i>ptʂǎ</i>
wipe	<i>dǎ</i>	<i>dǎ</i>	<i>dǎ</i>	<i>dǎ</i>	<i>bdǎ</i>
release	<i>ʃǎʰ</i>	<i>ʃǎʰ</i>	<i>ʃǎʰ</i>	<i>ʃǎʰ</i>	<i>ɸʃǎʰ</i>
throw	<i>rǎ</i>	<i>rǎ</i>	<i>rǎ</i>	<i>rǎ</i>	<i>βrǎ</i>
submit, pay	<i>dʒǎ</i>	<i>dʒǎ</i>	<i>dʒǎ</i>	<i>dʒǎ</i>	<i>dʒwǎ</i>

The third type of verb contrasts both person and number. This is the type that shows the most diversity. Within this type, for plain vowel bases (such as ‘say, speak’ and ‘feed, give’), first person singular and plural forms end with *-o* and *-æ*, and uvularized vowel bases with *-oʰ* and *-aʰ*, respectively. Only a few verbs with a plain vowel base contrast number in second person (such as ‘say, speak’ in Table 6.3), while verbs with uvularized vowels do not distinguish number in second person. Third person forms exhibit the greatest variation. Some third person forms contain an inserted bilabial consonant like the second type of verb described in Table 6.2 (e.g. ‘sit’, ‘dip’, ‘hold, take’), while others do not (e.g. ‘say, speak’,

‘feed, give’, ‘poke, stab’). Several examples of each type are demonstrated in Table 6.3. The [m] preinitial that occurs in third person forms in this category only occurs in verbs with prenasalized initials. For verbs with an initial /nt^h, nd, ndz/, labialization of the /n/ in third person forms produces /m/ (see ‘scoop out’ in Table 6.3).

Table 6.3: Verbs that contrast both person and number

Gloss	1SG	1PL	2SG	2PL	3
say, speak	<i>nǔ</i>	<i>nǎ</i>	<i>ně</i>	<i>nĩ</i>	<i>nĩ</i>
feed, give	<i>fǔ</i>	<i>fǎ</i>	<i>fĩ</i>	<i>fĩ</i>	<i>fỹ</i>
sit	<i>tsó</i>	<i>tsé</i>	<i>tsí</i>	<i>tsí</i>	<i>ptsó</i>
go	<i>f^hó</i>	<i>f^há^ʷ</i>	<i>f^hí</i>	<i>f^hí</i>	<i>pf^hí</i>
dip	<i>fǎ^ʷfǔ^ʷ</i>	<i>fǎ^ʷfǎ^ʷ</i>	<i>fǎ^ʷfě^ʷ</i>	<i>fǎ^ʷfě^ʷ</i>	<i>fǎ^ʷpfǔ^ʷ</i>
hold, take	<i>zǔ^ʷ</i>	<i>zǎ^ʷ</i>	<i>zě^ʷ</i>	<i>zě^ʷ</i>	<i>βzǔ^ʷ</i>
poke, stab	<i>xtf^hǔ^ʷ</i>	<i>xtf^hǎ^ʷ</i>	<i>xtf^hě^ʷ</i>	<i>xtf^hě^ʷ</i>	<i>xtf^hũ^ʷ</i>
scoop out	<i>nt^hǔ</i>	<i>nt^hǎ</i>	<i>nt^hĩ</i>	<i>nt^hĩ</i>	<i>mt^hĩ</i>
stand	<i>xk^hó</i>	<i>xk^hé</i>	<i>xk^hí</i>	<i>xk^hí</i>	<i>xk^hwí</i>
lean on	<i>xtǔ</i>	<i>xtǎ</i>	<i>xtĩ</i>	<i>xtĩ</i>	<i>xtqĩ</i>

6.2.2 The distribution of the inserted 3rd person bilabial preinitials

Among the seven bilabial sounds [p, b, φ, β, m, w, ɥ] that can be inserted in the third person forms, [w] and [ɥ] are allophone of each other, the occurrence of which is conditioned by both the following vowel and the preceding consonant. For example, in ‘to stand’, [w] is inserted when the preceding consonant is a voiceless velar stop /k^h/ (xk^hwí, see Table 6.3 for a full paradigm of this verb), while in ‘to lean on’, an [ɥ] is inserted when the preceding consonant is a voiceless alveolar stop /t/ (xtqĩ, see Table 6.3 for a full paradigm of this verb). These two sounds are inserted when the verb base already contains a preinitial, or when it facilitates the pronunciation. For example, when the initial is a velar or uvular consonant, the third person form always has a [w] inserted (e.g. q^hwǎ^ʷ ‘cut.3’, see Table 6.16 for a full paradigm of this verb).

The other five consonants, [p, b, φ, β, m], that can be inserted as the preinitial in 3rd person forms are also predictable. The voicing of the inserted preinitial depends on the

following consonants: voiceless preinitials occur before voiceless onsets, and voiced preinitials occur before voiced onsets.¹⁵ The specific subtypes of voiced and voiceless labials are distributed as follows.

The [p] only occurs before coronal voiceless consonants, and the attested consonants with which it occurs are /t, t^h, s, s^h, ʃ, ʃ^h, ʂ, ʂ^h, ts, ts^h, tʂ, tʂ^h, tʃ, tʃ, tsj/.

Table 6.4: Inserted preinitial [p] in 3rd person forms

Verb onset	Gloss	1SG	1PL	2SG	2PL	3
t	to wrap	<i>pátó</i>	<i>pátǎ</i>	<i>pátí</i>	<i>pátí</i>	<i>páptó</i>
t ^h	to drink	<i>t^hó</i>	<i>t^hǎ</i>	<i>t^hí</i>	<i>t^hí</i>	<i>pt^hí</i>
s	to wear, attach	<i>sǔ</i>	<i>sǎ</i>	<i>sǐ</i>	<i>sǐ</i>	<i>psǔ</i>
s ^h	to kill	<i>s^hó</i>	<i>s^hǎ</i>	<i>s^hí</i>	<i>s^hí</i>	<i>ps^hó</i>
ʃ	to dip	<i>ʃǎ^ʰó</i>	<i>ʃǎ^ʰǎ</i>	<i>ʃǎ^ʰí</i>	<i>ʃǎ^ʰí</i>	<i>ʃǎ^ʰpǔ</i>
ʃ ^h	to present, demonstrate	<i>ʃǐ^hó</i>	<i>ʃǐ^hǎ</i>	<i>ʃǐ^hí</i>	<i>ʃǐ^hí</i>	<i>ʃǐpǐ^hý</i>
ts	to sit	<i>tsó</i>	<i>tsǎ</i>	<i>tsí</i>	<i>tsí</i>	<i>ptsó</i>
ts ^h	to try, test	<i>ts^híts^hó</i>	<i>ts^híts^hǎ</i>	<i>ts^híts^hí</i>	<i>ts^híts^hí</i>	<i>ts^hípts^hó</i>
tʂ	to take an oath, swear	<i>tʂó</i>	<i>tʂǎ</i>	<i>tʂí</i>	<i>tʂí</i>	<i>ptʂí</i>
tʂ ^h	feel, stroke, touch	<i>tʂ^híʂ^hó</i>	<i>tʂ^híʂ^hǎ</i>	<i>tʂ^híʂ^hí</i>	<i>tʂ^híʂ^hí</i>	<i>tʂ^híptʂ^hó</i>
tʃ ^h	to open (door)	<i>tʃ^hǔ</i>	<i>tʃ^hǎ</i>	<i>tʃ^hǐ</i>	<i>tʃ^hǐ</i>	<i>ptʃ^hǐ</i>
ʂ ^h	to tear	<i>ʂ^híʂ^hó</i>	<i>ʂ^híʂ^hǎ</i>	<i>ʂ^híʂ^hí</i>	<i>ʂ^híʂ^hí</i>	<i>ʂ^híps^hí</i>
tj	to chase	<i>tjě</i>	<i>tjě</i>	<i>tjě</i>	<i>tjě</i>	<i>ptjě</i>
tsj	to jump	<i>q^hwǎ^ʰtsjé</i>	<i>q^hwǎ^ʰtsjé</i>	<i>q^hwǎ^ʰtsjé</i>	<i>q^hwǎ^ʰtsjé</i>	<i>q^hwǎ^ʰptsjé</i>

Phonologically, preinitial [b] occurs before voiced stops and affricates only. Attested initials with which it occurs are /d, dʒ/. For verbal argument indexation, the inserted 3rd person preinitial [b] is attested only with base-initial /d/. See Table 6.5 for an example.

Phonologically speaking, preinitial [ɸ] occurs before lateral consonants only, which are /l/ and /l̥/. But just like the case of [b] preinitials, in the case of verbal argument indexa-

¹⁵Though [ɸ] can occur before /l/ phonologically, for argument indexation no verbs with /l/ initials have a preinitial [ɸ] inserted for 3rd person forms.

Table 6.5: Inserted preinitial [b] in 3rd person form

Verb onset	Gloss	1SG	1PL	2SG	2PL	3
b	to slide down, wipe	dó	dó	dó	dó	bdó

tion, the inserted preinitial [ɸ] is only attested with bases that begin with /l/. See Table 6.6 for an example.

Table 6.6: Inserted preinitial [ɸ] in 3rd person form

Verb onset	Gloss	1SG	1PL	2SG	2PL	3
l	to release	l'ó ^h	l'ó ^h	l'ó ^h	l'ó ^h	ɸl'ó ^h

Preinitial [β] occurs before voiced fricatives and liquids, these are /z, ʒ, l, r, rw/. See Table 6.7 for examples.

Table 6.7: Inserted preinitial [β] in 3rd person forms

Verb onset	Gloss	1SG	1PL	2SG	2PL	3
z	to hold, take	zö ^h	zǎ ^h	zě ^h	zě ^h	βzö ^h
ʒ	to sleep	ʒó	ʒó	ʒó	ʒó	βʒó
l	to plough	ló	Lé	lí	lí	βlí
r	to look	řó	řá	ří	ří	řá
rw	to pick (bone), shave	rwó	rwó	rwó	rwó	βrwó

Though [ɸ] and [β] can both occur elsewhere in front of /l/ phonologically, only [β] is inserted before base-initial /l/. Therefore, the distribution of these two preinitials in 3rd person forms are still distinct from each other.

Preinitial /m/ occurs when the verb base contains a prenasalized stop or affricate. Attested initials are /nt^h, nd, ntʃ^h, ndʒ, n/. The inserted bilabial sound will fuse with the original preinitial /n/ in the onset, resulting in a rounded nasal preinitial /m/. There is only one case where /m/ does not replace the initial /n/ but is added as a preinitial, which is ‘to

dare’, as demonstrated in Table 6.8, in addition to other preinitial /m/ examples.

Table 6.8: Preinitial /m/ in 3rd person forms

Verb onset	Gloss	1SG	1PL	2SG	2PL	3
nt ^h	to sing	nt ^h ǒ	nt ^h ǣ	nt ^h ĩ	nt ^h ĩ	mt ^h ĩ
nd	to see	ndó	ndǣ	ndí	ndí	mdí
ntʃ ^h	to chew	ntʃ ^h à ^ʷ ló ^ʷ	ntʃ ^h à ^ʷ lá ^ʷ	ntʃ ^h à ^ʷ lé ^ʷ	ntʃ ^h à ^ʷ lé ^ʷ	mtʃ ^h à ^ʷ lá ^ʷ
ndʒ	to swallow	ndʒǒ	ndʒǣ	ndʒĩ	ndʒĩ	mdʒǒ
N	to dare	hnó/nó	nǣ	ní	ní	mnó

6.2.3 Summary of the verb paradigm categories

Among the 305 verbs collected, 202 contain a plain vowel stem while 103 contain a uvularized vowel stem. For plain vowel verbs, 61 do not conjugate for person or number, 32 of them only distinguish between SAP and non-SAP, and the other 109 conjugate for both person and number. As for the 103 verbs with uvularized vowels, 36 of them do not conjugate for person or number, 17 only distinguish between SAP and non-SAP, and 50 conjugate for both person and number. Table 6.9 summarizes the numbers of verbs in each category.

Table 6.9: Number of verbs in each category

	Type 1 (no change)	Type 2 (SAP vs. non-SAP)	Type 3 (person and number)	Total
Plain vowel verbs	61	32	109	202
Uvularized vowel verbs	36	14	53	103
Total (by types)	97	49	159	305

For verbs with plain vowels that belong to the first category, a total of ten vowels are attested in the verb base, which are demonstrated in Table 6.10.

For verbs with plain vowels that belong to the second category, a total of three pat-

Table 6.10: Type 1 plain vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
1	Σ -ə	Σ -ə	Σ -ə	Σ -ə	Σ -ə	3
2	Σ -i	Σ -i	Σ -i	Σ -i	Σ -i	3
3	Σ -ɪ	Σ -ɪ	Σ -ɪ	Σ -ɪ	Σ -ɪ	3
4	Σ -o	Σ -o	Σ -o	Σ -o	Σ -o	3
5	Σ -ʊ	Σ -ʊ	Σ -ʊ	Σ -ʊ	Σ -ʊ	5
6	Σ -y	Σ -y	Σ -y	Σ -y	Σ -y	3
7	Σ -u	Σ -u	Σ -u	Σ -u	Σ -u	3
8	Σ -æ	Σ -æ	Σ -æ	Σ -æ	Σ -æ	5
9	Σ -e	Σ -e	Σ -e	Σ -e	Σ -e	7
10	Σ -ə	Σ -ə	Σ -ə	Σ -ə	Σ -ə	26

terns are attested, which are illustrated in Table 6.11. The capital letter B refers to ‘bilabial’ in tables that summarize indexation patterns, and includes both inserted bilabial preinitials and the bilabial glide, since their distribution is predictable and does not overlap.

Table 6.11: Type 2 plain vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
11	Σ -æ	Σ -æ	Σ -æ	Σ -æ	B- Σ -æ	2
12	Σ -e	Σ -e	Σ -e	Σ -e	B- Σ -e	5
13	Σ -ə	Σ -ə	Σ -ə	Σ -ə	B- Σ -ə	25

For plain vowel verbs that belong to the third category, a total of 23 patterns are attested. They are illustrated in Table 6.12. Since the existing bilabial onset in a verb would prevent the insertion of another bilabial sound in 3rd person forms, Tables that summarize Type 3 verbs also provide numbers of verbs that already start with a bilabial initial in parentheses after the verb count (abbreviated as BI).

Fewer patterns are found in verbs containing uvularized vowels. For the first category, where no changes are observed, six patterns are attested. See Table 6.13.

For the second category, where SAP form contrasts with non-SAP form, only one

Table 6.12: Type 3 plain vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
14			$\Sigma-\vartheta$	$\Sigma-I$	$\Sigma-i$	1
15					$\Sigma-u$	1 (1BI)
16					B- $\Sigma-i$	2
17			$\Sigma-i$	$\Sigma-I$	B- $\Sigma-i$	3
18					$\Sigma-y$	2
19			$\Sigma-i$	$\Sigma-i$	$\Sigma-y$	1 (1BI)
20					B- $\Sigma-y$	1
21					$\Sigma-\upsilon$	4 (3 BI)
22					B- $\Sigma-\upsilon$	2
23					$\Sigma-\text{æ}$	3 (2 BI)
24					$\Sigma-I$	4 (3 BI)
25	$\Sigma-\upsilon$	$\Sigma-\text{æ}$			B- $\Sigma-I$	15
26					$\Sigma-u$	34 (3 BI)
27					B- $\Sigma-u$	4
28					$\Sigma-y$	8
29			$\Sigma-I$	$\Sigma-I$	B- $\Sigma-y$	1
30					$\Sigma-\gamma$	1
31					$\Sigma-i$	1 (1BI)
32					B- $\Sigma-i$	2
33					$\Sigma-\vartheta$	1 (1BI)
34					B- $\Sigma-\vartheta$	1
35					$\Sigma-i$	12 (9 BI)
36					B- $\Sigma-i$	6

Table 6.13: Type 1 uvularized vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
37	$\Sigma-o$	$\Sigma-o$	$\Sigma-o$	$\Sigma-o$	$\Sigma-o$	9
38	$\Sigma-\upsilon^{\text{h}}$	$\Sigma-\upsilon^{\text{h}}$	$\Sigma-\upsilon^{\text{h}}$	$\Sigma-\upsilon^{\text{h}}$	$\Sigma-\upsilon^{\text{h}}$	5
39	$\Sigma-e^{\text{h}}$	$\Sigma-e^{\text{h}}$	$\Sigma-e^{\text{h}}$	$\Sigma-e^{\text{h}}$	$\Sigma-e^{\text{h}}$	4
40	$\Sigma-u^{\text{h}}$	$\Sigma-u^{\text{h}}$	$\Sigma-u^{\text{h}}$	$\Sigma-u^{\text{h}}$	$\Sigma-u^{\text{h}}$	1
41	$\Sigma-u$	$\Sigma-u$	$\Sigma-u$	$\Sigma-u$	$\Sigma-u$	1
42	$\Sigma-\vartheta^{\text{h}}$	$\Sigma-\vartheta^{\text{h}}$	$\Sigma-\vartheta^{\text{h}}$	$\Sigma-\vartheta^{\text{h}}$	$\Sigma-\vartheta^{\text{h}}$	16

pattern is found. See Table 6.14.

As for type 3 verbs (where both person and number of the subject are indexed)

Table 6.14: Type 2 uvularized vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
43	$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	B- $\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	14

containing a uvularized vowel, eleven patterns are attested. See Table 6.15.

Table 6.15: Type 3 uvularized vowel verbs

No.	1SG	1PL	2SG	2PL	3	# of verbs
44			$\Sigma\text{-}\mathfrak{i}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{i}^{\mathfrak{v}}$	$\Sigma\text{-}u$	1
45					B- $\Sigma\text{-}\mathfrak{i}^{\mathfrak{v}}$	2
46					$\Sigma\text{-}\mathfrak{i}^{\mathfrak{v}}$	2 (1 BI)
47					B- $\Sigma\text{-}\mathfrak{i}^{\mathfrak{v}}$	2
48					$\Sigma\text{-}\mathfrak{o}^{\mathfrak{v}}$	20 (5 BI)
49	$\Sigma\text{-}\mathfrak{o}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$			B- $\Sigma\text{-}\mathfrak{o}^{\mathfrak{v}}$	2
50			$\Sigma\text{-}\mathfrak{e}^{\mathfrak{v}}$	$\Sigma\text{-}\mathfrak{e}^{\mathfrak{v}}$	$\Sigma\text{-}u$	1
51					$\Sigma\text{-}\mathfrak{u}^{\mathfrak{v}}$	1
52					$\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	2 (2 BI)
53					B- $\Sigma\text{-}\mathfrak{a}^{\mathfrak{v}}$	14
54					B- $\Sigma\text{-}\mathfrak{e}^{\mathfrak{v}}$	6

6.2.4 The nominal stem form of the verb

Pubarong Queyu verbs have another form, the nominal stem form, that may or may not overlap with the forms described in the previous sections. This form appears in certain environments, such as before nominalizers (except for the $-s^{\mathfrak{h}}\mathfrak{i}$ nominalizer), in certain multi-verb constructions, and in the one + Verb construction introduced in Section §4.8.6.2. Specific environments with examples are described below.

Nominal stem forms occur when suffixed by certain nominalizers, such as the patient nominalizer $-f\mathfrak{a}$. For example, ‘scripture (lit. things to read)’ is $li\text{-}f\mathfrak{a}$. The form of li ‘read’ differs from other forms mentioned in Table 6.16. Another way is to see how they behave in certain multi-verb constructions in different aspects or modalities, as person and number marking in those constructions occur on the final auxiliary verb, leaving the pre-

ceding verb non-finite. Several examples of verbs whose nominal stem form is unique from other indexation forms are given in Table 6.16.

Table 6.16: Verbs whose nominal stem form differs from other forms

Gloss	1SG	1DU/PL	2SG	2DU/PL	3	Nominal stem
Read	<i>lǒ</i>	<i>lǎ</i>	<i>lǐ</i>	<i>lǐ</i>	<i>lǔ</i>	<i>lǐ</i>
Cut	<i>q^hǒ^ʷ</i>	<i>q^hǎ^ʷ</i>	<i>q^hǐ^ʷ</i>	<i>q^hǐ^ʷ</i>	<i>q^hwǎ^ʷ</i>	<i>q^hǒ^ʷ</i>
frictionize, rub, touch	<i>tʂìtʂó</i>	<i>tʂìtʂǎ</i>	<i>tʂìtʂǐ</i>	<i>tʂìtʂǐ</i>	<i>tʂìptʂí</i>	<i>tʂìtʂǐ</i>

There are also verbs whose nominal stem form overlaps with a person/number verbal form. Examples are given in Table 6.17. For ‘pick up’, the nominal stem form aligns with the 1PL form, for ‘enclose’ the second person form, and for ‘pour, throw’ the third person form.

Table 6.17: Verbs whose nominal stem form overlaps with a person or number form

Lexicon	1SG	1DU/PL	2SG	2DU/PL	3	Nominal stem
pick up	<i>nt^hǒ^ʷlǒ^ʷ</i>	<i>nt^hǒ^ʷlá^ʷ</i>	<i>nt^hǒ^ʷlé^ʷ</i>	<i>nt^hǒ^ʷlé^ʷ</i>	<i>mt^hǒ^ʷlá^ʷ</i>	<i>nt^hǒ^ʷlá^ʷ</i>
enclose	<i>xtǒ^ʷ</i>	<i>xtǎ^ʷ</i>	<i>xtǐ^ʷ</i>	<i>xtǐ^ʷ</i>	<i>xtǔǐ^ʷ</i>	<i>xtǐ^ʷ</i>
pour, throw (liquid)	<i>bǒ</i>	<i>bǎ</i>	<i>bǐ</i>	<i>bǐ</i>	<i>bǓ</i>	<i>bǓ</i>

The nominal stem form of the verb can appear before the modal verb that conveys necessity. See (6.2), where the verb *gǎ* ‘need.1PL’ is finite and reflects person and number, while *vǒ* ‘do’ does not.

(6.2) the nominal stem form for ‘do’ is *vǒ*

kǒ-psjè tǎ^ʷ-p^hǒ^ʷ vǒ gǎ tʂǐ
 IN-store NEU-leave **do.NOM** **need.1PL** GNR

‘We need to store grass there.’

我们需要把草储存放在那里。

(QVY-329: 40)

Nominal stem forms can also occur in completive aspect. See (6.3) where the verb *tʂ^hǐ* ‘eat’ takes the nominal stem form while *wú* ‘finish.3’ is finite.

(6.3) the nominal stem form for ‘eat’ is *tʰí*

tʰǒ tǎ-tʰí wú mǎʳ lǎkwǎ zǐ lǎkwǎ lǎ-bdǎ ni
 3 NEU-eat.NOM do.3 after side house side US-drive.1PL NFI

‘After (cows) eating, we drive cows to the other side of the house.’
 牛吃完草后把它们赶去房子的另一边。 (QVY-329: 55)

The form that occurs before the non-final particle *lǎ* is also the nominal stem form. See (6.4) for an example. Compare the nominal stem form of ‘catch’ *ndzǐʳ* with its 3rd person form *mdzǐʳ* in this 3rd person subject context.

(6.4) the nominal stem form for ‘catch’ is *ndzǐʳ*

TMK *bǎʳxpé pʰǎfǔ ndzǐʳ lǎ mǎi-βri*
 then frog aside catch.NOM NF2 NEG-find.3

‘Then the frog beside was not caught (by the boy).’
 然后在一旁的青蛙没有被抓住。 (QVY-333: 13)

A nominal stem form also precedes the modal verb *mnǎ* that conveys the meaning of ‘have the courage to do something.3’. In (6.5), the nominal stem form of ‘do’ *vǎ* is used instead of its 3rd person form *wú*.

(6.5) the nominal stem form for ‘do’ is *vǎ*

TM *bǎʳxpé zǎzǎ sʰǐ bǎʳxpé ndzǐʳndzǐʳ=tǎ=i bǎʳxpé zǎzǎ=tǎ*
 then frog small.RED and frog big.RED=ISM1=ISM2 frog small.RED=ISM1

ǎpwǎli vǎ mǎi-mnǎ TM *tʰǎ=pʰé tǎkʰí nǎ-wú ni tʰǎ=pʰé*
 bully do.NOM NEG-dare.3 then 3=COM together DOWN-do.3 NFI 3=COM

nǎ-ptsú
 DOWN-sit.3

‘Then the small frog and, the big frog no longer dared to bully the small frog. Then (the big frog) sat with it (the small frog).’
 然后小青蛙，大青蛙不敢欺负小青蛙了，然后和它一起坐着。 (QVY-334: 34)

In purposive motion verb construction, the verb that occurs before *ʃʰǎʳ* ‘go.1PL’ is also in its nominal stem form. See (6.6) where *qʰǎʳ* ‘cut’ is non-finite while *ʃʰǎʳ* ‘go.1PL’ inflects for person and number.

(6.6) the nominal stem for ‘cut’ is $q^{hə́}$

TM $jə́$ $rú$ $q^{hə́}$ $tə́-f^{hə́}$ ni
then again grass cut.NOM NEU-go.1PL NFI

‘Then we went to cut grass again.’

(我们) 又去割草。

(QVY-329: 34)

That said, there are two issues regarding nominal stems that need to be addressed. The first one is that there are verbs in Pubarong that do not have a distinct nominal stem form. Compare the example $li-fə́$ ‘scripture’ with other nominalized verbs below in (6.7). The verbs that are suffixed by the patient nominalizer $-fə́$ and the agent nominalizer $-mə́$ are finite.

(6.7) Patient and agent nominalizers can suffix to finite verbs

a. 2SG form suffixed by the patient nominalizer

$\eta i-fə́=tə́$ $tʂi$
know.2SG-NMLZ=ISM1 GNR

‘(there are) things you know’

你知道的事情。

b. 1SG form suffixed by the patient nominalizer

$\eta i-fə́=tə́$
know.1SG-NMLZ=ISM1

‘things I know’

我知道的事情。

c. 3rd person form suffixed by the agent nominalizer

$\eta i-mə́=tə́$
know.3-NMLZ=ISM1

‘the person who knows’

知道的人。

Another method to determine nominal stem form comes from another nominalizer $-xto$ that means ‘way, method’. See (6.8) where $-xto$ ‘method’ is suffixed to the nominal stem form of $q^{hə́}$ ‘to brew’. Compare (6.8) with examples from (6.9). While it is ungrammatical

to suffix the finite form of *lǐ* ‘read.2’ with *-xto*, this nominalizer, like patient and agent nominalizers, can only attach to the finite forms of ‘know’. These data suggest that verbs like ‘know’ do not have a distinct nominal stem form like verbs such as ‘read’ or ‘eat’.

(6.8) *-xto* ‘method’ that occurs after the nominal stem form of *q^{hǎ}* ‘to brew’

áerǎ q^{hǎ}-xto *xtsiwú* TMKN *áerǎ* TZ=*ri* *tsí* *ʈsí*
 liquor **brew.NOM-method** mainly then liquor this.way=ISM3 EGO GNR

‘The brewing method is mainly like that.’

酿酒的方法主要就是这样子的。

(QVY-330: 63)

(6.9) behavior of verbs when suffixed by another nominalizer *-xto* ‘method’

a. the nominal stem form *lǐ* suffixed by *-xto*

nǎ *lǐ-xtó*
 2SG.LOC **read.NOM-method**

‘The way you read.’

你阅读的方法。

b. the finite *lǐ* ‘read.2’ cannot take the *-xto* nominalizer

**lǐ-xtó*
 read.2-method

Intended meaning: ‘The way you read.’

c. the 1SG form suffixed by *-xto*

ŋò-xtó
know.1SG-method

‘The way I know.’

我知道的方法。

d. the 2nd form suffixed by *-xto*

ŋì-xtó
know.2-method

‘The way you know.’

你知道的方法。

The second issue regarding nominal stems is that the diagnostic methods introduced

above may not be fool-proof with regard to determining nominal stem form in light of connected speech. For example, (6.3) shows that the nominal stem form of ‘eat’ occurs before the completive aspect verb. However, in another utterance (6.10), the 3rd person form of ‘take out’ is used in front of ‘to finish.3’ *wú*. The form of ‘take out’ that can take the patient nominalizer is the second person form *nt^hĩ*.

(6.10) A finite verb *mt^hĩ* ‘take out.3’ precedes ‘to finish’

ʒǔ=té *təŋú mó* *i-mt^hĩ* *wú* *mæ-tʂí* *mó*
 whole.yogurt=ISM1 still butter **DS-take.out.3 finish.3** NEG-GNR butter

í-mé-nt^hĩ-s^hĩ=xə *ni* *tʂí*
 DS-NEG-take.out.NOM-NMLZ=LOC say.3 GNR

‘Until now, the butter is not singled out from *ʒǔ* yet, the thing that butter isn’t taken out from yet is called (*ʒǔ*).’

全脂酸奶 (*ʒǔ*) 到现在为止酥油还没取出来。酥油没有取出来的叫全脂酸奶 (*ʒǔ*)。
 (QVY-332: 12)

Verbs preceding another modal verb that expresses necessity ‘need’ *ri* have contradicting behavior, too. Contrast the two sentences in (6.11). Different forms of ‘to cause’ can occur before ‘need’. These two utterances are from the same text and the same speaker, so inter-speaker variation cannot account for this behavioral difference.

(6.11) The ‘need’ *ri* can follow both finite and non-finite verbs

a. *ri* ‘need’ occurs after the nominal stem form of *p^hə* ‘to cause.NOM’

t^hə *zí* *nə-wú* *ni* *tʂí* *p^hə* *ri* *tʂí*
 this way DOWN-do.3 NFI boil **cause.NOM need** GNR

‘Need to boil water like this.’

需要像这样把水烧开。 (QVY-330: 6)

b. *ri* ‘need’ occurs after the third person form of *p^hu* ‘to cause.3’

t^hə *zí* TMKN *jǔ* *i-pté* *ni* *ʒí^s=té* *tə^s-nt^há^s* *p^hú* *ri* *tʂí*
 this way then again DS-dump.3 NFI water=ISM1 NEU-reduce **cause.3 need** GNR

‘Then after doing like this, after the water has been evaporated, need to pour the barley out.’

然后这样做后，然后水烧干之后需要把青稞倒出来。 (QVY-330: 14)

6.2.5 Origins of the bilabial preinitial in third person forms

The origin of the inserted bilabial preinitial or /w/ in 3rd person verb forms is an inverse marker. Sun (2000b:217) proposed that the Proto-Rgyalrongic inverse prefix is *wə-, and this is observed in different forms in modern Rgyalrongic languages. For example, it is *u-* in Khroskyabs (Lai 2015:274), *wɣ-* in Japhug Rgyalrong (Jacques 2010:129), *o-* in Caodeng/Tsobdun Rgyalrong (Sun and Shi 2002:86), *wu-* in Situ (Sastod) Rgyalrong (Sun 2015:733), and *f-/v-* in Geshiza Stau (Honkasalo 2019). The realization of this inverse marker in Zbu Rgyalrong resembles the situation of Queyu. In Rbu Rgyalrong, the inverse marker is *f-/v-* when it is phototactically possible, or *wə-* otherwise (Gong 2014:47).

A complication that needs to be taken into account is the loan words in Queyu. There are many Tibetan loan verbs, and many of them contain a bilabial consonant in their original form. For example, ‘to release’ in Queyu is *l̥ʰəʰ* (SAP form) and *ϕl̥ʰəʰ* (non-SAP form). It is a Tibetan loan whose nominal form is *glud*, while the verb form is *blud*. Another Tibetan loan, ‘to hold, to take’, belongs to Type 3 and the 3rd person form is *βzöʰ*. The future tense for this verb in Tibetan is *gzung*, while the past tense is *bzung*. It is not clear which form of these loan verbs was borrowed into Queyu, and if the bilabial consonant in the non-SAP form came from the Tibetan stem or is the relic of the inverse marker. On the other hand, the Tibetan loan *ster* ‘to hand, give’ has only one form in Tibetan but two in Queyu—*xtəʰ* (SAP form) and *xtwəʰ* (non-SAP form). In this case, the inserted /w/ in the non-SAP form then clearly came from the inverse marker.

6.2.6 Verb reduplications

Words denoting property concepts are a subclass of verbs (PCVs). They behave like verbs when they are in their monosyllabic form. They behave like nouns when they are reduplicated (see Section §4.4.6). Non-property verbs can be reduplicated, too. They tend to express repeated action, or an action done by many people at the same time. Examples of property concept terms and non-property concept verbs are given below. Table 6.18 is a list of PCVs, while Table 6.20 and Table 6.19 provide indexation patterns for non-PCV that

contain plain and uvularized vowels, respectively.

Table 6.18: Examples of property concept words

Gloss	Non-reduplicated form	Reduplicated form
red	<i>ʃíí</i>	<i>ʃííʃíí</i>
pretty, beautiful	<i>ŋk^hó</i>	<i>k^hóŋk^hó</i>
big	<i>ndʒú^h</i>	<i>ndʒú^hndʒu^h</i>
tasty, delicious	<i>ʒí</i>	<i>ʒíʒí</i>

Table 6.19: Examples of non-property concept verbs with uvularized vowels

Lexicon	1SG	1DU/PL	2SG	2DU/PL	3	
to ask	<i>xtá^hxtó^h</i>	<i>xtá^hxtá^h</i>	<i>xtá^hxté^h</i>	<i>xtá^hxté^h</i>	<i>xtá^hxtó^h</i>	<i>xtá^hxtó^h-ʃə</i>
to smell	<i>hnə^hhnó^h</i>	<i>hnə^hhná^h</i>	<i>hnə^hhné^h</i>	<i>hnə^hhné^h</i>	<i>hnə^hhnó^h</i>	<i>hnə^hhnó^h-ʃə</i>
to wrestle	<i>xlə^hxló^h</i>	<i>xlə^hxlá^h</i>	<i>xlə^hxlé^h</i>	<i>xlə^hxlé^h</i>	<i>xlə^hxló^h</i>	<i>xlə^hxló^h</i>
to wash	<i>tʃí^htʃó^h</i>	<i>tʃí^htʃá^h</i>	<i>tʃí^htʃé^h</i>	<i>tʃí^htʃé^h</i>	<i>tʃí^htʃó^h</i>	
to press	<i>tʃí^htʃó^h</i>	<i>tʃí^htʃá^h</i>	<i>tʃí^htʃé^h</i>	<i>tʃí^htʃé^h</i>	<i>tʃí^hptʃí^h</i>	<i>tʃí^htʃó^h-ʃə</i>
to dip	<i>ʃǎ^hʃó^h</i>	<i>ʃǎ^hʃá^h</i>	<i>ʃǎ^hʃé^h</i>	<i>ʃǎ^hʃé^h</i>	<i>ʃǎ^hʃó^h</i>	<i>ʃǎ^hʃó^h-ʃə</i>
to squeeze	<i>tsí^htsá^h</i>	<i>tsí^htsá^h</i>	<i>tsí^htsá^h</i>	<i>tsí^htsá^h</i>	<i>tsí^hptsá^h</i>	
to rub, wipe	<i>tʂí^htʂó^h</i>	<i>tʂí^htʂá^h</i>	<i>tʂí^htʂé^h</i>	<i>tʂí^htʂé^h</i>	<i>tʂí^hptʂí^h</i>	<i>tʂí^htʂó^h-ʃə</i>
to rub with hands	<i>zí^hzǎ^h</i>	<i>zí^hzǎ^h</i>	<i>zí^hzǎ^h</i>	<i>zí^hzǎ^h</i>	<i>zí^hβzǎ^h</i>	<i>zí^hzǎ^h</i>

Property and non-property concept verbs differ in terms of morphosyntactic behaviors. PCV do not conjugate for person nor number (see §6.18), while non-PCV can (see §6.20 and §6.19). Reduplicated PCVs behave like nouns while reduplicated non-PCVs still behave like verbs. For PCV, the vowels remain the same, while for non-PCV, the vowel in the reduplicated syllable may or may not change. There are few cases like *textsíndəndá* ‘to shiver’ where both vowels are the same (see §6.20).

For non-PCVs with plain vowels, the vowels in the first syllable can be /ə, i, ə, o, æ/, while for non-PCVs with uvularized vowels, the vowels in the first syllable can be /ə^h, i^h, ə^h/. The first syllable vowel in some of the non-PCVs may change in the third person

Table 6.20: Examples of non-property concept verbs with plain vowels

Gloss	1SG	1DU/PL	2SG	2DU/PL	3	Nominal stem
to cut, slice	xk ^h ó	xk ^h áé	xk ^h í	xk ^h í	xk ^h ú/xk ^h wí	
(many people) to cut, slice	xk ^h éxxk ^h ó	xk ^h éxxk ^h áé	xk ^h éxxk ^h í	xk ^h éxxk ^h í	xk ^h éxxk ^h ú	
to change	gǒ	gǎé	gǐ	gǐ	gǔ	
to exchange	gǒgǒ	gǒgǎé	gǒgǐ	gǒgǐ	gǒgǔ	
bend over,						
Lower one's head	xk ^h éxxk ^h ó	xk ^h éxxk ^h áé	xk ^h éxxk ^h í	xk ^h éxxk ^h í	xk ^h éxxk ^h ú	xk ^h éxxk ^h ú
to fight	tʃʃéʃtǒ	tʃʃéʃtǎé	tʃʃéʃtǐ	tʃʃéʃtǐ	tʃʃéʃtǔ	tʃʃéʃtǔ-ʃə
to push	tǒtǒ	tǎtǎé	tǐtǐ	tǐtǐ	tǔtǔ	tǐtǐ-ʃə
Grind or husk with a roller	tʃ ^h ótʃ ^h ó	tʃ ^h ótʃ ^h áé	tʃ ^h ótʃ ^h í	tʃ ^h ótʃ ^h í	tʃ ^h ótʃ ^h ú	tʃ ^h ótʃ ^h í-ʃə
to push back and forth	xʃsɪxʃsɪó	xʃsɪxʃsɪáé	xʃsɪxʃsɪí	xʃsɪxʃsɪí	xʃsɪxʃsɪú	
to move (by oneself or cause others to move)	ŋgǒŋgǒ	ŋgǒŋgǎé	ŋgǒŋgǐ	ŋgǒŋgǐ	ŋgǒŋgǔ	
to walk, go	tʃtʃsǒ	tʃtʃsǎé	tʃtʃsǐ	tʃtʃsǐ	tʃtʃsǔ	tʃtʃsǐ
to pull	nt ^h ínt ^h ó	nt ^h ínt ^h áé	nt ^h ínt ^h í	nt ^h ínt ^h í	nt ^h ínt ^h ú	nt ^h ínt ^h í-ʃə
friction, rub, touch	tʃtʃsǒ	tʃtʃsǎé	tʃtʃsǐ	tʃtʃsǐ	tʃtʃsǔ	
to faint	ŋǎŋŋǒ	ŋǎŋŋǎé	ŋǎŋŋǐ	ŋǎŋŋǐ	ŋǎŋŋǔ	
to wither	s ^h íʃs ^h ó	s ^h íʃs ^h áé	s ^h íʃs ^h í	s ^h íʃs ^h í	s ^h íʃs ^h ú	
to select (seeds)	s ^h íʃs ^h ó	s ^h íʃs ^h áé	s ^h íʃs ^h í	s ^h íʃs ^h í	s ^h íʃs ^h ú	
to tear	ndǎndǎ	ndǎndǎé	ndǎndǎí	ndǎndǎí	ndǎndǎú	
to shiver	ts ^h éʃts ^h ǎé	ts ^h éʃts ^h áé	ts ^h éʃts ^h í	ts ^h éʃts ^h í	ts ^h éʃts ^h ú	
be flurried	ts ^h éʃts ^h ǎé	ts ^h éʃts ^h áé	ts ^h éʃts ^h í	ts ^h éʃts ^h í	ts ^h éʃts ^h ú	
to wake sb up	xʃsɪxʃsɪó	xʃsɪxʃsɪáé	xʃsɪxʃsɪí	xʃsɪxʃsɪí	xʃsɪxʃsɪú	xʃsɪxʃsɪú
to try, test	ts ^h íʃts ^h ǎé	ts ^h íʃts ^h áé	ts ^h íʃts ^h í	ts ^h íʃts ^h í	ts ^h íʃts ^h ú	ts ^h íʃts ^h ú-ʃə
Feel; stroke; touch	tʃʃéʃtǒ	tʃʃéʃtǎé	tʃʃéʃtǐ	tʃʃéʃtǐ	tʃʃéʃtǔ	
to suck	xʃʃtʃtʃǎé	xʃʃtʃtʃáé	xʃʃtʃtʃí	xʃʃtʃtʃí	xʃʃtʃtʃú	

form ($xk^h\theta xk^h\acute{o}$ ‘many people cut, slice.1SG’ vs. $xk^huxk^h\acute{u}$ ‘many people cut, slice.3’), while in other non-PCVs the first syllable vowel is not changed in third person forms ($xl\theta^{\#}xl\acute{a}^{\#}$ ‘to wrestle.1PL’ vs. $xl\theta^{\#}xl\acute{o}^{\#}$ ‘to wrestle.3’).

6.2.7 Discussion on argument indexation

Putting everything on verbal indexation patterns that have been discussed together, it is clear that Pubarong Queyu verbs present complex indexation patterns, and no coherent paradigm can apply to all verbs. For verbs with a plain bases that also belong to Type 3, the 1SG form always end with $-o$ and the 1PL form with $-æ$. The 2SG and 2PL forms mostly end with $-i$, and a few $-i$, $-i$, and $-ə$. As for 3rd person forms, 22 verbs end with $-i$, 19 with $-i$, 5 with $-i$, 3 with $-æ$, 2 with $-ə$, 12 with $-y$, 1 with $-y$, 39 with $-u$, and 6 with $-o$. Among these, 37 verbs have an inserted bilabial sound in the 3rd person forms, while 73 do not. If we exclude the 24 verbs which already contain a bilabial sound in the base, there are 49 verbs that do not contain an inserted bilabial in 3rd person forms, and 61 verbs that either do or already contains a bilabial onset. Another trend that is obvious is that half of the verbs (58 out of 109) contain a rounded vowel for 3rd person forms. The numbers are presented in the table below.

Table 6.21: Possible plain vowels in 3rd person forms

Plain vowels in 3 rd person forms									
	$-i$	$-I$	$-i$	$-æ$	$-ə$	$-y$	$-Y$	$-u$	$-o$
#	22	19	5	3	2	12	1	39	6

For verbs with uvularized vowels that belong to Type 3, their 1SG forms always ends with $-o^{\#}$, and 1PL with $-a^{\#}$. The 2nd person form always end with $-e^{\#}$. As for 3rd person forms, seven vowels are possible in the base, which are $-I^{\#}$ (2), $-i^{\#}$ (4), $-a^{\#}$ (16), $-e^{\#}$ (6), $-u^{\#}$ (1), $-u$ (2), and $-o^{\#}$ (22). The numbers in the parenthesis indicate the number of verbs belonging to each category. 26 verbs contain an inserted bilabial in 3rd person forms, while 27 do not.

Within the 27 verbs which do not contain an inserted bilabial, there are eight of them that already have a bilabial onset. Therefore, in total there are 34 verbs whose 3rd person forms contain an inserted bilabial sound, or already have a bilabial, and 19 verbs do not have the inserted bilabial sound in 3rd person forms.

Table 6.22: Possible uvularized vowels in 3rd person forms

Uvularized vowels in 3 rd person forms						
	-ɪ ^ʁ	-i ^ʁ	-ɑ ^ʁ	-e ^ʁ	-u ^ʁ	-ʊ ^ʁ
#	2	4	16	6	1	22

When examining the nominal stem forms of these 305 verbs, though most of the nominal stem forms contain a vowel that is identical with the 3rd person forms, there are still a number of verbs whose nominal stem forms are either not identifiable, or which contain a vowel that differs from the vowel of the 3rd person forms. For example, for pattern NO. 26 in Table 6.12, among the 34 verbs, 21 of them have a nominal stem form whose vowel is the same as the 3rd person form (-u). 4 of these have a nominal stem vowel -i, 3 have -ɪ, and the remaining 6 are unclear cases. This presents a slightly different scenario from neighbouring languages.

Unlike other Rgyalrongic languages that have a clear separation between transitive and intransitive verb paradigms, Pubarong Queyu verbs do not seem to make a transitivity distinction. Previous studies show that in many Rgyalrongic languages the 1SG argument suffix is -u, 2SG suffix is -i, and 3rd person forms are treated as the non-finite or citation form, and general PTH reconstruction would also include a *-u for 3rd person arguments (Honkasalo 2019; DeLancey 2023). A table summarizing argument indexes across the TH family is given below.

Though the Pubarong verb paradigm system presents similar patterns with what is described in previous studies, such as the 1SG base vowels -ʊ and -ʊ^ʁ and high front

Table 6.23: Argument indexes across the TH family from DeLancey (2023:105).

Branch	Language	1SG	2SG	1PE	1PL	2PL	du	3OBJ
Nung	Trung	-ŋ	<i>nu-</i>	<i>-i</i>		<i>nu- -n</i>	<i>-ɛu</i>	<i>-o</i>
Qiangic	Tangut	<i>-ŋa</i>	<i>-na</i>	<i>-ni</i>			<i>(-kə)</i>	<i>*-w</i>
	Qiang	<i>-a < -aŋ</i>	<i>-n</i>	<i>-ʰ</i>		<i>-i</i>	<i>-tɛi</i>	<i>-w-</i>
rGyalrongic	Khroskyabs	<i>-ŋ</i>	<i>-n</i>	<i>-j</i>		<i>-ɲ</i>	<i>-z / -ɣ</i>	–
	Zbu	<i>-aŋ</i>	<i>tə-</i>	<i>-jə</i>		<i>tə- -ɲə</i>	<i>-(n)tɛə</i>	<i>-u</i>
Kiranti	Camling	<i>-u-ŋa</i>	<i>ta-</i>	<i>-i-ka</i>	<i>-i</i>	<i>ta- -i</i>	<i>-ci</i>	<i>(-u-)</i>
	Thulung	<i>-ŋu</i>	<i>-na</i>	<i>-ku</i>	<i>(-i)</i>	<i>Σ-ni</i>	<i>-tsi</i>	<i>-u</i>
Newaric	Thangmi	<i>-ŋa</i>	<i>-na</i>	<i>-i</i>			–	<i>-u</i>
Central Him	Sheshi Kham	<i>-ŋ</i>	<i>-n</i>	<i>-i</i>		<i>-ci</i>		<i>-o</i>
	Chepang	<i>-ŋa</i>	<i>-naŋ</i>	<i>-i</i>			<i>-ci</i>	<i>-u</i>
Northern Naga	Nocte	<i>-ŋ</i>	<i>-o</i>	<i>-i</i>		<i>-ɛn</i>	–	–
Western Him	Rangpo	<i>-ŋ</i>	<i>-n</i>	<i>-ni</i>			–	–

vowels in 2nd person verb forms (which came from the first person plural suffix **-i*. In some languages this is still 1PL suffix, and in some other languages this turned into 2PL suffix (Scott. DeLancey, p.c. November 19, 2024)), this language contains a more complicated system with more diverse patterns, and is not as systematic as other Rgyalrongic languages. One piece of evidence comes from the nominal stem forms. Even within the same paradigm pattern, there can be multiple nominal stem vowels. Additionally, the same test for nominal stem forms can have different results. Furthermore, some verbs do not even have a distinct nominal stem form. All of these features suggest that the Queyu verb indexation system is undergoing collapse, making it difficult to generalize an argument fusion pattern except for the tendency that is still observable. Note that there is also controversy about how old verb indexation is in the family. While LaPolla (1992) objects to the hypothesis of argument indexation on verbs in PTH, van Driem (1993) and others consider verb agreement/argument indexation to be present in the proto-language. Here, I follow DeLancey (2023), who shows conclusively that the indexation system is ancient.

Another piece of evidence showing that the Queyu indexation system is collaps-

ing comes from the alignment system. While Rgyalrongic languages show a hierarchical system, Queyu now presents a nominative-accusative alignment system, with the inserted bilabials in 3rd person verb forms no longer functioning as inverse markers. In intransitive verbs like ‘sit’ and ‘go’, the 3rd person forms contain an inserted bilabial (*ptsú* for ‘sit.3’ and *pʃʰí* for ‘go.3’, see Table 6.3 for full paradigms). It indicates that inverse marking in Queyu has now been reanalyzed as a 3rd person marker. The historical inverse marker, therefore, indicates neither transitivity nor inverse. This is another piece of evidence showing that the Queyu system is going through rapid changes.

This pattern shift also shows up elsewhere in the family. When a language loses its verb agreement system, it first shifts from hierarchical alignment to accusative alignment (Scott DeLancey, p. c., March 3, 2023). Another language demonstrating this pattern shift is Stau. As Sun and Tian (2013:230) and Sun (2015:745) point out, the Stau variety spoken in Ngawa (Tibetan <རྩ་ཁ་> *rnga ba*; Chinese <阿坝> *Aba*) Prefecture (in northern Sichuan Province) still contains the split alignment system, while the Stau variety spoken in Garzê Prefecture (in western Sichuan Province, where Pubarong Queyu is spoken) has started to show verbs that exhibit a nominative-accusative alignment pattern.

In fact, there is a clear geographical gradient going down from the north, where there are Rgyalrongic languages, which are very conservative and typologically complex, to the south, where there are Lolo-Burmese languages, which have already lost the verb agreement system (DeLancey 2010; Scott DeLancey, p.c. November 14, 2024). Queyu thus presents an interesting case, as it sits in the middle of this gradient, and shows this indexation system undergoing a shift.

6.3 Directional prefixes

Directional prefixes are a set of markers indicating the direction of an action. Most Qiangic and Rgyalrongic language have between three to nine of them, and they tend to be based on solar, vertical, and riverine systems (Sun 2001:169). Queyu has directional prefixes as well. This section introduces directional prefixes, the outmost possible prefixes in

a verbal template, as well as related expressions for spatial relations. The extended functions of directional prefixes, which are coding perfective aspect and imperative mood, are also addressed. The following subsections will introduce the orientational, perfective and imperative functions of directional prefixes.

6.3.1 The directional usage

The most basic function of directional prefixes in Queyu is to express the direction of a motion verb. There are other word classes in Pubarong that are clearly derived or related to directional prefixes, with similar forms and semantics. This subsection will introduce the prefixes first, then directional adverbs and nominals. Discussions on the last two topics can also be found in Section §4.3 and Section §4.8.6.

6.3.1.1 Directional prefixes in directional usage

Queyu has six directional prefixes. Their forms (both plain and uvularized) and functions are listed in Table 6.24, followed by examples of how they are used in speech (examples (6.12) through (6.17)). Notice that the prefix *tə-/təʷ-* does not indicate any direction, hence is glossed as ‘neutral’ NEU. Its function is merely indicating perfective or imperative (Section §6.3.2 and Section §6.3.3). However, the distribution of *təʷ-/təʷʷ-* in the verb is the same as that of semantically directional prefixes. Therefore, it is listed alongside other directional prefixes below.

Table 6.24: Directional markers in Queyu

Queyu prefix	Uvularized version	Gloss
<i>í-, rí-, ó-</i>	–	Upward
<i>nəʷ-</i>	<i>nəʷʷ-</i>	Downward
<i>ləʷ-</i>	<i>ləʷʷ-</i>	upstream/left
<i>ǰ-</i>	–	downstream/outward/right
<i>kəʷ-</i>	<i>kəʷʷ-</i>	inward
<i>təʷ-</i>	<i>təʷʷ-</i>	direction neutral

(6.12) the ‘upward’ prefix

bà^hxpé=i tə^h-q^hə^hptsjè áηò s^hípú=tjè í-tfí
frog=ISM2 NEU-jump.3 upside tree=SUPE **UP-go.3**

‘The frog jumped up to the tree.’

青蛙跳到树上去了。

(QVY-333: 18)

(6.13) the ‘downward’ prefix

ʃhòpʃhí s^hí xtʃhí^h=ndzè=i tə^h-xʃé^h nə-tʃí ní
child and dog-DU=ISM2 NEU-dash **DOWN-go.3** NFl

‘The kid and the dog dashed down.’

小孩和狗一起跑下去。

(QVY-333: 8)

(6.14) the ‘upstream’ prefix

t^hə qé^h nə^h-pʃá^h lə-tʃí KN
this here DOWN-cry.3 **US-go.3** time

‘(The boy) Went back home, crying.’

哭着走向家里。

(QVY-334: 30)

(6.15) the ‘downstream’ prefix

TM *bà^hxpé=i t^hə-ndzəé xk^həpə=p^hè í-tʃí ní*
then frog=ISM2 3-DU.LOC footprint=COM **DS-go.3** NFl

‘Then the frog followed their footprints.’

然后青蛙跟着他们俩的脚印走了。

(QVY-333: 28)

(6.16) the ‘inward’ prefix

ójà^h tí ək^hú tʃìt^hó t^hə qé^h kə-ʃl^hwə KN tǎ^h tʃəpə=tə tsə tʃítʃó^h ʃ^hó
OK then uncle PN this here **IN-arrive.3** time then tripe=ISM1 3 wash go.lsg

tə-ní tʃí ní tʃí
NEU-say.3 GNR say.3 GNR

‘Then when Uncle Trotung arrived at that place, then he said: ‘I’m going to wash the tripe.’’

然后舅通到了那个地方后，说：‘我去洗毛肚了。’

(QVY-335: 14)

(6.17) the neutral prefix

tʰə-sʰi tʰə ʃʰəpʃʰi məmò tʰə=xə kələ tə-kʰwí tʃi mò
 one-day this child someone this=LOC something NEU-give.3 GNR IND

‘One day, someone gave this kid something.’
 有一天，有人给这个小孩一个东西。

(QVY-334: 2)

The ‘upward’ prefix has three allomorphs. What conditions these three allomorphs is still unclear. There are two directional prefixes that do not have a uvularized version, which are the *i*- allomorph of ‘upward’ and the *ĩ*- ‘downstream’ prefix. The riverine meanings of *lǎ*- and *ĩ*- are lost in contemporary Queyu, as reported by speakers. They consider *lǎ*- to refer to the left direction and *ĩ*- the right direction. Detailed discussions as well as other support for glossing *lǎ*- and *i*- as ‘upstream’ and ‘downstream’ are given in Section §6.3.1.2 and Section §6.3.1.3.

Verbs of motion can select all six of the directional prefixes. For non-motion verbs, there is usually at least a default prefix that goes with each.

6.3.1.2 Directional adverbials

Queyu has a set of directional adverbials whose forms and meanings are related to the directional prefixes discussed in Section §6.3.1.1. These adverbials and the corresponding prefixes are given in Table 6.25.

Table 6.25: Directional adverbials and corresponding prefixes

Directional prefix	Directional adverbial	Gloss
<i>i</i> -, <i>é</i> -, <i>í</i> -	<i>éŋò</i> , <i>rǒ</i>	Upward
<i>nǎ</i> -	<i>éwá</i> , <i>nəwú</i>	Downward
<i>lǎ</i> -	<i>éli</i> , <i>ləwú</i>	Upstream
<i>ĩ</i> -	<i>évé</i> , <i>jǒ</i>	downstream
<i>ké</i> -	<i>ékù</i> , <i>kǔ</i>	inward

Directional adverbials tend to co-occur with directional prefixes. Examples of their usage are given below.

(6.18) upward and downward adverbial

TM *tʰə=ntsʰí áwǎ* *zǐʰ rəkʰí nǎ-φlwǎ* KN *rəkʰí tsóʰ=tje*
 then 3=PL **downside** water bank **DOWN-arrive.3** time bank bridge=SUPE

rǔ í-tfǐ KN
upward UP-go.3 time

‘Then they arrived at the river bank, and went up to the bridge.’
 然后他们到了河边，然后上了桥 (QVY-334: 18)

(6.19) upstream adverbial

a. the use of *lǎwú*

TM *lǎwú lǎ-tù* *ni bàʰxpé ndzúʰndzúʰ=tjè tǎʰ-χqó*
 then **side US-come.3** NFl frog big.RED=SUPE NEU-scold

‘Then came back and scolded the big frog.’
 然后转过身走过来来骂了大青蛙 (QVY-334: 17)

b. the use of *ǎli*

tʰəʰ mǎʰ KN *tǐ zǐʰríqò* *ni-sʰáʰ* **ǎli** *zǐʰ*
 this after time then place.name say.NOM-NMLZ **upstream** water

tfý-sʰáʰ=kù *lǎ-βzè* *ni*
 EXIST-NMLZ=INE **US-bring.3** NFl

‘Then there is a place called *zǐʰríqò*. Bring the wine to the place where there is water.’ (QVY-211: 35)

(6.20) downstream adverbial

a. the use of *jǔ* and *ǎvǎ*

TM *tʰə=ntsʰí tfǎlǎ=tǎ=i* *bàʰxpé zǎzǎ=tǎ* *kótǎ lǎ méi-βri*
 then 3=PL all=ISM1=ISM2 frog small.RED=ISM1 search NF2 NEG-capable.3

TMK *tǎʰ-hníqʰwǎʰ* **jǔ** **ì-tfǐ** *xtʰíʰ sʰí* *fʰòpʰí=ndzè=i* *dzípú*
 then NEU-angry **downstream DS-go.3** dog and child=DU=ISM2 very

mǎé-gó-tfǐ *nǎ-wú* *ni* TM *ǎvǎ éngù* **ì-tfǐ**
 NEG-happy-EXIST DOWN-do.3 NFl then **side** home **DS-go.3**

‘Then those two didn’t find the small frog, then they were mad. The dog and the child were very unhappy and went back home.’
 然后他们都没有找到小青蛙，小孩和狗生气着，很不开心地回家去了。
 (QVY-334: 27)

- b. the usage of *ǎvə̀*, the location where you obtain soil from, *ɣfáʷ*, is indicated in Figure 6.3

xpwə́=tjè *φlwə́* *kʰí=ɲí* *xpwə́* *térúʷ* *nə̀-ʒý* *kʰí=ɲí*
 flat.space=SUPE arrive.3 time=ABL flat.space very DOWN-leak time=ABL

tĩ *ǎvə̀* *ɣfáʷ* *kə́-mqzi* *xpwə́* *nə̀-xtú*
 then **there** soil IN-transport.3 flat.space DOWN-pound.3

‘When you arrive at the roof, and when the roof leaks, then bring the soil there and pound it (against the leaking place to prevent leaking).’

到了 *xpwə́* 之后, *xpwə́* 漏水。把土拿过去, (用棍子) 在 *xpwə́* 那儿打 (这样可以防止漏水)。
 (QVY-327: 16)

(6.21) inward adverbial

tĩ *jǒ* *kǒ* *kə́-tʰə̀* *qə́ʷ-ɣqʰwə̀ʷ* *ɲí*
 then again **here** **IN-drive.SAP** IN-chain NFl

‘Then drive the cows back again, chain them up in their original position.’

然后再一次把牛赶回来, 拴在它原有的位置上。
 (QVY-329: 95)

6.3.1.3 Directional nominals

In addition to directional prefixes and adverbials, Queyu also has a set of directional nominals that indicate locations. The forms and meanings of those nominals are, again, related to directional prefixes. They are listed in Table 6.26 alongside their associated prefixes.

Table 6.26: Directional nominals and their corresponding directional prefixes

Directional prefix	Directional nominal	Gloss
<i>í-, é-, rí-</i>	<i>tjèpáʷ</i>	upward
<i>nǎ-</i>	<i>wə̀páʷ</i>	downward
<i>lə́-</i>	<i>lə̀páʷ</i>	upstream
<i>ĩ-</i>	<i>və̀páʷ, ipáʷ</i>	downstream
<i>kə́-</i>	<i>kùpáʷ</i>	inward

Several examples below from a text will illustrate how directional nominals are used to indicate the locations of objects or events in the discourse. In the text, the speaker is talking about the structure of the house, the arrangement of the furniture within the house,

as well as places they went for daily activities. The landscape where Suoyi Village (where the main consultants of this study are from) used to be is shown in Figure 6.2. The previous house location the speaker was mentioning is indicated by a black circle. A sketch of the locations of places and furniture which are mentioned in examples (6.19b), (6.20b), (6.22) and (6.23) is given in Figure 6.3. The flow direction of the river is indicated by an arrow in the upper side of the picture, which is from right to the left. The right hand side is the upstream direction and the left hand side the downstream direction. The house is indicated by the big square on the lower left side of the picture. Locations of *ləpáʷ*, *ípáʷ*, *kùpáʷ*, and *wəpáʷ* are used in utterances below. Compare their locations in relation to the river shown in Figure 6.2.



Figure 6.2: Location of the house circled.

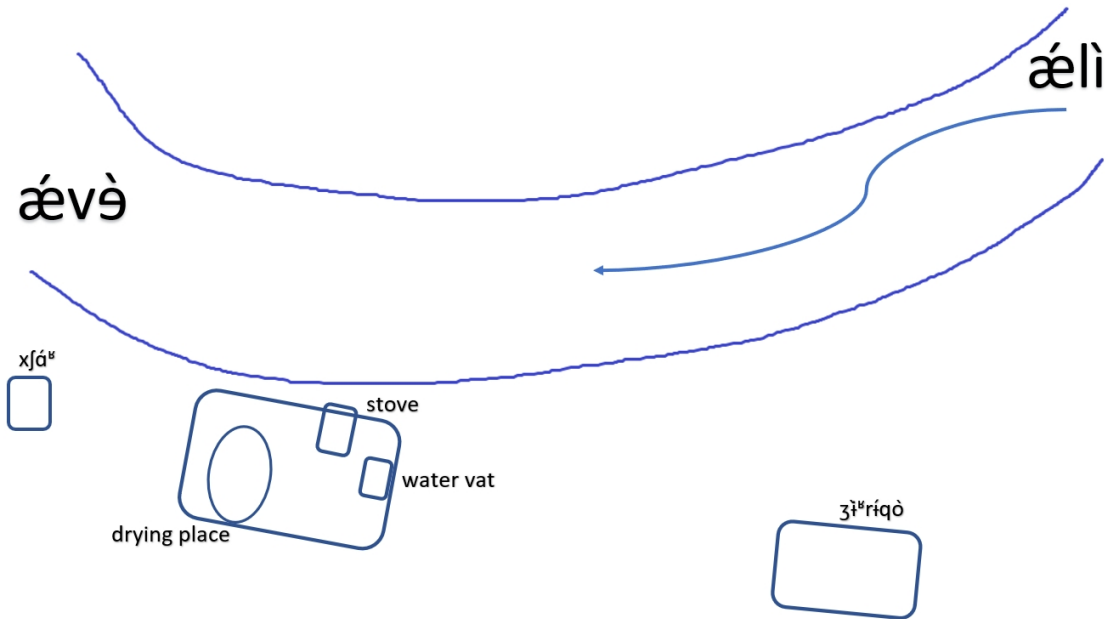


Figure 6.3: Location of the places and furniture in relation to the river.

(6.22) the water vat is at the *lǎpáǎ* direction

ǎŋgù ǎŋgù í-ǎlwǎ kʰí=ŋí tʰèkí ɓwǎǎ tʂí **lǎpáǎ** tʂʰíró tʂí
 3rd.fl 3rd.fl UP-arrive.3 time=ABL stove EXIST GNR **side** bucket GNR

‘Once we’ve arrived at the third floor, there’s a stove, the water vat is over there.’
 到了第三层后，灶台那边有水桶。 (QVY-327: 12)

(6.23) the grass drying place is at the *ipáǎ* direction

rú=tǎ tǎróǎ nǎǎ-qʰwǎǎ nǎ-ǎǎzé tǎróǎ **ipáǎ** ì-kʰwí
 grass=ISM1 very DOWN-cut.3 DOWN-persist very **side** DS-sun.dry.3

‘Need to cut grass for a long time, and sun dry the grass over there.’
 要很努力地割很长时间的草，在一旁晒草。 (QVY-327: 8)

(6.24) the inside of the collector is *kùpáǎ*

tʰǎ jǎndǎí=tǎ tʰǎ zí tǎ-wú ŋí **kùpáǎ** kʰòǎzǎǎ=xǎ nǎ tʰǎ
 this conduit.tube=ISM1 this way NEU-do.3 NFl **inside** collector=LOC also here

ǎrǎ nǎ-tú-sʰǎǎ tʰí ví hnǎ zǎ=rí ɓwǎǎ tʂí
 liquor DOWN-come-NMLZ this way mouth way=ISM3 EXIST GNR

‘Then conduit tube is like this, inside of the collector there is a mouth-like place that allows liquor to flow down.’

然后引酒管就是这样，里面的集酒器也有一个像嘴一样的让酒流下去的地方。
(QVY-330: 42)

(6.25) the downside is *wəpáʳ*

tí tʰə pʰsʰàʳ=tì *tə-dʒý nə-tú* ***wəpáʳ***
then this young.man=ISM1.ISM2 NEU-run DOWN-come.3 **downside**

nə-tú *tǐ* *χáʳlǎʳ=tə* *sʰintsʰò nə-tú* KN
DOWN-come.3 then approximate=ISM1 close DOWN-come.3 time

‘Then, the young man ran down, and almost reached him (Uncle Trotung).’
然后，这个年轻人跑了下来，差不多跑到他（晁通）的跟前。 (QVY-335: 10)

6.3.1.4 *The ‘upstream’ and ‘downstream’ prefixes and their cognates in other related languages*

Queyu speakers do not associate riverine meanings with *lǎ-* and *ǐ-* any more. They consider them to mean ‘leftward’ and ‘rightward’, respectively. However, by comparing these prefixes and the corresponding directional adverbials and nominals, as well as forms in related languages such as Khroskyabs, these two prefixes are seen to be clearly related to the riverine prefixes in other local languages. Therefore, they are glossed as ‘upstream’ and ‘downstream’. Further evidence for glossing these two prefixes this way is provided below.

In Figure 6.4, the location of Suoyi village is at the right hand side, which is the downstream location in relation to other villages. If one is traveling to upstream villages like those of Yazhong, Yinglong, or Xinlong County (which is further than Yinglong Village and located at the upstream side of the Yalong river), the prefix attached to the motion verb is always *lǎ-*. Only Yazhong village is at the same level as Suoyi, while all other places are at different levels and to the northwest of Suoyi. If one is traveling to downstream regions like Gala County or Yajiang, the prefix attached to the motion verb is always *ǐ-*, and not *nǎ-* ‘downward’, though all of these places are located to the south of Suoyi and have a relatively lower altitude.

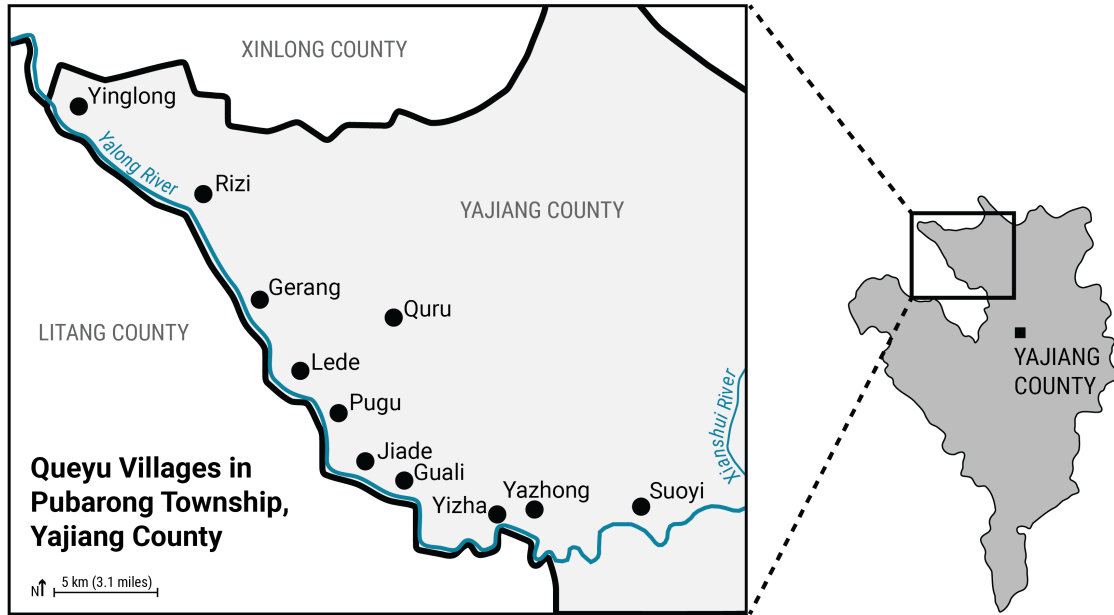


Figure 6.4: The location of Suoyi village in relation to other places

The Yalong river bends around Yazhong village, and looks like an approximate L shape, as is shown in Figure 6.4. For villagers who live in villages located on the ‘long’ stroke of the L shape, they are referred to as *l̈əndzəpi*. While villagers who live on the ‘short’ stroke of the L shape are referred to as *v̈əndzəpi*. The *pi* means ‘person’ in words like *hmémbi* ‘doctor’ (Tibetan *sman pa*). The speech spoken by *l̈əndzəpi* is called *l̈əndzə xkə*, and *v̈əndzəpi v̈əndzə xkə*. The word *xkə* is another Tibetan loan that means ‘speech, sound’ (Tibetan *skad*). It is therefore reasonable to assume that *l̈əndzəpi* means ‘upstream people’ while *v̈əndzəpi* means ‘downstream people’, with *l̈ə* and *v̈ə* containing the ‘upstream’ and ‘downstream’ information, respectively.

Table 6.27 summarizes several directional expressions just discussed in previous sections. Though the ‘downstream’ prefix is *ǎ-*, in the corresponding directional adverbial and nominal there is a *v̈ə* element that seems to express the same meaning as *ǎ-*. Several Rgyalrongic languages contain a *IV-* prefix that encodes ‘upstream’ information (such as Tshobdun and Japhug) (Thurgood 2017:16). While in Khroskyabs (the Siyuewu variety), a nearby Rgyalrongic language, not only is the upstream directional prefix *l̈ə-*, the down-

stream one is *və-*, and are likely related to the *lǎ-* and *ǎ-* prefixes in Queyu.¹⁶ Therefore, these two prefixes are glossed ‘upstream’ and ‘downstream’, respectively.

Directional prefixes, adverbs, and nominals are summarized in the table below.

Table 6.27: Directional expressions in Queyu

Directional prefix	Directional adverbial	Directional nominal	Gloss
<i>í-, é-, rí-</i>	<i>éŋò, rǒ</i>	<i>tjèpáʷ</i>	upward
<i>nǎ-</i>	<i>éwá, nǎwú</i>	<i>wǎpáʷ</i>	downward
<i>lǎ-</i>	<i>ǎli, lǎwú</i>	<i>lǎpáʷ</i>	upstream
<i>ǎ-</i>	<i>ǎvǎ, jǎ</i>	<i>vǎpáʷ, ipáʷ</i>	downstream
<i>kǎ-</i>	<i>ǎkù, kǎ</i>	<i>kǎpáʷ</i>	inward

6.3.2 Perfective usage of directional prefixes

Another function for the directional prefixes is to encode aspect. These extended functions of directional prefixes are common in regional languages. Shirai (2009) conducted a survey on directional prefixes in languages spoken in the Ethnic Corridor and concluded that they are also obligatory in both perfective and imperative contexts. Contrast (6.26) and (6.27), the presence of *tǎ-* is not required in (6.27), but is obligatory in (6.26), where the only difference is the perfective/imperfective context.

(6.26) perfective context

ŋǎ tsǎ tǎʷ-ɣʒǎʷ
 1SG 3SG.LOC NEU-hit.1

‘I hit him.’

(6.27) imperfective context

ŋǎ tsǎ ɣʒǎʷ tʂì
 1SG 3SG.LOC hit.SAP GNR

‘I will hit him (on a regular basis).’

¹⁶Data from field method class (University of Oregon, academic year 2017-2018) notes. The language consultant is Yulha, who was a linguistics undergraduate student.

Some verbs can take both the neutral *tǎ-* prefix and one of the directional prefixes to indicate the perfective with a slight semantic difference between the two expressions. While the *tǎ-* prefix, expresses perfective aspect, directional prefixes will have an inchoative meaning. See the three examples in (6.28).

(6.28) different utterance meanings when *ndʒúʷ* ‘big’ is paired with different prefixes

- a. Perfective use of *tǎʷ-*

tǎʷ-ndʒúʷ-sʰɪ̄
NEU-big-NMLZ

‘It’s big (for clothes, house, etc.).’

- b. Perfective use of *í-*

í-ndʒúʷ-sʰɪ̄
UP-big-NMLZ

‘(Child, animal) has grown up.’

- c. Inchoative use of *ǎ-*

ǎ-ndʒúʷ-sʰɪ̄
DS-big-NMLZ

‘It has become big (e.g. river during the flood season).’

6.3.3 The imperative function of the directional prefixes

In addition to expressing motion directions and perfective aspect, directional prefixes can also be used to express imperative meaning. As introduced in the Chapter 3 on tonal behavior, when verbs are paired with *í-/ɪ̄-/é-*, *lǎ-* and *kǎ-* prefixes, the perfective and imperative expressions are homophonous. When verbs are paired with *nǎ-*, *ǎ-* and *tǎ-* prefixes, the imperative and perfective expressions differ in terms of the surface tone of the prefix. Table 6.28 is re-introduced from Chapter 3 below to demonstrate the imperative function of the directional prefixes as well as how they may differ from directional and perfective expressions.

Table 6.28: Homophonous vs different IMP and NEU constructions

	Gloss	Imperative	Perfective
Different	DS-sun.dry.2	<i>í-kʰí</i>	<i>ì-kʰí</i>
	NEU-give.2	<i>tǎ-kʰí</i>	<i>tǎ-kʰí</i>
Homophonous	UP-stand.2	<i>ǎ-xkʰí</i>	<i>ǎ-xkʰí</i>
	IN-listen.2	<i>kǎ-nì</i>	<i>kǎ-nì</i>

Two examples of imperative utterances from texts are given below. In (6.29), both *ǎ-ʃʰí* ‘go up’ and *nǎ-lí* ‘go down’ are imperative utterances, where the speaker (which is a rabbit) was telling his friend which route to take when going to and returning from a mountain. Compare *nǎ-tí* ‘you come down’ and *nǎ-lí* ‘you come down’. In the first example *nǎ-* is used for pointing out the direction of motion, and the surface tone on the downward prefix is L. But in the second one the surface tone on the downward prefix is H, which is evidence that this prefix is used for imperative purposes. Additionally, the choice of verb bases can indicate the function of the prefix. While it is not observed in other verbs, for ‘to go’, *lí* is the suppletive form used in the imperative only, while *tí* is used in other contexts.

(6.29) *ǎ-* and *nǎ-* mark imperative

tí rǒ ǎ-ʃʰí KN ʎǎvǎ=rí ʎǎvǎ=tjè ǎ-ʃʰí tǎ-ní tʂí
then upward UP-go.2SG time sand=ISM3 sand=SUPE **UP-go.2SG** NEU-say.3 GNR

nǎwú nǎ-tí KN zǎémǎ=rí zǎémǎ=tjè nǎwú
downward **DOWN-come.2** time boulder=ISM3 boulder=SUPE downward

nǎ-lí tǎ-ní tʂí nì tʂí
DOWN-come.2SG NEU-say.3 GNR say.3 GNR

‘Then when you go up, you go up on the sandy side, and when you come down, you come down on the rocky side.’
‘上去的时候，从沙子上面上去，下来的时候从岩石上下来。’ (QVY-339: 4)

6.3.4 Semantic pathways from directional meanings to the extended functions

For many Qiangic and Rgyalrongic languages, it is noted that all perfective contexts require directional prefixes, while they are optional in imperfective constructions (Lin

2011; Sun 2017; Nagano 2017; Jacques 2017; Sims and Genetti 2017). The semantic pathway from directional to perfective has been discussed by Bybee, Perkins, and Pagliuca (1994:87), where they talk about bounders, which are adverbs with locational meanings that later develop into perfective markers, as they gradually come to indicate completion or attainment of a limit. This is similar to the contrast between drink vs. drink up and eat vs. eat up in English.

Sims and Genetti (2017) suggest a two-step pathway, in which the second step for this semantic shift is from perfective to imperative. Van Der Auwera, Malchukov, and Schalley (2009:100) explain this semantic shift pathway by noting that when one gives commands to another, it is expected that the command will be completed. The semantic pathway for directional markers is demonstrated in Figure 6.5:

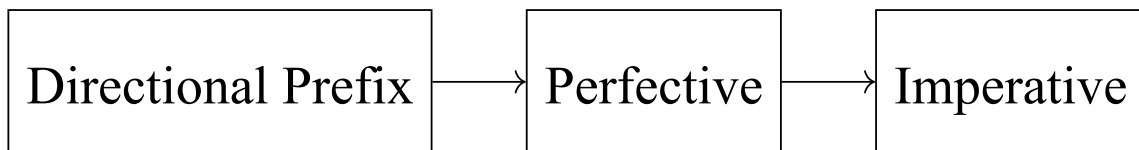


Figure 6.5: The semantic pathway from directional to imperative, adopted from Sims and Genetti (2017:135).

To support this argument, Sims and Genetti (2017) present data from different Qiangic languages, and examine if directional prefixes are required in directional, perfective, imperative, and imperfective contexts. Their results confirm this hypothesis, showing that all languages examined require directional prefixes when indicating directions. The majority require them in perfective and imperative contexts. Only three languages still require these prefixes in imperfective situations. In languages such as Stau, there are two sets of directionals, one occurs in the perfective/imperative and the other occur in the interrogative/irrealis (Jacques et al. 2017:601).

¹⁷The Queyu data used here are from Wang (1991), which is based on the variety spoken in Youlaxi. In Pubarong, we see that directional prefixes are required for directions, perfective and imperative constructions, but not imperfective.

Table 6.29: Obligatory directional prefixes in different functions, from Sims and Genetti (2017:136).

Language	Direction	Perfective	Imperative	Imperfective
Muya	√	√	√	√
Zhuokeji rGyalrong	√	√	√	√
Japhug rGyalrong	√	√	√	√
Yonghe Qiang	√	√	√	
Stau	√	√	√	
Niuwozi Prinmi	√	√	√	
Queyu ¹⁷	√	~	√	
Tangut	√	√	√	
Namuzi	√	√		
Guiqiong	√			
Baima	√			
Shixing	√			

6.4 Negation

Three negation markers are found so far, which are the imperfective NEG marker *mæ-*, the NEG marker *mə-* that occurs in most other contexts, and a marker *méi-* that thus far occurs in the most restricted environments.

The *mə-* marker always occurs between directional prefixes and the verb stem. For directional prefixes whose vowels are /ə/, notice that this /ə/ vowel will change into an /ə/ vowel. Contrasts between *mæ-* and *mə-* can be found in Table 6.30.

Table 6.30: Comparison between the *mæ-* and *mé-* prefixes.

Gloss	Negation	Translation	Negation	Translation
sun dry	<i>mæ-k^hó</i>	I don't sun dry.	<i>í-mé-k^hò</i>	I haven't sun dried [yet].
Give	<i>mæ-k^hó</i>	I don't give.	<i>té-mé-k^hò</i>	I haven't given yet.
stand	<i>mæ-xk^hó</i>	I don't stand.	<i>é-mé-xk^hò</i>	I haven't stood yet.
listen	<i>mæ-ŋó</i>	I don't listen.	<i>ké-mé-ŋò</i>	I haven't listened yet.

Several examples demonstrating the use of the negators are shown below. In (6.30), the imperfective *mæ-* negator is prefixed to *ŋǒ* 'capable.SG', while in (6.31), the other nega-

tor *mə-* is used in this non-imperfective environment. The *mə-* negator can also occur in dependent clauses like (6.32).

(6.30) *ŋǒ* ‘capable.1SG’ is being negated

tǎʷ tʰə=tə ŋǒ pjèrjé=tə xtsiʃí mǎ-ŋó
 then this=ISM1 1SG Tib.calendar=ISM1 calculation NEG-be.able.1SG

‘I don’t know how to calculate the Tibetan calendar.’

那个播种时间藏历的我不会计算。 (QVY-329: 133)

(6.31) *xtso* ‘process’ is prefixed and negated by *mə-*

<jīqi>=kù tǎʷ-mǎʷ-xtsò-sʰi=tə kə-fwə-sʰi=tə ʒǒ
 machine=INE NEU-NEG-process-NMLZ=ISM1 IN-rest.3-NMLZ=ISM1 whole.yogurt

ŋi tʃí
 say.3 GNR

‘The yogurt that is not processed yet and is being fermented in the machine is called *ʒǒ* (whole milk yogurt).’

机器里没有处理就发酵的酸奶叫*ʒǒ* (全脂酸奶, 里面有酥油)。 (QVY-332: 9)

(6.32) the use of perfective negation prefix *mə-*

tiri wǎ ə-mò ǎ-wú-sʰi mǎ-wú tiri wǎ tǎʷ-nóʷ
 that.time wine UP-complete Q-do.3-NMLZ NEG-do.3 that.time wine NEU-smell

i-tú-tʃi tsì tʃí
 DS-come.3-EXIST EGO GNR

‘Whether it has become liquor or not depends on if the smell of liquor comes out.’

有没有变成酒, 就看那时候有没有酒的气味传出来。 (QVY-330-31)

A more direct comparison between these two negators, *mǎ-* and *mə-*, can be seen in the two examples in (6.33). In (6.33a), the speaker is pondering and asking a question to themselves, while in (6.33b), when the question is now embedded in a subordinate clause, the *mə-* negator is used instead.

(6.33) contrast *mǎ-* and *mə-*

a. *mǎ-* is used when one is asking oneself

ǎ-tʰó mǎ-tʰó
Q-eat.ISG NEG-eat.ISG

‘Should I eat it or not?’
我吃不吃？

- b. *mə-* is used in a subordinate clause

ǎ-tʰó mǎ-tʰó ǎpò ǎó kʰò
Q-eat.ISG NEG-eat.ISG ISG.REFL know know.ISG

‘I know if I’m going to eat or not.’
我吃不吃我自己知道。

The last negation marker is the *méri-* prefix. This marker occurs in fewer contexts than the previous two negation prefixes. Below are several examples where *méri-* can occur. In summary, this marker can negate verbs indicating capability, with egophoric marker, with completive and experiential aspect verbs, and with state verbs like ‘see’ and ‘hear’.

(6.34) the use of *méri-*

- a. *méri-* in front of ‘be capable’

tĩ tʰǎ tsʰó-pì=tò tǎǎ ndě xǎ=tó ndzǎǎ ló
then this business-person=ISM1 then what rabbit=ISM1 catch.NOM NF2

méri-rò tǎǎ-xshǎǎ ní i-tǎǎ KN βrí mpi wú
NEG-capable.ISG NEU-think.3 NF1 DS-go.3 time horse lead.3 do.3

tǎ-wú tǎǎ ní tǎǎ
NEU-finish.3 GNR say.3 GNR

‘Then this merchant thought: ‘Well, I didn’t catch the rabbit.’ He went back, and the horse was already brought away.’

然后这个商人心想：‘唉，我兔子没有捉到。’回到了拴马的地方，马已经被带走了。
(QVY-336: 12)

- b. *méri-* in front of egophoric marker

óǎǎ tĩ ǎzò=tsʰǎ tĩ tǎǎ tǎǎ-kwǎǎxtǎǎ ní tǎǎ kǎtʰǎ=tsʰǎ ndě kǎ
ok then uncle=PL then then NEU-afraid NF1 then this=PL what wisdom

tǎǎ=rǎ ndě **méri-tsǎ-sʰǎ** ǎzò=tsʰǎ tǎǎǎǎ=tǎ sʰǎ-fǎ
wise=DIR what **NEG-EGO-NMLZ** uncle=PL all=ISM1 kill.NOM-NMLZ

tə-tsí-sʰí *tə̃ˣsʰí* *ni*
 NEU-EGO-NMLZ NEU-think.3 NF1

‘Then the uncles got scared, they thought: “This family is not some good kind, their uncles are to be killed.” The uncles got scared and all escaped.’
 然后舅舅们就害怕了，心里想：这家子不是啥子好人，舅舅们都是要被杀的。舅舅们就都害怕了，一哄而散了。
 (QVY-337: 53)

- c. *méi-* in front of ‘finish’, a verb indicating completive aspect

lə-ʃʰí *méi-yò*
 US-go.NOM NEG-finish.1SG

‘I haven’t gone yet (to Xinlong direction).’
 我还没去（新龙）。

- d. *méi-* in front of the experiential

ŋǎ *xinlong* *lə-ʃʰí* *méi-ndzə̃ˣ*
 1SG Xinlong US-go.NOM NEG-EXP

‘I haven’t been to Xinlong before.’
 我没去过新龙。

- e. *méi-* in front of *mdí* ‘see.3’

təwú *ʃʰòpʃʰí=tsʰí* *təwú* *méi-mdí* *təwú* *hɲúrí* *təwú* *pʃʃíˣ* *təɲú* *hɲúrí* *ʃʰí*
 still child=PL still NEG-see.3 still front still boat still front go.NOM

lə *ró* *kʰɪ*
 NF2 EXIST time

‘The kids hadn’t seen that, and the boat was still moving forward.’
 小孩还没有发现,船还在前进。
 (QVY-334: 22)

The *méi-* and *mæ-* prefixes can also contrast on verbs like ‘see’ and ‘hear’, as illustrated in Table 6.31.

There is one last type of negation construction that needs to be addressed. This is different from the three negators introduced above. It is a negator that occurs after nominalized verbs, instead of prefixing to verbs. The form of this negator is *měi*, and may be a borrowing of the Tibetan negative existential copula *med*. Two examples are given below to demonstrate this construction. In (6.35), *měi* negates ‘going up to the front’, within

Table 6.31: Contrasting *méri-* and *mæ-*

Queyu	Gloss	Translation	Queyu	Gloss	Translation
<i>méri-ndò</i>	NEG-see.2SG	‘I didn’t see.’	<i>mæ-ndó=rí</i>	NEG-see.1SG=DIR	‘I couldn’t see.’
<i>méri-mə̀</i>	NEG-hear	‘I didn’t hear it.’	<i>mə̀-mə̀=rí</i>	NEG-hear =DIR	‘I couldn’t hear it.’

which ‘going’ is nominalized. And in (6.36), *məri* negates the nominalized verb *ni-mə́* that precedes it.

(6.35) *məri* that negates ‘going up to the front’

tí wəpá sʰíntsʰò mtʰə́ áŋò tɛpá sʰíntsʰò ʃí-ʃə mə́
 then downside front only upward upside front **go.NOM-NMLZ NEG**
wəpá ə-ɸlwə rí tírí áŋò ə-qwə́ tʃə mə́ tʃí tə-ŋí
 downside UP-arrive then that.time upside UP-yell PROP hear GNR NEU-say.3

‘Then come close to where he is, but don’t go up to the front. When you arrive at the bottom, then you yell towards the upside, he’ll hear you.’ said (the rabbit).
 ‘然后到下面靠近他的地方，但是不要到上面跟前去。到了下面的时候，那时候就往上面喊，他会听到的’兔子说。
 (QVY-339: 6)

(6.36) *məri* that negates ‘say something’

TM *ŋə́ ndě́ ni-mə́ mə́*
 Then 1SG what say-NMLZ NEG

‘Then I didn’t say anything.’
 然后我也没说什么。
 (QVY-342: 147)

6.5 Questions

The interrogative prefix *æ-* can prefix to verbs and form a polar question. When occurring by itself, it forms an imperfective polar question, as can be seen in (6.37). When the question concerns events in the past, a directional prefix is obligatory, and will fuse with the interrogative prefix into one syllable. See (6.38). As discussed in Chapter §3.5.7, the surface tone of the *æ-* depends on the following verb. But for perfective polar questions,

the tonal pattern is fixed, with the first syllable (the portmanteau morpheme) bearing a R tone and the rest of the syllables L tone.

(6.37) the imperfective $\acute{x}\acute{e}/\acute{a}^x$ -

\acute{a}^x - $x s^h \acute{t}^x = r \acute{t}$
Q-see.clearly=DIR

‘Can you see clearly?’
看得清楚吗？

(6.38) Fused $\check{x}\check{e}/\check{a}^x$ - with $n\check{x}$ -

Jiangkang= $x\acute{o}$ <*diànhuà*> $s^h \acute{t} \quad t^h \acute{t} \quad v \acute{t} \quad n\check{x}\text{-}r\acute{o}$
PN=LOC telephone and this way **DOWN.Q-throw.SAP**

‘Did you call Jiangkang and stuff?’
你给健康打电话之类的吗？ (QVY-342: 139)

There is another situation where the fused directional prefix and question marker occurs. When the speaker is asking for a suggestion this portmanteau morpheme will be used, but with a different surface tone. Instead of having a RL pattern, the new construction will adopt a LH pattern instead. Compare the two questions below. Though the translations are the same, these two questions are uttered in different contexts. In (6.39), the speaker is asking another person for advice, while in (6.40) the speaking is talking to himself/herself.

(6.39) a different tonal pattern when asking someone else for suggestions

$n\check{x}$ $j\check{x}\text{-}k^h\acute{u}$
1SG **DS.Q-sun.dry.1SG**

‘Do I sun dry/Should I sun dry?’
我晾吗？

(6.40) only interrogative marker when you are asking yourself

$\acute{x}\text{-}k^h\acute{u}$ $m\acute{x}\text{-}k^h\acute{u}$
Q-sun.dry.1SG NEG-sun.dry.1SG

‘Do I sun dry/Should I sun dry?’
我晾吗？

6.6 Prohibitive marker

The prohibitive marker in Queyu is *tǎ-*, and it always pairs with a directional prefix. However, this prefix can also fuse with the directional prefix and form a portmanteau morpheme, whose surface tone is H. This differs from the perfective polar question (with a surface R tone) and the ‘asking for suggestion’ question (with a surface L tone). The two ways of forming prohibitive expressions are given in Table 3.31. Also notice that the *tǎ-* prohibitive marker does not pair with the *tə-* prefix. Hence the fused *tǎ-* morpheme is the only expression possibility when a verb is prefixed by *tə-*. One example of each of these two types in natural speech is shown in (6.41), uttered by the same speaker.

Table 6.32: Two prohibitive expressions

Pattern 1	Gloss	Pattern 2	Gloss	Translation
<i>í-tǎ-k^hí</i>	DS-PROH-sun.dry.2	<i>jǎ-k^hí</i>	DS.PROH-sun.dry.2	‘Don’t sun dry.’
<i>ǎ-tǎ-xk^hí</i>	UP-PROH-stand.2	<i>jǎ-xk^hí</i>	UP.PROH-stand.2	‘Don’t stand.’
<i>*tǎ-tǎ-k^hí</i>	NEU-PROH-give.2	<i>tǎ-k^hí</i>	NEU.PROH-give.2	‘Don’t give.’
<i>kǎ-tǎ-ŋí</i>	IN-PROH-listen.2	<i>kǎ-ŋí</i>	IN.PROH-listen.2	‘Don’t listen.’
<i>lǎ-tǎ-f^hí</i>	US-PROH-go.2SG	<i>lǎ-f^hí</i>	US.PROH-go.2SG	‘Don’t go (to Xinlong’s direction).’
<i>nǎ-tǎ-f^hí</i>	DOWN-PROH.go.2SG	<i>nǎ-f^hí</i>	DOWN.PROH-go.2SG	‘Don’t go (to Chengdu).’

(6.41) the two prohibitive expressions from a text

a. the fused morpheme construction

gǎ tǎ-vǎ
brag PROH-do.2SG

‘Don’t brag.’

不要吹牛。

(QVY-342: 80)

b. the construction where two morphemes are separate

qəʰ-tàʰ-xtəʰxtəʰ
IN-PROH-ask.2

‘Don’t ask.’
不要问。

(QVY-342: 151)

The *tæ-* prefix is a cognate shared in many other TH languages in various forms, such as *ti-* in Mazur, *tjæ-* in Wadu Pumi, and *tɿ-* in Yonghe Qiang (Daudey 2014:280; Gates 2021:331; Sims 2021:237).

6.7 Causativization

There are two ways to express causation in Pubarong, both are grammatical causatives, with the first one being morphological and the second one being syntactic/periphrastic.

The morphological causative utilizes a prefix that is no longer productive in Queyu. So far only several verb pairs are found for this type. Examples are given in Table 6.33. This causative prefix takes the form of a fricative, and is realized as [x] in ‘soak’, ‘pull down.2’, and ‘push someone down.2’, as [ɸ] in ‘to peel’, and [ɕ] in ‘push down.2’. This is a causative prefix inherited from PTH (Mei 2012). It is still be productive in some languages (such as Mazur Stau), while other languages like Geshiza Stau and Pubarong Queyu only retain a few fossilized lexical items containing it (Honkasalo 2019; Gates 2021).

Table 6.33: Morphological causation

Gloss	Lexicon	Gloss	Lexicon
to be wet	<i>pə</i>	to soak	<i>xpə</i>
to peel (vi.)	<i>lɸé</i>	to peel (vt.)	<i>ɸlɸé</i>
to fall (vi.)	<i>lólì</i>	to push down.2	<i>ɕlólì</i>
to fall (vi.)	<i>leʰ</i>	pull down.2	<i>xleʰ</i>
to roll down	<i>li</i>	push someone down.2	<i>xli</i>

The syntactic causative involves a verb *pʰə* that can conjugate for person and number. An example of this usage is demonstrated below. In (6.42), the literal meaning of the

expression is ‘cause (the barley) to chill down’, while in (6.43) the meaning is ‘cause to boil’.

(6.42) cause to chill

TM *i-pó* *tə-p^hú*
 then DS-chilly NEU-cause.3

‘Then make (the barley) cold.’
 让青稞冷却下来。

(QVY-330: 17)

(6.43) cause to heat

tʃə *rí-tʃù* *tə-p^hé*
 tea UP-hot NEU-cause.1PL

‘We heat up the tea.’
 (我们) 把茶加热。

(QVY-329: 5)

Geshiza Stau has a causative auxiliary *p^hə*, and Honkasalo (2019:243) suggests that this may be a cognate in Tangut *phji^l*.

6.8 Nominalization

Nominalization is a popular topic within TB linguistics, and it has been discussed through various perspectives (Rai and Lahaussois 2002; Bickel 1999; Noonan 1997; Matisoff 1972; DeLancey 2002; DeLancey 1999). This section describes and discusses nominalizing processes and other constructions related to nominalization. There are several types of nominalization strategies in Pubarong Queyu. As nominalization is a derivational process pertaining to verbs, different types of verbs adopt different strategies. Property concept words as a subtype of verbs use reduplication as the nominalization process, while other verbs use suffixation. The following subsections discuss these types individually. In addition to describing nominalizing strategies in Queyu, this section also discusses the possible historical development of some nominalizers with data drawn from related languages.

6.8.1 Nominalization of the property concept words

Property concept words can take the directional prefixes as well as the direct observation marker =*ri* when they are in their monosyllabic form. When reduplicated, they tend to behave like nouns and can take nominal suffixes and function as nouns.

For example, they can take the locative marker and occur in referring constructions just like nouns do. See (6.44) where the reduplicated verb ‘red’ refers to ‘the red one’ and functions as the object of liking.

(6.44) *jíjǐ* that functions like a noun

ŋǎ jíjǐ=xǎ gó=rǐ
 1SG red.RED=LOC like=DIR

‘I like the red one.’ (elicited)
 我喜欢红的。

A detailed discussion of reduplication of property concept words can be found in the Chapter 4.

6.8.2 Nominalization of non-property concept words

Non-property concept verbs can be nominalized by either suffixing a nominalizer or existential verb *tǐ*. There are various nominalizers in Queyu with different functions. Both participant and event nominalizations can be found. A list of those nominalizers is given below.

6.8.2.1 The *-mǎ* nominalizer

The *-mǎ* suffix nominalizes subjects in a clause. For example, *tʰí-mǎ* ‘eater’, *sʰǎ-mǎ* ‘killer’. In (4.19), *-mǎ* nominalizes ‘dumps barley’.

(6.45) ‘dump’ is nominalized

kʰǎǐ *ǎxtó* *xǐ* *tǎ-mǎ* *tǐ* *tǐ* *kʰǎǐ* *á"nǎ* *xǐ*
 some.people eleven peck dump-NMLZ EXIST GNR some.people twelve peck

tǎ-mǎ *nǎ* *tǐ* *tǐ*
 dump-NMLZ also EXIST GNR

‘Some people dump eleven pecks, there are also some people who dump twelve pecks.’

有些人倒十一斗的有，有些人倒十二斗的有。 (QVY-330: 9)

This nominalizer can also attach to property words used to modify nouns. An example is given in (6.46), where *ndzú^u-mə* refers to ‘the big one’, hence ‘the big frog’.

(6.46) ‘big’ is nominalized

xtʃ^hí^u s^hí ʃ^hòpʃ^hí s^hí tʃǎlə̀ bɑ^uxpé zə̀zə̀ xtʃixtʃí nə̀-wú k^hɪ
dog and child and all frog small.RED cherish DOWN-do.3 time

ndzú^u-mə tʃ t^hə̀=xó mə́-gó=ɾí
big-NMLZ then this=LOC NEG-happy=DIR

‘The kid and the dog were fond of the little frog, and the big one is not happy about it.’

小孩和狗都很疼爱小青蛙，大青蛙有点不高兴。 (QVY-334: 7)

6.8.2.2 The *-fə* nominalizer

The nominalizer *-fə* can be used for participant and event nominalizations. When nominalizing participants, the *-fə* suffix can nominalize a patient and/or recipient. For example, for the verb *sũ* ‘to feed (animal, people).3’, *sũ-fə* refers to the animal or person being fed. While for another verb with a similar meaning *kũ* ‘to feed (water, liquid)’, *kũ-fə* means ‘water, liquid food’. But for the verb *ʃǎ^uʃó^u* ‘to dip.1SG’, *ʃǎ^uʃó^u-fə* can refer to both dipping sauce and the food that is dipped into the sauce. Other examples of patient nominalization include *tʃ^hí-fə* ‘food (things to eat)’ and *s^hǎ-fə* ‘things to be killed’. In (6.47), *-fə* is suffixed to *nə̀-xpó* ‘soaked’, and refers to the thing that is being soaked.

(6.47) *ptʃ^há^u ni tʃí tǎ^u nə̀-xpó-fə*
fodder say.3 GNR then DOWN-soak-NMLZ

‘The thing being soaked is called fodder.’

浸泡的东西叫做ptʃ^há^u。 (QVY-329: 48)

There is another function of *-fə*, which is to nominalize an event. In (6.48), *-fə* produces ‘catching frog’, instead of only the object of the catching action (the frog). In (6.49),

-fə nominalizes the proposition ‘the mouse came in first place’, instead of the object of ‘becoming’ (which is ‘first place’).

(6.48) ‘catching frog’ is nominalized

TMK f^hòp f^hí s^hí x^tf^hí^h=ndzè=i b^a^hxpé ndz^í^h-fə tə^h-p^hə^h ni tǎ^h
 then child and dog-DU=ISM2 frog catch.NOM-NMLZ NEU-place NFl then
 éngù f^há^h tsì tə-ní ni tǎ^h éngù p^fí^h=rì
 home go.1PL EGO NEU-say.3 NFl then home go.3=DIR

‘Then the boy and the dog quit catching the frog, then said: “We are going home.” Then they went back home.’ 然后小孩和狗，放弃捉青蛙这件事了。然后说着‘我们要回家了’，然后他们就回家了。 (QVY-333: 23)

(6.49) ‘coming in first place’ is nominalized

x^tf^í f^íwáé=tə t^sò^h-f^í=xə x^tsá^hwà^h=tə t^hǎ tsì t^sí
 one mouse=ISM1 become-NMLZ=LOC source=ISM1 this EGO GNR

‘This is the reason why the mouse is first.’
 老鼠成为第一的原因就是这。 (QVY-349: 6)

6.8.2.3 The -s^ha^h nominalizer

The third nominalizer introduced here is -s^ha^h. This suffix has two functions as well, as it creates nominalizations referring to places and locations, as well as instruments. Pub-arong Queyu has a locative nominalizer -s^ha^h. This nominalizer turns the Verb into a Noun meaning ‘the place for doing that action’, as see in example (6.50) and (6.51). In (6.50), -s^ha^h is suffixed to tǎ ‘dump’, hence ‘dumping place’, and modifies vjé xkú ‘pig manger’. In (6.51), the -s^ha^h suffixes to p^hə ‘cause.NOM’, and nominalizes ‘the place where you dry (cause to dry) corns’.

(6.50) nominalization meaning ‘place to dump food’

vjé xkú=kù mdú tǎ-s^ha^h tsì t^sí
 pig manger=INE food dump-NMLZ EGO GNR

‘Manger is where you pour the food (for pigs).’
 猪食槽里是倒猪食的地方 (QVY-327: 44)

(6.51) ‘place to dry up food’ is nominalized

tʰə̀mǝ́ʳ tʰə̀=ʦǝ́ rǝ́ rí-tǿí kʰì pʦǝ́ʰáʳ pʦǝ́ʰáʳ nǝ̀wúlǝ́ imé rǝ́
 then this=SUPE upward UP-go.3 time stick.fl stick.fl as.for corn dry

pʰǝ́-sʰǝ́ʰáʳ tǿí
cause.NOM-NMLZ GNR

‘Then above there is the ‘stick floor’. The stick floor is the place for drying corns.’

然后再上去就是棍子层，棍子层是晒玉米的地方。 (QVY-327: 23)

The *-sʰaʳ* nominalizer also has another function, which is to create a nominalization referring to an instrument. Words like *hɲó ndǝ́-sʰǝ́ʰáʳ* ‘weaving machine’ and *kʰǝ̀xkǝ́ xkǝ́-sʰǝ́ʰáʳ* ‘baggage carrying tool (a bull called pʦǝ́ʰáʳ)’ demonstrate this function. The following two examples show how this function is used in natural speech.

In (6.52), *kǝ́ ʃʰí-sʰǝ́ʰáʳ* refers to the tool for carrying water, instead of a place you go and carry water from. In (6.53), the example is even clearer. The word *lí lí-sʰǝ́ʰáʳ* does not refer to the place where you plant and plough the field, but to the tool you use to do the job, which is *ɓwǝ́ʰǝ́ʰáʳ*, a kind of bull/yak. This nominalizer differs from the *-qʰaʳ* instrument suffix in that *-qʰaʳ* attaches to nouns and *-sʰaʳ* attaches to verbs.

(6.52) ‘water carrying’ is nominalized

tʰə̀mǝ́ʳ=ɲí ʒǝ́ʰ kǝ́ ʃʰí-sʰǝ́ʰáʳ tʰə̀ kʰí pǝ́tǝ́ ndǝ́ mǝ̀-tǿí
 then=ABL water carry **go.NOM-NMLZ** this time bucket EXIST NEG-GNR

‘Then the tool for carrying water, there were no buckets at that time.’

然后运水的东西，是没有运水的桶。 (QVY-327: 34)

(6.53) ‘field ploughing’ is nominalized

TM *kʰí=ɲí ɓwǝ́ʰǝ́ʰáʳ <shǝ́> lí lí-sʰǝ́ʰáʳ tǿí tǿí*
 then time=ABL OX COP **field plough-NMLZ** EGO GNR

‘Then WR is for ploughing fields.’

然后公牛是耕地的。 (QVY-049: 16)

Other TB languages also demonstrate this dual function of the place nominalizer as an instrument nominalizer. Such as the *-sce* in Siyewu Khroskyabs (personal notes). In

(6.54), *-sce* creates a nominalization referring the place where bear lives, and attaches to *ced* EXIST. In (6.55), *-sce* nominalizes *zæd* ‘write’ to mean the instrument one uses for writing.

(6.54) ‘live, exist’ is nominalized

ætə tōd tə χp^hξə ced-sce tə zəŋo
DEM cave DET bear **EXIST-NMLZ** DET COP

‘the cave where the bear lives’

(6.55) ‘write’ is nominalized

dzətə zæd-sce
book/letter **write-NMLZ**

‘what you use to write’

6.8.2.4 The *-s^{hi}* nominalizer

Another nominalizer present in Queyu is *-s^{hi}*. This marker is multifunctional, but nominalization is one of its functions. It can also serve as an inferential marker and a mirative marker (also see discussions on evidentiality in Chapter §7.1). Example (6.56) is a case where *-s^{hi}* nominalizes the verb phrase. It is suffixed to *nə-pfə* ‘said’ and means ‘what (the upstream people) said’.

(6.56) ‘say, speak’ is nominalized

lændzə-pi nə-pfə-s^{hi}=tə vændzə-pi=tsə^h=i χó kù tsí jǐ
US-person **DOWN-say-NMLZ=ISM1** DS-people=PL=ISM2 know know.3 GNR say.3

ŋù tsí
be.capable.3 GNR

‘What upstream people say, downstream people know it, are able to speak it.’
上游的人说的话，下游的人全部都懂，也会说。 (QVY-326: 11)

6.8.2.5 The *-xtə* nominalizer

This suffix nominalizes manner, or way of doing things. An example of this suffix can be found in the word *tʃ^hi-xtə* ‘way of eating’. In (6.57), another example of this nominalizer is given where the speaker was concluding explaining how to brew liquor.

(6.57) ‘to brew’ is nominalized

éɹǎ̀ *qʰǵʷ-xtó* *xtsìwú* TMKN *éɹǎ̀* TZ=*tí* *tsì* *tʂí*
 liquor brew.NOM-method mainly then liquor this.way=ISM3 EGO GNR

‘The brewing method is mainly like that.’

酿酒的方法主要就是这样子的。

(QVY-330: 63)

6.8.2.6 The *-tʂí* nominalizer

The last nominalizer introduced in this section is *-tʂí*, which also shares a form with an existential verb. When *tʂí* is functioning as an existential verb, the verb bears a high tone, while the nominalizer *-tʂí* bear a /L/ tone, and the surface tone depends on the preceding verb. An example of *tʂí* as an existential verb is given in (6.58), where the existence of a clever wife is introduced.

(6.58) *tʂí* as an existential verb

ĩ *mbəʷxtsʰáʷ=xə̀* *zìmǎʷzòʷ=tí* *tə-tʂí* *tʂí* *βlútʰò* *tʂʰipú* *tə-tsí* *tʂí*
 then pock=LOC wife=ISM3 NEU-EXIST GNR solution many NEU-EGO GNR

ɲì *tʂí*
 say.3 GNR

‘Then the son with pock had a wife, she had lots of solutions.’

然后麻子是有个媳妇的，她非常有办法。

(QVY-346: 10)

In (6.59), *-tʂí* is used as a nominalizer, and forms a relative clause that modifies the head noun *ɲə̀* ‘person’ that follows it.

(6.59) ‘very different’ is nominalized

tǎʷ *nǎ* *gə̀pə̀=xə̀* *tsǎ* *qéʷ* *pàʷ* *ké-li* *tə-nə̀*
 then 2SG old.man=LOC 3 place side IN-come.2 IMP-say.2

màʷ-nqzǎʷ-tʂí=xə̀ *ɲə̀* *tə-tsí-sʰí*
 NEG-same-EXIST=LOC person NEU-EGO-NMLZ

‘Then ‘You tell the grandpa to come to me, he is an unusual man.’ said the businessman.’

‘你让老公公到我跟前来，他是个不一样的人’（商人说）。

(QVY-346: 5)

6.8.2.7 *Origins of the nominalizers*

For the nominalizers introduced in the previous subsections, some of them share similar forms and functions with morphemes in related languages.

The origins of some of the nominalizers are clear, as $-s^h a^r$ probably came from Tibetan *sa*, which means ‘soil, place’, and is widely used as a nominalizer in Tibetan. For the $-m\emptyset$ suffix, other languages have agent nominalizers that may be cognate. For example, $-me$ in Geshiza (Honkasalo 2019:417), $-mi$ in Dongwang Tibetan (Bartee 2007). The origin of $-m\emptyset$ is likely Tibetan *mi* ‘person’, with the function as a nominalizer arising secondarily (DeLancey 1999; DeLancey 2002). Beaudouin (2023:655), on the other hand, proposes that the Geshiza $-me$ is a native morpheme instead of a Tibetan loan. As for the $-xto$ nominalizer, two similar morphemes are found in two Stau varieties. In Mazur Stau it is $-st\ddot{o}$ (Gates 2021), while in Geshiza (Honkasalo 2019) it’s $-t^h o\eta$. Honkasalo (2019) mentioned that the form and function are very similar to Tibetan nominalizer *stangs*, where the form and the function correspond to the Queyu $-xto$. An example of Tibetan usage of *stangs* is given in (6.60) for reference.

(6.60) A Tibetan example with *stangs*

byed stangs ’di yag.po mi ’dug
do way this good NEG COP

‘This way of doing things is not good.’

This $-s^h i$ nominalizer might be cognate with suffixes in two other nearby related languages/varieties. Honkasalo (2019) mentions a past tense nominalizer $-s^h i$ in Geshiza which $-s^h i$ is compatible with argument indexation (687-688). Gates (2021) mentions a perfective nominalizer $-s\emptyset$, which can form finite nominalization (373). Gates (2021) also discusses the two functions of this suffix $-s\emptyset$ as a finite nominalizer and an inferential evidential marker (377). In an article discussing the close relationship between Tangut and Stau, Beaudouin (2023:646) notes the similarity of this marker and the inferential suffix $-sji$ in Tangut. He also suggests that the inferential meaning can contain a ‘mirative over-

tone’ (2023 2023:647). This dual function also coincides with the functions of *-s^{hi}* in Queyu. Other functions of *-s^{hi}* can be found in Section §7.1.5.

6.8.3 Finiteness of the nominalized verbs

The finiteness of the nominalized verbs is worth noting. For some TB languages, the nominalized verbs are non-finite, while for some others the verbs, or clauses, they can be finite. The situation in Queyu is complicated, with different nominalizers requiring different forms of the verbs. In addition, while the nominal stem form is considered to be the non-finite form of the verb, this form can be unique to some verbs, but overlap with one of the conjugated forms for some others, making the determination of the finiteness of the nominalized verbs/clauses even more difficult to determine.

So far, if a verb has a nominal stem form, then this form takes the nominalizing suffix, except for the *-s^{hi}* nominalizer and verbs that do not have a nominal stem form. For the nominalizer *-s^{hi}*, this suffix always occurs after a finite verb. This may be explained by the fact that it also is an inferential marker that always describe something that already happened. Hence, the verb always has TAME marking in that situation. Compare (6.61) and (6.62), where in (6.61) the 1PL form of the verb *væ* takes the *-s^{hi}* nominalizer, but in (6.62) the nominal stem form of the verb *və* takes the *-fə* nominalizer.

(6.61) *-s^{hi}* occurs after a finite *væ*

tʃ mɔ tʰə zɪ nə-væ-s^{hi} tsɪ tʃɪ
 then butter this way **DOWN-do.1PL-NMLZ** EGO GNR

‘Then this is how we make butter.’
 我们是这样做酥油的（酥油是这样做的）。

(QVY-329: 80)

(6.62) *-fə* occurs after a nominal stem *və*

tʰə ptʰəræ və-fə tsɪ tʃɪ kʰɪ
 this cheese **do.NOM-NMLZ** EGO GNR time

‘This is the material for making cheese.’
 这个就是做奶渣子的材料是的。

(QVY-331: 6)

6.8.4 Relativization

What marks the difference between a relative clause in TB languages from relativization in Indo-European languages is the close relationship between relativization, nominalization, and genitivization (Matisoff 1972; DeLancey 1999; DeLancey 2002; Noonan 1997; Bickel 1999). In extreme cases like Lahu, nominalizer, relativizer, and genitive markers are all the same (Matisoff 1972). Other TB languages, though not as extreme as Lahu, still demonstrate a tight relation among these three functions. This relation is illustrated by the fact that relativization morphemes are almost always one of the nominalizers in those languages. In addition, relative clauses in some TB languages are accompanied by genitive markers. Whether the genitive marker will occur or not is language-specific, and depends on the head position in relative clause in that language (Noonan 1997; DeLancey 1999; DeLancey 2002; Rai and Lahaussais 2002). This connection of the three functions is even termed as the ‘Standard Sino-Tibetan Nominalization’ (SSTN) pattern by Bickel (1999). Queyu language data is another example that fits these characteristics.

Relative clauses in Queyu are formed by suffixing different nominalizers and the existential verb *tʃi*. They can be classified based on different perspectives: 1. headedness; 2. location of the head noun in relation to the relative clause; 3. what can be relativized (the accessibility hierarchy). The next subsections will address each topic, followed by a discussion on which form of the verb is used in different relative clauses.

There are different types of relativizations, and each type is described below with corresponding examples.

6.8.4.1 Headedness

Both headed and headless relative clauses are found in Queyu. An example of the headed relative clause is given in (6.63), where *ʒéʷ* ‘manure’ serves as the head noun, and *nə-psqé-sʰi=tə* ‘the piled up things’ is the relative clause that modifies the head noun.

(6.63) *ʒéʷ* ‘manure’ as the head noun

mózi *zé^h* *nə-psyé-s^hi=tə* *mótsò* *lí=kù*
 warm.season **manure** **DOWN-accumulate-NMLZ=ISML** cold.season field=INE

nə-ndzǎé
 DOWN-transport.1PL

‘As for the manure piled up during the warm season, we transfer them into the field during the cold season.’

夏天积累的肥，冬天的时候我们把它运到田里去。 (QVY-329: 113)

Relative clauses can also be headless, and this is the more common type in the available data. In example (6.64), the relative clause *nə-xpǎ-fǎ* ‘what is being soaked’ does not have a head noun preceding or following it.

(6.64) the relative clause *nə-xpǎ-fǎ* ‘the thing being soaked’ does not have a head noun

pt^há^h *ni* *tʂí* *tǎ^h* *nə-xpǎ-fǎ*
 fodder say.3 GNR then **DOWN-soak-NMLZ**

‘The thing being soaked is called fodder.’

浸泡的东西叫做。 *pt^há^h* (QVY-329: 48)

6.8.4.2 Location of the head noun

For relative clauses with a head, the location of the head noun can either precede or follow the modifying relative clause. In (6.65), the head noun *mǎ* ‘person’ follows the relative clause *mǎ^h-ndzǎó-tʂí* ‘different’. While in (6.66), the head noun *règú* ‘a kind of grass/weed’ goes before the relative clause *tǎ^h-q^há^h-s^hi=tə* ‘the thing that was cut’. It is worth noting that in (6.65), a locative enclitic =xǎ, that can also have the genitive function, also attaches to the relative clause. This fits the characteristics of TB relativization pattern, that genitive marker can also play a role in relative clauses.

(6.65) relative clause preceding the head noun

tǎ^h *nǎ* *gǎpǎ=xǎ* *tsǎ* *qé^h* *pǎ^h* *kǎ-li* *tǎ-nǎ*
 then 2SG old.man=LOC 3 place side IN-come.2 IMP-say.2

mǎ^h-ndzǎó^h-tʂí=xǎ *mǎ* *tǎ-tsí-s^hi*
 NEG-same-exist=LOC **person** NEU-EGO-NMLZ

‘Then ‘You tell the grandpa to come to me, he is an unusual man.’ said the

businessman.’

‘你让老公公到我跟前来，他是个不一样的人’（商人说）。

(QVY-346: 5)

(6.66) relative clause following the head noun

jǒ tʰə tsʰó rɛ́gú tǎ^u-qʰá-sʰi=tǎ nǎ-xpǎ ji
again this now PN NEU-cut.1PL-NMLZ=ISM1 DOWN-soak NFL

‘Soak regu, which is the thing that was cut.’

这个时候泡割了的regu

(QVY-329: 68)

6.8.4.3 Accessibility hierarchy

Keenan and Comrie (1977) introduced the Accessibility Hierarchy which concerns what can be relativized, which can be stated as:

subject > direct object > indirect object > oblique > genitive > object of comparison

This is an implicational universal suggesting that, if a language can relativize one element in this hierarchy, the elements to the left side can also be relativized. Queyu data obeys this hierarchy.

Example (6.67) and (6.68) are two instances where *-mǎ* nominalizes the subject.

(6.67) *-mǎ* as the nominalizer

kʰǎjǐ áxtó xtʂi tǎ-mǎ tʂi tʂí kʰǎjǐ á^unǎ xtʂí
some.people eleven peck dump-NMLZ EXIST GNR some.people twelve peck

tǎ-mǎ nǎ tʂi tʂí
dump-NMLZ also EXIST GNR

‘Some people dump eleven pecks, there are also some people who dump twelve pecks.’

有些人倒十一斗的有，有些人倒十二斗的有。

(QVY-330: 9)

(6.68) *-mǎ* as the nominalizer

tǐ tǎ-sʰi-zǐ KN pùtʂýrè=tǎ xqé^u qʰá^u ji-mǎ=tǎ
then one-day-way time just.now=ISM1 neck cut.1PL say-NMLZ=ISM1

tsʰó-pi=tǎ tú tʂí ji tʂí
business-person=ISM1 come.3 GNR say.3 GNR

‘Then one day, the businessman who-said-cutting-neck arrived.’
 然后有一天的时候，刚刚的说要砍脖子的商人到了。 (QVY-346: 12)

Object can be nominalized forms, as well. See example (6.69) and (6.70). In example (6.69), *-fə* produces the ‘thing that needs to be filtered’, while in (6.70) ‘what upstream people say’ (their speech) is nominalized by *-s^{hi}*.

(6.69) *-fə* as the nominalizer

nə^x-xtsú^x-fə *tsì* *tʂí*
 DOWN-filter-NMLZ EGO GNR

‘It needs to be filtered.’
 是需要过滤的。 (QVY-329: 79)

(6.70) *-s^{hi}* as the nominalizer

ləndzə-pì *nə-pfə-s^{hi}=tə* *vəndzə-pì=tʂá^x=ì* *χó* *kù* *tʂí* *ni*
 US-person DOWN-say-NMLZ=ISM1 DS-people=PL=ISM2 know know.3 GNR say.3

ŋù *tʂí*
 be.capable.3 GNR

‘What upstream people say, downstream people know it, are able to speak it.’
 上游的人说的话，下游的人全部都懂，也会说。 (QVY-326: 11)

Examples of oblique relativization can be found in (6.71) and (6.72).

(6.71) *tʂí* as the nominalizer

mó *tʂí-tʂí* *lò-tʂí=tə=xə* *wəŋé* *ni* *tʂí*
 butter EXIST-NMLZ with-EXIST=ISM1=LOC whole.milk say.3 GNR

tə-rú^x=tə=xə *wəfú* *ni* *tʂí*
 one-CL=ISM1=LOC skim.milk say.3 GNR

‘The one that contains butter is called whole milk, the (other) one is called skim milk.’
 有酥油的叫全脂牛奶，另外一个（反之）叫脱脂牛奶。 (QVY-332: 17)

(6.72) *-s^{ha}* as the nominalizer

TM *pətʂó* *pú-s^{ha}* *φlwó* *tʂí*
 then bug dig-NMLZ arrive.3 GNR

‘Then will arrive at the place to dig fungus.’

然后就会到挖虫草的地方。

(QVY-044: 8)

In addition to nominalizing/relativizing places, the *-s^ha^r* suffix can also nominalize/relativize instruments, as can be seen in (6.73).

(6.73) *-s^ha^r* can also nominalize instrument

t^hə^rmə^r=ɲí zǎ^r kó ʃⁿi-s^há^r t^hə k^hí pètó ndǔ mæ-tʃí
then=ABL water carry go.NOM-NMLZ this time bucket EXIST NEG-GNR

‘Then the tool for carrying water, there were no buckets at that time.’

然后运水的东西，是没有运水的桶。

(QVY-327: 34)

6.9 Aspect and modality

This section demonstrates how aspect and modality are expressed. While some of them are achieved through affixation, many others are done through periphrastic strategies.

6.9.1 Aspect

Five aspectual categories are found in Pubarong Queyu, and they are perfective, imperfective, progressive, completive, and experiential. Among the five, only perfective is expressed through prefixation, while the others utilize enclitics or a periphrastic method to achieve the aspectual meaning.

6.9.1.1 Perfective

As already discussed in Section §6.3.2, the perfective is marked by directional prefixes on a verb. The nominalizer *-s^hi* occurs in past/perfective contexts, and can express inferential knowledge on what might have happened. Therefore, this suffix can be an indicator for aspect, too. At the same time, this nominalizer never occurs on a bare verb base, always showing up with a verb base prefixed with a directional prefix. Discussion on other functions of *-s^hi* can be found in Section §6.8.2.7 on nominalization and Chapter §7.1.5 on evidentiality.

6.9.1.2 Imperfective

When directional prefixes are used to indicate the direction of actions or movements, no perfective reading is obtained (6.74). Imperfective aspect can be shown through the absence of directional prefixes (6.75). Various enclitics or particles like egophoric or direct observation markers are also used in imperfective contexts. They are discussed in more details in Chapter 7.

(6.74) the *ri-* prefix here only indicates direction, not perfective

tʰə̌mə̌ʰ tʰö rö ri-tʰi kʰi éŋgù ɸlwá tʂi
 then there upward **up-go.3** time 3rd.fl arrive.3 gnr

‘Then go up from there, we’ll arrive at the third floor.’
 然后再往上走就到第三层了。

(QVY-327: 11)

(6.75) no directional prefix attaches to the verb *tʰó* ‘drink.lsg’

ŋǎ tʂǎ tʰó tsɿ
 lsg tea **drink.lsg** EGO

‘I’ll drink tea/I’m drinking tea.’
 ‘我喝茶/我在喝茶。’

6.9.1.3 Progressive

Pubarong has a specific construction to indicate some one is doing something at the time of speech. This is very similar to the English *be + doing* construction and Mandarin *zhèngzài* <正在>. In Pubarong, this construction is comprised of the nominal stem form of the verb followed by a particle indicating progressive meaning and the verb that means ‘be, at’, a verb which can also vary based on person. Two examples are shown in (6.76). Suffixation of the direct observation marker *=ri* can also achieve a progressive reading, discussed in Section §7.1.4.

(6.76) Progressive construction in Pubarong

a. 1st person progressive

ŋǎ tʂǎ tʰi zò tʂó
 lsg tea drink.NOM **PROG at.lsg**

‘I’m drinking tea right now.’
我正在喝茶。

b. 3rd person progressive

tʰə̌ tʃə̌ tʰí *ʒò* *tʃí*
3 tea drink.NOM **PROG at.3**

‘He’s drinking tea right now.’
他正在喝茶。

6.9.1.4 *Completive*

Completive aspect is expressed through the verb ‘finish’. It is this verb that takes person and number marking (6.77). While (6.77a) is taken from a text where the speaker is talking about her daily routine in the past, (6.77b) is a common greeting phrase in the morning. Since Queyu speakers are ethnically Tibetans, the most common breakfast for them is butter milk tea, with ‘tea drinking’ referring simply to ‘breakfast’ in that region.

(6.77) Completive in Pubarong

a. 1st person completive

nə̌-xtʃə̌ *yæ̌* *mə̌^r* *rú* *kə̌-tə̌*
DOWN-squeeze.SAP **finish.1PL** after grass IN-dump.SAP

‘After milking, we dump grass (for the cows to eat).’
(我们) 挤完奶后倒草 (给牛吃)。

(QVY-329: 54)

b. 2nd person completive

tʃə̌ tʰí *æ̌-yí*
tea drink **Q-finish.2**

‘Have you finished drinking tea?’
你喝完茶了吗？

6.9.1.5 *Experiential*

The experiential aspect in Queyu allows speakers to talk about their experience. This construction is completed through adding an auxiliary verb *ndʒú^r*. The verb preceding *ndʒú^r* is in its nominal stem form, and it is *ndʒú^r* that can be prefixed and negated. Notice

that *ndzúʷ* can only take the *méi-* negator, based on current data.

(6.78) Experiential in Pubarong

æní nǎ lǎtʰó tsʰéʒʊ vǎ-sʰaʷ é-ʃʰí áʷ-ndzúʷ
 aunt 2SG Litang wedding do.NOM-NMLZ UP-go.NOM Q-EXP

‘Auntie, have you been to the wedding place in Litang?’
 姑姑，你去过理塘结婚的地方没有？

(QVY-342: 54)

6.9.2 Modality

Pubarong Queyu contains a series of modal auxiliary verbs. Some of them can still function as main verbs and are capable of person and number inflections, while others no longer are. Nonetheless, they are classified as verbs because they can still take verbal morphology such as being negated or taking the direct observation marker =*ri*. A list of modal auxiliary verbs is given in Table 6.34. All of the modal verbs except for *mdǎ* ‘allow’ and *ri* ‘need, desire’ can still conjugate for person and number. More details on the properties of each modal verb will be discussed below.

Table 6.34: Pubarong modal verbs.

Queyu	Definition
<i>ŋǎ</i>	be able to (through processes like learning)
<i>ri</i>	be capable
<i>mdǎ</i>	allow, permit
<i>gǎ</i>	need, necessity
<i>ri</i>	need, desire
<i>mnə</i>	dare
<i>ʒǎʷ</i>	be willing to

6.9.2.1 Ability *ŋǎ*

The modal verb *ŋǎ* describes abilities that can be acquired through learning. Therefore, when used in speech, it expresses the meaning of ‘know how to do/perform certain tasks’. An example of this usage is given in (6.79), where the speaker was talking about not

knowing how to calculate the calendar.

(6.79) *ŋǒ* ‘capable.1SG’ that expresses personal knowledge

tǎ̃^ʰ tʰə̃=tə̃ ŋǒ pjèrjé=tə̃ xtsiʦí mǎ-ŋó
 then this=1SM1 1SG Tib.calendar=1SM1 calculation NEG-be.able.1SG

‘I don’t know how to calculate the Tibetan calendar.’

那个播种时间藏历的我不会计算。

(QVY-329: 133)

This verb can even be used to describe events or abilities that are not totally under one’s control, or things that cannot be learnt, but can be influenced by human behavior. See the two examples below. In (6.80a), the speaker is saying that their field is capable of growing soybeans, while in (6.80b), the speaker is saying that three nights of fermentation will allow alcohol to ferment and smell.

(6.80) *ŋǔ* that expresses the ‘ability’, or possibility of events

a. ability to grow soy beans in the field

lí=kù éntsʰà̃^ʰ xòntʰú nə̃ tʂò̃^ʰ ŋú-tʃi tsì tʂí
 field=INE 1PL.LOC soy.bean also become be.able.3-EXIST EGO GNR

‘In the field, we also grow soy beans.’

我们的田里黄豆也可以长出来（也可以种）。

(QVY-329: 140)

b. ability to ‘reek’ or smell liquor after three nights

kómá kə̃-ptə̃ tʰə̃ zí tə̃-wú qə̃^ʰ-tʃʰĩ^ʰpò̃^ʰ tə̃^ʰ-pʰə̃^ʰ KN TMKN
 clothes IN-dump.3 this way NEU-.do3 IN-cover.3 NEU-leave time then

ʃʰé sʰó-ʃʰé tʃè ri tiri nó̃^ʰ ŋù tʂí
 night three-CL upon then then smell be.able.3 GNR

‘Put the clothes on top to cover it, then after three nights, it will reek (of liquor).’

把衣服盖在上面放着，然后放三晚以后，就会有（酒的）气味。（QVY-330:30）

6.9.2.2 Capability *rǐ*

This modal verb differs from *ŋǔ* in that, *rǐ* focuses more on physical ability, or capabilities that are not quite learnable. This difference can be demonstrated in the two examples below. In (6.81a), the big frog is trying to see if it could go with its friends, which is not

something that can be learnt. In (6.81b), the merchant is trying to see if he can catch the rabbit, which is also not something that he can learn.

(6.81) *rĩ* that expresses the capability or possibility

a. if the big frog can go with his friends together

bà^xxpé ndzú^xndzú^x=tə=i tə^x-q^hwə^xptsjè ni áɛŋò ndzòndzò t^hə=nts^hí=p^hè
frog big.RED=ISM1=ISM2 NEU-jump.3 NFl upward same.RED 3=PL=COM

ptʂí^x=kù i-ʃ^hí á-rí nə-wú ptʂí^x=kù nə-tʃĩ
boat=INE DS-go.NOM **Q-capable.NOM** DOWN-do.3 boat=INE DOWN-go.3

‘The big frog jumped to try to go with them (to see if it can board the boat together).’

大青蛙跳了一下，跟他们一起了，尝试和他们一起去（看能不能跟他们一起去船里）。 (QVY-334:21)

b. if the merchant can catch the rabbit that seems injured

TMKN *tsǎ=tó tǎ^x ndzì^x ló rò=rí kó-hmǎ-s^hí tʂi*
then 3SG=ISM1 then catch.NOM NF2 **capable.ISG=DIR** IN-injure-NMLZ GNR

ndzì^x ló rò=rí tə^x-xs^hqí^x ni
catch.NOM NF2 **capable.ISG=DIR** NEU-think.3 NFl

‘Then the merchant thought: ‘I can catch it, it’s injured, I can catch it.’ ’

商人想：‘我可以捉他，他受伤了，我可以捉它。’ □ (QVY-337:5)

6.9.2.3 *Permission mdǒ*

The modal verb *mdǒ* expresses subjective permissions. It is used in situations where rules made by other people apply, not rules that are subject to natural physical laws. In the two examples below, the speaker is talking about traditions. In (6.82a), the speaker is introducing new year traditions, and says that for men who were returning from the sacred mountain, they need to dance three dances before going back home. In (6.82b), the speaker is talking about funeral traditions, and says that the body needs to stay in the house for three nights before being taken out.

(6.82) *mdǒ* applies to rules made by people

a. not allowed to go home directly

<zhíjiē> *íngù fǎi mdò mǎ-tǎi*
 directly home go.NOM allow NEG-GNR

(They) can't go home directly.
 不能直接回家。

(QVY-051: 62)

b. not allowed to be taken out

s^hó-f^hé kǎ-tǎ-mts^hjè pà^s jà^sq^hǎ^s zé mdò mǎ-tǎi
 three-night NEU-PROH-keep COND outside bring.NOM allow NEG-GNR

'If (the body) is not kept (indoor) for three nights, then (you) can't bring (the body) outside.'
 不留三晚，不能带去外面。

(QVY-052: 2)

6.9.2.4 Necessity *gǔ*

The modal verb *gǔ* conveys necessity. This is a verb that still conjugates for person and number. Verbs preceding *gǔ* are in the nominal stem form, as in the example below.

(6.83) Necessary measures that need to be taken during winter

mótsò thè zǐ vǎ gǎ tǎi
 cold.season this way do.NOM need.1PL GNR

'We need to do like that in winter.'
 寒季的时候我们需要像这样做。

(QVY-329: 97)

6.9.2.5 Desire *rí*

The modal verb *rí* differs from *gǔ* in several ways. The first difference is that it does not inflect person or number like *gǔ* does. The second difference is that *rí* focuses more on the inner desire of a person, while *gǔ* focuses on 'what needs to be done'. Direct evidence for this semantic difference lies in the type of particle that can follow each verb. For *rí*, it can take the direct observation marker =*rí*, while *gǔ* takes the generic marker *tǎi*. Compare (6.84) and (6.83) for these differences.

(6.84) The desire within the rabbit and the poor young man

jép^hi xǐ tǎ-rú^s s^hi xǐtǎmǎ f^hòpǎi^hi tǎ-rú^s=ndzè=i kǎ-ptǎwǎ ni tǎ^s
 past rabbit one-CL and poor child one-CL=DU=ISM2 IN-discuss NFL then

áéŋò é-ʃʰà^ʷ ɲi tʃəxpí ʃʰí rí=rì tə-ɲí ɲi
 upward UP-go.1PL NFl robbery go.NOM need=DIR NEU-say.3 NFl

‘In the past, a rabbit and a poor kid, they two discussed and decided that ‘We need to go up and rob (someone).’ ’

以前，有一只兔子和一个穷小孩两个商量说：‘我们需要去山上打劫。’ (QVY-337: 1)

6.9.2.6 Having the courage *mnə*

The modal verb introduced here concerns not the ability, but the courage a person may have to carry out certain tasks. An example below demonstrates this usage, where the big frog dared not to bully the small frog any more. Notice that in (6.85), the negation prefix for *mnə* is *mæ-*, which is different from in (6.5). This shows that it is another verb that can take both *mæ-* and *méi-* negators.

(6.85) (Not) Having the courage to bully

TM ʃʰòpʃʰí bà^ʷxpé zəzə=tə ɲi vó mæ-mnə=rì
 then child frog small.RED=ISM1.LOC bad do.NOM NEG-dare.3=DIR

‘Then the child (should be the big frog) no longer dared to bully the small frog.’
 然后小孩（应该是大青蛙）不敢欺负小青蛙了。 (QVY-334: 36)

6.9.2.7 Willingness *zě^ʷ*

The last modal verb introduced here concerns one’s willingness to proceed to (listen to others and) do something. In (6.86), the speaker is talking about her son, saying that he was not willing to listen to her and weigh himself and tell her how much he weighed. The verb form that precedes this word is, again, in its nominal stem form.

(6.86) (Not) Willing to weigh oneself

mə-ʃʰí dzómèi tʃʰí mǎ^ʷ-βré^ʷ=rì
 NEG-know scale weigh.NOM NEG-consent.3=DIR

‘I don’t know, he’s not willing to weigh (himself).’
 不知道，他不肯上称。 (QVY-342: 185)

6.10 Existential verbs

Most Qiangic languages have multiple existential verbs, ranging from four to eight, that are used to express the existence of entities with different properties (Sun 2001:170; Chirkova 2012:143). Queyu is no exception. There are seven verbs in Queyu that can express a possessive relationship and the existence of certain animate or inanimate things. Some of them may conjugate for person and number while others cannot. The following subsections provide an introduction to each existential verb.

6.10.1 Possession *f^hǒ*

This verb can conjugate for person and number, other forms of this verb include *f^hǎ* ‘have.1PL’, *f^hǐ* ‘have.2’, and *f^hǎ* ‘have.3’. It is used to indicate a possessive relationship between arguments. See example (6.87) and (6.88).

(6.87) 1st person singular *f^hǒ*

ŋǎ tʂ^hí^s f^hǒ
1SG money EXIST.1SG

‘I have money.’
我有钱。

(6.88) 3rd person *f^hǎ*

jép^{hi} gǎpǎ tǎ-ró^s=i zǐ mbǎ^sxts^hǎ^s tǎ-ró^s tǎ-f^hǎ tʂǐ ɲǐ tʂǐ
past old.man one-CL=ISM2 son pock one-CL NEU-EXIST.3 GNR say.3 GNR

‘In the past, there was a grandpa, he has a son with pocks on the face.’
以前有个老公公，他有一个有麻子的儿子。 (QVY-346: 1)

6.10.2 Existential verb *fǐ*

The function of the verb *fǐ* is not clear yet. It only has one form, and it seems to emphasize the existence of both animate and inanimate entities. See (6.89) and (6.90) for cases where *fǐ* describes the existence of animate entities.

(6.89) the twelve zodiac animals were on the other side of the river

tǎʰ x[ʂípaʰ kə-tʃʰə kʰì lùtə pʰəri jòzɿʰ=xə pʰəri
 then ?? IN-begin time zodiac.animal other.side river.water=LOC other.side

fɿ-tʃɿ tə-tsɿ-sʰi
EXIST-NMLZ NEU-EGO-NMLZ

‘At the beginning, the twelve zodiac animals were at the other side of the river.’
 最初的时候，十二生肖在河水对岸。 (QVY-349: 1)

(6.90) the poor young man has a kid in his family now

tǐ xli tə-ní nì tǎʰ nə=tsʰi ʃʰòpʃʰi=rɿ fɿ=rɿ wə tʰə=tə
 then rabbit NEU-say.3 NFl then 2=PL child=ISM3 **EXIST=DIR** ? 3=ISM1
kə-sʰə nì tʰǎ zətʰáʰ nə-ví tʃə̀rə tǐ pʰèl=rɿ tə-ní
 IN-kill.SAP NFl 3.LOC nutrient DOWN-do.2PL PROP then effective=DIR NEU-say.3

tʂǐ nì tʂí
 GNR say.3 GNR

‘Then the rabbit said: “Your family has a child now, right? Kill him, and make him into something nutritious for the rabbit, this is going to help with the rabbit’s sickness.”’
 然后兔子说：“你们家有个孩子吧，把他杀了，给兔子做成有营养的食物，喂给兔子，这样有益于它的病情。” (QVY-339: 8)

Example (6.91) through (6.96) are instances where *fɿ* denotes or introduces the existence of inanimate things.

(6.91) the room is filled with corpse

xli mdzə tə-róʰ kə-ptʃʰy KN mə=rɿ tə-psʰə-sʰi rǐʰ təʰ-sʰó
 rabbit room one-CL IN-open time person=ism3 NEU-kill.3-NMLZ corpse NEU-full
tə-fɿ tʂǐ nì tʂí kətʰə=tə zivə əzò=tsʰi=tə tsì tʂí tə-ní
NEU-EXIST GNR say.3 GNR this=ISM1 last.year uncle=PL=ISM1 EGO GNR NEU-say.3
tʂǐ nì tʂí
 GNR say.3 GNR

‘The rabbit opened (the door to) a room, there were people’s corpses. It is said that these were last year’s uncles.’
 兔子打开了一间房间，然后里面是被杀了的人的尸体，尸体有满满的一房间。说是这些是去年的舅舅们。 (QVY-337: 51)

(6.92) there are always stories like that

TV=*ri* *nə^hpʃə* **fi** *k^hi* *tʃi*
 this.way=ISM3 story EXIST be.custom GNR

‘There’re stories like that.’
 一直有像这样的故事。

(QVY-337: 58)

(6.93) there is a stick in the front

x^tə^hpó *hɲúri* *s^hi xpú* *tə-tʃö* **tə-fi** *ni*
 stick front tree one-CL NEU-EXIST NFl

‘There is a stick in front of the feet.’
 脚前有一根树木

(QVY-333: 11)

(6.94) the skim milk is there

TMKN *t^hǎ* *nó^hs^hi* *jö* *tə^h-xtsó* KN *wə^hfö* **fi** *tʃi*
 then this.LOC next.day again NEU-process time skim.milk EXIST GNR

‘Then the next day process the fresh milk, then there will be skim milk.’
 然后第二天再处理（刚刚挤的）牛奶，就有脱脂牛奶了。

(QVY-332: 22)

(6.95) introduce the existence of the sifter

tʃi *t^hə=tə* *jö* TV *ptsjé-s^hà^h=ri* **fi** *tʃi* *tʃi* *t^hə=kú*
 then this=ISM1 again this.way filter-NMLZ=ISM3 EXIST GNR then this=INE
tə-ptsjé *ni* *tʃi* *zⁱ=tə* *nə^h-βrá^h* *tə-p^hú*
 NEU-filter NFl then water=ISM1 DOWN-drop NEU-cause.3

‘Then for the thing that was boiled, there’s a sifter like that, filter it in the sifter, then make the water drop (drain it).’

然后把刚才煮了的东西然后有一个这样的筛子，在里面过滤，然后让水滴下来。

(QVY-331: 10)

(6.96) the existence of the stone for pressing on the lid

TM *wəpá^h=tə* *zⁱ=kú* *t^hǎ* *áerə=tjè* *təɲú* *p^hö=tje* *təɲú* *dà^htʃi*
 then downside=ISM1 water=INE this liquor=SUPE also lid=SUPE also stone
nə^h-xt^hí-s^hi **fi** *tʃi*
 DOWN-press-NMLZ EXIST GNR

‘Then in the water (stream) below, there is still a lid on the liquor (on the three-peck pot). There is a stone pressing against the lid.’

然后下面小溪里（三斗锅）的那个烧酒上面还有盖子，盖子上有石头压着。
(QVY-330: 59)

6.10.3 Existential verb *ɸwǎʰ*

The existential verb *ɸwǎʰ* differs from *ʃi* in that, the location of the entity is specified, and it is used for inanimate objects in this study's corpus, while *ʃi* focuses more on introducing the existence of entities. Common usage of this verb includes: talking about the existence of fruits on the trees, grass and trees on the mountain, or hair on someone's head, etc. Specific examples of how *ɸwǎʰ* is used are given below.

(6.97) there is a notch on the nose of Tride Tsugtsen

lòmbúŋkæ̀ræ̀=ì TMK *dʒàʰzàʰ* *æ̀ndʒò=xə̀* *tə̀-ŋí* *ŋí* *tʂʰixtʂó* *də̀xtsɨ́=xə̀*
PN=ISM2 then Han.woman princess=LOC NEU-say.3 NFl PN=LOC

hŋiqóʰ=xə̀ *tʂʰiqò* *ɸwǎʰ* *tʂí* *tə̀-ŋí* *tʂǎ* *ŋí* *tʂí*
nose=LOC notch EXIST GNR NEU-say.3 GNR say.3 GNR

‘Lon Tongtsen told the Han Princess: ‘There is a notch on the nose of Tride Tsugtsen.’’

禄东赞对汉族公主说：‘赤德祖赞的鼻子上有一个缺口。’ (QVY-348: 5)

(6.98) introduce the existence of a village

jéʰpʰí *tʂòsʰú* *tó-róʰ* *tə̀-ɸwǎʰ* *tʂǎ* *ŋí* *tʂí*
past village one-CL NEU-EXIST GNR say.3 GNR

‘In the past, there was a village.’

以前有一个村庄。 (QVY-335: 1)

6.10.4 Existential verb *ró*

The function of *ró* is also not clear yet. It can be used to describe the existence of both animate and inanimate entities. This verb seems to express the speaker's general knowledge of the world, such as ‘there are mushrooms on the mountain’, ‘there is cloud in the sky’, and ‘there are people in the house’.

(6.99) two examples of *ró*

- a. the general knowledge that mushrooms grow on the mountain

ʃʰámù ró
mushroom EXIST

‘There are Matsutake mushroom (on the mountain).’
(山上) 有松茸。

- b. the general knowledge that there are people at home

éŋgù mǎ ró
home person EXIST

‘There are people in the house.’
家里有人。

6.10.5 Existential verb *tfỹ*

The verb *tfỹ* indicates the existence of something inside of another object which is not general or common knowledge (e.g. grass on the mountain). Notice that this *tfỹ* is different from *tfý* ‘at, locate.3’. Elicited examples are given in (6.100). In some situations, *tfỹ* and *ró* are interchangeable, as can be seen in (6.100b). Examples from texts are given in (6.101) through (6.103). In addition to concrete objects, *tfỹ* can also be used to describe the existence of abstract things like ‘solution’ (6.101).

(6.100) elicited examples

- a. *tfỹ* here conveys the meaning of containment of water in a reservoir

zǐ^ʰ tfỹ=rí
water EXIST=DIR

‘There is water (in the reservoir).’
(水库里) 有水。

- b. *tfỹ* here conveys the meaning of containment of caterpillar fungus in a mountain

pətǎfó ró / tfỹ=rí
bug EXIST / EXIST=DIR

‘There are caterpillar fungus (in the mountain).’
(山上) 有虫草。

(6.101) Uncle Trotung always has solutions to resolve issues

æk^hú tʂit^hó βlút^hò TZ tʃy̌=tʃǐ tsì tʂí
uncle PN method this.way EXIST=NMLZ EGO GNR

‘Uncle Trotung had ideas ideas like that.’

晁通很有计谋。

(QVY-335: 23)

(6.102) a little frog is in the box

tʃ^hy̌fúé=kù ʃ-mt^hǐ KN bà^hxpé zæzæ tʃ-tʃó tʃy̌=rí
plastic.pocket=INE UP-take.out.3 time frog small.RED one-CL EXIST=DIR

‘When opening the box, there’s a small frog in it.’

盒子打开的时候有一个小青蛙。

(QVY-334: 4)

(6.103) the whole milk is the milk that contains butter

mó tʃy̌-tʃǐ lò-tʃǐ=tə̌=xə̌ wə̌né nǐ tʂí
butter EXIST-NMLZ with-EXIST=ISM1=LOC whole.milk say.3 GNR

tʃ-ró^h=tə̌=xə̌ wə̌ʃó nǐ tʂí
one-CL=ISM1=LOC skim.milk say.3 GNR

‘The one that contains butter is called whole milk, the (other) one is called skim milk.’

有酥油的叫全脂牛奶，另外一个（反之）叫脱脂牛奶。

(QVY-332: 17)

6.10.6 Existential verb *tʃǐ*

The verb *tʃǐ* indicates the existence of an animate argument or an event. This existential verb can also function as a nominalizer, examples of which are discussed in Section §6.8.2.6 on nominalization. Examples below demonstrate how *tʃǐ* functions to indicate the existence of animate characters.

(6.104) that son has a wife who is very clever

tʃǐ mbə̌^hxts^há^h=xə̌ zimə̌^hzò^h=rì tə̌-tʃǐ tʂí βlút^hò tʃ^hipú tə̌-tʂí tʂí
then pock=LOC wife=ISM3 NEU-EXIST GNR solution many NEU-EGO GNR

nǐ tʂí
say.3 GNR

‘Then the son with pock had a wife, she had lots of solutions.’

然后麻子是有个媳妇的，她非常有办法。

(QVY-346: 10)

(6.105) there was a Han princess

tǎʷ dʒàʷzàʷ ándʒò=i tó-róʷ tǎ-tʃí=sʰí
then Han.woman princess=ISM2 one-CL NEU-EXIST=NMLZ

‘There was a Han Princess.’

有一个汉族的公主。

(QVY-348: 1)

(6.106) there are people who would dump eleven or twelve pecks

kʰæfǐ áxtó xʈsi tǎ-mə tʃí tʃí kʰæfǐ áʷnə xʈsí
some.people eleven peck dump-NMLZ EXIST GNR some.people twelve peck

tǎ-mə nə tʃí tʃí
dump-NMLZ also EXIST GNR

‘Some people dump eleven pecks, there are also some people who dump twelve pecks.’

有些人倒十一斗的有，有些人倒十二斗的有

(QVY-330: 9)

(6.107) “It was not a monk up there, it was me.” said the rabbit

tǐ nǎ-tʃí ɲi tsǎ tʃʰé kǎ-tsʰə tsǐ áŋò dzəkʰá=wə lámò ndě
then DOWN-go.3 NFl 3 testing IN-test EGO upward boulder=under monk what

tʃí mǎ-tʃí tsǎ tsǐ tʃí
EXIST NEG-GNR 3 EGO GNR

‘Then the rabbit went down, and said: ‘I was testing you. It wasn’t a monk up there under the rock, it was me.’’

兔子就下来了，说：‘他（我）在考验你，上面岩洞里的不是什么喇嘛，是我。’

(QVY-339: 13)

6.10.7 Existential verb *ndǔ*

The existential verb, *ndǔ*, can indicate the existence of things both abstract and concrete. This is a loan word from Tibetan *’dug*, that in some varieties indicates direct knowledge. It is not certain if this loan word in Queyu also conveys evidential information. See examples below for contexts where *ndǔ* is used.

(6.108) the daughter-in-law has solutions

tǐ nǎ sʰíxtʃí mǎ-rí tʃə tsǎ βlútʰò ndǔ tǎ-ɲí tʃí ɲí tʃí
then 2SG worry NEG-need PROP 3 solution EXIST NEU-say.3 GNR say.3 GNR

‘She said: “You don’t need to worry, I have a solution.”’
 她说：‘你不需要担心，我有办法。’ (QVY-346: 11)

(6.109) there were not buckets for carrying water in the past

tʰəʷməʷ=ɲí zǐʷ kə ʃʰi-sʰaʷ tʰə kʰí pətə ndũ mə-tʃí
 then=LOC water carry go.NOM-NMLZ this time bucket EXIST NEG-GNR

‘Then the tool for carrying water, there were no buckets at that time.’
 然后运水的东西，是没有运水的桶 (QVY-327: 34)

(6.110) the speaker has good luck

pəsʰí tʃwə tə-ndú-sʰí
 today luck NEU-EXIST-NMLZ

‘Today I’m lucky.’
 今天运气好。

6.10.8 Existential verbs in other Queyu varieties

Previous descriptions on other Queyu varieties documented their existential verbs. Tables below summarize their analysis on these verbs as well as contexts in which the corresponding verbs are used.

Table 6.35: Summary of existential verbs in Tuanjie/Gala (Lu 1985).

Tuanjie/Gala	Meaning	Context
<i>ei</i>	Used for general things, and can be used in possessive contexts.	‘He has a book.’
<i>də</i>	Used for abstract things.	‘You have a solution.’
<i>zǐ</i>	Used for animate entities.	‘There are beasts on the mountain.’
<i>tɛi</i>	Used for inanimate things.	‘There is a broom in the room.’
<i>wə</i>	Used for things that are not moveable.	‘There are trees on the mountain.’

Suoyi Queyu shares a lot in common with other Queyu varieties regarding existential verbs. For example, *kwəʷ* in Suoyi corresponds to *wə* in Tuanjie/Gala, *ko¹³* in Youlaxi, and

Table 6.36: Summary of existential verbs in Youlaxi (Wang 1991).

Youlaxi	Meaning	Context
<i>tʃi</i> ⁵⁵	Used for animate things.	‘There are deer on the mountain.’
<i>tɛy</i> ¹³	When something is within a container, or within certain range.	‘There is water in the bowl.’
<i>ko</i> ¹³	Used for things that are not moveable.	‘There are trees on the mountain.’
<i>ɛi</i> ¹³	Used for things that are moveable.	‘There is a cup on the table.’
<i>lo</i> ¹³	When something is within/mixed into another.	‘There is water in the alcohol.’
<i>ru</i> ¹³	Used for abstract things.	‘He has business to attend to.’
<i>tʃe</i> ¹³	Used in possessive contexts, can inflect for person and number.	‘I have books.’

Table 6.37: Summary of existential verbs in Rizi, Pubarong (Song and Piao 2022).

Rizi (Pubarong)	Meaning	Context
<i>tʃi</i> ⁵⁵	Used for animate or expensive entities, can be used in possessive contexts, can also inflect for person and number	‘He has a gun.’
<i>wa</i> ¹³	Used for things that are not moveable, or the fixed location for certain things.	‘Pears are on the pear tree.’
<i>ra</i> ¹³	Used for animate entities.	‘The cat is on the table.’
<i>tʃy</i> ¹³	Used for things that exist in a container.	‘The water is in the vat.’
<i>lo</i> ¹³	Used when things are mixed up together.	‘There is water in the alcohol.’
<i>ɛi</i> ¹³	Used for uncommon inanimate things.	‘The money is on the table.’
<i>ru</i> ¹³	Used for abstract things.	‘There are many things going on back home.’

*wa*¹³ in Rizi. All of them are used to describe things that are not moveable and specify the location of the entity being addressed. There are also verbs whose functions have diverged from each other, such as *tʃi* in Tuanjie/Gala, which is used for inanimate objects, while in Suoyi, *tʃi* describes the existence of animate entities.

While this section does not provide an exhaustive explanation of all existential

verbs, a direction for future research in this area would be to further investigate the functions of Pubarong existential verbs. Comparing various Queyu varieties and other neighbouring languages will be fruitful, too.

CHAPTER 7

EVIDENTIALITY AND OTHER CLAUSE-LEVEL MORPHOSYNTAX

This chapter focuses on basic clause structure and aspects of morphosyntax not addressed in previous chapters.

Like other TB languages, the basic word order of Queyu is SOV. Since the subject argument can be indexed on verbs, the subject of a clause does not have to be overt. The simplest finite clause in Queyu can consist of only one verb. An example of this kind is given in (7.1), where the context concerns two friends shopping. The seller is charging too much for their product. Then one speaker suggests to the other ‘Let’s go (i.e., no need to bargain with the seller)’.

(7.1) a single verb finite clause

ʃ^há^ʃ
go.1PL

‘We go (Let’s go).’
走走走。

Other simple and complex clauses exist and will be introduced in the following subsections, with a focus on evidentiality, a category that concerns speakers’ access to knowledge. Evidentiality is a grammaticalized system, and speakers of Queyu indicate their level of certainty and source of information for every utterance they make. Detailed discussion of evidentiality can be found in Section §7.1.1, while the rest of the chapter is dedicated to individual introductions of clause-final particles that express various other discourse functions.

7.1 Evidentiality

7.1.1 Introduction and summary to the Queyu evidential system

Evidentiality is defined as a grammatical category referring to information source (Aikhenvald 2003). Egophoricity, is an additional category often included within eviden-

tiality which indicates whether or not a speaker has privileged access to knowledge (Widmer and Zúñiga 2017; Tribur 2019).¹⁸ These categories often interact with other factors, such as person, clause types, and control or volition of the verbs (Widmer and Zúñiga 2017; Delancey 2018; Sun 2018). There are constant debates over whether to treat evidentiality, egophoricity, and epistemic modality as distinct categories in TB languages, or if they are a subcategories of one another (Daudey 2014; Widmer and Zúñiga 2017; Tribur 2019). This chapter does not address this issue, as more Queyu data are still needed for a more thorough conclusion to be made.

In Queyu, utterances are sensitive to factors such as speaker access to information, considering if evidence comes from general knowledge, visual or other sensory information, and also a speaker’s degree of certainty about information. All of these factors are conveyed through the selection of a series of enclitics and sentence-final particles, which are the egophoric marker *ts̃*, generic marker *t̃s̃*, direct observation enclitic *=t̃*, and inferential/perfective nominalizer *-s̃h̃*. The nominalizer *-s̃h̃* is multi-functional. When *-s̃h̃* is functioning as a nominalizer or perfective/past tense marker, egophoric marker, *ts̃*, and generic marker, *t̃s̃*, may follow. When *-s̃h̃* functions as an inferential marker, it prohibits other evidential markings. Egophoric marker *ts̃* and generic marker *t̃s̃* may co-occur, but they never combine with the direct observation marker *=t̃* that follows the verb base directly. Figure 7.1 illustrates the paradigm for these markers. Section §7.1.2 through Section §7.1.5 below will introduce, compare and contrast each of these markers.

Verb base	-nominalizer (<i>-s̃h̃</i>)	egophoric marker (<i>ts̃</i>)	generic marker (<i>t̃s̃</i>)
		direct observation marker (<i>=t̃</i>)	

Figure 7.1: Paradigm for evidential and egophoric markers.

¹⁸Privileged access here is understood as an “privileged epistemic relationship that holds between a speech-act participant (SAP) and the knowledge conveyed in a proposition” (Widmer and Zúñiga 2017:420).

7.1.2 The egophoric marker *tsǎ*

The particle *tsǎ* occurs mostly in 1st person statements and 2nd person interrogative sentences. This particle can occur in other contexts when combined with the generic marker *tɕǎ*. Examples below demonstrate the most common situation where *tsǎ* is used.

In (7.2), examples of *tsǎ* used in first person expressions are provided. This particle can also take the question and negation markers. In (7.3b), *tsǎ* is used in a second person interrogative sentence, which is the only second person context where it can occur alone in the absence of the generic marker *tɕǎ*. For affirmative sentences, the generic marker *tɕǎ* is obligatory, instead of using only egophoric marker (see the ungrammatical example in (7.3a)). In a question, the question marker always prefixes to the last element of the utterance, as can be seen in the two examples in (7.3b). In (7.4) where third person context examples are given, both *tsǎ* and *tɕǎ* have to occur in affirmative sentences. However, in the last example in (7.4a), *tsǎ* can be used alone in a context where the speaker has just realized something about the topic of the conversation. In questions, *tsǎ* cannot be used alone in third person contexts, and must occur with *tɕǎ* (see the ungrammatical example in (7.4b)).

(7.2) *tsǎ* occurring in first person utterances

- a. *tsǎ* in an affirmative statement

ŋǎ lé^ʳylé^ʳ tsǎ
1SG stupid.RED EGO

‘I’m stupid.’
我很笨。

- b. *tsǎ* in a negated statement

ŋǎ ʃ^hó mǎ-tsí
1SG go.1SG NEG-EGO

‘I’m not going.’
我不去。

(7.3) *tsǎ* occurring in second person utterances

- a. *tsǎ* in an affirmative statement

nǎ gígí tsì tǎí
2SG teacher EGO GNR

‘You are a teacher.’
你是一个老师。

* *nǎ gígí tsì* (intended meaning ‘You are a teacher.’)

b. *tsǐ* in an interrogative sentence

nǎ gígí á-tsí?
2SG teacher Q-EGO

‘Are you a teacher?’ (the most natural expression)
你是老师吗？

c. *nǎ gígí tsì á-tǎí*
2SG teacher EGO Q-GNR

‘Are you a teacher?’
你是老师吗？

(7.4) *tsǐ* in third person utterances

a. *tsǐ* in an affirmative statement

tǎí gígí tsì tǎí
3SG teacher EGO GNR

‘He is a teacher.’
他是一个老师。

* *tǎí gígí tsì* (intended meaning ‘He is a teacher.’)

b. an exception where *tsǐ* occurs in 3rd person context

tǎí gígí tsì o
3SG teacher EGO oh

‘Oh, he’s a teacher...’ (when it just occurred to the speaker)
噢，他是个老师。

c. *tsǐ* in an interrogative sentence

tǎí gígí tsì á-tǎí?
3SG teacher EGO Q-GNR

‘Is he a teacher?’
他是老师吗？

* *tʰə ɡɪɡí á-tsí* (intended meaning ‘Is he a teacher?’)

In a past time irrealis contexts, or when describing someone’s thoughts, the *tsǎ* particle can be used in third person utterances. A past time context example is given in (7.5), where the speaker is telling the story of how the order of the twelve zodiac animals was decided. Example (7.6) provides two examples of irrealis contexts, while example (7.7) provides two descriptions of thoughts of characters from two stories.

(7.5) *tsǎ* can occur in a past tense context

tɪ KN jě tʃʰɔ tsʰə-fə tə-tsǎ-sʰi
that.time who fast test-NMLZ NEU-EGO-NMLZ

‘At that time, they were competing for who was fastest.’
那时候要比赛谁比较快

(QVY-349: 2)

(7.6) *tsǎ* can be used alone in an irrealis context

a. 3rd person context with *tsǎ* alone

zɪbdjé zǐ=ntsʰi mə-tsǎ zóʷ=ntsʰi zɪbdjé ʃʰi mdə mə-tʃǎ
sacred.mt men=PL NEG-EGO woman=PL sacred.mt go allow.3 NEG-GNR

‘If you are not a man, it is the case that women are not allowed to go to the sacred mountain.’

如果不是男的，女生是不能去神山的。

b. irrealis context in which *tsǎ* occurs with 3rd person

lətʃʰó tə-tsǎ lə zɪ-ptɛi-zɛ-ku wú tʃǎ
young.person NEU-EGO NF2 four-ten-and-nine do.3 GNR

‘If (the dead person is) a young man, then perform 49 (days) ritual.’
如果是年轻人就做‘49法事’。

(7.7) *tsǎ* can be used when describing someone’s thought

a. *tsǎ* is used when describing someone’s thoughts

tʃ TZ nə-wú KN ɡǔ nə-wú KN pʃʃù=ndzé ɲùm wətʃi=xə
then this.way DOWN-do.3 time lie DOWN-do.3 time friend=DU truth=LOC

ǎŋò tʃò-pí=tə nə-tú ǎ-tʃi kò tə-xshíí
 upside **village-person=ISML** DOWN-come.3 **Q-EGO SPEC** NEU-think.3

‘Then when doing like this, and deceiving them, these two friends really thought: ‘Is it the villager who came down?’’

像这样子做了，骗了他俩之后，这两个朋友真的想是不是村民下来了

(QVY-335: 18)

b. 3rd person context with *tsǐ* alone

óǎ tǐ ǎzò=tsʰí tǐ tǎ tə-kwəxtfə ní tǎ kótʰə=tsʰí ndě kə
 ok then uncle=PL then then NEU-afraid NFl then **this=PL** what wisdom

tà=ri ndě méri-tsǐ-shí ǎzò=tsʰí tʃǎlǎ=tə sʰó-fə
 wise=DIR what **NEG-EGO-NMLZ** uncle=PL all=ISML kill.NOM-NMLZ

tə-tsǐ-shí tə-xshíí ní
 NEU-EGO-NMLZ NEU-think.3 NFl

‘Then the uncles got scared, they thought: ‘This family is not a good kind, their uncles are to be killed.’ The uncles got scared and all escaped.’

然后舅舅们就害怕了，心里想：这家子不是啥子好人，舅舅们都是要被杀的。舅舅们就都害怕了，一哄而散了。

(QVY-337: 53)

While *tsǐ* can follow nouns and functions as part of a non-verbal predicate, it can also follow verbs and express a progressive or present future meaning. For example, either *tʃǐ* or *tsǐ* can be used in (7.8), but the selection of *tsǐ* indicates that the action of eating is happening exactly at the time of speech. The *tsǐ* in (7.9) indicates the speaker’s intention to leave, which is similar to English ‘I’m leaving’.

(7.8) *ŋə kuaizi=xə=ni mdú tʰó tʃi/tsǐ*
 LSG chopsticks=LOC=ABL food eat.LSG **GNR/EGO**

‘I eat with chopsticks.’

我用筷子吃饭。

(7.9) *ŋǎ ŋgwǎ ʃʰó tsǐ*
 LSG first go.LSG **EGO**

‘I’m leaving first (now).’

我先走了。

7.1.3 The generic marker *tʂǎ*

The generic marker *tʂǎ* indicates that an event happens on a regular basis, and is taken for granted by the speaker. Compare (7.11), where *tʂǎ* is present, with (7.10), where *tʂǎ* is not. Example (7.11) can be used to describe the climate in a place where rain is frequent during the summer. In a text where the speaker was describing her life in the past, *tʂǎ* is used to indicate that milking is part of her daily routine (see example (7.12)).

(7.10) declarative clause that ends with a verb

xú nǎ-tú
rain DOWN-come.3

‘It rained.’
下雨了。

(7.11) declarative clause that ends with *tʂǎ*

(mózi) xú tú tʂǎ
(warm.season) rain come.3 GNR

‘It rains (during the warm season).’
(夏天) 会下雨。

(7.12) declarative clause that ends with *tʂǎ*

kʰímí nǎ-xtʂǎ vǎ tʂǎ
cow DOWN-squeeze.SAP do.1PL GNR

We milk the cows.
我们给牛挤牛奶。

(QVY-329: 14)

7.1.4 The direct observation enclitic *=ri*

The direct observation enclitic *=ri* is used commonly in 2nd and 3rd person contexts. It expresses what a speaker observes at the moment. This type of observed information is different from information that a speaker knows about themselves. Due to its ‘direct observation’ nature, this enclitic can express a progressive meaning when suffixed to a verb. Compare (7.13) and (7.10), the only difference is the *=ri* at the end of the clause, and the

meaning has changed from the perfective reading to progressive reading. Another example with =ri from text is given in (7.14), where the state of not liking someone (some frog) is conveyed through this enclitic.

(7.13) a clause that ends with =ri

xú nǎ-tú=rì
rain down-come.3=DIR

‘It is raining.’
正在下雨。

(7.14) declarative clause that ends with =ri

bà^rxpé ndzú^rndzú^r tǐ tsíkǎè bà^rxpé zǎzǎè=tǎè mǎé-gó=rì
frog big.RED then a.bit frog small.RED=ISML.LOC NEG-happy=DIR

‘The big frog doesn’t like the small frog.’
大青蛙有点不喜欢小青蛙。

(QVY-334: 6)

For first person contexts, =ri is not compatible with an action is controllable by the speaker. Compare the two utterances in (7.15): the egophoric marker is compatible, while =ri is not accepted by native speakers. Example (7.15a) is either a description the speaker made about their own action at that time, or the speaker’s response to ‘What are you going to drink?’ or ‘What are you doing?’ However, under certain circumstances, when the speaker does NOT have privileged access to knowledge, or when the speaker is observing themselves as a bystander, this =ri can then be used. Circumstances suggested by consultants have included: if the speaker is sleepwalking, if the speaker is watching a video of themselves drinking tea, or if the speaker had a dream in which they were drinking tea. These are situations where a speaker is either acting unconsciously, or observing their actions in a somewhat conscious way as if from a 3rd person point of view. A similar phenomenon exists in other languages, such as Stau and Munya, as well. When actions are not controllable or volitional, a non-egophoric marker will be used in 1st person contexts (Honkasalo 2019:585; Bai 2019:237).

(7.15) Contrasting tsǐ and =ri in the same context

- a. *tsʰ* is compatible with 1st person

ŋə̌ tʃə̌ tʰó tsʰ
 LSG tea drink.LSG EGO

‘I’m drinking tea/I’ll drink tea.’
 我在喝茶/我喝茶。

- b. *=ri* is not compatible with 1st person

* *ŋə̌ tʃə̌ tʰó=ri*
 LSG tea drink.LSG=DIR

Intended meaning: ‘I’m drinking tea.’

When the action is not volitional, such as describing the internal state of oneself, or is an action that the speaker has no control of, the *=ri* enclitic is compatible with 1st person subjects. Examples include dropping something accidentally, thinking, stumbling, shivering, or expressing one’s mood or feelings (sad, happy, scared, desire). To illustrate the issue of volition, the verb *pʰətʰó* is polysemous, and can mean both ‘drop something (accidentally)’ and ‘scatter’. In the ‘drop something (accidentally)’ reading, the verb pairs with the direct observation marker *=ri* (7.16a). In the ‘scatter’ reading the verb pairs with the egophoric marker *tsʰ* (7.16b). In (7.17a), the verb *ʒi* denotes a person’s status and wellbeing, and is not considered as something the speaker has control of. It can therefore take the *=ri* enclitic with a 1st person subject. In contrast, in (7.17b) *tʰékò* refers to a person’s character, which is considered something that someone can make a conscious decision about, and the verb can take the egophoric marker *tsʰ* with a 1st person subject.

(7.16) different markers are selected based on the meaning of the same verb

- a. *=ri* is compatible with the non-volition meaning

ŋə̌ ptʃáʷlàʷ pʰətʰó=ri
 LSG something drop.LSG=DIR

‘I dropped something.’
 我弄掉了东西。

- b. *tsʰ* is compatible with volitional actions

ŋǎ ʒéʳ pʰǎtʰó tsǐ
 1SG manure scatter.1SG EGO

‘I’m scattering manure.’
 我在撒肥料。

(7.17) verbs of different volition choose different markers

a. internal state verb selects =rǐ

ŋǎ ʒǐ=rǐ
 1SG good=DIR

‘I’m fine.’
 我很好。

b. volition verb selects tsǐ

ŋǎ tʰèkó tsǐ
 1SG good EGO

‘I’m good (I’m a good person).’
 我是好人。

(7.18) =rǐ is compatible with first person endopathic verbs

ŋkʰò=rǐ tǎ-ní ní xlí=xó tǎ-ní tǝǐ ní tǝí
 want.1SG=DIR NEU-say.3 NFI rabbit=LOC NEU-say.3 GNR say.3 GNR

‘He told the rabbit: ‘I need (the daughter of that rich family).’ ’
 他和兔子说了，说：‘我要（富人家的女儿）。’ (QVY-337: 17)

It is therefore reasonable to conclude that the function of =rǐ is a non-egophoric marker and tsǐ is an egophoric marker. When following verbs, =rǐ can also indicate a progressive meaning, as can be seen in (7.19). There are also situations where either tsǐ or =rǐ can be used. An example is given in (7.20). tsǐ indicates an action that is taking place right now, or will take place soon, while =rǐ only implies the action is happening now.

(7.19) =rǐ can also have a progressive reading

tsǎ ʒéʳ pʰǎtʰǐ=rǐ
 3SG manure scatter.3=DIR

‘He is scattering manure.’

他在撒肥料。

(7.20) both *tsǐ* and *=ri* can be used

nǎ ǎ-f^{hi} tsǐ/tǐ
2SG Q-go.2SG EGO/DIR

‘Are you going?’
你走吗？

In addition to the difference in function, these two particles also differ in terms of morphosyntactic behavior. The egophoric marker *tsǐ* can be prefixed by question and negation markers, while *=ri* as an enclitic and cannot. Question and negation markers will be placed on the verb that *=ri* follows.

7.1.5 The inferential and mirative *-s^{hi}*

The *-s^{hi}* suffix can express an inferential meaning and a mirative reading, in addition to being a perfective nominalizer. The inferential function is illustrated in (7.21). When my consultant was explaining the situation in (7.21), he mentioned that the *-s^{hi}* here indicates that the speaker had not seen the actual process of dripping, but there was a trace left so the speaker can infer from that scene that dripping occurred. Visual information is obligatory to utter something like (7.21), and other sensory information is not taken into account by Pubarong Queyu speakers. There are no markers that are associated with other senses, either.

The mirative reading of *-s^{hi}* is illustrated in (7.22). Usually first person subjects do not take a *-s^{hi}* verb ending, because according to the speakers, ‘how can you not know about your own stuff!’. With the addition of *-s^{hi}*, the utterance in (7.22) indicates that the speaker had no idea that she was going to have a daughter.

(7.21) inferential use of *-s^{hi}*

nǎ^h-brá^h-s^{hi}
DOWN-drip-NMLZ

‘Something dripped.’
滴下来了。

(7.22) mirative reading of -s^hi

ŋǎ zó^ʒ tó-ró^ʒ i-x[ʂí-s^hi]
 1SG.LOC daughter one DS-bore-NMLZ

‘I gave birth to a girl!’
 我生了一个女儿！

7.1.6 Conclusion about evidential and egophoric markers in Pubarong

In Queyu, the following factors can affect the expression of evidentiality: person (speech act participants and non-speech act participants), clause type (statement and interrogative), volition or control (the speaker has control or no control of the action). The four markers that can show a speaker’s status regarding access to privileged knowledge, and how they obtained their information is summarized in Table 7.1.

Table 7.1: Functions of the evidential markers.

Egophoric	Direct observation	Inferential/Mirative	Generic
tsǐ	=ri	-s ^h i	tʂǐ

7.2 Other clause-final markers

There are other clause-final markers that Queyu speakers have uses additional to the evidential markings functions introduced in Section §7.1. On the whole, they assist in conveying information source or carrying out other discourse functions. These markers are the non-final particle *lə*, concessive particle *na^ʒ*, propositive particle *tʃə(rə)*, particle *mtʃ^hə(rə)* ‘otherwise’, *ri* ‘then’ which indicates the start of an event following the completion of another event, the conditional particle *pa^ʒ* and assumptive *pa^ʒ*, speculative *ko*, indicative *mɔ*, and deontic *ɣæ*.

7.2.1 The non-final particle *lə*

The particle *lə* occurs after both nouns and verbs. It conveys a conditional meaning of ‘if’, ‘when’, ‘as for’. In (7.23), the clause with *lə* has a sense of ‘if sun shines like this’, and in (7.24), the clause containing *lə* means ‘this is the maximal amount of milk you could possibly get out of a cow’. The *lə* so far has been observed after the nominal stem form of verbs in this study’s corpus.

(7.23) *lə* that occurs after verbs

ts^hó káth^hó zì mǎtsi nǎ-tsǎ lə jèní k^hóŋk^hó tǝò^h tǝí
 now this way sun DOWN-shine NF2 very pretty.RED become GNR

‘If the sun shines like it does right now, it’ll become pretty.’

太阳要是像现在这样子照的话，会变得很漂亮。

(QVY-332: 29)

(7.24) *lə* that occurs after verbs

s^hǎ xtfǎ lə tú mǎ-tǝí
 SUP squeeze.NOM NF2 come.3 NEG-GNR

‘That’s how much they can milk the cows, no more (afterwards).’

最多挤这么多，然后就没有挤的了。

(QVY-329: 108)

The particle *lə* can follow nouns, as well. Example (7.25) demonstrates how *lə* is used in this situation. The *lə* in the texts convey the ‘as for’ meaning.

(7.25) *lə* that occurs after nouns

tǎ^h nǎ=ts^hí ts^híxpi tǎ-zǎ tǎ-ví gǎpǎ=xǎ lə mǎzi
 then 2SG=PL angry PROH-be.angry NEU-do.2PL old.man=LOC NF2 pregnant

tǎ^h-tǝó^h TMKN p^hǎβzǎ lə gòŋǎ i-βrǎ
 NEU-become then rooster NF2 egg DS-lay

‘(the daughter-in-law said) “Well you two don’t be mad, the grandpa is pregnant, and the rooster laid eggs.”’

儿媳妇说：‘你们不要生气，公公生孩子了，然后公鸡下蛋了。’ (QVY-346: 14)

7.2.2 Concessive *na^h*

Particle *na^h* expresses a sense of ‘whatever, even if, regardless’. See examples below.

(7.26) *na^r* that means ‘wherever’

rǎ̃ lǎ̃ tǎ-bdǎ́ na^r zǎ̃ tʃ^hí lǎ̃ ɛwǎ̃ tʃí
 mt.LOC **where** NEU-drive.1PL **CONC** 3.REFL eat.NOM NF2 EXIST GNR

‘Wherever you drive the cows on the mountain, they themselves have food.’
 山上不管赶去哪里，它们自己都有吃的。 (QVY-329: 100)

(7.27) *na^r* that means ‘although, even if’

á^lè^r ŋgwǎ́ ǎ-ɸlwǎ́ na^r mǎ̃ rí-fǎ̃=tǎ́ kòmt^hó=rí=tjè
 ox first **UP-arrive** **CONC** behind be.left-NMLZ=ISM1 bank=ISM3=SUPE

rí-tǎ̃-pʃí ŋgwǎ́ tǎ-p^hǎ̃p^hǎ̃ rǎ́ tǎ-gú-s^hí mtʃ^hǎ̃rǎ́ hní
 UP-PROH-go.3 first NEU-shake throw.NOM NEU-need.3-NMLZ otherwise gut

mt^húmt^hu tǎ-tsí-s^hí
 very.RED NEU-EGO-NMLZ

‘Though the ox arrived at the bank earlier, it was left behind. It was because before it went up to the bank, it needed to shake the water off its body, otherwise it was pretty bold.’
 即使alai先到了岸边，但是排在老鼠后面，是因为它没上岸之前，需要抖一抖身上的水，不然它是很胆大的。 (QVY-349: 7)

7.2.3 Propositive *tʃǎ(rǎ)*

The particle *tʃǎ*, glossed **PROP**, is used when the speaker is trying to make a suggestion, or trying to persuade someone into doing something. In example (7.29) below, Uncle Trotung was suggesting the man to go home and drink some water, so that Uncle Trotung would have the chance to steal the man’s yak while he was gone. The *tʃǎ* directly follows the imperative expression *í-f^hí*. Another common example is given in (7.28), where *tʃǎ* directly follows ‘(we) go’ *ʃ^há^r*.

(7.28) *tǎ̃ mǎ́ nǎ́ gǎ̃=rí pʃǎ̃=rí ní ǎ̃ŋʊ í-f^hí ní ǎ̃ŋgù*
 hen weather also hot=DIR thirsty=DIR 2SG.REFL upward UP-go.2SG NF1 home

pʃǎ̃t^hí=rí t^hí í-f^hí tʃǎ́ nǎ̃ ɣwǎ̃rǎ́ ŋǎ́ lí tsikǎ́
 water=ISM3 **drink.NOM** **UP-go.2SG** **PROP** 2SG.LOC replace 1SG field a.bit

lú tǎ-ńí tʃí
 plough.1SG NEU-say.3 GNR

‘It’s hot, you are thirsty. You yourself go up to your home and drink some water. I’ll plough the field for you a bit.’

‘天也很热，你也口渴了，你上去去家里喝口水嘛，我会替你耕一下田的。’

(QVY-335: 4)

(7.29) *énts^hí áηò f^há^ʷ tʃə*
 1PL upward **go.1PL PROP**

‘Let’s go (up).’

我们走嘛。

What is interesting is that, sometimes when speakers are trying to make a threat, this particle can be used as well. An example of this type is given in (7.30), where the speaker threatens the addressee.

(7.30) *s^hó-s^hí=tʃe énts^hí tǎ nǎ kǎ-li tʃə*
 three-day=supe 1PL come.1PL 2SG **IN-wait.2 PROP**

‘We’ll be there within three days, wait for it!’

我们两三天会到，你等着。

The *tʃə(rə)* particle is used in an irrealis context, when the speaker is expressing ‘if...then...’. An example is seen in (7.31), where the rabbit comes up with a hiding spot for the demon woman inside of a pot.

(7.31) *tʃə(rə)* after *p^hǒ bǎ^ʷ* ‘cover the lid’

q^hóló^ʷ nǎ-f^hí ηǎ t^hə=tʃé tʃǒ p^hǒ bǎ^ʷ tʃə(rə) TM jě
 pot DOWN-go.2SG 1SG this(pot)=SUPE pot **lid cover PROP** then who

tǎ-ró^ʷ=i mdí mǎ-tʃí tǎ-ní tʃǎ ní tʃí
 one-CL=ISM2 see.3 NEG-GNR NEU-say.3 GNR say.3 GNR

‘“You go into the pot, I’ll cover it with the lid. No one will see you.” said the rabbit.’

‘你到锅里面去，我就把这锅盖盖上，谁都看不到你。’兔子说。 (QVY-337: 45)

In (7.32), the poor young man asked the monk what he could do to cure the rabbit. The monk (who was actually the rabbit in disguise) told the poor young man that he could kill his own child to feed the rabbit and aid the rabbit’s recovery. The *tʃə(rə)* particle is used

after ‘make (the child) into something nutritious’.

(7.32) *tfərə* after *nə-ví* ‘do.2PL’

tǐ xǐ tǎ-ní ní tǎ^s nə=ts^hí f^hòp^hí=rí fí=rí wə t^hə=tǎ
 then rabbit NEU-say.3 NFl then 2=PL child=ISM3 EXIST=DIR ? 3=ISM1
kó-s^hə ní t^hǎ zəts^há^s nə-ví tfərə tǐ p^hèl=rí tǎ-ní
 IN-kill.SAP NFl 3.LOC nutrient DOWN-do.2PL PROP then effective=DIR NEU-say.3
tǎǐ ní tǎǐ
 GNR say.3 GNR

‘Then the rabbit said: “Your family has a child now, right? Kill him, and make him into something nutritious for the rabbit, this is going to help with the rabbit’s sickness.”’

然后兔子说：“你们家有个孩子吧，把他杀了，给兔子做成有营养的食物，喂给兔子，这样有益于它的病情。” (QVY-339: 8)

The *rə* element in *tfərə* is not analyzable yet, and another sentence ending particle *lə* can also follow *tfə*. An elicited example in (7.33) illustrates this usage.

(7.33) *tfə* can be followed by *lə*

tǎ-nə tfə lə ɲǎ nǎ kólə k^hǎ
 PROH-say.2 PROP NF2 lSG 2SG.LOC something give.lSG

‘If you don’t tell, then I’ll give you something.’

如果你不说的话，我会给你东西。

7.2.4 ‘Otherwise’ *mt^hərə*

The particle *mt^hərə* indicates a transition in the speech. It can roughly be translated as ‘otherwise’. In (7.34), where the speaker was talking about why mouse was ranked the first in the twelve zodiac animals, she said it was because the ox made a stop before reaching the finish line in a race, otherwise the ox was pretty bold. Particle *mt^hərə* precedes ‘the ox was pretty bold’. Example (7.35) is an elicited utterance.

(7.34) an example of *mt^hərə* ‘otherwise’

á^slè^s ɲgwǎ ə-φlwə ná^s mǎ^s rí-fǎ=tə kòm^hó=rí=tjè
 ox first UP-arrive CONC behind be.left-NMLZ=ISM1 bank=ISM3=SUPE

rí-tǎ-pʃí *ŋgwǎ tǎ-pʰǎpʰǎ* *rǎ* *tǎ-gú-sʰí* *mtʃʰǎrǎ*
 UP-PROH-go.3 first one-shake.RED throw.NOM NEU-need.3-NMLZ otherwise

hǎĩ mtʰúmʰu tǎ-tsí-sʰí
 gut very.RED NEU-EGO-NMLZ

‘Though the ox arrived at the bank earlier, it was left behind. It was because before it went up to the bank, it needed to shake the water off its body, otherwise it was pretty bold.’

即使公牛先到了岸边，但是排在老鼠后面，是因为它没上岸之前，需要抖一抖身上的水，不然它是很胆大的。 (QVY-349: 7)

(7.35) an elicited example of *mtʃʰǎ* ‘otherwise’

tʰèkó nǎ-tsí *mtʃʰǎ* *dʒǎbdǎpǎpǎbdǎ* *kʰǎ*
 good DOWN-sit.2 otherwise lesson give.1SG

‘You sit well or I’ll give you a lesson.’
 你最好坐好，否则我会好好收拾你

This particle can also follow nouns and can roughly be translated as ‘only’. In the example below, the rabbit was telling the poor young man to only go to a place near the so-called famous monk, but never go up. The particle *mtʃʰǎ* follows *sʰíntsʰǎ*, meaning this is the closest place the rabbit suggested that the poor young man to go.

(7.36) an example of *mtʃʰǎ* that means ‘only’

tǐ wǎpǎ *sʰíntsʰǎ mtʃʰǎ* *ǎŋǎ* *tǎpǎ* *sʰíntsʰǎ* *ʃʰí-ʃǎ* *mǎĩ*
 then downside front only upward upside front go.NOM-NMLZ NEG

wǎpǎ *ǎ-ʃlǎwǎ* *rí* *tǎrǎ* *ǎŋǎ* *ǎ-qwǎ* *tʃǎ* *mǎ* *tʃǎ* *tǎ-nǎ*
 downside UP-arrive then that.time upside UP-yell PROP hear GNR NEU-say.3

‘“Then come close to where he is, but don’t go up to the front. When you arrive at the bottom, then you yell towards the upside, he’ll hear you,” said (the rabbit).’
 ‘然后到下面靠近他的地方，但是不要到上面跟前去。到了下面的时候，那时候就往上面喊，他会听到的’兔子说。 (QVY-339: 6)

7.2.5 Clause-final *rí* ‘then’

The particle *rí* that can occur at the end of a clause means ‘then’. It is used to denote the temporal relationship between two consecutive events. The example (7.37) contains this

particle, and indicates the sequence of the actions the rabbit wanted the poor young man to do: arrive at the place beneath where the monk was, then yell at him.

- (7.37) *tĩ wəpá^ɸ s^hĩnts^hò mtf^hə áɛŋù tɛpá^ɸ s^hĩnts^hò ʃ^hí-ʃə mɛĩ*
 then downside front only upward upside front go.NOM-NMLZ NEG
wəpá^ɸ ʃ-ɸlwə rí tĩrí áɛŋù ʃ-qwə^ɸ tʃə mə^ɸ tʃĩ tə-ŋí
downside UP-arrive then that.time upside UP-yell PROP hear GNR NEU-say.3

‘“Then come close to where he is, but don’t go up to the front. When you arrive at the bottom, then you yell towards the upside, he’ll hear you,” said (the rabbit).’
 ‘然后到下面靠近他的地方，但是不要到上面跟前去。到了下面的时候，那时候就往上面喊，他会听到的’兔子说。
 (QVY-339: 6)

7.2.6 Conditional *pa^ɸ*

There are two *pa^ɸ* particles in Queyu with different functions. The first *pa^ɸ* occurs in negative environments (including prohibitive), and can follow both verbs and nouns. An example of it occurring after a verb is given in (7.38), while an example of a *pa^ɸ* following a noun is given in (7.39).

(7.38) *pa^ɸ* follows a verb

- a. *s^hó-ʃhé kó-tə-mts^hjè pà^ɸ jà^ɸq^hə^ɸ zé mdö mæ-tʃí*
 three-night NEU-PROH-keep COND outside bring.NOM allow NEG-GNR

‘If (the body) is not kept (indoors) for three nights, then can’t bring (the body) outside.’

不留三晚，不能带去外面。
 (QVY-052: 2)

- b. *nə^ɸ-mó p^hú ɲi nə-kəkə t^hə ʃ^hə mɔzɪlè t^həvínò*
 DOWN-mushy cause.3 NFl DOWN-crack this barley granule these
nə-kəkə t^hə zí tá^ɸ-tʃò^ɸ pà^ɸ zì-tʃí tsì mæ-tʃí mò
 DOWN-crack this way PROH-become COND good-EXIST EGO NEG-GNR IND

‘Make the barley mushy. Every grain of barley gets cracked open. If the barley doesn’t become like this, then it is not OK.’

让青稞变得软趴趴的，这一粒粒青稞都裂开了，没有变成这样就不行。
 (QVY-330: 12)

c. *nə̃^ʷ-mó=ɲi* *nə̃^ʷ-tə̃^ʷ-mò* *p^hú* *pa^ʷ* *ʒi-tʃí* *tsǎ̃*
 DOWN-mushy=NF1 DOWN-PROH-mushy cause.3 COND good-EXIST EGO
mæ-tʃí
 NEG-GNR

‘Make it mushy. It’s not OK if it doesn’t become mushy.’
 变成软趴趴的，不变成软趴趴的就不行 (QVY-330: 13)

(7.39) *pa^ʷ* follows a noun

TM *k^hí* *ɲí* *ʃ^hómɔ̃zə̃* *pə̃^ʷ* *ínɣù* *nə̃-tú* *ló* *rǎ̃* *mæ-tʃí*
 then time NF1 afternoon COND home DOWN-come.3 NF2 capable.1PL NEG-GNR

‘Then not until afternoon can we come back.’
 然后直到下午（我们）才能回来（不到下午不能回来）。 (QVY-046: 16)

7.2.7 Assumptive *pa^ʷ*

The second *pa^ʷ* is very likely a loan word from Chinese *ba* <吧>. Local Tibetan varieties also contain this particle and expresses a similar function. This particle is used at the end of an utterance when the speaker is not sure about the validity of the expression and wants confirmation from the addressee. Two examples are given below.

(7.40) the use of *pa^ʷ* following a generic marker

tʃí *pa^ʷ*
 GNR ASS

‘Is it?’

(7.41) the use of *pa^ʷ* in a traditional narrative

ɿZ=ɿɿ *pə̃^ʷ*
 this.way=ISM3 ASS

‘Probably like this.’
 像这样子的吧。 (QVY-339: 15)

7.2.8 Speculative *ko*

The particle *ko* is used by speakers when they are guessing or speculating. Example (7.42) is something a speaker would say when they are confused or need clarification. In a text on how Uncle Trotung tricked his friends, he made his friends think that the villager they stole the yak from was coming down to get them. When Uncle Trotung’s friends wonder ‘Is it the villager who is coming down?’, the particle *ko* is used (7.43).

(7.42) *ndě pfǎ tsì kò*
 what say EGO SPEC

‘What on earth are they talking about?’

(7.43) *tǐ TZ nǎ-wú KN gǔ nǎ-wú KN p[ʃù-ndzé nùmwótʃi=xǎ*
 then this.way DOWN-do.3 time lie DOWN-do.3 time friend-DU truth=LOC

ǎŋǎ [ʃǎ-pí=tǎ nǎ-tú ǎ-tsì ko tǎ^h-xshǐ^h
 upside village-person=ISM1 DOWN-come.3 Q-EGO SPEC NEU-think.3

‘Then when doing like this, and deceiving them, these two friends really thought: ‘Is it the villager who came down?’ ’

像这样子做了，骗了他俩之后，这两个朋友真的想是不是村民下来了。

(QVY-335: 18)

7.2.9 Indicative *mó*

The particle *mó* is very similar to *pa^h*. It is used when the speaker is somewhat certain about their knowledge of something, and when they want confirmation from the interlocutor. It is glossed as IND throughout the texts. Two examples from a monologue in which the speaker was describing life in the past illustrate the usage of this particle. In (7.44), the speaker is saying that there was no grass on the mountain during the cold season, and she was pretty sure about that, and the *mó* particle is used at the end. For example (7.45), when she was describing traditional activities after the new year, she wanted to confirm with me that ploughing was happening after the new year. Hence, *mó* was used there after the generic marker *[ʃǎ]*, to form an ‘Is it?’-type confirmation tag question.

(7.44) *rú mǎ^h-kwǎ^h tʂó^h wú tʂí mò*
 grass NEG-EXIST become finish.3 GNR IND

‘There is no grass (on the mountain).’
 (山上) 变得没有草了。 (QVY-329: 89)

(7.45) *tʂí mò? mǎ^htʂhý lǎs^hǎ mǎ^h*
 GNR IND ploughing new.year after

‘Right (confirming with the interlocutor)? Time to plough after new year.’
 对吧？新年后种地。 (QVY-329: 127)

7.2.10 Deontic *yæ*

The particle *yæ* is used when the speaker is asking others for favors, begging, making a wish, or praying. It is very similar to ‘please’ in English, so this particle occurs in prohibitive and imperative sentences. In example (7.46), Uncle Trotung was pretending that he was beaten up by the owner of the yak that he and his two friends stole, so he was begging the (non-present) owner: ‘Please don’t beat me!’ The particle *yæ* is used after the prohibitive construction *tá^h-yʒǎ^h* ‘Don’t hit’. While in (7.47), when the clever daughter-in-law asked the picky businessmen to do the preparation first, the particle *yæ* is used after the imperative *nǎ-rǎ*, *i-rǎ*, and *kǎ-rǎ*.

(7.46) *tǎ^h k^hǎtʂí tsǎ=tǎ tá^h-yʒǎ^h yæ tǎŋú tsǎ nǎ mǎ-ts^hǎ tǎŋú ŋǎ=p^hé*
 then please 3=ISML **PROH-hit.SAP DEO** still 3 also NEG-estimate still 1SG=COM
pʂǔ ná^h-rǔ^h lõ k^hǎtʂí tá^h-yʒǎ^h yæ pʂǔ=ndzé wùpá^h dʒýmǔǎ
 friend two-CL with **please PROH-hit.SAP DEO** friend=DU downside intestine
tʂítʂó i-tʂí-s^hǎ tʂí k^hǎtʂí tá^h-yʒǎ^h yæ tǎ-ŋí KN
 wash DS-go.3-NMLZ EXIST **please PROH-hit.SAP DEO** NEU-say.3 time

‘Then he beat the inflated tripe, and made a crackling sound. Then he said:
 “Please! Don’t beat me! It’s not only me. I still have two friends, please don’t
 beat me! My two friends are washing intestines down there.”’
 然后（晁通）说求（村民）不要打他，说不止他一个，‘我还有两个朋友，求你不要
 打我，我的两个朋友在下面洗肠子在。’ (QVY-335: 17)

(7.47) *tǎʷ ni=tsʰáʷ* *χqó=rǐ* *xtələ rǐ=tó* *dzómèr*
 then 2.REFL=PL.LOC trouble=DIR but mt=ISM1 scale

nə-wú (intended meaning: *nə=kú* 'load') *tó-kú* ***nə-rǎ*** ***yǎ*** TMKN
 DOWN-do.3 one-load **DOWN-throw.3 DEO** then

zǐʷ=tó *fʰəβzɣé tó-tʃi* ***i-rǎ*** ***yǎ*** TMKN *rǐ=tó* *chizi tó-rə*
 water=ISM1 tea.pot one-measure **DS-throw.3 DEO** then cloth=ISM1 ruler one-CL

kə-rǎ ***yǎ*** *tʃə* *ɲimwəʷ* *əsʰi=ɲi* *i-tʰó* *tə-ɲí* *tʃǐ ɲi*
IN-throw.3 DEO PROP then tomorrow=ABL DS-bring.SAP NEU-say.3 GNR say.3

tʃí
 GNR

‘ “Then, sorry to bother you, but please use the scale to weigh the mountain, use the tea pot to measure the (amount of the) water, and use the ruler (intended meaning: road) to measure the cloth. Tomorrow we will bring them.” ’
 ‘然后，麻烦你们了，但是，麻烦你们用称把山称一下，然后用茶壶把水量一下，用尺子（应该是路）把布料量一下。明天就我们一定会带来。’ (QVY-346: 15)

CHAPTER 8

CONCLUSION AND SUMMARY

This is a summary of the main findings for each preceding chapter. It will also summarize the directions for future research in this field.

Chapter 1 introduces basic information for the language Queyu, its speaker location, population, sociolinguistic environment and major traditions. Relevant literature on the history and classification of the Qiangic branch is also introduced. Controversies regarding the validity of a Qiangic branch exist, and part of the reason for that is due to the scarce documentation and analysis of its suggested member languages. Among languages of the Qiangic area, Queyu is one of the least studied. This dissertation will serve as a beginning step for a more profound understanding of the Queyu language.

Chapter 2 describes the segmental phonology of Queyu. The phoneme inventory as well as several phonological processes are discussed and analyzed. One focus of this chapter has been on uvularized vowels. This is a rare phenomenon cross-linguistically, but prevalent in the area where Queyu and other Qiangic and Rgyalrongic languages are spoken. Uvularity in vowels not only affects the distribution of phonemes and participates in relevant phonological processes, but can also affect the morphosyntactic behavior of verbs. Future acoustic and articulatory studies on vowel uvularization will contribute to typological studies on uvularization.

Chapter 3 describes and analyzes the tonal system of Queyu. Unlike many other TB languages spoken in Asia, Queyu tones present properties that are features of many African tonal systems. One remaining question concerns the spreading of /H/. Under certain circumstances the /H/ will spread while under other circumstances it will not. Future research should focus on the behavior of /H/ tone words, as well as the behavior of compounding words.

Chapter 4 focuses on parts of speech in Queyu. It starts by discussing theories concerning word categories, followed by illustrating the issues of categorizing property-concept

terms in TB literature. Nouns and Verbs are two categories that are established based on morphosyntactic and discourse behavior, and property-concept terms are argued to belong to a subclass of Verbs. Other minor word classes are discussed, too. Their identity is determined by their morphosyntactic behavior in relation to the major word classes established earlier.

Chapter 5 is an elaborated description of noun phrase morphosyntax. Noun phrase enclitics are demonstrated with examples. In addition to number and case enclitics, noun phrases in Queyu can also take three information structure markers. Their functions are not totally clear yet. Their position in a noun phrase is also relatively flexible, as they can switch places with case enclitics. A corpus-based study should be conducted to explore these information structure markers further.

Chapter 6 is on verbal morphosyntax. Argument indexation patterns as well as affixation processes are elaborated with ample examples. The Queyu system is undergoing rapid changes, as only tendencies but no strict generalizable paradigms can be observed. While traces of paradigmatic indexation and alignment systems can still be seen in the language, they have been reanalyzed or eroded and no longer indicate transitivity or hierarchical alignment, which were their purported original functions on the basis of comparison with similar systems in related and neighbouring languages. Aspects and modality are discussed, too. They are expressed through auxiliary verbs or multi-verb constructions, where the auxiliary verbs takes the verbal morphology. Nominalization and relativization are discussed in this chapter as well. Queyu contains multiple nominalizers with different functions. Nominalization plays an essential role in relativization in TB languages, and Queyu is no exception. Lastly, existential verbs in Queyu are illustrated. Local languages have abundant existential verbs that are used for entities of various properties, such as alienability, animacy, and whether or not they are moveable.

Chapter 7 discusses evidentiality in Queyu as well as other clause-level morphosyntax. Evidentiality indicates source of information, and this is a category that Queyu speakers

identify for every utterance. This knowledge is expressed through various markers influenced by factors such as person, clause type, and volition or control as expressed by verbs. Other clause-final markers with diverse functions are also introduced. Some clause-final markers also convey information source, or indicate speaker certainty, and may be used in different TAME environments.

APPENDIX A

SUMMARY OF THE ONSETS

The table below is a summary of all possible onsets.

Table A.1: A summary of all onsets

P	C	G	Onsets
x	p ^h		xp ^h
m	p ^h		mp ^h
	p ^h	w	p ^h w
x	p		xp
	p	j	pj
	p	w	pw
x	p	j	xpj
x	p	w	xpw
m	b		mb
	b	w	bw
p	t ^h		pt ^h
x	t ^h		xt ^h
m	t ^h		mt ^h
n	t ^h		nt ^h
	t ^h	j	t ^h j
	t ^h	w	t ^h w
p	t		pt
x	t		xt
	t	j	tj
	t	w	tw
p	t	j	ptj

x	t	j	xtj
x	t	w	xtw
b	d		bd
ɣ	d		ɣd
m	d		md
n	d		nd
	d	j	dj
	d	w	dw
m	d	w	mdw
n	d	j	ndj
x	k ^h		xk ^h
ɣ	q ^h		ɣq ^h
ŋ	k ^h		ŋk ^h
ɴ	q ^h		ɴq ^h
	k ^h	j	k ^h j
	k ^h	w	k ^h w
	q ^h	w	q ^h w
x	k ^h	w	xk ^h w
ɣ	q ^h	w	ɣq ^h w
ŋ	k ^h	w	ŋk ^h w
x	k		xk
ɣ	q		ɣq
	k	j	kj
	k	w	kw
	q	w	qw
x	k	j	xkj

x	k	w	xkw
χ	q	w	χqw
η	g		ηg
n	g		ng
N	G		NG
	g	j	gj
	g	w	gw
η	g	w	ηgw
N	G	w	NGW
p	ts ^h		pts ^h
x	ts ^h		xts ^h
m	ts ^h		mts ^h
n	ts ^h		nts ^h
x	ts ^h	w	xts ^{hw}
p	ts		pts
x	ts		xts
	ts	j	tsj
	ts	w	tsw
p	ts	j	ptsj
x	ts	j	xtsj
x	ts	w	xtsw
γ	dz		γdz
m	dz		mdz
n	dz		ndz
p	tɕ ^h		ptɕ ^h
x	tɕ ^h		xtɕ ^h

m	tʂʰ		mtʂʰ
n	tʂʰ		ntʂʰ
p	tʂʰ	j	ptʂʰj
p	tʂʰ	w	ptʂʰw
x	tʂʰ	j	xtʂʰj
x	tʂʰ	w	xtʂʰw
p	tʂ		ptʂ
x	tʂ		xtʂ
	tʂ	w	tʂw
p	tʂ	w	ptʂw
x	tʂ	w	xtʂw
m	dr		mdr
n	dr		ndr
	dr	w	drw
p	tʃʰ		ptʃʰ
x	tʃʰ		xtʃʰ
m	tʃʰ		mtʃʰ
n	tʃʰ		ntʃʰ
	tʃʰ	w	tʃʰw
x	tʃʰ	w	xtʃʰw
p	tʃ		ptʃ
x	tʃ		xtʃ
p	tʃ	w	ptʃw
x	tʃ	w	xtʃw
b	dʒ		bdʒ
m	dʒ		mdʒ

n	dʒ		ndʒ
	v	j	vj
	v	w	vw
p	s ^h		ps ^h
x	s ^h		xs ^h
p	s ^h	j	ps ^h j
p	s ^h	w	ps ^h w
x	s ^h	w	xs ^h w
p	s		ps
x	s		xs
	s	j	sj
β	z		βz
γ	z		γz
	z	w	zw
γ	z	w	γzw
p	ʃ ^h		pʃ ^h
x	ʃ		xʃ
p	ʃ ^h		pʃ ^h
x	ʃ ^h		xʃ ^h
	ʃ ^h	w	ʃ ^h w
p	ʃ ^h	w	pʃ ^h w
x	ʃ ^h	w	xʃ ^h w
p	ʃ		pʃ
x	ʃ		xʃ
	ʃ	w	ʃw
x	ʃ	w	xʃw

β	з		βз
γ	з		γз
β	з	w	βзw
γ	з	w	γзw
	χ	w	χw
	κ	w	κw
h	m		hm
	m	w	mw
h	m	j	hmj
h	m	w	hmw
h	n		hn
h	n	w	hnw
h	п		hp
γ	п		γп
m	п		mp
	п	w	pw
m	п	w	mpw
h	η		hη
	η	w	ηw
h	η	w	hηw
h	N		hN
	N	w	NW
h	N	w	hNW
φ	ḷ		φḷ
	ḷ	j	lj̣
φ	l		φl

β	l		βl
x	l		xl
γ	l		γl
	l	j	lj
	l	w	lw
ϕ	l	w	ϕlw
β	r		βr
	r	j	rj
	r	w	rw
β	r	w	βrw

APPENDIX B

LIFE IN THE PAST

QVY-329

(B.1) Summer morning?

早上夏天

(B.2) During summer, you get up in the morning.

夏天, 早上起来

(B.3) *ná^ʷri rí-fæ ni*
morning UP-get.up NFL

‘Get up in the morning.’

早上起来

(B.4) *tĩ mə^ʷ kə-tʃ^hə ni*
then fire IN-kindle NFL

‘Then light up fire,’

然后生火。

(B.5) *tʃǎ rí-tʃu tə-p^hé*
tea UP-hot NEU-cause.lpl

‘We heat up the tea.’

(我们) 把茶加热。

(B.6) *tʃǎ tə-t^hé ni*
tea NEU-drink.lpl NFL

‘After (we) have tea.’

(我们) 喝了茶后

(B.7) *t^hə^ʷmə^ʷ=ni k^himí=xə*
then=ABL cow=LOC

‘Then, cow...’

然后, 牛

(B.8) *ptʰáʰ nə-ʒé ji*
fodder DOWN-bring.sap NFl

‘We bring down the fodder.’
(我们) 把牛饲料带下去

(B.9) *nóʰ nə-xtʃǎ ji*
milk DOWN-squeeze.SAP NFl

‘Squeeze milk (milk the cow).’
挤牛奶

(B.10) *jaʰqǎʰ lí=wu*
outside field=INE

‘Outside in the field.’
外面地里

(B.11) *hnó tǎʰ-qʰáʰ ji*
weed NEU-cut.1PL NFl

‘We cut *hno* (a kind of weed).’
(我们) 割hno

(B.12) *lí=wu hnó tǎʰ-qʰáʰ ji*
field=INE weed NEU-cut.1PL NFl

‘We cut *hno* in the field.’
在田里割hno

(B.13) *tǐ móʒi*
then warm.season

‘Then during the warm season...’
然后暖季

(B.14) *kʰimí nə-xtʃǎ væ tʃí*
cow DOWN-squeeze.SAP do.1PL GNR

We milk the cows.
我们给牛挤牛奶

(B.15) *tʰəʳməʳ kʰimí nə-xtʃǒ ji rǎ tə-bdǎe kʰɪ=ɲi*
 then cow DOWN-squeeze.SAP NFL mt.LOC NEU-drive.lPL time=ABL

‘Then milk the cows and drive them to the mountains.’
 然后给牛挤牛奶，赶牛上山？

(B.16) *mózi tʰí lə ɛwəʳ tʃí*
 warm.season eat.NOM ?? EXIST GNR

‘There is food during the warm season.’
 暖季有吃的

(B.17) *rú tǒ rí mæ-tʃí*
 grass dump.NOM need NEG-GNR

‘Doesn’t need to dump grass.’
 不需要倒草

(B.18) *tʰəʳməʳ mózi rǎ tə-bdǎe məʳ=ɲi*
 then warm.season mt.LOC NEU-drive.lPL after=ABL

‘Then during the warm season, after driving the cows to the mountains...’
 然后（我们）暖季（把牛）赶到山上后

(B.19) *ʃimdzə jǒ zí kǒ kǎ-tu məʳ*
 afternoon again 3.REFL here IN-come.3 after

‘Then in the afternoon, after the cows themselves come here...’
 然后下午牛又自己来之后

(B.20) *tʰəʳməʳ tʰə hnó kǎ-ʃʰə ji*
 then this weed IN-dump.SAP NFL

‘Then dump the *hno*.’
 然后倒hno

(B.21) *kʰimí=xə nóʳ tuwǎ xtʃǒ tʃí*
 cow=LOC milk one-CL squeeze.SAP GNR

‘Then milk the cows one more time.’

然后挤一次牛奶

- (B.22) *tʰəʰməʰ nə-xɬǎ məʰ*
then DOWN-squeeze.SAP after

‘Then after milking the cows.’
然后挤了之后

- (B.23) *əsi náʰri*
tomorrow morning

‘Tomorrow morning.’
明天早上

- (B.24) *ŋǎ tʰítsʰe pǎ-rvʰ tje*
again time eight-CL upon

‘Around eight o’clock.’
八点钟的时候

- (B.25) *tiri rǎ bdæ tʂi*
a.while mt.LOC drive.1PL GNR

‘After a while, we drive the cows to the mountain.’
过一会儿（我们把牛）赶到山上

- (B.26) *nóʰ nə tuwǎ nə-xɬǎ ni*
milk ?? one-CL DOWN-squeeze.SAP NFL

‘Milk the cows again.’
再挤一次奶

- (B.27) *rǎ rí-bdæ jǎ ʃimdzə*
mt.LOC UP-drive.1PL again afternoon

‘In the afternoon, we drive the cows to the mountain again (should be: cows come back from the mountain).’
下午又一次赶牛上山（这句错了，应该是牛从山上回来）

(B.28) *tʰítsʰe jǒ qiba dian tje jǒ tuwǎ xtʃǎ tʃí*
time again 7/8 o'clock upon again one-CL squeeze.SAP GNR

‘Milk the cows again around seven or eight o’clock (should be around five or six o’clock PM).’

七八点再挤一次奶（应该是五六点挤奶，早上才是七八点）

(B.29) *nǎwǎ xtʃǎ tʃí*
two-CL squeeze.SAP GNR

‘Milk twice.’

挤两次

(B.30) *ʃímǔzǎ qiba dian tje tuwǎ xtʃǎ tʃí kʰimí*
afternoon 7/8 o'clock upon one-CL squeeze.SAP GNR COW

‘Milk the cows again around seven or eight o’clock.’

下午七八点的时候挤一次奶（应该是五六点挤奶）

(B.31) TMKN
Then
然后

(B.32) *kʰimí tǎ-bdǎ mǎʰ*
cow NEU-drive.1PL after

‘After (we) drive the cows.’

赶牛上山后

(B.33) *jǒ kʰǎ-ʃǎʰ*
again IN-go.1PL

‘We went inside again.’

（我们）又进（屋）去了

(B.34) TM *jǒ rú qʰǎʰ tǎ-ʃǎʰ ní*
then again grass cut.NOM NEU-go.1PL NFl

‘Then we went to cut grass again.’

（我们）又去割草

(B.35) *rú tə^ɻ-q^há^ɻ ɲi*
grass NEU-cut.lPL NFl

‘We cut grass.’
(我们) 割草

(B.36) *kə-t^hə ɲi*
IN-carry.SAP NFl

‘We carry the grass back.’
(我们) 把草(背)带回来

(B.37) *əndəxo rí-ʒe ɲi*
top.fl UP-bring.SAP NFl

‘Carry the grass to the top floor.’
把草背到楼上去

(B.38) *rí-rv tə-p^hə*
UP-dry NEU-cause.lPL

‘We make dry the grass.’
把草晒干

(B.39) TM *jǒ xtsəkʊ lə-kæ ɲi*
then again grass.storage US-place.lPL NFl

‘Then we place the grass into the storage room (for grass).’
然后把草放进放草的地方

(B.40) *kə-psje tə^ɻ-p^hə^ɻ və gæ tʂí*
IN-store NEU-leave do.NOM need.lPL GNR

‘We need to store grass there.’
我们需要把草储存放在那里

(B.41) *tǐ ɲǒ mótso t^hí-fə*
then again cold.season eat.NOM-NMLZ

‘Then, winter, food.’
然后冬天, 吃的东西

(B.42) TM *ri mótso*
then ?? cold.season

‘Then it’s winter.’
然后是冬天

(B.43) *kó-ptʰi*
IN-eat.3

‘(Cows) eat (grass).’
(他们=牛) 自己吃 (草)

(B.44) *tʰí-fə tʰə=xó kə-tə kʰɪ=ni*
eat.NOM-NMLZ 3=LOC IN-dump.SAP time=ABL

‘Dump food for cows.’
给牛倒吃的东西 (草)

(B.45) TM *tʰi*
‘Then...’
然后

(B.46) *regú sʰi qəʳó sʰi ʃivó sʰi tʰi ví təʳ-qʰáʳ rí-ru tə-pʰé*
RG and QR and SV and this way NEU-cut.lPL UP-dry NEU-cause.lPL

‘For different plants, we cut and make them dry like this.’
(我们) 把XX,和XX和XX和XX像这样收割晒干

(B.47) *ptʰáʳ nə-xpó ni*
fodder DOWN-soak NFL

‘We soak the fodder.’
(我们) 把饲料泡好

(B.48) *ptʰáʳ ni tʰí tǎʳ nə-xpó-fə*
fodder say.3 GNR then DOWN-soak-NMLZ

‘The thing being soaked is called fodder.’
浸泡的东西叫做ptsha

(B.49) *ptʰáʷ nə-xpó ni tʃ*
fodder DOWN-soak NFl then

‘Soak the fodder, then.’
把饲料浸泡，然后

(B.50) *ŋǒ kʰimí nǒʷ tuwó xtʃǒ gæ tʃí*
again cow milk one-CL squeeze need.1PL GNR

‘We need to milk cows again.’
我们需要又给牛挤一次奶

(B.51) *náʷri tǒ-xkwó*
morning one-CL

‘One time in the morning.’
早上一次

(B.52) *ʃimɔzǒ tǒ-xkwó xtʃǒ gæ tʃí*
afternoon one-CL squeeze need.1PL GNR

‘One time in the afternoon, we need to milk (cows).’
下午需要挤一次

(B.53) *TMKN náʷri tǒ-ʃǎ ni rú kǒ-tǒ*
then morning NEU-get.up.1PL NFl grass IN-dump.SAP

‘Then in the morning, we get up and dump grass (for the cows).’
然后早上起来（我们）（给牛）倒草

(B.54) *nə-xtʃǒ yæ mǒʷ rú kǒ-tǒ*
DOWN-squeeze.SAP finish.1PL after grass IN-dump.SAP

‘After milking, we dump grass.’
（我们）挤完奶后倒草

(B.55) *tʰǒ tǒ-tʰí wú mǒʷ lǎkwó zǐ lǎkwó lǎ-bdæ ni*
3 NEU-eat.NOM do.3 after side house side US-drive.1PL NFl

‘After (the cows) eat, we drive cows to the other side of the house.’

牛吃完草后把它们赶去房子的另一边

- (B.56) *tiri rǎ (tʰí lə) rú tʰí lə kwǎ̃ mæ-tʂí*
that.time mt.LOC grass eat.NOM ?? EXIST NEG-GNR

‘At that time, there isn’t grass on the mountain.’
那时候山上没有草

- (B.57) *mótsi=tə kə-tsə ni*
sun=ISML IN-shine NFl

‘Then the sun shines.’
太阳就升起来了

- (B.58) *mótsi lö̃̃ ʃlǎ̃̃ tʂí ʒi ləkwõ*
sun bask release.3 GNR house side

‘Drive the cows to the other side of the house to bask in the sun.’
(把牛) 放到房子的另一边晒太阳

- (B.59) *tǐ mótsi qə̃̃-ylõ̃ ri mótsi qə̃̃-ylõ̃ ni tǐ*
then sun IN-bask ?? sun IN-bask NFl then

‘Then bask in the sun.’
晒太阳

- (B.60) *tʰǒ tə̃̃-pʰǎ̃̃ ni tǐ*
here NEU-leave NFl then

‘Then leave the cows there.’
(把牛) 放在这里

- (B.61) *χá̃̃lã̃ tʰítʰe sʰó-rõ̃ βʒí-rõ̃ tje rí*
apprx time three-CL four-CL upon ??

‘Around three or four o’clock.’
差不多三四点钟的时候

- (B.62) *énərõ̃ tə-kjé ni tʰítʰe sʰó-rõ̃ βʒí-rõ̃ tje rí*
twelve NEU-PASS NFl time three-CL four-CL upon ??

‘After twelve o’clock, around three or four.’
过十二点后，差不多三四点钟的时候

- (B.63) *k^himi=tʂa^ʁ jǒ qə^ʁ-χq^ha^ʁ ni*
cow=PL again IN-tie.lPL NFl

‘Tie these cows up again.’
把这些牛再拴起来

- (B.64) *rú tə-wə tə tʂi*
grass one-CL dump.SAP GNR

‘Dump grass one time.’
倒一次草

- (B.65) *tik^hi=ni jomé xtʂé tə tʂi*
at.that.time=ABL corn stalk dump.SAP GNR

‘At that time, dump corn stalks.’
那时候倒要给牛倒玉米杆杆

- (B.66) *TM jǒ ʃimdzə k^ho rú=tə tə-xkwə tə tʂi*
then again afternoon time grass=ISM1 one-CL dump.SAP GNR

‘Then dump grass for the cows one more time.’
然后下午再一次给牛倒草

- (B.67) *TM rú kə-tə yæ mə^ʁ*
then grass IN-dump.SAP finish.lPL after

‘Then after (we) dump the grass...’
然后（我们）把草倒了以后

- (B.68) *jǒ t^hə ts^hó regú tə^ʁ-q^há-s^hi=tə nə-xpə ni*
again this now RG NEU-cut.lPL-NMLZ=ISM1 DOWN-soak NFl

‘Soak regu, which is the thing that was cut.’
这个时候泡割了的regu

(B.69) *ptʰáʷ nə-vá ji nə-zé ji*
 fodder DOWN-do.1PL NFl DOWN-bring.SAP NFl

‘We made fodder, and brought it down (to feed the cows).’
 我们做饲料，然后拿下去

(B.70) *ŋǒ tʰwǒ xtʰǒ gæ tʂí*
 again one-CL squeeze.NOM need.1PL GNR

‘We need to milk again.’
 我们需要再挤一次奶

(B.71) *jǒ tʰə=tʰ tʰ-wə nə-xtʰǒ ji rí-tʰə væ tʂí*
 again this(milk)=ISM1 one-CL DOWN-squeeze.SAP NFl UP-bring.SAP do.1PL GNR

‘We need to milk again and bring it up.’
 我们需要再一次挤奶，然后拿上去

(B.72) *TM ási náʷri*
 then tomorrow morning

‘Then tomorrow morning...’
 然后明早

(B.73) *jiqi=ku nəʷ-xtsáʷ ji*
 machine=INE DOWN-filter.1PL NFl

‘Filter milk in the machine.’
 在机器里过滤牛奶

(B.74) *nóʷ tʰ-róʷ wəʰú*
 milk one-CL skim.milk

‘For milk, there is skim milk to one side.’
 牛奶一边是脱脂牛奶

(B.75) *tʰ-róʷ=tə=ku mó nə-tú tʂí*
 one-CL=ISM1=INE butter DOWN-come.3 GNR

‘On the other side flows the butter.’

一个里面流的是酥油

- (B.76) *tə-róʷ=tə=ku wəfʰó*
one-CL=ISM1=INE skim.milk

‘In one part is the skim milk.’
一个里面是脱脂牛奶

- (B.77) *tʃ tʰə zí tə-væ ni nóʷ nəʷ-xtsáʷ ni*
then this way NEU-do.1PL NF1 milk DOWN-filter.1PL NF1

‘Then filter the milk like this.’
就这样把牛奶过滤

- (B.78) *kə-tʃu tə-pʰæ ni*
IN-hot NEU-cause.1PL NF1

‘Heat the milk.’
(把牛奶) 加热

- (B.79) *nəʷ-xtsóʷ-fə tsí tʃí*
DOWN-filter-NMLZ COP GNR

‘It needs to be filtered.’
是需要过滤的。

- (B.80) *tʃ mó tʰə zí nə-væ-sʰí tsí tʃí*
then butter this way DOWN-do.1PL-NMLZ COP GNR

‘Then this is how we make butter.’
我们这样做酥油的（酥油是这样做的）

- (B.81) *əli jəpʰi əli tʃæ kʰl tʰə zí tsí tʃí*
upstream past upstream at.1PL time this way COP GNR

‘In the past, when we were still in the village, this is how we did.’
以前我们在乡下的时候是这样子的

- (B.82) *mózi tje*
warm.season upon

‘When it was the warm season.’
暖季的时候

- (B.83) *mózi=tə nə-pfǎ tʂí*
warm.season=ISML DOWN-speak GNR

‘I talked about the warm season already.’
暖季也讲了

- (B.84) *xiatian=tə nə mótsə=tə nə nə-pfǎ tʂí a*
summer=ISML also cold.season=ISML also DOWN-speak GNR ah

‘I talked about summer, also talked about winter.’
夏天讲了，冬天也讲了

- (B.85) *ná^h-rú^h=tə kwǎ^h tʂí t^hə p^hé*
two-CL=ISML EXIST GNR this with

‘There are two (seasons), with (activities during those seasons described).’
有两个（季节），跟刚才讲的日常活动里面都讲过了

- (B.86) *<dōngtiān> tje tsíkæ rí-<jiǎng>*
winter upon a.bit UP-speak

‘For winter, I’ll talk about it a bit.’
冬天稍微讲了一点

- (B.87) *dongtian tje tʃ^hí-fǎ k^himí=xə tʃ^hí-s^há^h* kwǎ^h mæ-tʂí mU
winter upon eat-NMLZ cow=LOC eat.NOM-NMLZ EXIST NEG-GNR CF

‘In winter, cows don’t have a place to eat (food).’
冬天牛的吃的地方是没有的(应为吃的东西)

- (B.88) *rǎ tǎ-bdó k^hɪ tʃ^hí-s^há^h* kwǎ^h mæ-tʂí mU
mt.LOC NEU-drive.ISG time eat.NOM-NMLZ EXIST NEG-GNR CF

‘If I drive cows to the mountain, there are no places to eat (food) there.’
如果我把牛赶到山上，是没有吃的地方(应为吃的东西)

- (B.89) *rú ma^h-kwǎ^h tʂó^h wú tʂí mʊ*
grass NEG-EXIST become finish.3 GNR CF

‘There is no grass (on the mountain).’
(山上) 变得没有草了

- (B.90) *tɪk^hí=ni énts^hi rú tǎ^h-q^hǎ^h ni kǎ-psyɛ-s^hi*
at.time=ABL 1PL grass NEU-cut.1PL NFl IN-accumulate-NMLZ

‘At that time, we cut grass during summer and stored (the grass).’
那时候, 我们(夏天) 割了储存了的草

- (B.91) *rí-rʊ tǎ-p^hǎ ni kǎ-psyɛ-s^hi=tǎ mózi*
UP-dry NEU-cause.1PL NFl IN-accumulate-NMLZ=ISM1 warm.season
tʂí-fǎ nǎ-vǎ-s^hi tʂí tʂí mʊ
eat.NOM-NMLZ DOWN-do.1PL-NMLZ COP GNR CF

‘We dried the grass dry, the thing we stored, is the food we made for summer (should be winter).’
晒干了, 储存了的草, 夏天(应该是冬天) 我们做成(给牛的) 食物

- (B.92) TM *lǎkwǎ zɪ lǎkwǎ lǎ-bdǎ KN k^himí=tǎ lí=wu tɪrí jómé*
then side house side US-drive.1PL time cow=ISM1 field=INE that.time corn
s^hi tǎ^h-q^hǎ^h yǎ ni lí=wu ndě tʂí-fǎ kwǎ^h mǎ-tʂí
and NEU-cut.NOM finish.1PL NFl field=INE what eat.NOM-NMLZ EXIST NEG-GNR

‘Then drive the cows to the other side of the house. At that time, after cutting corn and the like in the field, there is not any food in the field.’
然后把牛赶到房子的另外一边, 田里面牛吃的那些玉米等我们割完了, 田里什么吃的都没有了

- (B.93) TM *tʂí-fǎ ma^h-kwǎ^h k^hɪ zɪ lǎkwǎ lí=wu i-bdǎ ni*
then eat.NOM-NMLZ NEG-EXIST time house side field=INE DS-drive.1PL NFl

‘Then when there is no food, we drive the cows to the fields, which are at the other side of the house.’
然后没有吃的时候, 我们把牛赶到房子另一边的田里

- (B.94) *mǎtsi yló^h rí-ǫǎ^h tʂí mtʂ^hǎ^h rǎ tʂí lǎ ndě kwǎ^h mǎ-tʂí*
sun bask.NOM UP-release GNR only mt.LOC eat.NOM ?? what EXIST NEG-GNR

‘Just let the cows bask in the sun, there isn’t any food on the mountain.’
仅仅只是让牛晒太阳，山上什么吃的是没有的

- (B.95) *tĩ jǒ kǔ kǎ-tʰə qáʷ-χqʰwəʷ ni*
then again here IN-drive.SAP IN-chain NFL

‘Then drive the cows back again, chain them up in their original positions.’
然后再一次把牛赶回来，拴在它原有的位置上

- (B.96) *jǒ kʰimí=xə rú shǐ kǎ-ptə*
again cow=LOC grass and IN-dump.3

‘Then dump some grass and the like for the cows.’
再给牛倒一些草料等等

- (B.97) *mótso tʰə zǐ və gæ tʂǐ*
cold.season this way do.NOM need.1PL GNR

‘We need to do like that in winter.’
寒季的时候我们需要像这样做

- (B.98) *mózi zæ rǎ tʃʰǐ lə kwəʷ tʂǐ*
warm.season 3.REFL mt.LOC eat.NOM ?? EXIST GNR

During the warm season, the cows go themselves, there is food on the mountain.
暖季的时候它（牛）自己山上有吃的

- (B.99) *ndegó tʃʰǐ lə kwəʷ tʂǐ*
many eat.NOM ?? EXIST GNR

‘There is lots of food.’
吃的东西有很多

- (B.100) *rǎ láʷ tə-bdǎ náʷ zæ tʃʰǐ lə kwəʷ tʂǐ*
mt.LOC where NEU-drive.1PL IRR 3.REFL eat.NOM ?? EXIST GNR

‘Wherever we drive the cows on the mountain, they themselves have food.’
山上不管赶去哪里，它们自己都有吃的

(B.101) TM *ŋú=tə* TM *hnó tə^h-q^há^h* *ni*
then cow=ISM1 then weed NEU-cut.1PL NFI

‘Then we cut the grass.’
然后我们给牛割草

(B.102) *hnó tə^h-q^há^h* *ni ptʃ^há^h* *nə-váé* *ni*
weed NEU-cut.1PL NFI fodder DOWN-do.1PL NFI

‘After cutting the grass, we made fodder out of it.’
割了草后我们做成饲料

(B.103) TM *KN* *zǎ* *t^hə=tǎ* *tə-fǎé* *ni*
then time 3.REFL this=ISM1 NEU-feed.1PL NFI

‘Then we feed the cows the fodder.’
然后我们把饲料喂给牛自己

(B.104) *xtʃǎ* *tʃi* *mʊ*
squeeze GNR CF

‘Squeeze (milk).’
挤奶

(B.105) *ná^hri* *tǎ-xkwǎ*
morning one-CL

‘Once in the morning.’
早上一次

(B.106) *ʃimdzə* *tǎ-xkwǎ*
afternoon one-CL

‘Once in the afternoon.’
下午一次

(B.107) *xtʃǎ* *gu* *tʃi*
squeeze.NOM need.3 GNR

‘They need to squeeze (milk).’
他们需要挤奶

- (B.108) *s^hó xtfó lə tú mæ-tʃí*
 SUP squeeze.NOM ?? come.3 NEG-GNR

‘That’s how much they can milk the cows, no more.’
 最多挤这么多，然后就没有挤的了

- (B.109) *k^himí=xə ŋú=xə nǎ-wə xtfyé tʃí*
 COW=LOC COW=LOC two-CL squeeze GNR

‘Others milk the cows twice.’
 别人给奶牛挤两次奶

- (B.110) *mózi nǎ^s ndzət^hé ʒʊʒú tú tʃí*
 warm.season milk many many.RED come.3 GNR

‘During the warm season, there’s lots of milk.’
 暖季的时候会有很多牛奶

- (B.111) *mótso nǎ^s tæ niní mt^hə tu mæ-tʃí*
 cold.season milk few few only come.3 NEG-GNR

‘During the cold season there’s very little milk.’
 冬天的时候牛奶只有一点点

- (B.112) *qita ma mótsə ʒě^s nə-psyé-s^hi jǒ lí=ku*
 other Q cold.season manure DOWN-accumulate-NMLZ again field=INE

nə-ndzǐ vǎ gæ tʃí
 DOWN-transfer.NOM do.NOM need.1PL GNR

‘As for other things, the manure we saved during the cold season, we need to transfer it into the field.’
 其他吗寒季时积攒的肥，我们又要运到田里去

- (B.113) *mózi ʒě^s nə-psyé-s^hi=tə mótsə lí=ku*
 warm.season manure DOWN-accumulate-NMLZ=ISML cold.season field=INE

nə-ndzǎé
 DOWN-transport.1PL

‘As for the manure piled up during the warm season, we transfer it into the field during the cold season.’

夏天积累的肥，冬天的时候我们把它运到田里去

- (B.114) *χqa^hló nə^h-xtá^h*
clod DOWN-hit.1PL

‘We break the clods.’
把土块打碎

- (B.115) *dombó yumi nə^h-q^há^h*
first corn DOWN-cut.1PL

‘First, we cut the corn.’
首先我们割玉米

- (B.116) *yumi nə^h-q^há^h mə^h=ɲi tĩ lí kó-læ*
corn DOWN-cut.1PL after=ABL then field IN-plant.1PL

‘After cutting the corns, we plough the fields.’
把玉米割完之后，然后我们耕地

- (B.117) *lí kó-læ mə^h=ɲi*
field IN-plant.1PL after=ABL

‘After we plough the fields...’
我们耕地之后

- (B.118) *tĩ χqa^hló nə^h-xtá^h*
then clod DOWN-hit.1PL

‘Then we break the clods.’
把土饼子/土块打碎

- (B.119) *jomé xtfe kó-k^həre*
corn stalk IN-sweep.SAP

‘We sweep the corn stalks together.’
我们把玉米秆秆扫在一起

- (B.120) *jomé xtfe kó-xpurwə*
corn stalk IN-burn

‘We burn the corn stalks.’
我们把玉米杆杆烧了

- (B.121) *jomé xtfé ká-xpurwə yáé məʷ=ɲi*
corn stalk IN-burn.NOM finish.1PL after=ABL

‘After (we) burn the corn stalks.’
我们把玉米杆杆烧完之后

- (B.122) TM *ʒéʷ sʰi thi ví tə-ndzæ*
then manure and this way NEU-transport.1PL

‘Then we bring manure and (the like) (into the field).’
然后我们把肥料等像这样运（到田里去）

- (B.123) *ləsʰó ɲgwə ʒéʷ sʰi tə-ndzæ tʰə zí væ tʂí*
new.year before manure and NEU-transport.1PL this way do.1PL GNR

‘We bring manure and (the like) (into the field) like this before New Year.’
新年前我们像这样把肥料等运（到田里）

- (B.124) *ʒéʷ sʰi tə-ndzɪ yáé məʷ=ɲi tʃ*
manure and NEU-transfer.NOM finish.1PL after=ABL then

‘After (we) transfer the manure and the like, then...’
我们运完了以后，然后

- (B.125) *ʒéʷ sʰi thi ví tə-ndzɪ yáé məʷ=ɲi*
manure and this way NEU-transport.NOM finish.1PL after=ABL

‘After (we) transfer the manure and the like like this.’
我们像这样把肥料运完了后

- (B.126) TM *ləsʰó məʷ ri tʃ məʷtʰy (wú tʂi)*
then new.year after ?? then ploughing

‘Then, after the new year, it’s time to plough the field.’
新年过后，开始种地

(B.127) *tʂi moʔ məʔtʂy ləʂhə məʔ*
GNR CF ploughing new.year after

‘Right (confirming with GX)? Time to plough after new year.’
对吧？新年后种地

(B.128) *ləʂhə məʔ ɣáʔlaʔ siyuefen=xə məʔtʂy wú ri pàʔ*
new.year after about April=LOC ploughing do.3 COP2 ASS

‘After the new year, ploughing starts around April, right?’
新年后，大概四月份开始耕地是吧？

(B.129) *daʔwáʔ βʒi pwə son pwə son pwə ə-tʂi shə βʒi pwə tʂi βʒi*
month four month three month three month Q-GNR or four month GNR four
pwə=xə tje tʂi pàʔ?
month=LOC upon GNR ASS

‘April, March, March or April? April, right?’
四月，三月，三月是吧？还是四月？四月是吧？

(B.130) *siyuefen ə-tʂi*
April Q-GNR

‘Is it April?’
是四月份吗？

(B.131) *siyuefen=xə məʔtʂy wú tʂi βʒi pwə tʂi pàʔ*
April=LOC ploughing do.3 GNR four month GNR ASS

‘Plant the field in April, April is the planting time, right?’
四月份耕种，耕种时间是四月份是吧？

(B.132) *βʒi pwə=xə lə mə-tʂi pàʔ*
four month=LOC ?? NEG-GNR ASS

‘It’s not April, right?’
四月份的呢不是吧？

(B.133) *tǎʔ tʰə=tə ŋə pjerjé=tə xtsitʂi mə-ŋó*
then this=ISM1 1SG Tib.calendar=ISM1 calculation NEG-be.able.1SG

‘I don’t know how to calculate the calendar.’
那个播种时间藏历的我不会计算

- (B.134) *tĩ mǝʰtʰy nǝ-wú*
then ploughing DOWN-do.3

‘Then they plant the field.’
然后别人耕种

- (B.135) *lí=wu jǝmé kǝ-βlɪ ʃʰó kǝ-βlɪ ʃʰǝ kǝ-βlɪ jǝŋgí kǝ-βlɪ*
field=INE corn IN-plant.3 wheat IN-plant.3 barley IN-plant.3 potato IN-plant.3
xontʰú kǝ-βlɪ
soy.bean IN-plant.3

‘In the field you grow corn, wheat, barley, potatoes, soy beans.’
田里面种玉米，小麦，青稞，洋芋，黄豆

- (B.136) *xontʰú tǝ-ní KN tĩ natian wǝmenliǝ*
soy.bean NEU-say.3 time then someday we.two

‘As for soybeans, one day we two...’
说起黄豆的话，哪天我们俩

- (B.137) *i-ptʃǝʰ-sʰi kǝtʰǝ tʰǝ zǝ i-ptʃǝʰ-sʰi ŋǝ kǝtʰǝ huoguo=pʰe kǝ-tʃʰǝ*
DS-bud-NMLZ this this way DS-bud-NMLZ 1SG this hot.pot=COM IN-eat.1PL

‘When the soybeans have budded, budded like this, we eat them with hot pot.’
黄豆发芽，像这样发芽后，我（们）跟火锅一起吃

- (B.138) *tʰǝ=xǝ xontʰú ni tʃí*
this=LOC soy.bean say.3 GNR

‘It is called soybean.’
这个就叫黄豆

- (B.139) *xontʰú nǝ kǝ-lǝ KN*
soy.bean also IN-plant.1PL time

‘We also grow soybeans.’
我们也种黄豆

- (B.140) *lí=ku énts^ha^ʷ xont^hú nə tʂó^ʷ ŋú-tʃí tsi tʂí*
 field=INE 1PL.LOC soy.bean also become be.able-EXIST COP GNR

‘In the field, we also grow soybeans.’
 我们的田里黄豆也可以长出来（也可以种）

- (B.141) *tʃ^hí-fə tsi tʂí*
 eat.NOM-NMLZ COP GNR

‘It is edible.’
 是吃的

- (B.142) *lí=ku xont^hú ɓwə^ʷ tʂí dzəsé ɓwə^ʷ tʂí mnyé ɓwə^ʷ tʂí*
 field=INE soy.bean EXIST GNR string.bean EXIST GNR pea EXIST GNR

‘There are soybeans, string beans, peas in the field.’
 田里面有黄豆，四季豆，豌豆

- (B.143) *lí=ku hnó ɓwə^ʷ tʂí*
 field=INE weed EXIST GNR

‘There’s grass in the field.’
 田里面还有草

- (B.144) *tí lí=ku tí hnó tə^ʷ-q^há^ʷ ní*
 then field=INE then weed NEU-cut.1PL NFl

‘Then we cut grass in the field.’
 在田里割草

- (B.145) *k^himí=xə rí-rv p^hæ ní ptʃ^há^ʷ tʃ^hí-fə*
 cow=LOC UP-dry cause.1PL NFl fodder eat.NOM-NMLZ

‘We dry the grass dry for the cows, (make it into) fodder, food.’
 我们给牛把草晒干，（做成）饲料，吃的东西

- (B.146) *mótso t^hə zí nə q^hó^ʷ k^hí tʂí*
 cold.season this way also cut.NOM be.custom GNR

‘There is also the custom of cutting grass during the cold season.’

冬天也有这样割草的习惯

- (B.147) *rǎ regú s^hi la^vdó s^hi t^hə zǐ nə tə^v-q^há^v ni k^himí=xə*
mt.LOC RG and LD and this way also NEU-cut.1PL NF1 cow=LOC

tʃ^hi-fə rí-ru tə-p^hǎé
eat.NOM-NMLZ UP-dry NEU-cause.1PL

‘There are *Regu*, *Lado* and the like, we also cut them and dry them, make them into food for cows.’

山上有*regu*, *lado*等, 也像这样割了之后晒干, 给牛吃

- (B.148) *ʃivó vjé=xə tʃ^hi-fə ʃivó*
SV pig=LOC eat.NOM-NMLZ SV

‘sv, the pig’s food sv.’

猪的饲料是酸酸草

- (B.149) *t^hə zǐ nə tə^v-q^há^v*
this way also NEU-cut.1PL

‘We also cut (sv) like this.’

我们也像这样割 (酸酸草)

- (B.150) *tǐ k^himí=xə tʃ^hi-fə s^hi vjé=xə tʃ^hi-fə t^hə zǐ vó*
then cow=LOC eat.NOM-NMLZ and pig=LOC eat.NOM-NMLZ this way do.NOM

gæ tʃí
need.1PL GNR

‘Then cow food, pig food, we need to do like this.’

然后牛吃的东西和猪吃的东西, 我们会这样子做

- (B.151) *mótso*
cold.season

‘(During) cold season.’

冬季

- (B.152) *mózi t^hə zǐ q^hǎ^v lə degó kwə^v tʃí*
warm.season this way cut.NOM ?? many EXIST GNR

‘During the warm season, there is a lot of grass to cut like this.’
热天的时候有很多这样子可以割的草

(B.153) *tĩ tʰə zǐ tə̃-qʰá̃ nə-ʒé ɲi*
then this way NEU-cut.1PL DOWN-persist NFl

‘Then we cut grass for a long time like this.’
就像这样很努力地去割草

(B.154) *tĩ mótsə tiri tĩ kʰimí=ʧã=xə tĩ tʰə=ʧá̃ tə-fǎ ɲi*
then cold.season that.time then cow=PL=LOC then this=PL NEU-feed.1PL NFl

‘Then when it is the cold season, then we feed the cows that grass.’
然后到了冬天的时候，我们就把那些草喂给那些牛

(B.155) *kwó ri kwó tʰə zǐ nə̃-qʰá̃ ɲi*
year ?? year this way DOWN-cut.1PL NFl

‘Every year we cut grass like this.’
每年都像这样割草

(B.156) *tĩ kʰimí=xə tʰə zǐ ʃĩ gǎ-tĩ tsi ʧí*
then cow=LOC this way feed.NOM need.1PL-EXIST COP GNR

‘Then we need to feed the cows like this.’
然后我们需要像这样给牛喂吃的

APPENDIX C

WINE BREWING

QVY-330 Liquor brewing

- (C.1) *tǎʷ ɲǎ kətʰə́ ʔntsʰaʷ pə̀rə́=tə́ nde zi tə-wú ji*
 then 1SG this 1PL.LOC Tib.liquor=ISM1 what way NEU-do.3 NFl
nəʷ-qʰwáʷ-sʰí tsi tʃí tʰə́ lodzý=tə́ tə́-pʃə́ rə́
 DOWN-brew.3-NMLZ COP GNR this history=ISM1 one-say.NOM throw.SAP
 ‘How we brew Tibetan wine, the history (brewing method) I’ll talk a bit.’
 我把那个藏酒是怎样酿出来的，这个酒的历史（做法）我讲一下
- (C.2) *zi ɲgwə́ nə-wú KN ʔntsʰaʷ xkə́pʰe qʰoʷlɔ́ ji tʃí*
 SUP front DOWN-do.3 time 1PL.LOC ten.peck pot say.3 GNR
 ‘At first, talk about our ’ten-peck pot’.’
 最先的时候，我们先说十斗锅
- (C.3) *xkə́pʰe qʰoʷlɔ́=tə́ tə́-roʷ tʃə́dʒí nə-wú ji*
 ten.peck pot=ISM1 one-CL preparation DOWN-do.3 NFl
 ‘Need to prepare a ten-peck pot.’
 要准备一个十斗锅
- (C.4) *tʰə́=tə́ təʷ-tʃíʷptʃó ji xtsómei nə-wú*
 this=ISM1 NEU-wash.3 NFl clean DOWN-do.3
 ‘Wash it, make it clean.’
 把这个洗得干干净净的
- (C.5) *TM tʰə́=kú=ji tʰekí tje kə́-fy ji ʒíʷ qʰweʷ xtjé ʒíʷ*
 then this=INE=ABL stove upon IN-place.3 NFl water half level water
nə́-ptə́
 DOWN-dump.3
 ‘Then put this pot on the stove, fill half the pot with water.’
 然后把这个锅放在灶台上，在里面放一半的水

(C.6) *tʰə zǐ nə-wú ni tʰý pʰə rǐ tʂǐ*
 this way DOWN-do.3 NFl boil cause.NOM need GNR

‘Need to boil the water like this.’
 需要像这样把水烧开

(C.7) *TMKN dʒóvə=ku ʃʰə=tə rǔ xləmél=ku rǔ é-mtʰɪ ni*
 then granary=INE barley=ISML upward sifter=INE upward UP-take.out.3 NFl

‘Then bring the barley from the granary, put it in the sifter.’
 然后从粮仓里把青稞拿上来，放到竹箴筛子里

(C.8) *tǐ xtʂǐ=xə í-ptʂǐ*
 then peck=LOC UP-measure.3

‘Then use peck to measure.’
 然后用斗/抔来量

(C.9) *kʰæǰǐ æxtó xtʂǐ tó-mə tǐ tʂǐ kʰæǰǐ áʷnnə xtʂǐ*
 some.people eleven peck dump-NMLZ EXIST GNR some.people twelve peck
tó-mə nə tǐ tʂǐ
 dump-NMLZ also EXIST GNR

‘Some people dump eleven pecks, there are also some people who dump twelve pecks.’
 有些人倒十一斗的有，有些人倒十二斗的有

(C.10) *tʰə zǐ (xləmél) lǔʰó=ku kətʰə xləmél=ku i-ptó ni tʰə zǐ tə=wú*
 this way (sifter) plate=INE this sifter=INE DS-dump.3 NFl this way NEU-do.3

ni æxtó xtʂǐ áʷnnə xtʂǐ xtje i-ptó ni TMKN qʰoʷló-ku
 NFl eleven peck twelve peck level DS-dump.3 NFl then pot=INE

nəʷ-χqʰwáʷ wú tʂǐ
 DOWN-cook.3 do.3 GNR

‘Dump the barley from this sifter like this, dump eleven twelve pecks, then broil in the ten-peck pot.’
 像这样从这个筛子里把青稞倒出去，正好倒十一斗十二斗，然后在十斗锅里煮

- (C.11) *nə^ʷ-χq^hwá^ʷ təró^ʷ nə-tʃ^hy p^hu KN mdzæmdzæ hme p^hə*
 DOWN-cook.3 very DOWN-boil cause.3 time very ripe cause.NOM
ri-tʃi tsi tʃi
 need-EXIST COP GNR

‘Need to boil it, need to make it completely cooked.’
 要一直煮开，需要让（青稞煮得熟透了）

- (C.12) *nə^ʷ-mó p^hú ni nə-kákə t^hə ʃ^hə mɔzɪlə t^həvínu nə-kákə*
 DOWN-mushy cause.3 NFL DOWN-crack this barley granule these DOWN-crack
t^hə zí tá^ʷ-tʃó^ʷ pa^ʷ zi-tʃi tsi mə-tʃi mʊ
 this way PROH-become COND good-EXIST COP NEG-GNR CF

‘Make the barley mushy. Every grain of these barely get cracked open. If the barley doesn’t become like this, then it is not OK.’
 让青稞变得软趴趴的，这一粒粒青稞都裂开了，没有变成这样就不行

- (C.13) *nə^ʷ-mó ni nə^ʷ-tá^ʷ-mo p^hú pa^ʷ zi-tʃi tsi mə-tʃi*
 DOWN-mushy NFL DOWN-PROH-mushy cause.3 COND good-EXIST COP NEG-GNR

‘Make it mushy. It’s not OK if it doesn’t become mushy.’
 变成软趴趴的，不变成软趴趴的就不行

- (C.14) *t^hə zí TMKN jǒ i-ptó ni zɪ^ʷ=tə tə^ʷ-nt^há^ʷ p^hu ri tʃi*
 this way then again DS-dump.3 NFL water=ISM1 NEU-reduce cause.3 need GNR

‘Then after doing like this, after the water has been evaporated, need to pour the barley out.’
 然后这样做后，然后水烧干之后需要把青稞倒出来

- (C.15) *zɪ^ʷ=tə nə^ʷ-nt^há^ʷ p^hu ni TM jǒ i-ptó*
 water=ISM1 DOWN-reduce cause.3 NFL then again DS-dump.3

‘After evaporating the water, pour the barley.’
 把水烧干后，把青稞倒出来

- (C.16) *xləméi=ku jǒ i-ptó ni i-bdáli*
 sifter=INE again DS-dump.3 NFL DS-spread

‘Spread out the barley in a big bamboo sieve (should be *xləndə*).’
把青稞倒在更大的竹盘里铺开(Should be a bigger sieve)

- (C.17) TM *i-pó tə-p^hú*
then DS-chilly NEU-cause.3

‘Then make (the barley) cold.’
让青稞冷却下来

- (C.18) *tš* TMKN *ptšĩ k^hæfĩ á^snnə-ro^s tó-mə tšĩ tšĩ*
then then yeast some.people twelve-CL dump.NOM-NMLZ EXIST GNR
k^hæfĩ á^ss^hó-ro^s tó-mə tšĩ tšĩ k^hæfĩ ázĩ-ro^s
some.people thirteen-CL dump.NOM-NMLZ EXIST GNR some.people fourteen-CL
tó-mə tšĩ tšĩ
dump.NOM-NMLZ EXIST GNR

‘Then there are people who pour twelve, thirteen, or fourteen portions of
brewer’s yeast.’
然后倒十二个，十三个，十四个酒曲的人是有的

- (C.19) *t^hə=tó tšəxtí=ku nə^s-xtú*
this=ISML bowl=INE DOWN-pound.3

‘Then break (pound) the yeast in a bowl.’
然后在钵里面把酒曲打碎

- (C.20) *mdzæmdzæ vəvə nə-wú ni və zĩ nə-wú ni*
very fine.RED DOWN-do.3 NFl powder way DOWN-do.3 NFl

‘Make it into very fine powder.’
弄成非常细细的粉末

- (C.21) *tš t^hə=p^hé=ni* TMKN *jiangjin baijiu tsíkæ kə-ptə*
then this=COM=ABL then Jiangjin distilled.liquor a.bit IN-dump.3

‘Then with this pour a bit Jiangjin distilled liquor.’
然后倒一点江津白酒跟酒曲和在一起

- (C.22) *tsíkæ p̄fɿlɣé tə-wú ni tʰə zɿ tə-wú ni t̄ wəpáʰ tʰə ʃʰó*
 a.bit lump NEU-do.3 NFl this way NEU-do.3 NFl then downside this barley
kó-hme-sʰi=tə=pʰe tʰə=pʰé siráʰ rí t̄ʃi
 IN-cooked-NMLZ=ISML=COM this=COM mix need GNR

‘Make it a bit lumpy like this, then mix it with the cooked barley.’
 加一点酒和酒曲和在一起，变成块块的样子，跟煮熟的青稞和在一起

- (C.23) *put̄ʃi xləmél=wu nə-ptó-sʰi=pʰe tʰə=pʰé təʰ-xsiʰrwáʰ*
 just.now sifter=INE DOWN-dump.3-NMLZ=COM this=COM NEU-mix.3
nəʰ-pəʰpt̄ʃəʰ tʰə zɿ tóróʰ nəʰ-pəʰpt̄ʃəʰ KN ɣáʰlaʰ t̄ʃʰítsʰe tó-róʰ t̄je
 DOWN-stir.3 this way very DOWN-stir.3 time approximate time one-CL upon
pəʰpt̄ʃəʰ rí t̄ʃi
 stir.3 need GNR

‘The barley that was just in the bamboo sieve, mix it with the yeast, stir it consistently, need to stir for about one hour.’
 刚才倒在大的竹盘里的青稞，和酒曲和在一起，一直搅拌，大概要搅拌一个小时左右

- (C.24) *tʰə zɿ tə-wú nəʰ-pəʰpt̄ʃəʰ ni t̄ i-pó tə-pʰú ni t̄ tʰə*
 this way NEU-do.3 DOWN-stir.3 NFl then DS-chilly NEU-cause.3 NFl then this
zɿ tə-wú KN t̄ put̄ʃý re qʰoʰló tə-kú
 way NEU-do.3 time then just.now that pot NEU-load.3

‘Stir like this, then cool down the barley and the yeast, then like this, then pour it into the ten-pec pot.’
 像这样搅拌，然后让青稞和酒曲冷却下来，像这样子做，把刚才那个倒到十斗锅里

- (C.25) *xkápʰe qʰoʰló təʰ-t̄ʃiʰpt̄ʃo xtsómei nə-wú ni t̄ tʰə zɿ tə-wú ni*
 ten.peck pot NEU-wash.3 clean DOWN-do.3 NFl then this way NEU-do.3 NFl
t̄ tʰə=kú təʰ-sʰó tə-wú
 then this=INE NEU-full NEU-do.3

‘Wash the ten-peck pot and make it clean, then do it like this, then fill the pot with barley.’
 把十斗锅洗干净，然后像这样子做，把青稞倒满十斗锅

- (C.26) TM *évvə ʃó lə βzé t̄ʃi ɣqáʰqʰo kó-ʃwə ni*
 then DS proof.NOM ?? bring.3 GNR prop.name IN-proof.3 NFl

‘Then bring it there to proof, bring it to *xqaqho* to proof.’
 然后带到那边去醒，带到*xqaqho*去醒

- (C.27) *kə-fwə* KN *tʰə tʃé* *putʃý* *re* *tʰə ʃʰə* *kə-hme-sʰí* *tʃétv*
 IN-proof.3 time this upon just.now that this barley IN-cooked-NMLZ upside
ʃʰə xpu mtʃʰə zǐ *mæ-tʃí*
 barley stalk only good NEG-GNR

‘When proofing the barley, above the cooked barley, it’s not ok if you don’t cover it with barley stalks.’
 在醒的时候，刚才的熟了的青稞上面，必须要用青稞杆杆（盖着）否则不行

- (C.28) *ʃʰə xpu tʰə=tə=qʰaʳ=ɲi* *ɲgwǎ* *qəʳ-tʃʰíʳpʊʳ*
 barley stalk this=ISM1=INS=ABL front IN-cover.3

‘First, use the barley stalks to cover (the cooked barley).’
 先用这个青稞杆杆来盖着

- (C.29) *tʰə tʃé=ɲí* TMKN *kəmó* *kə-ptə*
 this upon=ABL then clothes IN-dump.3

‘Then, on top of this you put a layer of clothes.’
 然后在这一层上面盖一层衣服

- (C.30) *kəmó* *kə-ptə* *tʰə zǐ* *tə-wú* *qəʳ-tʃʰíʳpʊʳ* *təʳ-pʰəʳ* KN TMKN *ʃʰé*
 clothes IN-dump.3 this way NEU-.do3 IN-cover.3 NEU-leave time then night
sʰó-ʃʰé *tʃe* *ri* *trí* *nóʳ* *ɲu* *tʃí*
 three-CL upon then? then smell capable.3 GNR

‘Put the clothes on top to cover, then after three nights, it will reek (of liquor).’
 把衣服盖在上面放着，然后放三晚以后，就会有（酒的）气味。

- (C.31) *trí* *wé* *é-mʊ* *é-wú-sʰí* *mə-wú* *trí* *wé* *təʳ-nóʳ*
 that.time fmr.wine UP-?? Q-do.3-NMLZ NEG-do.3 that.time fmr.wine NEU-smell
i-tú-tʃí *tsi* *tʃí*
 DS-come.3-EXIST COP GNR

‘Whether it has become liquor depends on if the smell of liquor comes out.’
 有没有变成酒，就看那时候有没有酒的气味传出来

- (C.32) *tə^h-nó^h i-tú ni nə^h-f^he=tə s^ho-f^hé βz^hi-f^he tə^h-t^hó^h ri t^hí*
 NEU-smell DS-come.3 NFl two-CL=ISM1 three-CL four-CL NEU-become then then
i-mt^hí ni TMKN énts^ha^h ziwá^h=ku k^hó-t^hə wæj^hi=ku i-pt^hə
 DS-take.out.3 NFl then 1PL.LOC bucket=INE IN-dump wine.jar=INE DS-dump.3

‘Three or four days after the smell of liquor comes out, then you take it out and pour it into the wine jar.’

有气味之后再酿三四天的时候，再把它拿出来倒到我们的酒缸里

- (C.33) *wæj^hi=ku i-pt^hə ni TMKN nde xtjé p^hə^hp^hə^h tsi t^hí k^hæj^hí*
 wine.jar=INE DS-dump.3 NFl then what level leave.RED COP GNR some.people
lí p^he p^hə^h-mə nə t^hí t^hí k^hæj^hí t^h-lí p^hə^h-mə
 month half leave-NMLZ also EXIST GNR some.people one-month leave-NMLZ
nə t^hí t^hí
 also EXIST GNR

‘After pouring the liquor into the wine jar, then you can leave it there for however long you like. There are people who leave it there for half a month, there are also people who leave it there for a month.’

在酒缸里倒了酒后，放多久都可以。有人放半个月也是有的，也有人放一个月。

- (C.34) *t^hə k^hó^hk^hí=xə áeræ k^hæ ri tə^h-xs^hyé KN*
 this self=LOC liquor want.1PL COP2 NEU-think.3 time

‘When someone thinks: ‘We want the liquor’’

自己想要藏酒的时候

- (C.35) *TMKN t^hə=t^hə wæj^hi=tə tə^h-βz^hó ló-βze ni tə-xkú*
 then this=ISM1 wine.jar=ISM1 NEU-take.3 US-bring.3 NFl NEU-carry.on.back.3
ló-βze ni éli áeræ q^hə^h-s^ha^h ló-βze
 US-bring.3 NFl upstream liquor brew.NOM-NMLZ US-bring.3

‘Then bring out the liquor from the wine jar, bring it to the brewing place.’

然后从酒坛里把酒背出来，带到那边酿藏酒的地方去

- (C.36) *áeræ q^hə^h-s^há^h-wə=tə nə haishi q^hə^hl^hó xkəp^he=i q^hə^hl^hó*
 liquor brew.NOM-NMLZ-downside=ISM1 ?? still pot ten.peck=ISM2 pot
tsi t^hí
 COP GNR

‘Beneath the brewing place, the pot is still the ten-peck pot.’
酿酒的地方下面放的锅还是十斗锅

- (C.37) *tʰə tʃé kʰoɣzɔ́ʰ kə́-fy*
this upon collector IN-place.3

‘Place a collector on top of it.’
上面放一个集酒器

- (C.38) *kʰoɣzɔ́ʰ=qʰaʰ=ɲi* TMKN *éntsʰaʰ jændzɪ́=ɲi* *tə́-rúʰ ri tʃí*
collector=INS=ABL then 1PL.LOC conduit.tube=ABL one-CL need GNR

‘Use a collector, then need a conduit tube...’
用了集酒器，还需要一个引酒管

- (C.39) *jændzɪ́=tə* *tsʰo éntsʰiaʰ áeræ* *i-tú-sʰaʰ* *tsi tʃí*
conduit.tube=ISML now 1PL.LOC liquor DS-come.3-NMLZ COP GNR

‘Now the conduit tube is where the liquor flows out from.’
现在引酒管就是我们的酒流出来的地方

- (C.40) *áeræ i-tú-sʰaʰ* *wəkú jǒ* *ziʰxtóʰ nə-wú* *ɲi tʰǒ jǒ sʰo*
liquor DS-come-NMLZ downside again puddle DOWN-do.3 NFl here again three

xʃí qʰoʰlɔ́=ɲi tʰi ví ri ʃi tʃí
peck pot=ABL this way ?? EXIST GNR

‘There needs to be a puddle beneath the conduit tube, then need to place a three-peck pot there.’
引酒管下面需要再有一个水洼，然后那儿（水洼里面）需要放一个三斗锅

- (C.41) *sʰo xʃí qʰoʰlɔ́=xə tʃe* *pʰu=xə pʃý* *ɸwəʰ tʃí*
three peck pot=LOC upon lid=LOC hole EXIST GNR

‘There is a hole in the lid on top of the three-peck pot.’
三斗锅的盖子上有个洞

- (C.42) *tʰǒ jændzɪ́=tə* *tʰə zí tə-wú* *ɲi kupáʰ kʰoɣzɔ́ʰ=xə* *nə tʰǒ*
this conduit.tube=ISML this way NEU-do.3 NFl inside collector=LOC also here

áeræ nə-tú-sʰaʰ *tʰi ví hnə* *zi ri ɸwəʰ tʃí*
liquor DOWN-come-NMLZ this way mouth way ?? EXIST GNR

‘Then conduit tube is like this, inside of the collector there is a mouth-like place that allows liquor to flow down.’

然后引酒管就是这样，里面的集酒器也有一个像嘴一样的让酒流下去的地方

- (C.43) *t^hǒ=ni wəpá^ʰ t^hə s^ho xtsí q^ho^ʰló=xə p^hǒ tje ptfý ʁwə^ʰ tsí*
 here=ABL downside this three peck pot=LOC lid upon hole EXIST GNR

‘From there, the three-peck pot down there also has a lid with a hole.’

从这儿下去，下面那个三斗锅的盖子上也有一个洞

- (C.44) *t^hə-ndzæ kə-xtsixtswə ni TMKN t^hǒ=ni áeræ t^hǒ=ni nə-tú tsí*
 3-DU IN-connect NFl then here=ABL liquor here=ABL DOWN-come.3 GNR

‘They two (collector and the three-peck pot) are connected, then the liquor flows down from there.’

它们（集酒器和三斗锅）连接起来，然后从这儿酒就流下来了

- (C.45) *tí t^hə zí tə-wú k^hoyzú^ʰ kə-fy k^hoyzú^ʰ jæji*
 then this way NEU-do.3 collector IN-place.3 collector surrounding
sí=q^há^ʰ=ni tə-zəβlɥe p^húni lá^ʰ p^húni é-tu-s^ha^ʰ ma^ʰ-ʁwə^ʰ-tí
 dough=INS=ABL NEU-fill.3 very air very UP-come-NMLZ NEG-EXIST-EXIST
tə-wú tə-βzəβlɥe wú tsí
 NEU-do.3 NEU-fill.3 do.3 GNR

‘Then place the collector on the pot, then use the dough to fill in the gap around the collector, so that there is no place for air to go out.’

然后像这样把集酒器放在锅上，然后在集酒器周围用面团填补缝隙，为了让气没有出去的地方而填补缝隙

- (C.46) TM *t^hə tje=ni k^hoyzú^ʰ tje p^ho-fǎ=tə énts^ha^ʰ da^ʰtí tsí tsí*
 then this upon=ABL collector upon cover-NMLZ=ISML 1PL.LOC stone COP GNR

‘Then on top of it, on top of the collector the thing used to cover is slate.’

然后在集酒器上面盖的东西是我们的石板

- (C.47) *k^hondá t^hə zí lje_lje t^hə zí=q^ha^ʰ tə-p^hó ni p^húni lá^ʰ p^húni*
 slate this way thick.RED this way=INS NEU-cover NFl very air very
i-tú-s^ha^ʰ ma^ʰ-ʁwə^ʰ-tí tə-wú tə-p^hó ni t^hə zí
 DS-come.NOM-NMLZ NEG-EXIST-EXIST NEU-do.3 NEU-cover NFl this way

tə-wú-s^hi tsi tʂí
NEU-do.3-NMLZ COP GNR

‘Slates as thick as this, cover (the collector) using them. There almost isn’t any room for air to come out, do it like this.’

像这样厚厚的石板，用它盖上去，气几乎没有出来的地方，像这样做

(C.48) *tǐ wə ʒǐ^ʳ tə-tʂ^hy tə-tʂ^hy KN*
then downside water NEU-boil NEU-boil time

‘Then the water below is boiled.’

然后下面的水开了

(C.49) *lúpi tǐ é-tu ni áηo tje nə-p^hó-s^hi=xə t^hǎ k^hondé=xə*
steam then UP-come.3 NFl upside upon DOWN-cover-NMLZ=LOC this slate=LOC

t^hə=xə=ni tǐ ʒǐ^ʳ riló zi tə^ʳ-tʂó^ʳ ni
this=LOC=ABL then water drop way NEU-become NFl

‘The steam goes up to the slate, then the water forms drops.’

蒸汽上升到上面盖的石板上，形成了水滴

(C.50) *tǐ áwə=tə s^ho xʂí q^ho^ʳló-wə=tə ʒǐ^ʳ=tə pópó tsi tʂí*
then downside=ISM1 three peck pot-downside=ISM1 water=ISM1 chilly.RED COP GNR

‘Then the water beneath the three-peck pot is chilly.’

然后下面的三斗锅下面的水是凉凉的

(C.51) *tǐ t^hə zǐ nə=wú ni áwə pópó=ni ʒǐ^ʳ pópó=ni*
then this way DOWN-do.3 NFl downside chilly.RED=ABL water chilly.RED=ABL

t^hə zǐ=ni tə-wú ni áwə kát^hə énts^ha^ʳ jændzǐ-ku nəwú
this way=ABL NEU-do.3 NFl downside this 1PL.LOC conduit.tube=INE downside

nə-xtf^wə ní tǐ áwə s^ho xʂí q^ho^ʳló=ku nə-tú tʂí
down-suck NFl then downside three peck pot=INE DOWN-come.3 GNR

‘Then it is chilly down there, the water is chilly. After doing like this, our conduit tube below will suck (the liquor drop) out, then (the liquor drop) will flow down into the three-peck pot.’

然后下面是凉凉的，水是凉凉的，像这样做了之后，下面我们这个引酒管里面会把（酒滴）吸出来，然后就流到下面的三斗锅里面了

- (C.52) *áeræ tʰə zí tə-wú nə-tú KN zí ŋgwə nə-tú KN*
 liquor this way NEU-do.3 DOWN-come.3 time sup front DOWN-come.3 time
tə-βráʰ tə-βráʰ nə-tú tʂí
 one-CL one-CL DOWN-come.3 GNR

‘The distilled liquor drops down like this. At first it flows down by drops.’
 烧酒就是这样流下来的，最先流下来的时候是一滴一滴的

- (C.53) *χáʰlaʰ móməʰ tjerí tiri χáʰlaʰ tsíkæ putsílaʰ tje tʰéʰtʰéʰ rí*
 almost behind that.time that.time almost a.bit barley.stalk level thin.RED ??
nərí nərí nánə nə-tú gu-tʃí tsi tʂí
 non-intermittent non-intermittent slow DOWN-come.3 need.3-EXIST COP GNR

‘When it is in the later stage, the liquor drops will flow down in a thin stream slowly.’
 差不多到后面那个时候，酒滴很细很细地不断慢慢慢慢流下来

- (C.54) *tʰə zí nə-wú KN zí ŋgwə KN áeræ kə-ŋgu KN tǎʰ nde zí*
 this way DOWN-do.3 time SUP front time liquor IN-taste time then what way
tʂóʰ rí zizí jæ-tú rí mə-tú rí tʰí ví
 become COP2 delicious.RED UP.Q-come.3 COP2 NEG-come.3 COP2 this way
putsílaʰ tʰí ví χáʰlaʰ seʰxséʰ tə-ptʰí xtje jæ-rə mə-rə xtje rí
 barley.stalk this way almost long.RED one-span level UP.Q-?? neg-?? level ??
tʃy tʂí tə-ptʰí mə-tsʰítsʰə rí tʰí ví fí tʂí tʰə=qʰáʰ=ɲi áeræ
 EXIST GNR one-span NEG-measure COP2 this way EXIST GNR this=INS=ABL liquor
ŋgú-sʰaʰ tsi tʂí
 taste-NMLZ COP GNR

‘After doing like that, first taste it, to see how the liquor has become, whether or not it has become tasty. Use barley stalks that are about one span long. There are barley stalks that are around or more than one span long. They are used to taste the liquor.’
 像这样做了后，先尝一下，看烧酒变成什么样子了，有没有变好喝。用差不多一ka左右长的青稞杆杆，用一尺左右、不止一尺的青稞杆杆有，它就是用来尝烧酒的工具

- (C.55) *kə-ŋgu* KN *mzæmzæ* *qə^ʷqə^ʷ* *tsi* *tʂí* *p^húni* *liushidu* *yishang* *p^húni*
 IN-taste time very dense.RED COP GNR very 60.degree above very
nə^ʷwá^ʷ *i-mt^hí* *mə^ʷ* *tə^ʷ-xsú* *K* *mə^ʷ* *mbə-tʂí* *tsi* *tʂí* *t^hi* *ví*
 outside DS-take.out.3 fire NEU-light.3 time fire kindle-EXIST COP GNR this way
qə^ʷqə^ʷ *tsi* *tʂí*
 dense.RED COP GNR

‘When tasting the liquor, it is very strong, approximately beyond sixty proof. Bring it to the outside from the three-peck pot, and light a fire. If the fire can burn this is how strong it is.’

尝酒的时候，酒非常浓，差不多有六十度以上。从三斗锅里拿到外面，用火点，是可以点燃的，就是这么浓

- (C.56) *wæ* *ærae* TM *t^hə* *zí* *t^hə* *zí* *tə-wú* *nə-tú* *nə-tú*
 fmt.wine liquor then this way this way NEU-do.3 DOWN-come.3 DOWN-come.3
p^hu KN *ŋgu* *ʃí* *ŋgu* *ʃí* *nə-wú* *tí* *χá^ʷla^ʷ* *tʂ^hísi* *tje* KN
 cause.3 time taste first? taste first? DOWN-do.3 then almost just.right upon time
qə^ʷntʃó *tʂ^hísi* *tə^ʷ-tʂó^ʷ* *K* *TMKN* *q^hwa^ʷ* *tʂí*
 bland? just.right NEU-become then take.apart.3 GNR

‘Make liquor flow down like this, and taste and taste. When it is about the right strength, then you can take out the three-peck pot (to pour out the liquor).’

像这样让烧酒慢慢流下来，尝了又尝，差不多到浓淡合适的时候，就可以把三斗锅取出来了（倒酒）

- (C.57) TM *tə^ʷ-q^hwá^ʷ* KN *æŋʊ* *rʊs^há^ʷ=ni* *æŋʊ* *k^hoyzú^ʷ* *tje* *p^hǒ*
 then NEU-take.apart.3 time upside immediately=ABL upside collector upon lid
nə-bdə-s^hi=tə *rʊs^há^ʷ* *p^hǒ* *rǒ* *tə-xk^hwá* KN *lúpi* *tʂáelæ*
 DOWN-cover-NMLZ=ISML immediately lid up NEU-uncover time steam all
t^hǒ *rǒ* *é-tu* *tʂí*
 here up UP-come.3 GNR

‘Then after taking apart the three-peck pot, uncover the lid from the collector above immediately. Then all the steam comes out from there.’

然后拆了三斗锅后，立刻把上面的集酒器的盖子立刻揭开，然后蒸汽就全部从那儿出来了

- (C.58) *TMKN* *jændzǐ=tə* *q^hwa^ʷ* *tʂí*
 then conduit.tube=ISML take.apart.3 GNR

‘Then take apart the conduit tube too.’
然后把引酒管也拆掉

- (C.59) TM *wəpá^ɣ=tə* *ʒí^ɣ=kú* *t^hǒ* *áɛræ* *tje* *təŋú* *p^hǒ* *tje* *təŋú* *da^ɣtʃí*
then downside=ISML water=INE this liquor upon also lid upon also stone
nə-xt^hɥé-s^hí *ʃí* *tʃí*
DOWN-press-NMLZ EXIST GNR

‘Then in the water (stream) below, there is still a lid on the liquor (three-peck pot). There is a stone weighing down the lid.’
然后下面小溪里（三斗锅）的那个烧酒上面还有盖子，盖子上有石头压着

- (C.60) *t^hə=tə* *nə-xt^hɥé-s^hí=tə* *rǒ* *í-mt^hɪ*
this=ISML DOWN-press-NMLZ=ISML up UP-take.out.3

‘Remove the weight.’
把压着的东西取开

- (C.61) TMKN *áɛræ=tə* *tǐ* *tə* *rǒ* *í-mt^hɪ* *tǐ* *<cháhu>=ku* *nəwú* *ptə*
then liquor=ISML then ?? up UP-take.out.3 then tea.pot=INE downside dump.3
tʃí
GNR

‘Then take out the three-peck pot and pour the liquor into the tea pot.’
然后把三斗锅取出来，把酒倒到茶壶里

- (C.62) TZ *nə-wú* *ni* *tǐ* *áɛræ* *nə-chahu* *s^ho-chahu* TV
this.way DOWN-do.3 NFl then liquor two-CL three-CL this.way
i-tú-s^hí TV *ni* *k^hí* *tʃí*
DS-come.3-NMLZ this.way say.NOM practice GNR

‘Do it like this, then you will brew two or three pots of liquor. It’s been said like that for a long time.’
像这样子做了后，然后酿出了两茶壶三茶壶的酒，长久以来有这种说法。

- (C.63) *áɛræ* *q^hə^ɣ* *xtó* *xtsiwú* TMKN *áɛræ* TZ *rí* *tsí* *tʃí*
liquor brew.NOM method mainly then liquor this.way ?? COP GNR

‘The brewing method is mainly like that.’

酿酒的方法主要就是这样子的

APPENDIX D

CHEESE MAKING

QVY-331

- (D.1) *tĩ ĩĩmdzə kʰimí tʃǒ tʃĩ-ptʰə ɲi tĩ nə-xtʃyé*
 then afternoon cow here ??-drive.3 NFl then DOWN-squeeze.3

‘In the afternoon, drive the cows back, then milk them.’
 下午的时候把牛往回赶，然后挤奶

- (D.2) *ǒjaʷ tʰə=tə púmu rí-ptʰə ɲi yəzi nəwáʷ nə-fý*
 OK this=ISM1 tonight UP-bring.3 NFl window outside DOWN-place.3

‘Bring up the milk, place it outside of the window tonight.’
 把牛奶拿上来，今晚把它放在窗外

- (D.3) TM *əsi náʷri ǒ tʰə=tə əwə nə-pʃʰí nə-xtʃyé*
 then tomorrow morning again 3=ISM1 downside DOWN-go.3 DOWN-squeeze.3

ɲi rí-ptʰə ɲi tʰə-ndzə náʷ-roʷ=tə təʷ-xtʃíʷ nə-wú tĩ
 NFl UP-bring.3 NFl 3-DU two-CL=ISM1 NEU-mix DOWN-do.3 then

<ɲiqi>=ku nə-ptə təʷ-xtsə
 machine=INE DOWN-dump.3 NEU-separate

‘Then next morning, milkers go downstairs and milk the cows, then bring up the milk. Mix these two (fresh milk and the old milk) and pour it into the machine to separate (skim milk and butter).’
 然后第二天早上下去挤奶，然后把牛奶拿上来，把这两个奶混在一起，然后倒到机器里处理（把脱脂牛奶和酥油分出来）

- (D.4) TM *tʰə mó=tə zí ɲiqi soqó tə-róʷ=ku tʃy tʃí* TMK
 then this butter=ISM1 3.REFL machine pot one-CL=INE EXIST GNR then

wəʃǒ tə-róʷ=tə kʰəkʰi nə-wú ɲi tʰekí tje ké-ptə
 skim.milk one-CL=ISM1 self DOWN-do.3 NFl stove upon IN-dump.3

‘Then, there’s a separate pot for butter, then separate the milk, pour the milk into the pot on the stove.’
 然后酥油它自己有个单独的锅，然后把牛奶分开（接的），然后把脱脂牛奶倒到灶上的锅里

- (D.5) *tĩ tʰə=tə rí-tʰy tə-pʰú tsíkæ qʰaʷlǐli=tə nə kə-fwə ni ptʰəræ*
 then this=ISML UP-boil NEU-cause.3 a.bit hot=ISML ?? IN-stand.3 NFl cheese
və-fə=tə qʰaʷlǐli zi rí kə-fwə ni tsíkæ tə-pʰəʷptéʷ zi rí
 do.NOM-NLZ=ISML hot way ?? IN-stand.3 NFl a.bit NEU-clot way ??
təʷ-tʂóʷ kʰɪ
 NEU-become time

‘Then make the skim milk boil, then make it hot, let it stand, make the cheese material hot and let it stand, then it will clot.’

然后把脱脂牛奶烧开。然后让它变得热乎乎的，然后让牛奶醒着，让牛奶也热乎乎
 的，然后让牛奶醒着，然后就变得稍微结块的样子了

- (D.6) *tʰə ptʰəræ və-fə tsí tʂí kʰɪ*
 this cheese do.NOM-NMLZ COP GNR time

‘This is the material for making cheese.’

这个就是做奶渣子的材料是的

- (D.7) *TMKN ŋǒ kətʰə tś-xkwə=tə TZ nə-wú kə-fwə*
 then again this one-CL=ISML this.way DOWN-do.3 IN-stand.3

‘Then do it like this before once again, then let the milk stand.’

然后再像之前那样做一遍，然后把牛奶醒着

- (D.8) *TM məʷ ŋǒ tś-xkwə ʃimdzə=tə nə-xtʃyé ŋǒ ási*
 then after again one-CL afternoon=ISML DOWN-squeeze.3 again tomorrow
náʷri=tə nə-xtʃyé tʰə=tə nóʷ=tə nəʷ-xtsó ŋǒ tʰekí
 morning=ISML DOWN-squeeze.3 this=ISML milk=ISML DOWN-separate again stove
tje kə-fy ni tĩ tʃó kə-ptə tʰə wəʃú náʷ-roʷ=tə təkʰí
 upon IN-place.3 NFl then yogurt IN-dump.3 this skim.milk two-CL=ISML together
nə-wú ni
 DOWN-do.3 NFl

‘Then one more time again, milk the cows in the afternoon and in the morning. Then process (separate) the milk and place it on the stove. Then pour the yogurt (the clotted milk) in, and mix the skim milk with yogurt.’

然后之后再一次，下午和早上挤奶，然后把牛奶处理，放到灶台上，然后倒酸奶进去
 （之前做的结块的酸奶），把脱脂牛奶和酸奶两个合到一起

(D.9) *tĩ ptʰə̀ræ=tə tə̀-pʰə̀pteʰ jĩ tə-tʰy tə-pʰú ni tĩ i-ptə*
 then cheese=ISM1 NEU-clot finish? NEU-boil NEU-cause.3 NFl then DS-dump.3

tʰə=tə qolú=ku i-ptə ni qolú=ku kə-fy tĩ ævə
 this=ISM1 pot=INE DS-dump.3 NFl pot=INE IN-place.3 then downstream

jaʰqəʰ i-βzə kə-fy ni i-pú tə-pʰú
 outside DS-bring.3 IN-place.3 NFl DS-chilly NEU-cause.3

‘Then boil the yogurt and the skim milk, then the cheese will clot again. Then pour the boiled stuff into another pot and bring it outside and make it cool down.’
 然后把结块的酸奶和脱脂牛奶烧开，然后奶渣子就又结块了。然后把煮好的东西倒到另一个锅里放着，把它拿到外面去放凉

(D.10) *tĩ tʰə=tə jǔ TV ptsjé-sʰaʰ ri jĩ tʰí tĩ tʰə=kú tə-ptsjé*
 then this=ISM1 again this.way filter-NMLZ ?? EXIST GNR then this=INE NEU-filter

ni tĩ zĩ=tə nə̀-βráʰ tə-pʰú
 NFl then water=ISM1 DOWN-drop NEU-cause.3

‘Then for the thing that was boiled, there’s a sifter like that, filter it in the sifter, then make the water drop out.’
 然后把刚才煮了的东西然后有一个这样的筛子，在里面过滤，然后让水滴下来

(D.11) *ndzə mə̀-ndzə nə-wú nə̀-βráʰ tə-pʰú*
 same NEG-same DOWN-do.3 DOWN-drop NEU-cause.3

‘Drain the water properly.’
 巴巴适适地让水流干

(D.12) *TMK tsíkæ pʰələpʰaʰlí tə̀-ʰúʰ-sʰi=tə lje=qʰaʰ tə̀-ziʰβzəʰ*
 then a.bit big.clot NEU-become-NMLZ=ISM1 hand=INS NEU-crush.3

‘Then it becomes big clots, use your hands to crush it.’
 然后变成了大块大块的东西，用手把它捏碎

(D.13) *ójaʰ TM tʰə=tə éndəxo í-βze ni mətʰi=ku i-kʰú ni*
 ok then this=ISM1 roof UP-bring.3 NFl sun=INE DS-sun.dry.3 NFl

‘Then bring it (the crushed cheese) to the roof to have it sun dried.’
 然后把（捏碎了的奶渣子）拿到楼上晾晒

- (D.14) *tǐ pwés^hús^hu tʂoʔ tʂí mǎtsi t^hekó nǎ-tsó lǎ t^hǎ=tó*
 then white become GNR sun good DOWN-shine ?? this=ISM1

‘If it’s sunny, then it’ll become white.’
 如果太阳好的话，就会变得白白的

- (D.15) *její k^hoŋk^hó tʂ^hóʔptʂ^hóʔ k^hoŋk^hó tʂoʔ ŋu-tǐ tsi tʂí*
 very pretty white.RED pretty.RED become be.able.3-EXIST COP GNR

‘It will become very pretty.’
 会变得非常白非常漂亮

- (D.16) *t^hekí tje kú-fy t^hekí tje éntsæ ləkǎpwǎ s^hi TV tje kǎ-fy*
 stove upon IN-place.3 stove upon DU.LOC slate and this.way upon IN-place.3

KN *ptʂ^hǎrá=tǎ tsíkæ ɲík^hik^hi rǐ tʂoʔ ŋu tʂí*
 time cheese=ISM1 a.bit red ?? become be.able.3 GNR

‘Place it on the stove, place it on the slate on the chimney and stuff, then the cheese will become a bit red (should be yellow).’
 放到灶台上，放到我们灶台上的（烟囱的）石板等上面，然后奶渣子会变得有点红（应该是黄色）

- (D.17) *mǎtsi=wu i-k^hú k^hɿ její k^hóŋk^hó tʂ^hóʔptʂ^hóʔ tʂoʔ tʂí*
 sun=INE DS-sun.dry.3 time very pretty.RED white.RED become GNR

‘Dry it under the sun, it will become very pretty and white.’
 在太阳下晒，会变得非常好看，白白的

- (D.18) *tǐ TM t^hǎ=tó mǎtsi=ku i-k^hú k^hɿ TM tǐ tǎ-zǐ wú tʂí*
 then then this=ISM1 sun=INE DS-sun.dry.3 time then then NEU-good finish.3 GNR

‘Then dry it under the sun, then it’ll be done.’
 然后把它在太阳底下晒，就好了

APPENDIX E

CHEESE MAKING-CONTINUED

QVY-332

- (E.1) *tʃó kə-fwə-sʰi=tə tʃʰý pʰə ri tʃi*
yogurt IN-rest.3-NMLZ=ISML boil cause.NOM need GNR

‘The yogurt that is being rested now, do you need to boil it (the milk you used to make yogurt) before?’

现在醒着的酸奶，（之前）要把做酸奶的牛奶烧开吗？

- (E.2) TM *tsíkæ qʰaʰsʰisʰi ri ʃə gu tʃi*
then a.bit hot ?? rest.NOM need.3 GNR

‘Then need to rest it while it’s still hot.’

需要在热乎乎的时候醒着

- (E.3) TM *ifwə kə-tu KN tʃ ifwə tʃ tʃó təʰ-xfwəʰ ni*
then later.today IN-come.3 time then later.today then yogurt NEU-dump.3 NFl
tʃ təʰ-pəʰpʃəʰ ni tʃ tʃó sʰi putʃi wəʃó náʰ-roʰ=tə tʃ
then NEU-stir.3 NFl then yogurt and just.now skim.milk two-CL=ISML then
təʰ-pəʰpʃəʰ ni tʃ pʰəʰléʰ sʰi kirí təʰ-tʃóʰ
NEU-stir.3 NFl then dairy.cake and sour.soup NEU-become

‘Then when you come back this afternoon, then pour the yogurt (into the milk that was rested), then stir it. Then stirring the yogurt and the skim milk just then, then it becomes a ‘milk cake’ and whey.’

然后今天下午回来的时候，把酸奶倒到醒着的牛奶里，然后搅拌，然后酸奶和刚才的脱脂牛奶两个搅拌混着，然后就变成了原料（奶饼）和汤（酸水）

- (E.4) *tʃ jé tə-pʃi ni*
then separation NEU-separate NFl

‘Then separate these two.’

然后就把二者分开了

- (E.5) *ptʰəɾæ ʃǎ-ʃə=tə* TZ *nǔ mæ-tsí áwə*
 cheese rest.NOM-NMLZ=ISML this.way say.LSG NEG-GNR downside
nə-xtʃǎ wú məʳ áɲʊ tje i-tú KN tʰə
 DOWN-squeeze.NOM finish.3 after upside upon DS-come.3 time this
wəʃó=tə tʰə nde ɲi tʃi
 skim.milk=ISML this what say.3 GNR

‘I’m not talking about the thing that’s being rested. After milking, then bring it up, that skim milk, what’s it called?’

我说的不是醒着的那个东西。在下面挤完奶后拿上来，那个脱脂牛奶叫什么来着吧？

- (E.6) *tʰə nǔʳ xtsó ri tʃi mʊ*
 this milk process need GNR CF

‘That milk needs to be processed (separated).’

那个牛奶需要处理的

- (E.7) *mæ-tsí æ ʃ-mtʰɪ-sʰi=tə* *nǔ tʰə áwə nə-xtʃǎ*
 NEG-COP ah UP-take.out.3-NMLZ=ISML ?? 3 downside DOWN-squeeze.NOM
wú məʳ ʃ-mtʰɪ-sʰi=tə áɲʊ tʰekí tje kǎ-ʃy KN tʰy
 finish.3 after UP-take.out.3-NMLZ=ISML upside stove upon IN-place.3 time boil
pʰə ri æ-tʃi sʰǎ tʃy pʰə mæ-rí tsikæ qʰaʳqʰáʳ və
 cause.NOM need Q-GNR or boil cause.NOM NEG-need a.bit hot do.NOM
rí tʃi
 need GNR

‘I’m not saying that. The thing that was taken out, after milking cows down there, then bring it up and place it on the stove, do you need to boil it up? Or just make it a bit hot?’

我说的不是这个。拿出来，那个下面挤完奶之后，带上去的，放到灶台上，需要烧开吗？还是不需要烧开，只要烫烫的就可以？

- (E.8) *tʰǎ rǎ ʃ-ptʰə ɲi tsikæ qʰaʳsisi tǎʳ-tʃóʳ ɲi TM xtsó gu*
 3 upward UP-bring.3 NFl a.bit hot NEU-become NFl then process need.3
tʃi mʊ ɲiqi=ku tǎʳ-xtsó ɲi
 GNR CF machine=INE NEU-process NFl

‘After bringing the milk up, make it a bit hot, then need to process (separate) it, process it in the machine.’

把牛奶带上去后，稍微弄热，然后需要处理牛奶

- (E.9) *jɪqi=ku tə^ɣ-mó^ɣ-xtso-s^hi=tə kó-fwə-s^hi=tə ʒǔ*
machine=INE NEU-NEG-process-NMLZ=ISM1 IN-rest.3-NMLZ=ISM1 whole.yogurt
ni tʃi
say.3 GNR

‘The yogurt that is not processed and fermented in the machine is called whole milk yogurt.’

机器里没有处理就发酵的酸奶叫jou（全脂酸奶，里面有酥油）

- (E.10) *t^hæ ʒǔ ni tʃi*
3.LOC whole.yogurt say.3 GNR

‘It’s called whole milk yogurt.’

它叫做jou

- (E.11) *t^hə ʒǔ=tə t^hə tsíkæ tʃy p^hə ri æ-tʃi*
this whole.yogurt=ISM1 3 a.bit boil cause.NOM need Q-GNR

‘Does this yogurt need to be boiled?’

这个jou需不需要烧开

- (E.12) *ʒǔ=tə tənú mó i-mt^hi wú mæ-tʃi mó*
whole.yogurt=ISM1 still butter DS-take.out.3 finish.3 NEG-GNR butter
i-mó-nt^hi-s^hi=xə ni tʃi
DS-NEG-take.out.NOM-NMLZ=LOC say.3 GNR

‘Until now, the butter is not singled out from the yogurt yet, the thing without butter hasn’t taken out yet is called (jou).’

jou到现在为止酥油还没取出来。酥油没有取出来的叫（jou）

- (E.13) *t^hə k^hək^hi pt^həræ=xə p^húni chansheng tʃy mæ-tʃi*
this other cheese=LOC totally formation EXIST NEG-GNR

‘This is something else, is totally irrelevant to the formation of cheese.’

这个是另外的，和奶渣子（的形成）完全没有关系

(E.14) *tʰə tʰə̃ nə-wú lə tʰí-fə tsi tʂí*
 this this DOWN-do.3 ?? drink.NOM-NMLZ COP GNR

‘This, after making this, it’s for drinking.’
 这个做了之后是喝的

(E.15) *ptʃʰərə́ ʃə́-fə=tə nóʷ é-xtso ni wəfú ni tʂí*
 cheese rest.NOM-NMLZ=ISM1 milk UP-process nfl skim.milk say.3 GNR

‘The milk for making cheese is the processed skim milk.’
 做奶渣子的牛奶是处理过了的脱脂牛奶

(E.16) *wəfú wəni ni tʂí*
 skim.milk whole.milk say.3 GNR

‘It’s called skim milk and whole milk.’
 叫脱脂牛奶和全脂牛奶

(E.17) *mó tʃy tʃí lo-tʃí=tə=xə wəni ni tʂí*
 butter EXIST EXIST with-EXIST=ISM1=LOC whole.milk say.3 GNR

tə-róʷ=tə=xə wəfú ni tʂí
 one-CL=ISM1=LOC skim.milk say.3 GNR

‘The one that contains butter is called whole milk, the (other) one is called skim milk.’
 有酥油的叫全脂牛奶，另外一个（反之）叫脱脂牛奶

(E.18) *wəfú é-tʃy tə-pʰú ni é-tʃy tə-pʰú TM ipáʷ i-ptə*
 skim.milk UP-boil NEU-cause.3 NFl UP-boil NEU-cause.3 then side DS-dump.3

TM *kə́-fəβri ni tʰə mə-gwə́ ljesʰáʷ nə-kú ni χáʷlaʷ tsíkæ qʰaʷsisi*
 then IN-look.3 NFl this NEG-only finger DOWN-load.3 NFl about a.bit hot

táʷ ptʃʰərə́ və tə-gú kʰɪ tsíkæ qʰaʷqʰáʷ tje=ni tʃó ʒiʷtí
 then cheese do.NOM NEU-need.3 time a.bit hot.RED upon=ABL yogurt starter

kə́-ptə TM kə́-fwə tʂí
 IN-dump.3 then IN-rest.3 GNR

‘Boil the skim milk, then pour it to (the pot that was placed on) the side. Then look, in addition to that, need to put the finger in it (to test the temperature). Then

when it's almost hot, if you need to make cheese, you need to put starter yogurt in it, then let it ferment.'

烧开脱脂牛奶，然后把它倒在旁边（的锅里）。然后要看，不仅如此，还要用手指伸进去（试探温度）。然后差不多有些热乎乎的时候，如果做奶渣子的话，要倒酸奶引子，然后醒着

(E.19) *q^ha^ssísi*
hot

'Hot.'
热乎乎的

(E.20) *ké-fwə* KN *tə^s-p^hə^spte^s ni p^hə^slé^s p^hə^slé^s tə-wú wə t^hə pt^hy^xkú*
IN-rest.3 time NEU-clot NFl big.clot big.clot NEU-do.3 downside this sour.water
pt^hy^xkú nə-wú ni k^hək^hi=tə je tə-pfī-s^hi tsi t^hí
sour.water DOWN-do.3 NFl fall.apart=ISML separation NEU-separate-NMLZ COP GNR

'When fermenting, it will clot, the cake will be cake, the sour water will be sour water. They will separate.'

醒着的时候，结块了，奶饼是奶饼，酸水是酸水，分开了。

(E.21) *tə-ptsjé wú t^hí*
NEU-sift finish.3 GNR

'It's filtered already.'
已经过滤了

(E.22) TMKN *t^hǎ nó^ss^hi jǒ tə^s-xtsó* KN *wəfǔ fī t^hí t^hǎ*
then this.LOC next.day again NEU-process time skim.milk EXIST GNR this
t^hó fə nde zǐ mǎ-t^hí t^hə áku q^ho^sló=ku q^s-f^hwə^s put^hire=tə
yogurt rest what good NEG-GNR 3 inside pot=INE IN-dump.3 just.now=ISML
t^hó s^hi t^hǎ áku tə^s-xsúra^s ni tə^s-xsúra^s tǐ tə-t^hy p^hu
yogurt and 3 inside NEU-mix NFl NEU-mix then NEU-boil cause.3

'Then the next day process the fresh milk, then there will be skim milk. No need to rest the yogurt. Pour the skim milk into the pot, then stir with the yogurt (made yesterday), then boil it.'

然后第二天再处理（刚刚挤的）牛奶，就有脱脂牛奶了。醒酸奶什么的不需要。把脱脂牛奶倒进锅里，再把刚才那个（昨天做的）酸奶和它在锅里搅拌，然后煮开

- (E.23) *tə-tʰy pʰu TMKN tʃ i-ptó ji wəpáʳ tʃolə=ku i-ptó i-ptsje*
 NEU-boil cause.3 then then DS-dump.3 NFL downside sieve=INE DS-dump.3 UP-sift

‘Boil it, then pour it into the sieve and filter it.’
 煮开后，然后倒到筛子里过滤

- (E.24) TZ *tə-wú KN TM ptʰiræ*
 this.way NEU-do.3 time then cheese

‘After doing it like this, then, cheese...’
 像这样做了之后，然后，奶渣子。。。’

- (E.25) TM *tʃ áŋv əndóxo mótʃi=ku í-βze ji vəvə tə-wú ji*
 then then upside roof sun=INE UP-bring.3 NFL fine.RED NEU-do.3 NFL
tə-tsívə ji mótʃi=ku i-kʰú tə mótʃi=wu tʰə kʰɔŋkʰó tʃʊʳ tʃí
 NEU-crush NFL sun=INE DS-sun.dry.3 ?? sun=INE 3 pretty.RED become GNR

‘Then bring the cheese upstairs and dry it under the sun, make it small, and crush it. Dry it under the sun, then it’ll become pretty.’
 然后把奶渣子带到楼上太阳底下晒，弄得小小的，然后揉碎。就这样在太阳下晒，然后会变得很漂亮

- (E.26) *ǒ əndzæ kótʰə ləkúpwə tje tʰekí tje kə-fy χaʳjó pʰv sʰi*
 oh 1DU.LOC this slate upon stove upon IN-place.3 aluminum lid and
 TV *tje nə-wú njíkʰikʰi kʰɔŋkʰó tʃʊʳ mæ-tʃí*
 this.way upon DOWN-do.3 red pretty.RED become NEG-GNR

‘Place it on our slate, on the stove, or on the aluminum pot lid, and so on. Do it like this, then it’ll become red, then it’s not pretty.’
 然后放到我们的灶台上的烟囱石板上，或者铝锅盖上，等等，像这样做，就会变得红彤彤的，就不好看了

- (E.27) *tsíkæ njíkʰikʰi zɪ rɪ tʃi tʃí*
 a.bit red way ?? COP GNR

‘Became a bit red.’
 变得一点点红了

- (E.28) *neʳnéʳ zɪ rɪ tʃʊʳ tʃí*
 yellow.RED way ?? become GNR

‘Became yellow.’
变成黄色

- (E.29) *ts^hó ká^hə zǐ mǎtsǐ nǎ-tsǎ lǎ jepǐ k^hoŋk^hó tʂo^ʂ tʂǐ*
now this way sun DOWN-shine ?? very pretty.RED become GNR

‘If the sun shines like it does right now, it’ll become pretty.’
太阳要是像现在这样子照的话，会变得很漂亮

- (E.30) *ɲǐɲǐ mǎ-tʂǐ, ne^ʂne^ʂ tʂo^ʂ tʂǐ*
red.RED NEG-GNR yellow.RED become GNR

‘Not red, it’ll become yellow.’
不是红的，是变成黄的了

- (E.31) *təŋú kǎ-ʂu-s^hǐ*
still IN-record-NMLZ

‘Now it’s still recording.’
现在还在录

- (E.32) *tsǐ mǎ-tʂǐ kǎ-ʂu mǎ-tʂǐ*
COP NEG-GNR IN-record NEG-GNR

‘Not, it is not.’
没有，没在录

APPENDIX F

FROG STORY 1

QVY-333

- (F.1) *ts^hó tǎ^ʰ ɲǎ xtʃ^hí^ʰ tǎ-tfó ʃ^hopʃ^hí tǎ-tfó* TMK *ba^ʰxpé* (should be *bexpá^ʰ*)
 now then 1SG dog one-CL child one-CL then frog

tǎ-tfó=tǎ lodzý tǎ-tfó pʃǎ
 one-CL=ISM1 story one-CL say

‘Now I’m going to tell a story about a dog, a child, and a frog.’
 现在我要讲一个小孩，和一条狗，和一只青蛙的故事

- (F.2) *ʃ^hopʃ^hí tǎ-tfó=i βzé xtʃ^hí^ʰ i-mɲí* TMKN *ɲa^ʰ thé βzó ɲi*
 child one-CL=ISM2 3.REFL dog DS-bring.3 then fish rope bring.3 NFl

ǎwə rək^hí xs^hí^ʰ ntʃ^hí^ʰ pʃ^hí tʃi
 downside riverbank fish catch.NOM go.3 GNR

‘That kid took his dog, and fishnet to the riverbank to catch fish.’
 那个小孩就带着自己的狗，准备了渔网到河边去捉鱼

- (F.3) TM *t^hə-ndzé rək^hí nə-tʃí ɲi*
 then 3-DU riverbank DOWN-go.3 NFl

‘Then when they arrived at the riverbank.’
 然后他们到了河边

- (F.4) *tǎ^ʰ xs^hí^ʰ kətə tə-ɲí k^hɪ*
 then fish search NEU-say.3 time

‘Then when he was about to search.’
 准备捉鱼的时候

- (F.5) *ʃ^hopʃ^hí=i rək^hí bexpá^ʰ tǎ-tfó mdí tʃi*
 child=ISM2 riverbank frog one-CL see.3 GNR

‘The kid saw a frog by the bank.’
 小孩在河边看到一只青蛙

(F.6) *tǎʰ baʰxpé ntʃǎʰ ʃʰó xsʰyé rǐ*
 then frog catch.NOM go.LSG think.3 COP2

‘Then he thinks ‘I’m gonna catch the frog’.’
 然后准备想着捉青蛙

(F.7) TMKN
 ‘Then.’
 然后

(F.8) *ʃʰopʃʰí sʰí xtʃʰíʰ-ndze=i tǎʰ-xʃéʰ nǎ-tʃǐ ní*
 child and dog-DU=ISM2 NEU-dash DOWN-go.3 NFl

‘The kid and the dog dashed down.’
 小孩和狗一起跑下去

(F.9) *tǎʰ bexpáʰ ndʒóʰ tsi tǎ-ní ní*
 then frog catch.LSG COP NEU-say.3 NFl

‘Then the kid said: “I’ll catch the frog.”’
 说着要抓青蛙

(F.10) *zǐwǎʰ zeʰ tʰǎ áwǎ rǎkʰí tǎʰ-xʃéʰ nǎ-tʃǐ KN*
 bucket take.2 this downside riverbank NEU-dash DOWN-go.3 time

‘Bringing the bucket, when they ran down to the riverbank.’
 拿着桶子，当他们跑下河边的时候

(F.11) *xtaʰpó hɲurí sʰixpú tǎ-tʃó tǎ-ʃǐ ní*
 stick front tree one-CL NEU-EXIST NFl

‘There is a stick in front of the feet.’
 脚前有一根树木

(F.12) *tǎʰ-qǎʰtǎʰ ní áwǎ ʃʰopʃʰí sʰí xtʃʰíʰ náʰ-tʃo=tǎ áwǎ zǐʰ=kú*
 NEU-stumble NFl downside child and dog two-CL=ISM1 downside water=INE
nǎʰ-zó
 DOWN-fall

‘Tripped over the stick, the boy and the dog fell into the river.’
 被绊倒了，小孩和狗都掉进河里了

- (F.13) *TMK ba^xxpé p^hefó ndzɪ^x ló méi-βri*
 then frog aside catch.NOM ?? NEG-find.3

‘Then the frog beside was not caught.’
 然后在一旁的青蛙没有被抓住

- (F.14) *ʃ^hopʃ^hí s^hí xtʃ^hí^x ná^x-tʃo=tə áwə ʒí^x=kú nə^x-zó*
 child and dog two-CL=ISML downside water=INE DOWN-fall

‘The boy and the dog, they two fell into the river.’
 小孩和狗两个一起掉进河里了

- (F.15) *káthə ziwá^x ʃ^hopʃ^hí=xə q^hó^x xtʃí qó^x-zo-s^hí*
 this bucket child=LOC head upon IN-hit-NMLZ

‘Then the bucket hit the boy’s head.’
 然后这个水桶砸到小孩头上了

- (F.16) *ba^xxpé thə qé^x thǒ p^hefó nə-ptsú ni nə^x-rí^x*
 frog this side here aside DOWN-sit.3 NFl DOWN-laugh.3

‘The frog sat by the side and laughed.’
 然后青蛙坐在旁边笑着

- (F.17) *TMK ʃ^hopʃ^hí=i thǒ ba^xxpé ndzú^x tə-ní KN*
 then child=ISM2 this frog catch.1SG NEU-say.3 time

‘Then when the boy said: “I’m gonna catch this frog.”’
 然后当小孩说‘我要抓这只青蛙’的时候

- (F.18) *ba^xxpé=i tə^x-q^hó^xptsje áηυ s^hípú tje í-tʃí*
 frog=ISM2 NEU-jump.3 upside tree upon UP-go.3

‘The frog jumped up to the tree.’
 青蛙跳到树上去了

(F.19) TM *ʃʰopʃʰí ndzǎ ló méi-βri* TM
 then child catch.NOM ?? NEG-find.3 then

‘Then the kid didn’t catch it, then.’
 然后小孩没有抓住，然后

(F.20) *ʃʰopʃʰí sʰí xtʃʰíʳ-ndze=i rirí rirí nə-wú ʃi áwə sʰipú*
 child and dog-DU=ISM2 slow.RED slow.RED DOWN-do.3 NFl downside tree
tje í-tfí ʃi rirí rirí nə-wú baʳxpé qeʳ kǒ kó-mdzə
 upon UP-go.3 NFl slow.RED slow.RED DOWN-do.3 frog side inside IN-stick.3
ʃi baʳxpé ndzǎʳ ló á-βri TZ nə-wú ʃi
 NFl frog catch.NOM ?? Q-find.3 this.way DOWN-do.3 NFl

‘The boy and the dog slowly, slowly, walked up to the tree, and slowly, slowly crawled towards the frog, to see if doing like this could help with catching the frog.’
 小孩和狗慢慢慢慢地，走到那个树上，慢慢慢慢地爬向贴近青蛙，看像这样子做到底能不能捉到青蛙

(F.21) *ndzǎʳ tə-ní KN ʃʰopʃʰí=i ʃaʳ tʰjé rǒ é-ptʃʰí baʳxpé*
 catch.lsg NEU-say.3 time child=ISM2 fish rope upward UP-hang.3 frog
ndzǎʳ tə-ní KN βzé xtʃʰíʳ=xə qé-zo ʃaʳ tʰjé ʃaʳ tʰjé=xə ʃi
 catch.lsg NEU-say.3 time 3.REFL dog=LOC IN-hit fish rope fish rope=LOC NFl
xtʃʰíʳ ʃaʳ tʰjé=xə qé-zo (should be ʃaʳtʰjé xtʃʰíʳ=xə qéʳ-zo) baʳxpé áwə
 dog fish rope=LOC IN-hit frog downside
zǎʳ=kú təʳ-xǎʳ nə-tfí baʳxpé ndzǎʳ ló méi-βri
 water=INE NEU-dash DOWN-go.3 frog catch.NOM ?? NEG-find.3

‘When the kid said “catch (frog)”, he raised the fish net, when he said “catch”, he hit his own dog. The fish net, the dog, the dog was caught in the net. The frog dashed down into the river, and they didn’t catch it.’
 当说‘捉青蛙’的时候，小孩举起渔网，说‘捉青蛙’的时候，套到他自己狗上了。渔网渔网，狗，狗套到渔网里，青蛙冲到那个河里去了，没有抓住青蛙

(F.22) TM *baʳxpé=i áηυ zǎʳ təʳ-xtʃʰíʳ ʃi pʰərí í-tfí ʃi*
 then frog=ISM2 upside water NEU-swim.3 NFl opposite.bank UP-go.3 NFl

‘Then the frog swam to the other side.’
 青蛙游泳游到到对面了

- (F.23) TMK *ʃʰopʃʰi sʰi xtʃʰiʰ-ndze=i baʰxpé ndʒiʰ-fə təʰ-pʰəʰ ni tǎʰ*
 then child and dog-DU=ISM2 frog catch.NOM-NMLZ NEU-place NFl then
əŋgu ʃʰáʰ tsi tə-ní ni tǎʰ əŋgu pʃʰi ri
 home go.1PL COP NEU-say.3 NFl then home go.3 COP2

‘Then the boy and the dog stopped trying to catch the frog, then said: “We are going home.” Then they went back home.’

然后小孩和狗，放弃捉青蛙这件事了。然后说着‘我们要回家了’，然后他们就回家了

- (F.24) TM *baʰxpé=i tʰə-ndzə náʰ-ruʰ=xə kə-fəβri*
 then frog=ISM2 3-DU.LOC two-CL=LOC IN-look.3

‘Then the frog looked at them two.’

然后青蛙看着他们俩

- (F.25) *ʃʰopʃʰi-ndze=xə ʃʰi-sʰaʰ qeʰ kə-fəβri ni*
 child-DU=LOC go.NOM-NMLZ side IN-look NFl

‘Look at the place those two kids went.’

看着两个小孩走着的方向

- (F.26) *əvə tje pʰefó pʰəri ndzónqzo i-tʃi KN*
 downstream upon aside opposite.bank same.RED DS-go.3 time

‘The frog followed them on the other side together.’

青蛙在河对面的旁边跟他们一起走了

- (F.27) *ʃʰopʃʰi sʰi xtʃʰiʰ-ndze=xə aʰqéʰ xkʰəpə tʰə malu tje ɛwəʰ tʃi*
 child and dog-DU=LOC shoe footprint this road upon EXIST GNR

‘The shoes of the kid and the dog, footprints, on the road.’

小孩和狗两个的，鞋，脚印，在马路上有

- (F.28) TM *baʰxpé=i tʰə-ndzə xkʰəpə=pʰe i-tʃi ni*
 then frog=ISM2 3-DU.LOC footprint=COM DS-go.3 NFl

‘Then the frog followed their footprints.’

然后青蛙跟着他们俩的脚印走了

- (F.29) *fʰopfʰí-ndze ávə riri riri i-φlwó KN tʰə=ntsʰáʰ əŋgu*
 child-DU downstream slow.RED slow.RED DS-arrive.3 time 3=PL.LOC home
xkʰəpə=pʰe əŋgu paʰ kə-φlwə
 footprint=COM home side IN-arrive.3

‘When the two kids slowly, slowly arrived home, the frog also arrived following their footprints.’

两个小孩慢慢慢慢到家的时候，青蛙也跟着脚印到了他们的家

- (F.30) TM *baʰxpé=i tʰə pə sʰi xkʰəpə=tə mdí ndzónqzo əŋgu paʰ kə-tfí*
 then frog=ISM2 this print and footprint=ISM1 see.3 same.RED home side IN-go.3

‘Then the frog saw the footprints, also walked into the house.’

然后，青蛙，看到脚印，一样走进家里了

- (F.31) TM *fʰopfʰí sʰi xtʰíʰ-ndze=i tǎʰ ce tǎʰ tʰerí=ku ækú tʰíʰtʰó vǎ tsi*
 then child and dog-DU=ISM2 then toi then toilet=INE inside wash do.1PL COP
tə-ní ní tʰə qéʰ nə-ptsú-sʰi tʰí tʰi mu
 NEU-say.3 NFl this side DOWN-sit.3-NMLZ EXIST GNR CF

‘Then the boy and the dog, they two sat in the bathroom, and said: “We are going to wash.” Then sat there.’

然后小孩和狗，他们两个，坐在在厕所里，说‘我们要洗了’，坐在那儿

- (F.32) *tʰə baʰxpé=i kǎʰ kə-ptʰy kə-tfí*
 this frog=ISM2 door IN-open.3 IN-go.3

‘The frog opened the door and entered.’

青蛙打开门进去了

- (F.33) *tʰə-ndzǎ náʰ-tʰo mdí*
 3-DU.LOC two-CL see.3

‘It saw them two.’

它看见了他们俩

- (F.34) *tʰə-ndzé náʰ-tʰo nə baʰxpé mdí-sʰi*
 3-DU two-CL also frog see.3-NMLZ

‘Those two also saw the frog.’
他们俩也看见了青蛙

- (F.35) TM *tʰə-ndzæ náʷ-tʃo baʷxpé kə-fəβri nəʷ-ríʷ*
then 3-DU.LOC two-CL frog IN-look.3 DOWN-laugh.3

‘Then those two looked at the frog and laughed.’
然后他们俩看着青蛙笑

- (F.36) *baʷxpé=i nə tʰə-ndzæ náʷ-tʃo=xə kə-fəβri nəʷ-ríʷ*
frog=ISM2 also 3-DU.LOC two-CL=LOC IN-look.3 DOWN-laugh.3

‘The frog also looked at them and smiled.’
青蛙也看着他们笑

- (F.37) TM *baʷxpé=i tsíkæ təʷ-tʃóʷ ri təʷ-qʰwəʷptsje ni ævə tʰə-ndzə*
then frog=ISM2 a.bit NEU-become ? NEU-jump.3 NFl there 3-DU

náʷ-tʃo=xə tʃíʷtʃo və-sʰaʷ=pʰe ndzónɔzɔ i-tʃí
two-CL=LOC wash do.NOM-NMLZ=COM same.RED DS-go.3

‘Then after a while, the frog jumped to the place where they were taking the bath, it also went there.’
然后青蛙过了一会儿，跳到他们俩洗漱的地方那边，一样去了（一样到他们那边去了）

- (F.38) TM *tʰə=ntsʰí sʰóʷ-tʃo náʷ-tʃo sʰóʷ-tʃo ptʃú təʷ-tʃóʷ* TM *ʒí=ntsʰí*
then 3=PL three-CL two-CL three-CL friend NEU-become then 3.REFL=PL

tʃíbdzæ nə-xkú
play DOWN-play.3

‘Then they two, they three, they three became friends, and played together.’
然后他们三个两个,他们三个变成朋友, 然后他们一起玩

- (F.39) *baʷxpé=i təʷ-qʰwəʷptsje ni xtʃíʷ=xə qʰóʷ tje í-tʃí ni βʒí=ntsʰí*
frog=ISM2 NEU-jump.3 NFl dog-LOC head upon UP-go.3 NFl 3.REFL=PL

tʃíbdzæ aʷxpəʷ nə-xkú
play a.while DOWN-play.3

‘The frog jumped onto the dog’s head, they played for a while.’

而且青蛙跳了，跳到狗头上，他们玩了好一会儿

(F.40) TM *ʃʰopʃʰí pʰeʃʊ kʰ-fəβri ni aʰxpəʰ ríʰ ríʰ*
then child aside in-look.3 NFl a.while laugh.3 COP2

‘Then the kid looked beside them and kept laughing.’
然后小孩在旁边看着，不停地笑着

(F.41) TM *tʰə=ntsʰí sʰóʰ-tʃò baʰxpé sʰí xtʃʰíʰ sʰí ʃʰopʃʰí sʰí tʰə=ntsʰí sʰóʰ-tʃò tʃáelæ*
then 3=PL three-CL frog and dog and child and 3=PL three-CL all

pʃú təʰ-tʃóʰ
friend NEU-become

‘Then they three, the frog, the boy, and the dog, three of them all became friends.’
然后他们三个，青蛙，小孩和狗 他们三个都变成朋友了

APPENDIX G

FROG STORY 2

QVY-334

- (G.1) *ba^sxpé zæzæ tə-tfó s^hi tǎ^s ba^sxpé ndzɯ^sndzú^s t^hə=nts^hi=p^he lodzý tə-tfó*
 frog small.RED one-CL and then frog big.RED 3=PL=COM story one-CL

‘A story about a small frog and a big frog.’
 一个小青蛙和一个大青蛙的故事

- (G.2) *tś-s^hi t^hə f^hɔp^hi məmo t^hə=xó kólə tə-k^hwí tʂi mo*
 one-day this child someone this=LOC something NEU-give.3 GNR CF

‘One day, someone gave this kid something.’
 有一天, 有人给这个小孩一个东西

- (G.3) KN TM *tə-k^hwí-s^hi o*
 time then NEU-give.3-NMLZ oh

‘Then, then (he) gave (it to the child).’
 然后,然后,送了

- (G.4) *t^hyfýé=ku é-mt^hɪ KN ba^sxpé zæzæ tə-tfó tʂy ri*
 plastic.pocket=INE UP-take.out.3 time frog small.RED one-CL EXIST COP2

‘When opening the box, there’s a small frog in it.’
 盒子打开的时候有一个小青蛙

- (G.5) TM *ba^sxpé zæzæ rǔ é-mt^hɪ ni t^hə=nts^hi-p^he tək^hi ni*
 then frog small.RED upward UP-take.out.3 NFl 3=PL-COM together NFl
βzæ ŋgwǎ ba^sxpé ndzɯ^sndzú^s s^hi t^hə=tʂá^s tǐ tək^hi kś-fy ni
 3.REFL.LOC front frog big.RED and this=PL then together IN-place.3 NFl
t^hə=nts^hi=tʂa^s tʂibdzæ nə-xkú tə-p^hú
 3=PL=PL play DOWN-play.3 NEU-cause.3

‘Then (the kid) took out the small frog and put it together with his previous (pets), and let them play together.’
 把小青蛙拿出来,他自己之前的大青蛙和这些 (其他的宠物) 放在一起, 让他们玩

- (G.6) *ba^xxpé ndzú^undzú^u tĩ tsíkæ ba^xxpé zæzæ=tæ mæ-gó rĩ*
 frog big.RED then a.bit frog small.RED=ISM1.LOC NEG-happy COP2

‘The big frog doesn’t like the small frog.’
 大青蛙有点不喜欢小青蛙

- (G.7) *xtf^hĩ^u s^hĩ f^hopf^hĩ s^hĩ tfæ^læ ba^xxpé zæzæ xt^hixt^hĩ nə-wú k^hĩ*
 dog and child and all frog small.RED cherish DOWN-do.3 time

ndzú^u-mə tĩ t^hə=xó mæ-gó rĩ
 big-NMLZ then this=LOC NEG-happy COP2

‘The kid and the dog were fond of the little frog, and the big one is not happy about it.’
 小孩和狗都很疼爱小青蛙，大青蛙有点不高兴

- (G.8) *TMKN ba^xxpé zæzæ=tə p^hefó kə-fy KN ba^xxpé*
 then frog small.RED=ISM1 aside IN-place.3 time frog

ndzú^u-mə=tə=i gó tsixkə nə-wú gu nə-wú ni p^hef^hó
 big-NMLZ=ISM1=ISM2? happy pretend DOWN-do.3 lie DOWN-do.3 NFl aside

rĩ^u tsixkə nə-wú ni ba^xxpé zæzæ=xə t^hekó vó tsixkə
 laugh.3 pretend DOWN-do.3 NFl frog small.RED=LOC good do.NOM pretend

nə-wú p^hefó TZ kə-fəβri nə-ptsú k^hĩ TZ vó tsixkə
 DOWN-do.3 aside this.way IN-look.3 DOWN-sit.3 time this.way do.NOM pretend

nə-wú p^hefó nə-ptsú ni
 DOWN-do.3 aside DOWN-sit.3 NFl

‘Then put the small frog beside the big frog. The big one pretended that it liked the small one, pretended to laugh, and be nice to the small frog. The big frog just sat beside and watched.’

然后把小青蛙放在大青蛙旁边，大的青蛙假装喜欢小青蛙，骗他们，在旁边假装笑，假装对小青蛙很好，大青蛙一直坐在旁边看着

- (G.9) *tsíkæ tə^u-tʂó^u rĩ ba^xxpé ndzú^undzú^u=i t^hǒ ba^xxpé zæzæ xk^hó=xə*
 a.bit NEU-become COP2 frog big.RED=ISM2 this frog small.RED foot=LOC

tə^u-h^hnwó^u
 NEU-bite

‘After a while, the big frog bit the small frog’s foot.’
 过了一会儿，大青蛙咬了小青蛙的脚

- (G.10) *tʃæ̀læ̀=ti tə̀-ɓwə̀xtʃə̀-sʰi ʃʰopʃʰi sʰi tʰə xtʃʰi sʰi tʃæ̀læ̀ tə̀-ɓwə̀xtʃə̀-sʰi*
 all=ISM1.ISM2 NEU-afraid-NMLZ child and this dog and all NEU-afraid-NMLZ

‘Everyone was scared, the child and the dog and everyone was afraid.’
 大家都被吓到了，小孩和狗全都害怕了

- (G.11) TM *tʰə ʃʰopʃʰi=i tʰə bàxpé ndzú̀ndzú̀ tje qʰa qʰá nə-wú ni*
 then this child=ISM2 this frog big.RED upon harsh.RED DOWN-do.3 NFl
bàxpé zæ̀zæ̀=ətə rǔ é-mtʰi lje=wu é-βzʊ ni tʰə tje
 frog small.RED=ISM1 upward UP-take.out.3 hand=INE UP-hold.3 NFl 3 upon
qʰa qʰá nə-wú tʰə tje tə̀-χqó
 harsh.RED DOWN-do.3 3 upon NEU-scold

‘Then this child was harsh to the big frog. He held the small frog in hand, and was harsh to the big frog, and scolded it.’
 然后这个小孩凶了一下大青蛙，把小青蛙拿在手里 批评（凶）了大青蛙 还骂了它

- (G.12) *xtʃʰi sʰi tʃæ̀læ̀=ti tʰə=tje bàxpé=tje χqó=rì*
 dog and all=ISM1.ISM2 3=SUPE frog=SUPE scold=DIR

‘The dog also scolded the big frog.’
 小狗也骂了大青蛙

- (G.13) TM *tə̀-sʰi ʃʰopʃʰi sʰi xtʃʰi sʰi bàxpé sʰi tʰə tʃæ̀læ̀ ə̀və ja qə̀ tʃʰotʃi*
 then one-day child and dog and frog and this all side outside hang.out
i-tʃi tʃi mʊ
 DS-go.3 GNR CF

‘Then one day, the child and the dog and frogs went out to play.’
 然后有一天，小孩和狗，青蛙们一起出去玩

- (G.14) *bàxpé ndzú̀-mə sʰi bàxpé zæ̀-mə=ətə kətʰə zæ̀zæ̀=ətə təkʰi*
 frog big-NMLZ and frog small-NMLZ=ISM1 this small.RED=ISM1 together
nə-ptsú-sʰi tʃi tʃi
 DOWN-sit.3-NMLZ EXIST GNR

‘The big frog and the small frog sat together.’
 大青蛙和小青蛙坐在一起

- (G.15) TM *tʰə ʃʰopʃʰí=tə hɟurí* TZ *tə-wú tə-tʃí* KN *ba^xpé=i*
 then this child=ISM1 front this.way NEU-do.3 NEU-EXIST time frog=ISM2
mə-mdí tsi pa^x ba^xpé zæzæ=tæ *tʰ-tʰó tə-ptó* *ni*
 NEG-see.3 COP time frog small.RED=ISM1.LOC one-kick NEU-dump.3 NFl
æwə wǒ nə-ré wú
 downside downside DOWN-throw finish.3

‘Then when the child was walking in the front, the big frog kicked the small frog when the child was not looking, and threw it down.’

然后当小孩走在前面时，大青蛙趁着小孩看不到的时候，踢了小青蛙一脚把它丢了下去

- (G.16) *ba^xpé zæzæ* *nə^x-ptʂá^x* KN *ʃʰopʃʰí sʰí xtʃʰí^x=tʂa^x mdí*
 frog small.RED DOWN-cry.3 time child and dog=PL see.3

‘When the small frog was crying, the child and the dog saw.’

当小青蛙哭的时候，小孩和狗看到了

- (G.17) TM *ləwú lə-tu* *ni ba^xpé ndzʉ^xndzú^x tje* *tə^x-ɣqó*
 then side US-come.3 NFl frog big.RED upon NEU-scold

‘Then came back and scolded the big frog.’

然后转过身走过来骂了大青蛙

- (G.18) TM *tʰə=ntsʰí æwó* *zǐ^x rəkʰí nə-ɸlwó* KN *rəkʰí tsó tje*
 then 3=PL downside water bank DOWN-arrive.3 time bank bridge upon
rǒ í-tʃí KN
 upward UP-go.3 time

‘Then they arrived at the riverbank, and went up to the bridge.’

然后他们到了河边，然后上了桥

- (G.19) *ba^xpé ndzʉ^xndzú^x=tə æŋʊ* *tje tə^x-pʰó^x ni ʃʰopʃʰí=i tʰə tje* *qʰa^xqʰá^x*
 frog big.RED=ISM1 upside upon NEU-put NFl child=ISM2 3 upon harsh.RED
nə-wú ni ‘æŋʊ tje nə-tʂí’ *tə-ní ni ba^xpé zæzæ=tə*
 DOWN-do.3 NFl upside upon DOWN-sit.2 NEU-say.3 NFl frog small.RED=ISM1
æwə xtʃʰí^x=pʰe é-mɲi *zǐ^x=kú nə-tʃí* *ni βzǐ=ntsʰí*
 downside dog=COM UP-bring.3 water=INE DOWN-go.3 NFl 3.REFL=PL

‘The child put the big frog on the other side of the river, and criticized it, and told him to wait on the riverbank. Then they themselves went onto the river.’
 小孩把大青蛙放到岸上 对它批评了一下, 对它说‘你在岸上等着’, 然后带着小青蛙和狗去河上了

(G.20) *ba^xxpé ndzɯⁿndzúⁿ=tə=i təⁿ-hɲiq^hwəⁿ t^{hə} qéⁿ nə-ptsú ɲi*
 frog big.RED=ISM1=ISM2? NEU-angry this here DOWN-sit.3 NFL

‘The big frog sat by the riverbank angrily.’
 大青蛙生气地坐在岸边

(G.21) *TM t^{hə}=nts^hí zǐⁿ=kú i-ɲí wú KN ba^xxpé ndzɯⁿndzúⁿ=tə=i*
 then 3=PL water=INE DS-go.NOM finish.3 time frog big.RED=ISM1=ISM2?

təⁿ-q^hwəⁿptsje ɲi éŋʊ ndzónɔzo t^{hə}=nts^hí=p^he pɬsǐⁿ=ku i-ɲí
 NEU-jump.3 NFL upside same.RED 3=PL=COM boat=INE DS-go.NOM

é-ri nə-wú pɬsǐⁿ=ku nə-tǐ
 Q-capable.NOM DOWN-do.3 boat=INE DOWN-go.3

‘Then when they were in the river, the big frog jumped to try to go with them (to see if it could board the boat together).’
 然后当他们到了河上时, 大青蛙跳了一下, 跟他们一起了, 尝试和他们一起去 (看能不能跟他们一起去船里)

(G.22) *təwú ɲ^hɔpɲí=ts^hí təwú méi-mdi təwú hɲurí təwú pɬsǐⁿ təŋú hɲurí ɲí lə*
 still child=PL still NEG-see.3 still front still boat still front go.NOM ?

ró k^hɪ ba^xxpé ndzɯⁿndzúⁿ=tə jǔ ɲɲé ndzɯⁿndzúⁿ nə-wú ɲi ba^xxpé
 EXIST time frog big.RED=ISM1 again eye big.RED DOWN-do.3 NFL frog

zæzæ kə-fəβri tə-tsó təⁿ-bdəⁿ ba^xxpé zæzæ=tə éwə
 small.RED IN-look.3 one-kick NEU-hit frog small.RED=ISM1 downside

zǐⁿ=kú nə-rə wú
 water=INE DOWN-throw finish.3

‘The kids hadn’t seen that, and the boat was still moving forward. The big frog’s eyes widened, and looked at the small frog, and kicked it into the river.’
 小孩还没有发现, 船还在前进, 大青蛙瞪着眼睛, 瞪着小青蛙把它踢到河里去了

- (G.23) TM *tʰə=ntsʰí=i baˣxpé ndʒuˣndʒúˣ(=i) ʒíˣ=kú zæzæ=tə áwə*
 then 3=PL=ISM2 frog big.RED(=ISM2) water=INE small.RED=ISM1 downside
nə-βrə-sʰí mdí-sʰí
 DOWN-throw.3-NMLZ see.3-NMLZ

‘Then they found out that the small frog was kicked into the river by the big frog.’
 然后他们发现小青蛙被大青蛙踢到河里去了

- (G.24) TM *tʰə=ntsʰí jǒ i-xtʂú ni baˣxpé ndʒuˣndʒúˣ tje qʰaˣqʰáˣ nə-wú*
 then 3=PL again DS-turn NFl frog big.RED upon harsh.RED DOWN-do.3

‘They turned around and scolded the big frog.’
 然后他们转过来,训斥了大青蛙

- (G.25) TMKN *kátʰə ʃʰopʃʰí=tə=i tsó-wə wə nə-tʃí ni baˣxpé*
 then this child=ISM1=ISM2 bridge-down down DOWN-go.3 NFl frog
zæzæ=tə kótó ʒíˣ=kú nə-tʃí baˣxpé zæzæ=tə káptə
 small.RED=ISM1 search water=INE DOWN-go.3 frog small.RED=ISM1 search.3
rí
 COP2

‘Then this child went down by the bridge and searched for the small frog in the river.’
 然后这个小孩走到桥下,到河里去找小青蛙

- (G.26) *baˣxpé ndʒuˣndʒúˣ=tə áŋv tʰə qéˣ nə-ptsú ni βzí tó-róˣ-pí*
 frog big.RED=ISM1 upside this here DOWN-sit.3 NFl 3.REFL one-CL-person
tʰə qéˣ təˣ-hníqʰwəˣ nə-ptsú-sʰí ro
 this here NEU-angry DOWN-sit.3-NMLZ EXIST

‘The big frog sat there by itself and was angry.’
 大青蛙一只蛙坐在那儿(船上)生气着

- (G.27) TM *tʰə=ntsʰí tʃáelæ=tə=i baˣxpé zæzæ=tə kátə lə méi-βri*
 then 3=PL all=ISM1=ISM2 frog small.RED=ISM1 search ?? NEG-capable.3
 TMK *təˣ-hníqʰwəˣ jú i-tʃí xtʃíˣ sʰí ʃʰopʃʰí-ndze=i dzípú*
 then NEU-angry downstream DS-go.3 dog and child-DU=ISM2 very

mæ-gó-tfĩ nə-wú ni TM ávə éŋgu i-tfĩ
 NEG-happy-EXIST DOWN-do.3 NFl then side home DS-go.3

‘Then those two didn’t find the small frog, then they were mad. The dog and the child were very unhappy and went back home.’

然后他们都没有找到小青蛙，小孩和狗生气着，很不开心地回家去了

(G.28) *ʃʰopʃʰi=tə zæ-mə=tə təwú ptʃáʳ ʃi i-tfĩ*
 child=ISM1 small-NMLZ=ISM1 still cry.3 PROG? DS-go.3

‘The child also left crying.’

小孩还哭着走了

(G.29) *TM ʃʰopʃʰi zæzə=tə βzə zə-sʰáʳ tje kə-βrə ni baʳxpé*
 then child small.RED=ISM1 3.REFL sleep-NMLZ upon IN-throw.3 NFl frog

zæzə=tə méi-rv tə-ni ni
 small.RED=ISM1 NEG-find.1SG NEU-say.3 NFl

‘Then the child was lying on his bed, and said: “I didn’t find the small frog.”’

然后小孩躺在自己床上，说‘我没有找到小青蛙’

(G.30) *tʰə qéʳ nəʳ-ptʃáʳ lə-tfĩ KN*
 this here DOWN-cry.3 US-go.3 time

‘Went back home crying.’

哭着走向家里

(G.31) *KN tsíkæ təʳ-tʃóʳ ri kələ xkə xtáʳ ri*
 time a.bit NEU-become COP2 something sound sound COP2

‘After a while, he heard a sound.’

过了一会儿，听见有一个声音

(G.32) *κəʳzĩ nʊʳwáʳ TZ tʃælæ=tə=i kə-ny nə-ptsú κəʳzĩ nʊʳwáʳ*
 window outside this.way all=ISM1=ISM2 IN-listen.3 DOWN-sit3? window outside

kə-ny KN baʳxpé zæzə=tə təʳ-qʰwəʳptsje kə-tu ni ʃʰopʃʰi=xə
 IN-listen.3 time frog small.RED=ISM1 NEU-jump.3 IN-come.3 NFl child=LOC

zə-sʰáʳ qeʳ ləkú nə-ptsú kú TM kú-tu ni baʳxpé ndzɯʳndzúʳ=xə
 sleep-NMLZ here side DOWN-sit.3 in then IN-come.3 NFl frog big.RED=LOC

q^ho^s xtʃi tə^s-q^hwə^sptsje nə-ptsú ji tʃibdzæ xkú ri
 head upon NEU-jump.3 DOWN-sit.3 NFl play play.3 COP2

‘Outside of the window, they were listening outside of the window. The small frog jumped inside, and landed on the other side of the child’s bed, and landed on the head of the big frog and played (with the big frog).’

窗外，他们都听着窗外，小青蛙跳进来了，到了小孩的床的另一边，然后跳到大青蛙的头上玩耍

(G.33) TM *tʃælæ=tə=i nə-gó ba^sxpé zæzæ kú-tu wú*
 then all=ISM1=ISM2? DOWN-happy frog small.RED IN-come.3 finish.3

tə-ni ji
 NEU-say.3 NFl

‘Then they all were happy, and said: “The small frog has come back!”’
 然后他们都很开心地说`小青蛙回来了’（他们很开心小青蛙回来了？）

(G.34) TM *ba^sxpé zæzæ s^hi ba^sxpé ndzɹ^sndzú^s=tə=i ba^sxpé zæzæ=tə*
 then frog small.RED and frog big.RED=ISM1=ISM2 frog small.RED=ISM1

əpwáli və méi-mnə TM *t^hə=p^hé tək^hi nə-wú ji t^hə=p^hé*
 bully do.NOM NEG-dare.3 then 3=COM together DOWN-do.3 NFl 3=COM

nə-ptsú
 DOWN-sit.3

‘Then the small frog and, the big frog no longer dared to bully the small frog. Then (the big frog) sat with it (the small frog).’

然后小青蛙，大青蛙不敢欺负小青蛙了，然后和它一起坐着

(G.35) TM *ʃ^hoʃ^hi=tə=i ʃ^hoʃ^hi s^hi xtʃ^hi^s tʃælæ=tə p^hefú kó-ʃəβri-s^hi*
 then child=ISM1=ISM2 child and dog all=ISM1.LOC aside IN-look.3-NMLZ

tə-tʃi
 NEU-EXIST

‘Then the child and the dog sat beside and watched them.’
 然后小孩和狗都在旁边看着他们

(G.36) TM *ʃ^hoʃ^hi ba^sxpé zæzæ=tə ji vó mæ-mnə ri*
 then child frog small.RED=ISM1.LOC bad do.NOM NEG-dare.3 COP2

‘Then the big frog no longer dared to bully the small frog.’
然后小孩（应该是大青蛙）不敢欺负小青蛙了

(G.37) TM *tʃi̯æ̯læ̯=tə̯=i* *tək^hi* *nə̯-wú* *pʃǔ* *tə̯^h-tʃó^h* *wú*
then all=ISM1=ISM2 together DOWN-do.3 friend NEU-become finish.3

‘Then they all became friends.’
然后他们都一起变成朋友了

APPENDIX H

THE RABBIT AND THE POOR YOUNG MAN

QVY-337

- (H.1) *jép^{hi} xli tṣ-ró^ʷ s^{hi} xtṣomá f^hop^hi tṣ-ró^ʷ-ndze=i kṣ-ptṣwə ni tǎ^ʷ*
 past rabbit one-CL and poor child one-CL-DU=ISM2 IN-discuss NFl then
ǎḡo é-f^ha^ʷ ni tṣxpí f^hi ri ri tə-ní ni
 upward UP-go.1PL NFl robbery go.NOM need COP2 NEU-say.3 NFl

‘In the past, a rabbit and a poor kid, they two discussed and decided that ‘We need to go up and rob (someone).’

以前，有一只兔子和一个穷小孩两个商量说：‘我们需要去山上打劫。’

- (H.2) *tǐ ǎḡò nṣ^ʷkṣ^ʷ=xṣ í-tṣi nṣ^ʷkṣ^ʷ pṣxkṣ é-ḡlwṣ KN ǎḡò*
 then upward mountain=LOC UP-go.3 hillside hillside UP-arrive time upward
nṣ^ʷkṣ^ʷ=tḡè=ni βrí xtṣ-pi=rǐ nṣ-tú tṣǐ ni tṣí
 mountain=SUPE=ABL horse ride-person=ISM3 DOWN-come.3 GNR say.3 GNR

‘Then, when they arrived at the mountainside, they saw a person coming down riding a horse.’

然后到了半山腰的时候，（看到）山上有个骑马的人下来了

- (H.3) *tǐ nṣ-tú mdí KN tǐ xli tə-ní ni tǎ^ʷ tsṣ éndzi qe^ʷ*
 then DOWN-come.3 see.3 time then rabbit NEU-say.3 NFl then 3SG 1DU place
nṣ-tú wú KN tsṣ ǎli brí=wu=ni fṣḡqá^ʷ fṣḡqá^ʷ vṣ
 DOWN-come.3 finish.3 time 3SG upstream path=INE=ABL lame lame do.NOM
fí ḡgwə f^hó tsí KN
 while first go.1SG COP1 time

‘They saw (that person coming down). Then the rabbit said: “When he gets here, I’ll walk lamely on that path”.’

他们看到那个人下来了，然后兔子就说：‘当他到我们这儿的时候，我在那边路上装作是瘸子走。’

- (H.4) *tǐ t^hə ts^hó-pi=tə=i nṣwú βrí tḡe nṣwú*
 then this business-person=ISM1=ISM2 downside horse upon downside
nṣ-pṣ ni βrí t^hṣ qṣ^ʷ-ḡq^hwə^ʷ
 DOWN-dismount NFl horse here IN-tie.3

‘Then the merchant dismounted from the horse and chained the horse here.’
 然后这个商人下了马，把马拴在了这儿

- (H.5) TMKN *tsǎ=tǎ tǎ^h ndzi^h lǎ rǔ rí kǎ-hmæ-s^hǐ tʂí*
 then 3SG=ISM1 then catch.NOM NF2 capable.ISG COP2 IN-injure-NMLZ GNR
ndzi^h lǎ rǔ rí tǎ^h-xs^hqí^h ʒi
 catch.NOM NF2 capable.ISG COP2 NEU-think.3 NF1

‘Then the merchant thought: ‘I can catch it, it’s injured, I can catch it.’’
 商人想：‘我可以捉他，他受伤了，我可以捉它。’

- (H.6) *tǐ tsǎ=tǎ ptje tʂí KN tsǎ TZ TZ vǎ ʃí áli*
 then 3SG=ISM1 chase GNR time 3SG this.way this.way do.NOM while upstream
t^há^hri lǎ-ǝlwǎ wú k^hɿ
 far.away US-arrive finish.3 time

‘Then he went chasing it, then the rabbit was walking lamely and reached a place far away.’
 然后就去追它，然后兔子就这样做一瘸一拐的样子，到了很远的地方

- (H.7) *tǐ nǎ ʒrí=tǎ í-ptʂ^hje ʒi áwǎ lupí t^hqe nǎ-ʒí tǎ-ʒí ʒi*
 then 2SG horse=ISM1 UP-untie NF1 downside valley bottom IMP-lead.2 NEU-say.3

‘Then the rabbit said: “Untie the horse and take it to the valley.”’
 兔子说：‘然后你把马解开，带到山沟下面。’

- (H.8) *tǐ TZ tǎ-ʒí t^hǎ ʒǝæ ptʂu=xǎ TZ tǎ-ʒí tʂǐ*
 then this.way NEU-say.3 3SG 3SG.REFL.LOC friend=LOC this.way NEU-say.3 GNR
ʒi tʂí
 say.3 GNR

‘It is said that the rabbit told his friend this.’
 说是兔子是这样对它自己的伙伴这样子说的

- (H.9) TM *ǎŋʊ kǎ-lu kǎ-lu KN tǐ t^hǎ xtʂǎ-pi=tǎ t^hǎ qé^h*
 then upside IN-wait.3 IN-wait.3 time then this ride-person=ISM1 this place
nǎ-ǝlwǎ KN xtʂǎ-pi=tǎ=i xli=tǎ mdi ʃi ros^há^h
 DOWN-arrive time ride-person=ISM1=ISM2 rabbit=ISM1 see.3 while immediately

nə-pó ni βrí tʰo qə-χqʰwəʳ ni tš xli=tə tə-ptjé tšǎ
 DOWN-dismount NF1 horse here IN-chain.3 NF1 then rabbit=ISM1 NEU-chase GNR

ni tšǎ
 say.3 GNR

‘Then they waited and waited up there, then that horse rider arrived at the mountainside. The horse rider saw the rabbit, then dismounted immediately, chained up his horse there, then went chasing after the rabbit.’

然后他们俩在上面等啊等，然后那个骑马的人就来到了半山腰。骑马的人看到兔子的时候，就立刻下马，把马拴在这儿，说是去追赶兔子了

(H.10) *xli=tə tə-ptjé KN xli=tə jǒ ndzǎʳ ló ri xtsí*
 rabbit=ISM1 NEU-chase time rabbit=ISM1 again catch.NOM NF2 ? close

nə-wú KN jǒ xli tə-pʰí jǒ ndzǎʳ ló ri xtsí
 DOWN-do.3 time again rabbit NEU-escape again catch.NOM NF2 ? close

nə-wú jǒ TZ tə-pʰí KN dipí áli tʰáʳri ló-ni
 DOWN-do.3 again this.way NEU-escape time totally upstream far.away US-lead

wú tšǎ ni tšǎ tʰə tsʰo-pi=tə
 finish.3 GNR say.3 GNR this business-person=ISM1

‘When the merchant went chasing the rabbit, he almost caught it but the rabbit escaped. Then when he was about to catch it, it went away again like that. The merchant was led to somewhere far far away.’

商人去追赶兔子的时候，商人快要捉到兔子了的时候，兔子又跑开了，然后又要快捉到的时候，然后又这样子逃跑了。就这样完全把商人引到了特别远的地方

(H.11) *tš tǎʳ βzǎé ptšú=i áwə lupí tʰqe βrí=tə*
 then then 3SG.REFL.LOC friend=ISM2 downside valley bottom horse=ISM1

nə-mjí wú psopsó KN xli je=wú tš-tsjé nə-βrǎ
 DOWN-lead.3 finish.3 almost time rabbit woods=INE one-jump DOWN-throw.3

ni tš xli tə-pʰí tʰqæ wú tə-wú tšǎ ni tšǎ
 NF1 then rabbit NEU-escape leave do.3 NEU-finish.3 GNR say.3 GNR

‘Then when his friend almost took the horse down to the valley, the rabbit jumped into the woods and escaped.’

然后它估计它的朋友大概已经把马带下去了的时候，兔子就一跳跳到了树林里，然后就跑开了

- (H.12) *tĩ tʰǒ tsʰó-pi=tə tǎʳ nde xli=té ndziʳ ló*
 then this business-person=ISML then what rabbit=ISML catch.NOM NF2
méi-ru təʳ-xshqíʳ ni i-tfĩ KN βrí mɲi wú tə-wú
 NEG-capable.1SG NEU-think.3 NFL DS-go.3 time horse lead.3 do.3 NEU-finish.3
ʈʂĩ ni ʈʂí
 GNR say.3 GNR

‘Then this merchant thought: ‘Well, I didn’t catch the rabbit.’ He went back, and the horse had already been taken away.’

然后这个商人心想：‘唉，我兔子没有捉到。’回到了拴马的地方，马已经被带走了

- (H.13) *βrí tje kʰəxkə sʰi nde ɛwəʳ ɛwəʳ tʃáelæ ni wú tə-wú*
 horse upon luggage and what EXIST EXIST all bring.NOM finish.3NEU-do.3
ʈʂĩ ni ʈʂí
 GNR say.3 GNR

‘The baggage on the horse and everything was taken.’

马上的行李和所有东西都被带走了

- (H.14) *TM tʰǒ xli=té tə-dzý nə-tfĩ KN áwə lupí tʰqe*
 then this rabbit=ISML NEU-run DOWN-go.3 time downside valley bottom
nə-tfĩ KN βzə ptʂú=tə tʰǒ áwə lupí tʰqe
 DOWN-go.3 time 3SG.REFL.LOC friend=ISML here downside valley bottom
nəwú nə-tfĩ ni kə-lu-sʰi tə-tfĩ ʈʂĩ ni ʈʂí βzĩ
 downside DOWN-go.3 NFL IN-wait.3-NMLZ NEU-EXIST GNR say.3 GNR 3SG.REFL

‘Then this rabbit went down to the valley. Its friend was waiting for it down there in the valley, waiting right there.’

然后这个兔子跑到山沟底下去了，它自己的朋友就去山沟下面等他，就在那儿

- (H.15) *TM βzĩ-ndze tʰə βrí=tə tə-βzĩ i-mɲí áwə tʰə lupí*
 then 3SG.REFL-DU this horse=ISML NEU-lead.NOM DS-bring.3 downside this valley
tʰqe nə-tfĩ kʰɪ áwə hmə ptʂusʰú ri kə-tʃʰæ-sʰi təʳ-ɛwəʳ
 bottom DOWN-go.3 time downside bottom village ? IN-locate-NMLZ NEU-EXIST
tʰǒ dzəpə=tsʰi ri tə-tfĩ ʈʂĩ ni ʈʂí dzəpə=tsʰi ri tʰʊ kə-tʃʰæ-sʰi
 here rich=PL ? NEU-EXIST GNR say.3 GNR rich=PL ? here IN-locate-NMLZ

tə-tʃi tʃi ni tʃi
 NEU-EXIST GNR say.3 GNR

‘Then they themselves led the horse to the bottom of the valley. At the bottom there was a village. It is said that there was a rich family living in the village, a rich family was living there.’

然后他们自己牵引着这匹马来到了下面山沟底部。山沟末端有一座村庄，村庄里说是有一户富人家，说是有一户富人家

- (H.16) *KN tʰə xʃsɔmó ʃʰopʃʰi=tə=i tʰə=ntsʰáʰ zóʰ tə-róʰ=tə ŋkʰo*
 time this poor child=ISM1=ISM2 3=PL.LOC daughter one-CL=ISM1 want.1SG
rí təʰ-xʃʰiʰ ni
 COP2 NEU-think.3 NFI

‘Then this poor kid thought: ‘I need a daughter of theirs.’’
 然后这个穷小孩心想：‘我需要他们家的一个女儿。’

- (H.17) *ŋkʰo rí tə-ní ni xli=xó tə-ní tʃi ni tʃi*
 want.1SG COP2 NEU-say.3 NFI rabbit=LOC NEU-say.3 GNR say.3 GNR

‘He told the rabbit: ‘I need (a daughter).’’
 他和兔子说了，说：‘我要。’

- (H.18) *tʃi xli tə-ní ni tʰə=tjé aʰqéʰ=tə tə-tʰó tə-ní tʃi*
 then rabbit NEU-say.3 NFI then=SUPE shoe=ISM1 IMP-take.off.SAP NEU-say.3 GNR
ni tʃi aʰqéʰ tə-ptʰó KN tʰə=kú toxkwó putʃy tʰə
 say.3 GNR shoe NEU-take.off.3 time this(shoe)=INE satin just.now this
tsʰó-pi=xə tʰə təʰylóʰ=ku tə-tʃy ni toxkwó ri
 business-person=LOC this cowhide.pocket=INE NEU-EXIST NFI satin ?
i-mtʰí ni tʰə=xó βzivé nə-kú tʃi ni tʃi
 DS-take.out.3 NFI this(shoe)-loc insole DOWN-load.3 GNR say.3 GNR
aʰqéʰ=wu=ku βzivé nə-kú
 shoe=INE=INE insole DOWN-load.3

‘Then the rabbit said: “Take off your shoes up there.” When the poor kid was taking off his shoes, there was satin in that merchant’s cowhide pocket. He took out the satin, and it is said that he put an insole in the shoes, put an insole in the shoes.’

然后兔子说：`在上面把鞋子脱了。'穷小孩在脱鞋的时候，刚才那个商人的牛皮口袋里
里有（绸缎），把绸缎拿出来了，说是在鞋子里放了鞋垫，在鞋子里放了鞋垫

- (H.19) *tĩ áηυ éndje tʰə=ntsʰí éndje áηυ ʃʰó xtú ʒυ tə-tʃĩ tʃĩ*
then upside upstairs 3=PL upstairs upside barley hit.3 PROG NEU-EXIST GNR
ni tʃĩ
say.3 GNR

‘Upstairs it is said that the rich family was beating the barley.’
楼上他们富人家说是正在打青稞

- (H.20) *KN áηυ éndje é-ʃʰaʳ KN nǎ pʃʰó tsíxkə nə-vó tə-ní*
time upside upstairs UP-go.1PL time 2SG slide pretend IMP-do.2SG NEU-say.3
tʃĩ ni tʃĩ
GNR say.3 GNR

‘Then the rabbit said: “When we go up, you pretend that you slide and fall.”’
然后兔子说：`我们上去的时候，你假装滑到。’

- (H.21) *KN tĩ nǎ ɲυ KN nǎ tʰǎ βʒivó=tə qʰé-pəʳ wú á-tʃĩ*
time then 2SG.LOC say.1SG time 2SG.LOC this insole=ISM1 IN-rot finish.3 Q-GNR
tə-ɲó KN nǎ rʊsʰáʳ ɲĩ aʳqʰé tə-tʰó ɲĩ
NEU-say.1SG time 2SG immediately 2SG.REFL shoe IMP-take.off.SAP NFL
βʒivó=xə qʰé-hnəʳhnʊʳ tsíxkə nə-vó í-ntʰɪ ɲĩ
insole=LOC IN-smell.NOM pretend DOWN-do.2SG UP-take.out.2SG NFL
qʰé-hnəʳhnʊʳ tsíxkə nə-vó tə-ní tʃĩ ni tʃĩ
IN-smell.NOM pretend IMP-do.2SG NEU-say.3 GNR say.3 GNR

‘“When pretending to fall, I will say to you ‘Is your insole stinky?’ When I said
that to you, you take off shoes immediately, pretend to smell the shoes.”’
‘假装滑到的时候，我会跟你说`你的鞋垫是不是臭了？’我和你说的的时候，你马上把鞋
子脱了，假装把鞋垫闻一闻，把鞋垫拿出来假装闻一下。’兔子说

- (H.22) *tĩ pʰe tə-nó ɲi áwə nə-rə tə-ní tʃĩ ɲi tʃĩ qʰé-pəʳ*
then pooj IMP-say.2SG NFL downside IMP-throw.SAP NEU-say.3 GNR say.3 GNR IN-rot
wú-sʰí tə-nó áwə nə-rə tə-ní tʃĩ ɲi tʃĩ
finish.3-NMLZ IMP-say.2SG downside IMP-throw.SAP NEU-say.3 GNR say.3 GNR

‘“Then say ‘Pooh!’ then throw it away”. The rabbit said to the poor kid: “You say ‘It’s stinky!’ then throw it away.”’

“然后说‘呸’，然后把它丢掉。”兔子对穷小孩说，“你说‘已经臭了’然后扔掉。”

- (H.23) *jö nǎ sábi toxkwó rí-ntʰɪ* *ɲi tʰǒ nǎ-kí tǎ-ɲí tʂǐ*
 again 2SG new satin IMP-take.out.SAP NFl here IMP-load.2 NEU-say.3 GNR
ɲi tʂǐ
 say.3 GNR

‘“You take out a new satin and put it in the shoes.”’

‘你再拿一个新的绸缎出来，放到鞋子里。’兔子说

- (H.24) *tǐ tʰǒ xʈsomǎ ʃʰopʃʰí=tǎ=i* *ǎŋʊ í-tʃǐ* KN *tǐ éndje pʃʰǎ*
 then this poor child=ISM1=ISM2 upside UP-go.3 time then upstairs slide
tsixkǎ nǎ-wú pʃʰǎ tsixkǎ nǎ-wú KN *tǐ xǐ tǎ-ɲí ɲi*
 pretend DOWN-do.3 slide pretend DOWN-do.3 time then rabbit NEU-say.3 NFl
nǎ βzivǎ=tǎ tǎʰ-pǎʰ wú mǎ-tʂǐ æ tǎ-ɲí tʂǐ ɲi tʂǐ
 2SG.LOC insole=ISM1 NEU-rot finish.3 NEG-GNR ah NEU-say.3 GNR say.3 GNR

‘Then this poor kid went up, then pretended to fall. When he was pretending to fall, the rabbit said: “Is your insole stinky?”’

然后这个穷小孩上去了，然后假装滑倒。假装滑倒的时候，兔子说：‘你的鞋垫是不是臭了？’

- (H.25) *tǐ xǐ rʊsʰǎʰ* *tʰǎ βzivǎ=tǎ í-mtʰí* *ɲi hnǎʰhnǎʰ tsixkǎ*
 en rabbit immediately this insole=ISM1 DS-take.out.3 NFl smell.NOM pretend
nǎ-wú pʰéɪ tǎ-ɲí ǎwǎ nǎ-βrǎ tʂǐ ɲi tʂǐ
 DOWN-do.3 pooh NEU-say.3 downside DOWN-throw.3 GNR say.3 GNR

‘Then the rabbit (should be the poor kid) immediately took out the insole, and pretended to smell it, then said: “Pooh!”; and threw it down.’

然后兔子（应该是穷小孩）立刻把鞋垫拿了出来，假装闻了闻，然后说了‘呸’，把它扔掉了

- (H.26) *jö nǎ toxkwó sábi tǎ-rǎʰ xǎ* *í-mtʰí* *ɲi tʰǎ=kú nǎ-kú*
 again also satin new one-CL bosom DS-take.out.3 NFl this=INE DOWN-load.3
tʂǐ ɲi tʂǐ βzivǎ nǎ-kú tʂǐ ɲi tʂǐ
 GNR say.3 GNR insole DOWN-load.3 GNR say.3 GNR

‘Then took out new satin from the bosom and put it in the shoes. It is said that he put the insole in the shoes.’

又从怀里拿了一个新的绸缎出来，装进了鞋子里，说是把鞋垫装进了鞋子里

- (H.27) *tĩ jö a^uqé^u=tə ə-ku tšĩ ni tšĩ*
then again shoe=ISM1 UP-load.3 GNR say.3 GNR

‘Then put on the shoes again.’

然后又把鞋子穿上了

- (H.28) *tɪKN tǎ^u jö dzəpə^u=ts^hi=i tə-ní ni tǎ^u kət^hə p^həś^ha^u=tə dzípú*
that.time then again rich=PL=ISM2 NEU-say.3 NFl then this lad=ISM1 very
pjýpu=rĩ tə-tsí-s^hi tə^u-xs^hqí^u tšĩ ni tšĩ dzəpə^u=ts^hi-i
rich.man=ISM3 NEU-COP1-NMLZ NEU-think.3 GNR say.3 GNR rich=PL=ISM2

‘Then the rich family thought: “This young man is very rich.”’

然后富人家就想：这个小伙子是非常富有的

- (H.29) *tǎ^u t^hě zó^u=tə t^hě tə-k^hə ná^u nǎ kət^hə=ts^hi pjýpu*
then this daughter=ISM1 3.LOC NEU-give.1PL even.if this=PL rich.man
tə-tsí-s^hi tə^u-xs^hqí^u tšĩ ni tšĩ
NEU-COP1-NMLZ NEU-think.3 GNR say.3 GNR

‘Even if we give him our daughter, his family is rich.’

就算我们把女儿给了他，他家也是富人家

- (H.30) *tĩ zó^u=tə t^hě tə-k^hwí tšĩ ni tšĩ*
then daughter=ISM1 3.LOC NEU-give.3 GNR say.3 GNR

‘Then they gave him (their) daughter.’

然后就把女儿给了他

- (H.31) *tĩ tś-s^hi zǐ=xə tĩ ts^həǝvə və tə-ní tšĩ ni tšĩ*
then one-day ?=LOC then marry do.1PL NEU-say.3 GNR say.3 GNR

‘Then one day (the rich family) said to the (poor kid): “Let’s get married.”’

然后有一天富人家对穷小孩说：‘我们结婚吧’

- (H.32) *ts^héʒo væ tə-ní KN xli s^hi xtʂomó ʃ^hopʃ^hi-ndze p^húni éŋgu*
 marry do.1PL NEU-say.3 time rabbit and poor child-DU totally home
kó-ʃ^hi-s^ha^ʷ ʒɪ p^húni kwǎ^ʷ mæ-tʂí ni tʂí tə^ʷ-kwǎ^ʷ mæ-tʂí
 IN-go.NOM-NMLZ house totally EXIST NEG-GNR say.3 GNR NEU-EXIST NEG-GNR
ni tʂí
 say.3 GNR

‘When the rich family said “Let’s get married”, the rabbit and the poor kid didn’t even have a house that they can go in. It is said that they didn’t have it.’

富人家说‘我们结婚’的时候，兔子和穷小孩完全连可以进的房子都没有，说是没有

- (H.33) *tǎ^ʷ nde zí væ tə^ʷ-xs^hqí^ʷ KN xli tə-ní ni tǎ^ʷ xó*
 then what way do.1PL NEU-think.3 time rabbit NEU-say.3 NFl then know
tə-kú ni áwə t^hǒ lupí t^hye áwə mə^ʷ kólə
 NEU-know.3 NFl downside here valley bottom downside bottom something
jǒ t^hǒ nydʒi k^hó ri tə^ʷ-kwǎ^ʷ tʂí ni tʂí
 again here ghost house ? NEU-EXIST GNR say.3 GNR

‘The rabbit thought: “What do we do?” It said that it knew that there was a haunted house at the bottom of the valley.’

兔子想：我们怎么办？兔子说他知道山沟沟下面末端有个鬼屋

- (H.34) *t^hǒ nydʒi mə^ʷgí ɿ tə-tʂí tʂí ni tʂí*
 here ghost old.woman ? NEU-EXIST GNR say.3 GNR

‘There was a ghost hag.’

这儿有一个鬼婆婆

- (H.35) *tǎ^ʷ t^hə=té qe^ʷ nə-ní rí rí tə^ʷ-xs^hqí^ʷ ni tǐ p^hefó TZ*
 then 3=ISML place DOWN-bring need COP2 NEU-think.3 NFl then side this.way
tə-wú ni nə^ʷká^ʷ tə^ʷ-flwé^ʷ ni p^hefó lupí=wu ʃ^hi
 NEU-do.3 NFl mountain NEU-across NFl side valley=INE go.NOM
tə-gú-s^hi
 NEU-need.3-NMLZ

‘Need to lead them to the ghost old woman’s place, then do it like that. They needed to go across the mountain and reach the valley.’

需要把他们引导鬼婆婆那儿，然后像这样子做，他们需要翻过山，去旁边的山沟里

- (H.36) *tĩ æwə nə-tfĩ ji xli ŋgwə nə-tfĩ xt̩somó ʃʰopʃʰi sʰi*
 then downside DOWN-go.3 NFl rabbit first DOWN-go.3 poor child and
məʳ æʒʊ sʰi tsʰəwú=tsʰi æŋʊ məʳ nə-tú
 behind uncle and best.man=PL upside behind DOWN-go.3

‘Then the rabbit went first. The poor kid and (the daughter’s) uncles and best men went down after the rabbit.’

然后兔子先去了。穷小孩和舅舅伴郎们在兔子后面下来了

- (H.37) TZ *nə-wú KN xt̩somó ʃʰopʃʰi æwə ŋgwə nə-tfĩ ji lupí*
 this.way DOWN-do.3 time poor child downside first DOWN-go.3 NFl valley
tʰqe nə-tfĩ ji tʰə nɣdʒi mü qeʳ kə-tfĩ ji áʳo nɣdʒi
 bottom DOWN-go.3 NFl this ghost old.woman place IN-go.3 NFl hey ghost
gemú tʃaʳpáʳ ʃʰó tə-ní t̩ʃĩ ji t̩ʃí
 old.woman bandit go.1SG NEU-say.3 GNR say.3 GNR

‘After doing like this, the poor kid (should be the rabbit) left first. It went to the ghost hag and said: “Hey, ghost hag, the bandit said he was coming.”’

然后像这样子做了后，穷小孩（应该是兔子）先走了，去了鬼婆婆那儿对她说：‘喂，鬼婆婆，强盗来了。’

- (H.38) *ndě sʰó pətáʳ mə-sʰi ŋə nə tə-βlo vó tə-ní t̩ʃĩ ji t̩ʃí*
 what yell any NEG-yell.2 1SG 2SG one-bite do.1SG NEU-say.3 GNR say.3 GNR
nɣdʒi mú tje tʰə xli=xə
 ghost old.woman upon this rabbit=LOC

‘The ghost hag said to the rabbit: “Don’t you shout, I’m going to swallow you in one bite.”’

鬼婆婆对兔子说：‘你不要嚷嚷什么了，我一口把你吃掉。’

- (H.39) TM *nə jö nde tə-ní mə-t̩ʃí tʰə=xə qeʳ nə-ptsú ji*
 then also again what NEU-say.3 NEG-GNR 3=LOC place DOWN-sit.3 NFl

‘Then the rabbit didn’t say anything, it sat there.’

然后兔子就什么也没说了，坐在门口

(H.40) *jǒ χά'la' tje á'ro nydʒi mú tfa'pá'f'ú tə-ní tʃi ni tʃí*
 again almost upon hey ghost old.woman bandit go.1SG NEU-say.3 GNR say.3 GNR

tǎ' s'ó nde mæ-s'í ŋǎ nǎ tɛ-βlo vó tə-ní tʃí ni tʃí
 then yell what NEG-yell.2 1SG 2SG one-bite do.1SG NEU-say.3 GNR say.3 GNR

‘Then after a while, the rabbit said to the ghost hag again: “Hey, ghost hag, the bandit said he was coming.” Then the ghost hag said: “Don’t you shout, I’ll swallow you in one bite.”’

又过了一会，兔子又对鬼婆婆说：‘喂，强盗来了。’然后鬼婆婆说：‘再不要嚷嚷啥子了，我一口把你吃掉。’

(H.41) *TM tənú nde tə'-βzɛ' mæ-tʃí ni tʃí tǐ χά'la' tje rí ázɔ*
 then still what NEU-behave.3 NEG-GNR NFL GNR then almost upon ? uncle

ts'ówu éŋɔ nə'kə' q'ú' tje nə-tú p'úni dzə'ylé' mə'
 best.man upside mountain head upon DOWN-come.3 very suona blow

á'-tsi-s'í tǔ' mə' á'-tsi ŋí γzwə' é-tsi p'úni diydzó xtá'
 Q-COPI-NMLZ conch blow Q-COPI drum beat.3 Q-COP2 very loud.noise sound

fí nə-tú tʃí ni tʃí
 while DOWN-come.3 GNR say.3 GNR

‘The ghost old woman didn’t listen to the rabbit. After a while, the uncles and best men (the wedding crowd) came down from the peak. There were people playing *suona*, there were people blowing trumpet shell, there were people beating the drums. They were making loud noises while going down.’

鬼婆婆没有听兔子的话，过了一会，舅舅和伴郎（送亲队伍）从山顶上下来了。吹着唢呐的有，吹着海螺的有，打着鼓的有，这样响彻山谷地下来了

(H.42) *nə-tú KN tǐ nydʒi gemú=i t'ǎ mə'gí=tə=i*
 DOWN-come.3 time then ghost old.woman=ISM2 this old.woman=ISM1=ISM2

tǎ' érápərá putfíre=tə xli'=é=tə (=xə=tə) nə-bdɛi-s'í o tǎ'
 then real just.then=ISM1 rabbit=LOC=ISM1 DOWN-correct-NMLZ oh then

tʃəxpí tǔ tə'-xs'qí' tʃí ni tʃí
 robbery come.3 NEU-think.3 GNR say.3 GNR

‘When the send off crowd came down, the ghost old woman thought: ’The rabbit just then was right, they came to rob.’’

送亲的人下来的时候，鬼婆婆就想：刚刚的兔子（说）的是对的，真的来打劫了

(H.43) *tǎʰ tsǎ ndě nǎ-vu lǎʰ tǔ qǎʰ-vuʰ tǎ-ní tǰǎ ní tǰǎ*
 then 3 what down-do.1SG where place in-hide.1SG NEU-say.3 GNR say.3 GNR

‘The ghost hag said: “What should I do? Where do I hide?”’
 鬼婆婆就说：‘我要怎么做？我要藏到哪儿？’

(H.44) *tǎʰ tǎ-pʰí jǎ pʰí lǎ tʰǎ mǎ-tǰǎ tsʰo ǎŋu*
 then NEU-escape 2SG.REFL.LOC escape.NOM NF2 succeed NEG-GNR now upside

pʰí mǎʰ-tsó rǐ tepǎʰ nǎ-tú xtaʰ tǎʰ qʰolóʰ=ku
 escape NEG-available COP2 upside DOWN-come.3 sound then pot=INE

nǎ-ʰí tǎ-ní tǰǎ ní tǰǎ
 DOWN-go.2SG NEU-say.3 GNR say.3 GNR

‘“Now you won’t be able to escape, there’s no time to escape. (You can hear) They are coming down now. Go into the pot.” (said the rabbit)’
 ‘你自己现在想逃是逃不掉的，没有逃跑的时间了，听到上面（送来的）下来了。到锅里面去。’兔子说

(H.45) *qʰolóʰ nǎ-ʰí ŋǎ tʰǎ=tǎ tǰo pʰǔ bdǎʰ tǰǎǎ TM jě*
 pot DOWN-go.2SG 1SG this(pot)=SUPE pot lid cover otherwise then who

tǎ-róʰ=i mdí mǎ-tǰǎ tǎ-ní tǰǎ ní tǰǎ
 one-CL=ISM2 see.3 NEG-GNR NEU-say.3 GNR say.3 GNR

‘“You go into the pot, I’ll cover it with the lid. No one will see you.” said the rabbit.’
 ‘你到锅里面去，我就把这锅盖盖上，谁都看不到你。’兔子说

(H.46) *TMKN tʰǎ nydǰǎ mǎǎ=tǎ qʰolóʰ=ku nǎ-tǰǎ qʰolóʰ nǎ-tǰǎ kʰí*
 then this ghost old.woman=ISM1 pot=INE DOWN-go.3 pot DOWN-go.3 time

tʰǎ=tǎ tǰo pʰú tǎʰ-bdǎʰ tǰo pʰǔ tǎʰ-bdǎʰ mǎʰ TMKN tǰǎ=qʰǎʰ=ní
 this=SUPE pot lid NEU-cover pot lid NEU-cover after then stick=INS=ABL

ǎŋu xkǎyǰzwǎmwǎ xtǐ tǎʰ-bdǎʰ tǐ wǎ mǎʰ tǎ-ptʰǎ TZ
 upside ceiling hold.up NEU-cover then under fire NEU-light this.way

tǎ-wú ní mǎʰ tǎ-ptʰǎ KN ndǰǎ mǎǎ=tǎ pʰúni tǎʰ-βló
 NEU-do.3 NFl fire NEU-light time ghost old.woman=ISM1 very NEU-melt

tǎ-pʰú tǰǎ ní tǰǎ tǎ-tǰʰý tǎ-wú tǰǎ ní tǰǎ
 NEU-cause.3 GNR say.3 GNR NEU-boil NEU-do.3 GNR say.3 GNR

‘Then this ghost hag went into the pot. After she went into the pot, the rabbit put the lid there. After it covered the pot with the lid, then the rabbit used a stick to hold up the ceiling, then lit up a fire beneath the pot. Then when the rabbit was lighting up fire, the ghost hag melted, the rabbit boiled (the ghost hag).’

然后这个鬼婆婆就到锅里去了，她到锅里去后，（兔子）把锅盖盖上了。把盖子盖上之后，用木棍撑起天花板，然后在下面点火了。然后生火的时候，鬼婆婆就被化掉了，兔子把鬼婆婆烧开了

- (H.47) *tĩ* *ǎʒo=tsʰi nə-tú* *tʂĩ ni tʂí ǎʒo=tsʰi nə-tú* KN *tʰə*
 then uncle=PL DOWN-come.3 GNR say.3 GNR uncle=PL DOWN-come.3 time this
nɔʒí mǎgí=tə *tə-tʃʰý* *tə-pʰú* KN *tə-mó* *ni yĩ*
 ghost old.woman=ISML NEU-boil NEU-cause.3 time NEU-mushy NFl melted.butter
zĩ *iĩ* *tə-tʂóʰ* *tʂĩ ni tʂí*
 way ? NEU-become GNR say.3 GNR

‘Then uncles came down. That ghost hag was boiled, and became mushy, became like melted butter.’

然后送亲队伍就下来了，鬼婆婆就被烧开了，煮软了，变成了像酥油汤汤的样子

- (H.48) *tĩ* *tʰə=ntsʰi=xə* *tʃeʒí=ku* *tə-xʃʰwəʰ* *tʂĩ ni tʂí*
 then 3=PL=LOC bowl=INE NEU-pour.3 GNR say.3 GNR

‘Then the rabbit poured (the ghost hag) into their bowls.’

兔子就把鬼婆婆倒到了送亲队伍的碗里

- (H.49) *mdú* TZ *tə-wú* *ni kə-xʃʰwə* *tʂĩ ni tʂí*
 meal this.way NEU-do.3 NFl IN-feed GNR say.3 GNR

‘This is how this meal was fed.’

这顿饭是像这样子喂的

- (H.50) *tĩ* *tǎʰ* *ǎʒo=tsʰi=xə* *dʒý* *ʃiʃʰo* *tsi* *tə-ní* *tʂĩ ni tʂí*
 then then uncle=PL=LOC property present.lsg COPl NEU-say.3 GNR say.3 GNR

‘Then the rabbit said: “I’ll demonstrate the property.”’

然后兔子说：‘给你们（送亲队伍）展示财物。’

- (H.51) *xlǐ mdzə tə-rúʳ kə-ptʃʰy KN ɱə rǐ tə-psʰə-sʰi rǐʳ təʳ-sʰó*
 rabbit room one-CL IN-open time person ? NEU-kill.3-NMLZ corpse NEU-full
tə-ʃǐ tʃǐ ni tʃí kətʰə=tə ʒivə əʒo=tsʰi=tə tsi tʃí tə-ní
 NEU-EXIST GNR say.3 GNR this=ISM1 last.year uncle=PL=ISM1 COP1 GNR NEU-say.3
tʃǐ ni tʃí
 GNR say.3 GNR

‘The rabbit opened (the door to) a room, there were killed people’s corpses. It is said that these are last year’s uncles.’

兔子打开了一间房间，然后里面是被杀了的人的尸体，尸体有满满的一房间。说是这些是去年的舅舅们

- (H.52) *TM jǒ pʰeʃú mdzə tə-rúʳ kə-ptʃʰy KN ɱə hméhmi bú tsíkæ*
 then again side room one-CL IN-open.3 time person half.dead breath a.bit
tʃy-tʃí tǎ təʳ-sʰó tə-tʃý tʃǐ ni tʃí tʰə=tə pəvə əʒo=tsʰi
 EXIST-EXIST ? NEU-full NEU-EXIST GNR say.3 GNR this=ISM1 this.year uncle=PL
tsi tʃí tə-ní tʃǐ ni tʃí
 COP1 GNR NEU-say.3 GNR say.3 GNR

‘Then the rabbit opened another room, there were people who were half dead.

The room was full of this kind. It is said that these are this year’s uncles.’

然后又打开了旁边的另一间房间，这里面是半死不活的只有一点气的人，像这样的有满满一房间。说是这是今年的舅舅们

- (H.53) *ójaʳ tǐ əʒo=tsʰi tǐ tǎʳ təʳ-kwəʳxtʃəʳ ni tǎʳ kətʰə=tsʰi nde kə taʳ*
 ok then uncle=PL then then NEU-afraid NF1 then this=PL what wisdom ?
rǐ nde méi-tsi-sʰi əʒo=tsʰi tʃǎelæ=tə sʰə-fə tə-tʃí-sʰi
 COP2 what NEG-COP1-NMLZ uncle=PL all=ISM1 kill.NOM-NMLZ NEU-COP1-NMLZ
təʳ-xshíqí ni əʒo=tsʰi təʳ-kwəʳxtʃəʳ tʃǎelæ tə-pʰípʰi tʃǐ ni tʃí
 NEU-think.3 NF1 uncle=PL NEU-afraid all NEU-escape.RED GNR say.3 GNR

‘Then the uncles got scared, they thought: ‘This family is not some good kind, their uncles are to be killed.’ The uncles got scared and all escaped.’

然后舅舅们就害怕了，心里想：这家子不是啥子好人，舅舅们都是要被杀的。舅舅们就都害怕了，一哄而散了

- (H.54) *TMKN βrí s^hi gəxtí s^hi TVNØ nde jǐjǐ tʃǎlə=tə i-rí ǎzɔ=ts^hi*
 then horse and saddle and these what EXIST.RED all=ISML DS-remain uncle=PL
tʃǎlə tə-p^hi tə-tʃ^hɥǎ wú tʃǐ jǐ tʃí
 all NEU-escape.3 NEU-leave finish.3 GNR say.3 GNR

‘Then horses, saddles, rugs, things like that were all left. The uncles all escaped.’
 然后马和马鞍地毯这些所有的东西都被剩下了，舅舅们全部都逃离了

- (H.55) *tǐ xǐ tə-jǐ jǐ tǎ^h TZ mæ-tʃí ts^hó ǎnts^hi t^hə ɱó rǐ s^hi*
 then rabbit NEU-say.3 NFL then this.way NEG-GNR now 1PL this person ? and
t^hə tʃǎlə=tə ǎwə rə TMKN ǎnts^hi ǎŋɥu=tə tə-k^hǎre xtsómei
 this all=ISML downside throw then 1PL home=ISML NEU-clean.SAP clean
vǎ tə-jǐ TZ tə-wú jǐ xtsómei tə-k^hǎβre tʃǐ jǐ tʃí
 do.1PL NEU-say.3 this.way NEU-do.3 NFL clean NEU-clean.3 GNR say.3 GNR

‘Then the rabbit said: “It’s not like this. Now let’s throw these people’s bodies and everything else down there, and let’s clean up our house.” Then they did so and cleaned up the house.’

兔子说：‘不是这样子的。我们现在把这些人的尸体和其他的全部都丢到下面。然后我们把房子打扫干净。’然后他们就把房子打扫干净了

- (H.56) *tǐ tǎ-s^hi-zǐ-rǐ=xə xǐ tə-jǐ jǐ tǎ^h jǐ-ndze t^həkó nǎ-tsí*
 then one-day-?-?=LOC rabbit NEU-say.3 NFL then 2.REFL-DU good DOWN-sit.2
ója^h ts^hǔ t^həkó qǎ^h-ze^h tʃetʃý tá-vǐ tsǎ nǎ=ts^hi=p^he tsú-mə
 ok settle good IN-settle fight PROH-do.2PL 3 2SG=PL=COM sit.NOM-NMLZ
nde tsǐ mæ-tsí tsǎ rǎ rú tʃ^hi-mə tsǐ tʃí tsǎ tǎ^h rǎ
 what COPL NEG-GNR 3 mt.LOC grass eat.NOM-NMLZ COPL GNR 3 then mt.LOC
ʃ^hó tsǐ jǐ-ndze t^həkó nǎ-tsí tə-jǐ jǐ TM χá^hla^h
 go.1SG COPL 2.REFL-DU good DOWN-sit.2 NEU-say.3 NFL then almost
tǎ-s^hi-zǐ=xə xǐ tə-tʃ^hɥǎ k^hi tʃǐ jǐ tʃí
 one-day-?-?=LOC rabbit NEU-leave ? GNR say.3 GNR

‘Then, one day, the rabbit said: “You two please live well, settle down, don’t fight. He (should be I)’s not going to live with you two. I’m the grass-eating one on the mountain, now I’m going up to the mountain. You two live well.” Then one day, the rabbit left.’

有一天，兔子说：‘你们两个好好过日子，好好安家，不要吵架，他（我）不会跟你们一起生活。我是在山上吃草的，我现在去山上了，你们好好地生活。’然后有一天，兔子就离开了

(H.57) *tǐ jép^{hi} xǐ* TZ *tə-wú ji βlút^ho* TZ *nə-wú*
 then past rabbit this.way NEU-do.3 nfl method this.way DOWN-do.3

kú-dzu-s^{hi} *ri=xə* TV *ri=xə nǎ^rpfə* *ri tʂi*
 IN-carry.out-NMLZ ?=LOC this.way ?=LOC story ? GNR

‘Then in the past the rabbit carried out a plan like this, there’s a story like that.’
 以前兔子实施了这样的计策，的一种故事

(H.58) TV *ri nǎ^rpfə* *fǐ k^{hi}* *tʂi*
 this.way ? story EXIST be.custom GNR

‘There’re stories like that.’
 一直有像这样的故事。

APPENDIX I

PUBARONG VILLAGES

QVY-326

- (I.1) *pʃĩni nəwú lə rínóʷ=pʰe xtsó tsi tʃí*
 Yinglong as.for ?? Xinlong=COM be.close COP GNR

‘Yinglong is right next to Xinlong.’
 应龙村和新龙相邻

- (I.2) *pʃĩni sʰi vətʃý mydzǝzi kɔβzɔ*
 Yinglong and PN Rizi Gerang

‘Yinglong and XX, Rizi, Gerang (village names)’
 应龙和XX, 日孜, 各让

- (I.3) *tʰə=ntsʰí yige dadui tsi tʃí*
 3=PL one brigade COP GNR

‘They belong to a brigade.’
 它们是一个大队

- (I.4) *tʰǝ=ni i-tó kʰi=ni lóte, ló, pʰukú*
 there=ABL DS-come.3 time=ABL Lede Quru Pugu

‘Down from there, then we have Lede, Quru, Pugu.’
 从这儿下来以后就是勒德, 曲入, 普古。

- (I.5) *tʰə=ntsʰí yige dadui tʃí*
 3=PL one brigade GNR

‘They belong to a brigade.’
 它们是一个大队

- (I.6) *tʰəʷmóʷ i-tó kʰi=ni dzəʃtjé, mətʃý,*
 then DS-come.3 time=ABL Jiade PN

qʷəʷli (mətʃý should precede dzəʃtjé)
 Guali

‘Then down from there are Jiade, XX (a village of Jiade), Guali. (XX should precede Jiade)’

然后从这下来以后就是甲德,XX(甲德的一个村子),瓜里 (XX应该在甲德前面)

- (I.7) *yige dadui tʂi*
one brigade GNR

‘(They) are one brigade.’

是一个大队

- (I.8) *tʰə^hmə^h tʰö i-tó kʰi kə^hptʂó xúli qə^hvə rə^hə^h xlówu*
then there DS-come.3 time Yizha Yazhong PN PN Suoyi

lá^hxto tʂi
Laduo/Sanjiacun GNR

‘Then down from there are Yizha, Yazhong, Yazhong village 1, Yazhong village 2, Suoyi, Laduo.’

然后再过来就是乙扎,亚中,亚中的村子1,亚中村子2,索依, 拉多

- (I.9) *tʰə=nts^hi yige dadui tʂi*
3=PL one brigade GNR

‘They belong to a brigade.’

它们是一个大队

- (I.10) *kə^hptʂ^hó jö i-rə xkə s^hi ləndzə-pi xkə nəwú*
Yizha downstream afterward language and upstream-people language as.for

lə tsíkæ ri xtfĩ mə-tʂi
?? a.little ?? same NEG-GNR

‘Down from Yizha, the language is a bit different from the upstream speech.’

乙扎以下的语言和以上的村民的话有一点点不一样

- (I.11) *ləndzə-pi nə-pfə-s^hi=tə vəndzəpi=tʂa^h=i xó ku tʂi nĩ*
US-people down-say-NMLZ=ISM1 DS.people=PL=ISM2 know know.3 GNR say.3

ŋu tʂi
be.capable.3 GNR

‘What upstream people say, downstream people know, and are able to speak.’

L说的话, V全部都懂, 也会说

- (I.12) *vəndʒə-pi xkə nə-pfə-s^hi=ʦá^s=tə ləndʒə-pi=ʦá^s nə nǐ*
DS-person language DOWN-say-NMLZ=PL=ISML US-person=PL also say.3

ŋu ʦí xó ku ʦí jǔ pfə ŋu ʦí
be.capable.3 GNR know know.3 GNR also say be.capable.3 GNR

‘The downstream people’s speech, upstream people also understand, know, and are able to speak.’

V的全部的话, L全部都听得来, 也懂, 会说

- (I.13) *lá^sxto nəwú lə nə^stʰiko pətó zi xtsí=tə tsi ʦí*
Laduo as.for ?? Yajiang middle SUP be.close=ISML COP GNR

‘As for Sanjiacun Village, it’s the losest to the midpoint between Yajiang.’
三家村的话和雅江中间是最近的

- (I.14) *Ertan Dianzhan=p^{he} zi xtsí-tə ʃówu t^hə zí nəwú lə tǐ*
Ertan Hydropower.Station=COM SUP be.close-OBJ Quru? this way as.for ?? then

t^hə zí tsi ʦí
this way COP GNR

‘The closest villages to Ertan Hydropower Station are XX (including Sanjiacun).’
离二滩电站最近的是XX那两村子(包括laxto), 然后就是这样子的

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