

# Outline of Bra‘go Variety of rTa’u (Horpa)

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A thesis submitted in total fulfilment  
of the requirements for the degree of  
Doctor of Philosophy

College of Arts, Social Sciences and Commerce,  
School of Humanities and Social Sciences,  
Department of Languages and Linguistics

La Trobe University  
Victoria, Australia

March 2019





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## Summary of the thesis

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This thesis is a descriptive grammar of the Brag mda' (Zhangda) speech variety of rTa'u (Daofu), a Tibeto-Burman language of the rGyalrongic branch spoken mainly in rTa'u County of Dkar mdzes (Ganzi) Tibetan Autonomous Prefecture in Sichuān province in Southwest China. It is based on a large corpus of primary data collected during two fieldwork trips in 2013-2014 and 2014-2015 by the author. Most sentence examples are given by the author as he is a native speaker of the rTa'u language himself. The thesis presents a phonological and grammatical description of the language and includes three fully analysed interlinear texts in the appendix.

## **Statement of authorship**

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Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Tunzhi

21-03-2019



## Acknowledgements

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As I write this reflecting back on how this unusual journey began and thinking of all the people who have, directly or indirectly, contributed to the successful completion of this thesis, memories of my very first English class came into my mind. All began on a usual Autumn day in 2003. Never in my wildest imagination did I imagine that a decade later I would be writing my dissertation in English. Therefore, first and foremost, I would like to express my deep gratitude to my first English teacher Dr. Kevin Stuart and his teaching team. He took the initiative to arrange informal meetings for students with diverse cultural and language background with linguists who would drop by during their fieldwork and it is through such informal contacts that I established my first acquaintance, though informal, with linguistics.

I am indebted to my supervisor Prof. David Bradley. No word could sufficiently express my gratitude and appreciation of his unreserved support and patience. In fact, his support and caring during my study extended beyond my academic life. He spent countless hours correcting and commenting on each and every part of the thesis. The depth of knowledge he mastered of Tibeto-Burman languages has been nothing but inspirational. I am also grateful to my co-supervisor Dr. Stephen Morey, who made the extra effort to make sure he read and commented on my chapters before every meeting. Their dedication and enthusiasm for the study of languages have my outmost admiration. The community of La Trobe University has been exceptionally welcoming. There is nothing more exciting than to be surrounded by

enthusiastic and talented people. I want to thank Henriette Daudey, Pavel Ozerov, Libu Lhaki, Mijke Mulder and Kellen Parker van Dam who had to bear with my constant barrage of questions and always gave exhaustive answers for my naive questions. Special thanks also go to Daniel Arisawa and Tamami Arisawa for inviting me over for dinner on numerous occasions.

Several other people should be acknowledged for their support: The Roche and McKinlay family for making me part of your lovely family: especially Elena McKinlay for preparing countless delicious dinners over the years; meeting Arlo after tiring and tense work days has always brought a smile and ease in me; Gabriela Samcewicz and her daughters for their unconditional hospitality and opening their family whenever I needed a place to escape. Your friendships have made this journey all the more memorable and special.

I would like to make a special remark to my friend and colleague Libu Lakhi (Jianfu Li) in appreciation of the decade-long friendship and support he has shown me during my time at La Trobe University. Seeing me completing my thesis would make no one happier than Libu Lakhi as he and I sat next to each other as colleagues over the past few years going through the struggles together. He has always been a source of inspiration and a model for me and I will forever appreciate the friendship we built through those years.

Lastly, words of appreciation do not do justice for what I owe to my family. Every cultural group has a unique way of fulfilling social and family obligations and obtaining a doctorate degree is least of it. Yet, despite all the objections, they gave me the freedom to pursue my dreams. For this I want to thank my father Yiluo, my mother Tsering Droma, my elder sister Monlam Tso, my brother Tinphar and my younger sister Chosnyi Sgrolma for their unlimited support.

This work was supported by a La Trobe University Full Fee Research Top-Up Scholarship.

## Abbreviations

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(1) All Tibetan words are written according to the Wiley Tibetan transcription method and Tibetan script is given for Tibetan words when appearing for the first time in the introduction. In the main texts Tibetan words are marked by Ti.

(2) All Chinese words are marked by Ch.

(3) All quotations from Chinese sources have been translated into English by the author

### List of Abbreviations

1P	first person
1PS	first person singular
2P	second person
2PS	second person singular
3P	third person
3PS	third person singular
ABL	ablative case
ABS	absolute case
ADE	adessive case
ADV	adverbial
ALL	allative case

ART	article
AUX	auxiliary
CL	classifier
COM	comitative case
COP	copula
CONJ	conjunction clitic
COND	conditional
COORD	coordination
CP	comparative particle
DAT	dative case
DEF	definite article
DET	determiner
DEM	demonstrative pronoun
DIM	diminutive suffix
DIR	directional prefix
DJ	disjunct
DUL	dual number
EMPH	emphatic clitic
ERG	ergative case
EVOC	evocative clitic
EVI	evidential marker
EXIST	existential copula

EXP	experiential marker
EXPER	experiencer
FUT	future tense
GEN	genitive case
HABIT	habitual
HON	honorific
HS	hearsay clitic
IMPER	imperative marker
IMPF	imperfective marker
INCL	inclusive
INDEF	indefinite clitic
INFER	inferential evidence
INTS	intensifier
INSTR	instrumental marker
intr.	intransitive
LOC	locative case
NOM	nominalizer
ONOM	onomatopoetic expression
PL	plural number
PN	proper name
POSS	possessive copula
PERF	perfective

PROG	progressive participle
PROH	prohibitive marker
PRS	present tense
ADJP	adjectival prefix
PST	past tense
PTB	proto-Tibeto-Burman
Q	question clitic
REL	relativizing clitic
RESUL	resultative aspect
SG	singular number
SIM	simultaneous clitic
STAT	stative suffix
STP	stative perfective marker
SUP	superlative
TAGQ	taq question
TOP	topic marker
TR	transitive conjugation
tr.	transitive
TRA	transitivizer
VOLIT	volitional
VP	verb phrase
VRB	verbalizing suffix

WT	written Tibetan
*	reconstructed form
**	ungrammatical form/non-existent phonological form
?	form with debatable grammatical status
/.../	phonological representation
[...]	phonetic representation



## Outline

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Following this introduction, Chapter One provides an ethnographic description of rTa'u language speakers, starting by discussing, from a macro perspective, issues pertaining to nomenclature. This section on nomenclature concludes by focusing on the existing names that refer to rTa'u language or its speakers. This is followed by a discussion of the cultural features of the rTa'u-speaking population. The final section of this chapter provides a review of the research literature on the rTa'u language, with a particular focus on sources in non-English languages.

Chapter Two, on morphology, begins with a full description of the consonantal system of rTa'u language; minimal pairs are provided for each distinct phoneme. rTa'u has a relatively large phonemic inventory, characteristic of rGyalrongic languages. This is followed by a discussion of the language's vowel system, which shows a large number of distinct vowels. Prosodic features such as stress, pitch and accent are also discussed in this chapter.

Chapter Three deals with nouns and nominals. The chapter begins with an exploration of the phonotactics of nouns in rTa'u, which shows that most common nouns in rTa'u are monosyllabic, and multisyllabic words often have two semantic elements, with the second one hosting the meaning of nouns. The presentation of derivational processes of noun formation shows that rTa'u uses a wide range of

derivational suffixes to make nouns. In contrast to reduplication, compounding is a productive process in rTa'u that distinguishes 7 types of semantic relationship between different compounding elements. Fauna and flora are one category that presents the most interesting phonotactic features, and is the semantic category least influenced by borrowing. Then, a discussion of grammatical relations presents 8 types of grammatical markings, which is followed by discussions on spatial nouns, including four independent morphemes that function as spatial nouns, specifying the spatial position of an object or the relative temporal sequence of events. The chapter ends with the discussions on discourse clitics and noun phrases. The discourse clitics section presents 6 types of clitics and particles that share a pragmatic and discourse-structuring function. The section on noun phrases discusses two types of coordination: a) marking with the postpositive conjunctive coordinator and b) asyndesis.

Chapter Four, on closed nominal world classes, is concerned with different types of pronouns and demonstratives. It starts with a discussion on personal pronouns and concludes with a discussion on demonstratives. All the demonstratives in BM rTa'u prototypically express a spatial relation to the speakers and addressees. Specifically, their functions can be summarized as following: a) demonstratives express deictic reference to some persons or things other than speaker and addressee; b) used either as independent pronouns or as modifiers of a co-occurring noun.

Chapter Five deals with numerals and includes discussions of numeral classifiers and quantification. BM rTa'u has a large number of numeral classifiers that only appear after a numeral or other quantifier and categorize the noun in terms of its animacy, shape, and other inherent properties. This chapter also includes nouns that can be used as noun classifiers and concludes with a brief discussion on verbal action classifiers.

Chapter Six, the noun phrase, presents a preliminary study of noun phrase structure in BM rTa'u. It starts off by discussing the topics surrounding bare nouns and their syntactic behaviors within the noun phrase. It presents four different types of noun phrase structures. Finally, the chapter is concluded by discussing the phenomenon of possessive phrase structures.

Chapter Seven, on verbs, discusses the lexical class of verbs, which constitute the other major word class of BM rTa'u in addition to nouns. Morphologically, the verb in BM rTa'u can be defined as an element that can take the directional prefixes and the negative prefix. Adjectives can also take the directional and negative prefixes and are thus a subclass of verbs. The BM rTa'u verb can be defined additionally based on lexical semantics as denoting activities, processes, and states. This is followed by verb-stem alternation, a complex phenomenon common in rGyalrongic languages.

Chapter Eight, on ideophones and interjections, examines four small word classes: ideophones, onomatopoeic ideophone, expressives, and interjections. These word classes present some interesting phonological and morphological features that are absent in other classes, e.g., having three or four syllables. BM rTa'u has a whole range of ideophones which are regularly used during conversations and narratives. Their use is especially common in narratives when the addresser's verbal depiction of a particular situation is limited, and the use of an ideophone creates a vivid mental image in the addressee's mind.

Finally, Chapter Nine looks at sentences structure. This chapter discusses conjunction, disjunction, the clausal adversative and subordination. The materials presented in this chapter are preliminary and are indicative of the large amount of research still needed to be carried out on the rTa'u language.

# 1 Introduction

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This thesis is a descriptive grammar of the Brag mda' (Ti. བྱཀ་མདའ། Ch. Zhāngdá 章达) (hereafter BM) speech variety of rTa'u, an endangered language spoken in western Sichuan Province of the People's Republic of China, in the northwestern part of the region that is known to linguists and anthropologists as the Tibetan-Yi Ethnic Corridor. In this thesis the toponym rTa'u (Ti. རྟ་ཁ། Ch. Dào'fú 道孚) is used both as glossonym and an ethnonym to refer to both the rTa'u language and its speakers. This chapter begins by providing an overview of the aims of this thesis (§1.1) the nomenclature (§1.2) the people (§1.3), their culture (§1.4), and literature review (§1.5).

## 1.1 Aims

The aims of this reference grammar are threefold: (a) as the very first of its kind on Brag mda' speech variety of rTa'u, it serves as a reference for linguists and scholars interested in learning more about the language, culture and the speakers of this language; (b) it is the first full-fledged documentation of this endangered language in a systematic manner containing all important aspects of a language: phonetic, phonological, morphological and syntactic analysis, and; c) it aims to serve as the foundation for the creation of a writing system, which would enable rTa'u speakers to create teaching materials which, combined with other efforts, will contribute to language maintenance.

## *1.2 The Nomenclature*

Explorations of the languages and culture of the “Ethnic Corridor” of Sichuan, China, (also known as the “Tibetan-Yi Ethnic Corridor”), are inevitably confronted with a profusion of terminologies ensuring confusion (Matisoff et. al 1996: ix, Prins 2011:18, Tunzhi 2017:147). A standard approach to issues of nomenclature remains yet to receive the attention it deserves; yet the significance and importance of nomenclature cannot be under-stated in this area. This is especially true in typological and explorative studies that aim to discover and enrich our existing understanding of groups of peoples. More often than not, the issue of nomenclature surfaces in two forms: a) a list of all related names and, or; b) just the names in the official or socially and politically dominant languages.

The problems with such lists are that often they include not only genuinely different names for the same language but also, most often, merely different spellings or pronunciations of the same name. The latter is rampant due to the tendency of granting ‘native’ people some kind of ‘official’ status by using those terms that are adopted by the higher-ranking groups in a cultural hierarchy. Ironically, often those terms are mere adaptations of native names and, sadly, the meanings of original names are lost in the adaptation. This, in turn, produces another chain of wildly speculative names that are far distant from the original names.

Before embarking on the discussion of nomenclature of rTa'u, I will try again to set the scene by presenting some excerpts that precisely illustrate the type of terminological ‘crisis’ facing Sino-Tibetan (hereafter ST) linguistics and it is within

this context of growing concern that I will present the terminological problems pertaining to rTa'u and its neighbouring languages. Marrison (Marrison 1967: 377 cited in Matisoff 1996: ix), in his description of the complexity of Naga names, writes:

“The nomenclature of the Naga tribes is complex. The tribes themselves are much sub-divided; but apart from this, in many cases there are alternative names, as well as alternative spellings of the same name. When the Nagas were first described, it was usually an outsider’s name for a particular tribe which was used; the tribe’s own name for itself often was not known till later. In reference to language, especially in the reports made in the 19th century, it is often the name of the village, rather than that of the tribe or sub-tribe, which is given. This arose from a need to provide some means of identification; but it may be justified by the fact that nearly every village has its own variety of speech”.

“...[D]ifferent names have been applied to the same tribes or other groups at different times...” [p. 377]”.

Matisoff (1996: ix) subsequently remarks: “Rampant polynymy prevails in the TB. Rare is the language that is not known by more than one name”.

If the only consequence of misrepresenting, mislabelling or misusing names were confusion among scholars, then it is a reasonable argument that it is an issue that can be solved over time. However, the consequences of such misrepresentation are

not confined to the scholarly community; they affect the people being talked about, and therefore it is paramount that these issues receive the attention they deserve. Overall, this terminological issue not only creates inconvenience in the linguistic community, but most importantly, I argue that the misrepresentation of language names or other words using problematic terms to refer to a certain language group may promote negative perceptions of the language amongst its speakers, which may be a threat to the vitality of that language (Tunzhi 2017: 147). Thus, questions regarding how to represent the name of a speech group/community in the academic discourse deserves equally careful assessment.

rTa'u is no different. In the case of rTa'u, Vanderveen (2015:12) makes the following observation:

“In the first place, rTa'u has many allograms, which can be confusing to the novice. The allogram *rTa'u* uses the Wylie transliteration of Tibetan script. Because the pronunciation of the *r* in Written Tibetan (WT) is misleading to newcomers, other scholars changed this preinitial to the more phonetic *s*. Other allograms include *Daofu* (Chinese pinyin), *Dawu* (Tibetan pinyin), and *Taofu* (Wade-Giles romanization). Capitalization is also an issue among Rgyalrongic languages because some, like Stau, have Tibetan names. In Tibetan, it is conventional to capitalize the root letter; if the first letter it is a prefix, it is written in lowercase. Thus, one gets *sTau*, *rGyalrong*.”

With such a prelude, a discussion on several important terms related to rTa'u becomes a necessity. I will try to provide a detailed discussion of the terms seen



thus far in literature, which are more often than not treated as synonymous to rTa'u.

In this discussion I will adopt Matisoff's (1996) terminology, as follows:

- ETHNONYMS

Names used to refer to a given group of people (people-name);

- GLOSSONYMS

Names used to refer to a language or a group of language (language-name);

- ALLONYMS

Genuinely different names for the same people/language;

- ALLOGRAMS

Different spellings of the same name;

- AUTONYMS

Self-names for a given group of people;

- EXONYMS

Outsider's names that others use to refer to them;

- TOPONYMS

Names of places that are used to refer to a given group of people or language;

- LOCONYMS

Names referring specifically to place name that has been extended to serve as the same name of a language and dialect;

- PALEONYMS

Names that have been replaced or changed to other names;

- NEONYMS

New names in place of paleonyms.

- PALEOAUTONYMS

Old names that people used to call themselves;

- PALEOEXONYMS

Old names that outsiders used to call a given group of people.

The following discussion is arranged in subsections. Section (§1.2.1) is a brief account of the term *Ergong*; section (§1.2.2) is devoted to the etymology of the commonly-used term Hörpa and its historical significance for rTa'u speaking people; section (§1.3) is a discussion of contemporary geographical attributes of the rTa'u speaking community, lastly, in section (§1.4) I will discuss the cultural aspects of rTa'u speakers, focusing on the community of BM community.

### 1.2.1 Ergong

The prominent linguist Sūn Hóngkai (孙宏开), whose (1983) 'Ethnic Languages in the Six River Valleys and their Classifications' contains descriptions of a dozen small languages spoken in the Ethnic Corridor, promoted the term ěrgōng (尔龚). According to Sun (1983: 139) the term first appeared in Mǎ Zhǎngshòu's (马长寿) *Social History of the rGyalrong Nationality* (Jiāróng mínzú shèhuìshǐ 嘉绒民族社会史). Subsequently, it achieved currency mainly among Chinese scholars and is in use to date. However, its use has changed over the years as a direct result of continuing research in the area. Sun uses Ergong as the higher-order taxonomic term for a group of culturally and genetically close languages spread over neighbouring counties including rGyalrong (Ti. ལྷོ་རྩུག་ Ch. Dānbā 丹巴), rTa'u, Brag mgo (Ti. བྱ་མགོ་ Ch. Lúhuò 炉霍), and Nyarong (Ti. ཉག་རྩུག་ Ch. Xīnlóng 新龙) counties of Ganzi Autonomous Prefecture of the Tibetan Nationality, and in some localities around

the Thugs rje chenmo (Ti. ཐུགས་རྒྱལ་ཆེན་མོ། Ch. Guānyīn qiáo 观音桥) area of (Ch. Jīn chuān 金川) County of Aba Autonomous Prefecture (Ti. ཇའ་བ་རང་སྐྱོང་ཁུལ། rNgaba rangskyong khul, Ch. Abà zìzhì zhōu 阿坝自治州) of the Tibetan Nationality” (Sun 1990:12-13). Ergong was believed to be a different language among Chinese scholars according to Li (1980) (as cited in Sun 1983: 139), who wrote “[R]esidents in Geshenzha and Bawang areas speak a language known by the autonym *rgu*, [which was phonetically translated as ěrgōng 尔龚] commonly known as Daofu speech, and in speech [they] mix with Hörpa (Li 1980).”

The original works mentioned little to nothing about the nomenclatural nature of the term, therefore there is no shred of evidence suggesting that *rgu* is an autonym; certainly it is not known to the rTa'u people. It most likely an exonomic toponym—a place name used by outsiders to refer to the people in that specific area. With increasing access to the actual people with whom the term was originally said to be affiliated with, we have come to know that this term, in the Geshitsa variety of rTa'u, means “cattle”, and its compound *rgu skad* “cattle speech” is used as a derogatory term for any unintelligible languages (Hiroyuki Suzuki, pers. comm.). Such cases appear to be common; as Matisoff writes: “Human nature being what it is, exonyms are liable to be pejorative rather than complimentary, especially where there is a real or fancied difference in cultural level between the ingroup and the outgroup. Sometimes the same pejorative exonym is applied to different peoples, providing clues to the inter-ethnic pecking-order in a certain region” (Sun 1996: ix).

In the case of Brag mgo County, people pejoratively call the rTa'u language 'ghost language' ('*dre skad*) because it sounds so different from any other language spoken in the region.

The *Pinyin* form ěrgong comes from Chinese 尔龚, which is a representation of the term *rgu*; as in Mandarin Chinese there is no consonantal cluster of *r* and *g*, following Chinese phonological rules *r* is represented by Chinese *er* in the initial 尔. At the same time, the language was known by a totally different name among western linguists, who most commonly referred to it as Hörpa, with allograms including Hörpa and Hör-pa (Hodgson 1874), as well as some toponyms such as Pawang (Rosthorn 1897), Gesitsa (Laufer 1916), Tao/Tao fu, Rtahu (Migot 1959) and Bawang Rong-ke (Edgar 1933).

The essence of the preceding discussion is to a) present an argument that Ergong is not suitable as a glossonym and b) bring to people's attention some of the inadequacies in what has been conventionalized practice over decades in terms of assigning certain nomenclature to a given group of people in a manner that is not compatible with the perception of native speakers towards themselves or their language.

### 1.2.2 Hörpa

The term Hörpa represents a complex phenomenon which can partially be attributed to unsuccessful endeavours from both linguists and anthropologists over the years to shed light on its etymology. Secondly, complicated historical factors plus

synchronic distinctive cultural and linguistic traits within a largely Tibetanized region have both laypeople and academics wondering about their origin, specifically see Stein (1972), Rèn (任) (1981), Zéng (曾) (2006, 2007, 2008), Rockhill (1891), Edgar (1932), Lǐ 李 (1995) and Mǎ (马) (2003).

A step towards a comprehensive discussion of the term Hörpa can be constructed on two parameters: a) linguistic and b) non-linguistic, which also can be understood within Proschan's (1997) "Two contrary models of identity". One model can be defined on the basis of linguistic unity and classification. This of course is popular among linguists of the region who use Hörpa to refer to a particular language or languages known by cluster of allonyms and allograms as mentioned in the preceding section. Nevertheless, as a glossonym it is not problematic in the sense that there is limited literature and a certain consensus, although it largely remains under-researched, regarding this synchronic language with respect to its distinctive linguistic properties and the speakers, who are multiethnic and reside across expanded jurisdictional boundaries (Sūn Hóngkāi (孙宏开) 1983, Qú Aitáng (瞿霭堂) 1983, Huáng Bùfán (黄布凡) 1991, rDo-rje 1998, Ngag-dbang Tshul-khrims 2009, Sun 2006, Jacques 2008, Suzuki 2010). Therefore, within this analytical framework of seeing Hörpa as a synchronic language or a group of languages, the etymological significance of Hörpa, discussed below, is neither of much interest nor an issue since it is evident that the relationship between the term Hörpa and the actual language is arbitrary. On the other hand, if it is examined from a historical perspective as a *pseudo-historiconym*, the connotation of Hörpa can be very different.

### 1.2.2.1 The historical aspect of ethnonym Hörpa

Before looking into the historical context of the application of Hörpa to rTa'u speaking people, it is necessary to break down the morphological elements of the term. First of all, *Hör* has no etymology in native rTa'u language; it is a transliteration of the Tibetan term ཁྲོ་ཤི་ 'Mongol' and *pa* is a suffix in literary Tibetan that can be translated to mean 'person' or 'people', thus the term Hörpa means 'Mongol people'.

The term Hör in the *Dung dKar Great Tibetan Dictionary* has the following definition “It has multiple renderings in different historical periods; sometimes it is used to refer to Mongols (typically Eastern or Khalkha Mongol), sometimes it refers to nomads of Northern Tibet, and sometimes the small kingdom of Gru gu was known as Hör” (Dung dKar 2002: 2137). Whatever the circumstances may have been, the mere fact that *Hör* is introduced from Tibetan and lacks any etymology in native rTa'u language suggests that it is a paleoexonym used by Tibetans. This begs the question why Tibetans call this region or the people in this region Hörpa. Different theories have been proposed in the past and there appear to be two popular ones, but before turning to those two theories below, first let's hear what local Tibetans say about this. Below are two popular accounts:

The Luhuo Annals (2000:3) state that “... in 1227, Mongol soldiers conquered the area of current (Ch. Yúnnán 云南) Province and then moved north into present-day Dkar mdzes Prefecture. They divided the area into five parts, giving rise to the traditional name, 'Hör khog khag lnga' or Five Hör Places: rTa'u, Brag mgo, Tre Hör

(Ti. ཉེ་ཉྩ། Ch. Zhūwō 朱倭), Dkar mdzes (Ti. དཀར་མཛེས། Ch. Gānzī 甘孜), and Stong skor (Ti. ལྷོང་སྐོར། Ch. Dōnggǔ 东谷)."

Account two is a different version, however the basic story line is same:

During the Yuan Dynasty, in 1251 Kublai Khan (1215-1294) invited the great Salya master Drogon Chogyal Phagpa (chos rgyal 'phags pa blo gros rgyal mtshan) (1235–1280) to the city of Beijing to teach Buddhism. En route to Beijing, they arrived in what is today's western Dkar mdzes Tibetan Autonomous Prefecture. Witnessing the place to be a special place, Chogyal Phapa requested Kublai Khan to build monasteries in that place. Kublai Khan sent a minister with Chogyal Phaba to choose exact locations to build monasteries. During his time in Dkar mdzes building monasteries, he fell in love with a woman from today's Lho pa Township (Ti. ལྷོ་པ། Ch. tuō bà 拖坝). When the project was complete, it turned out that the woman was already pregnant. Therefore, he entrusted the pregnant woman to the care of the head of the monastery. When the woman gave birth to a boy he was named Hör Ma bsampu (ཧྲ་མ་བསམ་བླ།) meaning 'unwanted son of Hör'. Latter on the son became a powerful local king who had three wives. During the eighth generation Wonluo, divided his territory among his five sons thus the birth of 'Five Hör States'; namely Mashu ( Ti. མ་བྱུ། Ch. 麻书), Zhuwo (Ti. ཉེ་ཉྩ། Ch. Zhǔwō 主倭), Luhuo, Donggu, Kongse (Ti. ཁང་གསེ། Ch. Kōngsè 空色) (Ren 2015: 34)

Therefore, a popular theory for the application of Hör to rTa'u-speaking people is the "Mongol ancestry" theory which is common not only among literate natives but

also among scholars as well (Dkar mdzes County Annals 1999, rTa'u County Annals 1997 and Bra mgo County Annals 2000), Zēng (曾) (2006, 2007, 2008), Li (1995) and Mǎ (2003).

Others have argued, as an extension of the Mongol ancestry theory, that Hör is transliterated from the Chinese word Hú (胡), Rèn ((任) 1981: 48). "... [T]he Tibetan word Hör is directly transliterated from the Chinese word 胡 (hú), which Han people use to refer to ethnic minorities in west and in central Asia (Rèn 1981)." Furthermore, some have suggested that Hörpa originally referred to the so-called Yellowhead Uygurs (Huáng tóu huí gǔ 黄头回鹘) who moved to the region north of Kangding, assimilating into the other culturally Tibetan groups (Zēng 2006).

Traveling in east Tibet, the Protestant missionary and medical doctor Albert Shelton wrote "...in color and other characteristic features there is an indication that they may have sprung from the original Mongol people" (Shelton 1921). Similarly, in 1889, the United States diplomat William Rockhill en route to present-day rTa'u County from Qinghai observed:

"Kanze (Dkar mdzes) is the chief city of the Hörpa states, locally called Horse Ka nga, "the five Hörba clans"... This region is, after Derge (Sde dge), the most populous and wealthy of eastern Tibet. The county is ruled by five chieftains in whose respective families the dignity is hereditary. The people are among the best-looking I have seen in Tibet; they are smaller than those farther north and from central Tibet, and have less heavy features; aquiline noses, hazel eyes, and curly or wavy hair are not uncommon. The women are especially good-looking, and the natural



comeliness of the people is not a little increased by their bright-colored attire and gold and silver ornaments (Rockhill 1891: 242).

In 1913 J. H. Edgar (cited in Zéng 2006:26) made a similar observation on rTa'u people. Based on physical features, Zéng (2006:80) argues that “aquiline noses, hazel eye and curly hair hardly give us the impression of Mongols nor Tibetans, instead it reminds us of Turkic and or Xiongnu of the Hun with “aquiline nose and deep eye” frequently cited in Chinese historical records.” Zéng (2006:80) further argues that his position is shared by the orientalist R. A. Stein who proposes (cited in Zéng 2006:80) that two features distinguish Hörpa (rTa'u) people from Tibetans, one of which is the usage of metal tools e.g., stirrup and saddle which have animal patterns or designs that indicate connection with Xiōngnú (匈奴) culture.

Regardless of which theory offers the best explanatory approach in respect to the application of Hör to rTa'u speaking people, it is rather evident that ‘the prefix *Hör* implies a Mongol origin (Coales, 1919:234)’. However, “...If one is to ask a common *rTa'u* speaker about the term *Hörpa*, the majority of them are oblivious of the term” (Tunzhi 2017:163), as Marrison (cited in Matisoff 1996: ix) observes that ‘an outsider’s name for a given tribe was often learned by Westerners long before the tribe’s autonym came to light.’ The same can be said about Hörpa. Therefore, it can be established that Hörpa is a paleoexonymic ethnonym used by Tibetans which latter was used as a glossonym. This has real implications for the suitability of the term and what it entails, and mostly importantly, it raises further questions

regarding the parallelism between Hörpa as an ethnonym and glossonym. This requires looking further into the history of the Hörpa people.

#### 1.2.2.2 Hörpa as a pseudo-historiconym

Before becoming a glossonym Hörpa was used as an ethnonym, associated with political states—the Hör states—which had well-defined geographical and social boundaries that can be reconstructed through modern jurisdictional system (Lì Nà 1997, Dung dkar 2002). The historical contextualization provides the necessary background to establish Hörpa as a *pseudo-historiconym*, which can be understood as an ethnonym based on an important event in the pseudo-history of a given ethnic group.

To understand the historical background of the term Hörpa we are obliged to begin by looking at it from a bigger political, cultural and geographic perspective, discussing the term Xikāng (Ch: 西康) Province ‘West Kham Province’ during the Republic of China (1911-1949). This is because the Hörpa region is part of Kham, culturally and linguistically. The Kham region is located at the south-east edge of the Tibetan plateau that connects it to lowland China, therefore it has been an important geopolitical and commercial route that enabled the transportation of goods between central China and Tibet. Kham had a turbulent past, periodically ruled and marginalized by Tibetans to the West and or Hàn (汉) Chinese to the East. Due partially to its unique geographical position, it eluded extended total control by the growing powers on each side. This environment allowed the establishment of dozens of local kings (often mistranslated as ‘chieftains’, corresponding to the

Chinese word Tǔ sī 土司) who ruled their respective tribes/communities or territories. Rivalry and disputes were common between and amongst communities and the consequences of such disputes frequently turned into tragedy, as evidenced by events reported and, echoed in local folk cultures, for example, the story of the cruel Nyarong or Minyag king (Ti. མི་ཉག། Ch. Mù yǎ 木雅) who allegedly dropped babies from rooftops is a household story in rTa'u.

The following is a description of the rTa'u area in the early 1900s by the British commissioner Coales, providing a glimpse into the social and cultural makeup of the area at the time. For the sake of easy reading, I have added corresponding contemporary Tibetan and Chinese terms for those terms which appear in this work.

We had now left Chala (Ti: *Dar rtse mdo* དར་རྩེ་མདོ། ; Ch: *Kāng dìng* 康定) and entered the territory of five small states called the Hör-se-k'a-nga or Hörpa clans, which extends along the valleys of two rivers called the She Ch'u (Ti. ཤེ་ཆུ། Ch. Sèqǔ 色曲) and Dza Ch'u (Ti. ལྷ་ཆུ། Ch. Dáqǔ 达曲), the latter being another name of the Yalung, a tributary of the Yangtze. The names of the states are Luhuo (Ti: *Brag mgo* བྲག་མགོ། ; Ch: *Lú huò* 炉霍), Zhuwo (Ti: *Tre Hör* ཐྲེ་ཧོར། ; Ch: *Zhū wō* 朱倭), Kongse (Ti: *Khong ksar* ཁང་གསར། ; Ch: *Kōng sè* 空色), Mazi (Ti: *Ma zur* མ་བུར། ; Ch: *Má zī* 麻孜) and Wari (Ti: *Wa ri* བཟའ། Ch: *Wǎ rì* 瓦日), and the prefix Hör indicates that they are of Mongol origin. In the early part of the eighteenth century the country was governed by a powerful lama named Ngawang P'unts'o, who was sent by the fifth Dalai Lama to convert the district. He founded thirteen great monasteries, some of which we passed

on this road. Ngawang was afterwards ousted by a Mongol intruder, probably one of the Mongol band who subjugated the whole of Tibet about that time.

After this Mongol's death the country was divided amongst his sons, who are the ancestors of the present chiefs. They have now, of course, been deposed by the Chinese, who have installed Chinese magistrates at Dau, Drango, and Kandze. The Hörpa country is the most prosperous part of Eastern Tibet. The valleys of the two rivers have a genial climate and fertile soil which support a farming population probably the densest in Tibet. Here are produced crops of wheat, barley, beans, roots, and potatoes; and at Dau, where the elevation is below 10,000 feet, even maize can be harvested. In the extensive pastoral districts of the north and north-east, flocks and herds of innumerable sheep, cattle, mules and ponies are let out to graze. But the occupation which brings the greatest profit to the Hörpa people is the commerce. The Hörpa merchants, amongst whom are counted the ruling chiefs and monasteries, almost monopolize the caravan trade between Tachienlu (*Ti: Dar rtse mdo* དར་རྩེ་མདོ། *Ch: Kangding* ) and Lhasa (*Ti. ལྷ་ས། Ch. Lāsà* 拉萨).

The profits are so great that one finds the common people living in houses that elsewhere only lamas could afford to build, and an example of what these people are able to spend on luxuries is shown in the ease of the Kandze monastery, where in the past year a new gilded roof had been put on the principal temple at a cost 5000 pounds (Coales 1919:235).

This provides supporting evidence for the argument that despite tremendous influence of Tibetan culture and the claims of rTa'u people to be Tibetans, they were perceived as 'other Tibetans', a perception which remains relevant today; thus, the actual historical event that took place in the pseudo-history of the rTa'u speaking people being conquered by the Mongols and ruled by a Mongol leader grants some form of justification for the application of the term Hörpa to rTa'u-speaking people. However, a problem arises when the term is perpetuated while the supporting ideologies embedded in the psychological, political and cultural world of both rTa'u-speakers and the wider Tibetan people have changed. Today, rTa'u-speaking people identify themselves strongly with Tibetan identity and are officially classified as such.

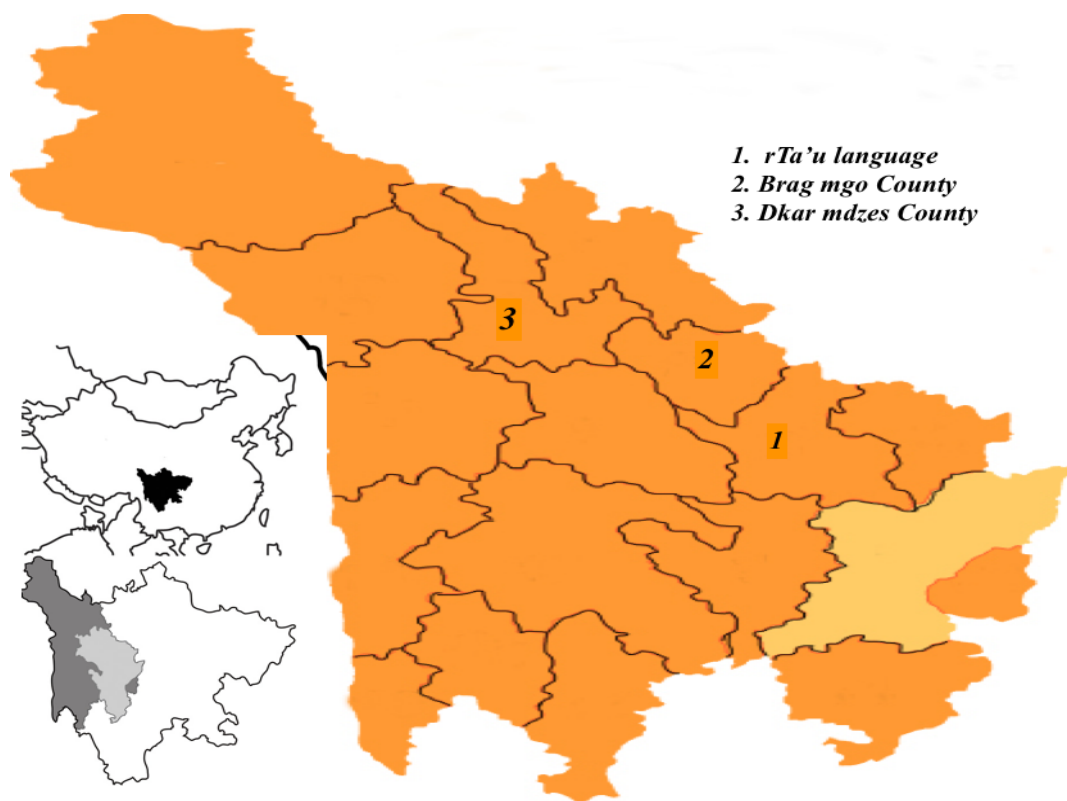
The preceding discussion of the *pseudo-historical* contexts of the ethnonym Hörpa thus far presents several versions of the traditional Five Hör states. Coales (1919) version contains places that are currently within the jurisdiction of rTa'u County, except for Brag mgo County which shares an east-west border with rTa'u. The other versions contains places that are indeed far from rTa'u County, and most importantly rTa'u language was spoken in only two of the five states namely: rTa'u and Brag mgo Counties. Therefore in this context Hörpa can only be used as a glossonym.

### 1.2.2.3 *The Contemporary Hörpa region*

The description of rTa'u town (now renamed as Xiānshuǐ (鲜水) Town) at the dawn of the 20<sup>th</sup> century, depicts a similar scene to what we observe today in terms of social and 'racial' landscape. If half-caste here is meant to refer to cross-marriage between Tibetan and Han Chinese, a survey obtained in 2004 (Gengga & Suzuki 2008) showed that among 424 residents of Xiānshuǐ Town, 74 are mixed families of local Tibetan and Han Chinese and only two families are of other 'races'; however the study did not specify what 'race' they were. The study did not comment on how the language attitudes of children from such mixed families differ from those from more conservative/traditional families, nevertheless, it did show that people whose professions—e.g. teachers, government officials, students—require some level of command of Mandarin, tend to value Mandarin higher than Tibetan. rTa'u is ranked lowest in terms of perceived prestige and value by all speakers across different professions. A similar case is reported in nearby Brag mgo County seat, Xīndōu (新都) Town, in Tunzhi (2017:147); children from such mixed-marriages between Tibetan and Han Chinese families obtain little to zero ability in the local language.

In the following I attempt to reconstruct the historical territory occupied by local leaders based on various sources mentioned in the previous section. Despite the different names suggested in different sources, they can be related to contemporary jurisdictional boundaries of counties, belonging to three northern counties of Dkar.mdzes Tibetan Autonomous Prefecture. All five states were in three counties namely: rTa'u County (marked by number 1 in the map below, and Brag mgo County (marked by number 2), and lastly Dkar mdzes County marked as (3). The Hörpa

region begins from its north-west end in today's Dkar mdzes County town seat, Dkar mdzes district, stretching southeastward to Brag mgo County town seat, Xīndōu district zhèn (新都镇), following the Zla chu (Tib: ཟླ་ཆུ། Ch: Dá qǔ 达曲) river which unites with the Nyi Chu (Ti: ཉི་ཆུ། Ch: ní qǔ 尼曲) in Brag mgo County and forms the Xiānshuǐ river (鲜水) that runs through Bra mgo to rTa'u County finally joining the Yǎlóng (雅砻) river in Nya chu County (Ti: ཉག་ཆུ། Ch: Yǎjiāng 雅江). One important thing to keep in mind is that the modern distribution of rTa'u language does not correspond to the geographical reconstruction of the original Hörpa states. The rTa'u language is most commonly spoken around the valleys of the Xianshui River, however its northwestern end is in Nyan.mo (Ti: ཉན་མོ། Ch: Yí mù 宜木) Township of Brag mgo County situated right at the border of Brag mgo County and rTa'u County. However, as we will discuss in the section on language, rTa'u language and related-languages are also found in other adjacent counties which were not considered as part of the traditional Hörpa states.



**Figure 1: Map of Hörpa Region in Current Dkar mdzes Prefecture Based on Present Jurisdictional System.**

As will be discussed in the following sections, the term Hör or Hörpa has never found popularity among native people, nevertheless, we increasingly observe, especially among intellectuals or highly venerated Lamas, a re-emergence of literary tradition which sees the usage of Hör as a prefix to indicate the birth place of the referent. For instance, my middle school Tibetan language teacher's name is Nyima (ཉི་མ།) but is given as Hör Nyima (ཨོར་ཉི་མ།) in the books he has written. This is increasingly becoming a trend among young intellectuals of the region. There is no easy way to examine the origin of the regional tendency to refer to people from other areas as Hörpa people, which could well be due to tribal rivalries dating back to the Mongol rule, and is seen, for example, in the way that people from Nyarong County (Ti: ཉག་རོང་། Ch: Xīnlóng 新龙) habitually refer to Dkar mdzes County people



as Hörpa or Hör people, and Brag mgo people are often called Hör or Hörpa people by others.

Finally, in simple terms I think one can use the term Hörpa in the in-group as a way of self-identification. The boundaries of the in-group depend on the cultural and ideological intimacy people share in culturally close vicinities, however when it is used by other groups it can mean numerous other things, some are pejorative as discussed earlier, and worst of all, it provides some kind of justification for endeavours to equate the language, with the people to argue in favour of some kind of separate race or ethnicity. I believe it is misleading to draw on linguistic traits, particularly in this case, to equate them with a loosely defined pseudo-historiconym in argue for the proposition of a new ethnicity, separate from Tibetans.

Therefore, in this thesis I use the toponym rTa'u as both a glossonym and ethnonym, including for those who live outside rTa'u/Daofu County. Furthermore, in order to avoid confusion, I will follow the Wylie transliteration rules throughout the thesis for Tibetan including capitalization rules. Some have suggested to follow the Western convention of capitalizing the first letter, which I think is inappropriate as anyone interested in this type of work would be familiar with common Tibetan-Wylie transliteration rules. Some have also suggested that in order to reflect local pronunciation rTa'u should be written as Stau, and the latter is easier for a Western audience. However, I suggest original Tibetan terms ought be written as in literary Tibetan, which helps in the standardization of such terms.

**Table 1:A comparison of different terms for 'Five Hör States' in literature**

		<b>Tibetan name</b>	<b>Translateration of Tibetan term</b>	<b>Chinese name</b>	<b>Pinyin</b>
<b>Coales (1919: 235)</b>	Drango	བྲག་མགོ།	Brag.mgo	炉霍	Lúhuò
	Drio	རྩེ་རྩོར།	Tre.Hör	朱倭	Zhūwō
	K'angsar	ཁང་གསར།	Khang.gsar	空色	Kōngsè
	Mazur	མ་བཟུར།	Ma.zur	麻孜	Mázī
	Beri	བཟུར།	bZa'	瓦日	Wǎrì
<b>Luhuo County Annals (2000:3)</b>		བྲག་མགོ།	Brag.mgo	炉霍	Lúhuò
		རྩེ་རྩོར།	Tre.Hör	朱倭	Zhūwō
		རྩུ།	rTa.hu	道孚	Dàofú
		དཀར་མཛེས།	dKar.mdzes	甘孜	Gānzī
		སྟོང་སྐོར།	sTong.dkar	东古	Dōnggǔ

### 1.3 *rTa'u speaking people*

Whatever the origin of the first settlers of the region may be, today the people are classified as Tibetan, and this is also how local people prefer to be identified. Traveling through the rTa'u region, the ethnic make-up of the region might be confusing to an outsider, as one is likely to encounter Han communities in areas predominantly inhabited by rTa'u-speaking people. Due to the fact that the majority of rTa'u-speaking communities are located along the G317 National Highway, Sichuan-Tibet Highway North route, contact with outsiders is frequent, leading to a higher percentage of mixed-marriages between local people and outsiders of different ethnicities. Therefore, one is likely to observe a rather more complex racial scenery.

### 1.3.1 Location

Various studies suggest that Khroskyabs (Lavrong, Guanyinqiao) and Dgebcu rtsha (Geshenzha) are sister-languages of rTa'u. The data for this study is collected from rTa'u and Brag mgo Counties, and when speaking of demographic composition, I am speaking of rTa'u speakers in rTa'u and Brag mgo Counties. The majority of rTa'u speakers live along the lower Xianshui River, with some communities, usually the size of around 15 households, located on hillsides and in deep valleys. The following figure shows the minority languages of the eastern Tibetosphere.

Minority Languages of the Eastern Tibetosphere

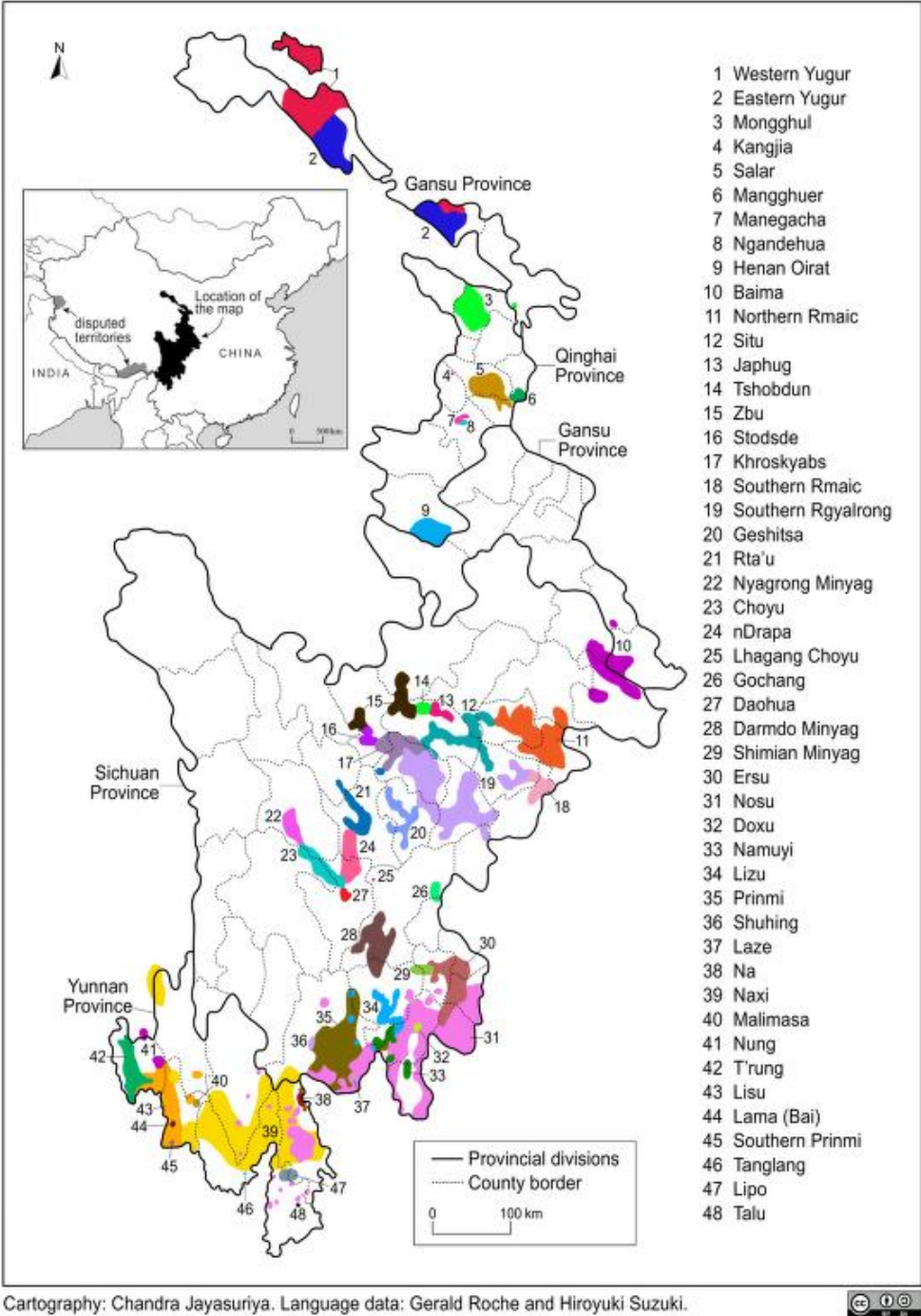


Figure 2: Minority languages of the Eastern Tibetosphere

### 1.3.2 Demography

Before presenting the demographic landscape of the rTa'u-speaking population, some practical issues and challenges need to be addressed which are crucial for accurate presentation of rTa'u demographics. They can be categorized into two groups, each group presents different issues. The first group constitutes those who left their original home places and migrated to towns or cities. Although it is difficult to obtain exact numbers for such migrants, due to the fact that they remain unregistered residents in cities, such migration is clearly a growing trend in recent years as people become less economically dependent on farming. The issues such shift causes for demographic studies is that data obtained from local government does not reflect actual local population; the actual number of residents in a community may be much lower than what official documents show. The immediate threat to rTa'u language as a direct result of migration for work is the emergence of a new generation without any ability in their mother-tongue.

The other issue concerns those communities that are within the rTa'u speaking cultural sphere, as defined in (§1.3.1), but who have completely or almost completely shifted either to Sichuan Chinese or Kham. There is little research on the diversity of language use within this culturally homogenous inter-group who are often seen as rTa'u-speaking people. An extreme example is that of Shawa Thung (Ti. ཤ་འབྲུག་ Ch. Xiā lā tuó 虾拉沓) village, 5km distant from Brag mda' village on the border of rTa'u and Brag mgo counties. This community has completely shifted to Sichuan Chinese; while many others along the main road have shifted to local Tibetan. Such are the difficulties in presenting precise demographics for rTa'u

speakers. Therefore, due to cases of this nature it should be noted that the demographic statistics in Appendix One are based on the number of registered communities/villages which are within the rTa'u speaking cultural zone, and may be exaggerated.

In Brag mgo County, there are three townships located near the border area with Khang gsar Township (Ti. ཁང་གསར། Ch. Kōngsè 空色) of rTa'u namely: Srib mo (Ti. སྤེན་མོ། Ch. Simù 斯木), Nyin mo (Ti. ཉིན་མོ། Ch. Yímù 宜木) and Gci.mda' (Ti. གཅི་མདའ། Ch. Réndá 仁达) townships. Srib mo and Gci mda' townships are located on the G318 National Road, and have completely switched to the Brag mgo variety of Kham Tibetan, except for some scattered communities way up in the hills. All ten villages in Nyin mo Township speak rTa'u as their mother-tongue except for Shawa Thung village, which is predominantly a Han Chinese village, and therefore Sichuan Chinese is the medium of communication within the village and its influence is spreading to neighbouring villages as well.

In rTa'u county, there are 8 townships and 77 villages; all reportedly speak rTa'u as their mother-tongue. The only exception might be the county town seat, Xianshui Town which has a highly mixed population and a large number of Han Chinese. According to Wēng mǔ (翁姆) & Suzuki (2008), Xiānshuǐ Township has the highest population of rTa'u speakers among all rTa'u speaking villages, with 5,364 people. Through cluster sampling focusing on Tuánjié (团结) First Village, the study shows clear correlation between language decline and age: 14 out of 19 people aged between 0-20 said they only know a little bit of rTa'u, while 14 out of 15 people

aged between 41-60 say they are fluent in rTa'u. This survey validates the aforementioned speculation and difficulties in calculating the exact number of speakers at the beginning of the section as this survey shows that there is a growing number of young people who do not have any skills in rTa'u.

My data shows there are about 45,000 rTa'u speakers in both rTa'u and Brag mgo counties; however, as discussed in the preceding paragraph and in Tunzhi (2017), a considerable proportion of speakers within the total population have now moved away from their original communities where rTa'u is used on a daily basis.

## *1.4 Culture*

### *1.4.1 Subsistence strategies*

rTa'u speakers have always been agriculturalists and are largely self-sufficient in agriculture and livestock provision: valley basins along the Xiānshuǐ River provide plenty of arable land at an average altitude of 2500 meters above sea level with a warm temperature that produces various crops including potatoes, highland wheat, barley, rapeseed and peas. In some areas in the lower region of Xianshui River people grow canola, tomatoes, peppers, apples, and walnuts. Livestock is essential for the practice of agriculture and trading and raising livestock has a unique culture of its own. Most local women are highly talented in weaving and some of the bedding is locally produced from sheep and yak wool. The last decade witnessed a complete transformation of local livelihoods, bringing a chain of changes in local culture. Horses used to serve as means of transportation, but have been replaced by automobiles; harvesting is now completed in a few days with modern machines

which brought all related cultural performances—chanting for rain, singing during harvest—to an end.

These transformations are brought about and driven by various forces. One particular phenomenon which is representative of the complexity of the driving forces is the animal rights movement—a fundamentally Buddhist ideology to improve animal rights and shift towards vegetarianism. Prior to 2006, pigs were an important part of the livestock that rTa'u speakers maintained, and due to an abundance of crops, pigs were often so well-fed that villages could consume pork throughout the year. However, around 2010, a campaign promoting quality of life for animals has spread to the region, and since then no pig has been ever raised again for the purpose of pork consumption. This caused a chain of other cultural reactions; the tradition of inviting relatives and close friends over for party, when a pig was slaughtered, that functioned as an important system to maintain family ties and clan power, has gone, since no more pigs were raised. Cows are now much favoured, even though yaks produce more milk and butter, because yaks have to be grazed at higher altitudes and tended to throughout the year, so families that cannot spare the human resource tend to prefer cows.

As of 2016, seasonal labour work is more profitable than raising livestock, and livestock numbers have been reduced by more than half. Agriculture has become less dependent on human labour as manure is distributed by tractors, ploughing is done by tractors, harvesting is done by harvesting machines and even threshing is done by machines. The introduction of machinery has utterly changed traditional



lifestyles. In cooperation with local governments, companies have increasingly turned local fields into large-scale greenhouses, and thus the variety of crops produced has also been reduced.

Cash is earned both by selling crops and labour on road and building construction. rTa'u men are also well known for highly sophisticated carpentry skills, and therefore much cash income is from building residential houses. The Xianshui River valley is surrounded by dense forests and transportation of wood logs to Chengdu was once a profitable business, until a logging ban was imposed in 1995. It is now common for families to own large trucks, which are used to transport mineral deposits to Chéngdū from various parts of the Kham region. Even though this business upsets and is faced with fierce opposition from nearby communities, rTa'u truck drivers profit could be seen as a reflection of the earlier caravan business which is said to have benefited the rTa'u people most.

In recent years, due to growing tension between local people and mining companies, local truck drivers have shifted to transporting people from Chengdu to different counties in Dkar mdzes Prefecture and vice versa. It is becoming a highly profitable business and this profession itself is usually called *Night taxi* 'yè di 夜的'. More and more people are leaving villages to go to cities and more city people are going into Tibetan areas to travel, and night taxis present a good travel option to both sets of travelers. Another important means of earning cash income is caterpillar fungus. Young rTa'u people move high up to the mountains tops for a period of 3-4 months each year and collect caterpillar fungus. One piece of caterpillar fungus is worth up

to 10-15 RMB. However, in recent years, due to the nation-wide anti-corruption campaign, prices have declined by half.

#### 1.4.2 Architecture

Abundance of forest in rTa'u valleys has allowed the rTa'u to use wood extensively in practically every aspect of their livelihood. From houses to furniture, wood is a major architectural feature. There are no more elegant and grander houses in Kham region than what is famously called the 'rTa'u structure', '道孚架子 dàofú jiàzi'. As mentioned above, almost every male adult has some level of skill in carpentry. Their skills are well recognized and some of the monasteries in nearby regions were built by rTa'u people. About a decade and a half ago, a traditional rTa'u house had two floors and a flat roof where crops were kept in high piles until dry enough to be threshed by beating on them with strips of wood tied together by leather ropes. The ground floor houses the family's animals that also produce manure which then is used as fertilizer. At the back of the ground floor is a wooden ladder that leads to the upper floor where families eat and sleep. However, as subsistence strategies underwent transformational change, so did house style. As of 2016, there are few houses with the traditional flat roof, tile rooves are more popular instead of flat-roofed residential houses as rooves are no longer needed to dry crops.



**Figure 3: Homemade threshing tool**

Because livestock has been reduced by half, often families have a separate building just for the few animals, thus the ground floor is now used for storage of crops or other family property while the upper floor is used for eating and sleeping. Usually, the upper floor has six rooms and a huge living hall. Such housing architecture is more useful when there are important gatherings e.g., weddings, funerals or religious gatherings, which are now very frequent.

On the upper floor, the largest room is used as kitchen. Cooking and eating are all carried out in the kitchen which also has changed fundamentally compared to the traditional kitchen layout. First, the fireplace is no longer made of mud; instead nowadays almost every rTa'u household uses metal stoves produced at the county town seat by Han and Muslim metal-workers. Parallel to the stove is a wooden painted table where guests and family members sit to have meals. Traditionally,

guests sit at the upper seats followed by male family members, and female family members sit across the table facing each other. It is uncommon to find a family without a TV; local government provides free satellite dish receivers. But most of the time, local people enjoy a Tibetan song or show from their DVD players while having dinner.

All the interior wooden walls are painted beautifully, which gave rise to an increasing apprenticeship for traditional Tibetan painting. For instance, in the village of Brag mda', the largest single community in the entire rTa'u region, there was only one professional painter until late 2000. Since then, with increasing demand for house painters, he accepted 5 local apprentices and as of 2016 those five students have become independent contractors who paint residential houses. Regardless of family wealth, every family has a shrine, often exquisitely decorated, including the Han village of Shawa Thung. It is said some families have two shrines; one for Buddhists in the family and the other for Catholics, however this is rare. All religious activities, which are many and frequent, are hosted in the shrine room. During the annual fasting, hundreds of community members live at the host's house for three nights. Such are the reasons why local people prefer bigger houses even though they are costly.

#### 1.4.3 Men's clothing

As described in previous sections, the last decade or so saw tremendous change. The same can be said about clothing, especially men's clothing; hundreds of years of traditional ceremonial customs have come to an end in recent decades as a result of

and along with widespread promotion of animal rights. The tradition of wearing fox hats and tiger and leopard skin robes has gone to extinction. A fox fur hat was once the most popular hat in rTa'u region, worn by both men and women, in different types. Every year, on the first day of the New Year, every man, old and young, wore a fox fur hat visiting the local mountain deity. At a traditional wedding, the entourages of both groom and bride were the most well dressed and a fox fur hat was an indispensable element. Leopard and tiger skins were the most precious ceremonial costumes. They were obtained either by hunting, which was rare, or through trading, often costing a fortune. They were used to rim robes made of lamb skins. Both fox fur hats and tiger and leopard skins are still worn in some parts of Tibetan communities in other marginal counties, e.g. in Rung brag County and by Pumi in Yunnan Province.

At present, it would be hard to identify any type of men's clothing that is particular to rTa'u, or even Kham, since every man wears western clothes, e.g., jeans, jackets, etc., however, one would commonly see older men with their Kham Tibetan traditional hairstyle with a long braid often lengthened by red woolen yarn tied around the head.

#### 1.4.4 Women's clothing

Women's clothing also reflects areal characteristics. From the far northwest end of Dkar mdzes Prefecture to its far east, women's clothing manifests certain unitary features; a long robe, often black in color, covers everything above the ankle and below the neck. There are two types of robes, one with sleeves and one without

sleeves. The latter is called *vzema* 'sleeve-NEG' in rTa'u language, meaning no sleeve and is worn commonly in spring and summer. Women's clothing appears to be more conservative in facing new trends. There has not been much change over the years with women's clothing, except for ceremonial clothing. The use of animal skin has entirely disappeared in women's clothing and the most popular special-occasion dress for women today is robes made of silk. Headdresses have also substantially reduced, instead, a new trend of excessive use of gold in women's jewelry is emerging in the rTa'u region. Huge gold necklaces, earrings, and rings are highly commercialized and showcased in many local fashion shows and have become a regional symbol. The former religious charm box called *gau* is now worn as ornament by both men and women. They are covered in gold and inlaid are large corals which are most appreciated by rTa'u people.

Female children do not wear traditional robes, however when not at school women wear traditional robes from the age of around 15.

#### 1.4.5 Family and kinship relations

Family is the most basic and fundamental unit of rTa'u society. Regardless of age, no man or women is traditionally expected to live alone before marriage. Family is an important social organization and it is maintained through kinship relationships. It is not uncommon for the most popular type of marriage, arranged marriage, to strengthen kinship power and widen the social aspect of family ties. Kinship is neither predominantly patrilineal nor matrilineal. There are 2-4 children in a typical rTa'u family and traditionally, with some exceptions, only one child stays with the

family to inherit family wealth and lineage when coming of a marriage age which for women is around 20-22 and for men is around 20-24. The decision about which children to keep with the parents depends on various factors. To keep a son with parents is common and usually in the interest of keeping and continuing family lineage. However, in contemporary rTa'u society, parents are less concerned about family lineage, instead, more practical reasons affect in deciding whom to keep with parents. Such reasons include the children's wellbeing. Some families keep the least talented at home so he or she won't have a difficult life in another family. Parents now increasingly prefer daughters to remain with parents so they could avoid 'mother and daughter-in-law' conflicts.

Marriages are monogamous and usually endogamous within rTa'u society. The general practice is to marry someone of the same village but of different clan and definitely not cousins. There is a certain stigma about exogamy though it is readily accepted if it involves villagers with government jobs. In fact, in 2016 in the community of Bra mda' Village, there are close to a hundred government officials and none is married within the village. However, it is quite different if it is lay people. For them, marriage is commonly arranged and endogamy is highly preferred. For detailed marriage rituals see Tunzhi (2011: 317-336).

rTa'u people do not use surnames. All names are acquired traditionally from local highly venerated Lamas. Personal names often reflect Buddhist worldview and uncommon is a name without wish-fulfilling meaning. Nevertheless, such perceptions of clan-based hierarchical order of the family from the 'Old time', pre-

communist era, are fading, and new social and family orders and value systems have been introduced as a result of frequent contact with outsiders. However, the old generation still speak of families by their clan names. For instance, in the community of Brag mda' there are several original families with distinguished clan names that indicate their social status as superior to other families, such clan names include Mkharr Nang family 'family in the castle', Khris Me family 'tax-free family', Brag Cub Family 'family at the bottom of the rocky mountain' etc. It can be presumed that some of these clan/family names actually describe family locations, but they also have a certain social status, and a family without a clan name is supposed to be less worthy to marry into. Such pre-communist era perceptions are slowly fading away as the youth are more concerned about personal qualities than clan status.

Arranged marriages remain common in Hörpa areas. Often family social status and occupation of the spouse are considered important. Young people may have romantic relationships formed while working outside the home, during large religious gatherings, and while digging for caterpillar fungus. These relationships end when the young person's parents announce that they have chosen a spouse for them when they are around twenty-two or twenty-three. Usually, parents do not consult their children before choosing a marriage partner. Instead, they make all the arrangements and then inform the child of their choice. At this essential milestone in life, it is obvious how much parents are venerated. Parents are understood to be minor deities and everything that they say should be believed. Obedience to parents is considered the measure of a person's moral quality. Those



who defy their parents are condemned for their entire lives. For instance, during my fieldwork in Kongse I became acquainted with a local resident named rDo rje ར་རྟ་རྟེ (b. 1983). rDo rje became friendly with a girl from another village and worked with her for seven months in Snyi pa Town, Brag Mgo County doing road construction work. During this time they became closer and they planned to get married. However, in the meantime, rDo rje's parents decided that he should marry a village girl and move into her home, and made relevant arrangements. They did not inform rDo rje until three months before the marriage ceremony was to take place. Although Rdo rje could have gone ahead and married the girl he loved in defiance of his parents' wishes, he was aware of the community criticism that would have ensued and therefore, obeyed his parents.

#### 1.4.5 Religion

Nearly all rTa'u people are Buddhists and are deeply religious. They proudly identify themselves as such. In the rTa'u region, one would frequently see the artistic result of local people integrating their Buddhist view with the natural world. Nowhere in Tibet is Buddhism portrayed as symbolic of local culture more than in rTa'u region by stones carved with mantras on river banks and mountain tops. Everywhere one travels one observes how Buddhism has become an indispensable feature in the region. The most majestic things that have come out of such practices are the grand rTa'u stupas located at the east gate to rTa'u County. They are well known among Kham Tibetans and people come to circumambulate them from far places.

The Thirteen Great Hör Monasteries are testimony to rTa'u people's belief in Buddhism. Today there are 35 Gelek monasteries in Dkar mdzes, Brag mgo and rTa'u counties of varied size and population.

Religious practice in the rTa'u region is much more complex than counting Buddhist monasteries. The Buddhist world view is pretty much how rTa'u people see the world and how they go about daily routines and there is no better way to understand life in this region than through application of Buddhist philosophy. From external spatial arrangement including natural surroundings to personal space including housing structure to personal ornaments, Buddhist philosophy is integrated in every aspect of rTa'u people's lives. Quite literally, every day begins with a ritual and ends with a ritual as well, likewise, in rTa'u, life begins with a Buddhist ritual and ends with a Buddhist ritual.

Below is an observation of a usual day in Brag mda' community. Usually the mother, or the daughter if old enough, wakes up at dawn and starts a fire in the stove. As she does morning chores, she does religious rituals as part of daily ritual which involve chanting of scriptures from memory, offering prostrations and cleaning and making offerings in the family altar. Males members get up around the same time and visit the huge stupa in the community erected a decade ago. It is frequented by male villagers early in the morning until the sunlight hits the tip of the mountain on the other side, which indicates morning tea time, when everybody returns to their respective homes. After morning tea, as the day goes along, old people gather around the stupa and circumambulate and chant scriptures until dusk except for

lunch time. After dinner, family members sit around and continue to chant scriptures. Almost everyone above the age of 15 has made a promise to chant a certain amount of scripture, therefore they usually keep a record. The day finishes by everyone making final prostrations at the family altar. Repetition varies as some people do more than 50 repetitions and some only do 3. As is common across all the rTa'u region, in the case of Brag mda' community, a family spends 1/3 of its annual cash income, which is around 20,000 USD, on religious rituals which includes donating to communal projects such as erecting stupas, building prayer halls, donating to local monasteries, making offerings to local monks, initiating religious gatherings, fasting, establishing a family altar etc.

In recent decades, in response to ongoing animal slaughter, theft, and conflict within and between communities, an increasing number of rTa'u people are making vows to refrain from any of the above. As an example, in the case of Brag mda' community half of the adult males have vowed not to steal, kill animals or engage in fights. Similar cases are observed in other rTa'u communities as well. Second-hand sources suggest that in certain families in the village of Shawa Thung, predominantly a Han Chinese village but surrounded by rTa'u speaking communities, there are a few families who still perform Catholic rituals at funerals which is confirmed by my informant who happened to be at a relative's funeral in 2015 in that village. The following is what he told me: "a group of five old men with white hats, and white dresses chanted something we cannot understand. Simultaneously there are dozens of monks from Brag mgo monastery who are chanting scriptures in another room. It was strange."

## 1.5 Literature review

### 1.5.1 Language and Ethnicity

As briefly mentioned in (§1.2) the tendency among linguists to assign and represent certain linguistic communities with distinct racial or ethnic names proves to be problematic and the level of linguistic diversity across these little-researched communities makes the ethnic make-up of the region complex. Below are a few typical approaches that are representative of such tendencies, which have come about due to a lack of comprehensive understanding of the contributing historical factors that are intertwined with and embedded in the formation of the larger cultural community. When approaching a linguistic community it is necessary to avoid the linguistic view and adapt a holistic approach. Following is an illustration of such an approach, “The speakers of Ergong refer to themselves *bopa*, and their tradition and religious practice resemble those of the Tibetans” Sun (1983:140). This passage can be rendered in various ways depending on the level of familiarity of the readers with the issues concerned in this the passage. However, technically, it is the task of the researcher to eliminate potential ‘ambiguity’, so the actual rendering is not dependent on the familiarity of the reader with the issues. With any understanding of local Tibetan or literary Tibetan, one could guess *bopa* actually means ‘Tibetan people’; *bo* is the local pronunciation which designates Tibet and the common suffix *pa* indicates people. Such choice of wording and description becomes and is perceived as ‘scientific’ evidence for the establishment of such entities as ‘Ergong Ethnicity’<sup>1</sup>, ‘Kham Ethnicity’, ‘rGyalrong Ethnicity’, ‘Minya Ethnicity’ etc.

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<sup>1</sup> <https://zh.wikipedia.org/wiki/尔龚语> (accessed on 25 Oct 2016)

In respect to rTa'u people, again here the toponym rTa'u is used as an ethnonym to refer to the rTa'u speaking people. However, it is by no means used to designate or suggest a distinct ethnicity, by employing an ethnonym which in this thesis is used to refer to a specific group of people/community. rTa'u speakers are officially classified as Tibetan as they wish to be so. However, there is certainly clear communal sentimentality as part of the ideological reality, language being a distinctive feature of who they are in comparison to neighbouring Tibetan communities, towards the need to express their 'Tibetanness'. Such cultural sentimentality has often manifested in the formation or reformation of the external physical world of the rTa'u speaking region where they have put up countless large stupas; mountains slope in the rTa'u region are carved with the *Six Sacred Syllables*<sup>2</sup>. Such purposeful efforts of self-representation through reformation of external physical realities reflect the sharp contrast between neighbouring Tibetan communities such as 'dra pa (Ch. Zhā bā 扎巴), rGyalrong, Minya etc.

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<sup>2</sup> Oṃ maṇi padme hūṃ

### 1.5.2 Sociolinguistic situation

The sociolinguistic situation of rTa'u is of much interest, however the topic has not gained much attention. The majority of rTa'u speakers live in rTa'u and Brag mgo counties, concentrated around the border of the two; small villages of a couple of dozen households are scattered along National Highway 317 also known as the Sichuan-Tibet northern route. rTa'u County also has a large number of Tibetan-speaking nomads in the northeastern part of the region while rTa'u speakers occupy the lower lands around the county town seat. There has always been constant interaction with nomads at the higher altitudes, and therefore practically every rTa'u adult can speak fluent nomadic Tibetan language. However, this trend of bilingualism has taken a different shift in the past decade as the emerging young generation's lives do not demand as much contact with nomads in the uplands, and there is thus a steady decrease in knowledge of nomadic Tibetan language among the younger generation. Instead they become fluent in Mandarin Chinese or Sichuan Chinese.

In Brag mgo County, rTa'u speakers occupy the southeast part including three townships: Nyin mo, Srib mo, gCi mda'. However, as mentioned in (§1.3), Srib mo and gCi mda' being located on National Highway 317 have shifted to local Tibetan and the new generation has no ability in rTa'u language. The largest rTa'u speaking population of Brag mgo County is in Nyin mo Township which has six administrative villages and all, except for Shawa Thung Village, use rTa'u as a mother tongue.

The rTa'u speaking region also has a high concentration of Han and other ethnic immigrants consisting not only of business people as described in (§1.3), but also Han people who have been described as injured soldiers who were left behind to the care of local families during the Long March (1934-5, Lǐ Nà 1997: 3-10). The offspring of those old first Han generation in rTa'u region have been exceptionally successful in the sense that the four Han villages in the Nyinmo Township are the most prosperous communities and are often promoted as model villages to be followed by other communities. They have also exerted tremendous influence in shifting from rTa'u to Sichuan Chinese. Communal frictions are also common between communities with a higher percentage of Han migrants and exclusively rTa'u-speaking communities.

### 1.5.3 Previous work

Overall, rTa'u remains largely under-researched. However, there is certainly more work on rTa'u in comparison to some other lesser-known Sino-Tibetan languages spoken in the Ethnic Corridor, as described briefly in preceding sections. The majority of the work on rTa'u can be characterized as scanty description and collections of word lists, and therefore much work yet remains to be done. This thesis is the very first attempt of this scale of rTa'u language documentation. A previous lengthy work on rTa'u language is Vanderveen (2015), which is an extensive treatment of rTa'u phonology in the variety spoken in Ma zur. Township. She indicates that her key informant, originally from Mazi Township, had moved to Chengdu City where the actual fieldwork was undertaken. The variety described by Vanderveen, when compared with the BM variety described herein, demonstrates

the internal diversity of the rTa'u language, which I will comment on in more detail throughout the thesis.

Some years prior, Gates (2012) completed a much-needed and interesting work on the dialectology of rGyalrong. However, the work is essentially on what is now called 'rGyalrong proper' languages namely; Situ, Japhug, Zbu, and Tshobdun. Therefore, I will not discuss this interesting work in relation to rTa'u.

Vanderveen (2015) provides a review of existing literature written in English, and thus it is unnecessary to repeat this here. However, literature in non-English languages, mainly Mandarin Chinese, is underrepresented, and therefore here I will focus solely on presenting this literature.

Sun (1983) in his *Six-river Valley Ethnic Languages and Their Classification* contains a grammatical sketch of what he described as a variety of 'Ergong' (rTa'u) spoken in Dasang (Ti. Dàsāng Ci.大桑 ) region in Rong-brag County. The author comments that there is dialectal difference between rTa'u Ergong and Dasang Ergong. However, it is not indicated how different they are.

The first lengthy and comprehensive linguistic treatment of rTa'u is Huang (1990); this is a study on phonology and verb conjugation of rTa'u spoken in Ní wān (尼弯) Village, Dge bshus (Ch. Géxī 格西) Township, Chéngguān (城关) District. She identifies 49 basic consonants with 217 two-member consonant clusters and 34 three-member consonant clusters. She does not mention more than three-member



consonant clusters. The vowel inventory is startling: she lists 58 vocalic forms which contains 18 single vowels; 5 diphthongs, and 33 vowels with contrasting coda consonants. Huáng (1991) is another contribution of the same variety included in the collection *Zangmianyu Shiwu zhong* [*Fifteen Tibeto-Burman languages*]. Huáng (1992) includes a very large vocabulary of the same variety.

Gēngā Wēngmǔ has written extensively on rTa'u language. She is a native of rTa'u with a background in linguistics. Gengga & Hu (2008, pp. 86-90) provide a useful sociolinguistic account of rTa'u language, specifically regarding the spatial arrangement of four major languages in rTa'u County— rTa'u, 'draba, Tibetan (Amdo and Kham), and Sichuan Chinese—and how each language performs and maintains their *lingua franca* status in their respective region. They say that rTa'u is mainly spoken in Xianshui Town district (the county seat), Nícuò (尼措), Wǎrì (瓦日) and Shāhōng (沙冲) townships in Bāměi (巴美) district. Except for Shachong, in the rest of the Bamei district people speak Kham Tibetan, while in Yùkē (玉科) region, which is predominantly a nomadic area, Amdo Tibetan is spoken; lastly, 'draba (扎巴) is spoken mainly in the 'draba region. She further argues that due to this high level of linguistic diversity, most people are bilingual or trilingual, however, when people of different language backgrounds come together it is not rTa'u language that serves as the *lingua franca*, but rather Sichuan Chinese or Amdo Tibetan serve as the main medium of communication across linguistic communities. Gengga & Suzuki (2008, pp.1-5) investigated the synchronic language-specific social aspects of rTa'u usage and vitality through cluster sampling focusing on Xianshui Town. Gengga (2010a) is a presentation of the phonological inventory of rTa'u with

a list of examples. She identifies 50 single consonants and 323 consonant clusters of which 241 are two-member clusters and one example of a five-member cluster. She also recognized 28 vowels belonging to four different categories: 18 simple vowels, two r-coloured vowels, 7 nasalized vowels and finally the vowel ʊ. Gengga (2010b) provides a preliminary investigation of rTa'u syllable structure, morphology and word classes. Gengga (2010, 2011, 2012, 2014) are studies of an anthropological linguistic nature, looking at how the ideological realities of rTa'u people are reflected in rTa'u language and how it is representative of rTa'u-speaking people, especially in contrast to long-lasting influence from Tibetan language and culture.

Another native linguist who has contributed significantly to the study of rTa'u language is Duo'erji, whose 1995 and 1998 publications are major contributions to the study of Geshezha rTa'u spoken in Rong brag County. Duo'erji (1995) provides a phonological sketch of Geshezha, whilst Duo'erji (1998) gives a brief description of the same language, including grammatical topics, not just phonology.

## 2 Phonology

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### 2.1 Introduction

This chapter contains five major sections: section (§2.3) introduces the consonants and is organized into different subsections based on the principle of manners of articulation; section (§2.4) is devoted to discussion of vowels with a brief cross-dialectal comparison; in section (§2.5) I will elaborate on the topic of syllable structure. Section (§2.6) discusses the role of pitch and stress and section (§2.7) is a comprehensive treatment of rTa'u consonant clusters. Section (§2.8) is on phonological processes, ending this chapter on phonology.

### 2.2 Conventions

Slashes // and brackets [] are used for phonemic transcriptions and phonetic transcriptions respectively. A primary stress mark is used as in ['zamba] 'bridge' to indicate stress on a syllable, when necessary. In general, in disyllabic words the first syllable is stressed as in ['kʰɔʔ.χpə] 'body', and the same applies to prefixed words, where it is the prefix that receives stress as in ['tə = ɕə] 'IMP-go', with stress either expressed in high pitch or as increased loudness; lack of a stress mark indicates the syllable is not stressed. In BM rTa'u pitch is not contrastive. A dot is placed between syllable boundaries in all transcriptions when relevant, as in [za. mba] 'bridge' and [qʰə.zu] 'bow'. In examples, Tibetan or Chinese loanwords are marked by Ti. and Ch. respectively and are placed in brackets. Since more than half of the local lexicon is Tibetan loanwords, only those that are obviously Tibetan origin, e.g., religious terms and modern items, are marked. Local words lacking one-word English glosses

are given full translation in footnotes.

## 2.3 *Consonants*

### 2.3.1 Background

"Qiangic is a 'consonant-prominent' subgroup of TB, with a rich proliferation of syllable onsets reminiscent, e.g., of Hmongic languages. Within Qiangic, the most elaborate consonantal repertoires are to be found in the many dialects of the rGyalrong and Ergong languages..." (Matisoff 2003: 173). rGyalrongic languages are often reported to host complex syllable initial consonantal clusters. Data available on the varieties spoken within rTa'u County and those thought to be closely related illustrate a substantial level of internal diversity in terms of size of phonemic inventory and consonant and vowel systems.

Vanderveen (2015:32) identifies 42 consonant phonemes of Mazur speech (hereafter MZ). In her consonantal inventory there is a total of 46 phonemes among which four are described as 'not full phonemes' and marked by brackets, namely, (g), (f), (ʃ) and (N). Meanwhile, Gengga (2010) suggests that there are 50 consonant phonemes in Xiānshuǐ Town (hereafter XS) speech. Those absent in both BM and MZ are: glottal stop /ʔ/, voiceless labiodental fricative /f/ and voice contrastive glottal fricatives /h/ and /ɦ/. Jacques, Lai, Antonov & Nima (2016) found 44 consonantal phonemes in the speech of Khang-gsar Township (hereafter as KS). Notably, the voiced uvular is missing, as in MZ speech. If we are to put aside the phenomenon of prenasalization, KS speech appears most close to BM speech in terms of size and members of phonemic inventory. Jacques et al. (2016:2) state that

there is no evidence in KS for treating the prenasalized voiced stops as single phonemes in Stau (KS rTa'u), unlike in Japhug and Tshobdun rGyalrong.

Chirkova (2012:137) and others, e.g. Sun (2001:166-170) have provided a couple of dozen (she lists twenty) features common to what has come to be known among linguists as the Qiangic family. Amongst these features are large consonant and vowel inventories. It is therefore intriguing to see how the rTa'u consonantal inventory compares to other languages in a cross-linguistic comparison. According to Maddieson (2013), in a sample of 563 languages worldwide, five different categories can be established based on the size of the consonantal inventory, and languages with 34 or more consonants are classified as having a 'large' repertoire. Furthermore, only 57 languages of the surveyed 563 fit in this category.

How much weight, if any, should be given to what appear to be typologically unusual feature-large consonant inventories in defining Qiangic membership is a different discussion. However, it appears that a large consonantal inventory is indeed common among languages considered to belong to the Qiangic family. It should be noted here though that whether this feature could be regarded as evidence in support of a genetic Qiangic family is a different question and is beyond the scope of this section. Of 12 languages/lects, the average consonant inventory is 44.3, thus all can be categorized as having a 'large' inventory in the classification of Maddieson (2013).

Language	No. of Consonant phonemes
Lizu (Chirkova & Chen 2013)	39
Wadu Pumi (Daudey 2014:19)	40
Kyom-kyo rGyalrong (Prins 2011:24)	40
Wobzi rGyalrong (Lai 2013)	41
Qiang (LaPolla & Huang 2003:22)	43
Khang-gsar rTa'u (Jacques et al. 2016)	43
Xianshui rTa'u (Genga 2010:5)	50
Xumi (Chirkova 2009)	44
Mazur rTa'u (Vanderveen 2015:32)	46
Yongning Na (Mosuo) (Lidz 2010:25)	49
Guiqiong (Li Jiang 2015:31)	60

### 2.3.2 BM consonants

In my analysis of BM I propose 53 consonant phonemes, as presented in Table 2. Evidently, a clear distinction centres around the topic of pre-nasalization of stops and affricates. As has been described for Wadu Pumi (Daudey 2014: 18-20), most of the time, voiced stops and affricates are prenasalized in initial position, however, there are also some examples that have plain voiced stops/affricates in initial position. It should also be mentioned that Jacques et al. (2016) state that sTa'u (KS rTa'u) lacks evidence for treating the prenasalized voiced stops as single phonemes, unlike in Japhug and Tshobdun. Given the fact that KS and BM speech are mutually intelligible and are the closest of all rTa'u lects, I believe the differences

could well be due to different choices of analytical approach, instead of actual differences in the respective languages.

Without the controversial prenasalized voiced stops and affricates, there are 45 consonantal phonemes in BM rTa'u, with 5 marginal phonemes (in parentheses), which occur either in loanwords or highly restricted environments.

The 55 consonants are distributed at ten articulatory places: bilabial, labiodental, dental, alveolar, retroflex, alveopalatal, palatal, velar, uvular and glottal. They are grouped into stops, affricates, fricatives, nasals, liquids and approximants in terms of manner of articulation. All consonants may occur in the onset of a syllable, with the exception of glottal stop /ʔ/, which only occurs in syllable final position after an open back vowel, and thus is not treated as a full phoneme.

**Table 2: Brag mda' rTa'u Consonantal Inventory**

		labial	labialdent	dental /alveolar	retroflex	alveopalatal	palatal	velar	uvular	glottal
stop	voiceless	p		t			c	k	q	(ʔ)
	aspirated	p <sup>h</sup>		t <sup>h</sup>			c <sup>h</sup>	k <sup>h</sup>	q <sup>h</sup>	
	voiced	b		d			ɟ	g		
	prenasal	<sup>m</sup> b		<sup>n</sup> d			<sup>ɲ</sup> ɟ	<sup>ŋ</sup> g	<sup>ɴ</sup> g	
	voiceless			ts	tɕ	tɕ				
affricate	aspirated			ts <sup>h</sup>	tɕ <sup>h</sup>	tɕ <sup>h</sup>				
	voiced			(dz)	dʒ	(dʒ)				
	prenasalized			<sup>n</sup> dz	<sup>n</sup> dʒ	<sup>n</sup> dʒ				
fricative	voiced		(f)	s	ɕ	ɕ		x	χ	h
	voiceless		v	z		ʒ		ɣ	ʁ	
Lateral sonorant				l						
Lateral fricative	voiceless			ɬ						
	voiced			ɮ						
	voiced			c						
Rhotic					ɻ					
Nasal		m		n			ɲ	ŋ		
approximant		w				j				

BM appears to be the only rTa'u language for which a distinction between plain and prenasalized voiced stop/affricate has been proposed. What follows is a presentation of minimal pairs, illustrating contrastive pairs of plain vs. prenasalized vs. prenasalized clusters of stops and affricates. As will be elaborated extensively in the following section, in addition to a handful of clear examples of plain voiced



obstruents in the speech of younger speakers, there is strong tendency to variation in the prenasalization of stops. The ultimate question whether there is phonological evidence that prenasalized obstruents are not in fact clusters is of analytical nature; later I will be presenting my argument in favour of prenasalized obstruents through evidence from compensatory lengthening, syllabification, and acoustic analysis of prenasalized consonants in more detail. For now, the following table suffices to demonstrate the phonemically contrastive pairs.

**Table 3: Contrastive pairs of plain voiced stops and prenasalized voiced stops**

/də.qe/ 'stone wall'	vs.	/ <sup>n</sup> də/ 'heavy'	vs.	/ɣ <sup>n</sup> dɔ/ 'to put in a bag'
/ja/ 'width'	vs.	/ <sup>n</sup> ja/ 'to lick'	vs.	/ɣ <sup>n</sup> ja.ɛi/ 'muddy'
/gə.tsə/ 'dinner'	vs.	/ <sup>n</sup> gə/ 'nine'	vs.	/ɣ <sup>n</sup> gə/ 'to eat'
/dzə/ <sup>3</sup>	vs.	/ <sup>n</sup> dzə/ 'to allow'		

Table 3 illustrates the phonemic distinction among plain voiced vs. prenasalized plan voiced and prenasalized voiced clusters.

In general, only voiceless stops, voiced nasals and glottal stop occur in the coda position. However coda consonants are highly infrequent, making BM predominantly open syllabic. In this position, stops are normally unreleased. Glottal

<sup>3</sup> A type of a tree that grows in a swamp.

stop usually occurs after open back rounded vowels. The velar nasal is only found in coda position, mostly after back vowels.

/b/, /d/, /g/, /ʝ/, /ɣ/, /dz/ and /dʒ/ appear to occur most often non-initially in the word. They also seem to be more frequent before mid-central vowels.

Voiceless obstruents appear to be more prominent and, across all articulatory positions, there is also an aspiration contrast.

Contrastive aspirated fricatives are attested in some dialects of rTa'u (see Sun 2000b), and furthermore, in KG dialect Jacques et al. (2015) found that voiceless fricative phonemes are realized as aspirated in syllable-initial position in non-clusters, and as unaspirated in a cluster. This does not appear to be the case in BM, where aspiration does not appear to be related to its distribution within the syllable. Instead a scenario opposite to that described for KG has been attested in BM for instance, /ɕa/ 'diligent' is realized as [ɸɕʰa] in /ɸɕa/ 'room' when in clusters. It appears that the fricative is influenced by a preceding uvular fricative in clusters, thus producing non-contrastive aspiration. However, when in syllable-initial position, fricatives are not aspirated.

The parenthesized consonantal phonemes, /f, dz, dʒ, ʔ/ are a special group. Their environment is highly restricted and predictable; /f, dz, dʒ/ are only found in clusters except for /f/ which may also occur word-initially, but only in Chinese loanwords. The glottal stop /ʔ/ is limited to coda position following some back

vowels. Near minimal pairs such as those provided below give evidence of their phonemic status.

- (4) /ʃfa/        ‘to emerge’    vs.   /ɪva/        ‘to carry on shoulder’  
      /ɣdzo/       ‘tsampa’        vs.   /xtɕo/       ‘to hustle’  
      /vdze/       ‘to pollute’    vs.   /ftse/       ‘wrestle’

Before proceeding to the discussion of each category of consonants, Table 5 is intended to provide an overall idea of the distributional pattern of consonants and vowels, which reveals some interesting general patterns. As seen above, we see a restricted distribution of plain voiced obstruents, however, there are still several examples. Another important observation which can be drawn from Table 5 is what appears to be near-complementary distribution of velar and uvular consonants. Remaining consonant-vowel co-occurrences appear to be regular. Lateral fricatives, however, like other consonants that have restricted occurrence alone with vowels, usually occur more frequently in clusters.

For convenience, a summary vowel table is presented below. A full-fledged discussion of the vowel system is provided in § 2.4 1.4).

**Table 4: Brag mda' rTa'u Vowels**

	front	central	back
high/close	i	ɯ	u
close-md	e	ə	o
open-mid		ɜ̃	ɔ
low/open	a		ɑ

**Table 5: Distributional table of consonantal phonemes with vowels**

- In this table, Chinese loanwords are marked by \*;
- Tibetan loanwords are not marked, since they make up more than half of BM local lexicon.

	-i	-e	-a	-ə	-ɜ̃	-ɯ	-u	-o	-ɔ	-ɑ
<b>p</b>	pi	pe	pa	pə	pɜ̃	pɯ	*pu	po	pɔ	pa
<b>p<sup>h</sup></b>	p <sup>h</sup> i	p <sup>h</sup> e	p <sup>h</sup> a	p <sup>h</sup> ə	p <sup>h</sup> ɜ̃	p <sup>h</sup> ɯ	p <sup>h</sup> u	p <sup>h</sup> o	p <sup>h</sup> ɔ	p <sup>h</sup> ɑ
<b>b</b>	bi	be	ba	bə		bɯ				ba
<b><sup>m</sup>b</b>	<sup>m</sup> bi	<sup>m</sup> be	<sup>m</sup> ba	<sup>m</sup> bə	<sup>m</sup> bɜ̃	<sup>m</sup> bɯ	<sup>m</sup> bu	<sup>m</sup> bo	<sup>m</sup> bɔ	<sup>m</sup> ba
<b>t</b>	ti	te	ta	tə	tɜ̃	tɯ	tu	to	tɔ	ta
<b>t<sup>h</sup></b>	t <sup>h</sup> i	t <sup>h</sup> e	t <sup>h</sup> a	t <sup>h</sup> ə	t <sup>h</sup> ɜ̃	t <sup>h</sup> ɯ	t <sup>h</sup> u	t <sup>h</sup> o	t <sup>h</sup> ɔ	t <sup>h</sup> ɑ
<b>d</b>			da	də	dɜ̃			do		da
<b><sup>n</sup>d</b>	<sup>n</sup> di	<sup>n</sup> de	<sup>n</sup> da	<sup>n</sup> də	<sup>n</sup> dɜ̃	<sup>n</sup> dɯ	<sup>n</sup> du	<sup>n</sup> do	<sup>n</sup> dɔ	<sup>n</sup> da
<b>c</b>	ci	ce	ca	cə	cɜ̃	cɯ		co		ca
<b>c<sup>h</sup></b>	c <sup>h</sup> i	c <sup>h</sup> e	c <sup>h</sup> a	c <sup>h</sup> ə	c <sup>h</sup> ɜ̃	c <sup>h</sup> ɯ		c <sup>h</sup> o		c <sup>h</sup> ɑ
<b>ʃ</b>	ʃi		ʃa	ʃə	ʃɜ̃	ʃɯ			ʃɔ	ʃɑ
<b><sup>ɳ</sup>ʃ</b>	<sup>ɳ</sup> ʃi	<sup>ɳ</sup> ʃe	<sup>ɳ</sup> ʃa	<sup>ɳ</sup> ʃə	<sup>ɳ</sup> ʃɜ̃	<sup>ɳ</sup> ʃɯ	<sup>ɳ</sup> ʃu	<sup>ɳ</sup> ʃo		<sup>ɳ</sup> ʃɑ
<b>k</b>	ki	ke	ka	kə	kɜ̃	kɯ	ku	ko		ka
<b>k<sup>h</sup></b>	k <sup>h</sup> i	k <sup>h</sup> e	k <sup>h</sup> a	k <sup>h</sup> ə	k <sup>h</sup> ɜ̃	k <sup>h</sup> ɯ	k <sup>h</sup> u	k <sup>h</sup> o	k <sup>h</sup> ɔ	k <sup>h</sup> ɑ
<b>g</b>		ge	ga	gə	gɜ̃				gɔ	ga
<b><sup>ŋ</sup>g</b>	<sup>ŋ</sup> gi	<sup>ŋ</sup> ge	<sup>ŋ</sup> ga	<sup>ŋ</sup> gə	<sup>ŋ</sup> gɜ̃	<sup>ŋ</sup> gɯ	<sup>ŋ</sup> gu	<sup>ŋ</sup> go		
<b>q</b>	qi	qe	qa	qə	qɜ̃	qɯ		qo	qɔ	qa
<b>q<sup>h</sup></b>	q <sup>h</sup> i	q <sup>h</sup> e	q <sup>h</sup> a	q <sup>h</sup> ə	q <sup>h</sup> ɜ̃	q <sup>h</sup> ɯ	q <sup>h</sup> u	q <sup>h</sup> o		
<b><sup>N</sup>G</b>	<sup>N</sup> Gi	<sup>N</sup> Ge						<sup>N</sup> Go	<sup>N</sup> Gɔ	

<b>ts</b>	tsi	tse	tsa	tsə	tsʰ	tsu	*tsu	tso	tsɔ	tsa
<b>tsʰ</b>	tsʰi	tsʰe	tsʰa	tsʰə	tsʰʰ	tsʰu	tsʰu	tsʰo	tsʰɔ	tsʰa
<b>ⁿdz</b>	ⁿdzi		ⁿdza	ⁿdzə	ⁿdzʰ	ⁿdzu		ⁿdzo	ⁿdzɔ	ⁿdza
<b>tʂ</b>	tʂi	tʂe	tʂa	tʂə	tʂʰ	tʂu	*tʂu	tʂo	tʂɔ	tʂa
<b>tʂʰ</b>	tʂʰi	tʂʰe	tʂʰa	tʂʰə	tʂʰʰ	tʂʰu	*tʂʰu	tʂʰo	tʂʰɔ	tʂʰa
<b>dz</b>	dzi		dza	dzə	dzʰ	dzu	dzu		dzɔ	dza
<b>ⁿdz</b>	ⁿdzi		ⁿdza	ⁿdzə		ⁿdzu		ⁿdzo	ⁿdzɔ	
<b>tɕ</b>	tɕi	tɕe	tɕa	tɕə	tɕʰ	tɕu	tɕu	tɕo	tɕɔ	tɕa
<b>tɕʰ</b>	tɕʰi	tɕʰe	tɕʰa	tɕʰə	tɕʰʰ	tɕʰu	tɕʰu	tɕʰo	tɕʰɔ	tɕʰa
<b>ⁿdʒ</b>	ⁿdʒi	ⁿdʒe	ⁿdʒa	ⁿdʒə	ⁿdʒʰ	ⁿdʒu				ⁿdʒa
<b>f</b>	*fi									*fa
<b>v</b>	vi	ve	va	və		vu		vo		
<b>ɬ</b>	ɬi	ɬe	ɬa	ɬə		ɬu	ɬu	ɬo		ɬa
<b>ɮ</b>	ɮi	ɮe	ɮa	ɮə			ɮu	ɮo		
<b>s</b>	si	se	sa	sə	sʰ	su	su	so	sɔ	sa
<b>z</b>	zi	ze	za	zə	zʰ	zu	zu	zo	zɔ	za
<b>ʂ</b>	ʂi	ʂe	ʂa	ʂə	ʂʰ	ʂu	*ʂu			ʂa
<b>r</b>	ri	re	ra	rə	rʰ	ru		ro	rɔ	ra
<b>ɕ</b>	ɕi	ɕe	ɕa	ɕə	ɕʰ	ɕu	ɕu	ɕo	ɕɔ	ɕa
<b>ʐ</b>	ʐi	ʐe	ʐa	ʐə	ʐʰ	ʐu	ʐu	ʐo	ʐɔ	ʐa
<b>x</b>		xe	xa	xə	xʰ	xu				
<b>ɣ</b>		ɣe	ɣa	ɣə	ɣʰ	ɣu		ɣo		
<b>χ</b>	χi	χe	χa		χʰ				χɔ	χa
<b>ɸ</b>	ɸi	ɸe	ɸa				ɸu		ɸɔ	ɸa
<b>m</b>	mi	me	ma	mə	mʰ	mu		mo	mɔ	ma
<b>n</b>	ni	ne	na	nə		nu		no		
<b>ɳ</b>	ɳi		ɳa	ɳə	ɳʰ	ɳu	ɳu	ɳo	ɳɔ	ɳa
<b>ŋ</b>	ŋi		ŋa	ŋə	ŋʰ	ŋu	ŋu	ŋo		ŋa
<b>j</b>	ji	je	ja	jə	jʰ	ju	ju	jo		
<b>w</b>		we	wa	wə			wu	wo		*wa
<b>l</b>	li	le	la	lə		lu		lo	lɔ	la

### 2.3.3 Stops

BM rTa'u distinguishes 19 stops which contrast at five places of articulation namely labial, alveolar, palatal, velar, and uvular, along four cross-classifying dimensions: voiceless unaspirated, voiceless aspirated, voiced and prenasalized voiced, except for the uvular series which lacks a plain voiced stop. The uvular stop series makes for interesting cross-linguistic comparison within the Qiangic family. Following Sun Hongkai's (2001:160) Qiangic subgroup hypotheses, data on northern Qiang languages indicate a lack of voiced uvular as in Northern Qiang (LaPolla & Huang 2003), Pumi (Daudey 2013), Japhug rGyalrong (Jacques 2004:16), KS rTa'u (Jacques et al. 2015:2). In MZ rTa'u, plain voiced uvular stop is marked as marginal (Vanderveen 2015:32). However, not all northern Qiangic languages share this feature uniformly: Kyom-kyo (Jiaomuzu) rGyalrong reportedly lacks the entire uvular series (Prins 2011:28). In southern Qiangic languages, data indicates similar cross-linguistic diversity: Xumi, similar to BM rTa'u, lacks a plain voiced uvular, however, it distinguishes a three-way voicing contrast at uvular position, namely voiceless unaspirated, voiceless aspirated, and prenasalized voiced (Chirkova 2009:11). Ersu is the only language cited here that has a three-way voicing distinction with a plain voiced uvular (Chirkova 2015:3), at the same time, in Guiqiong (Jiāng Li, 2015), the entire uvular stop series is absent.

For now, I simply, operationally, differentiate prenasalization and nasal clusters on the principle of homorganicity where [md] (NC) indicates a nasal cluster, while [<sup>N</sup>d] (<sup>N</sup>C) is a prenasalized stop, as indicated by way of superscript.

Table shows stops /p, p<sup>h</sup>, b, <sup>m</sup>b, t, t<sup>h</sup>, d, <sup>n</sup>d, c, c<sup>h</sup>, ʃ, <sup>n</sup>ʃ, k, k<sup>h</sup>, g, <sup>n</sup>g, q, q<sup>h</sup>, <sup>n</sup>G/ to be in contrast.

**Table 5: Stops**

phoneme	description	minimal pair gloss	
/p/	v1 unaspirated bilabial plosive	[pə]	'thin'
/p <sup>h</sup> /	v1 aspirated bilabial plosive	[p <sup>h</sup> ə]	'to beg'
/b/	vd unaspirated bilabial plosive	[bə.va]	'bee'
/ <sup>m</sup> b/	vd prenasalized unaspirated bilabial plosive	[ <sup>m</sup> bə]	'caterpillarfungus' Ti.
/t/	v1 unaspirated alveolar plosive	[tə]	'demonstrative'
/t <sup>h</sup> /	v1 aspirated alveolar plosive	[t <sup>h</sup> ə]	'to worsen'
/ <sup>n</sup> d/	vd prenasalized alveolar plosive	[ <sup>n</sup> də]	'heavy'
/d/	vd plain alveolar plosive	[də.qi]	'stone wall'
/c/	v1 unaspirated palatal plosive	[cə]	'to reap'
/c <sup>h</sup> /	v1 aspirated palatal plosive	[c <sup>h</sup> ə]	'to lift'
/ʃ/	vd plain palatal plosive	[ʃə.ma]	'intestines'
/ <sup>n</sup> ʃ/	vd prenasalized palatal plosive	[ <sup>n</sup> ʃə]	'possessive'
/k/	v1 unaspirated velar plosive	[kə]	'to wear'
/k <sup>h</sup> /	v1 aspirated velar plosive	[k <sup>h</sup> ə]	'dog'
/g/	v1 plain velar plosive	[gə]	'to sleep'
/ <sup>n</sup> g/	vd prenasalized velar plosive	[ <sup>n</sup> gə]	'nine'
/q/	v1 unaspirated uvular plosive	[qə]	'to dry up'
/q <sup>h</sup> /	v1 aspirated uvular plosive	[q <sup>h</sup> ə.zə]	'bowl'
/ <sup>n</sup> G/	vd plan uvular plosive	[ <sup>n</sup> Ge]	'to get tired'

**As is clear from**

Table 5 and will be further discussed, the distributional pattern of stops is rather unbalanced. In particular, voiced stops occur much less frequently than their prenasalized voiced counterparts. This could be considered an areal feature considering its wide distribution among other neighbouring languages.

### 2.3.3.1 Bilabial stops /p<sup>h</sup>, p, b, <sup>m</sup>b/

BM rTa'u makes a four-way distinction between voiceless aspirated bilabial stop /p<sup>h</sup>/, voiceless unaspirated bilabial stop /p/, voiced bilabial stop /b/ and prenasalized voiced bilabial stop /<sup>m</sup>b/. As noted by Vanderveen (2015) for MZ rTa'u, /p/ sometimes appears as a coda in rapid speech in BM rTa'u, e.g., [ʔjəp] 'to sleep' and when occurring in careful speech it may also be realized as [m], as in [ʔjəm]. If it occurs in word-medial position, it is always pronounced as unreleased [p] as in [ʔjəp.ɾə] 'to sleep-COP'.

In words with a bilabial stop at both the onset and coda position, it is hard to assess the exact status of both the vowel and final consonant e.g., the word 'to dismount' can be produced in multiple possible ways giving its sudden closure of lips both at the beginning and end of the word; [pəm], [pəp], [pap] and or [pam].

/p/ is unaspirated in word-initial position, however, when preceded by voiceless uvular fricative /χ/, it becomes weakly aspirated as in [χp<sup>h</sup>a] 'brave', with slightly weaker aspiration than in a normal aspirated bilabial stop, establishing a fortis-lenis scale. The same acoustic feature is applicable to all voiceless unaspirated stops when preceded by the voiceless uvular fricative as in [χp<sup>h</sup>a], [χc<sup>h</sup>a], [χq<sup>h</sup>a], etc.

The 4-way contrast is realised syllable-initially. Syllable-finally: /p/ is realised as [p] or [m]. The distinction between /p/ and /p<sup>h</sup>/ is neutralised after /χ/ where it is realised as aspirated



### 2.3.3.2 Prevoicing and Prenasalization of voiced bilabial stop

To further complicate the matter, at the phonetic level, voiced stops also show two types of voice onset timing: [b] represents a regular prevoiced bilabial stop with a maximum prevoicing duration of around 150ms in connected speech, shown in Figure 4 below.

The spectrogram of this type of [b] is characterized by what is often known as the ‘voice bar’—the band of very low frequency voiced energy below about 200 Hz. The burst of the stop is not obvious on the waveform but is quite clear on the spectrogram and appears as a vertical band spread fairly uniformly across the frequency range. This is typical of voiced stops found in other languages like English. It is however by no means typical in BM, instead, another type of VOT pattern appears to be typical of voiced stops.

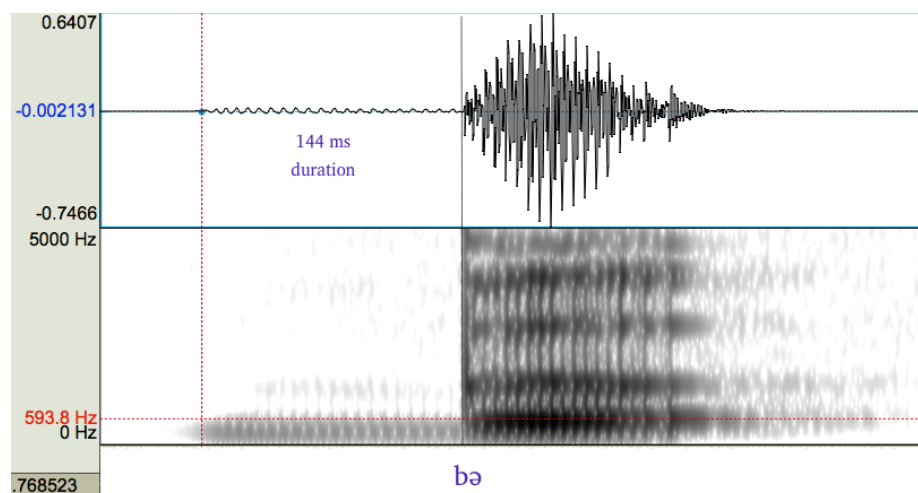


Figure 4: Prevoicing in plain voiced bilabial stop

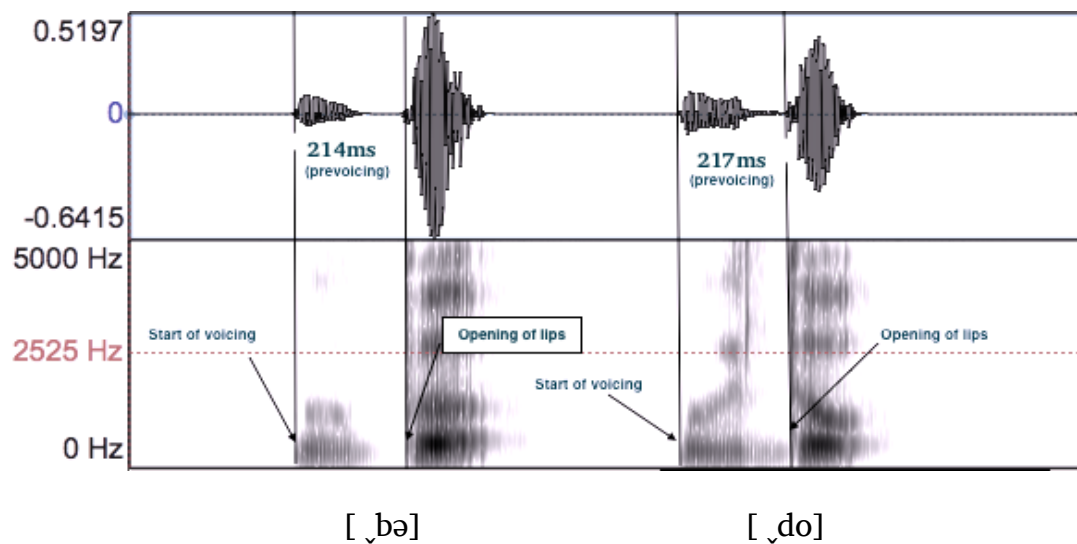
**Another type of prevoiced [ɓ] has a voicing duration of a minimum 200ms and has a different profile, as in shown**

. These appear to be derived from forms with a preceding voiced consonant plus a voiced consonant, which can either be produced as a cluster or with a prevoiced stop. Although the latter seems to be the more frequent form, there are, however, some examples like the preceding.

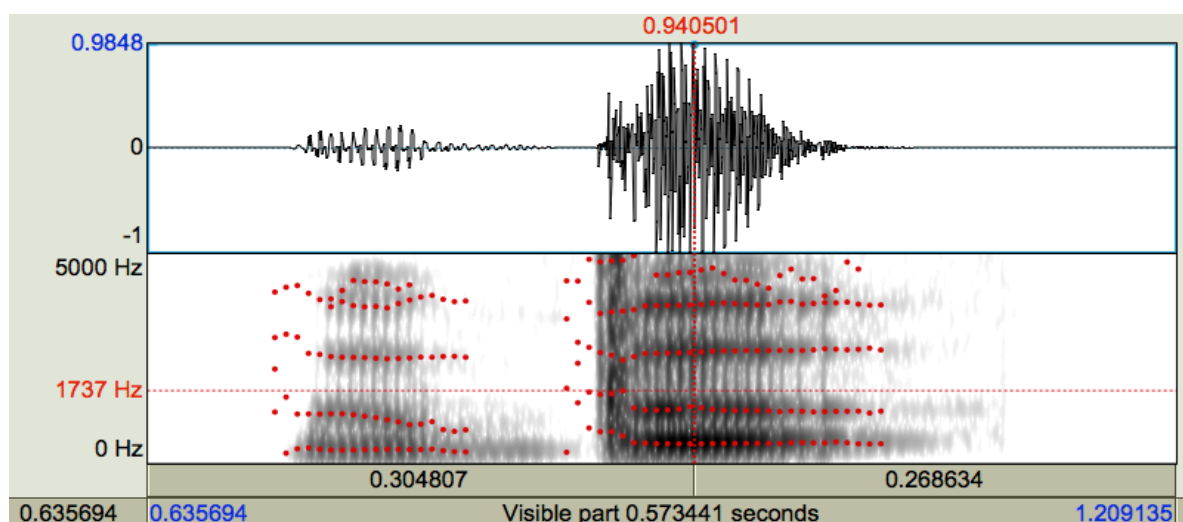
**Van Alphen & Smits (2004) explain that prevoicing is produced during the phase in which the closure of the initial plosive takes place and is essentially the vibration of the vocal folds which occurs before the realization of the initial voiced stop. Prevoicing is clearly visible in the spectrogram shown as in Figure 4 with clear negative VOT which is detectable before the release of the voiced stop consonant. Since voicing occurs before the burst of the plosive, VOT is negative. In**

a waveform and spectrogram of the words /bə/ and /dɔ/ are presented. The period of prevoicing is between two vertical lines and marked as *pre-voicing*. Since voicing starts before the release of the plosive /b/ and /d/, the VOT is negative. At this point of research, no phonologically systematic constraints have been discovered associated with features of prolonged pre-voicing or lack thereof.

**Figure 5: Prolonged pre-voicing of stops**



Below is a closer look at the spectrogram of prolonged pre-voicing of a bilabial stop. What distinguishes it from a non-prevoiced bilabial stop is the higher frequency, duration and energy of prevoicing. As will be made clear further on in this section, voiced bilabials of this type are infrequent and are in the process of being replaced by voiced stops with more negative VOT as in Figure 4. Figure 6 shows an instance of even more negative VOT in [b].

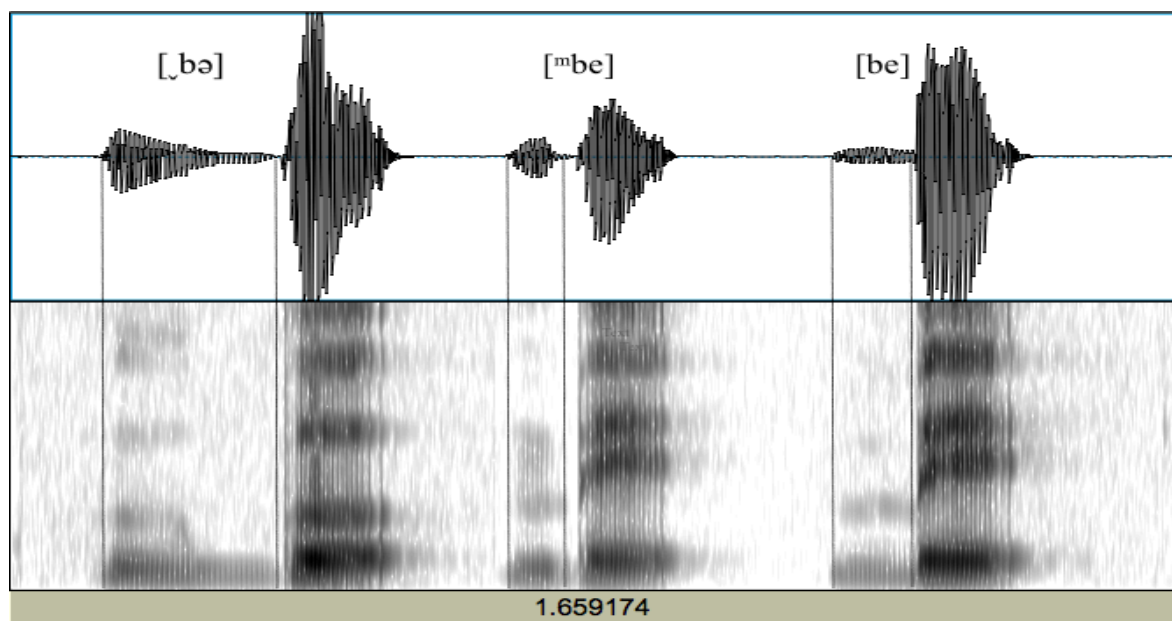


**Figure 6: Spectrogram of prolonged pre-voicing of bilabial stop**

The voiced bilabial stop /b/ is of interest on its own. Overall, three different bilabial stops with varied acoustic features can be distinguished as shown Figure 7 below. The duration of prevoicing ranges from 60 ms to 228 ms. The most extreme prevoicing is in [ɓə] ‘sun’ which is an alternative form of /ɣbə/ as shown in Figure 7 below; on the other end of the spectrum is plain voiced bilabial stop which is least prevoiced as in [be.ca]<sup>4</sup> and is clearly indicated in spectrograms. The waveform is quite different among these three. The combination of homorganic nasal with voiced bilabial is less in duration and energy waveform. However, the distinction between [nbə] and [ᵐbe] can be made through articulatory gestures; where during the articulation of [nbə], before the burst of stop, air flow is released through nasal cavity while lips come together to close up the oral cavity before the burst of plosive while the nasal cavity closes. On the other hand, during the articulation of [ᵐbe], the oral cavity is shut and air flows through the nasal cavity for the brief prevoicing duration before the burst is released through the oral cavity.

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<sup>4</sup> A kind of game using a sharpened stone.



**Figure 7: Three-way voicing of voiced bilabial stop**

Having established acoustic evidence for three different realizations of voiced bilabial stop, below is evidence for a distinction between prevoiced bilabials, voiced bilabials and prenasalized bilabials.

(5) /ɣb/

- a) ɣb      [bə]      ‘sun’
- b) ɣbəʷ    [bəʷ]      ‘sand’

(6) /b/

- a) bepca    [be.pca]      ‘a game’
- b) baça    [ba.ça]      ‘cockroach’
- c) bə.wa    [bə.wa]      ‘bee’

(7) /<sup>m</sup>b/

- a) <sup>m</sup>bi      [<sup>m</sup>bi]      ‘carpet’
- b) <sup>m</sup>be      [<sup>m</sup>be]      ‘five’
- c) <sup>ɲ</sup>ɟa<sup>m</sup>ba    [<sup>ɲ</sup>ɟa<sup>m</sup>ba]    ‘mud’

#### 2.3.3.3 Alveolar stops /t, t<sup>h</sup>, d, <sup>n</sup>d/

Alveolar stops are distinguished in four manners: voiceless unaspirated /t/, voiceless aspirated /t<sup>h</sup>/, voiced /d/ and prenasalized voiced /<sup>n</sup>d/.

(8) /t/

- /ti.ti.ɲa/      ‘small’
- /te. ɲɟə/      ‘their’
- /ta/      ‘come with’
- /ɣqa.tə/      ‘to work in the field’
- /tɜ/      ‘to become rich’
- /tuw/      ‘poison’
- /tu/      ‘to have’
- /to/      ‘to defeat’
- /tɔ/      ‘afraid’
- /ta.dzo/      ‘silk’

(9) /t<sup>h</sup>/

- /t<sup>h</sup>i/      ‘to drink’
- /t<sup>h</sup>e/      ‘to take out’

/t <sup>h</sup> ə/	‘good’
/t <sup>h</sup> a/	‘domesticated animals giving birth’
/t <sup>h</sup> ɜ/	‘slope’
/t <sup>h</sup> ʉ/	‘a drop of’
/t <sup>h</sup> u/	‘to beg’
/t <sup>h</sup> o/	‘mark between fields’
/t <sup>h</sup> ɔ/	‘crops’
/t <sup>h</sup> ɑ/	‘decisions’

(10) /d/

/di.scə/	‘Ti. proper name’
/də.ma/	‘Ti. proper name’
/dɜ/	‘plate’
/dʉ.ŋ <sup>h</sup> ɜ/	‘Ti. suffering’
/du.ɹi/	‘Ti. proper name’
/ɹu.da/	‘Ti. proper name’

(11) /<sup>n</sup>d/

/ <sup>n</sup> di/	‘or’
/ <sup>n</sup> de/	‘happy with’
/ <sup>n</sup> də/	‘heavy’
/ <sup>n</sup> da/	‘where’
/ <sup>n</sup> dɜ/	‘to shake’ Ti.
/ <sup>n</sup> dʉ/	‘to sit’ Ti.
/ <sup>n</sup> do/	‘locative’

/<sup>n</sup>də/      ‘to put inside’

The voiced /d/ deserves some remarks: it shows regular distribution among all vowels however, there are some peculiarities with the examples provided in (10) since four out of six examples are Tibetan loanwords, and four of them are personal names. Local reading of Tibetan personal names indicates a radical simplification where all preinitial consonants are dropped, as in Table 6.

**Table 6: Simplification of Tibetan personal names in BM speech**

Tibetan	full pronunciation	simplified version
བདེ་སྒྱིད།	bDe.skyid	[di.scə]
ཐཱ་མ།	sDi.ma	[də.ma]
སུག་བསྟལ།	sDug.bsngal	[du.ŋ <sup>h</sup> ʒ]
རིག་མ་བདག་	Rigs.bmag	[ɽu.də]
དུ་རྩེ།	rDo.rje	[du.ʒi]

It should be mentioned that it is rather evident that such radical simplification is not driven by the phonotactics of BM, instead, it is driven by social factors which reflect the mentality of local people associated with speaking a non-native language which in this case is Tibetan. Among the older generations, literacy is rather low in written Tibetan, and therefore pronouncing local Tibetan loanwords close to written forms is considered to be ‘showing off’, and thus even people literate in Tibetan tend to pronounce Tibetan loanwords without pronouncing the prefixes or the suffixes. For instance, when saying the word (12) below, people often do not sound the prefix འ. (12) below provides a comparison of Tibetan loanwords in their original forms and their corresponding phonetic transcription in local speech.



(12) Literary Tibetan    Wylie                      BM rTa'u

བཀྲ་ཤིས།	bkra shis	[dz̥a.ɕi]
རྡོ་རྗེ།	rdo rje	[du.ʒi]
ཕུན་ཚོགས།	phun tshogs	[pʰə.ˈtsʰog]
བདེ་སྦྱིད།	bde skyid	[di.scə]
ཚེ་རིང་སྒོལ་མ།	tshe ring sgrol ma	[tsʰə.ɾi.dz̥o.ma]
ལྷུན་འགྲུབ།	lhun 'grub	[l̥ə.ˈdz̥ə]
བསོད་ནམས་ལྷ་མོ།	bsod nams lha mo	[sə.ne.l̥a.mo]
རིག་བདག།	rig bdag	[ɾiʊg.da]
བློ་བཟང་།	blo bzang	[l̥ə.vzɔŋ]
ཀུན་དགའ།	kun dga'	[kə.ga]
དག་འདུལ།	dgra 'dul	[dz̥a.dʒ̥]
དངོས་གྲུབ།	dngos grub	[ŋi.dz̥ə]

#### 2.3.3.4 Palatal stops /c, c<sup>h</sup>, ʃ, <sup>n</sup>ʃ/

BM rTa'u distinguishes four palatal stops: voiceless unaspirated /c/, voiceless aspirated /c<sup>h</sup>/, voiced /ʃ/ and prenasalized voiced /<sup>n</sup>ʃ/. A regular sound correspondence is attested between different speech communities of rTa'u language where voiceless palatal stops in the communities upriver on the Xianshui River are realized as voiceless alveopalatal affricates downriver along the Xianshui River, meanwhile, the prenasalized voiced alveopalatal affricates upriver are realized as prenasalized voiced stops downriver, as exemplified in Table 7. One side note about this table is that it also reveals a general vowel alternation pattern between upper and lower rTa'u speaking communities where /i/ become /ə/ in downriver rTa'u communities.

Unlike other aspirated voiceless stops, the voiceless aspirated palatal stop is prenasalized at the phonetic level when occurring with rounded back vowels and /a/.

(13) /c/

- /ci/ 'to exist'
- /ce/ 'classifier'
- /ca/ 'surprised'
- /cə/ 'to cut crops'
- /cu/ 'a type of tsampa'
- /cɜ/ 'onomatopoetic sound'
- /co/ 'disagreement' Ti.

(14)	/c <sup>h</sup> /	
	/c <sup>h</sup> i/	‘bottom of an object’
	/c <sup>h</sup> e/	‘free to do sth’
	/c <sup>h</sup> a/	‘intercourse’
	/c <sup>h</sup> ə/	‘allow to be part of game’
	/c <sup>h</sup> ʒ/	‘onomonapoetic sound’
	/c <sup>h</sup> u/	‘to be burned’
	/c <sup>h</sup> u/--[ɲc <sup>h</sup> u]	‘to hit’
	/c <sup>h</sup> o/--[mc <sup>h</sup> o]	‘sociable’
	/c <sup>h</sup> ɔ/--[ɲc <sup>h</sup> ɔ]	‘crooked’
	/c <sup>h</sup> ɑ/--[ɲc <sup>h</sup> ɑ]	‘to be cold’

(15)	/ʃ/	
	/te.ʃi/	‘proper name’
	/ʃe.lo/	‘proper name’
	/ʃa/	‘Han’
	/ʃə.k <sup>h</sup> uɿk/	‘calf’
	/ʃʒ.ʏbə/	‘king’
	/ʃu/	‘to run’ Ti.
	/ʃo.ʃo/	‘round’

(16)	/ɲʃ/	
	/ɲʃe/	‘donation’
	/ɲʃa/	‘to eat <i>tsampa</i> with tongue’
	/ɲʃə/	‘possessive marker’
	/ɲʃʒ/	‘onomatopoetic sound’
	/ɲʃu/	‘cheese’ Ti.
	/ɲʃu/	‘to cheat’
	/ɲʃo/	‘to leave’ Ti.
	/ɲʃɔ/	‘religious rite’
	/ɲʃɑ. <sup>m</sup> ba/	‘mud’

**Table 7: Palatal stops and affricates across different speech communities**

Gloss	Upper XS	Lower XS
‘to exist’	/ci/	/dʒə/
‘bottom object’	/c <sup>h</sup> i/	/dʒ <sup>h</sup> ə/
‘to study’	/ʳdzi/	/ʳjə/

*2.3.3.5 Velar stops /k, k<sup>h</sup>, g, ʲg/ and uvular stops /q, q<sup>h</sup>, ʳG/*

In BM rTa’u there are four stop phonemes at the velar position and three at uvular. The voiced velar stop tends to occur before fewer vowels, while the prenasalized velar occurs before more vowels. The following examples show the distributional pattern of velar and uvular stops in BM rTa’u.

There are many words with voiced velar stops in contrast with other stops, however these almost exclusively occur in Tibetan loanwords or clusters where its environment is predictable. The voiced uvular and prenasalized voiced uvular are difficult to distinguish since their articulatory gestures are primarily in the uvular region where nasal gesture also begins. Vanderveen (2015) comments that the voiced uvular stop /G/ is a doubtful phoneme and she only posits a two-way distinction between the voiceless aspirated /q<sup>h</sup>/ and the voiceless unaspirated /q/ in the uvular series.

- (17)
- |         |            |         |                    |
|---------|------------|---------|--------------------|
| /k/     |            | /q/     |                    |
| /ki.pa/ | ‘cliff’    | /də.qi/ | ‘stone wall’       |
| /ke/    | ‘to break’ | /qe/    | ‘to tear’          |
| /ka.mə/ | ‘then’     | /qa.li/ | ‘magpie’           |
| /kə/    | ‘to wear’  | /qə.zə/ | ‘to tickle’        |
| /kʒ/    | ‘tent’ Ti. | /qʒ/    | ‘to make firewood’ |

/kʷ/	‘to bend’	/qʷ/	‘to knee’
/ku <sup>5</sup> /		/qu/	‘to die e.g. flower’
/ko/	‘to know’	/qo/	‘plough’
/kɔ.tɕ <sup>h</sup> ɑ <sup>6</sup> /		/qɔ/	‘valley’
/ka/	‘obstacle’		

(18)	/k <sup>h</sup> /		/q <sup>h</sup> /	
	/k <sup>h</sup> i/	‘to lay down’	/q <sup>h</sup> i/	‘vicious’
	/k <sup>h</sup> e/	‘to cut down’	/q <sup>h</sup> e/	‘to laugh’
	/k <sup>h</sup> a/	‘because of’	/q <sup>h</sup> a/	‘salty’
	/k <sup>h</sup> ə/	‘dog’	/q <sup>h</sup> ə.zə/	‘bowl’
	/k <sup>h</sup> ʒ/	‘to carry’ Ti.	/q <sup>h</sup> ʒ/	‘classifier’
	/k <sup>h</sup> ʷ/	‘curve’ Ch.	/q <sup>h</sup> ʷ/	‘to throw’
	/k <sup>h</sup> u/	‘stipple’	/q <sup>h</sup> u/	‘bowl’
	/k <sup>h</sup> ɔ/	‘to shun’		
	/k <sup>h</sup> o/	‘to give’	/q <sup>h</sup> o.ste/	‘back’
	/k <sup>h</sup> ɑ/	‘excuse’	/q <sup>h</sup> ɑ/	‘salty’
(19)	/ŋg/		/ <sup>N</sup> G/	
	/ŋgi/	‘to infect’	/ <sup>N</sup> Gi/	‘exhaust’
	/ŋge/	‘to explode’ Ti.	/ <sup>N</sup> Ge/	‘welcome’
	/ŋga/	‘plural’		
	/ŋgə/	‘nice’		
	/ŋge.ŋgʷ/	‘to shake’		
	/ŋgu/	‘be satisfied’		
	/ŋgɔŋ. <sup>m</sup> bə/	‘demon’	/ <sup>N</sup> Gɔ/	‘eat <i>tsampa</i> with tongue’
	/ŋgo/	‘to carry’	/ <sup>N</sup> Go.lo/	‘big pot’
	/ze.ŋga/	‘disease’		

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<sup>5</sup> A pot used to roast barley.

<sup>6</sup> A word used to drive animals.

The pattern of distribution of velar and uvular stops is discussed further below along with velar and uvular fricatives.

#### 2.3.4 Affricates

Affricates are unit phonemes consisting of a stop and a fricative, with the duration of a single segment. In sTa'u there are affricates with an apical stop followed by a coronal fricative, as in all other rGyalrongic languages. The affricates of rTa'u, like the affricates of related languages, are not consonant clusters, as Prins (2011) argues; they may cluster with a preceding consonant, but otherwise have fewer clustering possibilities than stops.

rTa'u has homorganic alveolar affricates, homorganic retroflex affricates, and alveolar stop plus alveopalatal fricative heterorganic affricates, the latter contrasting with palatal stops.

Many questions seem to arise pertaining to the phonological status of affricates in this language group, it is therefore deemed useful to provide a full-fledged discussion of affricates in BM rTa'u. As the majority of rGyalrongic studies have concentrated primarily on dialects spoken in the culturally rGyalrong regions, e.g., 'Bar khams (འབར་ཁམས། Ch. Mǎěrkāng 马尔康) and north of Rong brag (Ti. རོང་བྲག། Ch. Dānbā 丹巴) County of Dkar mdzes Prefecture, affricates in other languages spoken outside this region that are identified as rGyalrongic remain under-described, including rTa'u, Khroskyabs, and the rGyalrongic subgroup of Minyak/Muya. Although demographic and phonological sketches of most of the above-mentioned

languages are available, they are inadequate for drawing any comprehensive conclusions to compare with BM rTa'u, therefore for the purpose of this discussion, references will be made only to relatively better-described or better-known languages.

Affricates seem to constitute a major difference in segmental phonology between BM rTa'u and other well-described rGyalrongic languages. Amongst all the rGyalrongic branches Japhug (ja-phug) (Ch. Chá bǎo 茶堡) rGyalrong (Jacques 2004) are reported to have a four-way voicing contrast. The discrepancy, however, seems to depend on the analytical approach one adopts. Presence or absence of a contrast between post-alveolar/retroflex and alveopalatal affricatives in rGyalrongic languages is also diverse across different dialects. Zhuokeji (Lin 1993) and Kyom kyo ལྷོ་ཁྱོ་ (Ch. Jiǎomùzú 脚不足) (Prins 2011), lack-contrast between those two. In the case of BM rTa'u they show free variation; one is more likely to find palatalalveolar affricates in the speech of children, while adult speakers have alveopalatal affricates as shown in example (20) below:

(20)	Children	Adults	Gloss
	[tʃa]	[tɕa]	'tea'
	[dʒo]	[dʑo]	'tsampa'

Mansier, as cited in Prins (2011), reported on the co-occurrence of palatal plosives and affricates in the Xiǎojīn dialect of rGyalrong and in some dialects of Amdo Tibetan by stating that in the speech of older people in some places they differentiate between palatal plosives and affricates, whereas younger people do not,

and that in some locations he found either only a palatal plosive series or a series of affricates, whereas in other places both occur. In the literature on other rGyalrongic languages a similar phenomenon is reflected; some scholars (Jin et al. 1957 and Lín 1993) reported post-alveolar and palatal affricates, but no palatal plosives, while some others reported one series of affricates and a palatal plosives series (Nagano 1984). However Jin et. al (1957) attested both a double series of affricates and a palatal plosive series. In BM rTa'u the alveo-palatal affricates and palatal plosives are contrastive; they have four-way voicing contrasts as shown in Table 8.

**Table 8: Contrastive pairs of Palatal plosives and alveopalatal affricates**

'to dismiss'	[ci]	vs.	[tɕi]	'hat'
button'	[c <sup>h</sup> i]	vs.	[pe.tɕ <sup>h</sup> i]	'Tibetan'
'to expand'	[ji]	vs.	[dʒi]	'footprint'
'to chant'	[ <sup>n</sup> ji]	vs.	[ <sup>n</sup> dʒi]	'to learn'

In the retroflex place of articulation there is only one series, retroflex affricates, which, like other affricates, show a four-way stop manner contrast. The retroflex fricatives are, however, not phonemic in BM rTa'u.

Table 9 below gives an overview of the distribution of affricates in onset position and poses an impression of largely unsystematic distribution. However, if we look closely we find that, dark shaded, the marginal plain voiced affricates do not occur alone, except for voiced retroflex affricates which occur commonly contrasting with prenasalized retroflex affricates, with some clear examples of minimal pairs of plain voiced retroflex affricates and prenasalized retroflex affricates.



**Table 9: Distribution of affricates with vowels**

	/i/	/e/	/a/	/ə/	ɜ̌	/u/	/o/	/ɔ/	/ɑ/	
	/ts/	/tsi/	/tse.ko/	/tsa.və/	/tsə/	/tsɜ̌/	/tsu/	/tso/	/tsɔ/	/tsɑ/
	/ts <sup>h</sup> i/	/ts <sup>h</sup> e/	/ts <sup>h</sup> a.ki/	/ts <sup>h</sup> ə/		/ts <sup>h</sup> u <sup>7</sup> /	/ts <sup>h</sup> o/	/ts <sup>h</sup> ɔ/	/ts <sup>h</sup> ɑ/	
	/dz/	/vdzi/	/vdze/	/ɿdza.kɜ̌/	/ɿdzə/	/ɿdzu/ <sup>8</sup>	/ɿdzo/	/ɿdzɔ/		
alveolar	/ <sup>n</sup> dz/			/ <sup>n</sup> dzə/	/ndzɜ̌/	/ <sup>n</sup> dzu/	/ <sup>n</sup> dzo/	/ <sup>n</sup> dzɔ/		
	/tɕ/	/tɕi/	/tɕe.mə/	/tɕa/	/tɕə/	/tɕɜ̌/	/tɕu/	/tɕo/	/tɕɔ/	/tɕɑ/
	/tɕ <sup>h</sup> /	/tɕ <sup>h</sup> i/ <sup>9</sup>		/tɕ <sup>h</sup> a/	/tɕ <sup>h</sup> ə/	/tɕ <sup>h</sup> u.tɕ <sup>h</sup> u/	/tɕ <sup>h</sup> o/	/tɕ <sup>h</sup> ɔ.la/	/tɕ <sup>h</sup> ɑ/	
retroflex				clever	money	exactly	iron	pity	flood	
affricates										

<sup>7</sup> The ability to stay at someone else's house overnight

<sup>8</sup> Buddha statue made out of *tsampa* during religious rituals that are blessed and then given to people

<sup>9</sup> A kind of plant which grows along river banks

	/dz/	/dzi/ cleaver		/dza/ enemy	/dzə <sup>10</sup> /	/dzɜ̃/ to row	/dzu/ to place		/dzɔ̃.zɔ̃/ button	/dza/ to spread
alveopalata 1	<sup>n</sup> dz/	<sup>n</sup> dzi/ to get along		<sup>n</sup> dza. <sup>n</sup> dza/ same	<sup>n</sup> dzə/ to allow		<sup>n</sup> dzu/ queue	<sup>n</sup> dzo/ go Ti.	<sup>n</sup> dzɔ̃ <sup>11</sup> /	
	/tɕ/  /tɕ <sup>h</sup> /	/tɕi/ hat	/tɕe/ road /tɕ <sup>h</sup> e/ to	/tɕa/ tea /tɕ <sup>h</sup> a/ on	/tɕə.kɔ̃/ what /tɕ <sup>h</sup> ə/ DM	/tɕɜ̃/ to stare /tɕ <sup>h</sup> ɜ̃/ to be full	  /tɕ <sup>h</sup> u/ rate	/tɕo.da <sup>12</sup> / /tɕ <sup>h</sup> o/ capable /ydzɔ̃/ tsampa	/tɕɔ̃.k <sup>h</sup> u/ <sup>13</sup>	/tɕa/ to loot
	/dz/	/ɿdzi/ foot print								
	<sup>n</sup> dz/	<sup>n</sup> dzi/ to learn	<sup>n</sup> dze/ to peel	<sup>n</sup> dza/ rainbow	<sup>n</sup> dzəm/ quiet	<sup>n</sup> dzɜ̃/ to see	<sup>n</sup> dzu/ good person			<sup>n</sup> dza/ to get along

<sup>10</sup> A kind of plant that grows near the river side.

<sup>11</sup> Verb indicating that horses get frightened.

<sup>12</sup> Prayer flags at funeral sites.

<sup>13</sup> a bamboo basket where babies are put in.

### 2.3.4.1 Alveolar affricates /ts, ts<sup>h</sup>,<sup>n</sup>dz/

The alveolar affricates have a three-way contrast, voiceless unaspirated alveolar /ts/, voiceless aspirated /ts<sup>h</sup>/ and prenasalized voiced alveolar /<sup>n</sup>dz/. The plain voiced alveolar /dz/ only occurs in predictable clusters, thus is analysed here as an allophone of /<sup>n</sup>dz/, which appears to have wider distribution and is prenasalized in word-initial position.

(21)

/ts <sup>h</sup> /	/ts/	/ <sup>n</sup> dz/
/ts <sup>hi</sup> / ‘to come’	/tsi/ ‘to hang oneself’	/ <sup>n</sup> dzi/ ‘fingernail’
/ts <sup>he</sup> / ‘goat’		
/ts <sup>ha</sup> / ‘spring water’	/tsa.və/ ‘a plant’	/ <sup>n</sup> dza/ ‘wood’
/ts <sup>hə</sup> / ‘salt’	/tsə/ ‘to eat’	/ <sup>n</sup> dzə/ ‘to hide’
/ts <sup>hɜ</sup> / ‘to finish’ Ti.	/tsɜ/ ‘to fall’	/ <sup>n</sup> dzɜ/ ‘to put on wall’
/ts <sup>hu</sup> / see <sup>14</sup>	/tsu/ ‘to shine’	/ <sup>n</sup> dzu/ ‘to hide’
/ts <sup>hu</sup> / ‘fat’		
/ts <sup>hɔ</sup> / ‘religious item’	/tsɔ/ ‘to sit up’	/ <sup>n</sup> dzɔ/ ‘to smear’
/ts <sup>ho</sup> / ‘to milk’	/tso/ ‘able to fit in’	/ <sup>n</sup> dzo/ ‘to sit’
/ts <sup>hɑ</sup> / ‘living’	/tsɑ/ ‘light’	

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<sup>14</sup> When kids stay overnight, they cry in the middle of night because they miss their home; this word is used as a verb to mean that he/she can stay overnight without getting homesick

#### 2.3.4.2 Retroflex affricates

(22)	/tʂ/		/tʂʰ/	
	/tʂi/	‘warm’	/tʂʰi/	‘tax’
	/tʂe.i/	‘debt’	/tʂʰe/	‘onomatopoetic’
	/tʂa/	‘to saw’	/tʂʰa.tʂʰa/	‘colorful’
	/tʂə/	‘ghsot’	/tʂʰə/	‘blessing’
	/tʂʒ/	‘to row’	/tʂʰʒ/	‘tax’
	tʂu/	‘to break to pieces’		
	/tʂɔ/	‘luck’	**/tʂʰɔ/	
	/tʂa.ɛə/	‘to excuse’	/tʂʰa/	‘blodd’ Ti.

(23)	/dz/		/ʳdz/	
	/dzi/	‘smart’	/ʳdzi/	‘to familiarize’
	/dza/	‘enemy’	/ʳdza/	‘log’
	/dzə/	‘kind of plant’	/ʳdzə/	‘to allow’
	/dzʒ/	‘be caught up’	**/ʳdzʒ/	
	/dzu/	‘to lay out’	/ʳdzu/	‘row’
	/dzu <sup>15</sup> /		**/ʳdzu/	

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<sup>15</sup> verb to describe a particular way of dressing by women.

/dzɔ/	‘hanging rope’	/ <sup>n</sup> dzɔ <sup>16</sup> /Ti.
/dzɔ.ma/	‘proper name’	/ <sup>n</sup> dzɔ/ ‘to leave’ Ti.
/dzɑ/	‘to broadcast’	**/ <sup>n</sup> dzɑ/

#### 2.3.4.3 Alveopalatal affricates

(24)	/tɕ/		/tɕ <sup>h</sup> /	
	/tɕi/	‘hat’	/tɕ <sup>h</sup> i/	‘Darma’
	/tɕe/	‘road’	/tɕ <sup>h</sup> e/	‘division’
	/tɕa/	‘tea’	/tɕ <sup>h</sup> a/	‘pair’
	/tɕə.kə/	‘what’	/tɕ <sup>h</sup> ə/	‘then’
	/tɕʒ/	‘to star’	/tɕ <sup>h</sup> ʒ.tɕ <sup>h</sup> ʒ/	‘very full’
	/tɕʷk.tɕʷk/	‘waist’	/tɕ <sup>h</sup> ʷ/	‘scolding’
	/tɕu/	‘to meet’	/tɕ <sup>h</sup> u/	‘a sickness’
	/tɕɔ/	‘to put babies to bed’	/tɕ <sup>h</sup> ɔ/	‘to allow’ Ti.
	/tɕo/	‘metal’	/tɕ <sup>h</sup> o/	‘to know’
	/tɕɑ/	‘banditry’	/tɕ <sup>h</sup> ɑ/	‘be able to ride horse’

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<sup>16</sup> sound used to attract the attention of calves

(25)	/dʒ/		/ʲdʒ/	
	/ɪdʒi/	‘to wear’	/ʲdʒi /	‘to learn’
	**/dʒa/		/ʲdʒa/	‘rainbow’ Ti.
	**/mdʒə/	‘to hold’ Ti.	**/ʲdʒə/	
	**/dʒʒ/		/ʲdʒʒ/	‘to see’ Ti.
	**/dʒu/		/ʲdʒu/	‘good’
	/vdʒa/	‘to break’	/ʲdʒa/	‘to get along’

As examples in (25) shows that voiced alveopalatal affricates only occur in clusters thus it is treated as an marginal consonant.

### 2.3.5 fricatives

The fricatives /v, ɸ, ɣ, s, z, ʃ, ʒ, ɬ, ɮ/ are found to be in contrastive distribution as supported by the following examples.

**Table 10: Fricatives**

	Phoneme	descriptions	minimal pair	gloss
(1)	/v/	voiced labiodental fricative	/va/	'pig'
(2)	/ɸ/	voiceless dental fricative	/ɸa/	'goddess'
(3)	/ɣ/	voiced dental fricative	/ɣa/	'hand'
(4)	/s/	voiceless alveolar fricative	/sa/	'to plow'
(5)	/z/	voiced alveolar fricative	/zə/	'son'
(6)	/ʃ/	voiceless retroflex fricative	/ʃə.ʃə/	'hard'
(7)	/ʒ/	voiced retroflex fricative	/ʒə/	'to buy'
(8)	/ɬ/	voiceless palatal fricative	/ɬa/	'to need'
(9)	/ɮ/	voiced palatal fricative	/ɮa/	'lame leg'

(10)	/ɣ/	voiced velar fricative	/ɣa/	'fox'
(11)	/χ/	voiceless uvular fricative	/χa/	'surprise'
(12)	/ʁ/	voiced uvular fricative	/ʁa/	'favour'

/f/

Like other rGyalrongic languages, e.g., Kyom-kyo (Prins 2011) /f/, causativizing prefix (§7.3.2) and STEM-3 marker (§7.5.2), only occurs in Chinese loanwords when occurring alone; however, it may be preceded by voiceless retroflex in clusters at syllable onset position, e.g., [ʃfa] 'to emerge', and it precedes other voiceless obstruent consonants as well, as shown in Table 11.

- (23) [ʰfi.tɕi] airplane, Ch. 飞机 fēi jī  
[ʰfa] to start engine, Ch. 发动 fā dòng

**Table 11: Distribution of /f/**

	/f/	/ʃf/	/fq/	/fs/	/fc/
initial	[ʰfi.tɕi]	[ʃʰfa]	[fqa]	[fse]	[fcə]
	'airplane. Ch.'	'to emerge'	'neck'	'to kill'	'to lift'

Fricatives are frequent, as in Yadu Qiang (LaPolla & Huang 2003), and BM rTa'u has a dental fricative series among its five contrastive fricatives at different articulatory places; this is otherwise unreported in rGyalrongic languages. Voiceless

velar fricative /x/ occurs at the phonetic level and is reported to have phonemic status in Daofu (Jacques, et al. 2014, Vanderveen 2015, Gates 2015 (pc)) and Geshezha (Duō'ěrjǐ 1998). Its phonemic status is doubtful in BM rTa'u and a closer look at Table 12 suggests that [x] may be an allophone of /χ/.

### 2.3.5.1 Velar and Uvular fricatives

Velar and uvular fricatives include /ɣ, χ, ʁ/. As is evidenced by examples in Table 13 below, that [x] is an allophone of /χ/ when followed by /ə/ and /ʊ/.

**Table 12: Distribution of velar and uvular fricatives**

	[x]		χ		ɣ		ʁ	
i	**/xi/		/χi/	crack	/ɣi/	questio	/ʁi/	favor
e	**/xe/		/χe/	shoe	/ɣe/	light	/ʁe/	door
a	**/xa/		/χa/	seam	/ɣa/	fox	/ʁa/	LOC
ə	/xə/	plow	**/χə		/ɣə/	prefix	**/ʁ	
ɜ	**/xɜ/		/χɜ/	gap	/ɣɜ/	noise	**/ʁɜ	
u	**/xu/		**/χu		/ɣu/	mill	/ʁu/	head
ʊ	/xu.ɕe/	sigh			**/ɣʊ/			
ɔ	**/xɔ/		/χɔ/	now	**/ɣɔ/			
o	**/xo/		**/χo		/ɣo.ja/	yes	/ʁo/	favor
ɑ	**/xɑ/		**/χɑ		[ɣɑ.gon]	to know	/ʁɑ/	labou



**Table 13: Distribution of velar and uvular initials**

	i	e	a	ə	u	u	o	ɔ	ɑ
/k/	/ki/	/ke/	/ka.mə/	/kə/	/ku/	/ku/	/ko/	/kɔ.lɔ/	/kɑ/
/k <sup>h</sup> /	/k <sup>h</sup> i/	/k <sup>h</sup> e/	/k <sup>h</sup> a/	/k <sup>h</sup> ə/	/k <sup>h</sup> u.ma/	/k <sup>h</sup> u/	/k <sup>h</sup> o/	/k <sup>h</sup> ɔ/ to	/k <sup>h</sup> ɑ/
/g/			/ga/	/gə.ŋɑ/					
/ŋg/	/ŋg i/	/ŋge. ŋgu/	/ŋga/	/ŋgə/	/ŋgu/	/ŋgu/	/ŋgo/	/ŋgɔ/	/ŋga/
/ɣ/	/ɣi/	/ɣe/	/ɣa/	/ɣə.zə/	/ɣu/	/ɣu/	/ɣo.ja/		
/q/	/qi/	/qe/	/qa.tsa/	/qə.tuʔ/		/qu/	/qo/	/qɔ/	/qɑ/
/q <sup>h</sup> /	/q <sup>h</sup> i/	/q <sup>h</sup> e/ to	/q <sup>h</sup> a.na/	/q <sup>h</sup> ə.zə/	/q <sup>h</sup> u/	/q <sup>h</sup> u/	/q <sup>h</sup> o/	/q <sup>h</sup> ɔ.ste/	/q <sup>h</sup> ɑ/
/g/	/gi/	/ni.ge/ fn 11	/ga/	/gə/	/gu/		/go/	/gɔ/	/gɑ/
/χ/	/χi/	/χe.zə/	/χa/	/χə/	/χu/	/χu/	/χo/	/χɔ/	/χɑ/
/ʁ/	/ʁi/	/ʁe/				/ʁu/	/ʁo/		/ʁɑ/

### 2.3.6 Nasals

BM rTa'u has four contrastive voiced nasal consonants, at bilabial, alveolar, palatal and velar places of articulation. Voicing distinction among nasal consonants is not attested; all are voiced. Table 14 below shows the distribution of nasals with vowels. Except for high back vowels, nasal consonants are more or less equally common with all vowels.

**Table 14: Distribution of nasals**

	/m/	/n/	/ɲ/	/ŋ/
i	/mi/ cooked	/ni/ you	/ɲi/ accident	/ŋi/ my
e	/me/ mother	/ne/ sickness	/ɲe.pə/ weathered	
a	/ma/ NEG	/na.na/ red	/ɲa/ NEG	/ŋa/ I
ə	/mə/ rain	/nə/ to suck	/ɲə/ plural	/ŋə/ cow
<sup>y</sup> u	/mə <sup>y</sup> u/ eye	/nə <sup>y</sup> u/ to suck	/ɲə <sup>y</sup> u/ to observe	/ŋə <sup>y</sup> u/ cow (ERG)
u				/ɲu/ ear
o	/mo/ divination	/no.no/ breasts	/ɲo.ɲo/ mismatched	/ŋo/ sick
ɔ	/mɔ/ mask	/nɔ/ to blame	/ɲɔ/ tsampa cake	
ɑ	/ma.skə/ bride mate	/na/ to lose	/ɲɑ/ anxious	/ŋɑ/ message

The phonemes /m, n, ŋ/ can also occur in syllable final position. This is demonstrated by the following minimal pairs. Alveolar nasal final is found only in Tibetan loanwords.

(26)

/m/

/ʰtsəm/      ‘to compensate’

/tɕəm/      ‘to tame’

/pʰəm/      ‘to bring rain’

/n/

/tɕin/      ‘to miss’

/lən/      ‘to get’

/ŋ/

/scaŋ/      ‘to be afraid’

/bəŋ.tɕʰa/      ‘wooden crop container’

#### 2.4 Vowels

Before I present BM rTa’u vowels it is interesting from a dialectological perspective to look at whether different lects of rTa’u have a rather unitary vowel system, and how these compare with the vowel systems of other rGyalrongic languages. Consonants of the various rTa’u varieties that have been discussed hitherto appear to resemble the rTa’u consonantal system in most ways therefore no further cross-dialectal comparison of consonantal systems is pursued here.

In general, data available to date on rGyalrongic languages suggest a range from six (Kyom.kyo) to nine (Tso.bdun) vowels. Western rGyalrongic languages are known for their complex consonant clusters and large vowel inventory. Data available on these languages show that this impressionistic generalization holds true, as evidenced by samples from various sources on several lects of rTa'u.

It is important to note that certain discrepancies among the following vowel inventories of various rTa'u lects could be due to different methods of transcription. If we are to assume the same vowel symbols in Table 16 and Table 16 have the same articulatory gestures then we can visualize a vowel quadrilateral where /i/ and /u/ define the front-to-back dimensions while /a/ and /u/ define the low-to-high dimensions. However, this generalization is not useful in the sense that it does not inform us if there is anything unusual in the rTa'u vowel system. The table below illustrates striking differences rather than uniformity: firstly, the number of vowels attested for each speech variety ranges from seven to eleven vowels. Secondly, a binary lip-rounding feature does not appear to be contrastive in rTa'u, but Sun's variety distinguishes lip rounding for high front vowels.

Ladefoged and Maddieson (1996: 286) believe that cross-linguistically vowel height is more fundamental than front-back dimension: "...Even if a language has only two phonologically contrastive vowels, the difference will always be in (height)

dimension rather than the front-back dimension”. This raises an interesting question and allows us to form a hypothetical inter-dialectal variety based on vowel height from data in Table 16: Huang, Vanderveen and Wang posit four contrasting vowel heights, while Sun, Jacques and my own data suggest three contrasting heights. The vowel height reflected in the data corresponds to two geographical zones of rTa’u language which also correlate to patterns of cultural variation as well: Northwestern rTa’u includes BM and KS rTa’u, while Ma.zur and Dge.bshus constitute the central rTa’u variety. There could therefore be inter-dialectal differences in vowel height. Huang’s Dge.bshus vowel system also reveals some additional features which are absent in other works. It is not clear in the original discussion whether all the vowels presented in her work are actually phonemic or a result of phonological processes. In particular, contrastive long vowels and nasalized vowels are not attested to be phonemic in any other identified rTa’u languages, so it is difficult to decide what to make of these.

In general, rTa’u languages conform to a universal pertaining to lip rounding: “In the great majority of the world’s languages...front vowels are usually unrounded and back vowels are usually rounded” (Ladefoged & Maddieson 1996: 292). The average size of vowel inventory of rTa’u lects is large in comparison to the average five- or six-vowel inventory of 51% of the world’s languages (Maddieson 2013). Other sister languages in the rGyalrongic family such as Stod.sde (Shangzhai) and

Ja.phug have eight and nine vowels, respectively (J. Sun 2000b, Jacques 2004). Finally, vowels contrasting by way of length are only reported in Qiang (LaPolla & Huang 2003:25).

**Table 15: A cross-lect comparison of rTa'u vowel inventories**

			front				central		back		
<b>Sun (1983b)</b>			/i/	/y	/e/	/a/		/ʊ/	/ɯ/	/u/	/ɔ/
	<i>r</i> -colored				/ɛ/		/ə/		/ɯ/		
<b>Wang (1970)</b>			/i/	/e/	/ɛ/	/a/	/ə/		/ɯ/	/u/	/o/ /ɔ/
<b>Huang (1990)</b>	Gexi sTa'u	short	/i/	/e/	/ɛ/	/a/	/ə/ /ə/		/u/	/o/	/ɑ
		long		e:	/ɛ:/						
		nasalized	ĩ	ẽ	ẽ	ã	/õ/			/õ/	/ã
		diphthong									
		/				au	əu		ua	uã	uei
<b>Jacques et al. (2015)</b>	Khang. Gsa sTa'u	vowels	/i/	/e/	/a/		/ə/ /ə/		/u/	/o/	
		velarized				/aɣ/				/oɣ/	
		nasalized			/ã/					/õ/	
			/i/	/e/	/e/	/a/	/ɑ/ /ə/		/u/	/o/	
<b>Vander veen (2015)</b>	Ma.Zu r rTa'u		/i/	/e/	/e/	/a/	/ɑ/ /ə/		/u/	/o/	

#### 2.4.1 BM rTa'u vowel system

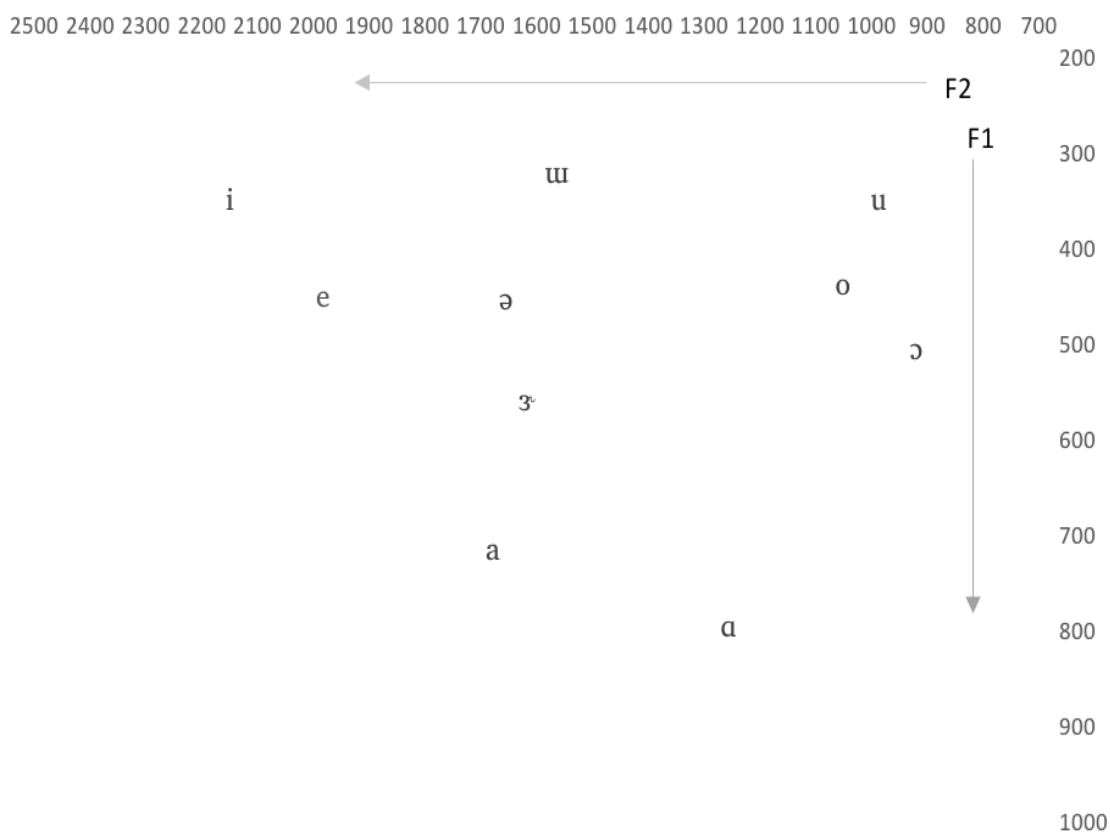
The vowel system of BM rTa'u is complex. Vowel length, diphthongs and nasal vowels are surface features as a result of phonological processes and do not

constitute phonemic vowels. There are ten monophthongal oral vowels. Nasal vowels and diphthongs are not attested at the phonemic level, though they are found at the phonetic level through assimilation and in loanwords. Unlike Dge.bshus and Ma.zur, front vowels are distinguished in only three height differences /i/, /e/ and /a/. The formant plot of /e/ below indicates that it is closer to /i/ than to /a/ therefore it is represented as /e/.

The rhotacized vowel /ɜ̣/ has allophones [ə̣], [ɜ̣] in free variation, [ɯ̣] is an allophone of [ɜ̣] when followed by a stop. /ə̣/ is more frequently attested than /ɜ̣/. It is evident that there is also variation within many vowels, so it is useful to provide an acoustic analysis of vowels which allows us to describe each vowel more accurately and only then will such comparisons as those in Table 16 be meaningful for any serious cross-dialectal studies. In the following section I present an acoustic analysis of BM rTa'u vowels. The acoustic description here is based on only one speaker, myself. F1 and F2 measurements were made on recordings sampled at a rate of 48 kHz. To minimize consonant interference, only word-final vowels are measured. F1 and F2 were measured by Praat and were then manually calculated for the mean for each vowel over ten tokens. This gives the acoustic representation of vowels in Table 16 and Figure 8 below.

**Table 16: Average formant value of vowels**

	i	e	a	ɯ	ə	ɜ̃	u	o	ɔ	ɑ
F	348	450	715	329	453	558	34	437	505	795
F	214	1992	1676	162	1654	1615	98	1050	919	125



**Figure 8: Formant plotting of BM vowel system**

Additionally, there are two diphthong phonemes [ei, ao] attested in the data. However, [ei] only occurs in a small number of lexemes and has, unlike monophthongs, a distinct distributional pattern: it only follows uvular consonants where it is an allophone of /i/. The diphthong [ao] is the result of a rather



productive phonological process, verbal affixation to mark TAM, therefore its phonological environments are many but it is limited to verbs only.

**Table 17: Inventory of diphthong phonemes**

	front	centra	bac
close			
half-close	ei		ao
open			

The phonemic contrast of the ten vowels /i, e, a, ə, ɜ, ʊ, u, o, ɔ, ɑ/ is evidenced by the following minimal pairs.

**Table 18: Evidence for vowel quality contrast**

	i	e	a	ə	ɜ	ʊ	u	o	ɔ	ɑ
/t/	ti	te	ta	tə	tɜ	tʊ	tu	to	tɔ	tɑ
	his	this	come	DIR.	burn	poison	have	COP	handl e	clean
/p <sup>h</sup> /	p <sup>h</sup> i	p <sup>h</sup> e	p <sup>h</sup> a	p <sup>h</sup> ə	p <sup>h</sup> ɜ	p <sup>h</sup> ʊ	p <sup>h</sup> u	p <sup>h</sup> o	p <sup>h</sup> ɔ	p <sup>h</sup> ɑ
	vomit	father	half	beg	capable of	deep	bed	cover	a pile	pig (Ti.)
/ç/	çi	çe	ça	çə	çɜ	çʊ	çu	ço	tç <sup>h</sup> ə.ç ɔ	ça
	hit	peel	crippled feet	teeth	glass	louse	behind	card	plastic	diligent

- (27) /i/ close unrounded front vowel [i]  
 /e/ open-mid unrounded front vowel [e] [ɛ]  
 /a/ open unrounded front vowel [a] [a]

As briefly repeated earlier, front vowel height distinctions found in literature on various rTa'u languages may reflect areal differences. These assumptions have to be tested rigorously with high quality recordings and precise descriptions of vowels, unfortunately, such data are lacking. Therefore, any judgements derived from such comparative work is essentially based on the premise that similar IPA forms representing vowels used in different dialects bear the same vowel quality. It appears that BM rTa'u makes only three height distinctions in front vowels.

The vowel phoneme /i/ is a high front unrounded vowel [i], with the allophone [ei] after uvulars. This vowel is very frequent. /i/ occurs with every phonemic consonant in syllable final position except for approximant /w/ and velar fricatives. It does not occur word-initially and in closed syllables it can only be followed by a dorsal nasal, e.g. /ɸwinj/ 'big long log laid vertically to support ceilings in a traditional all-wooden house'.

As demonstrated in rule (28) and the examples in (29), the high front vowel /i/ has an allophone [ei] found after the uvular series.

(28) /i/ → [ei] / uvular stop/fricative\_\_\_\_\_

(29)	/qi/	[qei]	wooden container
	/q <sup>h</sup> i/	[q <sup>h</sup> ei]	to throw
	/ <sup>N</sup> G/	[ <sup>N</sup> Gei]	to become tired

/χi/	/χei/	to breathe heavily
/ɸi/	[ɸei]	to get something

Because BM rTa'u does not make a phonemic distinction between [e] and [ɛ], therefore the symbol e would be used to represent vowel /e/ for the purpose of convenience if an orthography is created. More importantly, the formant plotting of vowels shown in Figure 2 indicates that it is fairly high.

/e/ does not occur in the following phonological environments:

- it never occurs in word or syllable final position when preceded solely by voiced stops and or affricates;
- it is never solely preceded by a palatal nasal or voiced alveolar in syllable-initial position;
- it does not occur in closed syllables word-internally;
- no native words have been found where /e/ is followed by a nasal.

When the word-final vowel is an open back vowel, through influence of vowel harmony, the pronunciation fluctuates between a half-close [e] and a more open front of a preceding [ɛ] see example in (30) below;

- (30)    k<sup>h</sup>e.ta      [k<sup>h</sup>ɛ.ta]      lace  
           se.tɕ<sup>h</sup>ɑ    [sɛ.tɕ<sup>h</sup>ɑ]      die.PROG

### 2.4.1.1 Low central vowel

The unrounded low vowel /a/ is a front vowel, contrasting with the back vowel /ɑ/. The vowel /a/ has an allophone: a less low allophone [æ]. This allophone is very frequent and occurs mostly in absolute syllable final position except after palatal stops. Unlike some of the rTa'u lects presented in Table 16, BM rTa'u makes a phonemic contrast between /a/ and /ɑ/ as illustrated below:

**Table 19: Contrasts between /a/ and /ɑ/**

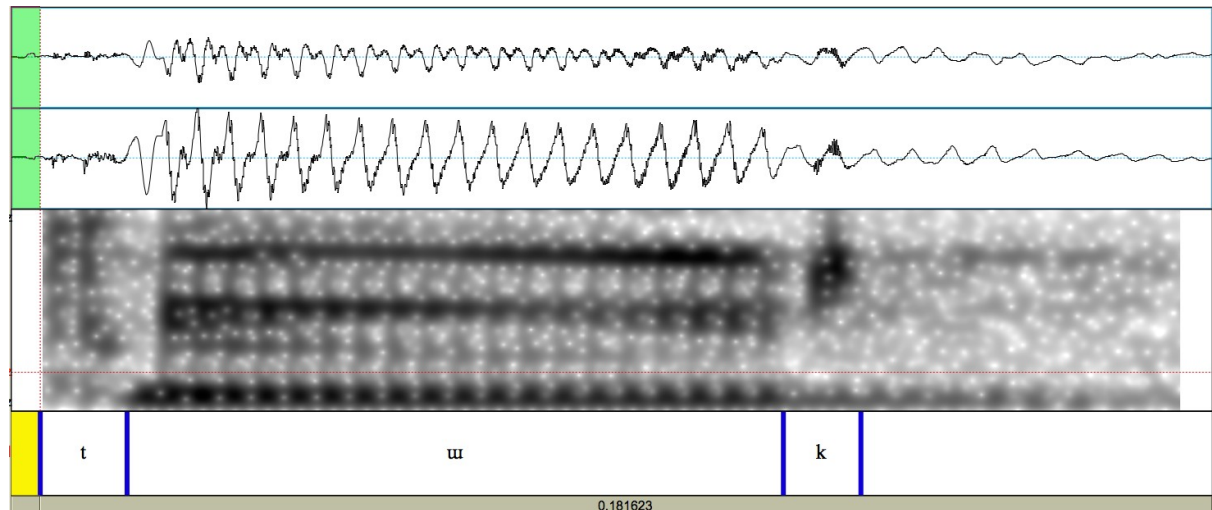
half	/p <sup>h</sup> a/	/p <sup>h</sup> ɑ/	to jump
top	/k <sup>h</sup> a/	/k <sup>h</sup> ɑ/	excuse
kind of plant	/tsa.və/	/tsɑ.ski.ski/	to dress lightly
to need	/ɕa/	/ɕɑ/	diligent

### 2.4.1.2 Central vowels

Cross-dialectally in the rTa'u language, the presence of three central vowels is uniquely a BM rTa'u feature. However, there are some peculiar features associated with these vowels making them rather unusual. First of all, there is enough evidence to suggest that the high central vowel [ɨ] is of Tibetan origin, since it occurs only before a final unreleased stop which is not a native rTa'u feature. The presence of unreleased stop in coda position is shown acoustically in Figure 9 below. Thus, [ɨ] may be classified as an allophone of /ə/ instead as given in (31) below as a working

hypothesis which obviously deserves further testing. For now, I will treat it as an allophone of /ə/.

(31) /ə/ → [i] /\_\_k



**Figure 9: A spectrogram illustrating /tu:k/ with a final velar stop**

/ə/ and /ɜ/ present some difficulties in deciding their phonemic status as well, since there are some examples which demonstrate that they are in contrast, as shown in (32). At the same time, words containing /ɜ/ are restricted to either Tibetan loanwords or onomatopoetic words as illustrated in (33). This sheds light on the origin of /ɜ/ and data suggest most instances might be derived from Tibetan loanwords. However, it now also occurs in a moderate number of native words, and therefore I am treating /ə/ and /ɜ/ as separate phonemes.

(32) Showing /ə/ and /ɜ/ in contrast

to beg	/p <sup>h</sup> ə /	/p <sup>h</sup> ɜ/	be able to
to burn	/m <sup>b</sup> ə/	/m <sup>b</sup> ɜ/	to slander
direction	/ɣə/	/ɣɜ/	classifier
to heal	/zə/	/zɜ/	to become blind
what	/tɕə.kə/	/tɕɜ/	to stare

(33) Examples of /ɜ/

/n <sup>d</sup> ɜ/	to shiver (Ti.)	/c <sup>h</sup> ɜ/	onomatopoetic word
/tɜ/	to become rich (Ti.)	/tsɜ/	onomatopoetic word
/t <sup>h</sup> ɜ/	be liberated (Ti.)	/tɕɜ/	onomatopoetic word
/kɜ/	tent (Ti.)	/sɜ/	onomatopoetic word
/c <sup>h</sup> ɜ/	to carry (Ti.)	/zɜ/	onomatopoetic word
/ɣɜ.bə/	king (Ti.)	/ɭɜ/	onomatopoetic word
/k <sup>h</sup> ɜ/	to carry (Ti.)	/ɣɜ/	onomatopoetic word
/ts <sup>h</sup> ɜ/	to finish (Ti.)	/ɕɜ/	onomatopoetic word
/tɕ <sup>h</sup> ɜ/	rain (Ti.)	/pɜ/	interjection
/mɜ/	butter (Ti.)	/cɜ/	interjection

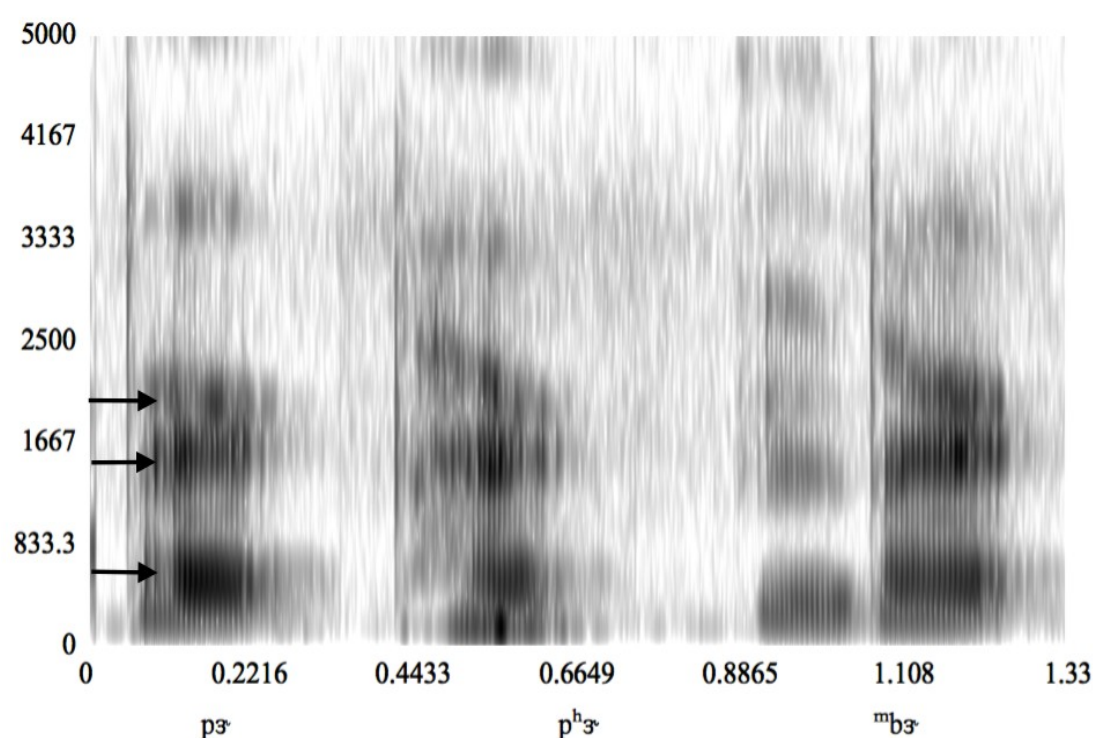
The status of rhotic vowels in rTa'u lects is not well understood and descriptive works of various rTa'u lects present a rather diverse view. Ladefoged and Maddeson (208:313) say that "the common attribute of all rhotic vowels is in their acoustic structure, rather than in their articulation... and they always have a lowered frequency of the third formant." All previous descriptive works on rTa'u language were purely based on impressionistic data. In the following I will first look into the

features of the rhotic vowel in order to establish its status and then proceed to its specific articulatory gestures, since it appears rhotic vowels can be produced in various articulatory ways.

Figure 10 below shows the formants of vowel [ɜ] in three different words. What is important here in relation to the status of vowel [ɜ] is that in all three words the frequency of the third formants are characteristically lowered; in each word F2 and F3 start off separately and from the middle towards the end, F3 decreases to merge with F2. This formant feature has been attributed to rhotacized vowels. However, this does not clearly show how exactly 'rhotacization' is achieved articulatorily in these words. Ladefoged et al. (2011: 94), speaking of an American English vowel, describes two ways of producing rhotacized vowels a) with the tip of the tongue raised and, b) with the tip down and a high bunched tongue position. In BM rTa'u, it appears three different articulatory gestures can be used in the production of the rhotic vowel; where two types of articulatory gestures can be identified based on the extent and direction of tongue tip movement, or thirdly the tongue blade is raised towards the alveolar region.

The exact gesture is largely determined by the preceding consonant. For instance, in simple monosyllabic words, if the preceding consonant is a bilabial stop, the tongue tip is fully curved backwards to approach the alveolar region and frication

is produced at the edges of the tongue; if the preceding consonant is an alveolar stop, in which case the tongue tip is already at the alveolar region, the tongue tip moves away from it with slightly lowered tongue position; finally, if the preceding consonant is a palatal consonant then the front of the blade of the tongue is raised and touches the roof of the mouth. This could be the reason why Sun (1983, 1991) listed four rhotacized vowel, /ɛ̃/, /ə̃/, /ẽ/ and /ũ/, but it is unclear whether they are phonemic or allophonic variants.



**Figure 10: Spectrogram showing formant features of /ɜ̃/ in three different words**



In BM rTa'u as described above there is only one rhotacized phonemic vowel /ɜ̃/. It has allophonic variants; preceding consonants influence the exact gestures involved. However, that said, it is hard to test how the quality of the rhotic vowel is impacted by preceding consonants, and therefore in this analysis I am not distinguishing allophonic variants of the rhotic vowel /ɜ̃/. The reason to use /ɜ̃/ rather than /ə̃/ is because the formant plotting in Figure 2 shows that the rhotic vowel is closer to an open-central vowel similar to English [ɜ] as in *sir* or *fur*, as given in Ladefoged et al. (2011: 94).

#### 2.4.1.3 *Back vowels*

Native phonology is considerably expanded by Tibetan loanwords, and this is nowhere better illustrated than with back vowels. If Tibetan loanwords are completely removed, it would give us a totally different picture of the back vowel system. However, they are now so deeply integrated in the local lexicon, not taking them into account will result in incomplete conclusions. This can be applied to any other works produced thus far on rTa'u. Without extensive knowledge of Tibetan language, one will not be able to tell if a particular word is of Tibetan origin or not, since the majority of native speakers do not read and write Tibetan so they would not know. It is probable that other vowel systems presented in Table 15 on various rTa'u lects could have been equally influenced by Tibetan loanwords.

Speaking of back vowels, if Tibetan loanwords were excluded from the analysis, it would appear that [ɑ] is not a native vowel; furthermore the remaining three back vowels are in complementary distribution. There is only one native back vowel /o/, which is a rounded back vowel with three major allophones: rounded half-close back vowel [o], rounded half-open back vowel [ɔ] and finally, the close rounded back vowel [u]. The allophone [o] is found in most environments, while [u] is found in monosyllables with an aspirated stop or alveolar fricative at onset position, and lastly [ɔ] is found where the preceding consonant is a voiceless unaspirated stop.

However for any analysis it would be reckless to ignore Tibetan loanwords since they have already become part of the language, therefore the following analysis includes Tibetan loanwords.

BM rTa'u distinguishes among four back vowels, all rounded and distributed at four different heights; the high back rounded vowel /u/, the close-mid back rounded vowel /o/, the open-mid back rounded vowel /ɔ/, and finally the low back unrounded vowel /ɑ/. There is ample evidence of minimal pairs of back vowels to establish their phonemic status.

#### (34) Back vowels and their representation

/u/	close rounded back vowel	[u]
-----	--------------------------	-----

/o/	open-mid rounded back vowel	[o]
/ɔ/	open-mid rounded back vowel	[ɔ]
/ɑ/	open unrounded back vowel	[ɑ]

The following minimal pairs provide evidence for their phonemic status:

(35) Some examples of minimal pairs

stable	/k <sup>h</sup> u/	/tu/	to have
to give	/k <sup>h</sup> o/	/to/	copula
bottom	/k <sup>h</sup> ɔ/	/tɔ/	to be cautious
excuse	/k <sup>h</sup> ɑ/	/tɑ/	to be clean

## 2.5 Syllable

BM rTa'u has moderately complex syllable structure, which can be illustrated with the following scheme in Table 20.

**Table 20: BM rTa'u syllable structure**

(C2)	(Ci)	(M)	V	(CF)
Nasal	*glottal	/j/	all	stops/
Fricative	stop	/w/	vowel	nasal

- The optional C2 slot may be filled by bilabial nasal or a fricative
- The optional Ci slot may be filled by any consonant except for glottal stop
- The optional M slot is only filled by approximants /j/ and /w/
- The obligatory V slot can be filled by all vowels
- The optional CF slot may be filled by a voiceless stop or a voiced velar nasal.

The minimum syllable structure is a single vowel, e.g., one of the inflectional forms of the directional imperative case: /ə/ as in /ə.ɕə/ 'go upward.', /ə.tsə/ 'eat it up!', /ə.kə/ 'dress up!'. Most BM rTa'u words are open-syllable and monosyllabic, and the CV type is the most frequent. CVC is most frequently produced by grammatical marking, for instance, /kə/ 'to dress' becomes /kik/ in first person. CCV type is also frequent as well. There are some CCVC type syllables; most of them are produced through morphological processes.

**Table 21: Structure of BM RTa'u syllable**

V	[ə]	Directional prefix	CV	[ɕə]	'go'
VC	[tɕen]	'to miss'	CCV	[fɕe]	'to tell'
CVC	[rik]	'one'	CCVC	[mdzɪk]	'dragon'
CCMV	[pɕ <sup>h</sup> jik]	'outside'			

## 2.6 Pitch and stress

Polysyllabic words exhibit a prominent stress on the first syllable when elicited in isolation. BM rTa'u does not exhibit lexical contrasts based on pitch accent; that is, there are no minimal pairs of words that can be distinguished in terms of their pitch contour. This also applies to stress. However, stress is contrastive on the morphological level and it marks a variety of meanings. The BM rTa'u pitch-accent system can be simply described to have a High (H)-Low (L) sequence on syllables within a word, the accented syllable is the loudest and has the highest pitch. Below

are some examples of pitch patterns attested in BM rTa'u. High and low pitch is marked by H and L respectively below the corresponding syllables.

### 2.6.1 Pitch patterns for two syllable words

The default pattern for two syllable words is for the first syllable to be accentuated, with low pitch on the second syllable:

(36)	/ <sup>l</sup> mə.ko/	sky	/ <sup>l</sup> ʋu.ptʂa/	hair
	H L		H L	
	/ <sup>l</sup> muuk.spə/	eyebrow	/ <sup>l</sup> ja.sɳə/	yesterday
	H L		H L	
	/ <sup>l</sup> q <sup>h</sup> o.ste/	back	/ <sup>l</sup> zə.pa/	shoes
	H L		H L	

Two syllable words that consist of a root and suffix have low pitch on the suffix, and high pitch on the accented first syllable. The same pitch pattern is found in two syllable words that are compounds.

(37)	/ <sup>l</sup> k <sup>h</sup> ə.zə/	‘puppy’	/ <sup>l</sup> ve.zə/	‘piglet’
	H L		H L	
	/ <sup>l</sup> li.zə/	‘cat’	/ <sup>l</sup> q <sup>h</sup> ə.zə/	‘bowl’
	H L		H L	

### 2.6.2 Pitch patterns for three syllable words

The default pattern for three syllable words is accent and accompanying high pitch on the initial syllable, with low pitch on both the unaccented second and final syllables.

<b>(38)</b>	/ <sup>l</sup> ʦəŋ.mba.ʂta/	‘hoopoe’	/ <sup>l</sup> ne. <sup>m</sup> ba.ra/	‘burdock’
	H L L		H L L	

Words with reduplicated syllables have the accent on the non-reduplicated element which can be either the final or initial syllable with low pitch on the reduplicated elements which can be the first two or last two syllables:

<b>(39)</b>	/ti.ti. <sup>l</sup> ŋa/	‘small’	/ <sup>l</sup> ts <sup>h</sup> a.qɔ.qɔ/	‘warm’
	L L H		H L L	

### 2.7 Consonant Clusters

Wang’s (1970) study of the consonantal clusters of Tibetan loanwords in rTa’u is the earliest treatment of the consonantal clusters in the rTa’u language. Subsequent works are essentially limited to lists of lexical items showing complex initials but lack a substantial account. To start off, the following conventions are introduced. In a cluster of consonants the one immediately before the vowel, unless it is medial /w/ or /j/, is the initial consonant, which is symbolized as Ci, with i indicating

initial. Consonants preceding the initial are the preinitial consonants and are symbolized successively as C2, thus, C2Ci for a 2-member cluster. Occasionally, the Ci is followed by a glide. As discussed above, the monomorphemic BM rTa'u syllable canon looks like this: (C)(C)(G)V(C). Additional consonantal elements in the C2 slots may result from inflectional or derivational morphology and are not included here; thus, the above syllable canon represents the basic stem syllable structure. An onset in BM rTa'u can be more than three consonants, but in basic stems a maximum onset contains no more than three consonants and every consonant plays a role in the cluster governed by clear sequential constraint rules. Two-member clusters account for the majority in onset position as shown in Table 22 which summarizes and illustrates the building blocks of phonotactics of BM rTa'u. Since 3-term clusters are more often than not derived from and build upon 2-term clusters shown below, it will be easier to tackle more complex onset clusters with a good understanding of the phonotactics of 2-term clusters. Theoretically, every homogeneous pair in (40) is expected to have equal distribution since they differ in voicing only, but the actual picture looks rather different as shown in Table 22. The discrepancies seem to centre around nasals and affricates. When nasals are in initial position, homorganic constraints prohibit certain consonants to appear in preinitial position for instance, labiodental fricatives /f, v/ do not precede nasals in syllable onset position, and such homorganic clusters as \*/ʙN/ and \*/ɣŋ/ also do not occur. Putting aside the special preinitial class preceding nasals, voiceless stops and affricates can be

preceded by /f/ /ʃ/ or /ɣ/, with voiced fricative counterparts occurring before voiceless initials. Aspirated affricates can only occur in clusters with nasals, both bilabial nasal /m/ as well as the homorganic prenasalised stop and affricate series which are here treated as single segments.

### 2.7.1 Sequential consonant rules of consonantal clusters

Sequential consonant rules of consonantal clusters explain and predict the type of consonantal cluster permissible in onset position in rTa'u phonology.

- The allophonic preinitial consonant [p] is explained and produced through phonological processes in certain phonological environments;
- Labiodental fricatives /f, v/ do not occur in the preinitial position preceding nasals or approximants;

Alveolar and uvular fricatives /s, z, ʃ, ʒ/ may not occur before affricates;

These sequential rules with additional examples from Table 22 allow the following types of clusters.



### Phonotactics of nominal clusters

Type 1	[SIBILANT PREINITIAL] + [INITIAL]	sp-, zɕ-, ʁɕ-, ɣdz-, etc.
Type 2	[INITIAL] + [MEDIAL]	c <sup>h</sup> j-, t <sup>j</sup> -, ɲj-, zj- etc.
Type 3	[SONORANT PREINITIAL] + [INITIAL]	ɹb-, ft-, mk <sup>h</sup> -, vdɕ-, etc.
Type 4	[SIBILANT PREINITIAL] + [INITIAL] +	stj-, scj, ɣpj, etc.
Type 5	[SONORANT PREINITIAL] + [INITIAL]	ɹpj-, ʂtj, mc <sup>h</sup> j-, etc.

As shown in Table 22 below, the majority of preinitial consonants (C2) are fricatives. There are clusters of a nasal consonant followed by a heterorganic consonant such as /mt<sup>h</sup>i/ ‘to knit’. Analytically, prenasalized stops as /<sup>n</sup>t<sup>h</sup>i/ ‘to be accepted’ function as a single prenasalized consonant and can be preceded by a preinitial consonant as in /ɣ<sup>n</sup>dɔ/ ‘to put in a bag’.

There is another way to determine the initial consonant in a cluster. For instance, the prefix /f-/ or /v-/ indicates causativity as discussed in (§7.2.4) which can be systematically prefixed to many verb stems as in /se/ ‘to die’, /fse/ ‘to kill’. The prefix undergoes various morphological processes resulting in it appearing in different forms: voiceless [f-] before voiceless consonants, and voiced [v-] before voiced consonants.

The following templates show the segments possible as preinitial and medials. They are arranged from most common (to the right) to least common:

(40) ɹ (ʂ) s (z) f (v) ɣ (ʁ) χ (x) p

The medials are: j, w

**Table 22: Two-member consonant clusters preceded by fricatives**

		v	s	z	ʂ	ɹ	x	ɣ	χ	ʁ
stop	fp	vb	sp	zb	ʂp	ɹb		ɣb	χ	
	ft	vd	st	zd	ʂt	ɹd		ɣd	χt	ʁd
	fc	vʃ	sc	zʃ	ʂc	ɹʃ			χc	ʁʃ
	fk	vg	sk	zg	ʂk	ɹg				
	fq		sq		ʂq					
	fs	vz			ʂs	ɹz		ɣs	χs	ʁz
fricative	fç	vʒ	sç	zʒ					χç	ʁç
	fɬ	vɬ	sɬ	v	ʂɬ	ɹɬ		ɣɬ	χɬ	ʁɬ
					ʂf	ɹv				
					ʂɣ	ɹʁ				
	fts	vdz			ʂts	ɹdz	xts	ɣd		
	ftʂ	vdʒ			ʂtʂ	ɹdʒ	xtʂ	ɣd		
affricates	ftç	vdʒ			ʂtç	ɹdʒ	xtç	ɣd		
			sm			ɹm		ɣm		ʁm
			sn			ɹn		ɣn		ʁn
nasal			sn̥, sɲ			ɹɲ, ɹ̃		ɣ̃		ʁ̃
			sɬ	z		ɹj		ɣl		ʁl
			sj	zj				ɣɹ		ʁj
approxim										

### 2.7.2 Nasals in consonants

Table 23 illustrates the distributional patterns of nasals in preinitial positions compared to prenasalized consonants in initial positions. It shows that only bilabial and alveolar nasals can occur in preinitial position. A nasal followed by a homorganic consonant is a single prenasalized unit, finally /m-/ surfaces as [p] when preceding voiceless consonants. With such preliminaries, Table 23 provides an exhaustive view of preinitial nasal clusters. First of all, nasals may be followed only by obstruents. Alveolar nasal /n/ does not occur in preinitial position when followed by voiceless stops.

**Table 23: Distributional comparison of prenasalized consonants and nasal**

bilabial stop	[p]		[p <sup>h</sup> ]		[b]	
	[pp]	[np]	[mp <sup>h</sup> ]	[np <sup>h</sup> ]	[mb]	[nb]
	x	x	✓	x	✓	x
alveolar stop	[t]		[t <sup>h</sup> ]		[d]	
	[pt]	[nt]	[mt <sup>h</sup> ]	[nt <sup>h</sup> ]	[md]	[nd]
	✓	x	✓	✓	✓	✓
palatal stop	[c]		[c <sup>h</sup> ]		[ɟ]	
	[pc]	[ɲc]	[mc <sup>h</sup> ]	[ɲc <sup>h</sup> ]	[mɟ]	[ɲɟ]
	✓	x	✓	✓	✓	✓
velar stop	[k]		[k <sup>h</sup> ]		[g]	

	[pk]	[ŋk]	[mk <sup>h</sup> ]	[ŋk <sup>h</sup> ]	[mg]	[ŋg]
	✓	x	✓	✓	✓	✓
uvular stop		[q]		[q <sup>h</sup> ]		[G]
	[pq]	[Nq]	[mq <sup>h</sup> ]	[Nq <sup>h</sup> ]	[mG]	[NG]
	✓	x	✓	✓	✓	✓
alveolar		[ts]		[ts <sup>h</sup> ]		[dz]
affricate	[pts]	[mts <sup>h</sup> ]	[mdz]	[pts]	[mts <sup>h</sup> ]	[mdz]
	[nts]	[nts <sup>h</sup> ]	[ndz]	[nts]	[nts <sup>h</sup> ]	[ndz]
	✓	x	✓	✓	✓	✓
retroflex		[tɕ]		[tɕ <sup>h</sup> ]		[dʒ]
affricate	[ptɕ]	[mtɕ <sup>h</sup> ]	[mdʒ]	[ptɕ]	[mtɕ <sup>h</sup> ]	[mdʒ]
	[ɲtɕ]	[n <sup>t</sup> ɕ <sup>h</sup> ]	[ndʒə]	[ɲtɕ]	[n <sup>t</sup> ɕ <sup>h</sup> ]	[ndʒə]
	✓	x	✓	✓	✓	✓
palate		[tɕ]		[tɕ <sup>h</sup> ]		[dʒ]
alveolar	[ptɕ]	/mtɕ <sup>h</sup> /	[mdʒ]	[ptɕ]	/mtɕ <sup>h</sup> /	[mdʒ]
affricate	/ɲtɕ/	[ɲtɕ <sup>h</sup> ]	[ɲdʒ]	/ɲ <sup>t</sup> ɕ/	[ɲtɕ <sup>h</sup> ]	[ɲdʒ]
	✓	x	✓	✓	✓	✓

## 2.8 *Phonological Processes*

In this section, I provide a descriptive account of the major phonological processes attested in BM rTa'u verbal and nominal systems. These can be best explained and analysed simply based on the underlying morphological structures of the stems of verbs and nouns.

A noun without any morphological marking may consist of just a single root, e.g. ɤu 'head', which is the case with most citation forms; nouns are preeminently monosyllabic. The most complex nouns consists of a root followed by a derivational suffix (e.g. nominalizer), a definiteness or indefiniteness clitic, a number clitic and finally a case clitic.

### 2.8.1 Assimilation

Vowels and coda consonants may be nasalized when directly followed by any of the moderate number of morphological clitics that have either a nasal consonant in onset position or comprise a prenasalized consonant. Complete nasalization of the syllable is achieved when the consonant preceding the vowel is also a nasal. Affixation is also one main force behind many of the vowel alternations attested in BM rTa'u.

The justification for treating the following morphemes as clitics is as follows: a) they are phonologically bound to the preceding word; b) they are syntactically free and can be systematically cliticized to other words; c) they have a meaning/function of a grammatical/syntactic nature and finally d) they are phonologically unstressed. All BM rTa'u clitics follow a preceding word, however they do not necessarily occur outside deviational/inflectional affixes.

Nasal assimilation of vowel and coda consonants

(41) Clitics / =ŋa/ 'diminutive', / =ŋ<sup>h</sup>e/ 'nomalizer', / =ŋə/ 'plural marker'

a)	smi = ŋa	'female = DMN'	[smĩ.ŋã]
b)	ŋa = ŋə	'1st = PL (we)'	[ŋã.ŋə]
c)	scu = ŋ <sup>h</sup> e	'to watch = NOM	[scũ.ŋ <sup>h</sup> e]

### 2.8.1.1 Epenthesis

Assimilation of place of articulation is common with Tibetan loanwords in closed syllables. The examples below illustrate the presence an epenthetic sound, [ɿ] after syllable ending in /ɿ/ or a nasalized vowel and [h] between two stops.

(42)

- |    |          |             |                          |
|----|----------|-------------|--------------------------|
| a. | toɿ.ma   | 'trousers'  | [toɿ.ɿma]                |
| b. | dəɿ.sa   | 'cemetery'  | [dəɿ.ɿsa]                |
| c. | toʔ.pa   | 'suspicion' | [toʔ. <sup>h</sup> pa]   |
| d. | ʂkuuk.pa | 'deaf'      | [ʂkuuk. <sup>h</sup> pa] |

e. skõ = te      ‘relatives = TOP’ [skõ = ɾte]

#### 2.8.1.2 Assimilation of nasality

Assimilation of manner of articulation is attested in a few words in BM rTa’u that have closed syllables. The following examples illustrate the process of assimilation of bilabial plosive at coda position to nasals when followed by a nasal in the onset position in the following syllable and vice-versa.

- (43) k<sup>h</sup>əp = ŋk<sup>h</sup>e      ‘to fetch = NOM’      [k<sup>h</sup>əp.ŋk<sup>h</sup>e]  
k<sup>h</sup>əp = k<sup>h</sup>a      ‘needle = INTRM’      [k<sup>h</sup>əp.k<sup>h</sup>a]

#### 2.8.2 Vowel reduction

Vowel deletion is rather common with grammatical morphemes in fast speech. In this analysis I discuss only those involved in morphophonological processes such as derivational affixes and clitics. The fact that most of the morphological affixes are not stressed has contributed to the deletion of their vowels in certain environments. In general, this occurs with open-syllabic nouns. In nouns that consist of two syllables, only the last vowel is deleted.

When the locative suffix follows an open-syllable noun, both the final vowel of the noun and the /n/ of the locative are deleted as exemplified in (44) below.

(44) /=nu/ (locative marker),

/ <sup>m</sup> do = nu/	‘Kangding = LOC’	[ <sup>m</sup> du]
/ti = nu/	‘here = LOC’	[tu]
/poŋ.k <sup>h</sup> o = nu/	‘room = LOC’	[poŋ.k <sup>h</sup> u]
/k <sup>h</sup> u = nu/	‘lair = LOC’	/k <sup>h</sup> u:/
/p <sup>h</sup> ək = nu/	/porch = LOC/	/p <sup>h</sup> u/

Open-syllable nouns ending with front vowels have their vowels deleted when followed by the genitive marker /-i/ which in turn becomes lengthened as in (45); when it follows back vowels, there is an epenthetic [j] as illustrated in (46).

(45) -i (genitive marker),

/k <sup>h</sup> ə-i /	‘dog-GEN’	[k <sup>h</sup> i:]
/xə-i /	‘yak-GEN’	[xi:]
/te-i /	‘he-GEN’	[ti:]
/ŋa-i /	‘I-GEN’	[ŋi:]
/tɕətə-i /	‘book-GEN’	[tɕəti:]

(46) -GEN following back vowels

/jo-i/	‘house-GEN’	[joji]
/va-i /	‘pig-GEN’	[vaji]
/ce.lo-i /	‘PP-GEN’	[ce.loji]



### 2.8.3 Vowel harmony

Similar to the cases observed in other rGyalrongic language such as Japhug (Jacques 2004: 350) and Pumi (Daudey 2014), regressive vowel harmony is attested in BM rTa'u. The main instances of harmony observed are given in (47) below. Examples, (a-c) represent cases of morphophonological processes where vowel harmony arises through inflectional/derivational processes such as classifiers e.g., -sɲə 'day', and personal possessive clitics, e.g., / = ɲə/. Finally, examples (d-j) illustrate examples of vowel harmony in compounding, which is very productive. Vowel fronting is the most common pattern observed in compounding, as in (d-e). The vowel harmony patterns include: /a/ → [ə/e], /e/ → [a], /i/ → [e] and /ə/ → [a].

(47)				
/e/ → [a]				
a.	/te/	'he/she'	/tə = ɲə/	'his/hers'
b.	/c <sup>h</sup> e/	'big'	/c <sup>h</sup> a = wa/	'big-nom'
/a/ → [ə/e]				
c.	/ma/	'foot'	/me.sqe/	'heel'
d.	/ɲa/	'yakdung'	/ɲə = ri/	'a wall of yak dung'
e.	/sɲa/	'early'	/sɲə = rə/	'head/first'
/i/ → [e]				
f.	/rji/	'horse'	/re = rɲe/	'horse carcass'
/ə/ → [a]				
g.	/rɲə/	'knee'	/rɲa-ɣdon/	'knee surface'

There are some examples which suggest vowel dissimilation before a following /i/.

For instance, in example a below, we would expect the form \*/ni-ɲni/, however the

front vowel /i/ of the first syllable changes to /ə/. The same process is applicable to other items as in (48).

(48)	a. ni	‘you’	/nə = ɣni/	‘you two’
	b. ɣni	‘two’	/ɣnə = ri/	‘two times’
	c. mi	‘negative prefix’	/mə = ɲi/	‘not good’

#### 2.8.4 Monosyllablificaton

Monosyllabification is a morphophonological process of turning disyllabic words into monosyllabic words as shown in (49) below. This process is not particularly productive. In some cases it involves inflectional markers as in (49); however, not all grammatical markers with similar phonological structure can be fused with roots. It appears, from the examples below, that if the second syllable ends with the vowel /u/, it may be fused with the onset of the first syllable.

(49)	a. /q <sup>h</sup> ə.zu/	‘bowl’	/q <sup>h</sup> u/
	b. /p <sup>h</sup> ək = nu/	‘porch = LOC’	/p <sup>h</sup> u/
	c. /ti = nu/	‘here = LOC’	/tu/

### 3 Nouns and nominal morphology

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#### 3.1 Introduction

In this chapter, I will discuss nouns and nominal morphology. In BM rTa'u, nouns constitute an open lexical class that can express a wide range of meanings referring to objects, places, beings (both human and non-human) and states. The principle behind recognizing nouns as a distinctive word class pertains chiefly, besides semantics, to their syntactic behaviour and morphological structure. As shown in (§ 3.3.8) nouns are the only lexical class that extensively employs compounding as a systematic process of word formation and it has also been put forward that “more common in the Himalayan region are classifier systems whereby nouns are grouped together into syntactic count classes based on the semantic properties of shape, texture, etc.” (Watters 2002). This holds true in BM rTa'u which uses an extensive number of classifiers based on the semantic properties of nouns, see (§ 5.1.1) for more on classifiers.

It is worth noting here that due to the large number of loanwords, particularly nouns, from Tibetan, a process of a degree of grammaticalization of Tibetan suffixes in the BM rTa'u noun system is attested, for instance, the /-p<sup>h</sup>a/ (sometimes realized as –[pa]) and /-ma/ ‘masculine’ and ‘feminine’ respectively, are found suffixed to MB rTa'u nouns. Otherwise, as is the case with many other rGyalrongic languages

(LaPolla & Huang 2003, Daudey 2015, Prins 2011), the gender distinction is not sufficiently paradigmatic to warrant a sub-categorization of nouns into separate classes in BM rTa'u.

In general, nouns in BM rTa'u can be defined as a free form that can be followed by a number plus classifier and/or the demonstrative marker /te/ (§ 4.3.1). When compounding, the modifying noun always precedes the modified noun. This process gives rise to complex noun constructions consisting of two nouns, tightly coordinated; however, the majority of nouns are simple and monosyllabic. There is a group of 'hybrid' compound nouns consisting of a Tibetan loanword noun and a native noun. Such constructions demonstrate a certain degree of lexicalization, however the system is not productive.

In the rest of the chapter I will discuss the phonotactics of nouns (§3.2) which then is followed by the section on nominal derivation (§3.3) which contains seven subsections on various kinds of nominal derivational morphology. In (§ 3.3.9) I will discuss reduplication, followed by a discussion on gender suffixes (§3.4). Section (§ 3.5) is devoted to morphological marking in the kinship system followed by a brief discussion on fauna (§3.6) and flora (§3.7). (§3.8) discusses nouns from the environment, followed by a brief discussion on body parts (§3.9). The chapter ends with a discussion on Chinese loanwords (§3.10).

### *3.2 Phonotactic structure*

The phonotactic structure of BM rTa'u nouns cannot be fully accounted for by a set of rigid constraints; the phonotactic structure of nouns may vary considerably. A large number of loanwords from both Tibetan and Chinese certainly contributed to this. Furthermore, these loanwords are not limited to certain semantic fields, e.g. religion, as might be expected.

As demonstrated in Table 24, there is a correlation between syllabicity and lexical semantics; the most common and high-frequency nouns are monosyllabic, though some are disyllabic without morphological marking. An overwhelming majority of trisyllabic and quadrisyllabic nouns refer to fauna and flora. Many of the trisyllabic and quadrisyllabic nouns are compounds. Nouns which refer to shape, odour, size, texture, colour and sound are commonly reduplicated forms of adjectival verbs.

An online survey through Wechat (a social networking platform) with 50 students from the BM community shows that the last time they have heard the quadrisyllabic nouns for flowers and plants is almost a decade ago when they were not old enough to leave the village to go to schools. This is indicative of the effect of the large-scale transformation of life and environment on language. When children go to school, as of 2016 at the age around six to seven, they spend 6 days a week away from the local community, except for holidays, which in summer are very short. Therefore,

the contextual setting for usage of rTa'u language has changed so drastically that some of the words for trees and flowers were no longer known to the younger generation.

**Table 24: Phonotactic shapes of nouns**

Type	Examples	Meaning
monosyllabic	ja	‘mouth’
	ma	‘foot’
	mə <sup>h</sup> u	‘eye’
	ɸu	‘head’
disyllabic	tsəkə	‘clothing’
	ɣoɟi	‘winder’
	tɕipa	‘hat’
	k <sup>h</sup> ɛɹma	‘animal’
trisyllabic	ɕoŋbaʂta	‘woodpecker’
	pepəɹɟi	‘butterfly’
	mdzɯɹəma	‘ceramic bowl’ Ti.
	<sup>h</sup> caqəɹa	‘burnable tree bark’
quadrisyllabic	tsitsiyəna	‘rainbow’
	mevənono	a type of flower
	kukubatoʔ	a type of flower

### 3.3 Derivation

BM possesses several morphological mechanisms that function as nominal derivation and eight classes of morphologically complex nouns can be distinguished based on derivational morphological word formation: (1) nouns formed by the diminutive suffixes /-zə/ and /-ŋa/, (2) nouns formed with the locative suffix /-ɛ/, (3) nouns formed with the nominalizer /-lə/, (4) nouns formed with the instrumental nominalizer /-sce/, (5) nouns formed with the agentive nominalizer /-ʔk<sup>h</sup>e/, (6) nouns formed with the nominalizer /-wa/, (7) nouns formed by way of compounding and finally (8) nouns formed by way of reduplication.

#### 3.3.1 The diminutive suffixes /-zə/ and /-ŋa/

There are two diminutive suffixes /-zə/ and /-ŋa/ whose occurrence with nouns is determined by the semantic category of the noun. Most nouns referring to non-human entities have the suffix /-zə/, while those referring to human entities take the suffix /-ŋa/. The form /-zə/ is also the lexical root for 'son', and it could be suggested that this diminutive suffix is most likely derived from /zə/ 'son' and is indicative of a grammaticalization. Most nouns containing /-zə/ have a diminutive function as in (50). Although the lexicon contains some examples containing /-zə/ without diminutive functions, such examples show the lexicalization of this

deviational suffix as in (50) and (51) where /-γə/ is apparently related to ‘bird’; it must co-occur with the suffix /-zə/ to mean ‘bird’ but /γəzə/ together just means ‘bird’, not ‘small bird’. /-ŋa/, as a suffix, also has limited distribution. It mostly occurs with human entities where it indicates ‘young’ and ‘small’, as in (50). However, it also occurs with non-human animates; such nouns have lexicalized the suffix and do not retain the diminutive function anymore, as in (50).

(50) Diminutive nouns derived from simple nouns

- |     |                      |               |                                  |
|-----|----------------------|---------------|----------------------------------|
| (a) | k <sup>h</sup> əzə   | ‘puppy’       | ( < k <sup>h</sup> ə ‘dog’ )     |
|     | vezə                 | ‘piglet’      | ( < va ‘pig’ )                   |
|     | li.zə                | ‘cat’         | ( < lili ‘cat’ )                 |
| (b) | q <sup>h</sup> əzə   | ‘bowl’        | ( < q <sup>h</sup> u ‘bowl’ )    |
|     | γəzə                 | ‘bird’        |                                  |
| (c) | zəŋa                 | ‘male baby’   | ( < zə ‘male’ )                  |
|     | smiŋa                | ‘female baby’ | ( < smi ‘female’ )               |
|     | q <sup>h</sup> anaŋa | ‘child’       | ( < q <sup>h</sup> ana ‘child’ ) |
|     | ɣuəkŋa               | ‘herdsmen’    | ( < ɣuək ‘herd’ )                |
| (d) | jəŋa                 | ‘sheep’       |                                  |
|     | ɣəŋa                 | ‘lamb’        |                                  |
|     | gaŋa                 | ‘calf’        | ( * < ga )                       |



(51) lexicalization of diminutive suffix /-zə/

yəzə	‘bird’	
yəme	‘mother bird’	( < me ‘mother’)
yəts <sup>h</sup> oŋ	‘bird net’	( < ts <sup>h</sup> oŋ ‘net’)
yəʂca	‘bird droppings’	( < ʂca ‘droppings’)

The diminutive system is not productive. The function of diminutive suffixes has been fossilized in some words. However, in contemporary BM rTa'u, diminutive suffixes can be best recognized as nominal word formation suffixes.

### 3.3.2 The locative nominalizer /=je/

There is a class of nouns that are derived from verbs by means of suffixing the locative nominalizer /=je/. In general, this derivational process is very productive and may occur with any type of verb. The resulting nouns refer to a location or platform where the action, indicated by the verb root, would be carried out, as in (52) below. That is also the reason why this class of nouns is referred to as locative nouns because they indicate a location where an action is carried out.

(52) Locative nouns derived from action verbs

- |     |       |        |                         |
|-----|-------|--------|-------------------------|
| (a) | nzoje | ‘seat’ | ( < nzo ‘to sit’)       |
| (b) | ɣgəje | ‘bed’  | ( < rgə ‘to go to bed’) |

- (c) ɲdɔɹɛ 'container' (< ndɔ 'to put in a container')
- (d) mdzɛɹɛ 'bag' (< mdze 'to put in a bag')
- (e) stɔɹɛ 'table' (< sto 'to put')
- (f) scuɹɛ 'scene' (< scu 'to see')
- (g) ɲgoɹɛ 'bucket' (< ɲgo 'to carry on back')
- (h) ɕɛɹɛ 'road' (< ɕə 'to walk')
- (i) ɹɛɹɛ 'paper' (< ɹɛ 'to write')
- (j) ɲtʰoɹɛ 'fireplace' (< ɲtʰo 'to burn')
- (k) ɲgəɹɛ 'bowl' (< ɲgə 'to eat' )

Often, the derived noun neither defines nor limits the semantic boundaries of the nominalized verbs; therefore, in the case of /nzɔɹɛ/ it only means 'something to sit on'-a seat, but does not make any indication of the type of 'seat'; whether it is a sofa or wood chair or something else. Therefore, it is the case that most nominalized locative verbs are semantically prototypical with subclass nouns that refer to specific entities. For instance, alongside /ɪgəɹɛ/ 'bed', /ɲəntʂʰə/ is another word for 'bed' that occurs frequently.

In some cases, the location indicated by the resultant noun can be a person upon whom the action indicated by the verb is carried out. There are no direct English equivalents for this type of derived noun, as in (53) below. Their nominal status can

be confirmed by the fact that these derived nouns can be followed by articles and number markings.

(53) Locative nouns derived from verbs

- (a) <sup>n</sup>ts<sup>h</sup>əɬe      ‘sb to think of’ (< <sup>n</sup>ts<sup>h</sup>ə ‘think’)
- (b) pceɬe      ‘sb to shun’      (< pce ‘to shun’)
- (c) k<sup>h</sup>oɬe      ‘sb to give to’ (< k<sup>h</sup>o ‘to give’)
- (d) ɕəɬe      ‘somewhere to go’ (< ɕə ‘to go’)
- (e) <sup>n</sup>c<sup>h</sup>uɬe      ‘sb to hit’      (< <sup>n</sup>c<sup>h</sup>u ‘to hit’)

3.3.3 The nominalizer /=lə/

This class of nouns is derived from verbs by means of the nominalizing suffix /=lə/. This suffix is unreported in other rGyalrongic languages. I call this class of nouns purposive nouns since they refer to what they are for. The verbal element indicates what the nominalized item is for as /<sup>n</sup>gə/ ‘to eat’ indicates the nominalized form /<sup>n</sup>gə=lə/ is for ‘something to eat’, which can be any kind of edible food.

As is discussed in (§ 3.3.3) /=lə/ can also be used to nominalize verbal phrases.

Below are some examples:

(54) Purposive nouns derived from verbs

- (a) ɲgələ          ‘food’          (< ɲgə ‘to eat’)
- (b) kələ          ‘clothes’      (< kə ‘to wear’)
- (c) tʰilə          ‘drinks’      (< tʰi ‘to drink’)
- (d) ɲjilə          ‘necklace’    (< ɲji ‘to wear’)
- (e) ɲpɜːlə       ‘showcase’   (< ɲpɜː ‘to display’)
- (f) ɲtʰolə       ‘firewood’    (< tʰo ‘to burn’)
- (g) zilə          ‘sthg for sale’ (< zi ‘to sell’)

Similar to the noun class in (§3.3.2), this type of derived noun class also presents a cover term for a particular semantic domain and may overlap with other specific nouns that belong to the same domain. For instance, the derived noun /ɲgələ/ meaning ‘something to eat’ includes all different types of food and overlaps with /zama/ ‘food’, however, interestingly, they both can appear in the same sentence, as exemplified in (55).

- (55) zama   tɕəkə   ɲgə=lə      tu  
       food   what   eat=NOM   have  
       ‘What food (do you) have to eat’

### 3.3.4 Instrumental and causative nominalizer / =sce/

In BM rTa'u, there is a class of instrumental nouns that are formed with the nominalizer / =sce/. This instrumental nominalizer / =sce/ turns verbs into nouns that are used as instruments to achieve the action indicated by the verb. Any type of verb that requires an instrument to undertake the action may be nominalized through suffixation of / =sce/. Below are some examples:

#### (56) Instrumental nouns derived from verbs

- (a) tʂasce      'sthg to cut'      (< tʂa 'to cut')
- (b) ʔqʰoɿasce      'sthg to dig'      (< ʔqʰoɿa 'to dig')
- (c) ɿesce      'sthg to write'      (< ɿe 'to write')
- (d) ɿgasce      'sthg to make people happy' (< ɿga 'to be happy')
- (e) kʰəbsce      'sthg to fetch water'      (< kʰəb 'to fetch water')
- (f) ʔgəsce      'sthg to eat'      (< ʔgə 'to eat')

There are a few lexicalized nouns with the morphological structure of noun root + /sce/ suffix, but whose meaning can not be predicted based on the semantics of the verb root. See examples below:

(57) Derived nouns with independent meanings

- (a) scusce ‘see footnote<sup>17</sup>’ (< scu ‘to visit’)
- (b) <sup>N</sup>Gisce ‘see footnote<sup>18</sup>’ (< <sup>N</sup>Gi ‘be tired’)
- (c) ʁuŋosce ‘see footnote<sup>19</sup>’ (< ʁu ‘head’)

The same derivational process can derive nouns from stative verbs (adjectives) and verbs to refer to causation of the state or event indicated by the intransitive stative verb root. A number of examples are given below.

(58) Causative nouns

- (a) ʂkosce ‘cause of being cold’ (< ʂko ‘cold’)
- (b) zduŋsce ‘cause of being sad’ (< zdu ‘sad’)
- (c) ʁnoŋsce ‘cause of being beautiful’ (< ʁnoŋ ‘beautiful’)
- (d) sesce ‘cause of death’ (< se ‘to die’)
- (e) ɕəsce ‘cause for departure’ (< ɕə ‘to depart’)
- (f) ŋosce ‘cause of sickness’ (< ŋo ‘to be sick’)

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<sup>17</sup> The gift people bring when visiting a patient.

<sup>18</sup> An expression used to reject something.

<sup>19</sup> An expression to mean something is complicated and causes headache.

### 3.3.5 The agent nominalizer /<sup>ŋ</sup>k<sup>h</sup>e/

There is a class of agent nouns that are derived from verbs by means of the nominalizer /<sup>ŋ</sup>k<sup>h</sup>e/. It appears that this form is borrowed from the Tibetan agentive nominalizer མཁན *mkhan* ‘doer’. The resultant nouns refer to a person who performs the action expressed by the verb stem. This suffix can be suffixed to virtually all verbs that have an inherent ‘doer’. Some examples are provided below.

#### (59) Agent nouns derived from active participles

le <sup>ŋ</sup> k <sup>h</sup> e	‘driver’	( < le ‘to drive’ )
ʒi <sup>ŋ</sup> k <sup>h</sup> e	‘teacher’	( < ʒi ‘to teach’ )
ᵑdʒi <sup>ŋ</sup> k <sup>h</sup> e	‘learner/student’	( < ᵑdʒi ‘to learn’ )
ptɕa <sup>ŋ</sup> k <sup>h</sup> e	‘swimmer’	( < ptɕa ‘to swim’ )
ŋk <sup>h</sup> o <sup>ŋ</sup> k <sup>h</sup> e	‘giver’	( < ŋk <sup>h</sup> o ‘to give’ )
ʎe <sup>ŋ</sup> k <sup>h</sup> e	‘writer’	( < ʎe ‘to write’ )

The use of /<sup>ŋ</sup>k<sup>h</sup>e/ suggests that the referent has some degree of control over the action. For instance, let’s look at this pair /fse<sup>ŋ</sup>k<sup>h</sup>e/ ‘killer’ and /selə/ ‘person to be killed’, /f-/ indicates transitivity so /fse/ indicates that someone carries out the action of killing, and therefore it can be suffixed only by agentive /<sup>ŋ</sup>k<sup>h</sup>e/ with control of the action of killing; on the other hand, the word /se/ ‘die’, is in the intransitive

and can only be followed by the suffix /-lə/ indicating the experiencer of the action, as discussed in (§3.3.3).

### 3.3.6 Nominalization by /=wa/

In BM rTa'u there is a handful of nouns derived from stative verbs (adjectives) that share the suffix /=wa/, which has the meaning equivalent to English 'the Adj. one'. It derives nouns specifically from stative verbs to refer to entities that embody characteristics indicated by the verb root. In connected speech, it is sometimes pronounced as [va].

#### (60) Nominalization /=wa/

- |     |                    |                      |                              |
|-----|--------------------|----------------------|------------------------------|
| (a) | <sup>m</sup> cowa  | 'quicker'            | ( < <sup>m</sup> co 'quick') |
| (b) | ɲnoŋwa             | 'more beautiful one' | ( < ɲnoŋ 'beautiful')        |
| (c) | c <sup>h</sup> awa | 'bigger one'         | ( < c <sup>h</sup> e 'big')  |
| (d) | tawa               | 'small one'          | ( < təm 'small')             |
| (e) | tɕoŋwa             | 'straight one'       | ( < tɕoŋ 'straight')         |

### 3.3.7 Temporal /pə= /

A near-comprehensive list of nouns with the prefix /pə= / is given in (61) below. This is the only case of prefixation. And, as can be seen in examples below, it has rather restricted application and occurs only with some nouns that indicate time.



However, it can not be prefixed to other nouns in the same class such as month. (61) is not in the current local lexicon.

(61) Nominalization by /pə = /

- (a) pəkə     ‘tonight’     (< kəzə ‘night’)
- (b) pəvə     ‘this year’     (< və ‘year’)
- (c) pəsɲə     ‘today’     (< sɲə ‘day’)
- (d) pəçi     ‘a while ago’

### 3.3.8 Compounding

In general, BM rTa'u compounds can be categorized into two types: a) endocentric compounds and b) coordinative compounds. Endocentric compounds are commonly defined as compounds that incorporate the semantic head to which the compound expression refers, whereas coordinate compounds contain at least two semantic heads that contribute to the meaning of the compound expression in equal measure (Haspelmath 2007: 87-89). These two types express five different semantic relationships between the components of the compound noun. In general, only monosyllabic words can be compounded and most common nominal compounds involve the juxtaposition of two nominal elements where the first acts as the head. In general, however, noun compounding demonstrates a more complex semantic relationship than just modifier and modified and juxtaposition of two nouns. There

are five main types of semantic relationships between the components of compounded nouns as following:

- 1) A possessor-possessed relationship or genitive relationship
- 2) A whole-part relationship
- 3) A modifier-modified relationship
- 4) An object-functionality relationship
- 5) Co-ordinate compound

Each compound with a particular semantic relationship corresponds to different combinations of different word class (N: noun, A: Adjective/stative verb, V: Verb).

The most common compound is the type N + N, then there is small number of N + A. Below are some examples:

(62) BM RTa'u N + N compounds

N + N	mə <sup>v</sup> uɪspə	[eye + hair]	'eyebrow'
N + N	k <sup>h</sup> əts <sup>h</sup> oŋ	[dog + family]	'doghouse'
N + A	ɛuna	[head + red]	'red hair'
N + A	ɣɛəytse	[water + warm]	'hot water'

### 3.3.8.1 *Possessor-possessed relationship*

A major distinguishing criterion of nominal compounds of possessor-possessed semantic relationship is that of the possible insertion of genitive case marker /-i/ between the two components. Generally, in possessor-possessed semantic nominal compounds, the possessor comes first; therefore the genitive case marker is marked on the first component in the compound. For instance, with /k<sup>h</sup>əts<sup>h</sup>oŋ/ in (63), the genitive case marker /-i/ is encliticized to the nominal root /k<sup>h</sup>ə/ ‘dog’, thus /k<sup>h</sup>ə-i-ts<sup>h</sup>oŋ/ [dog-GEN-house] ‘dog’s house’. In this category of nominal compounds each element within a single compound can occur independently except for (63) where the first element refers to ‘ear’ but the second element is not a free noun. The compounding of native nouns with Tibetan loanwords with possessor-possessed relationship is of particular interest for several reasons: a) they provide evidence of formation of new lexical items consisting of native and Tibetan nominal elements, b) they provide an ideal phonological environment to assess vowel alternation in BM rTa’u, and finally c) they provide information about what type of lexical items are more likely to be borrowed by BM rTa’u.

- (63) (a) k<sup>h</sup>əts<sup>h</sup>oŋ ‘dog house’      (< k<sup>h</sup>ə ‘dog’ + ts<sup>h</sup>oŋ Ti. ‘animal house’)  
(b) vats<sup>h</sup>oŋ ‘pig house’      (< va ‘pig’ + ts<sup>h</sup>oŋ Ti. ‘animal house’)  
(c) ɤubdza ‘hair’      (< ɤu ‘head’ + bdza (Ti. skra) ‘hair’)  
(d) mə<sup>y</sup>uɤspə ‘eyebrow’      (< muɤ? ‘eye’ + spə ‘hair’)

- (e)  $\gamma m\grave{z}\text{-}\text{ɿpa}$  'lips' ( $< \gamma m\grave{z}$  'lip' +  $\text{ɿpa}$  'skin')
- (f)  $\text{n}\ddot{u}\gamma qe$  'ear-wax' ( $< \text{n}\ddot{u}$  'ear' +  $\gamma qe$  'wax')

### 3.3.8.2 Whole-part relationship

In compounds expressing a whole-part relationship, the N2 is a part of the whole expressed by the N1 and they form endocentric compounds where the whole denotes a subclass of one of the elements. This category of whole-part semantic relationship compounding strategy is more productive with Tibetan loanwords. If a compound consists of only native nominal elements, then they tend to go through morphological changes driven by vowel harmony principles.

(64)

- (a)  $\text{ɿkon}\eta ts^h\ddot{u}k$  'ankle' Ti. ( $< \text{ɿkon}\eta$  'foot' +  $ts^h\ddot{u}k$  'ankle')
- (b)  $m\grave{a}^v\ddot{u}\text{ɿ}t\text{ɕ}\grave{s}\grave{a}$  'eyelids' ( $< m\ddot{u}\text{?}$  'eye' Ti. +  $\text{ɿ}t\text{ɕ}\grave{s}\grave{a}$  'zigzag')
- (c)  $k^h\text{on}\eta\text{ɿ}tsa$  'house ground' Ti. ( $< k^h\text{on}\eta$  'house' +  $\text{ɿ}tsa$  'root')
- (d)  $\text{ɿ}\text{ɕ}ci$  'hillside' Ti. ( $< \text{ɿ}\text{Ti.}$ 'mountain' +  $\text{ɕ}ci < \text{ɕc}\grave{a}$  'middle' )
- (e)  $l\grave{a}t\text{ɕ}sa$  'pulse' Ti. ( $< l\grave{a}$  'hand' +  $t\text{ɕ}sa$  'vein')
- (f)  $mesqe$  'heel' ( $< ma$  'foot' +  $sqe$  'heel')
- (g)  $zelo$  'wooden bucket's carrying strap' ( $< ze < za.qo$  'bucket' +  $lo$  'strap')
- (h)  $k^h\text{on}\eta m\grave{a}$  'laypeople' Ti. ( $< k^h\text{on}\eta$  'general' +  $m\grave{a}$  'person')
- (j)  $\text{ɕin}\text{ɿpa}$  'bark' Ti. ( $< \text{ɕin}$  'wood' +  $\text{ɿpa}$  'skin')

In general, both elements of the compound tend to be Tibetan loanwords. The few non-Tibetan nominal compoundings are subject to vowel harmony rules e.g. /mesqe/ ‘heel’ comes from /ma/ ‘foot’ plus a bound second element.

### 3.3.8.3 *Modified and modifier relationship*

The semantic relationship that expresses modified-modifier [N + A] is rather productive, the stative verb follows the noun—the typical order for noun and stative verb modifier in MD rTa'u—and the stative verb is marked differently from predicative adjectives as a compound-internal attributive where the predicative form is marked by reduplication.

One crucial feature distinguishes [N + A] compounds from N + A phrases, as stated earlier, both attributive and predicative adjectives have identical distribution in relation to the noun. They can be distinguished based on syntactic criteria, but BM rTa'u also uses morphological marking to differentiate the two. Those single stative verbs that can occur in a compound with a noun usually occur in reduplicated form in predicate position. Example (65) is a good example: /ɣavca/ [hand-round] means ‘palm’ but when /-vca/ occurs in reduplicated form /ɣavcavca/ it means ‘round hand’.

It should be noted here that the [N + A] type is particularly productive when used as an idiom to make fun of other people (65).

(65)

- (a)  $\gamma\lambda\epsilon\gamma tse$  ‘hot-water’ ( $< \gamma\lambda\epsilon$  ‘water’ +  $\gamma tse$  ‘hot’)
- (b)  $\gamma\lambda\epsilon\lambda ko$  ‘cold-water’ ( $< \gamma\lambda\epsilon$  ‘water’ +  $\lambda ko$  ‘cold’)
- (c)  $\nu na$  ‘red-head’ ( $< \nu u$  ‘head’ +  $na$  ‘red’)
- (d)  $t^h o \eta gu$  ‘bent-forehead’ ( $< t^h o$  ‘forehead’ +  $\eta gu$  ‘bent’)
- (e)  $\mathfrak{z}avca$  ‘palm’ ( $< \mathfrak{z}a$  ‘hand’ +  $vca$  ‘round’)

#### 3.3.8.4 *Property-entity relationship*

Property-entity compounds encode the relationship between an inherent or defining property and an entity defined by that property. This compounding strategy is highly productive and uses Tibetan words more often than native words.

(66)

- (a)  $k^h o \eta \mathfrak{c} i \eta$  Ti. ‘logs for building house’ ( $< k^h o \eta$  ‘house’ +  $\mathfrak{c} i \eta$  ‘logs’)
- (b)  $\mathfrak{s} t \mathfrak{c} a c^h \mathfrak{a}$  Ti. ‘metal hook’ ( $< \mathfrak{s} t \mathfrak{c} a$  ‘metal’ +  $c^h \mathfrak{a}$  ‘hook’)
- (c)  $\mathfrak{c} i \eta p^h o$  Ti. ‘plants’ ( $< \mathfrak{c} i \eta$  ‘tree’ +  $p^h o$  ‘piled shape’)
- (d)  $\lambda i sk \mathfrak{a}$  ‘string’ ( $< \lambda i$  ‘cloth’ +  $sk \mathfrak{a}$  ‘string’)
- (e)  $\lambda do k^h o \eta$  Ti. ‘stone house’ ( $< \lambda do$  ‘stone’ +  $k^h o \eta$  ‘house’)

(f) tɕʰəmtɕʰu Ti. 'water mill' (< tɕʰə 'water' + mtɕʰu 'mill')

(g) ɕaɪkoŋ Ti. 'leg' (< ɕa 'meat' + ɪkoŋ 'leg')

#### 3.3.8.5 Co-ordinate compound

There are some coordinate compounds where both nouns have equally head-like characteristics and their combination gives birth to the formation of supergeneric nouns. In general, coordinate compounds are fewer in number than other types of compounds.

(67)

(a) pʰeme Ti. 'parents' (< pʰe 'father' + me 'mother')

(b) pəɪjə 'offspring' (< pə Ti. 'son' + ɪjə Ti. 'lineage')

(c) mazə 'mother and son' (< me 'mother' + zə 'son')

#### 3.3.8.6 Endocentric compounds

The type of endocentric compounds presented here does not neatly fit in the compounds based on any semantic relationship of the elements presented above, therefore they are presented separately below. Endocentric compounds display several compositional possibilities [N + A], [N + CL] and [N + LOC]. In BM rTa'u endocentric compounds are almost exclusively right-headed meaning that the second constituent represents the semantic head of the compound expression. What is interesting about the endocentric compounds in (68) is that the N, the first

element, cannot occur alone, and therefore it serves a similar function to a semantic prefix. /kə-/ below is taken from /kəɹa/ ‘wooden board’. It should also be noted here that in [N + A] compounding structures, A is usually restricted to particular semantic properties such as size, colour and shape which occur in reduplicated forms when functioning as adjectives (stative verbs). Though (c) and (d) are both glossed as ‘board’ they refer to different kinds of board.

(68)

- (a) kəɹa            ‘wooden board’
- (b) kələm        ‘rectangular wooden board’ (< kə + ləm ‘rectangular’)
- (c) kəɹba        ‘board’ (< kə + ɹba ‘CL’)
- (d) kəɹjəm       ‘board’(< kə + ɹjəm Ti. ‘back’)
- (e) kəɹa        ‘small pieces of wood’(< kə + ɹa ‘\*’ )

### 3.3.8.7 Noun-Locative

Below are examples of noun-locative compounds. The locative indicates the particular location of the entity/item referred to by the first constituent. This system is commonly employed in the creation of place names.

(69)

- (a) me-vuuk       ‘sole of feet’ (< me < ma ‘feet’ + vuuk ‘under’)
- (b) la-ka        ‘hill top’-name of local place’ (< la ‘hill’ + k<sup>h</sup>a ‘top’)



- (c) scum-c<sup>h</sup>a      ‘hill top’-name of local place (< scum + c<sup>h</sup>a ‘top’)
- (d) zaba-k<sup>h</sup>a      ‘above bridge’-name of local place (< zaba ‘bridge’ + k<sup>h</sup>a ‘above’)

### 3.3.9 Reduplication

Nominal reduplication is rare and does not seem to be constrained by semantic domains. As the examples in (70) demonstrate, there is no phonological or semantic regularity. (70) is an exhaustive list of all the examples found in my data.

(70)

- a. nono      ‘breast’
- b. lili      ‘cat’
- c. kuku      ‘cuckoo’

### 3.4 *The gender affix*

BM rTa'u nouns do not mark gender except for natural gender which is infrequently marked by Tibetan gender prefixes /=p<sup>h</sup>o=/ and /=mo=, ‘masculine’ and ‘feminine’ respectively. There is one more natural gender marking by the use of /me/ ‘mother’ as suffix, as shown in (71). It is evident from examples in (71) that Tibetan gender markers are prefixes while /=me/ in BM is usually a suffix. The interesting thing about these Tibetan gender prefixes is that they only modify nouns

that are of Tibetan origin; however, unlike Tibetan, the gender markers mostly appear before the nouns they modify as exemplified in (71). It should be noted that a small number of native nouns can also take the Tibetan gender prefix. The suffix / = me/ retains its original meaning ‘mother’ when used to modify nouns to indicate the referent’s mother status; /ɿji/ is a general term for ‘horse’.

(71) Natural gender marking in BM rTa'u

a. ɣəɹa	‘chicken’	moja	‘hen’	p <sup>h</sup> oja	‘male chicken’
b. ɿji	‘horse’	ɹe-me	‘mother horse’	ɿtap <sup>h</sup> o	‘male horse’
c. moɹti	‘female horse’	moɹti	‘filly’	p <sup>h</sup> oɹti	‘colt’
d. jəɹɿa	‘sheep’	jəme	‘mother sheep’	t <sup>h</sup> oŋba	‘ram’
e. moɹw?	‘newborn FS’	mo-lw?	‘female lamb’	p <sup>h</sup> oɹw?	‘male lamb’
f. k <sup>h</sup> ə	‘dog’	mo-c <sup>h</sup> ə	‘bitch’	p <sup>h</sup> oc <sup>h</sup> ə	‘dog’
g. va	‘pig’	mo <sup>h</sup> a	‘sow’	p <sup>h</sup> op <sup>h</sup> a	‘boar’
h. ɹaŋa	‘newborn cow’	moɹga	‘female calf’	p <sup>h</sup> oɹga	‘male calf’

### 3.5 The kinship system

As is the case in Qiang (LaPolla & Huang 2003), the majority of BM rTa'u kinship terminology consists of a vocalic prefix and a root. In Qiang it is reported that the form of the vowel in the prefix is determined by vowel harmony rules. However, in BM rTa'u this does not seem to be the case. As can be seen from examples in Table

25, there does not appear to be any consistent relationship between the vocalic prefix and the vowel in the root. However, it has to be mentioned that except for 1-4, 23, 26 and 27, all other kinship terms are borrowed from Tibetan. What is interesting about 1 and 2 is that the prefix /p<sup>h</sup>e=/ and /me=/ mean ‘father’ and ‘mother’ respectively. It can then be assumed that the root words are the free morphemes /p<sup>h</sup>e=/ and /me=/ which have a suffix /=və/. This is a different system from the Tibetan loanword kinship system of [vocalic + root]. It is surprising why this particular semantic domain is prone to Tibetan loanwords. For -2 generation terms such as grandchildren, rTa'u uses description such as ‘my daughter’s son’ or ‘my son’s children’.

**Table 25: BM rTa'u kinship system**

+ 2	Gloss	rTa'u	
		(Male speaker)	(Female speaker)
	1. father's father	p <sup>h</sup> evə	p <sup>h</sup> evə
	2. father's mother	mevə	mevə
	3. mother's father	p <sup>h</sup> evə	p <sup>h</sup> evə
	4. mother's mother	mevə	mevə
+ 1	5. father	p <sup>h</sup> e/apa	p <sup>h</sup> e/apa
	6. mother	me/ama	me/ama
	7. father' brother	akə	akə

	8. father's sister	ani	ani
	9. mother's brother	aʒo	aʒo
	10. mother's sister	ala	ala
0 consanguineal	11. elder brother	ako/ʕeɲi/məsti	ako/məsno
	12. elder sister	atɕi/ati/məsno	atɕi/ati/sqe
	13. younger brother	ʕeɲi/məsti	mə/məsno
	14. younger sister	mə/məsno	sqe/məsqe
affines	23. husband	vdzi	vdzi
	24. wife	ɽjəp	ɽjəp
	25. wife's brother	maskə	
-1	26. son	zə/q <sup>h</sup> ana	zə/q <sup>h</sup> ana
	27. daughter	smi/q <sup>h</sup> ana	smi/q <sup>h</sup> ana
	28. sibling's son	ts <sup>h</sup> evə	ts <sup>h</sup> evə
	29. sibling's daughter	ts <sup>h</sup> emə	ts <sup>h</sup> emə

### 3.6 Fauna

It is an undisputed fact that the small languages spoken in predominantly Tibetan cultural areas in western Sichuan Province, including rGyalrongic languages, are greatly influenced by Tibetan language. However, little is known about how Tibetan-language effects apply in these small languages. Nevertheless, what is alarming is the growing number of loanwords from Tibetan and Chinese; there is a

clear tendency that some types of nouns are more likely to be borrowed. Below are some examples of Tibetan and Chinese loanwords organized based on semantic features.

A large number of nouns denoting animals are attested in BM rTa'u. These can be categorized into two types: Tibetan loanwords and native words. In general, Tibetan loanwords denote large wild animals, contrasting with domestic animals, while domestic animals and smaller animals such as fish, insects and birds are known by native words. There do not seem to be consistent morphological features distinguishing animals known by Tibetan loanwords from those known by native words. However, many native animal names exhibit taxonomic 'generic-specific' classificatory characteristics, for example, /yəzə/ 'bird', yəvɕi 'baby bird', /yəɹa/ 'chicken', and /yəɹɿ/ 'baby chicken'. It is clear that /yə-/ is a bound stem indicating 'bird'. This formative, however, is not productive with all items in this category as many Tibetan loanwords are found which do not conform to this. It is also unclear whether birds currently known by Tibetan loanwords also have native names, such as /sɕeqe/ 'magpie' (Ti. 喜鹊 Skyaka ) and /bceɹgo/ 'vulture' (Ti. 秃鹫 Byargod).

(72) shows Tibetan loanwords for large wild animals. It is nevertheless interesting to ponder about the motivation behind this particular semantic borrowing and its implications about the origin of BM rTa'u speakers. In cases of other semantic

borrowings such as religious terms from Tibetan and agricultural terms from Chinese, there are rather evident reasons due to their cultural dominance where BM rTa'u is spoken. Perhaps some of these terms are learnt from educational settings, as animals such as 'zebra' and 'elephant' are not found in the local area, and are therefore probably learnt from Tibetan textbooks. The problem of such a view is the fact that animals such as hare and tiger abound in the local area, so there must have been native names for those animals; there may be some former taboo involved.

(72) Wild animals

rəwɔŋ	'rabbit'	dəm	'bear'
staʔ	'tiger'	mdzɯʔ	'dragon'
ɛzɯʔ	'leopard'	avɿɑ	'pika'
səgi	'lion'	ɛlɔŋbətɕʰiŋ	'elephant'
ɿʂivə	'monkey'	tɕʰəɿta	'zebra'
mafɕa	'peacock'	ɕawa	'deer'
mdzɔŋ	'wild yak'	ɣcoʰkʰə	'wolf'

(73) rTa'u animals

Birds	γəzə	Domestic animals		Insects	pəpa
ɕədudu	‘woodpecker’	va	‘pig’	γpəcɜ	‘frog’
məku	‘pigeon’	ɽjəɽɲa	‘sheep’	γnɛpəcɜ	small fish
yla	‘vulture’	ɲə	‘cow’	sɲəpə	‘worm’
γɕa	‘sandgrouse’	ts <sup>h</sup> e	‘goat’	sa <sup>n</sup> dʒoŋ	‘worm’
		xə	‘plowing cow’	pepəɭi	‘butterfly’
		γəɽa	‘chicken’		

Trading of domestic animals, especially horses, used to be common, and domesticated animals with clear gender and age often have terms that denote their specific age and gender. However, this particular semantic functionality of animal names has fallen out of use as animals have been increasingly replaced by vehicles. Horses and other animals are no longer needed for the purpose of agriculture and transport.

### 3.7 Flora

There are few Tibetan loanwords in this semantic category.

(74) Flower names

γ̣ə	ɹva.ɤt̪ə
ve.ɹvi	je.ɹbi
mk <sup>h</sup> i.sca.va	ɤsə.pɜ
γ̣ə.və	rə.ŋi
ɹtsa.ku.ɕa	ra.ŋa
zuuk.lo	wə?
me.və.no.no	ne. <sup>n</sup> ba.ra
γ̣ə.zə.ko.ɹbə	ɕə.li
ɤt̪ə.li.ɤu.na	qə.sɹuuk
zɜ.ɕt̪ə.lo	pe.pca
sɹo.juuk.va	bo.rtsa
ɕt̪sa.va	ɤdʒə.kə.ŋə
ve.zə.ɕtsəp	qa.ɕi.ra
pə.mts <sup>h</sup> o	ɤt̪ə. <sup>m</sup> p <sup>h</sup> a
ɹdzə.tuuk	ɹbə
kə.ɹtsi	kə.to.və
ne. <sup>n</sup> q <sup>h</sup> o.lo	juuk.mɜ.va
ne. <sup>m</sup> ba.ra	ki.və.na
ɤt̪ə.mts <sup>h</sup> o	ə.mt̪ə.pe.mt̪ə



It appears that in this specific semantic field of flower names, no Tibetan loanwords are found and, unlike names in other semantic categories, names for flowers appear to be predominantly multi-syllabic including suffixes with certain morphological features, such as the classifier /lo/ (§5.1.1) meaning ‘stem’ ‘trunk’ or ‘handle’ indicates that the plant has a trunk.

Four-syllable flower names are compounds of two meaningful elements. For instance, the term /me.və.no.no/ often has two distinctive morphological elements: /me.və/ ‘grandmother’ and /no.no/ ‘breast’. This gives the name of a flower that contains a sweet liquid that can be sucked out. For the term /ɣə.zə.ko.ɿbə/, /ɣə.zə/ means ‘bird’ and /ko.ɿbə/ is ‘pea’ and it refers to a pea-shaped small plant that birds eat.

### *3.8 Environment*

There are few Tibetan loanwords in this semantic category. Natural phenomena often associated with religious significance are often referred to by Tibetan terms, however they also retain native terms. For instance, as mentioned above /tsitsiyəna/ ‘rainbow’ is commonly used only by children. Adults often use the Tibetan term 'ja' tshon (འཇའ་མཚན). Another native term that is often replaced by the Tibetan term for religious motivation is /ɣuʔnə/ ‘moon’, with Tibetan /zakʔ/. BM rTa'u native words

often show a velar or uvular prefix, and this is especially true for words of the natural world, see (75); others do not have this prefix as in (76).

(75) Natural words

ɣɹə	‘water’	ɣdomə	‘cloud’
ɣɹemə	‘well’	ɣbə	‘sun’
ɸtsə	‘soil’	ɸçə-k <sup>h</sup> a	‘autumn’
ɸseba	‘grass’	xtse	‘warm’
mə.ko	‘sky’	kə.zə	‘night’
tçe	‘road’	dza.kər	‘moon’
ɬuuk.nə	‘moon’	ɲɟa. <sup>m</sup> pa	‘mud’
χtsə	‘sand’	mi.tə	‘flower’
ɣkə.me	‘stone’	kuku <sup>m</sup> batə	‘cypripedium’
ɬi	‘field’	ɹə. <sup>n</sup> ko	‘mountain’
sɹə.le	‘day’	sa. <sup>n</sup> guuk	‘earthquake’
tç <sup>h</sup> ə.lə	‘flood’	rvo	‘frost’
ɹvo	‘ice’		

Weather nouns may have the prefix or not as in (76).

(76) Weather

ɸpəɹji	‘wind’	ɸləŋ.me	‘gale’
ɸləŋ ɲdʒuuk	‘gale’	ju. <sup>m</sup> bə.ɹo	‘tornado’

ɕje	‘sunny’	ɣmə	‘rain’
kha.wa	‘snow’	mə.lo.lo	‘hail’
tɕʰe.ɕɕa	‘shower’	smuɕ	‘fog’
ɣdo.mə	‘cloud’	tsi.tsi.ɣə.na	‘rainbow’
ᵐdza	‘rainbow’	skər.ɕa	‘thunder/lightning’
ɕe.ftsu	‘lightning’		

### 3.9 Body parts

Terms for body parts are particularly interesting. Terms for external parts are mostly native terms. Terms for internal organs are mostly Tibetan, except for ‘heart’. Subordinate terms display [root + suffix] structure so for example subordinate terms to do with eyes exhibit the initial formative /məʷ/ ‘eye’, as in /məʷ-dɔ/ ‘eyebrows’, /məʷ-spə/ ‘eyebrow/eyelash’, and /məʷ-ɣtɕə/ ‘double-edged eyelid’. Some of the suffixes are roots themselves, as in /məʷ = spə/, / = spə/ is ‘hair’. Some subordinate terms have both native and Tibetan roots for example, /ɕu/ ‘head’ in /ɕu = bdza/ ‘hair’, and /ᵑgo = ne/ ‘headache’ where both /ᵑgo/ and /ne/ are Tibetan words.

#### (77) Common body parts

ɕubdza	‘hair’	zɕja	‘heart’
snə	‘nose’	ɕɕə	‘hip’

ɤu	‘head’	p <sup>h</sup> ə.va	‘stomach’
ɣməʰ	‘lip’	fqa	‘throat’
t <sup>h</sup> opa	‘forehead’	ma	‘leg’
ja	‘mouth’	ɹzi	‘nail’
mə <sup>y</sup> uɪspə	‘eyebrow’	la.ɪtsa	‘wrist’
ɕə	‘teeth’	ʒa	‘hand’
mə <sup>y</sup> uɪtɕə	‘eyelash’	nɔ.χpə	‘finger’
vɭe	‘tongue’	tɕuɪk	‘waist’
mə <sup>y</sup> u	‘eye’	nɔ.χpə	‘toe’
fqa	‘neck’	pə.luɪk	‘tears’
mə <sup>y</sup> uɪdɔ	‘eyebrow’	ɕə	‘tooth’
ɹva	‘shoulder’	sɔ.χpa	‘arm’
mə <sup>y</sup> uɪɕa	‘eye discharge’	k <sup>h</sup> a.spə	‘beard’
ɹkuʔ	‘elbow’	ɲu	‘ear’
p <sup>h</sup> əwa	‘belly’	mə.ni	‘chin’
ma	‘leg/foot’	ptɕoŋ	‘chest’
vla	‘thigh’	ɤle.pa	‘brain’
ɹŋə	‘knee’	q <sup>h</sup> ɔ.ste	‘back’

### 3.10 Chinese loanwords

Chinese loanwords occur in new semantic domains, and have also introduced new phonemes that were originally not in rTa'u, such as initial /f/. One clear ramification of the large number of borrowings is their pressure on the use of the unmarked classifier /=lo/ (§5.1.1), thus other classifiers are underused.

#### (78) Chinese loanwords

tjansi	电视	'television'
t <sup>h</sup> ɔlatɕi	拖拉机	'tractor'
ʂoutɕi	手机	'cellphone'
mɔt <sup>h</sup> ɔ	摩托	'motorcycle'
tʂotsə	桌子	'table'
tjantʂ <sup>h</sup> ə	电池	'battery'
piŋɕaŋ	冰箱	'refrigerator'
tɕ <sup>h</sup> ətʂin	汽车	'vehicle'
feitɕi	飞机	'airplane'
koŋzɔ	工作	'public service'

### 3.11 Grammatical relations and 'case' marking

In general, core syntactic grammatical relations in BM rTa'u are primarily expressed by constituent order, which is SV and AOV. Often, agent and object are not

expressed when they are retrievable from context. The marking of agent can be best described as the type of pragmatic ergative/agentive marking found in some TB languages, as discussed in LaPolla (1995). LaPolla (1995:189) notes that in these languages, the ergative/agentive marker is used only when the agent is pragmatically salient. Furthermore, in BM rTa'u there are some other discourse-motivated usages of the agentive: emphasis on agent, shift in speaker, and contrastive focus.

**Table 26: BM rTa'u grammatical relation and case markers**

subject	marked by word order
object	marked by word order
agent	-u(k)
possessive/genitive	-i(singular), = <sup>ɲ</sup> ɔ, = <sup>ɲ</sup> ga (plural)
locative (spatial)	= nu
locative (temporal)	= tɕ <sup>h</sup> a
comitative	= p <sup>h</sup> a
dative	= ki
ablative	= k <sup>h</sup> a
instrumental	= k <sup>h</sup> a
allative	= ɤa
adessive	= <sup>ɲ</sup> ɔ

inessive	= <sup>n</sup> oŋ
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### 3.11.1 Agentive marking

LaPolla (1995) provides a comprehensive cross-linguistic review of agentive/ergative marking in languages of the TB family, and the information relevant to BM rTa'u will be presented here as a comparison across its related sister-languages. Among his Qiangic examples are rTa'u varieties (rTa'u) Daofu (Chengguan district), and Danba (Dasang district), these have the forms /y/ and /u/, respectively. There is no doubt that they are related to the BM rTa'u agentive marker /=u(k)/. Concerning the rTa'u Chengguan form, /y/ occurs frequently in front of single vowels as a pre-voicing feature in rTa'u lects. In BM rTa'u the agentive /u/ often surfaces as [uk] as in /t-uk/ [3SG-AGE] or [au] for example /ŋa-u/ [1SG-AGE], due to phonological environment. This makes rTa'u one of the few Qiangic languages with a vowel-only form, the others being Jinghua Pumi /ie/ and Taoping Qiang /i/ (LaPolla 1995: 204). The agentive form /=u/ also is clearly not related to other case markers such as instrumental as is the case in some TB languages (LaPolla 1995). Instrumental and ablative cases are marked by the same form /-k<sup>h</sup>a/, and the genitive marker is /-i/. A similar genitive marker form is found in other rTa'u varieties such as Daofu /-ji/, also in several other Qiangic languages such as Queyu /-ji/, Xumi /-ji/, Ersu /-i/, Namuzi /-ji/ and Lyusu /-ji/.

The semantic role of agent is marked by a postposition in BM rTa'u, when pragmatically appropriate, and may surface in various different forms [ʷk], [ʷ], [u] through phonological processes when affixed to different personal pronoun roots e.g. /ŋaʊ/ [1SG = AGE] (<ŋa + ʷk), otherwise this is optional except for third person subjects of transitive clauses. Agentive marking is not limited to arguments denoting people but also occurs with other animates, but not inanimates, and is used for disambiguating possible agents. In some cases, when the subject is first person, agreement is marked on the verb as in (79). The normal order is for the agent to precede object, and without any overt marking the first constituent will be interpreted as the agent and the second as the object, as in (79). See more examples below.

(79)

a    t-ʷk            q<sup>h</sup>əzu = te    tə = ʷçi            sə  
          3PS-AGT    bow-DEM DIR:PST-break    STP  
          ‘He broke the bow.’

b    ŋa        q<sup>h</sup>əzu    te        tə = ʷç-ʷk  
          1PS    bow        DEM        DIR:PST = break-1SG  
          ‘I broke the bow.’



c    q<sup>h</sup>əzu    le    tə = ɣci    sə  
      bow    TOP DIR:PST = break    STP  
      ‘The bow broke.’

d    ɣəndzɿ-wuk    q<sup>h</sup>əzu    te    tə = ɣci    sə  
      lhundrop = AGT bow    DEM    DIR:PST = break    STP  
      ‘Lhundrop broke the bow.’

e    dzɔjɔŋ    q<sup>h</sup>əzu    te    tə = ɣci    sə  
      Droyong    bow    DEM    DIR:PST-break    STP  
      ‘Droyong broke the bow.’

f    ŋa    tə = ki    zama    tə = k<sup>h</sup>u  
      1PS    2PS = DAT    food    DIR:PST = give  
      ‘I gave him food.’

It can be seen from the examples above that /q<sup>h</sup>əzu/ ‘bow’ is zero marked whether it occurs as the subject of an intransitive (79)c), or as the object of a transitive (79),d). The agent of a transitive clause receives agentive marking if it is third person, whether it is a pronoun or a full NP (79) and (79), but not if it is first or second person (79). What is interesting is (79) which by agentive marking rules just

described should have agentive marking on the third person pronoun but does not. This necessitates a discussion pertaining to the relationship of vocalic quality of the coda of the subject and overt agentive marking. It seems that when third person subject has /i, ə, e, a, o/ vowels in coda position then overt agentive /-u/ is highly audible, but if the coda position has other vowels or a final consonant then the agentive marker is absent. Semantic/pragmatic factors may also necessitate the marking of agent on first and second person transitive agents.

- (80) t-wuk            jə    tɕʰə   ŋ-au    qʰəzu = te    tə = ɸci            sto  
          S/he-AGT    say   CON   I-AGT   bowl = DET    DIR:PST = break   COP  
          ‘He said that I broke the bowl.’

Example (80) illustrates that when the first or second person occur as agent in an embedded clause, they are often marked for agentive. However, it is more likely that agentive marking of subjects in embedded clauses is motivated by semantic and pragmatic factors. In the example above, the speaker is making an effort to point out that the addressee is suspected of breaking the bowl, not anyone else, therefore the use of agentive marker here may be used pragmatically to disambiguate among competing agents, thus achieving the function of emphasis on agent.

The usage of agentive is also motivated by other pragmatic reasons, including contrast, as in (81).

- (81)  $\eta a = n\grave{a}$      $t\check{c}\acute{a}t\grave{a}$      $scu$      $t\check{c}^ha$      $t-u\check{u}k$      $\eta^h a\grave{a}$      $s\grave{a} = t\grave{a} = ci$   
 1PS=PL    book    look    LOC    3SG-AGE    play    STP=DIR=EXIST:EVI  
 ‘When we were studying, he was playing.’

### 3.11.2 Dative /=ki/

The dative case is marked with the clitic /=ki/, which indicates, in general, the recipient or beneficiary of the action of a ditransitive verb such as /k<sup>h</sup>o/ ‘to give’, as in (82) and (83).

- (82)  $n\grave{a}\eta^j\grave{a}$      $ako = -u\check{u}k$      $\eta a = ki$      $t\check{c}\acute{a}t\grave{a} = k\grave{a}$      $t\grave{a} = vko$   
 your    brother = AGT    1PS = DAT    book = ART    DIR:PST = give  
 ‘Your brother gave me a book.’

- (83)  $te$      $k^h\grave{a} = te = ki$      $y\grave{a}\grave{a} = k\grave{a}$      $t\grave{a} = k^ho$   
 DEM    dog = TOP = DAT    water = ART    DIR:FUT = give  
 ‘Give this dog (some) water.’

Examples (84) and (85) show that dative /=ki/ is sometimes used on direct object nominals which are not touched or affected by the action.

(84) ɲa    aʒo = ki        scu    kə-ɕa-ɲ  
 1SG   uncle = DAT   visit   DIR:PST-go-1P  
 ‘I went to see my uncle.’

(85) te = ɲə = ki        kə    scu  
 3PS = PL = DAT        IMP   watch  
 ‘Watch them!’

In some constructions, such as light verb constructions, the dative may also mark the direct object argument that functions as a stimulus causing a sensation.

(86) ɲa    mtɕ<sup>h</sup>i = ki        sca-ɲ  
 1SG   snake = DAT   afraid-1P  
 ‘I am afraid of snakes.’

Furthermore, this case also marks benefactive as in (87).

(87) te    tsəkə    te    nə = ki        ca        .ɬə  
 this    cloth    TOP   2PS = DAT    good    COP  
 ‘This cloth is good for you.’

### 3.11.3 Genitive /-i/

The genitive case is marked by the clitic case marker /-i/. The most common use of a noun phrase in the genitive case is to express a possessor. Depending on its phonological environment, the form undergoes changes. Possessive pronouns are given in Table 31 below. Interestingly, the plural personal pronouns and family-based plural nouns have no possessive marking, as in (89). Below are some examples.

- (88)  $\eta$ -i            tɕætə    te    tə-<sup>m</sup>p<sup>h</sup>e            sə  
1PS-GEN book    TOP DIR:PST-lose    STP  
'My book is lost.'

- (89)  $\eta$ a = <sup>ɲ</sup>jə            ɹji            tə-zzɪ            ste  
1SG = GEN horse    DIR:PST-sell            PER  
'My family's horse was already sold.'

- (90) k<sup>h</sup>ə-i            mə<sup>y</sup>u = ɤa            tə-<sup>ɲ</sup>c<sup>h</sup>u            sə  
dog-GEN            eye = ALT            DIR:PST-hit    STP  
'The dog's eye was hit.'

- (91) tʂaɕi = ɲjə                      ŋə    te    tə = se                      sə  
          Bkrashis = GEN      cow   TOP   PST:DIR = die                      STP  
          ‘Bkrashis family’s cow is dead.’

#### 3.11.4 Terminative /=p<sup>h</sup>e/

The terminative case has the phonological shape /=p<sup>h</sup>e/. It serves both the function of denoting a spatial movement that reaches a certain point in a physical world and follows a noun that indicates the spatial destination of the motion, and also may refer to a time interval that lasts up to a certain point in time. In such constructions, it follows a noun that indicates time e.g. afternoon, adolescence, or numerals that indicate age. When used to denote spatial movement, it follows the adessive (§3.11.5) marker /=ɲjə/ to means ‘around’ or ‘close to’, as illustrated in (92) below.

- (92) ŋa    za<sup>m</sup>ba = ɲjə = p<sup>h</sup>e                      ɣə = ɕa-ŋ  
          1      bridge = ADE = TERM      DIR:PST = go-1  
          ‘I went up close to the bridge.’

- (93) ɳəɰci = p<sup>h</sup>e                      xəta      ɣə = zu  
          afternoon = TERM      home      DIR:PST = stay  
          ‘(I) stayed at home until afternoon.’

- (94) lo    ʏsɔsqɑ = p<sup>h</sup>e = te    dʒene    nə = ci    sto  
 age    30 = TERM = PRTC    Brag mda' DIR:PST = EXIST    EVI:COP  
 'He had been in Bra.mda' village up until he was 30 years of age.'

### 3.11.5 Adessive / =<sup>ɲ</sup>ʒə/

The adessive is marked by / =<sup>ɲ</sup>ʒə/. The use of / =<sup>ɲ</sup>ʒə/ has the same meaning as English 'near, close, around' as in (95) and (96). Oftentimes this meaning is conveyed by postposition /k<sup>h</sup>aji/ 'beside/around' as in (97).

- (95) za<sup>m</sup>ba = <sup>ɲ</sup>ʒə    ʏə = ɕə    tɕ<sup>h</sup>ə    ʏə = rɲi  
 bridge = ADE    IMPR = go CONJ    IMPR = wait  
 'Go near the bridge and wait.'

- (96) te = <sup>ɲ</sup>ʒə    kə = ʒe    tɕ<sup>h</sup>ə    ʏə = dzo  
 DEM = ADE    DIR:IMPR = come CONJ    DIR:IMPR = sit  
 'Come around/close here and sit.'

If the postposition /k<sup>h</sup>ajii/ is used, then it has to be linked by a genitive marker to the referent which denotes the spatial location, as shown in the following example.

- (97) za<sup>m</sup>ba-ji      k<sup>h</sup>aji      γə = dzo  
 bridge-GEN   beside   IMPR = stay  
 ‘Stay beside the bridge.’

### 3.11.6 Instrumental / = k<sup>h</sup>a/

The marking of instrumental is achieved by postposition / = k<sup>h</sup>a/ which indicates the instrument used to carry out the action of the verb. When, as in (99), the action of going home is achieved by horse riding, the horse is not marked as instrumental but locative, where the rider is sitting. However, in (100) the horse is used as a means of transportation and is marked for instrumental.

- (98) pəγca = k<sup>h</sup>a    ʁe    te    γə = ha  
 stick = INS    door TOP   DIR.FUL = open  
 ‘Open the door with the stick.’

- (99) ɲaŋ    ɹji = c<sup>h</sup>a    xəta    kə = va-ɲ    ɲo  
 1PS    horse = LOC   home   DIR:FUL = go-1P   COP  
 ‘I will go home on a horse.’

- (100) ɹji = k<sup>h</sup>a    nə = ɕaɹa  
 horse = INS   DIR:FUL = transport



‘Transport by horse.’

The instrumental marker is homophonous with the ablative marker; however, when used as ablative case marker, it requires the co-occurrence of comitative marker /=p<sup>h</sup>a/ when the source is animate as illustrated in examples (101) and (102) below:

(101)    ηa    xəta = k<sup>h</sup>a    nə = ʒa-ŋ                      so

1PS   home = ABL   DIR:PST = come-1P   STP

‘I came from home.’

(102)    ηa    ako = p<sup>h</sup>a = k<sup>h</sup>a                      nə = ʒa-ŋ                      so

1PS   brother = COM = ABL   DIR:PST = come-1P   STP

‘I came from (my) brother (I was with him when I came here).’

### 3.11.7 Comitative /=p<sup>h</sup>a/

The use of comitative case marker /=p<sup>h</sup>a/ encodes a relationship between two participants in an event. BM rTa’u requires both participants to be in the same category, human or animate. Specifically, /=p<sup>h</sup>a/ indicates with whom something is done (103) and also has an extended function similar to locative as in (104).

- (103)     $\eta a$      $n\bar{a} = p^h a$      $x\bar{e}ta$      $\bar{a} = ta-\eta$      $\eta o$   
             1SG 2=COM home DIR:FUL=come-1P    COP  
             ‘I will come home with you.’

- (104)     $\eta a$      $n\bar{a} = p^h a$      $\bar{a} = ta-\eta$      $\eta o$   
             1PS 2= COM    DIR:FUL=come-1P    COP  
             ‘I will come to you.’

### 3.11.8 Locative

#### 3.11.8.1 Containment /=*noŋ*/ ‘in’

The containment case is expressed by the clitic /=*noŋ*/. It is the equivalent of English ‘in’ as discussed in (§3.3.4). In general, BM *rTa’u* does not mark location, as in (105). Therefore, it is not, in a strict sense, a locative case marker but instead a relator noun that serves the function of specifying the spatial position of an object as exemplified in (105). The morpheme is subject to certain morphophonological alternations and sometime surface as /=*nuŋ*/ or /=*nu*/, however the latter is restricted not by phonological rules but the meaning of the noun denoting the location of the motion.

- (105)     $\eta a$      $x\acute{e}ta$      $n\acute{e}-\zeta a-\eta$   
           1SG    home    DIR:PST-go-1P  
           ‘I went home.’

- (106)     $ti = nu$              $le$              $longt^h\acute{u}k-k\acute{e}$              $t\acute{e} = tu$   
           DEM = LOC    AUX            earring-ART            DIR:PST = EXIST  
           ‘In here is an earring.’

### 3.11.8.2 *Elative*

The combination of containment / =  $no\eta$  / and ablative / =  $k^ha$  / gives an ablative case meaning ‘out from inside’. They can follow nouns that have the physical attributes of container e.g. from small objects like bottles to big containers like houses. It can also follow nouns such as water, cloud, etc.

- (107)     $jo = no\eta = k^ha$      $^mk^h\acute{e}$              $\acute{e} = ta$              $s\acute{e} = t\acute{e} = ci$   
           house = ELAT    smoke            DIR:PST = come    STP = DIR = EXIST:EVI  
           ‘Smoke was coming out of the house.’

- (108)     $\zeta\acute{z}dom = no\eta - k^ha$      $p\acute{e}pa = k\acute{e}$      $t\acute{e} = \S fa$   
           bottle = ELAT    worm = ART    DIR:PST = come  
           ‘A worm came out of the bottle.’

### 3.11.8.3 Allative /=ɤa/ ‘onto’

/=ɤa/ can be used in some similar contexts as dative /=ki/. There is no straightforward line between them. However, it appears /=ɤa/ is semantically more limited than /=ki/. In general, /=ɤa/ expresses motion towards a goal. It indicates an object that is an experiencer or receiver of an unrequested effect indicated by the verb.

- (109) tə = ɤa      kə      ə = ɤkɯk  
3SG = ALT    ART    DIR:IMP = push  
‘Give it a push.’

- (110) tə = ɤa      kə = ɕi      sə  
3SG = ALT    PST = hit    STP  
‘He was hit.’

### 3.11.8.4 Ablative /=k<sup>h</sup>a/

The ablative clitic has the phonological shape of /=k<sup>h</sup>a/, isomorphic to that of instrumental case (§3.11.6). The morpheme expresses motion away from a location and can either directly attach directly to a noun, to a locative clitic, to the allative clitic /=ɤa/ or to containment /=noŋ/. The noun can either refer to a generic

location e.g. /ʎasa/ ‘Lhasa’, /rəvə/ ‘community’, or one that refers to a definite location, e.g. /nə<sup>n</sup>do/ ‘your family(house)’ or /xəta/ ‘home’.

- (111)    ɲa    rɔ̃u = k<sup>h</sup>a                      ɣə = ʒa-ŋ                      so  
                  1PS   Brag.mgo = ABL    DIR = come-1P            STP:1P  
                  ‘I came from Bragmgo County town.’

Notice, as usual, the verb ‘come’ is preceded by the appropriate directional prefix (§7.3.2.1). However, there is no grammatical principle or rule to test the appropriateness of one particular directional. /ɣə = / can be replaced by any of the four directionals depending on the actual physical location of the ‘source’ location and ‘destination’ location. It can be used in construction with the verb ‘go’, see example below:

- (112)    te    xəta = k<sup>h</sup>a    kə = rja  
                  3PS   home = ABL   DIR:PST = go  
                  ‘He went from home.’

As in example (112), the destination of the verbal motion away from a particular location is often not expressed as part of the syntactic structure however, the use of a directional makes up for this lacuna; therefore it plays an important role in

correctly conveying the message to the listener.

In some constructions the directionals can be omitted altogether, see examples below:

- (113) xəta = k<sup>h</sup>a      mtɕ<sup>h</sup>en      v-ɕe      sə  
home = ABL      message      3-come      STP  
‘A message arrived from home.’

- (114) te      tɕ<sup>h</sup>entu = k<sup>h</sup>a      ɕi      sə  
3sg      Chengdu = ABL      come      STP  
‘He arrived (home) from Chengdu.’

As noted above, the ablative clitic can also follow the allative / = ɤa/. The resulting sequence / = ɤa = k<sup>h</sup>a/ expresses a movement out of an object, e.g. a tree or even a person.

- (115) coŋ = ɤa = k<sup>h</sup>a      pɜ = te      nə = <sup>n</sup>q<sup>h</sup>o  
wall = ALL = ABL      picture = DEF      IMPR:DIR = take down  
‘Take the picture down from the wall.’

- (116)     $\eta a$      $tə = \text{ʌ}a = k^h a$                        $\text{ɕ}ow i$                        $tə = \text{ʃ}k\text{w} = k$   
                  1PS   2PS = ALL = ABL                      money                      PST = steal = PST  
                  ‘I stole money from him.’

It can also follow the containment clitic  $/ = \text{no}\eta /$ . The resulting sequence  $/ = \text{no}\eta = k^h a /$  expresses a movement away from a container, e.g. a bottle, a room, or mouth.

- (117)     $te$      $t\text{ɕ}^h\text{ət}\text{ʃ}in = \text{no}\eta = k^h a$                        $m\text{ɕ}^h j\text{w}$                        $\text{ɕ}i$   
                  3PS   vehicle = LOC = ABL                      outside                      come:PST  
                  ‘He came out from inside the vehicle.’

The ablative can follow spatial postpositions,  $/t\text{ɕ}^h\text{ə}o/$  ‘above’,  $/v\text{w}uk/$  ‘below’,  $/s\text{cə}q\text{w}uk/$  ‘between’,  $/k^h\text{aji}/$  ‘alongside’. In such constructions, the ablative functions both as an adverbial to denote manner or physical world in which the action/motion is happening, and as a source of location from where the motion begins. The postposition follows nouns that denote an object which is often first marked by a genitive, followed by an ablative case marker. See following examples.

- (118)     $te$      $\text{y}r\text{ə} - i = k^h\text{aji} = k^h a$                        $\text{y}\text{ə} = ta$                        $s\text{ə} = t\text{ə} = ci$   
                  2   river-GEN = alongside = ABL                      DIR:PST = come                      STP = DIR = EXIST:EVI

‘He was coming alongside the river.’

(119)    te      tɕʰətɕin-i = tɕʰəo = kʰa      nə = tsa      sə

3PS   vehicle-GEN = top = ABL    DIR:PST = fall    STP

‘He fell from the vehicle. (Lit. He fell from the top of vehicle.)’

### 3.12 *Spatial nouns*

In the following section, I describe the class of morphemes that function as spatial nouns. They occur in postnominal position and serve the function of specifying the spatial position of an object or the relative temporal sequence of events. They can be defined as an independent class based on two characteristics. First, they usually bear phrasal stress and thus constitute independent phonological words. Secondly, they have to be linked to the head noun by the use of a genitive.

#### 3.12.1 /tɕʰəo/ ‘on top of, above’

The spatial noun /tɕʰəo/ expresses a locational relation in which the marked referent is placed on top of another object. As mentioned in (§3.11.8.4), the lexeme also occurs as an independent locational adverbial when followed by ablative with the meaning ‘above’.

(120)    meɣe-i = tɕʰəo      ɣə-tsʰoŋ = kə      tə = tu

tree-GEN = on top of   bird-net = ART   DIR = EXIST



‘There is a birdnet on top of the tree.’

- (121) tɕotsə-i = tɕ<sup>h</sup>əo                      tɕətə = kə      tə = tu  
table-GEN = on top of    book = ART    DIR = EXIST  
‘There is a book on top of the table.’

- (122) tɕ<sup>h</sup>əo    ə = ɕə                      tɕ<sup>h</sup>ə              ɣə = dzo  
above    DIR:IMPR = go      CONJ      DIR:IMPR = sit  
‘Go above there and sit.’

### 3.12.2 /vuuk/ ‘under’

The spatial noun /vuuk/ indicates that the marked referent is located underneath another object.

- (123) go = vuuk              tɕətə = kə      te      ɣə = <sup>n</sup>tɕ<sup>h</sup>o  
pillow = under    book = ART    TOP    DIR:IMPR = bring  
‘Bring the book under the pillow.’

- (124) t-i = vuuk              ɣə = <sup>n</sup>dzo  
3-GEN = under    DIR:IMPR = sit  
‘Sit under it.’

### 3.12.3 /sɲərə/ ‘in front of, before’

The spatial noun /sɲərə/ indicates a locational relation in which an object is located in front of the marked referent. Similarly, when attached to a word that refers to a point in time or a time interval, it refers to a temporal meaning ‘before’ and denotes that an event took place before the point in time referred to by the respective noun.

- (125) ni    ɲ-i = sɲərə                      ɣə = <sup>n</sup>dzo  
 2PS   1-GEN = in front              DIR:IMPR = sit  
 ‘You sit in front of me.’

- (126) sɲə.rə   te   nə-ɲo                      sə.mo   ɕu-te                      tɕ<sup>h</sup>a   jo                      ɲa.ɲge  
 early   DET PAST-COP   guess   later-DET   in   again   our  
 kə.zə                      ʒi-tɕ<sup>h</sup>ə                      ɲa. ɲga   ti.no                      <sup>n</sup>dzo-tɕ<sup>h</sup>a  
 evening                      come-PAST-CONJ   we                      here                      stay-CONJ  
 ʒi-sto                      jo                      tə.vɕi                      tɕ<sup>h</sup>ə   ɣɕi-te   po.po   və-tɕ<sup>h</sup>ə  
 come-PST:COP   again   PST-destroy   so   fuel-DET   pile   PAST-do  
 rgə-lə                      ɣə-ɕa-sto  
 sleep-NOM                      PAST-need-COP

(I) guess it was the early one (earthquake), then again another one, en...  
 en... our...came in the evening when we were staying here... destroyed  
 again... so people needed to sleep on the woodpile. (Nyima’s life story: 36)

#### 3.12.4 /ɕu/ ‘behind, after’

The spatial noun /ɕu/ can express both spatial and temporal relations. When attached to a word that refers to a location, the postposition indicates that an object is placed behind the marked referent. When attached to a word that denotes a point in time, the postposition indicates that an event will take place after the indicated point in time. This also follows the genitive marker.

- (127) ni    ŋ-i = ɕu                      kə = ʒe  
2PS   1PS-GEN = after    DIR:IMPR = come:FUT  
‘You come after me.’

- (128) ni    ŋ-i = ɕu                      ste = sto  
2PS   1PS-GEN = after    finish = COP  
‘You finished after me.’

These two sentences have identical syntactic structure but different meanings due to pragmatics. ‘After me’ can mean physically after ‘me’ at the same point in time. The other meaning of ‘after me’ can be interpreted as ‘after’ in time interval, as in after a few hours, days or weeks.

### 3.13 *Discourse clitics and markers*

This section discusses nominal discourse clitics and discourse particles. These lexical classes have in common that they serve a pragmatic and discourse-structuring function.

#### 3.13.1 Topic clitic /=le/

Topic-comment structure is the primary information structure in BM rTa'u, and the topic morpheme /=le/ may be used to mark the topic of a proposition which is the first noun phrase in a clause. The topic can be a lexical noun, a pronoun or a nominalized complement. As will be seen in the rest of the section, in some scenarios, the topic clitic /=le/ can be replaced by the definite marker /=te/ and in some cases, /=le/ followed by /=te/ may occur in the same phrase, as in (132). It requires further research to understand the internal relationship between /=le/ and /=te/ and most importantly to figure out what is responsible for the presence of both of them in one clause and the absence of both in another. An initial observation suggests that there is a correlation between person, topic marker and copula marker, as demonstrated in (130) and (131) below.

In example (129) below, in a conversational setting such as an interview where the example below is from, it is clear whose father the speaker is referring to, and therefore there is no need to specifically highlight it, thus it is omitted in most

conversations. However, without situational and background knowledge about the interlocutors, the example below can be marked in different ways depending on the relationship between the speaker and the referent and it is also this particular relationship that decides the type of topic marking at sentence final.

- (129) p<sup>h</sup>e = le      çivzo      to      me = le      zɛŋ-li  
 father = TOP carpenter COP      mother = TOP      farming-work  
 və = ŋk<sup>h</sup>e      to  
 do = NOM COP  
 ‘Father is a carpenter; mother is a farm worker.’ (12.1: 8)

Assuming the speaker is in first person as in (130), it can be observed that it consequently is marked by /ŋo/, which usually co-occurs with person. The final copula and evidential marker /ŋo/ seem to be more usual with topic marker /=le/. This can be contrasted with sentence (131) where it is in third person, and thus the final copula and evidential marker is /to/, to agree with third person. In such third person constructions, /=te/ appears to be more frequent. However, choice of topic marker is not solely dependent on person, as there are examples of all three persons receiving the same topic marker.

Based on person agreement rules the sentence could be expanded as follows:

- (130)     $\eta$ -i            p<sup>h</sup>e = le             $\varsigma$ ivzo             $\eta$ o            me = le  
                  1PS-GEN      father = **TOP** carpenter **COP:EVI** mother = **TOP**  
                   $\varsigma$ eŋ-li            və =  $\eta$ k<sup>h</sup>e             **$\eta$ o**  
                  farming-work    do = NOM      **COP:EVI**  
                  ‘My father is a carpenter; my mother is a farm worker.’

- (131)    t-i                    p<sup>h</sup>e = te             $\varsigma$ ivzo            to            me = te  
                  3PS-GEN      father = **TOP** carpenter COP mother = **TOP:EVI**  
                   $\varsigma$ eŋ-li            və =  $\eta$ k<sup>h</sup>e            **to**  
                  farming-work    do = NOM      **COP:EVI**  
                  ‘His father is a carpenter; his mother is a farm worker.’

- (132)    t-i                    p<sup>h</sup>e = te = le                     $\varsigma$ ivzo            to  
                  3-GEN      father = **TOP = TOP**            carpenter **COP**  
                  ‘His father is a carpenter.’

### 3.13.2 The intensifier clitic /=jo/ ‘also’

The intensifier clitic /=jo/ following a noun phrase has a meaning similar to ‘also’ in English. Etymologically, it could be related to Tibetan *Yang* ཡེ་ཤ་ ‘also’. /=jo/ often appears in parallel clauses linked by the clitic /=ve/ ‘conditioning clitic’ where it

can either appear in both clauses for emphasis, or in the second clause after a noun phrase. Following are some examples.

- (133)     $\eta a$      $t\phi\phi t\phi$   $t\phi i = \eta^h k^h e$      $\eta o$      $ni = jo$      $t\phi\phi t\phi$   $t\phi i = \eta^h k^h e$      $to$   
           1PS   book study = NOM   COP:EVI   2PS = also   study = NOM    COP:EVI  
           ‘I am a student, you are also a student.’

- (134)     $te$      $mi = \text{ɛ}ong$      $\text{ɛ}\phi$      $\phi ki = te = jo$   
           this   NEG = beautiful   COP    other = DEF = also  
            $mi = \text{ɛ}ong$      $\text{ɛ}\phi$   
           NEG = beautiful    COP  
           ‘This one is not beautiful, the other one is also not beautiful.’

- (135)     $n\phi = ki$      $\phi ovi$      $t\phi = du$      $\eta a = ki = jo$      $\phi a$   
           2PS = DAT   money   DIR = have   1PS = DAT = also   need  
           ‘You have money, I also need money.’

- (136)     $ni = jo$      $\phi\phi$      $\eta o$   
           2 = again   go    Q:EXCLM  
           ‘You are going again!’/‘You are also going!’

### 3.13.3 The intensifier /=sa/ ‘even’

The intensifier /=sa/ expresses different meanings depending on whether the referent has control over the state or event denoted by the verb. In cases where the referent has direct control over the state or event, the use of /=sa/ expresses the meaning of surprise and unexpectedness about the event or state that the referent is responsible for which is not in the realm of mutual agreement. In the case that the referent has no direct control over the state/event indicated by the verb, the usage of /=sa/ expresses disappointment over the referent being unable to prevent the state or disappointment that something else has not not been done instead. See the following examples.

- (137) t-wuk = sa      ɬaŋu      kə = ɕə = sə  
3-ERG = even    Brag.mgo   DIR:PST = go = STP  
‘He even went to Brag mgo County.’

- (138) t-wuk = sa      bə      nəsqə      kə = lin = sə  
3-ERG = even    fungus    twenty    DIR:PST = get = STP  
‘He even found twenty (caterpillar) fungus.’

- (139) te = sa      lo    ysosqa    to  
3PS = even    year thirty    COP



‘He is unfortunately thirty years old.’

- (140) t-wk = sa                      tɕətə      kə = den = tɕʰə                      lo nəsqə      to  
3PS-ERG = even      book      DIR:PST = read = CONJ      year twenty COP  
‘Surprisingly, it has been twenty years since he first started school.’

In sentence (137), the use of /=sa/ indicates that his going to Brag mgo County is not within mutual understanding. The event has surprised the speaker and thus the employment of /=sa/ can be understood to suggest the speaker’s discontent of the even or state for which the referent is responsible. Contrarily, in sentence (138) /=sa/ also indicates surprise, however it is not necessarily ‘bad’ surprise, indeed it expresses a pleasant surprise over the fact that the referent found twenty caterpillar funguses and the use of /=sa/ suggests this fact is not within the speaker’s expectation.

In Sentence (139) /=sa/ expresses the speaker’s discontent not over the fact that the referent is thirty years old, but the state s/he is in. The speaker expects the referent to be doing something different at this state of life. Sentence (140) expresses a similar meaning where the speaker does not express discontent over the fact that the referent has been in school for twenty years but expected the referent to be doing something different.

### 3.13.4 The intensifier /=ɔ/

/=ɔ/ has different meanings in different contexts, and therefore giving a single English equivalent would be misleading. The use of /=ɔ/ indicates that the event/state referred to by the verb has taken place and it often follows time adverbials. Compare the following sentences.

- (141)    ɲa        jasɲə=ɔ        kə=ʔɑ-ɲ  
             1PS       yesterday=INTSF DIR:PST=leave-1P  
             ‘I already left yesterday.’

- (142)    ɲa    jasɲə        kə=ʔɑ-ɲ  
             1PS   yesterday   DIR:PST=leave-1P  
             ‘I left yesterday.’

The above sentences basically have a similar meaning, stating that an event took place yesterday. However, the use of /=ɔ/ emphasizes the time at which it took place, and therefore in this particular context it can be roughly translated as English ‘already’.

When it follows a noun that denotes physical location, it has the meaning of ‘until’ and may co-occur with /=sa/, see examples below.

- (143) t-wuk = sa                      xəta = ɿo                      kə = ɸə = sə  
           3PS-ERG = even    home = until            DIR:PST = go = STP  
           ‘He went until home.’

The above sentence may occur in a context where the referent is the son and his father sent him to get something that does not require him to travel all the way home but instead, the son actually went all the way home to get it.

### 3.13.5 General topic maker / = te/

BM RTa'u tends to place topicalized constituents sentence-initially. The most frequent topic marker is / = te/. The form / = le/ is instead used when emphasizing of the subject is pragmatically necessary. A clause can have multiple topics, and may have either / = te/ or / = le/ or both. See examples below.

- (144) p<sup>h</sup>e = le                      ɸivzo    to  
           father = TOP   carpenter   COP  
           ‘Father is a carpenter.’

- (145) t-wuk = le                      demɸwuk = te    tə = mp<sup>h</sup>e                      sə  
           3 = ERG = TOP   key = TOP            PST:DIR = loss    STP  
           ‘(It is) He (who) lost the key.’

- (146) tə<sup>n</sup>jə    p<sup>h</sup>e = te    ɕivzo    to  
           their    father = TOP carpenter COP  
           ‘Their father is a carpenter.’

Topic marking can be used to mark something already mentioned in preceding discourse, especially after a verb nominalized with /=lə/ (147). Most often it is used to mark shared experience or knowledge between interlocutors, as in (148).

- (147) t-i                    jə = lə = te                    ŋoma    to  
           3PS-GEN        say = NOM = TOP        true        COP  
           ‘His sayings are true.’ (Lit. what he said is true.)

- (148) ŋu = ni    ɬasa    ə = vi = lə = te                    ə    dzin    ɬə  
           1PS = 2PS Lhasa    PST:EVI = go = NOM = TOP    Q remember COP  
           ‘Remember you and me going to Lhasa?’ (Do you remember our journey to Lhasa?)

There are cases where both /=te/ and /=le/ appear together after personal pronoun in objective position, however, the semantic role of /=te/ is rather ambiguous as it can be replaced by other case makers as in (150), however, it should

be noted that such constructions only occur in sentence final /ɿə/ construction where it has a tag question functionality.

- (149) ni    ɲa = te = le                    mi = ɸtɕi                    ɿə  
                  2PS   1PS = TOP = TOP   NEG = care   COP  
                  ‘You do not care about me, do you?’

- (150) ni    ɲa = ki = le                    mi = fko                    ɿə  
                  2PS    1PS = DAT = TOP   NEG = give                    COP  
                  ‘You won’t give (it) to me, will you?’

### 3.13.6 The temporal intensifier / = ɿo/ ‘already’

This temporal intensifier, which is a subtype of the intensifier clitic / = ɿo/, cliticizes to a temporal nominal, be it a specific time or general time range to mean that the action has been taking place since the time reference indicated by the temporal nominal. The nominal intensifier constituent can precede or be followed by agentive nominal, as in (151) where the temporal nominal indicates time period of within a day, e.g. morning, afternoon, evening, then it is preceded by temporal prefix / = k<sup>h</sup>a/ as in (152).

- (151)    te    jasɲə = ɣo                      kə = ɣja  
              3PS   yesterday = already   PST:DIR = go  
              ‘We already went since yesterday.’

- (152)    qəçi = k<sup>h</sup>a = ɣo                      tə = ɣja                      sə  
              morning = TOMP = already   PST:DIR-go           STP  
              ‘(They) left already by the morning.’

### 3.14 Noun phrase coordination

BM noun phrases can be conjoined in two ways: a) through marking with the postpositive conjunctive coordinator /=ɣə/ and b) asyndesis. As will be shown in Chapter 9 there is partial overlap with clause coordination strategies as asyndesis is also used to conjoin clauses while /=ɣə/ can only conjoin noun phrases.

#### 3.14.1 Asyndetic coordination

Asyndesis is less common than other strategies of conjoining noun phrases. In asyndetic conjunction, three or more noun phrases are juxtaposed without the use of any formal means of marking conjunction; thus the structure can be represented as: [[NP] [NP] [NP] ... ]<sub>NP</sub>. In asyndetic coordination, it is common to have a summarizing conjunction (§3.14.3) immediately after the last nominal phrase, as shown below.

- (153) [ʃkəmə] [ləlaŋa] [χəmʃca] aji kə =<sup>n</sup>dzəmsə  
 thief liar arrogant person all DIR = haveCOP:EVI  
 ‘Thief, liar, arrogant person, he has (is) all of that.’

### 3.14.2 Monosyndetic conjunctive coordinator /=ɾə/

BM nominal conjunctive coordinators with two coordinands have a medial conjunction on the first coordinand showing A-co B pattern. The most common strategy for conjoining two noun phrases is through marking with the conjunctive coordinator particle /=ɾə/ ‘and’, which can connect two nouns, as seen below. Bisyndetic coordination of two nominals is not possible in BM.

The clitic forms a phonological unit with the preceding coordinand. Thus the structure of BM rTa’u is A=co B. The structure of A B=co has not been attested. Within a sentence, conjoined nominal constituents function as one argument as they only take one set of grammatical marker e.g., number and semantic role as in (154) where the conjunctive coordinator =ɾə conjoins the noun /ʒa/ ‘hand’ and /fqa/ ‘neck’ to form a compound noun phrase /ʒa=ɾə fqa=ŋə/ ‘hands and neck’; even though ‘hands’ in this context is plural, only the phrase-final element receives plural marking, which indicates that the conjoined nominal constituents are regarded as one argument.

- (154)  $\text{ɕe.tɕin}$      $\text{ə.ro-ə.rve}$      $\text{tɕʰə}$      $\text{a.kə}$   $\text{kə-scu}$   
 PN            back-PAST-get CONJ    a    PT-look  
 $\text{sto.kʰe}$      $\text{ɭa-ncə}$      $\text{ja-nə-ɣa}$      $\text{ɣɔ}$   
 CONJ    image-PL    mouth-PL-LOC    *tsampa*  
 $\text{nə-tu}$              $\text{tɕʰə}$      $\text{tsʰi.pa}$      $\text{tə-za}$              $\text{tɕʰə}$   
 PAST-EXIST    so    anger    PAST-get    CONJ  
 $\text{ɭa-ncə}$      $\text{ɭa-rə}$              $\text{fqa-nə}$      $\text{rku-ɣa}$      $\text{nə-və}$      $\text{sto}$   
 image-PL    hand-CONJ    neck-PL    cut-EM    PAST-do    COP  
 ‘Strong Man got back from sleep (woke up) and had a look at the images,  
 saw the *rtsam pa* on the images' mouths, got angry, and cut off all the  
 images' hands and necks.’ (Folktale 1: 16)

- (155)  $\text{pʰe = ɬə}$              $\text{me}$   
 father = COORD    mother  
 ‘Father and mother.’

- (156)  $[\text{dzo:ɬe} = \text{te} = \text{ɬə}]$              $[\text{tʰi} = \text{lə} = \text{te}]$   
 seat:NOM = TOP = COORD    drink = NOM = TOP  
 $\text{tə} = \text{zo}$              $\text{tɕʰə}$              $\text{kə} = \text{ɕe}$   
 IMP = hold    CONJ    DIR:IMP = come  
 ‘Bring the drinks and the seat here.’



- (157) tə<sup>ŋ</sup>ɣə    tɕətə = nden = nk<sup>h</sup>e    kə    ɣə    tɕ<sup>h</sup>ɑŋgo  
his      book = read = NOM    ART    COORD    song  
= <sup>n</sup>den = <sup>n</sup>k<sup>h</sup>e    kə    ɕi.vzo = və = <sup>n</sup>k<sup>h</sup>e      kə ci    to  
= sing = NOM    ART    wood = do = NOM      ART    EXIST      COP  
‘There are a student (who reads), a singer (who sings), and a carpenter in  
his family.’

The conjunction /=ɣə/ is not to be confused with the homophonous copula (see §6.4.3). When occurring in sentence final position after an adjectival or verbal predicate, this functions as a copula and/or evidential marker, but when occurring after the first of two noun phrases it functions as a coordinator. (158) shows copula use, while (159) shows coordinative use.

- (158) te      mco ɣə  
3PS    fast    COP  
‘He is fast.’

- (159) t-i                      tɕətə = ɣə                      janbi      to  
3PS-GEN      book = COORD      pencil      COP  
‘It’s his book and pencil.’

Stress is employed to mark emphatic coordination when the hearer expects only one person, as in (160). In emphatic coordination, usually the coordinands are topicalized as in (160). In emphatic negative coordination, the negative particle occurs in the last slot of the phrase as in (160).

(160)

a     $p^he = \text{ɹə}$                        $me = \text{ɣni} = ki$

father = COORD    mother = DUL = DAT

‘to father and mother...’

b     $p^he = \text{ɹə}$                        $me = \text{'ɣni} = te = ki$

father = COORD    mother = DUL = TOP = DAT

‘to both father and mother...’

c     $p^he = \text{ɹə}$                        $me = \text{'ɣni} = te = ki = m\text{ɲ}a = \text{ɹə}$

father = COORD    mother = DUL = TOP = DAT = NEG = COP

‘It is not to both father and mother...’

The BM coordinative conjunction construction places strict constraints on the semantic role and phrasal category of its coordinands: it is not possible to coordinate two expressions with different semantic roles and the coordinated constituents have

to belong to the same phrasal category. BM also makes a distinction in conjunction between natural conjunction and accidental conjunction, which Mithun (1988:332) explains: “In natural conjunction, the conjuncts habitually go together and can be said to form some conventionalized whole or ‘conceptual unit,’ and is regarded as compound word; coordinative compound.” See example (161) below with *no* / = *ɲə*/.

- (161) *p<sup>h</sup>e:me = ɲə = ki*                      *ʂəʂə*      *nə = və*  
           father:mother = PL = DAT      good      IMPR = be  
           ‘Be good to father and mother (parents).’

There are cases where a sentence has non-asyndetic multiple nominal coordinands. In such constructions, the basic pattern in binary coordination A-co B is replaced with A B C D E ... NUM CL, where C D E ... symbolizes additional nominal phrases. The final slot is occupied by obligatory numeral plus numeral classifier. The system of complete omission of all coordinators in multiple coordinand construction appears to be rare cross-linguistically (Shopen 2007:11). Beyer (1992:241 as cited in Shopen 2007:13) provides example of coordinator omission in Classical Tibetan; however, in Classical Tibetan, the first coordinator is retained. As shown in examples below, no coordinator is present in BM in multiple coordinand constructions.

- (162)     $\eta a j a^{n} b i = k \bar{a}$                    $p e n t s \bar{a} = \gamma n \bar{a} = l o$                    $\xi u p o = k \bar{a}$                    $k \bar{a} = \text{ɹu} k$   
             1PS   pencil = ART    notebook = two-CL    schoolbag = ART    PST = buy  
             ‘I bought a pencil, two notebooks, and a schoolbag.’

- (163)     $t \xi e n e = k a$      $p^{h} \bar{a}^{n} t s \bar{o}$      $p t \xi a \bar{c} i$                    $\eta a \bar{w} o \eta = \gamma s o = \bar{k} e$                    $t \bar{a} = c i$   
             BM = NOM    Phuntsog   Brashi                  Ngawong = 3 = CL                  PST = EXIST  
             ‘Brag mda’ people, Phuntsong, Bragshi, Ngawong were there.’

### 3.14.3 Summary conjunction

Following Haspelmath’s framework of coordination constructions, one last type of nominal coordinative construction to be discussed here is what is termed ‘summary conjunction’ (Haspelmath 2007:36) which he describes as “a construction in which conjunction is signalled not by an element that links the conjuncts together in some way, but by a final numeral or quantifier that sums up the set of conjuncts and thereby indicates that they belong together and that the list is complete.” If the subject is indefinite they are followed by a single plural marker as in (164); however, if they are definite/specific they are followed by the appropriate numeral marker, as in the case of (165) as one can only have two parents and here they are followed by the numeral two.

(164) p<sup>h</sup>e:me = n̩ə = ki                      ʂəʂə      n̩ə = v̩ə  
 father:mother = DUAL = DAT    good      IMPR = be  
 ‘Be good to parents.’

(165) p<sup>h</sup>eme = ɣni = ki                      ʂəʂə      n̩ə = v̩ə  
 parents = DUAL = DAT    good      IMPR = be  
 ‘Be good to (your) parents.’

When there are more than two conjuncts, /aji/ ‘all’ is often used to sum up the set of naturally conjoined, however not limited to, conjuncts, as shown in the following examples (166) and (166).

(166) ati                      ako                      p<sup>h</sup>e:me  
 elder sister    elder brother                      father:mother  
 aji = ki      ʂəʂə    n̩ə = v̩ə  
 all = DAT    good      IMPR = be  
 ‘Be good to elder sister, elder brother and parents.’

(167) vtsi    smi = aji                      koc<sup>h</sup>e = k<sup>h</sup>e                      ŋo  
 male female = all      capable = NOM      COP  
 ‘Men and women are all very capable people.’

In connected speech or in formal speech used in settings such as negotiations, there are a few other coordinating or summary conjunctions that join two or more clausal units of the same status, however they differ from the above conjunctions in their syntactic behaviour and distributional constraints. Consider the following examples:

- (168) zama = to      tsəkə = to      zo      ɕa = lə      tata      to  
 food = COP   cloth = COP   bring   need = NOM      all      COP  
 ‘Food, cloth, all those things need to be brought. (It is food, it is cloth, all those things are the ones need to bring).’

- (169) zama = jə = lə = tə = ma      tsəkə = jə = lə = tə = ma      k<sup>h</sup>atsoŋ  
 food = say = NOM = DIR:NEG   cloth = say = NOM = DIR:NEG      all  
 ʁuci      dengc<sup>h</sup>u      ɕa to  
 above      think      need COP  
 ‘Not to mention food, not to mention cloth, (we) need to think about all those.’

(168) is a copula clause sentence with a final copula /to/, interestingly, each of the conjunctive phrase is also marked by the copula, which is then summed up by the summary conjunction /tata/ ‘all’. However, the summary conjunction cannot directly follow the conjunctive clauses. The conjunctive phrases are closed which

then allows them to be summed up by the summary conjunction. If conjuncts are natural conjunctives as described above, then they are not marked by the copula separately, as exemplified in (168).

(168) shows another term for summarizing conjuncts. It behaves in a similar fashion to (169). The interesting aspect of this sentence is the marking of conjuncts; both are nominalized, which allows the conjuncts to be category-free, and is followed by a final summary conjunction which in this case is /k<sup>h</sup>atsoŋ/, a Tibetan loanword meaning ‘all’, or of course /=aji/ can be used here instead.

#### 3.14.4 Disjunctive coordination

Disjunctive coordination cannot join noun phrases. Disjunctive coordinations are only used to join clauses. Below are two examples that illustrate the use of disjunctive coordination, which will be discussed in further detail below.

- (170)    tɕətə = kə = deŋ = tɕ<sup>h</sup>ə            za = pkuuk = ŋo = so            ɤavɽuuk = pkuuk = ŋo  
              book = DIR = read = CONJ    10 = year = COP = or            11 = year = COP  
              ‘It has been 10 or 11 years since I started school.’

- (171)    nə = ki            jan<sup>n</sup>bi = ɕa = so            pentsə = ɕa  
              2 = DAT            pencil = need = or    notebook = need

‘Do you need a pencil or (you) need a notebook?’

Example (170) shows that in copula clauses, each syntactic unit is obligatorily marked by the sentence-final copula marker, thus it is not noun phrases but instead copula clauses that are being contrasted by the the disjunctive coordinator. Similarly, in (171) the noun phrases ‘pencil’ and ‘notebook’ cannot be directly contrasted by a disjunctive coordinator; instead, each coordinand has its own verbal predicate.



## 4 Closed nominal word classes

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### 4.1 Introduction

This chapter is concerned with different types of pronouns and demonstratives. It starts with a discussion on personal pronouns (§4.2) and concludes with a discussion on demonstratives (§4.3).

### 4.2 Personal pronouns

Personal pronouns are a closed lexical class of words in BM rTa'u that a) can substitute for nouns or noun phrases that refer to human or human-like entities, and b) cannot take any modifiers or complements to indicate the identifying properties of their referents. Personal pronouns are gender-neutral and distinguish person and number. True personal pronouns are limited to first (speaker) and second (addressee) persons in having inherent deictic function, effectively 'pointing' at the speaker or addressee (or both) (Dixon 2010:223). Three numbers are distinguished: singular, and dual—by suffixing the numeral two /=ɣni/, or plural by suffixing /=nə/, respectively. There are two additional forms that also mark plurality, a family-based plural marked by /=jə/ and a village-based plural marked by /=<sup>h</sup>ga/. Third person singular is isomorphic with the proximate demonstrative (§4.3), often regarded as a common feature in Tibeto-Burman language (Lidz 2010:191). Therefore, it will be discussed in the demonstrative section in (§4.3).

As mentioned above, all personal pronouns may distinguish three types of number marking. Dual forms are formed periphrastically by postposing the numeral /-ɣni/ ‘two’ after a pronoun. As shown in Table 27 below, this morphophonological process often results in alternations of morphophonological form of the personal pronoun root. All plural personal pronouns are formed by suffixing /=pə/ ‘more than two’, or /=<sup>ɲ</sup>ga/ ‘village-based plurality’. It is observed that inclusiveness is marked by stress as in /<sup>l</sup>ɲu.ni/ ‘we two (you and me)’, as opposed to the exclusive form /ɲu.ni/ ‘we two (he/she and me)’.

The first and second personal pronouns have the underlying forms /ɲa/ and /ni/, respectively, which are reflexes of the PTB forms \*ɲa and \*naŋ (Benedict 1972:93). They can be used to refer to animals, as well, in a context where the animal has been portrayed as human-like and given the attribute of speaking. This is especially common in storytelling.

**Table 27: Personal pronoun paradigm of BM rTa'u**

		personal pronoun						possessive determiner	
		subjective		objective		reflexive			
first person	singular	ŋa	i	ŋa	me	ŋa.ŋi/q <sup>h</sup> o	myself	ŋi	my
	plural	ŋanə	we (all)	ŋanə	us (all)	ŋanəq <sup>h</sup> o	ourselves (all)	ŋa <sup>ɰ</sup> ʒə	our (all)
		ŋuy <sup>ni</sup>	we (two)	ŋuy <sup>ni</sup>	us (two)	ŋuy <sup>ni</sup> q <sup>h</sup> o	ourselves (two)	ŋuy <sup>ni</sup>	our (two)
		ŋanə	we (family)	ŋanə	us (family)	ŋanəq <sup>h</sup> o	ourselves (family)	ŋa <sup>ɰ</sup> ʒə	our (family)
		ŋa <sup>ɰ</sup> ga	we (village)	ŋa <sup>ɰ</sup> ga	us (village)	ŋa <sup>ɰ</sup> gaq <sup>h</sup> o	ourselves (village)	ŋa <sup>ɰ</sup> gai	our (village)
second person	singular	ni	you	nə	you	nəŋi/q <sup>h</sup> o	yourself	ni	your
	plural	nənə	You (all)	nənə	you (all)	nənə	yourselves (all)	ŋa <sup>ɰ</sup> ʒə	your (all)
		nwk <sup>y</sup> ni	you (two)	nwk <sup>y</sup> ni	you (two)	nwk <sup>y</sup> niq <sup>h</sup> o	yourselves (two)	nwk <sup>y</sup> ni	your (two)
		nənə	You (family)	nənə	you (family)	nənəq <sup>h</sup> o	yourselves (family)	nə <sup>ɰ</sup> ʒə	your (family)
		ni <sup>ɰ</sup> ga	you (village)	ni <sup>ɰ</sup> ga	you (village)	ni <sup>ɰ</sup> gaq <sup>h</sup> o	yourselves (village)	ni <sup>ɰ</sup> gaji	your (village)
third person	singular	te	s/he	te	her/him	ətəŋiq <sup>h</sup> o	himself/hersel	ti	his/her
	plural	tey <sup>ni</sup>	they	tey <sup>ni</sup>	them	ətənəq <sup>h</sup> o	themselves	tey <sup>ni</sup>	thier
		tənə	they (two)	tənə	them (two)	tənəq <sup>h</sup> o	themselves (two)	ŋa <sup>ɰ</sup> ʒə	their (two)
		tə <sup>ɰ</sup> ʒə	they (family)	tə <sup>ɰ</sup> ʒə	they (family)	tə <sup>ɰ</sup> ʒəq <sup>h</sup> o	themselves (family)	tə <sup>ɰ</sup> ʒə	their (family)
		tə <sup>ɰ</sup> ga	they (village)	tə <sup>ɰ</sup> ga	they (village)	tə <sup>ɰ</sup> gaq <sup>h</sup> o	themselves	tə <sup>ɰ</sup> gaji	their (village)

Pronouns are often absent in discourse when they are retrievable contextually as illustrated in (172), in such contexts it is also common to use a term of reference such as a kinship term as in (172).

(172)

a    ꞥɑ-ŋ                    ŋo  
      leave-1SG            1PS:COP  
      ‘(I) am leaving’

b    ꞥuuk                    to  
      leave:3P        COP:EVI  
      ‘(He) will leave’

c    a.ti            ɿi  
      sister        arrive/come:PST  
      ‘(she) Sister arrived.’

There is a fifth alternative / =<sup>ɲ</sup>ɿə/ which is a plural possessive suffix as in /ŋa=<sup>ɲ</sup>ɿə/ ‘our’, which can indicate both ‘our’ as a collection of individuals or ‘our family’s’. The same applies to /nə=<sup>ɲ</sup>ɿə/ ‘your’ and ‘your family’s’, and /tə=<sup>ɲ</sup>ɿə/ ‘their’ or ‘their family’s’. The five numbers distinguished are illustrated below: singular (173), dual (173), plural (173) and family-based plural as in (173) and finally, village-based plural, as in (173). The village-based collective plural is marked by / =<sup>ɲ</sup>ga/ and can only mean we as plural entities from one single village, as in (173) where /ni<sup>ɲ</sup>ga/ refers to ‘you plural from a single village.’

(173)

a    ni            dʒe.ne            və            to

2P.SIN    Brag mda'    NOM    COP

‘You are from Brag mda’.

b    nuuk = ɣɲɪ    dʒe.ne            və            to

2P = DU    Brag mda'    NOM    COP

‘You two are from Brag mda’.

c    nə = ɲə    dʒe.ne            və to

2P = PL    Brag mda'    NOMCOP

‘You (more than two) are from Brag mda’.

d    tə=ɲə    q<sup>h</sup>a.na=ɲə    dʒene            və            to

3P=FAM.POSS    child=PL            Brag mda'    NOM    COP

‘His/Her (family's) children are from Brag mda’.

e    ni = ɲga    tɕəkə            li            sə = tə = ci

2P = VIL    what            do    STP = DIR = EXIST:EVI

‘What are you (villagers) doing?’

One feature associated with all persons, unreported in other rGyalrongic languages, is the use of a diminutive-like suffix / = q<sup>h</sup>o/ after the pronoun to express politeness and affection. When co-occurring with first person it expresses the speaker's intention to 'lower' his status, thus expressing a sense of humbleness. To the naive, such constructions can sometimes be confusing. For instance, the emphasis in (174) is not that the speaker is not capable of anything, instead, the speaker wishes to indicate that he is capable of something.

- (174)    ŋa = q<sup>h</sup>o    ta    tɕuuk = mi = sta-ŋ                      rə = mo  
           1<sup>st</sup> = DMN    AUX    nothing = NEG = capable-1P    COP = AUX  
           'I am capable of nothing.'

Free personal pronouns retain the same form regardless of their syntactic function as agent (175), subject (176) or direct object (177).

- (175)    ɣnə = ʁe = t-əv      ɭa.sa      ə = ɕə = sto = mo.k<sup>h</sup>e  
           2 = QU = 3-ERG      Lhasa      PST-go = COP = IMF  
           'Both went to Lhasa.' (Folktale 1: 20)

(176)    ɲa = ki      ɬə.ndzə    jə    to  
              I=DAT    PN               call   COP

I am called Lhundrum. (Folktale 1: 1)

(177)    mou = le                tə-scər                tɕʰə      te-ɕe.ke.cʰe.me = t-uuk  
              mother = TOP   PAST-afraid   so               DET-strength big = DET-ERG

lin    ʰdi                te    ɕe                cʰe    kʰa  
              get   otherwise he   strong   big   so

[ɲu.ni]    ma-zə                te    ə.mə-fse                ə-jə-sto

us                mother-son                TOP   might-kill                PAST-say-COP

‘Mother was afraid of (Strong Man) so (she) said, "(Strong Man should) get the gold, he is so (big) and strong otherwise he might kill us—mother and son.'" (Folktale 1: 41)

#### 4.2.1 First person pronoun

This section provides an account of first person forms as seen in Table 28.

**Table 28: First person paradigm**

	Singular	plural			
		dual	plural	family-based plural	village-based plural
ABS	ɲa [ɲa]	ɲu=ni [ɲuni]	ɲa=ɲə [ɲaɲə]	ɲa=ɲə [ɲaɲə]	ɲa=ʱga [ɲaʱga]

GEN	ηa-i [ɲi]	ηu=ni [ɲuni]	ηa=ᵐjə [ɲaᵐjə]	ηa=ᵐjə [ɲaᵐjə]	ηa=ᵐga-i [ɲaᵐgi]
DAT	ηa=ki [ɲaki]	ηu=ni=ki [ɲuniki]	ηa=ᵐə=ki [ɲaᵐəki]	ηa=ᵐə=ki [ɲaᵐəki]	ηa=ᵐga=ki [ɲaᵐgiki]
ERG	ηa-uk [ɲaok]	ηu=ni-uk [ɲunjuk]	ηa=ᵐə-uk [ɲaᵐuk]	ηa=ᵐə-uk [ɲaᵐuk]	ηa=ᵐga-uk [ɲaᵐgau]

When two singular or plural personal pronouns occur together, they are linked by a conjunction word /=ᵐə/ ‘and’ (see elsewhere for more on conjunctions) as in (178) with whoever (other than the speaker) is oldest first, and the speaker always comes last. In conversations, when referents of mixed generations are involved and the speech-act-participants know each other, kinship terms are normally used instead of personal pronouns and proper names. Any male 20-30 years older than the speaker not directly related to the speaker is addressed as /a.ʒo/, a Tibetan term for maternal uncle; and any female with the same age difference is addressed as /a.ni/, a Tibetan term for maternal aunt. There is also a form /a.tɕi/ used to refer to females who are older than the speaker but too young to be called /a.ni/. In a similar manner, /a.ko/ ‘brother’ is used to refer to any male older than the speaker but too young to be called /a.ʒo/. The female form is clearly related to /a.tɕʰe/ ‘sister’ in nomadic Tibetan spoken in surrounding areas.



(178)

a    ni=ɿə            ŋa

2PS = and    1SG

‘you and me.’

b    nə=ŋə=ɿə            ŋa=ŋə

2PS = PL = and    1 = PL

‘you all and us all’

c    nə<sup>ŋ</sup>ə=ɿə            ŋa=<sup>ŋ</sup>ə

2PS = family’s=and    1 = family’s

‘your family and my family.’

#### 4.2.2 Second person pronoun

The second person pronoun has the stem /ni/ ‘you’. This is coincidentally similar to Mandarin Chinese second person nǐ ‘你’. A second person pronoun can be used as an address term. However, using the second person pronoun to address someone higher in status is considered rude. In this case, an appropriate kinship term usually precedes the personal pronoun, as in (179), or the kinship term is used alone, as in (179). Second person also has four different forms of plural marking as shown in Table 29 below. The phonological shape of the second person pronoun stem changes due to vowel harmony as in /nuɿkni/ ‘you two’, /nəŋə/ ‘you all’, /nəŋə/ ‘you as family’ and /ni<sup>ŋ</sup>ga/ ‘you as a village’.

**Table 29: Second person paradigm**

	singular	dual	plural	Plural family-based plural	village-based plural
ABS	ni [ni]	nuk=yɪni [ɲukni]	nə=ɲə [nəɲə]	nə=ɲə [nəɲə]	ni=ɲga [ɲi <sup>ɲ</sup> ga]
GEN	ni-i [ni]	nuk=yɪni-i [nukni]	nə=ɲjə [nə <sup>ɲ</sup> jə]	na=ɲjə [nə <sup>ɲ</sup> jə]	ni=ɲga-i [ni <sup>ɲ</sup> gaji]
DAT	nə=ki [nəki]	nuk=yɪni=ki [nukniki]	nə=ɲə=ki [nəɲəki]	nə=ɲə=ki [nəɲəki]	ni=ɲga=ki [ni <sup>ɲ</sup> giki]
ERG	ni-uk [ɲjuk]	nuk=ni-uk [ɲukɲjuk]	nə=ɲə-uk [nəɲuk]	nə=ɲə-uk [nəɲuk]	ni=ɲga-uk [ni <sup>ɲ</sup> gau]

(179)

a    azo    <sup>ɲ</sup>da    tə=ɕə    ɲo

uncle    where    PST=go    Q

‘Uncle, where did (you) go?’

b    azo    ni    <sup>ɲ</sup>da    tə=ɕə    ɲo

uncle    2PS    where    PST=go    Q

‘Uncle, where did you go?’

Similar to the function of /ɲa=ɲjə/, /nə=ɲjə/ can mean both the English equivalent of ‘your’ and ‘your family’s’, as exemplified in (180) below.

- (180)    nə=ʳjə      laʔstə    te    ŋa=nə=ki      ə    sŋi  
              2PS=GEN    axe            TOP    1PS=PL=DAT      Q    lend  
              ‘Could (you) lend your axe to us?’

This sentence can be rendered in various ways as shown below; the exact meaning can only be determined contextually.

- a) Could you lend us (our family) your (family’s) axe?
- b) Could you lend us (a regular plural) your (a regular plural) axe?
- c) Could you lend us (our family) your (a regular plural) axe?
- d) Could you lend us (a regular plural) your (family’s) axe?

#### 4.2.3 Emphatic and Reflexive pronominals

König et al. (2013) provides a comparative concept of reflexive pronouns as follows: Reflexive pronouns are expressions which are prototypically used to indicate that a non-subject argument of a transitive predicate is co-referential with (or bound by) the subject, i.e. expressions like Mandarin *zìjǐ*, English *X-self*.

The use of a reflexive pronoun “...indicate[s] that the subject and the object of a transitive or ditransitive predicate pick out one and the same referent both as target and source of that predicate” (Lin 2011:34), as exemplified in (181) where the

subject *I* and the direct object *myself* are coreferential. The reflexive anaphor and its antecedent co-occur in the same clause, and the reflexive pronoun cannot be left out.

- (181)     $\eta a$      $\eta aq^h o = \varepsilon a$          $k\bar{a} = \bar{z}i = sto$   
              I        myself = DAT    PST = hit = PST  
              ‘(I) accidentally hit myself.’

Three reflexive pronouns can be identified in BM rTa’u; each has a variant form as shown in Figure 11 below: / $\eta a.\eta i/$  or / $\eta a.q^h o/$  for the first person, / $n\bar{a}.\eta i/$  or / $n\bar{a}.q^h o/$  for the second person, and / $\bar{a}.t\bar{a}.\eta i/$  or / $\bar{a}.t\bar{a}.q^h o/$  for third person. Reflexives can also be marked by four numbers, in a similar manner as discussed above. The basic morphological properties of BM rTa’u reflexive pronouns can be summarized as follows:

Stem	Reflexive												
$\left[ \begin{array}{c} \eta a/n\bar{i}/te \end{array} \right]$	<table> <tr> <th>Singular</th><th>plural</th></tr> <tr> <td><math>= \eta i/q^h o</math></td><td> <table> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \gamma \eta i</math></td><td><math>= \gamma \eta i q^h o</math></td></tr> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \eta ga</math></td><td><math>= \eta gaq^h o</math></td></tr> </table> </td></tr> </table>	Singular	plural	$= \eta i/q^h o$	<table> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \gamma \eta i</math></td><td><math>= \gamma \eta i q^h o</math></td></tr> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \eta ga</math></td><td><math>= \eta gaq^h o</math></td></tr> </table>	$= \eta \bar{a}$	$= \eta \bar{a}q^h o$	$= \gamma \eta i$	$= \gamma \eta i q^h o$	$= \eta \bar{a}$	$= \eta \bar{a}q^h o$	$= \eta ga$	$= \eta gaq^h o$
Singular	plural												
$= \eta i/q^h o$	<table> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \gamma \eta i</math></td><td><math>= \gamma \eta i q^h o</math></td></tr> <tr> <td><math>= \eta \bar{a}</math></td><td><math>= \eta \bar{a}q^h o</math></td></tr> <tr> <td><math>= \eta ga</math></td><td><math>= \eta gaq^h o</math></td></tr> </table>	$= \eta \bar{a}$	$= \eta \bar{a}q^h o$	$= \gamma \eta i$	$= \gamma \eta i q^h o$	$= \eta \bar{a}$	$= \eta \bar{a}q^h o$	$= \eta ga$	$= \eta gaq^h o$				
$= \eta \bar{a}$	$= \eta \bar{a}q^h o$												
$= \gamma \eta i$	$= \gamma \eta i q^h o$												
$= \eta \bar{a}$	$= \eta \bar{a}q^h o$												
$= \eta ga$	$= \eta gaq^h o$												

Figure 11: Morphological make-up of reflexive pronouns

The three forms are clearly derived from the pronominal forms /ŋa/, /ni/ and the demonstrative /te/ respectively, to which the bound morphemes /=ŋi/q<sup>h</sup>o/ have been suffixed. However, for plural pronouns only /=q<sup>h</sup>o/ can be suffixed. The bound morpheme /=q<sup>h</sup>o/ itself may be derived from the word /a.q<sup>h</sup>a/, equivalent to English word ‘sorry’, an expression used to express sympathy and penitence. It is commonly used in daily conversations to express sentiment towards the state or proposition by the speaker as illustrated in (182) below, where the speaker begins by using the word /a q<sup>h</sup>a/’ ‘sorry’ knowing that the addressee has been sick and the use of /=q<sup>h</sup>o/ reinforces such sentiment attached to the utterance. In some cases the occurrence of a personal pronoun + /nəq<sup>h</sup>o/ form does not necessarily indicate reflexive as shown in example (183) where the function of the form /nə.q<sup>h</sup>o/ is not reflexive.

- (182) a.q<sup>h</sup>a      nə = q<sup>h</sup>o = le      nə = ŋo sa  
          ‘Sorry      2PS = EMP=AUX    PST=sick= MD  
          ‘Sorry, you were sick!’

- (183) ni      nə.q<sup>h</sup>o      nə = ŋo      sa  
          2PS      yourself      PST = sick      MD  
          ‘You yourself were sick! (I thought it was somebody else).’

If the assumption that /=q<sup>h</sup>o/ has been grammaticalized from a politeness marker to mark reflexive is correct, this would suggest that /=ŋi/ is the original reflexive marker. If this is the case, it would beg the question why it does not occur with plural personal pronouns. Aside from this distributional difference, other features separating these two markers are primarily semantic. I initiated a Wechat (social networking platform) discussion consisting of 50 native speakers about the difference between /=ŋi/ and /=q<sup>h</sup>o/ from the point of view of native speakers. Two features received highest approval a) when the form [personal pronoun + q<sup>h</sup>o] immediately follows a personal pronoun, it indicates reflexive; b) when it occurs alone with a personal pronoun /=q<sup>h</sup>o/, to express such meanings as ‘diminutive’ or ‘modest’.

When functioning as reflexives co-occurring with personal pronouns, the use of /=ŋi/ and /=q<sup>h</sup>o/ appears to be variable as to which form occurs. Examples (184) and (185) below have virtually identical meaning despite the fact that the reflexive is represented by a different form.

- (184)    ŋa     ŋaŋi = ki            kə = ɿ-wuk            so  
              1PS   myself = DAT   PST = buy-1PS   COP  
              ‘I bought (it) for myself.’

- (185)     $\eta a$        $\eta aq^h o = ki$        $kə = ɿ-ʉk$       so  
             1PS    myself = DAT    PST = buy-1PS    COP  
             ‘I bought (it) for myself.’

Both / =  $\eta i$  / and / =  $q^h o$  / can be used to indicate a co-referential subject in reported indirect speech, as in (186).

- (186)  $tʉ-k$        $jə = tɕ^h ə$        $ətəq^h o$        $qəɕi$        $ɣə = taŋ$        $jə$        $rə$   
             3PS-ERG    say = CON    himself    tomor.    DIR:FU = come    say    REP  
             ‘He said that he (himself) will come tomorrow.’

In addition to the reflexive pronouns discussed above, there is an emphatic pronoun / $roŋri$ / in BM  $rTa'u$ . It is probably connected to the Tibetan word *Rang* ‘oneself’, which expresses reflexive and/or emphatic meaning. In BM  $rTa'u$ , / $roŋri$ / is commonly used as an emphatic indefinite pronoun with the meaning ‘oneself’, as in (187).

- (187)  $roŋri$      $ko = tə = tɕ^h e = ve$        $tɕəkə$      $nə = vli$      $ve$        $\eta i$        $to$   
             self    capable = DIR = capable = if    what    FUT = do    CON    right    COP  
             ‘If one is capable, it’s all right whatever one does.’

#### 4.2.4 Interrogative and indefinite pronouns

BM rTa'u possesses a number of different interrogative pronouns listed below.

##### Interrogative pronouns

1. tɕəkə 'what'
2. tɕək<sup>h</sup>a 'why'
3. tɕəkə.k<sup>h</sup>a 'for whatever reason or purpose'
4. sə 'who'
5. 5. sətu 'when'
6. 6. <sup>n</sup>da 'where'
7. 7. tɕ<sup>h</sup>əsa 'how'

Interrogative pronouns (2) and (3) share a common morphological property /=k<sup>h</sup>a/, which is also isomorphic with the instrumental case marker as in (§3.11.6) where the speaker knows someone hit him and asks with what was he hit. In (189) it means rain caused a flood. It, therefore, could be the case that the instrumental/causation case marker which has been grammaticalized into these two interrogative pro(190) nouns; thus speakers intuitively assume there must be a causation as in (189).



- (188)    tə = ɤa            tɕəkə = k<sup>h</sup>a            tə = c<sup>h</sup>u            sə  
                  3PS = DAT    what = INSTRU    DIR:PST = hit            STP  
                  ‘What hit him?’

- (189)    ɣmə ɭe = k<sup>h</sup>a            tɕ<sup>h</sup>əlɔ    ɭi            sto  
                  rain came = CAUS    flood    come:PST    PEF  
                  ‘Because of rain, there came a flood. ’

- (190)    ni    mi = scə            sce    tɕək<sup>h</sup>a    to  
                  2PS    NEG = happy    NOM    what    COP  
                  ‘Why are you unhappy?’ (Lit. What is the cause for you to be unhappy?)

Interrogative pronouns 4 and 5 also share a common feature /sə-/, but they do not appear to be related. The stem /sə/ ‘who’, can be used in compound with other morphemes to construct possessive interrogative pronouns as follows:

stem	bound morpheme	phonological form	Gloss
sə	-i (GEN)	si	whose (singular)
sə	= <sup>ŋ</sup> jə (pl)	sə <sup>ŋ</sup> jə	whose (family plural)
sə	= <sup>ŋ</sup> ga (pl village)	si <sup>ŋ</sup> ga	of which village

Examples are seen in (191)

(191)

a        te            si                    tɕətə        to  
          DM        whose        book        COP  
          ‘Whose book is this?’

b        te                    sə<sup>n</sup>ʃə                    .ɟi        to  
          DM                whose(family)    horse    COP  
          ‘Whose family’s horse is this?’

c        te    si<sup>n</sup>ga                    vdzi        to  
          DM    which village    person    COP  
          ‘Which village’s person is he?’

(192) shows examples for the interrogative pronouns /sətu/ ‘when’ and /tɕ<sup>h</sup>əsa/ ‘how’. When /tɕ<sup>h</sup>əsa/ ‘how’ is used as interrogative pronoun it always followed by what appears to be an indefinite article /=kə/.

(192)

a      na    sətu    vlama    nə = və    sto

2PS    when    Lama    PST = do    PERF

‘Since when have you become a Lama?’

b      tə<sup>n</sup>ʃə                      jo              te      tɕ<sup>h</sup>əsa = kə    c<sup>h</sup>e    rə

his (family)    house    TOP    how = ART    big    Q

‘How big a house is his family’s?’

/<sup>n</sup>da/ ‘where’ can take various bound morphemes to form particular interrogative forms relative to location as followings, as in (193) to (195).

stem	bound morpheme	phonological form	gloss
------	----------------	-------------------	-------

<sup>n</sup> da	= k <sup>h</sup> a	<sup>n</sup> dak <sup>h</sup> a	from where
-----------------	--------------------	---------------------------------	------------

<sup>n</sup> da	= fɕɔ	<sup>n</sup> dafɕɔ	which direction
-----------------	-------	--------------------	-----------------

<sup>n</sup> da	= te	<sup>n</sup> date	which one
-----------------	------	-------------------	-----------

<sup>n</sup> da	= jeme	<sup>n</sup> dajeme	around where
-----------------	--------	---------------------	--------------

(193) ni      <sup>n</sup>da = k<sup>h</sup>a              to

2PS    where = from    Q

‘Where are you from?’

- (194) χpeɹji    <sup>n</sup>da = fɕɔ                      və                      sə = tə = ci  
 wind        where = direction    do                      STP = DIR = EXIST:EVI  
 ‘Which direction is the wind blowing?’

- (195) ni        ɹji            te        <sup>n</sup>date            to  
 2PS   horse   TOP   which one   Q  
 ‘Which one is your horse?’

For more examples of this use of these question pronouns, see (§9.2.3.1)

#### 4.3 Demonstratives

The primary function of the demonstrative pronoun is to mark relative distinctions from the point of view of the speaker, as discussed above. Thus, in principle there are two types with the function of expressing relative spatial reference from the point of view of the speaker, proximate and distal, as English *here* and *there*. What makes the BM rTa’u demonstrative system different from English is the use of directionals in its distal system. As discussed below in (§ 7.3.2.1), BM rTa’u uses four distinctive directional forms expressing spatial reference. The distal system also uses these four forms by way of derivational morphology, to construct four spatial-reference specific demonstrative pronouns that express distal meaning. These

demonstrative forms have the identical morphological form [direction prefix + te], thus, this allows the establishment of four different types of demonstratives with the meaning equivalent to English ‘that’ but with specific direction in relation the location of the speech-act-participants. In other words, the spatial location of the referent indicated by ‘that’ is indicated by the locative prefixes. As discussed in (§7.3.2.1), each directional has a conventionalized inherent quality concomitant with the form whenever and however it is used. The morphological structure of demonstratives is shown in Table 30 below.

**Table 30: The structure of demonstrative pronouns in BM rTa’u**

Directionals	stem	Demonstratives	gloss	Plural			
<b>tə</b>	te	təte	‘this’	teɣni	these two	teŋə	these all
<b>a"da</b>	te	a"date	‘that’	a"dateɣni	those two	a"dateŋə	these all
<b>aɹda</b>	te	aɹdate	‘that’	aɹdateɣni	those two	aɹdateŋə	these all
<b>akəta</b>	te	akətate	‘that’	akətateɣni	those two	akətateŋə	these all
<b>ayəda</b>	te	ayədate	‘that’	ayədateɣni	those two	ayədateŋə	these all

The reason behind treating all such constructions [directional + te] as demonstratives is because they constitute a subtype of deixis that refers to a class

of linguistic expressions whose purpose is to indicate the situational/discourse context elements relative to speech participants and the time and location of the current speech event (cf. Bühler 1934: 93; Lyons 1977: 636, Levinson 2004: 102). They refer to things either in the speech situation (deixis) or previously mentioned (anaphora).

When used as deixis, speaker use /təte/ or /te/ ‘this’ interchangeably to refer to things (both animate and non-animate) that are in their immediate vicinity as seen below. These derived demonstratives can also be used on their own in referring to any object retrievable from context.

- (196) təte    ŋa = ki  
this    1<sup>SG</sup> = DAT  
‘(Give) this to me!’

- (197) te        ŋa = ki  
this    1<sup>SG</sup> = DAT  
‘(Give) this to me!’

The demonstrative pronouns are marked for plurality in the same way as nouns, by adding /-ɣni/ ‘two’ or /-ŋə/ ‘all’ as in (199). However, number marking takes a

different shape. Number marking splits the phonological structure of demonstrative [demonstrative + *te*] and gives birth to the structure [demonstrative + numeral + demonstrative], as in (200). This form can be further extended by adding the usual classifier after the number as [directional + numeral + classifier + demonstrative], as in (201).

(198) akəta te ɛnoŋ ɿə  
 DEM DET beautiful COP  
 ‘That one is beautiful.’

(199) akətate = nə ɛnoŋ ɿə  
 DEM = PL beautiful COP  
 ‘Those are beautiful.’

(200) akəta = ɣso = te ɛnoŋ ɿə  
 DIR = 3 = DEM beautiful COP  
 ‘Those three are beautiful.’

(201) akəta = ɣso = lo = te ɛnoŋ ɿə  
 DIR = 3 = CL = DEM beautiful COP  
 ‘Those three are beautiful.’

#### 4.3.1 Demonstrative pronoun/determiners

All the demonstratives in BM rTa'u prototypically express a spatial relation to the speakers and addressees specifically, their functions can be summarized as following:

a) demonstratives express deictic reference to some persons or things other than speaker and addressee (Dixon 2010:224), b) used either as independent pronouns or as modifiers of a co-occurring noun, and c) locational adverbs, the equivalent of English 'here' and 'there', as in (205). Furthermore, every demonstrative displays three semantic features that are essential for effective communication: (a) an ego element, which is also understood as the *deictic centre* (cf. Bühler 1934; Lyons 1977); (b) a pointing element; and (c) a target element in space.

In general, the demonstrative root /te/ can perform multiple semantic roles as third person (202), demonstrative pronoun/determiner (203) and locative demonstrative (204), as shown below. All other demonstrative forms are derived from /te/, and in some cases the derivational process alters the phonological shape of the resultant forms as with /ayətate/ 'the one there' pronounced as [ayədate], due to voicing assimilation across syllable boundaries. These forms are discussed in the following sections.

- (202)    te    q<sup>h</sup>ana    kə    to  
          3SG child    ART    COP  
          'He is a child.'



(203) te      ɲa = ki

DEM    1<sup>ST</sup> = DAT

‘Give this to me!’ (something near the speaker)

(204) te              tɕətə      te              ɲa = ki

DEM              book      ART              1<sup>ST</sup> = DAT

‘Give this book to me.’

(205) te      tinu    tu

DEM    Here    EXIST

‘It is here.’

**Table 31: BM rTa’u demonstrative paradigm**

	demonstrative pronoun /determiner			locative
	singular	dual	plural	
proximate	te (this)	teɲni (these two)	teɲə (these all)	tinu (here)
distal	akətate (that/ west/upriver)	akətateɲni (those two)	akətateɲə (those all)	akətatenu (there)
	ayədate (that/ east/downriver)	ayədateɲni (those two)	ayədateɲə (those all)	ayədatetenu (there)
	arɪdate (that/up)	arɪdateɲni (those two)	arɪdateɲə (those all)	arɪdatenu (there)

	a <sup>n</sup> date (that/down)	a <sup>n</sup> dateyni (those two)	a <sup>n</sup> datenə (those all)	a <sup>n</sup> datetenu (there)
--	------------------------------------	---------------------------------------	--------------------------------------	------------------------------------

#### 4.3.2 Third person pronoun

The demonstrative pronoun /te/ can be used as a third person pronoun. This can be used to refer to both human or non-human entities alike. Similar to other personal pronouns, plurality is marked by plurality clitics that follow, and four types of plurality can be established with third person: /te=yni/ ‘they two’, /te=nə/ ‘they all’, /te=nə/ ‘they (as a family)’ and finally /te=ŋga/ [ti ŋga] ‘they (as members of a village)’. Below are some examples.

(206) te        vlama    to  
          3PS     Lama     COP  
          ‘He is a Lama’

(207) tenə    tɕətə    <sup>n</sup>den = <sup>n</sup>k<sup>h</sup>e    to  
          they   book   read = NOM   COP  
          ‘They are book readers (students).’

**Table 32: Third person paradigm**

	singular	Plural			
		dual	plural	family-based plural	village-based plural
ABS	te	te=ɣni	te=ɲə	te=ɲə	te=ʷga
	[te]	[teɣni]	[teɲə]	[teɲə]	[tiʷga]
GEN	te = i	te=ɣni=i	te=ʷjə	te=ʷjə	ti=ʷga=i
	[ti]	[teɣni]	[teʷjə]	[teʷjə]	[tiʷgaji]
DAT	te = ki	te=ɣni=ki	te=ɲə=ki	te=ɲə=ki	te=ʷga=ki
	[teki]	[teɣniki]	[teɲəki]	[teɲəki]	[niʷgiki]
ERG	te-ɯk	te=ɣni-ɯk	te=ɲə-ɯk	te=ɲə-ɯk	te=ʷga-ɯk
	[tɯk]	[tenjuɯk]	[teɲɯk]	[teɲɯk]	[tiʷgaʊ]

#### 4.3.3 Demonstratives of location

Locational demonstratives have similar morphological properties to other demonstratives [directionals + locative], as listed in (208).

#### (208) Demonstratives of location

- a. tinu                    ‘here’
- b. a<sup>n</sup>datinu            ‘there’ (referent in lower altitude)
- c. aɿdatinu            ‘there’ (referent in higher altitude)
- d. akətatinu           ‘there’ (referent located towards the source of Xianshui River)
- e. ayədatinu          ‘there’ (referent located towards the end of Xianshui River)

Similar to demonstrative pronouns, the locational demonstratives are also established on a similar principle that the directionals predetermine or predict the spatial location of the referent in relation to the speaker. Following are some examples.

- (209)   te     aɾdatinu   nə     sto  
          DEM there     IMPR   put  
          ‘Put it there.’

This sentence can be repeated with the addition of locative /=nu/ as below.

- (210)   te           akətati = nu   tə = ci  
          3PS       there = there   PST = EXIS  
          ‘He was/is there.’

## 5 Numerals

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BM rTa'u employs the decimal system for counting, typical of most Tibeto-Burman languages. Numerals precede classifiers and together they modify a preceding noun. They may also appear without a classifier in counting and without a head noun in contexts where interlocutors have established sufficient understanding so that the head noun is absent. In terms of the cardinal numeral system, there are unique forms for numbers from 'one' to 'ten'. Numerals 'eleven' to 'nineteen' use a 'ten' + 'unit' system. 'Twenty' to 'ninety' use 'unit' + 'ten' + 'unit', for instance 46 is 'four' + 'ten' + 'six'. There is a slight change in forms of the basic numerals, often with vowel shifting, when occurring in word initial and non-initial positions. Most noticeably, the prefixes are dropped from 'two' and 'three'. Similar cases are reported in Qiang (LaPolla & Huang 2003), though with different numerals. An interesting aspect of prefixes on numerals is that in some circumstances, new prefixes are added, which differ from the one being dropped. For instance, the form for 'one' is /ɿu/, when occurring in 'eleven' as 'ten' + 'one' it is /vɿu/ with an initial prefix. For 'three' [fso] only occurs in 'thirteen'; other examples are seen in (211) below. There is no word for 'zero' in BM rTa'u and Tibetan loanwords are used for higher numerals, *sTongphrag* 'thousand', *Khrilu* 'ten thousand'. Table 33 below also contains the cardinal numbers of PTB, rGyalrong (Prins 2011) and Tibetan. The reconstructed forms are from Benedict (1972).

**Table 33: Comparison of cardinal numbers in various languages**

Gloss	PTB	BM	rGyalrong	Ti
one	*t(y)ik	ɽuk	kərek	gcig
two	*g-nis	ɣni	kənes	gnyis
three	*g-sum	ɣso	kəsam	gsum
four	*b-liy	ɣlə	kəbdu	bzhi
five	*l-ŋa	mbe	kəmŋi	lnga
six	*d-ruk	ɣtɕuk	kətɕoʔk	drug
seven	*s-nis	sŋi	kəʃnəʔs	bdun
eight	*b-r-gyat	ɽje	kərscat	brgyed
nine	*d-kuw	ŋgə	kəngu	dgu
ten	*gip	za	zʃi	bcu

Numerals from 11 through 19 are formed by prefixing /ʁa =/ to the numeral.

(211)

- a. ʁa.vɽɕ 11    ʁa.ptɕɕ 16
- b. ʁa.ɣni 12    ʁa.sŋi 17
- c. ʁa.fso 13    ʁa.ɽje 18
- d. ʁa.vlə 14    ʁa.ŋgə 19
- e. ʁa.mbe 15

Numerals for multiples of 10 up to 90 are formed by a suffix /=sqa/ to numerals:

(212)

A. za	10	ytɕusqa	60
B. nəsqɑ	20	sɳisqa	70
C. ʏsosqa	30	ɿjesqa	80
D. ʏləsqɑ	40	ŋgəsqa	90
E. mbesqa	50		

Hundreds are formed by number + /ɿjə/ ‘100’. For ‘thousand’ and ‘ten thousand’ Tibetan loanwords are used.

(213)

a. ɿjə	100	stonmtɕʰɑ	1,000
b. ʏnəɿjə	200	ᵐbeɿjə	500
c. ʏsoɿjə	300	ᵐtɕʰələ alo	10,000
d. ᵐtɕʰələ ʏni	20,000		

For figures such as 1639, a mixture of Tibetan and local words is used as in:

- (214)    stonmtʂ<sup>h</sup>a a-lo      ɿə      ɣtɕu-ɿjə      ɣsosqa ʱgə  
             thousand NM-CL CON six-hundred    thirty    nine  
             ‘one thousand six hundred thirty-nine’

As in Qiang and rGyalrong, there are no ordinal numbers in BM rTa’u. LaPolla & Huang (2003) describe Qiang ordinal numbers as such; only ‘the most front one’ (= ‘the first one’), ‘the one after this (one)’ (= ‘the next one’), ‘the one after that’ (= ‘the third one’), and ‘the last one’ have special forms, but they do not involve the use of numbers. BM rTa’u employs a similar system to indicate ordinal positions, but some are indicated with numerals as in (215).

(215)

- |                    |                  |                  |
|--------------------|------------------|------------------|
| a. zi-sɿəɿə-te     | (most-front-DEF) | ‘the first one’  |
| b. toŋbə-te        | (first-DEF)      | ‘the first one’  |
| c. ti-ɕu/ɣtə.ɸu-te | (its-back/DEF)   | ‘the second one’ |
| d. ɣso-pa-te       | (three-NOM-DEF)  | ‘the third one’  |
| e. zɑ-pa-te        | (ten-NOM-DEF)    | ‘the tenth one’  |
| f. zi-ɕu-te        | (most-back-DEF)  | ‘the last one’   |

The BM rTa’u system is similar to that of Qiang in many ways. The difference is that in Qiang numeral + classifier can be used for ordinal numbers. However, in BM rTa’u, numeral + NOM + determiner is used for ordinal numbers apart from first,



second and last. There are two ways of expressing ‘the first one’, besides the usual system of numeral + NOM + determiner, another is ‘the most front one’.

As just described, numerals occur in postnominal position before classifiers. However, there are two logically possible scenarios where the numeral is not preceded by a noun or followed by a classifier. Scenario one: the mention of entity in the noun position is redundant in a pragmatic sense, therefore, the noun phrase only has a numeral followed by a classifier as shown below.

(216)

Q: vdzi    tɕʰəsa    a.ɲe    tə-ci  
person    how    one-CL VP-exist  
(How many ones (of) person are there)  
‘How many people are there?’

A: sɲi-ɲe    tə-ci  
seven-CL VP-exist  
(seven people are there)  
‘There are seven people.’

In the second scenario, the noun functions as its own classifier, the noun does not need to appear again before the numeral:

(217) tinu ɣlə-k<sup>h</sup>ama tə-ci

here four-household.CL VP-exist

‘There are four households here.’

Code-switching between Tibetan or Chinese and BM rTa'u is most common when conversations involve numbers, especially for time references in contemporary contexts, where BM rTa'u does not have the equivalent time unit. For example, days and weeks tend to be in Chinese and the year is counted by using the Tibetan twelve-year cycle with Tibetan terms. There is no time reference equivalent to English 'month', instead, the season is the unit indicating when and what agricultural tasks should be completed. Though Tibetan seasonal terms are often used, especially by elders in common conversations, there are only two native terms that refer to seasons; /vza/ and /ɿtso/, the equivalent of 'summer' and 'winter' in English, respectively. There is greater and more significant influence from the traditions of Buddhism than Chinese popular mainstream culture in relation to certain linguistic domains, including time reference. Rooted in Buddhist philosophy is the concept of /ts<sup>h</sup>idzɔŋ/, a Tibetan term, which locals interpret as an auspicious date when important things should be done, such as weddings, business deals, and funerals. Local monks should be consulted about what day is auspicious, and of course monks consult the Tibetan calendar.

When asked, elder women in their forties and fifties usually do not recall the birthdates of their children. However, they often narrate the birth of their children in a way similar to this: *My third child was born in winter. It was cold. It was 13 days before the New Year. So he became 2 years old already after 13 days (according to the Tibetan calendar).*

### 5.1 Numeral classifiers and quantification

BM rTa'u has a large number of numeral classifiers that only appear after a numeral or other quantifier and categorize the noun in terms of its animacy, shape, and other inherent properties (Aikhenvald 2000). Adams (1989) states that in a language with a large set of numeral classifiers, the way they are used often varies from speaker to speaker, depending on their social status and competence. It is well- reflected in the speech of children where the default classifier /=lo/ and quantification /=se/ 'full of' appear more frequently than in the speech of adults whose ability to choose the appropriate classifiers and quantifiers evidently exceeds that of children. In BM rTa'u there are cases where nouns function as classifiers. The range of semantic oppositions employed in numeral classifiers in BM RTa'u includes: animacy, shape, size, and structure. There is also a 'generic' classifier that can replace all other forms of classifier /=lo/, similar to Chinese '个' *ge*, and a 'generic' quantification form /=se/, similar to English 'full of'.

In languages, such as BM rTa'u, the numeral classifiers are not independent items. Other than autotransformers which can occur as head Ns, they occur only before a numeral and can not occur on their own. BM rTa'u also has a certain number of nouns that have independent forms and functions similar to Chinese classifiers as in §3.6.3. In BM rTa'u, numeral classifiers are obligatory, regardless of number, except when counting. However, it has to be noted that the use of classifiers denotes a precise number/amount of the referent noun, therefore, when either the precise number of referents is practically unrealistic e.g., counting of hairs, or conversationally insignificant, e.g., knowing how many birds there are in a tree, then oftentimes the classifier is replaced by the form meaning 'about, approximate' as in (218) as opposed to (219).

- (218) pəsɲə ɲcʰaɪa ɬenu vdzi stongmtɕʰa zəkə tə = ci  
 today party LOC people thousand about VP-exist  
 'Today, at the party, there are about a thousand people.'

- (219) pəsɲə ɲcʰaɪa ɬenu ŋ = i fsi = lə mbe = ɸe tə = ci  
 today party LOC I = GET know = NOM five = CL VP = exist  
 'Today, at the party, there are five people of my knowing.'

### 5.1.1 Classifiers

(1) / =lo/:

General (default) classifier can be used for any noun when one is uncertain of the specific classifier for the particular noun. Children tend to use it frequently.

- (220) jo a = lo                      q<sup>h</sup>əzu    ɣso = lo                      ɹji            mbe = lo  
house ART = CL    bowl    three = CL                      horse    five = CL  
'a house'                      'three bowls'                      'five houses'

/lo/ is also the nominal term for year, when it is used as noun for year, /mkw/ is used for its classifier as in below:

- (221) ɲa    lo    ɤa<sup>m</sup>be = mkw    to  
1PS   year   15 = CL.year    COP  
'I am 15 years old.'

(2) / =p<sup>h</sup>ɔ/:

Used for objects with a cone shape, similar to a pile, also including objects such as trees, animal faeces, and even weeds to feed animals, which is measured by bamboo buckets.

- (222)  $\chi$ seba a = p<sup>h</sup>ɔ meɣe ɣnə = phɔ  
 weed ART = CL tree two = CL  
 ‘A bucket of weeds’ ‘two trees’

(3) / = q<sup>h</sup>ʒ/

Handful - relatively long and flat objects that can be held. Generally used for knives, arrows, snakes, sashes, Tibetan prayer-beads, traditional Tibetan coral necklaces, pillars, and hair.

- (223) pəzə ɣnə = q<sup>h</sup>ʒ ʂkiʂin ɣnə = q<sup>h</sup>ʒ  
 knife two = CL necklace two = CL  
 ‘two knives’ ‘two necklaces’

(4) / = ɿtsu/

A Tibetan loanword used for story or layer. It also can be used as a verb to mean the action of building something in layers.

- (224) teŋə ɣɑ<sup>m</sup>be = ɿtsu tɕ<sup>h</sup>a tə-ci  
 they fifteen = CL LOC DIR-exist  
 ‘They are on the fifteenth floor.’

(5) / = ʁe /

Used for humans.

- (225)    ɲaɲə            vdzi            ʏtɕʷ = ʁe            ci  
          our family    people        six = CL            exist  
          ‘Our family has six people.’

(6) / = ɭba /

Used for flat objects; leaves, planks, papers, and cards; similar to English    ‘slice’.

- (226)    ɲa = ki            tɕətə            a = ɭba            tə = fkoŋ  
          1ps = DAT    book        one = CL            IMP.DIR = FUR.give  
          ‘Give me a piece of paper.’

(7) / = pa /

Used for steps.

- (227)    kəɭo    ʏso = pa            kə-ɭe            k<sup>h</sup>e            pəpa            kə            tə = ci  
          DIR    three = CL    IMP.DIR-come    COND        insect ART        DIR = exist  
          ‘Come towards here three steps and there is an insect.’

### 5.1.2 Measure words/massifiers

#### (1) / =se/

General measure word meaning ‘full of’. It could be, for example, a houseful of something. When / =se/ is used, the head noun is obligatory.

- (228) q<sup>h</sup>ana jo a = se tə = ɕi  
child house one-CL DIR = exist  
‘There is a houseful of children.’

#### (2) / =ɿ/

Similar to English ‘time’.

- (229) ŋa ɬasa ɣnə = ɿ ə-ɕaŋ zda  
I Lhasa two = CL DIR-go PERF  
‘I have been to Lhasa two times.’

#### (3) / =ɿdo/

Used for groups of animates, either human or non-human. When used with the quantifier /a =/ it expresses a large quantity.



- (230) təndo      q<sup>h</sup>ana    a = ɿdo      tə-ci  
                  his family child    ART = CL    VP-exist  
                  ‘There are lots of children in his family.’

(4) / = ʊskɜ/

Measure word using palm, one /ʊskɜ/ ‘one palmful of’, as in below:

- (231) ydzo      a = ʊskɜ    tə = zo      nə = ɬe  
                  tsampa    one = CL    DIR = bring    DIR = COM.IMP  
                  ‘Bring a palmful of *tsampa* here’. (lit. *tsampa* a palmful bring here.)

- (1) / = c<sup>h</sup>a/      Pair of something  
 (2) / = dzɯ /    Row of something  
 (3) / = po/      Bag of something (< Chinese bāo)  
 (4) / = ɿzi/      Bamboo bucket of something

### 5.1.3 Nouns used as classifiers

There are certain nouns that can be used as classifiers. The difference from other classifiers is their ability to occur as nouns and having the syntactic properties of any other regular noun, however, the grammatical behaviour of words of the two types is largely identical.

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(232) Nouns as classifiers

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a. q <sup>h</sup> u	bowl	a = q <sup>h</sup> u	a bowl of
b. γdo	water bucket	a = γdo	a water bucket of
c. γor	a back load	a = γor	a back load of
d. baška	bundle	a = baška	a bundle of
e. skəlo	leather made rope	a = skəlo	a rope length of

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5.1.4 Verbal action classifiers

Verbal action classifiers precede the verbs they modify and are derived from the verbs themselves.

(233)

- a. a-ce ‘one hit’
- b. a-štso ‘one kick’
- c. a-šce ‘one bite’
- d. a-škui ‘one push’
- e. a-štə ‘one hit by head’
- f. a-zʒ ‘one stab’
- g. a-po ‘one gunshot’
- h. a-tʃətʃe ‘one pull’

- i. a-ʂe 'one scratch'
- j. a-ʋtɕɜ 'one squeeze'
- k. a-ʋɕɜ 'one flogging'

/a-/ can be replaced by any other numeral, as in /ɣnə = ce/ 'two hits', /ɣso = ce/ 'three hits', /za = ce/ 'ten hits'. When this type of verb/classifier is used as a classifier, the verb slot is always occupied by the verb /<sup>n</sup>c<sup>h</sup>u/ meaning 'to do' as in examples below.

- (234) k<sup>h</sup>u-k      tə = ʋa      ɣnə = ʂe      tə = <sup>n</sup>c<sup>h</sup>u  
 dog-ERG      3SG = EXPER      two = bite      DIR:PST = do  
 'The dog bit him two times.'

- (235) tu-k      tə = ʋa      a = ʂtso      tə = <sup>n</sup>c<sup>h</sup>u  
 3SG-ERG      3SG = EXPER      one = kick      DIR:PST = do  
 'He kicked him once.'

## 6 Noun phrase

This chapter provides an overview of the noun phrase structure. The following table provides a list of common constructions.

**Table 34: Noun phrase construction**

Element	construction	reference
Bare noun	N	
Noun with adjectives	N + ADJ  N + ADJ + ART  N + ADJ + DET  N + ADJ + NUM + CL  N + ADJ + NUM + CL + DET  N + ADJ + DET + NUM + CL	
Possessive phrase	N + POSS	
Nominalized clause	V + NMLZ	

These noun phrase constructions are exemplified as following:

(236)

- a    tɕətə  
      book  
      ‘book’

b tɕətə suksuuk ɣnə-lo  
 book new two-CL  
 ‘two new books’

c tɕətə suksuuk ɣnə-lo fl̥ʒe-sə-nə  
 book new two-CL arrived-TAM-PL  
 ‘the newly-arrived books’

d tɕətə suksuuk ɣnə-lo fl̥ʒe-sə-nə-i ʂpa  
 book new two-CL arrive-TAM-PL-POSS cover  
 ‘cover of the two new books that arrived’

e tɕətə suksuuk ɣnə-lo fl̥ʒe-sə-nə-i ʂpa-te  
 book new two-CL arrive-TAM-PL-POSS cover-DER  
 ‘the covers of the two new books that arrived’

f tɕətə suksuuk ɣnə-lo fl̥ʒe-sə-nə-i ʂpa ɣni te  
 book new two-CL arrive-TAM-PL-POSS cover two DET  
 ‘the two front covers of the two new books that arrived’

g   tɕətə   suksuuk   ɣnə-lo   fɿe-sə-nə-te-i         spa   ɣni   te  
 book   new   two-CL   arrive-TAM-PL-DET-POSS   cover   two   DET  
 ‘the two front covers of the two new books that arrived’

From these examples, it can be concluded that: a) additional elements are normally added rightward of the noun; b) complex noun phrases can be built by embedding other phrases.

### 6.1 Bare noun

The bare noun can constitute a noun phrase, as is shown in (237):

(237)

a   ŋa   tɕətə   ɯuk   to  
 1PS   book   teach   COP  
 ‘I teach books.’

b   ts<sup>h</sup>e   ɿa = tɕ<sup>h</sup>a         tə = ɟi  
 goat   mountain   cliff = LOC   DIR = EXIST  
 ‘Goat is on mountain cliff.’

## 6.2 Noun with adjectives (*N + ADJ*)

A noun can occur with an attributive adjective and can be optionally marked for definiteness. Attributive adjectives follow the noun; an attributive adjective is part of a nominal where as a predicative adjective takes sentence-final TA markers, as in (238) below.

(238)

- a    *te*    *vdzi*    *ke = scəme = kə*    *to*  
3PS   person   PRF = happy = ART   COP:EVI  
“He is a happy person.”

- b    *te*    *vdzi*    *ke = cə = me = t-wk*    *tə = ntɕəm*  
3PS   person   PRF = happy = AGT = 3PS-ERG   DIR:PST = dance  
“The happy person danced.”

- c    *ɕi*    *haji*   *ɲe.ɲə*   *to*  
field/crops   still   green   COP:EVI  
“The crops are still green.”

- d    *ɕi*    *ɲe.ɲə = te*    *ɕu*    *nə = k<sup>h</sup>e*  
field/crop   Green = DET   later   DIR:IMPR = cut

“Cut the green crops later.”

Nouns can be followed by more than one attributive adjective without any linking particles in between, as shown in 0 below:

- (239) jo      ke-c<sup>h</sup>e      ke-ɪdzɯk-kə  
house PRF-big PRF-beautiful-ART  
“A big and beautiful house.”

There is another type of noun-adjective construction linked by the instrumental marker /k<sup>h</sup>a/, which is addressed in (3.11.6). In this construction, the adjective precedes the noun and the instrumental marker is cliticized to the adjective as demonstrated in examples 0 below.

(240)

- |   |                                 |           |   |                               |           |
|---|---------------------------------|-----------|---|-------------------------------|-----------|
| a | nana-k <sup>h</sup> a           | tsəkə-te  | b | nana-k <sup>h</sup> a         | tsəkə-kə  |
|   | red-INS                         | cloth-DET |   | red-INS                       | cloth-ART |
|   | ‘The red cloth’                 |           |   | ‘A red cloth’                 |           |
|   | ‘The cloth coloured by red dye’ |           |   | ‘A cloth coloured by red dye’ |           |



The type of adjective/stative verb that may occur in this position is not limited by their semantics. Practically all adjectives can occur in this position marked by the instrumental marker.

### 6.3 Noun, adjective, numeral and classifier (*N + ADJ + NUM + CL*)

A common type of noun phrase has a head noun, an adjective and a numeral which is always accompanied by a classifier. The attributive adjective always immediately follows the head noun. This is illustrated in the examples in (241).

(241)

a   puɰkɰcja   ke-ji-me       ɣso-q<sup>həʔ</sup>  
      stick     PRF-long-SUF   three-CL  
      ‘Three long sticks’

b   zaqo       ke-c<sup>h</sup>e-me     ɣso-se  
      bamboo basket   PRF-full-SUF   three-CL  
      ‘Three full bamboo-baskets’

### 6.4 Noun, adjective, numeral, classifier and determiner

The last type of noun phrase to address here is the (*N + ADJ + NUM + CL + DET*) type which is the full expression of possible features of the noun phrase. The

determiner can also be moved after the adjective as (N + ADJ + DET + NUM + CL) which can result in a slight semantic change.

(242)

a ɿgə.me ke-ʋoŋ-me

stone PRF-beautiful-SUF

‘beautiful stone’

b ɿgə.me ke-ʋoŋ-me ɣso-lo

stone PRF-beautiful-SUF three-CL

‘three beautiful stones’

c ɿgə.me ke-ʋoŋ-me ɣso-lo-te

stone PRF-beautiful-SUF three-CL-DET

‘the three beautiful stones’

d ɿgə.me ke-ʋoŋ-me-te ɣso-lo

stone PRF-beautiful-SUF-DET three-CL

‘the three beautiful stones’

### 6.5 Possessive phrase

The possessive marker is preceded by nouns and pronouns with their respective specifiers such as determiners, classifiers and numerals. (243) provides possessive structures with a variety of noun phrase structures.

(243)

a jo-te-ji

house-DET-POSS

‘of the house’

b jo        ysukysuk-te-ji

house new-DET-POSS

‘of the new house’

c jo        ysukysuk    yni-te-ji

house new            two-DET-POSS

‘of the two new house’

## 7 Verbs

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### *7.1 Introduction*

In this chapter I will discuss the lexical class of verbs which constitute the other major word class of BM rTa'u. This topic has attracted great attention among scholars of rGyalrong (Qu 1983, Nagano 1984, Lín 1993, Gong 2014, Jacques 2004, 2010, 2012, Sun 2000a, 2000b, 2004, Sun & Tian 2013, Prins 2011). The same holds true for rTa'u as well (多尔吉 Duo'erji 1998, Huang 1991, Sun 2007, Jacques 2014.). Morphologically, the verb in BM rTa'u can be defined as an element that can take the directional prefixes and the negative prefix. Adjectives can also take the directional and negative prefixes and are thus a subclass of verbs. The BM rTa'u verb can be defined additionally based on lexical semantics as denoting activities, processes, and states.

Main verb, adverb, adjective, existential verb and copula verb all belong to the category of verb in that they share common behavioral features in respect of tense-aspect marking.

A verb includes a verb stem plus inflectional morphology. The stem is the morpheme that contains the lexical information of the verb. The majority of verbs in BM rTa'u

are monomorphemic and obligatorily inflected for direction/tense prefixes in sentences. In citation, often times, directionals are perceived by native speakers as part of the verb. Derivational morphology has rather limited functionality in BM rTa'u, but unlike rGyalrong (Prins 2011), verbs in BM rTa'u can be derived from nouns by the suffix /=və/. Nouns can be formed by nominalizing verbs using various productive procedures discussed in Chapter 3. Most verbs of rTa'u can be either transitive or intransitive. With only a few exceptions e.g. the imperative, the verb root can never appear 'bare' in uninflected form, while heading a predicate.

Sun (2003a) asserts that reduplication, or iteration of some part of the phonological materials of a root, is a prevalent morphological process in rGyalrong, however, as will be shown in this chapter, reduplication appears to have rather limited functionality in BM rTa'u verb morphology, other than with stative verb/adjectives.

I divide verbs into four types: intransitive verbs (§7.2.1), transitive verbs (§7.2.1), ditransitive verb (§7.2.3), and causative verbs (§7.2.4).

## *7.2 Main verb category*

From a macro-view, these different types of verbs can be divided into main verb and other auxiliary verbs. The main verbs are those verbs which can be further

divided into sub-categories, namely transitive, monotransitive, ambitransitive and ditransitive.

Basic verbs appear to be monosyllabic, however, even when conducting isolated elicitation, verbs are often accompanied by verbal affixes; e.g. directional prefixes. The main verbs are lexemes that depict actual action or manners of action. Following are some examples of common verbs.

**Table 35: Monosyllabic verbs**

Word	meaning	word	meaning
ɪgə	sleep	ptʂə	wake up
tsə	eat	t <sup>h</sup> i	drink
li	work	vdo	see
zo	carry	sto	put
kə	wear	t <sup>h</sup> e	take off
mɿə	exchange	k <sup>h</sup> o	give

In the following, main verb sub-categories are discussed separately.

### 7.2.1 Intransitive

In the intransitive conjugation, the second and third person (singular and plural) forms are in the bare stem, while first person (singular and plural) forms have multiple vowel alternations as exemplified below in (244) which can be summarized in Table 36. Six classes of alternations are found in verbs with open syllables; class 6 includes verbs without alternation, and class 7 contains verbs with irregular forms, (in my data there are only two verbs that belong this class: /ʒe/ ‘to come/arrive’ and /ɕə/ ‘to go’).

**Table 36: Vowel alternations in open-syllabic intransitive verbs in rTa’u**

Meaning	sit on	be ill	to sleep	to vomit	get up	to bend down	go	come
1	<sup>n</sup> tsu o→u	saŋ s,ʒ,e,o→ŋ	ɿguuk ə→uuk	p <sup>h</sup> juuk i→juuk	ɿvəʊ e, a→əʊ	kuuk	ɕaŋ	
2/3	<sup>n</sup> tso	se	ɿgə	p <sup>h</sup> i	ɿve	kuuk	ɿja ɕə	ʒe

The following are some examples.

(244)

a            o → u (2/3 → 1)

gloss	2/3 form	1 form
‘to sit’	<sup>n</sup> tso	<sup>n</sup> tsu
to put down	sto	tə-stu
to move	spo	tə-spu
to give	k <sup>h</sup> o	tə-k <sup>h</sup> u
to swallow	m̥o	tə-m̥u
to kick	ʂtso	tə-ʂtsu

b            e,ɜ̌,i → -ŋ

‘to fall’	tsɜ̌	tsaŋ
‘to be’	ci	caŋ
‘to die’	se	saŋ
‘to laugh’	<sup>N</sup> q <sup>h</sup> e	<sup>N</sup> q <sup>h</sup> aŋ
‘be ill’	ŋo	ŋoŋ

c            ə → ʉk

‘to sleep’	ɿgə	ɿguʉk
‘to wake up’	ptɕə	ptɕʉk
‘to jump’	<sup>n</sup> t <sup>h</sup> ə	<sup>n</sup> t <sup>h</sup> ʉk



d      i → ju:k

‘to vomit’      p<sup>h</sup>i                      p<sup>h</sup>ju:k

e      e → əv

‘to get up’      ɹve                      ɹvəv

‘to slide’      ɸzəŋe                      ɸzəŋəv

‘to move’      m<sup>h</sup>bəɸe                      m<sup>h</sup>bəɸəv

‘to swim’      ptɸa                      ptɸəv

f      irregular      bare stem      2/3      1

‘to go’      ɸə                      ɹja      ɸaŋ

‘to arrive’      ɹe                      ɹi      ɹaŋ

g      same form                      1/2/3 forms

‘to bend down’                      ku:k

‘to dismount’                      pəv

‘be hot’                      c<sup>h</sup>u:k

The single overt argument of an intransitive verb can perform, at least, two different semantic roles; the actor or undergoer (including experiencer) as shown in examples

below. The verb may be preceded by locative and temporal nominals. Single direct arguments of intransitive verbs that are volitional can be marked for agentive as exemplified in (245) and (246). And, when in first person, the verb may receive optional agentive marking, as in (245).

Agentive:

(245)

a     $\eta a$      $t\theta = \text{ɪg-wk}$

I       PST:DIR = sleep-AGT

‘I slept.’

b     $\eta a$          $s\eta a = t\phi^h\theta$                        $t\theta = v-\theta\theta$

1PS       early = ADV                      PST:DIR = get up-1Ps

‘I got up early.’

(246)

a     $t-wk$      $t\theta = {}^n tso$

3S-AGT DIR = sit

‘He sat.’

b     $t-wk$      $t\theta = pt\phi a$

3S-AGT DIR = swim

‘He swam.’

c    k<sup>h</sup>-uɬk       tə = ptɕa       tɕ<sup>h</sup>ə       ə = ɻja

dog-AGT    DIR = swim    CONJ    PST:DIR = go

‘The dog swam and went away.’

Non-agentive:

(247)

a       te                    tə = se

S/he/3S       PST = die

‘It    died.’

b       mə       kə = ni

night    PST = dark

‘Night became dark.’

c       puɬkyja    tə = χi

stick       PST = break

‘The stick broke.’

### 7.2.2 Transitive

Verbs in BM rTa'u can be classified into intransitive, transitive, and ditransitive verbs by reference to the number of arguments the verb takes. There is no formal grammatical marking of transitivity in BM rTa'u, although many transitive verbs, derived from intransitive verbs, are marked with the valency-increasing causative prefix /f/ or /s/ as discussed in (§7.2.4). Person is expressed by way of suffix to the verb root. There are significant morphological differences in agreement between transitive and intransitive verbs, although both transitive and intransitive verb stems share a similar phonological shape. In general, transitive verbs take two core arguments with an actor carrying out an action which in turn causes something to occur to an undergoer. Transitive verbs are obligatorily marked for first and third persons, as illustrated in (248) below.

#### (248) Transitive subjects

- a    ɲa    pəpa    kə    tə = s-əu  
I      insect    ART    DIR:PST = kill-1S  
'I killed an insect.'
- b    ni    pəpa    kə    tə = f-se  
you   insect    ART    DIR:PST = TRA-kill  
'You killed an insect.'

c t-wk pəpa kə tə = f-se  
 3PS-ERG insect ART PST:DIR = TRA-kill  
 ‘He killed an insect.’

As shown in (248) and (248), the first person agent of a transitive verb is marked on the verb by means of a suffix, whereas second person agent in transitive clauses is unmarked. A third person transitive agent is marked for agentive but unmarked on the verb as in (248).

Monotransitive verbs taking two arguments are most common. Examples of monotransitive verbs are shown in Table 37 below:

**Table 37: Monotransitive verb**

Word	meaning	word	meaning
tsə	eat	scu	read
t <sup>hi</sup>	drink	kə	wear
ɿbi	wash	<sup>N</sup> qora	dig

These mono-transitive verbs are exemplified below:

(249)    ŋa     va       pce.ne    ʔg-ʉk  
           1PS   pig       meat       eat = AGT  
           ‘I eat pork.’

(250)   t-ʉk               tsəkə       ɬi  
           3PS = AGT       clothes       wash  
           ‘He washes clothes’

### 7.2.3 Ditransitive

Ditransitives are verbs (Table 38) that take a subject (S), direct object or first object (O1), and indirect object or second object (O2). Semantically, these trivalent verbs are endowed with the semantic roles of agent, patient and recipient/beneficiary.

Table 38 provides a list of some ditransitive verbs, though they can all be used with just one object.

**Table 38: Ditransitive verbs**

Word	meaning	word	meaning
k <sup>h</sup> o	give	sŋi	lend
ɬu	pour	ʒi	teach
sti	feed		

The core structure of a diransitive verb is S–O<sub>1</sub>–O<sub>2</sub>–V, i.e., the subject followed by the first object, second object and lastly the verb. The first object is obligatorily marked for recipient/beneficiary. Following are some examples:

(251) a     $\eta$ a        te = ki            tɕətə        k<sup>h</sup>o  
                  1PS    3PS = RECP    book        give  
                  ‘I give him book.’

                 b    ni        q<sup>h</sup>ana = ki        tɕa        sti  
                  2PS    child = RECP    food    feed  
                  ‘You feed the child food.’

#### 7.2.4 Causative

The causative verbs which are derived from transitive verbs are ditransitive. They are discussed separately due to the fact that they have undergone phonological and semantic changes. Indeed, within the category of main verbs, causative verbs are the only subcategory that have distinguishing morphological features. A causative verb is a verb that denotes an action which is caused to a patient by another agent. This causative verb usually has a counterpart version specifying that the action is not caused by others. This is a widely observed phenomenon across Sino-Tibetan languages (Matisoff 2003: 89-92; LaPolla 2017, 40-41).

**Table 39: Causative verbs**

Active	causative	meaning
kə	zgə	wear
pe	zbe	wet
ɪgə	zgə	sleep
k <sup>h</sup> o	fko	give
t <sup>h</sup> i	sti	smoke
zəla	fsəla	fall
tɕə	ftɕə	melt
se	fse	kill
ʒuuk	fɕuuk	collaps
ɸsi	fsi	light
si	fsi	recognize

The most salient phonological process of forming causative verbs is prefixation; it appears that most of the causative verbs in the table above are clearly derived by prefixes /f/ and /s/, each with multiple allophonic variation conditioned by the initial consonant of the verbal roots. There is also a process of changing the voicing or aspiration of the stem. Initial consonant which applies in many stems, and replacing any prefixed consonant. Causative verb forms are further discussed in section 7.3.2.



### 7.3 Derivation

Verbs display rather simple morphological structure. One noticeable feature is the class of directional prefixes which may occur before any verb, regardless of verb type. Some verb roots are marked for person agreement which is then followed by case and TAM markers. Therefore, in theory a maximally complex verb form can contain up to five distinct morphemes since BM rTa'u marks aspect which is distinct from the tense marker. It uses a very limited number of derivational mechanisms. First, there is the derivational verbalizing suffix /-və/. Second, there is a derivational system viz. the transitivizing prefix /f-/, a mechanism that is still productive in contemporary BM rTa'u.

The following subsections discuss the distribution and function of the aforementioned derivational mechanisms. In (§7.3.1) I will describe the verbalizing suffix /-və/ and in (§7.3.2) I will discuss the causativizing prefix /f-/.

#### 7.3.1 Verbalizing suffix /-və/ and other compounds

The verbalizing suffix /-və/ derives verb stems from nominal roots. The suffix /-və/ itself is a lexical verb meaning 'to do' as in /tɕəkə və=sə=ci/ [what do=IMPF=EXIST?] 'What are (you) doing?' This morpheme is still commonly used as a verb root in daily conversation. The following examples illustrate the application of verbalizing suffix.

(252) Verbs exhibiting the verbalizing suffix /-və/

- |    |            |                     |         |               |
|----|------------|---------------------|---------|---------------|
| a. | tʃi = və   | ‘to discuss’        | < tʃi   | ‘discussion’  |
| b. | ʁe = və    | ‘to close the door’ | < ʁe    | ‘door’        |
| c. | ʃkə = və   | ‘to steal’          | < ʃkə   | ‘theft’       |
| d. | ɲcʰəm = və | ‘to dance’          | < ɲcʰəm | ‘performance’ |
| e. | ʁe = və    | ‘to close door’     | < ʁe    | ‘door’        |
| f. | ʁo = və    | ‘to help’           | < ʁo    | ‘help’        |

As the examples above illustrate, the derived verb stem can be intransitive or transitive. The semantic content of the derived verb stem can often be predicted from the underlying noun. The underlying noun can be from various semantic domains. The examples above show nominals that denote objects, such as door and the suffixation of / = və/ to this nominal root indicates the action of closing the door. Similarly, it can be suffixed to other objects with a physical feature that can be either opened or closed, meaning to close the object.

The fact that directionals and TAM markers are marked not on the derived verb stem but instead solely marked on the suffix / = və/ begs the question of their verbhood, whether they are really derived verbs and function as verbs. The treatment of [noun + və] as a derived verb is based primarily on native speakers’ intuition. When cited, they also appear in the form of [noun + v ]. There is no other

means of distinguishing between the form [ʁe = və] in the following sentences; they can be either a verbal root as in (253) or a verbal clause as in (253), but which, similar to verbs, is nominalized.

- (253) a ʁe-və = lə                      te      tə = ti = ɹmə  
           door-close = NOM TOP DIR:IMP = NEG = forget  
           ‘Do not forget to close the door.’

- b ʁe = və                      nə = ɕa-ŋ                      so  
           door = close      DIR:PST = go-1<sup>ST</sup>      COP  
           ‘I went to close the door.’

### 7.3.2 Causativizing prefix /f/

The other productive derivational prefix has the phonological form /f/, which I refer to as the causativizing prefix. Causativization is a process by which intransitive verbs are made transitive, marked by the prefix /f/. Verbs are clearly distinguished (even in citation) by their morphology. In essence, the prefixation of /f/ to verb stem creates a new but semantically related verb, as in (254) below.

(254)

a. 'to kill'	fse < se	'to die'
b. 'to be picked up by sb'	fço < ço	'to collect'
c. 'to knock sb down'	fsəla < zəla	'fall down'
d. 'to give'	fko < k <sup>h</sup> o	'to give'
e. 'to recognize sb'	fsi < si	'to recognize'
f. 'to give food'	sti < t <sup>h</sup> i	'to have food'

The examples in (254) illustrate a simple case of prefixiation of /f-/ to verbal roots. It causes the immediate initial consonant of the verbal root to change in voicing to comply with voicing harmony principles as in (254), for instance, the regular intransitive verb /zəla/ 'to fall down', becomes /fsə.la/ 'to knock sb down/over', instead of /\*vzə.la/. Examples (254), d and e provide further insight into the phonological alternation of transitivizing process: an aspirated verbal root with a non-alveolar stop initial becomes unaspirated when preceded by causative /f-/, as in (254).

All the examples given in the left column in (254) marked as transitive verb only occur in second and third person as illustrated in examples below for the verb /se/ 'to kill'.

(255)

a    ɲa    pəpa    kə    tə = s-əu

1<sup>st</sup>    insect    ART    DIR:PST = kill-1<sup>st</sup>:EVI:

‘I killed an insect.’

b    t-wuk            pəpa    kə    tə = f-se

3PS-ERG    insect    ART    PST:DIR = 3PS-kill

‘He killed an insect.’

There is a small number of transitive verbs with /s-/ or /z-/ prefix given in (256) which remain the same in terms of phonological shape for all persons. This raises a question of whether there are ‘true’ and ‘half’ transitive verbs in the sense that some derived transitive verbs are not subject to change conditioned by person agreement, while other derived transitive verbs occur only in second or third person agentive constructions.

(256)

a. ‘to wet sth’            zbe    <    pe    ‘to get wet’

b. ‘to put sb in bed’    zgə    <    ɪgə    ‘to sleep’

c. ‘to dress’            zgə    <    kə    ‘to wear’

d. ‘to feed’            sti    <    t<sup>h</sup>i    ‘to eat’

Illustrating examples are given below:

(257)

a     $\eta a$      $q^h ana$      $te$              $zgə$              $nə = \zeta a-\eta$   
1PS    child    ART            put to bed    DIR:PST = go-1<sup>st</sup>  
‘I went to put the child in bed.’

b     $\eta a$      $\text{ɪ}gə$              $nə = \zeta a-\eta$   
I        sleep    DIR:PST = go-1<sup>st</sup>  
‘I went to sleep’

c     $t-\text{u}k$              $q^h ana$              $zgə$              $nə = \text{ɪ}ja$   
3<sup>rd</sup>-ERG    child            put to bed    DIR:PST = go  
‘He went to put the child to bed.’

d     $t-\text{u}k$              $\text{ɪ}gə$              $nə = \text{ɪ}ja$   
3PS-ERG    sleep    DIR:PST = go  
‘He went to bed.’

Example (257) show that the transitive verb / $zgə$ / ‘to put sb in bed’ does not undergo morphological change when occurring in constructions with first and third

persons. The same rule applies to the transitive verb /zbe/. What is interesting about these two transitive verbs is the fact that the initial consonants of the verb roots are voiced consonants, and it can therefore be deduced through voicing harmony rules that the underlying transitive marker may be [s-]. There are examples of such transitive verbs, as given in (258) below:

- (258)      ‘to plow up sth’          sca    < pca    ‘to explode’  
                  ‘to threaten a horse’    ʂtʂɔ    < ʰdzɔ    ‘to get threatened’

The verbs in the left column are transitive verbs that are marked by the presence of [s-] which has the phonological variant [ʂ] when preceding retroflex affricates.

In conclusion, there are two causative/transitive suffixes /f-/ and /s-/ and each has multiple allophonic variation conditioned by the initial consonants of the verbal roots. Often seen are their voiced counterparts [v] and [z], respectively.

#### 7.3.2.1 *Directionals*

There is a set of verbal prefixes whose primary semantic function is to mark the direction of the action, as in most rGyalrongic and Qiangic languages. Four different directions are marked, with each having two different morphological forms. The topological reference point of these directional prefixes can be best understood in

relation to features of local geography. The BM direction marking system is similar to that of the Mawo dialect of Qiang (Sun 1981a, 1981b) system in that it uses two different forms referring to action towards a particular location and action at a particular location. There is also a separate form for backward motion, as is reported for some other Qiangic languages.

As can be seen from Table 40, there are two forms for each directional prefix with distinctive morphological properties. The first type has the morphological structure of [a + directional stem + ta], which is used to mark a motion/event at a particular location. The suffix /=ta/ surfaces in different forms due to phonological assimilation. The alternative [directional stem + ɿo] is used in BM directional verbs marked by the presence of suffix /=ɿo/ is used primarily to mark a motion/action towards a particular direction.

The following table summarizes all the directional markers.

**Table 40: Directionals in BM rTa'u**

Motion towards a location		At a location
kə-ɿo	Upriver	[a-kə-ta]
ɣə-ɿo	Downriver	[a-ɣə-ɣda]
nə-ɿo	Lower altitude	[a- <sup>n</sup> da]
ə-ɿo	Higher altitude	[a-da]



As described in (§1.3.1), rTa'u-speaking communities are scattered along the Xianshui River valley. High mountains are on both sides of the valley, which runs from west to east. The directionals inherently take the Xianshui River as an independent topological reference point. Thus, the location or direction west towards the source of a river is commonly referred to as /akəta/ or /kə.ɯo/, as verbal demonstrative. Thus in (259), the use of directional /kə = / indicates that Bragmgo County town seat is located in the direction of the source of Xianshui river from where the speaker is located at the moment of speaking. The opposite direction is marked by /ɣə = /, from /aɣəta/ or /ɣəro/, which indicates the direction towards which the Xianshui River flows. Thus, the use of /aɣəta/ indicates that the referent is located in an eastern direction—the direction where the Xianshui River flows from the point where the speaker is at the moment of speech.

(259)  $\lambda a \vee b$

$$k\theta = \zeta a - \eta$$

Brag mgo county town seat    DIR= go=1<sup>SG</sup>

'I went to Bragmgo town seat.'

There are two more directional prefixes which are distinguished primarily on altitudinal differences: /ada/ or /ə=ɪo/ and /a<sup>n</sup>da/ or /nə=ɪo/. /ada/ and /ə=ɪo/ indicate upward at or towards a higher place or altitude, and /a<sup>n</sup>da/ and /nə=ɪo/ indicates downwards at or towards a lower place or lower altitude.

The two forms differ primarily in meaning. The type [a + stem + a] indicates location in a particular direction in space, as discussed in (§4.3), as in (260) and (262), whilst the type [stem + ɿo] indicates the pointing element or action away; as in (263). (261) is ungrammatical because /kə = ɿo/ always implies motion, not location.

(260) te      akəta      tə = ci

3<sup>SG</sup>      DIR      PST = EXIS

‘He was there (at a particular point in location towards the source of XS river from where the speaker is.).’

(261) \*te      kəɿo      tə = ci

(262) te                      akəta      kə = ɿja

3<sup>SG</sup>                      DIR      PST:DIR = go

‘He went there (to a particular location towards the source of XS river ).’

(263) te      kəɿo      kə = ɿja

3<sup>SG</sup>      DIR      PST:DIR = go

‘He went towards the source of the XS river.’

In example (260), /akəta/ is used as locative adverbial to indicate location of the referent ‘he’ or the action of ‘going’ as in (262) as where it occurs in space from the perspective of the speech-act-participants at the moment of speech and the independent topological reference point XS river. However, /kəɬo/ as in (261) cannot be used in a similar manner since it indicates motion and the verb ‘exist’ in BM does not indicate motion. Their difference is best illustrated in sentences (262) and (263) where they occur in otherwise identical sentences but have different meanings; sentences (262) means he went there, indicating a specific location (often accompanied by pointing gesture) and (263) means he went towards the source of the Xianshui River.

As is shown above, both forms may be used, even in the same sentence, when appropriate from pragmatic factors. Furthermore, BM also obligatorily requires verbs to be marked by directional prefixes. There are eight forms, but BM only distinguishes four directions therefore, in principle, any particular verb can only take four prefixes.

ɕə ‘go’		ɬgə ‘sleep’	
kəɕə	‘go upriver’	kəɬgə	‘sleep upriver’
ɣəɕə	‘go downriver’	ɣəɬgə	‘sleep downriver’
əɕə	‘go up’	əɬgə	‘sleep in upper place’

nəɕə	‘go down’	nəɪgə	‘sleep in lower place’
scu	‘look’	ɭe	‘come’
kəscu	‘look upriver’	kəɭe	‘come upriver’
ɣəscu	‘look downriver’	ɣɭe	‘come downriver’
əscu	‘look up’	əɭe	‘come up’
nəscu	‘look down’	nəɭe	‘come down’

However, not all verbs can take all four directional prefixes. For instance, /<sup>n</sup>ts<sup>h</sup>ə/ ‘to think’ does not take any directional prefix at all. /<sup>n</sup>gə/ ‘to eat’ can only take two. The restriction appears to be lexicosemantic, where verbs that denote real world actions or events with movement in space are more likely to be prefixed by directional markers.

The imperative test discussed below shows that some verbs that are not always prefixed by directional prefixes actually may sometimes have a directional prefix. For instance, the verb /<sup>n</sup>go/ ‘to carry on the back’ in non-imperative sentences is prefixed by /tə = / as in *tə = <sup>n</sup>go* ‘PST = carry’ in past tense constructions and is not prefixed at all in non-past constructions. But in imperative, it can take the directional prefix /ə = / ‘towards higher altitude’, as in *ə = <sup>n</sup>go* ‘DIR:IMPR = carry’ ‘Carry it up!’. This shows that despite the fact that /<sup>n</sup>go/ rarely occurs in a sentence

with the prefix /ə=/, it can be prefixed by /ə=/. This is semantically plausible, as something is lifted off the ground towards the back of someone, which is higher in altitude than the ground.

The grammatical system of directionality is complex, as its functions are not limited to verbal direction but also relate to tense (§7.9.1). Therefore, there are cases where a verb cannot take a directional prefix otherwise, but receives one of the directional prefixes in past tense, as in /ɲuuk/ ‘dream’, which takes the prefix /nə=/ as in /nə=ɲuuk/ ‘PST=dream’. However, at this stage, it is hard to speculate on the issues of compatibility of a particular directional prefix and a particular verb when their combination is not clearly motivated by verbal semantics.

Overall, verbal directional prefixes denote four directions. Further examples reveal there can be more specifications depending on the semantics of the action/event indicated by the verb; thus, the directional prefixes can be assigned a secondary directional value as shown in Table 41 below.

The verbs in the following table can only take one particular directional prefix. This seems to suggest that /ɣə=/ has another directional value referring to actions/movement outward and /kə=/ refers to movement inward toward the centre.

**Table 41: Secondary directional values of directional prefixes**

Gloss		Directional prefix	
ɿbʉk	‘to blossom’	ʉə = ɿbʉk	ʉə < stretch out
c <sup>h</sup> e	‘to gain weight’	ʉə = c <sup>h</sup> e	ʉə < stretch out
t <sup>h</sup> e	‘to take off’	ʉə = t <sup>h</sup> e	ʉə < stretch out
ta	‘to age’	kə = ta	kə < stretch in
ptɕa	‘to make dumplings’	kə = ptɕa	kə < stretch in
ɕcəla	‘to tie ’	kə = ɕcəla	kə < stretch in

Unlike typical prefixed verbs in which the directional prefix reflects the direction of the action, in other cases there needs to be some semantic homogeneity between the verb and the directional prefix that allows a plausible combination of the two to have meaning, e.g., /<sup>n</sup>ts<sup>h</sup>ə/ ‘to think’; since the action of thinking is an internal and abstract process without physical movement in space it is not immediately plausible to have any directional prefixes to indicate the action of thinking. /<sup>n</sup>ts<sup>h</sup>ə/ is not preceded by directionals and in past-tense constructions it takes the default past-tense marker /tə = /, instead of any other directional prefix.

Following are examples of verbs that take a specific directional prefix without clear semantic motivation. These are in imperative forms; past tense is also marked by the same prefix.

**Table 42: The arbitrariness of directional prefixes**

Verb	Gloss	IMPR. prefix
ɣtse	‘to boil’	kə = ɣtse
ŋo	‘to be sick’	nə = ŋo
<sup>n</sup> c <sup>h</sup> u	‘hit’	ə = <sup>n</sup> c <sup>h</sup> u
ptɕa	‘to swim’	kə = ptɕa
ɲəqɯk	‘to knee’	kə = ɲəqɯk

These examples demonstrate some lexical restrictions on the combination of verb stem with directional prefixes. In the following, I will look at cases where the directional prefix may be conditioned by sentential semantics.

The verb /<sup>n</sup>c<sup>h</sup>u/ ‘to hit’ occurs with the default prefix /tə = / in past tense. However, as is shown in the following sentence, it can be preceded by the directional /ə = /, as in (265) below where the direction of the action of hitting is not pragmatically significant since the target of hitting is identified as ‘him’, but because before the action of hitting is carried out, the actor has to perform the action of going upwards

to where the target is located, and therefore the semantics of the sentence requires the verb ‘hitting’ to also be preceded by the same directional /ə= / as the verb in the preceding clause.

- (264)    ηα    ə=ɕɑ-η=tɕ<sup>h</sup>ə                      tə=ʁɑ=kə                      tə= <sup>n</sup>c<sup>h</sup>u  
                  1PS   DIR=go-1=CONJ    3=DAT=ART           PST=hit  
                  ‘I went up and hit him.’

- (265)    ə=ɕə=tɕ<sup>h</sup>ə                      tə=ʁɑ=kə                      ə= <sup>n</sup>c<sup>h</sup>u  
                  DIR=go=CONJ    3=DAT=ART           DIR:IMPER=hit  
                  ‘Go up (there) and hit him.’

In some cases, the agentivity of the argument of an intransitive verb can affect the type of directional prefix the verb takes. Following are some examples of such verbs. They are in past-tense form. These examples also show the effect of using a particular directional prefix on evidentiality (§7.10).

- (266)
- a.    tə= <sup>n</sup>guuk    ‘bent (itself)’                      nə= pkuuk ‘bend’
  - b.    tə= χwa    ‘opened(door by wind)’    nə= χwa    ‘open (door)’
  - c.    tə= tɕə    ‘melted(itself)’                      kə= ftɕə    ‘melted(by sb)’



- d. tə = pca      ‘exploded(itself)’      nə = sca ‘exploded(by sb)’  
 e. tə = ʒuuk      ‘collapsed(itself)’      nə = fɕuuk ‘to destroy’

#### 7.4 *Verb-stem alternation*

Verb-stem alternations are commonly attested in rGyalrongic languages and there are various studies on this topic (Sun 2000b, Sun 2004, Lin 2003, Tian & Sun 2016, Lai 2017). Sun (2000a, b) sees verb-stem alternation as a test for the rGyalrongic group within the Sino-Tibetan family. Sun (2004:289) states “Verb stem alternations are on the decline among rGyalrongic languages in general,” however, he also further asserts “...the distinction between STEM 1 and STEM 2 is robustly maintained in Lavrung and at least some dialects of Horpa.”

In BM rTa’u verbs are, more often than not, alternating, however, the phenomenon of stem-alternation presents a rather different picture than that of any other rGyalrongic languages presented to us hitherto (Sun 2000a. b, 2004, Lin 2003, Lai 2017), in terms both of stem-formation mechanisms and stem distribution. In its entirety, BM rTa’u verb-stem alternation resembles that of Puxi rGyalrong (Sun 2000b). What follows is a detailed presentation of BM rTa’u verb-stem alternation. Following Sun (2004), different stems will be labelled simply as STEM 1, STEM 2, and STEM 3, however, it should be noted that this does not indicate, as will become

clear, that BM rTa'u STEM 1, STEM 2, and STEM 3 have similar features to those of Showu rGyalrong (Sun 2004).

There are three-stem verbs, two-stem verbs and non-alternating stems. There are examples that allow us to further divide two-stem verbs into two subtypes, if A, B and C present distinct stems, the following configurations are possible:

A/B-C, and A/C-B.

The first category is three-stem verbs, as given in *Table 43* below:

Table 43: Examples of three-stem verbs in BM rTa'u

(1)	STEM 1	STEM 2	STEM 3	meaning
	t <sup>h</sup> i	t <sup>h</sup> jə <sup>ʷ</sup> u	fti	'to drink/eat'
	k <sup>h</sup> o	k <sup>h</sup> u	fko	'to give'
	t <sup>h</sup> o	t <sup>h</sup> u	fto	'to catch'
	c <sup>h</sup> ə	c <sup>h</sup> ə <sup>ʷ</sup> u	fcə	'to lift up'
	k <sup>h</sup> e	k <sup>h</sup> eʊ	fke	'to cut'
	q <sup>h</sup> e	q <sup>h</sup> ə <sup>ʷ</sup> u	fqe	'to throw'
	ʕə.ʕe	ʕe.ʕəʊ	fʕə.ʕe	'to wipe'
	se	səʊ	fse	'to kill'
	tsə	tsə <sup>ʷ</sup> u	vdzə	'to eat'
	kə	kə <sup>ʷ</sup> u	vgə	'to wear'
	ʒe	ʒəʊ	vʒe	'to peel off'
	ts <sup>h</sup> o	ts <sup>h</sup> u	ftso	'to milk'

There is a large number of three-stem verbs in BM rTa'u and a list, not meant to be exhaustive, is provided in Appendix 3: Three-stem verb list. Each category displays some distinctive morphophonological features. In three-stem verbs, there are productive differences of aspiration and voicing between STEM 1 and STEM 3, and STEM 2 is marked by /<sup>ʷ</sup>u/ or a variant. This topic is pursued further in more

detail in the section on stem-formation. STEM 3 includes the productive causative prefix /f-/ , with its variant /v-/before voiced initials.

The second category involves two-stem verbs which divide further into three subtypes according to the formal distribution of the stems.

(1) Two-stem verbs type 1: STEM 1/2-STEM 3

STEM 1/2	STEM 3	
t <sup>h</sup> u	ftu	‘to borrow’

(2) Two-stem verbs type 2: STEM 1-2/3

STEM 1	STEM 2/3	
scəŋ	scə <sup>v</sup>	‘to be afraid of’
cəŋ	ci	‘to exist, to be’

(3) Two-stem verbs type 2: STEM 1/3-2

STEM 1/3	STEM 2	
lə	lə <sup>v</sup> u	‘to get in’
me	məu	‘to blow’
ʃfa	ʃfau	‘to emerge’
mʃə.cə	mʃə.cə <sup>v</sup> u	‘to play’
ɿgə	ɿgə <sup>v</sup> u	‘to sleep’

Subtype three is the most common. The majority of BM rTa'u verbs belong to this subtype.

There are a few irregular verbs that show exceptional stem variations. These include motion verbs 'to go' and 'to come'.

(267)	zja	<sup>m</sup> bi	'to take away'
	vi	ɿja	'to go'
	ɕe	ɕi	'to come'

/ɕe/ and /ɕi/ are distinguished by tense only: the former is used in non-past contexts and the latter occurs in past contexts. Similarly, /vi/ and /ɿja/ and /zja/and /<sup>m</sup>bi/ are distinguished in terms of tense only; the former occurs in non-past contexts and the latter in past contexts, and they are obligatorily preceded by a directional.

The final category is non-alternating verbs; there is a good number of verbs that belong to this category. Some contain the causative prefixes /f-/ or /s-/, other do not. All borrowed verbs also fall into this class.

Table 44: Non-alternating verbs

(3)	STEM 1/2/3	meaning
	scu	‘to watch’
	ʃtʃə	‘to wake up’
	zcə <sup>y</sup>	‘to put together’
	kwa	‘to stop’
	.itsə <sup>y</sup> u	‘to build’
	fɕe	‘to erect’
	xtɕəp	‘to burn’
	tʃa	‘to heal’
	mnoŋ	‘to experience, to suffer’
	mkə <sup>y</sup> p	‘to fold, to bend’

### 7.5 BM rTa’u stem formation

STEM 1 functions as the verb base from which STEM 2 and STEM 3 are derived. BM rTa’u use two stem modification processes involving vocalic and manner change processes. Similar processes are observed in Showu rGyalrong (Sun 2004: 275) and Wobzi rGyalrong (Lai 2017), however, stem modification processes in BM rTa’u appear to be simpler than in any other rGyalrongic languages reported on hereto.

### 7.5.1 Vocalic alternations

Following Sun (2004: 275) I use the label *ablaut* “to refer to the phenomenon of grammatically conditioned vowel alternations in the rGyalrongic verb” (Sun 2004: 275). There are three categories of ablaut in the formation of STEM 2. The attested ablaut series are summarized and exemplified in the following two tables, pertaining respectively to both intransitive and transitive verbs showing STEM 2. No case of vocalic alternation is observed in the formation of STEM 3.

**Table 3: Transitive Ablaut Series with STEM 2**

2	i-əʷu	ntɕ <sup>h</sup> i	ntɕ <sup>h</sup> əʷu	‘to hear’
		χɕi	χɕəʷu	‘to break’
		ntɕ <sup>h</sup> i	ntɕ <sup>h</sup> əʷu	‘to hear’
		ŋk <sup>h</sup> i	ŋk <sup>h</sup> əʷu	‘to wear shoes’
		p <sup>h</sup> ji	p <sup>h</sup> jəʷu	‘to vomit’
	ə > əʷu	tsə	tsəʷu	‘to eat’
		kə	kəʷu	‘to wear’
		c <sup>h</sup> ə	c <sup>h</sup> əʷu	‘to lift up’
	e-əʷ	me	məʷ	‘to blow’
		ɕə.ɕe	ɕə.ɕəʷ	‘to wipe’
		se	səʷ	‘to kill’

		k <sup>h</sup> e	k <sup>h</sup> eʊ	‘to cut’
		me	məʊ	‘to blow’
	o-u	ŋgo	ŋgu	‘to carry’
		vdo	vdu	‘to see’
		ŋgo	ŋgu	‘to carry’
		nt <sup>h</sup> o	nt <sup>h</sup> u	‘to burn’
		nt <sup>h</sup> o	nt <sup>h</sup> u	‘to start fire’
		vdo	vdu	‘to see’
		pc <sup>h</sup> o	pc <sup>h</sup> u	‘to drive cattle’

### 7.5.2 STEM 3-marking /f-/

A good number of transitive verbs are characterized by the prefix /f-/ in STEM 3. Due to prefix voicing harmony rule /f-/ becomes /v-/ before voiced consonants, including those with a voiceless unaspirated stop or affricate.



**Table 7: STEM 3-Marking**

(1)	STEM 1	STEM 2	STEM 3	meaning
	t <sup>h</sup> i	t <sup>h</sup> jə <sup>y</sup> u	fti	‘to drink/eat’
	se	sə <sup>y</sup> u	fse	‘to kill’
	k <sup>h</sup> o	k <sup>h</sup> u	fko	‘to give’
	t <sup>h</sup> o	t <sup>h</sup> u	fto	‘to catch’
	c <sup>h</sup> ə	c <sup>h</sup> ə <sup>y</sup> u	fcə	‘to lift up’
	ɕə.ɕe	ɕe.ɕəu	fɕə.ɕe	‘to wipe’
	k <sup>h</sup> e	k <sup>h</sup> eu	fke	‘to cut’
	kə	kə <sup>y</sup> u	vgə	‘to wear’

### *7.6 Stem distribution and functions*

Each distinct verb stem occurs in a morphologically different environment defined by various verbal inflectional categories. As Sun (2004: 284) states, no pure syntactic factors play a role in conditioning verb stem alternation. In the following, we will discuss the distribution of each stem in detail beginning with STEM 3, then the highly constrained STEM 2, and finally the default STEM 1.

The following table attempts to provide a tentative template showing the distribution of each stem. The template does not extend to all the attested verbs

however. For example, three irregular verbs and the verbs in subtype two of the second category do not occur in all the positions predicted by the template. For instance, /scaŋ/ ‘to be afraid’ does not occur in polite interrogative constructions.

The template also does not exhibit all possible inflections of the stems that constitute a verbal complex which may occur in a wider syntactic environment. The template provides a simplified overview of the majority of the stem distribution.

**Table 8: Stem distribution**

	STEMS		
	1 <sup>ST</sup> PERSON	2 <sup>ND</sup> PERSON	3 <sup>RD</sup> PERSON
<b>STEM 1</b>	1. Present progressive [DIR+V+sə+caŋ] 2. Past progressive [V+sə+DIR+caŋ] 2. Perfective [DIR+V+ste/staŋ]	1. Imperative [DIR+V] 2. Interrogative [ʔi+V] 3. Question [V+ŋo]	
<b>STEM 2</b>	1. Past tense [DIR+V] 2. Non-past: future/habitual reference [V+ŋo]/[V+to]		
<b>STEM 3</b>		1. Past tense [DIR+V+(sə)] 2. Past progressive [V+sə=tə+ci]	1. Present [V+(to/ɪə)] 2. Past [DIR+V(sə/sto)] 3. Past progressive [V+sə=tə+ci] 4. Perfective [DIR+V+ste (sə/sto)] 5. Interrogative: non-past [V+ti+ŋo;], past: [DIR+V]

### 7.6.1 STEM 3

The apparent function of STEM 3 is to highlight transitivity. Its morphosyntactic contexts are constrained by person, it occurs with 2<sup>nd</sup> and 3<sup>rd</sup> person, in past tense

and with 3<sup>rd</sup> person in present tense. However when occurring with copula/evidential to/ɿə; it indicates present or habitual meaning. The typical uses of STEM 3 are illustrated below with /fti/, 'to have a meal/drink' STEM 3 of /t<sup>hi</sup>-t<sup>hj</sup>ɿ-fti/ and /fcə/ 'to lift up' STEM 3 of /tɕ<sup>h</sup>ə-tɕ<sup>h</sup>əɿ-fcə/.

STEM 3 does not occur in 1<sup>st</sup> person sentences:

(268) Non-compatible with 1<sup>st</sup> person

*ŋa	tə = te = fcə	sə = ɕa-ŋ
1PS	DEM = DEF = lift up	STP = EXIST[PRGR] = 1P:AGRE

It occurs in 2<sup>nd</sup> person past and past progressive aspect:

(269) 2<sup>nd</sup> person past tense

<b>ni</b>	tə = te	<b>tə = fcə</b>	sə
3P:S/2P:S	DEM = DEF	DIR = lift up	STP
‘You lifted this up. ‘			

(270) 2<sup>nd</sup> person past progressive aspect

<b>ni</b>	tə = te = fcə	sə = tə = ɕi
2P:S	DEM = DEF = lift up	STP = DIR = EXIST:EVI
‘You were lifting this up. ‘		

It occurs in 3<sup>rd</sup> person present tense, past tense, past progressive and perfective aspects. When STEM 3 is not prefixed by orientational markers in a /to/ copula construction or with /=ɿə/ evidential making sentence, it implies simple present tense with a universal or habitual rendering, suggesting something generally true, as in the first example below.

(271) 3<sup>rd</sup> person present tense

tə <sup>y</sup> u	vo	fti	ɿə
3P:S/2P:S	alcohol	drink	COP

‘S/he drinks alcohol. ‘

(272) 3<sup>rd</sup> person past tense

tə <sup>y</sup> u	tə = te	tə = fə
3P:S/2P:S	DEM = DEF	DIR = lift up

‘S/he lifted this up. ‘

(273) 3<sup>rd</sup> person past progressive

tə <sup>y</sup> u	tə = te	fə	sə = tə = ci
3P:S/2P:S	DEM = DEF	lift up	STP = DIR = EXIST:EVI

‘S/he was lifting this up.’

(274) 3<sup>rd</sup> person perfective aspect

tə = <sup>v</sup>u      tə = te      tə = fca      ste = sə

3P:S = AGT    DEM = DEF    DIR = lift up    PRF.AUX = STP

‘He had drunk alcohol already.’ (He was drunk already.)

7.6.2 STEM 2

This derived stem is the most functionally constrained. It only occurs with 1<sup>st</sup> person and can be used in both past and non-past sentences; the non-past implies a habitual or future reference. As mentioned earlier, habitual reference is always in the /to/ copular construction.

(275) 1<sup>st</sup> person past tense

ŋa      tca      tə = t<sup>h</sup>jə<sup>v</sup>u

1P:S      tea = DEFN      DIR = drink

‘I drank tea.’ (I had meal)

(276) 1<sup>st</sup> person future reference

ŋa      tca      t<sup>h</sup>jə<sup>v</sup>u      ŋo

1P:S    tea      drink      COP:EVI

‘I will drink tea.’ (I will have food)

(277) 1<sup>st</sup> person habitual reference

ŋa	tɕa	t <sup>h</sup> jə <sup>v</sup> u	to
1P:S	tea	drink	COP

‘I drink tea.’ (as a habit)

### 7.6.3 STEM 1

This verb stem occurs in 1<sup>st</sup> and 2<sup>nd</sup> person sentences. When occurring in 1<sup>st</sup> person sentences, it may indicate present/past progressive and perfective aspects:

(278) 1<sup>st</sup> person present progressive aspect

ŋa	tɕa	t <sup>h</sup> i	sə = ɕ-aŋ
1P:S	tea	drink	STP = EXIST:PRGR-1P

‘I am drinking tea.’

(279) 1<sup>st</sup> person past progressive aspect

ŋa	tɕa	t <sup>h</sup> i = sə	nə = c-aŋ
1P:S	tea	drink	DIRPST = PROG-1P:S

‘I have had tea (I have already eaten).’

(280) 1<sup>st</sup> perfective aspect

ŋa	tɕa	tə = t <sup>h</sup> i	ste
1P:S	tea	DIR:PSTdrink	PRF:AUX

‘I have had tea (I have already eaten).’

It is used in 2<sup>nd</sup> person imperative and question sentences with the use of directional prefixes.

(281) 2<sup>nd</sup> person imperative

ni	tɕa	ɣə = t <sup>h</sup> i
2PS	tea	DIR:IMPR = drink

‘You have (some) tea!’

(282) 2<sup>nd</sup> person question

ni	tɕa	ɣ-i = t <sup>h</sup> i
2PS	tea	DIR-Q = drink

‘Did you drink tea?’

### 7.7 Copula verbs

There is one equational copula verb in BM rTa'u /to/ with a suppletive form /ŋo/ in first person, as in (283) and (284) below. Negation of copula clauses takes a special form: /to/ becomes /ɪə/ which is preceded by the negator /<sup>m</sup>ɲa/ as shown in (286), while in first person negatives, the copula is entirely omitted with the negator being in clause-final position, as exemplified in (287). This copula can be prefixed by directionals that indicate tense and suffixed by aspect makers. In this regard, the copula functions just like other intransitive verbs in terms of person marking, interrogative marking, tense and aspect marking and nominalization. The copula /to/ /ŋo/ can be used alone as answers to a question, but /ɪə/ can't and cannot normally be added to a verbal sentence.

The copula is used in equational (283), attributive (284) and identificational clauses (285). Notice, in an identificational clause, the copulas do not have to follow the person agreement role. In most utterances, the demonstrative in demonstrative equative constructions is omitted, as can be the subject of the copula clause, as in (288). The underlying role of the first-person subject is indicated by the presence of /ŋo/, whereas if the same construction has the copula form /to/, the meaning is no longer the same as illustrated by (289).



(283) te      aɿda = te      droma      to  
 DEM    DIR = TOP    Droma    COP  
 ‘That (one) is Droma.’

(284) ɲa      tɕətə      ʰdeŋ = kʰe      kə      ɲo  
 1PS    book    read = NOM    ART    COP  
 ‘I am a book reader (student).’

(285) ɲa    tɕətə ʰdeŋ = kʰe    te    ɲo/to  
 1PS    book read = NOM    DEF    COP  
 ‘I am the student.’

(286) te    pepa    m̥ɲa = ɿə  
 3PS    Tibetan    NEG = COP  
 ‘He is not a Tibetan.’

(287) ɲa    pepa    m̥ɲa  
 1PS    Tibetan    NEG  
 ‘I am not Tibetan.’

(288)    te            nə = ki            ɲo  
              this        2PS = DAT        COP:1  
              ‘This is for you (I gave it to you).’

(289)    te            nə = ki            to  
              this        2PS = DAT        COP  
              ‘This is for you.’

The sole distinction between copula constructions (288) and (289) is that the former indicates that ‘this’ is from me indicated by the use of 1<sup>st</sup> person agreement form ɲo, and the latter just means this is for you without specifying whom it is from.

The copula in interrogative constructions uses a special form /ɪə/, which also appears in answers and which does not show person agreement, as illustrated in (290) and (291).

(290)  
       Q.    ɲa        ə = ʋnoɲ            ɪə  
              1sg    DIR:Q = beautiful    COP  
              ‘Am I beautiful?’

A.    ʁnɔŋ        ɿə  
          beautiful   COP  
          ‘(You) are beautiful.’

(291)

Q.    tɛ                ə = ʁnɔŋ                ɿə  
          this/3sg    DIR:Q = beautiful   COP  
          ‘Is he beautiful?’

A.    ʁnɔŋ        ɿə  
          beautiful   COP  
          ‘(He) is beautiful.’

However, if the clause expresses a possessive relation of the type ‘This is yours/mine’, then the equative copula /ŋo/ is used, which is immediately preceded by the question marker /ti/ in interrogative constructions as (292); the same copula also occurs in identificational clauses as well, as in (293).

(292)

Q.    ni tɛ = ŋə = ʁa    ti = ŋo  
          2   3 = PL = GEN   Q = COP  
          ‘Are you (this family’s)?’

A.    ηa    te = n̩ə = ɤa           tə = ηo  
        1sg   3 = PL = GEN       DIR = COP  
        ‘I am (this family’s).’

(293)

Q.    tə = ɤa       <sup>n</sup>c<sup>h</sup>u = <sup>n</sup>k<sup>h</sup>e    te    ni    ə = ηo  
        3 = DAT    hit = NOM    DEF 2    DIR:Q = COP  
        ‘Are you the one who hit him?’

A.    tə = ɤa       <sup>n</sup>c<sup>h</sup>u = <sup>n</sup>k<sup>h</sup>e    te    ηa    ηo  
        3 = DAT    hit = NOM    DEF 1    COP  
        ‘I am the one who hit him.’

The copula /to/ can be preceded by /aɾgə/ ‘similar’ to express ‘be similar’; and it does not show person agreement:

(294)   n̩an̩a = te    ɾə    te = ɣni           aɾgə           to  
           black = DEF   and   this = DUAL       same       COP  
           ‘The black one and this, they are similar.’

- (295)    ηu-ni        aɪgə    to  
             1sg-DUAL same    COP  
             ‘We are similar.’

However, if two people are getting into a fight, it is common to say ‘We are similar’, emphasizing that he is not afraid of the person, then the copula changes to first person /ŋo/ instead of /to/, as illustrated in (296) below:

- (296)    ηu-ni        aɪgə    ŋo  
             1sg-DUAL    same    COP  
             ‘We are the same.’

Another copula verb is the locational copula, which has two forms: /ci/ with animate subjects and /tu/ with inanimate subjects. This is also used as an evidential and is further discussed below; its negation has been discussed above. The existential copula is /ci/.

#### *7.7.1.1 Copulas in non-present constructions*

Tense in copula constructions is marked differently from typical verbal phrases. Copula constructions are marked by /nə/ instead of /tə/ as shown in (297) below.

- (297)    tə = ʁa        <sup>n</sup>c<sup>h</sup>u = <sup>n</sup>k<sup>h</sup>e    te    ŋa        nə = ŋo  
              3 = DAT    hit = NOM    DEF 1SG    PST = COP  
              ‘I was the one who hit him.’

When in non-first person, the use of past tense marker /nə = / triggers the occurrence of a perfective marker /sto/. It also marks non-egophoricity, and only occurs in non-first person constructions as illustrated below in (298).

- (298)    te    *Blama*        kə        nə = ŋo = sto  
              3sg   monk        ART        DIR:PST = COP = PST:COP  
              ‘He was a monk.’

It should be noted that sentence (298) can be a grammatical sentence without the clause-final /sto/, in which case the final /ŋo/ has an evidential reading of personal knowledge or involvement in the event/proposition; for example, where the referent ‘he’ and the speaker belong to the same family, and this relationship gives the speaker entitlement to speak of the proposition as personal knowledge. See (7.10.1) for further evidential readings of clause-final copula /ŋo/.

Predicate constituents in a copula sentence do not receive special marking. Other verbs take marking for the verbal categories of person, mood, aspect, tense and

evidentiality. Example (299) is marked for mood by interrogative /ti = / while (300) shows an irrealis construction. The basic distinction between /to/ and /ŋo/ is based on evidentiality as discussed in (7.10.1).

(299)    te    ɿca            ti = ŋo  
              3       Chinese    Q = COP  
              ‘Is he Chinese?’

(300)    ni    χəta    ʰdzo    ɕa = to  
              2sg   home   stay    IRR = COP  
              ‘You should stay at home.’

### 7.8 Stative/Adjective

It is well documented that some languages lack a distinctive class of adjective (Dixon 2010:62), and terms such as ‘adjectival’ or ‘adjectival verb’ are used to refer to intransitive stative predicate verbs. This analytical approach has been adopted in Qiangic as well e.g. Qiang (LaPolla & Huang 2003), Puxi Qiang (Huang 2004) and Wadu Pumi (Daudey 2014). Some of the rGyalrongic languages are also reported to lack a distinctive adjective class e.g. Kyomkyo (Prins 2011).

In the case of BM rTa’u, adjectives represent a distinctive lexical class whose basic function is the act of modification and a distinctive subclass of adjective verbs can be proposed based on a combination of features listed in Table 45 in comparison with the class of verb. These features are in line with the four functional contexts of Dixon (2004:9-12) in establishing adjectives as a distinct lexical class. According to him, adjectives may (but do not necessarily have to) be characterized by their ability to...

- (a) assign properties to nominal heads (predicative use).
- (b) specify the identify of nominal heads (attributive use).
- (c) serve as the ‘parameter of comparison’ (comparative use).
- (d) modify the meaning of verb (adverbial use) (cited in Widmer 2014: 313).

**Table 45: Properties of adjectives and verbs in BM rTa’u**

Adjectives	Verbs
Closed class	Open class
Can modify nouns directly, and also is nominalized in some instances	Must be nominalized to modify nouns
Occur with copula in predicate	Occur independently in predicate
Occur with intensifiers	Do not occur with intensifiers
Can be used in comparative constructions	Cannot be used in comparative constructions



BM rTa'u adjectives display the four functions listed above. These are illustrated by the following example sentences involving the word /ɤnoŋ/ 'beautiful'. In example (301), the adjective /ɤnoŋ/ is the complement of the copula /ɿə/. In example (301), the same adjective modifies the noun. In example (303), /ɤnoŋ/ serves as the parameter of comparison in a comparative construction, and in example (304), it modifies the verb 'to do'.

- (301) n-i          tsəkə    te          ɤnoŋ          ɿə  
                  2SG-GEN    cloth    TOP    beautiful    COP  
                  'Your cloth is beautiful.'

- (302) te    tsəkə    ɤnoŋ = va          te          ə = kə  
                  DEM cloth    beautiful = NOM    TOP    IMP:DIR = wear  
                  'Wear this, the beautiful cloth one.'

- (303) te          tsəkə    te    so          ɤnoŋ          ɿə  
                  DEM    cloth    TOP    more    beautiful          COP  
                  'This cloth is more beautiful.'

- (304) ɤnoŋɤnoŋ    nə = və    tɕʰə          ə = ɕə  
                  beautiful    IMP = do    CONJ    IMP = go

‘Be beautiful and then go.’

However, further investigation suggests that a third category can be established which can be called ‘adjectival verbs’; these are a hybrid category, with the syntactic properties of adjectives, but the morphological properties of verbs. The principal reason to consider these as a hybrid category is based on the fact that these ‘adjectives’ take what can be described as ‘verbal’ inflections such as directionals and also mark tense. This class of adjectival verbs is limited to adjectives of value in Table 46 below. These adjectives can be directly preceded by directionals which indicate tense in the appropriate sentences, see examples below.

- (305)    tsəkə      nə-ta                      sə  
         cloth    DIR:PST-clean   STP  
         ‘Cloth was (washed) clean.’

- (306)    ni-le            ə-ɲnoŋ                      tɕʰə  
         2SP-TOP   DIR:PST-beautiful   DM  
         ‘You (became) beautiful!’

In (305) /ta/ ‘clean’ is the predicate and takes the argument /tsəkə/ ‘cloth’ where /ta/ is not followed by a copula but instead by a past tense marker. Furthermore,

just like verbs, /ta/ is preceded by the directional /ə = /. In (306) /ɲnoŋ/ ‘beautiful’ is the predicate and takes the argument /ni/ ‘2SP’. Evidently, this is not a copula structure, and indeed it can end with the past tense /sə/ as well.

### 7.8.1 Semantics of adjectives

Adjectives are a closed word class and belong to the following semantic domains: dimension, value, colour, physical properties and corporeal. A list of core adjectives based partially on Dixon’s (2004) crosslinguistic survey framework is provided below in Table 41, though it is not meant to be an exhaustive list. Adjectives can be given an inherent semantic content describing certain qualities such as colour, shape, emotional state and physical properties. Those included in Table 46 are the basic adjectives that appear regularly in daily conversation.

**Table 46: Adjectives in BM rTa’u**

BM RTa’u	English gloss	Type of adjectives
tɔʔ	shallow	Dimension
nəp	deep	Dimension
pə	thin	Dimension
yɭa	thick	Dimension
tɕi	long	Dimension
ɿji	short	Dimension

c <sup>h</sup> e	big/tall	Dimension
təp	small/short	Dimension
ɤtsoŋ	clean	Value
tɑ	clean (clothes)	Value
ɤnoŋ	beautiful	Value
ŋdʒɯk	good	Value
ɤʌ	diligent	Value
ca	good(objects)	Value
scə	happy	Value
ɤzɯk	handsome	Value
ʂko	cold	Value
c <sup>h</sup> ɯk	hot	Value
t <sup>h</sup> ə	good	Value
mtʂomtʂo	white	Colour
ɤʌɤ	black	Colour
ɤŋɤŋə	blue	Colour
scasca	grey	Colour
Nana	red	Colour
ɤŋɤŋə	yellow	Colour
ʌoʌo	round	Shape

ləpləp	triangular	Shape
caca	flat	Shape
bɜːbɜː	bumpy	Shape
tʃoŋtʃoŋ	straight	Shape
bʉkbuːk	arrow-headed	Shape
ɤnəp	loud	Physical property
ɹsa	hard	Physical property
dʒəp	soft	Physical property
ʒtsəp	rough	Physical property
ndə	heavy	Physical property
ɥja	light	Physical property
sku	sharp	Physical property
ᵐŋɜː	sweet	Physical property
ɤtɕɜː	sour	Physical property
sɤa	bitter	Physical property
qʰa	salty	Physical property
ɥioɥio	dry	Physical property
ʒuʒu	wet	Physical property
fsʉk	bright	Physical property
caca	flat	Physical property

ᠢᠴᠠᠨᠵᠢᠰᠤ	crooked	Physical property
ᠢᠣ	ill	Corporeal
ᠢᠭᠡ	tired	Corporeal
ᠢᠪᠣ	mute	Corporeal
ᠮᠵᠢᠮᠤ	deaf	Corporeal
ᠴᠢᠭᠤ	blind	Corporeal
ᠰᠴᠠ	happy	Corporeal
ᠵᠳᠤᠠᠭ	sad	Corporeal
ᠢᠭᠠ	crazy	Corporeal
ᠪᠣ	shy	Corporeal
ᠮᠴᠣ	fast	Speed
ᠢᠵᠡ	difficult	Difficulty

Below is a list of common compound adjectives, mostly Tibetan loanwords. They have the same grammatical properties as other adjectives.

**Table 47: Compound adjectives**

mə <sup>y</sup> u-c <sup>h</sup> e	eye-big	Compound adjective
snə-c <sup>h</sup> e	nose-big	Compound adjective
ɰə-jo	rich	Compound adjective
k <sup>h</sup> oŋ-me	coward	Compound adjective
me-pə	poor	Compound adjective
koŋ-c <sup>h</sup> e	expensive	Compound adjective
scə-me-sduuk-ze	lazy, laid back	Idiomatic adjective
ɑ-va-q <sup>h</sup> e	terrible	Idiomatic adjective
ʂʂoŋ- <sup>m</sup> bə	careless	Idiomatic adjective

### 7.8.2 Phonotactic structure

In general, adjectives are prototypically monosyllabic like other verbs. However, the subclass of adjectives describing colour and shape normally occur reduplicated, thus are disyllabic. When elicited as single tokens they come in reduplicated form, but some can occur without reduplication in some semantic environments such as when followed by the intensifier /-ɬɬɬ/, or as a nominal attribute.

In general, most monosyllabic adjectives can be reduplicated in usage to achieve certain semantic effects, however, as aforementioned, adjectives of colour and shape are normally in reduplicated forms except when followed by the intensifier / = ɬɬɬ/.

Trisyllabic adjectives all consist of a monosyllabic adjectival root with the intensifier suffix / = ɲəɲə/. Other adjectives consisting of more than two syllables are very rare and those contained in my data are all Tibetan loanwords.

Table 48: Phonotactic shapes of adjectives

Type	Examples	Meaning
Monosyllabic	mt <sup>h</sup> o	high
	ɲc <sup>h</sup> e	big
	dəp	small
	χtɕə	bitter
disyllabic	nana	red
	k <sup>h</sup> ak <sup>h</sup> a	different
	həp <sup>h</sup> ca	arrogant
trisyllabic	ɲaɲəɲə	black
	fsɯkɲəɲə	bright
	toŋɲəɲə	high-spirit
	ɲəɲəɲə	blue



### 7.8.3 Reduplication

Two types of reduplication are observed in adjectives. The first one is a morphological process to achieve a grammatical function e.g. emphasis or intensification. However, it should be noted that this process is not universally applicable to all adjectives. The other one is adjective stems of color that are reduplicated forms which can only be monosyllabic when followed by an intensifier /=*ɬəɬə*/ or as a nominal attribute. Reduplication of adjectives may nominalize adjectives and occur with the definite marker /=*te*/. They can occur as a nominal subject or can be used as a nominal argument as in (307) and (308).

- (307)    *nə* = *ki*            *ɲaɲa* = *te*            *cɑ*            *ɬə*  
          2SP = DAT    black = DART            suitable    COP  
          ‘The black one is suitable for you.’

- (308)    *ŋa*    *ɲaɲate* = *ki*            *ɪga-ŋ*            *ɬə*  
          1SG    blackDART = DAT    love-1SG    COP  
          ‘I love the black one.’

As the examples above show, /*ɲaɲate*/ ‘the black one’ in (307) is the subject whereas it is the predicate argument in (308).

#### 7.8.4 Intensifier /=ɾəɾə/

The intensifier /=ɾəɾə/ can only be suffixed to adjectives that describe colour. As shown in Table 46, all colour adjectives in predicate position are disyllabic by way of reduplication, but this suffix is added to a one-syllable stem. The intensified adjective can be used both as predicate or modifying noun, as shown in examples in (309). When adjectives are predicates or modifiers of nouns, they can take a degree verb.

(309)

- a. t=i            zəpa    te    ɲa-ɾəɾə=kə            to  
3SG=GEN shoe    TOP black-INTS=ART    COP  
'His shoe is a black one.'

- b. te            ɲa-ɾəɾə=te            ske-ca            ɾə  
DEM black-INTF=DET more-good            COP  
'The very black one is better.'

#### 7.8.5 Intensifier /=qoqo/

This intensifier occurs with the adjectives given in Table 49. There does not seem to be any cross-lexeme semantic features that predicts the use of the suffix /=qoqo/.

**Table 49: Adjectives that can be suffixed by =qoqo**

Morphological form	English gloss
ts <sup>h</sup> a-qoqo	‘warm’
scə-qoqo	‘comfortable’
ʒo-qoqo	‘delicious’
mnɔ-qoqo	‘spacious’

These adjective forms can be used as copula complement as shown in (310) and (311), and also deverbal nominals to describe a state of being as in (312).

- (310) te = n̩ə      ts<sup>h</sup>a-qoqo      to  
 3SG = PL    warm-INTF    COP  
 ‘His family is warm (His family is having a descent life).’

- (311) n̩ə = q<sup>h</sup>o      scə-qoqo      to  
 2SG = DIM    comfortable-INTF    COP  
 ‘You are comfortable (have a good life).’

- (312) ts<sup>h</sup>a-qoqo      n̩ə-və      tɕ<sup>h</sup>ə      ɣə-zo      sə = t̩ə-ci  
 warm-INTF    DIR:PST:do    CONJ      DIR:PST-stay    STP = DIR = EXIST:EVI

‘They are staying warm.’ (Lit. It appears they are having a comfortable life.)

There are a few compounds of a native adjective stem and a Tibetan loanword adjective where the second stem gets reduplicated as in /ʃko<sup>n</sup>c<sup>h</sup>ɑ<sup>n</sup>c<sup>h</sup>ɑ/ where /ʃko/ is a native adjective meaning ‘cold’ and /<sup>n</sup>c<sup>h</sup>ɑ/ is a Tibetan loanword meaning ‘cold’ as well. Such constructions are used in structure like ‘appear to be’ as in (313).

- (313)    te ʃko=<sup>n</sup>c<sup>h</sup>ɑ<sup>n</sup>c<sup>h</sup>ɑ      əmənɔ      ts<sup>h</sup>ə ts<sup>h</sup>ə  
              3SG    cold=cold    appears      AUX  
              ‘It appears he is cold.’

#### 7.8.6 Attributive adjectives

In addition to being used as predicates, adjectives can occur after the head of a noun to modify the noun. When occurring as noun modifier, adjectives can occur in two forms: [reduplicated + te (definite article)] and [monosyllable stem + wa (NOM) + te (DART)].

The definite article suggests that the adjective is being treated as part of the nominal constituent as in (314), and while if it functions as a predicate it comes after the topic instead and followed by a copula verb as in (315).



can be absent, see example (321). The difference between /=wa/ and /=me/ is that the latter only occurs in the default [ke + Adj + me] structure, while /=wa/ occurs in both comparative and superlative construction.

- (316) te [vdzi te]NP ɬa ɬə  
 DEM person TOP diligent COP  
 ‘This person is diligent.’

- (317) \*te vdzi ɬa te

- (318) te ɬəme nana te ŋ-i = de to  
 DEM stone red TOP 1SG-GEN = PT COP  
 ‘This red stone is mine.’

- (319) te [vdzi ɬa = va]NP te ŋ-i vdʒə to  
 DEM person diligent = NOM TOP 1SG-GEN friend COP  
 ‘This diligent person is my friend.’

- (320) te [vdzi ke-ɬa-me] te ŋ=i vdʒə to  
 DEM person CC-diligent-NOM TOP 1SG = GEN friend COP  
 ‘This diligent person is my friend.’

- (321) te [vdzi    zi = ɽa]NP            te    ɲi    vdʒə    to  
 DEM person most = diligent TOP my friend COP  
 ‘This most diligent person is my friend.’

### 7.8.7 Comparative constructions

Adjectives are often considered to be the prototypical example of a “gradable” category (Jackendoff 1977; Doetjes 2008) and gradability is certainly an exclusive adjectival property in BM rTa’u that distinguishes adjectives from other word classes. In this subsection, I will discuss adjectives in comparative constructions.

#### 7.8.7.1 *Comparative construction in attributive position*

As noted in (§ 7.8.7), BM rTa’u adjectives can be distinguished from other parts of speech through their ability to serve as the parameter of comparison in comparative constructions. However, a comparative construction in attributive position is different from a comparative sentence. In this subsection, I will discuss comparative constructions in the attributive position. The comparative construction in attributive position has the following structure.

[NP + ske/zi + Adj + wa + DART]

- NP slot can be filled by any noun, which can also be omitted in contexts where the referent is retrievable from context, as exemplified in (322).
- /ske/ is the comparative particle/prefix and /zi/ the superlative particle.
- Adj can be any adjective attested in BM rTa'u.
- /=wa/ acts as a nominalizer
- DART stands for the definite article /te/

(322) ske c<sup>h</sup>a wa te ɲnong ɿə  
 CP big NOMD DET beautiful COP  
 'The bigger one is beautiful.'

(323) q<sup>h</sup>əzu zi-c<sup>h</sup>e-wa te k<sup>h</sup>ɯkma-nu tu  
 bowl SUP-big-NOM DET bag-LOC EXIST  
 'The biggest bowl is in (my) bag.'

(324) te ske-da-wa te nə = ki mdza ɿə  
 DEM CC-small-NOM DET 2SG = DAT suit COP



‘The smaller one suits you.’

### 7.8.7.2 Comparatives

A comparative construction phrase with two comparees has a complex structure. There are two basic verbs which connect the comparee, these are: /ɣi/ and /scu/. They have similar meaning as English phrases ‘when it comes to’ and ‘when looking at’ respectively. Their structure in a comparative sentence can be presented as following:

$$[C_A + \text{CASE} + \text{ɣi/scu} + C_B + \text{ske} + \text{Adj}]$$

C<sub>A</sub> stands for the entity being compared, which is inflected for case, either /=p<sup>h</sup>a/ ‘with’ or /=ki/ ‘dative’ dependent on the following verb such as /ɣi/ and /scu/. If the verb is /ɣi/ ‘come’ then the C<sub>A</sub> takes /=p<sup>h</sup>a/ and if the verb is /scu/ ‘to look at’ C<sub>A</sub> takes dative marker /=ki/. This is then followed by C<sub>B</sub>, the comparee noun phrase, that is then followed by /ske/ the comparative particle which then is followed by an adjective. Whichever form fills the V<sub>OBL</sub> slot the meaning is identical as shown in (325). And as shown in (325), /scu/ and /ɣi/ may occur in the same sentence as well.

(325)

a    Bragshi = ki    scu = ɬe    ɣi = ɬuk    zoŋbo    ske    c<sup>h</sup>e    ɬə

PN = DAT      look = LOC    come = PST    PN      CP    big    COP

‘When it comes to looking at Bragshi, Zongbo is bigger.’

b    Bragshi = p<sup>h</sup>a    ʒi = k<sup>h</sup>e    zɔŋbo      c<sup>h</sup>e    ɿə

PN = DAT      come = if    PN              big    COP

‘If it comes to Bragshi, Zongbo is bigger (than him).’

Even though the comparative construction above is rather complex, it is nevertheless frequent in daily conversation. Every so often, native speakers make use of another much simpler comparative sentence which involves the comparative particle /so/ ‘than’ which has the following structure:

[C<sub>A</sub> + so + C<sub>B</sub> + so<sub>opt</sub> = Adj]

(326)    jambi    so    tɕətə = kə      te      so      ɲa      ɿə

pencil    than book = ART    DEM more    need    COP

‘A book is more needed than a pencil.’

(327)    jambi    so tɕətə = kə              te              ɲa              ɿə

pencil    than book = ART    DEM    need    COP

‘A book is more needed than a pencil.’

The comparative particle /so/ has a variant /sni/ and they are used interchangeably, even together.

- (328) tsəkə    sni    tɕətə = kə    te    so    ɲɑ    ɿə  
           clothes than book = ART    DEM more    need    COP  
           ‘A book is more needed than clothes.’

### 7.8.7.3 *Superlative construction in attributive position*

The superlative construction has identical structural properties to the comparative construction but with the superlative prefix /zi-/. It should be noted here that local Tibetan language also uses this prefix in the superlative construction, however, it is difficult to speculate on the source of this prefix.

- (329) te = ɲə = nu = k<sup>h</sup>a    zi    ɲnoŋ    te    te = to  
           3 = PL = LOC = ABL    most beautiful    DET    DEM = COP  
           ‘Among these the most beautiful is this.’

- (330) zi    c<sup>h</sup>e    te    te = to  
           most big    DET    3 = COP  
           ‘The biggest one is him.’

The opposite of ‘more’, equivalent to ‘less’, is expressed by the use of negative particle /mi =/ which comes between the comparative particle and the adjective. If the adjective can take a directional prefix, then the negator comes after directional prefixes as shown below:

[so/ske + DIR + NEG + Adj + NOM<sub>OPT</sub>]

- (331) jasnə-ki          scu-ɛ          pəsɲə    ske    mi    ɪko    ɛ  
yesterday-DAT look-LOC today CP NEG cold COP  
‘Looking at yesterday, today is less cold.’

- (332) pəvə    zi    nə-ma    ɪko  
this year most DIR-NEG cold  
‘This year, (it was) most not cold.’ Lit: This year was not the coldest of all.

### 7.8.8 Adjectival predication

Adjectives occur either as attributive as part of a nominal as in (333), or as predicates as in (333). They can also be adverbialized by the suffixes /-tɕ<sup>h</sup>a/, and occur in the slot before the verb as in (333), like other adverbial forms such as the ideophones discussed in Chapter 8.

(333)

a pcene ɣɿoɣɿo

meat dry

‘Dry meat’

b pcene ɣɿoɣɿo-to

meat dry-COP:EVU

‘Meat is dry.’

c pcene ɣɿoɣɿo-ŋo-tɕ<sup>h</sup>a ə-<sup>ŋ</sup>gə

meat dry-1PS:COP:EVI-ADVL DIR:IMPR-eat

‘Eat meat while it is dry.’

### 7.9 *Tense and aspect*

Features of tense and aspect marking are probably the most complicated area of rTa'u language, and this remains undescribed to date. rTa'u uses a system that combines directional/orientational prefixes, verbal morphological suffixes and clausal final TAM particles in marking of tense and aspect. There is considerable overlap between and among those grammatical morphemes.

Typically, directional prefixes have an inherent semantic value (§6.3.3), therefore verbs describing actions are obligatorily prefixed with directional prefixes to indicate the direction of action. Thus, in theory it is possible that one verb of action could be preceded by different directional prefixes, e.g. /sto/ 'to put', the verb of putting something somewhere can be preceded by virtually any directional prefix. The choice of a particular prefix depends on the location of the destination to the ego-where the speaker is thus /ə-sto/ 'to put up', /nə-sto/ 'put down', /ɣə-sto/ 'to put downstream', /kə-sto/ 'to put upstream', and /tə-sto/ 'to put'. Simultaneously, this system is now employed in other ways to achieve other grammatical functions as such as tense (§7.9.1) and imperative marker (§9.2.2).

As detailed in the following section, tense can be marked in two ways. One is marked by the use of directional prefix only, in other cases, both directional prefix and verbal suffixes are involved. The question of which prefix is the appropriate one

has to be learnt; similar cases are reported in rGyalrong language e.g. Prins (2011:390).

### 7.9.1 Tense

The BM rTa'u tense paradigm can be summarized as in Table 50. BM rTa'u only makes two distinctions: past versus non-past. Past tense has a directional prefix while non-past is marked by the copula /to/ (§7.7), as shown in (334). In the past tense, the default directional marker /tə = / can be replaced by any other directional (§7.3.2.1), as shown in (335)

In the following subsections, I will discuss each type of tense in detail.

**Table 50: A simplified tense paradigm of BM rTa'u**

Tense	Non-past	Past
Person		
1	ŋo	DIR = $\Sigma$
2	to	
3		

**Table 51: BM rTa'u verbal aspect paradigm**

	1	2/3
Present progressive	$\Sigma + s\bar{a} + ca\eta$	$\Sigma + s\bar{a} + ci$
Past progressive	$\Sigma + s\bar{a} + n\bar{a} + ca\eta$	$\Sigma + s\bar{a} + t\bar{a} + ci$
Perfective	DIR + $\Sigma + sta-\eta$	DIR + $\Sigma + ste$

(334)

a    $\eta\bar{a}$     $vo$     $t\bar{a} = \text{sku}$

I   alcohol PST = cut

‘I quit alcohol.’

b    $t-\text{uk}$     $vo$     $fti$     $to$

3S-AGT alcohol   drink   COP:FAC

‘He drinks alcohol.’

(335)

a    $te$     $\bar{a} = \text{.ja}$

B    $te$     $n\bar{a} = \text{.ja}$

3   DIR:PST = go

3   DIR:PST = go

‘He went upward.’

‘He went downward.’



b    te    kə = ɽja

3DIR:PST = go

‘He went towards the source of stream.’

c    te    ɣə = ɽja

3    DIR:PST = go

‘He went towards the end of stream.’

#### 7.9.1.1 *Non-past tense*

The non-past tense is used to express generic situations by adding the factual copula /to/ or /ŋo/ with a 1<sup>st</sup> person subject after the verb. In non-past tense, the verb is never preceded by directionals. This fact supports the conceptualization of tense into two categories; past vs. non-past. Past tense is typically marked by the presence of directionals before verbs. Below are some examples;

(336)

a    t = ə<sup>h</sup>ɯk    təva    fti    to

3 = ERG    cigarette    drink    COP:FAC

‘He smokes.’

b    t = ə<sup>v</sup>uuk    ja = mə = ŋi                      to  
       3-AGT    mouth = NEG = good       COP:FAC  
       ‘He does not listen to (elders).’

c    meɐe = nə vza = k<sup>h</sup>a              juuk = tɕ<sup>h</sup>ə = ə = ta              to  
       tree = PL    spring = ADV    grow = CONJ = DIR = VP    COP:FAC  
       ‘Trees grow in the spring.’

d    mitoʔ = nə    ɿso = nu              ɿɕu    to  
       flower = PL    winter = LOC    die    COP:FAC  
       ‘Flowers die in winter.’

As is evident in the examples above, verb stems are not preceded by a directional prefix. However, they also do not appear in bare stems. In (336) the verb for ‘to drink’ is /t<sup>h</sup>i/ which appears in the surface form /fti/ through the process of adding causative /f-/. In (336) the verb form /juuk/ is actually the base form, even though it appears similar to the agentive marker /-uuk/. Verbs in non-human subjects appear in bare stem, as in (336).

In BM rTa'u, the habitual tense structure can be used as universal tense for general statements that are universally true, in the sense that local people think it is true

and perceive it to be a known fact among interlocutors. Following are some examples.

- (337)    ɬav̥u kəɬo = fɕə                      tu          to  
PP     DIR(upper stream) = direction   EXT       COP  
'Bragmgo County town is located towards the source of the stream.'
- (338)    lose = tɕ<sup>h</sup>a              gɜːntɕ<sup>h</sup>əm              to  
new year = LOC dance perform       COP  
'During the New Year (people) perform dances.'
- (339)    ymə k<sup>h</sup>a              c<sup>h</sup>jʉk              to  
fire INSTR       burn              COP  
'Fire burns.'

The use of /to/, the factual copula, in example (337) demonstrates that local people perceive the fact that Bragmgo County town is located upstream is a universal truth understood by everyone in the community. Similarly, (338) is a statement of fact in the context of local tradition that it has been true in the past, thus the speaker discusses it as a known fact.

In some instances of habitual tense, /to/ may be preceded by a copula which agrees in person and has the form of /ŋo/ when in 1st person, as in (340). First person may also be unmarked, as in sentences like (341), where an overt first-person subject is present.

(340)   ŋo   pepa       ŋo   to  
           1     Tibetan   COP COP:FAC  
           ‘I am Tibetan.’

(341)   te       pepa       to  
           he       Tibetan   COP  
           ‘He is Tibetan.’

In summary, habitual tense in BM rTa'u has the function of a) making statements about a factual situation/event that is known to the cultural community across all time, and b) expressing a habitual statement.

Below is an exchange between a young daughter and her grandmother where she asks what the grandmother used to do when she was young, and the grandmother responds with a third person subject in habitual tense marked by /to/.

(342)

a    mevə                    ni titiŋa    ŋo = tɕʰə    tɕəkə    li    ɕa    ti    ŋo  
grandmother    2 young    be = LOC    what    do    need Q    COP

‘Grandmother, when you were young, what did you need to do?’

b    smi-ŋuuk    cʰəmli    v-uuk    to    vdzi = ŋ-uuk  
female-PL chores    do = AGT    HABIT    men = PL = AGT  
nqe = va = te                    v = li                    to  
hard-NOM = TOP            3 = do                    COP

‘Females do house chores and men do the hard work.’

#### 7.9.1.2 *Past tense*

Past tense here is understood to locate the situation prior to the present moment and says nothing about whether the past situation occupies just a single point prior to the present moment, or an extended time period prior to the present moment, or indeed the whole of time up the present moment (Comrie 1985:41). As mentioned earlier, past tense is marked simply by a directional prefix on the verb stem, as shown in (343).

(343)

a     $\eta a$      $te = ki$      $t\phi\phi t\phi$      $k\phi$      $t\phi = k^h-u$

I        3 = DAT    book    ART   PST = give-1<sup>ST</sup>

‘I gave him a book.’

b     $t-wuk$          $\eta a = ki$      $t\phi\phi t\phi$      $k\phi$      $t\phi = v-ko$

3-AGT        1 = DAT    book    ART   PST = 3-give

‘He gave me a book.’

c     $t-wuk$          $q^h\phi zu$          $te$          $t\phi = \chi\phi i$

3-AGT        bowl        DART        PST = break

‘He broke the bowl.’

d     $\eta a$      $q^h\phi zu$      $te$          $t\phi = \chi\phi-wuk$

1        bowl    DART        PST = break-AGT

‘I broke the bowl.’

e     $k^h-wuk$          $le$          $t\phi = \kappa a$          $t\phi = \varsigma ce$

dog-AGT    TOP   3 = EXPERI        PST = bite

‘A dog bit him.’

As shown in (343), verbs in past tense are not only preceded by a directional marker such as /tə/, but also go through various stem vowel alternations. The examples in (343) show various alternative types of person marking. The verbal complex is preceded by a directional marker. As discussed earlier, a causative marker is not always present on all verbs, as shown in (343), where the verb appears in bare stem preceded by a directional marker, in this case the default /tə=/, but other directional forms are also possible.

There are a few irregular verbs with a morphological past tense form; such verbs are not preceded by a directional in past tense constructions as shown below.

- (344)   te ɣi  
           3 arrive  
           ‘He arrived.’

It is obvious that some verbs do not distinguish directions, as discussed above, such as ‘think’. But most verbs can be preceded by any of the five directionals. For instance, the verb ‘give’ /k<sup>h</sup>o/ in (345) is preceded by /tə=/, however, it can be preceded by any other directional depending on pragmatic context, as illustrated in (345) and (345).

(345)

a     $\eta a$      $p^h e = ki$                      $tə = k^h - u$

I       father = DAT    DIR:PST = give-1<sup>st</sup>

‘I gave (it) to father.’

b     $\eta a$      $p^h e = ki$                      $kə = k^h - u$

I       father = DAT    DIR:PST = give-1<sup>st</sup>

‘I gave (it) to father (I handed (it) to father upstream).’

c     $\eta a$      $p^h e = ki$                      $nə = k^h - u$

I       father = DAT    DIR:PST = give-1<sup>st</sup>

‘I gave (it) to father (I handed (it) to father downstream).’

Such a construction may be used in a situation where a family is having dinner, and as part of the local tradition, elders, in this case father, sit at the head of the table which may be in any direction from the point where the speaker is located. In sentence (345) above, the father is seated towards the ‘source of the stream’ westward from where the speaker is, therefore the speaker used / $kə =$ / to indicate the direction of the action of giving. If he used other directionals, it would cause some confusion among interlocutors. For example, (345) can only mean that something was handed downward.



### 7.9.1.3 *Aspect*

BM rTa'u has several types of aspect marking, including progressive aspect marking (§7.9.1.4), past progressive (§7.9.1.5), prospective aspect (§7.9.1.6), perfective aspect (§7.9.1.7) and experiential aspect (§7.9.1.8).

### 7.9.1.4 *Progressive marker*

Progressives represent a situation in progress at or around reference time. The field of reference of progressives varies greatly and the importance of progressiveness is the indication of the situation in process, or in other words an action as an ongoing and durative event. In BM rTa'u, the progressive construction is indicated by the existential copula /ci/, which is preceded by the stative perfective marker /sə/. glossed as stative perfective marker (STP) in interlineal glossing. Progressive constructions are not marked by directional; in this sense it is similar to the present tense. The use of the existential copula in progressive aspect is also reported in Bunan (Widmer 2014:647). The following example sentences illustrate the use of the progressive construction.

(346)

a     ŋa     zama     tsə     sə = ca-ŋ  
I     food     eat     STP = EXIST-1  
‘I am eating food.’

b    t-uuk        zama    v-dzə        sə = ci  
       3-AGT    food    CAU-eat    STP = EXIST  
       ‘He is eating food.’

c    coŋ        ʒuuk        sə = ci  
       wall    fall        STP = EXIST  
       ‘The wall is falling.’

d    mə    nə = ta                sə = ci  
       rain   DIR = down        STP = EXIST  
       ‘It is raining.’ (Rain is coming down.)

As shown in (346), the progressive markers appear in clause-final position just after the verbal complex. The verbal complex in progressive construction may be a verb stem with or without the 2/3-person causative prefix /v-/ , as in (346), but no directional prefix.

#### 7.9.1.5 *Past progressive construction*

The past progressive construction is formed by the presence of /=nə=/ in 1st/2nd person or /=tə=/ in third person; the former is homophonic with the directional /nə=/ ‘downward’, and the latter is homophonic with the default past

tense directional prefix, however in this construction [sə = nə/tə = ci], / = nə/tə = / has a specific default past tense functionality, and unlike past tense (§7.9.1.2), it cannot be replaced by other directionals, as illustrated in the following example sentences.

(347)

- a    ηa    zama    tsə    sə = nə = ca-η  
       I    food    eat    STP = DIR:PST = EXIST-1<sup>ST</sup>  
       ‘I was eating food.’
- b    t-ɯk    zama    v-dzə    sə = tə = ci  
       3-AGT   food    CAU-eat   STP = DIR: = EXIST:EVI  
       ‘He was eating food.’
- c    coŋ    ɰɯk    sə = nə = ci  
       wall   fall    STP = DIR:PST = EXIST  
       ‘The wall was falling.’
- d    mə    nəta    sə = nə = ci  
       rain   come down   STP = DIR:PST = EXIST  
       ‘It was raining.’ (Rain was coming down.)

/sə + tə/ may become [stə] in rapid speech, as shown (348).

- (348) t-wk      zama    v-dzə      sə = tə = ci  
3-AGT    food    CAU-eat    PST = DIR = EXIST:EVI  
‘He was eating food.’

#### 7.9.1.6 Prospective aspect / = tɕ<sup>h</sup>u/

/tɕ<sup>h</sup>u/ is used to indicate when an action or event is about to take place. It directly follows the verb stem and has a similar meaning to English ‘to be about to’. In prospective construction marked by / = tɕ<sup>h</sup>u/, verbs are not prefixed by directionals.

- (349) vla.ma    ɕə = tɕ<sup>h</sup>u      to  
Guru      leave = PROS    COP  
‘Guru is about to leave.’

- (350) mə      nə = ta = tɕ<sup>h</sup>u      to  
rain    DIR = come = PROS    COP  
‘Rain is about to come.’ (Its about to rain.)

In examples (350) the verb complex has the directional prefix /nə/ and it has thus been glossed as directional, however, here /nə/ has become an integrated part of the verb /nə.ta/ meaning ‘come down’ and they cannot occur alone when separated, and therefore /nə/ here does not function as a directional.

When the urgency or immediacy of the impending action or event needs to be emphasized, the whole verb complex is reduplicated:

- (351) de.mnə<sup>y</sup>u = te    ytsə = tɕ<sup>h</sup>u    ytsə = tɕ<sup>h</sup>u    to  
 key = ART          fall = PROS    fall = PROS    COP  
 ‘The key is about to fall any moment.’

Marking for prospective action often combines with past perfective marking, indicating that the completion of an action or event is impending:

- (352) ŋa            ʒe = tɕ<sup>h</sup>a            te.nə = <sup>y</sup>u    ŋgə = ste = tɕ<sup>h</sup>u            to  
 1P:S          arrive = when    3PL = ERG    eat = PST:EVI = PROS    COP  
 ‘When I was arriving, they were about to finish eating food.’

#### 7.9.1.7 *Perfective*

The perfective in BM rTa'u is marked by a verb stem preceded by a directional prefix followed by a clause-final participle /ste/; a frequent aspect marker in daily conversation. It views the events/situations described by the preceding verb as complete and disregards the internal temporal subparts of the events:

(353)

a    ŋa    tə = ɿgə                   sta-ŋ  
      I     DIR:PST = sleep    PERF-1<sup>ST</sup>  
      'I have slept.'

b    ŋa   tɕətə    tə = scu           sta-ŋ  
      I   book    DIR:PST = read   PERF-1<sup>ST</sup>  
      'I have read the book.'

The events in (353) are characterized as complete events. It is evident in (353) that reading is a durative process, and may occur over a wide time range, however, the perfective ignores any internal temporal pattern and construes the action of reading as a single completed event.

#### 7.9.1.8 *Experiential aspect /zda/*

Use of sentence-final /zda/ marks that the action indicated by the main verb has been experienced by the actor, but it does not say anything about the internal temporal pattern or duration of the action. The utterance as a whole suggests that the action indicated by the verb is not continuing into the moment of speech. In an utterance where /zda/ appears in sentence-final position, the main verb is obligatorily marked for past tense with directional prefixes. When the subject is non-first person, /zda/ is always followed by a second person agreement marker, that in other cases has an evidentiality meaning.

- (354)     $\eta$ a     $\mathfrak{r}$ ji     $\mathfrak{a} = \eta$ c<sup>h</sup>uuk.yja    zda  
          1    horse    DIR = ride    EXP  
          ‘I used to ride a horse.’

- (355)    te    tu     $\gamma$  $\mathfrak{a} =$ ndzo    zda  
          3PS    here    DIR = live    EXP  
          ‘He used to live here.’

Negativity is marked between the main verb and /zda/:

(356)    ɲa    nə=jəp.ɿ ma    zda  
           1    PST-fight NEG EXP  
           ‘I have never had a fight.’

(357)    t-wuk            tɕətə kə=deŋ            ma    zda    sto  
           2-ERG        book PST=read    NEG EXP EVI:2  
           ‘He has never been to school.’

An auxiliary verb for emphasis can be added to the subject to emphasize that something has never been experienced by the actor as exemplified below in (358); it can be roughly translated as ‘even’ in English.

(358)    ɣna            la            tsəkə    nə-tu            ma    zda  
           long ago EMPH    cloth    PST-exit NEG EXP  
           ‘Long ago, (we) even had no clothes.’

(359)    t-wuk            la            ɣja    kə            vdo ma            zda    sto  
           3-ERG        EMPH yak    ART    see NEG        EXP EVI:2  
           ‘He has not even seen a yak.’



(360) jo       mǝ       nə = ta               sə = tǝ = ci  
          again   rain     DIR:PST = come   PST = DIR = EXIST:EVI  
          ‘It is raining again.’ (I am experiencing it now.)

### 7.10 Evidentiality and inference

Studies on the topic of evidentiality in various rGyalrongic languages include work on Cogtse (Lin 2003), Kyom-kyo (Prins 2011) and Japhug (Jacques 2015). These studies illustrate widely diverse systems, and therefore, a typologically rGyalrongic evidentiality system is lacking, if such a feature exists at all. Evidentiality in rTa'u languages has not been studied to date. In this section, I will provide a sketch of the evidential system of BM rTa'u, based partially on evidence found in the corpus and partly on my knowledge of the language as a native speaker.

“Evidentiality is defined as a grammatical category that specifies the way in which the epistemic source of acquired knowledge about a given event or situation (Aikhenvald 2004:3).” Cross-linguistically, “rGyalrongic languages and nearly all languages of the Tibetosphere have a complex evidential system” (Jacques 2015).

Three categories of means of identifying sources of information can be established in rTa'u and it therefore can be considered as a B3 system (Visual, Non-visual (inferred), and Reported) in Aikhenvald's (2004:42) classification of evidentiality.

Syntactically, BM rTa'u system presents similarities to Lisu (Bradley 2010), where BM rTa'u has an interesting category of markers that occur in clause-final position in sentence-final clauses. In fact, as rTa'u is a verb-final language, various grammatical markers occur in sentence-final position. This constituent order has contributed to a greater range of evidential affixes, as also reported for Standard Tibetan (Tournadre & LaPolla 2014) and Lhasa Tibetan (DeLancey 1986). DeLancey's remark on Standard Tibetan captures the complexity of BM rTa'u evidential marking precisely, as he states "In Standard Tibetan, .... we find a rather complicated tense/aspect/modality system which incorporates some evidential categories" (1986:203). In the following subsections, I will discuss each type of evidential marker separately.

#### 7.10.1 /to/ and /ŋo/

Aikhenvald (2004:284) reported on copula constructions as a source for evidentials; she remarks that these constructions often involve an existential verb. Furthermore, what rTa'u copula constructions bear most resemblance to in terms of their evidential reading is the Tibetan copula as presented in DeLancey (1986:205), Denwood (1999:151) and Hill (2012, 2013). The exact evidential meaning of the Tibetan copula construction remains controversial among scholars.

/to/ and /ŋo/ are the rTa'u equational copula, which appear in clause final position. They also operate in the personal agreement system with first person /ŋo/ and /to/ more often with non-first subjects. It is also not uncommon to find first person subject constructions with /to/. However, it is clear such differences are not due to evidential/mirative marking such as suggested in the case of Lhasa Tibetan for *yod* and *'dug*, but rather due to grammaticalization. When used as evidential markers, /to/ and /ŋo/ have the same meaning and the same tense/aspect value, marking non-past forms.

When appearing in equational sentences, their evidential reading indicates common knowledge or common-sense denoting information which the speaker deems common knowledge and needs no specific evidential source. This holds true in past tense copula constructions as well.

- (361)    ŋa    tɕə.tə    ʰdenŋ = ʷkʰe    to/ŋo  
           I     book    read = NOM    COP  
           'I am a student.'

- (362)    te drene = ka    to  
           3    PN = NOM    COP

‘He is *drene*<sup>20</sup> person.’

- (363)     $\gamma m\grave{a} = k^h a$      $\gamma tse$     to  
         fire = INSTU    warm    COP  
         ‘Fire (makes us) warm.’

In copula constructions, evidentiality is best illustrated in past tense constructions marked by / $n\grave{a} =$ /, which can optionally be followed by the perfective marker / $sto$ / as exemplified in (364) below.

- (364)     $te$      $t\phi\grave{a}.t\grave{a}$      $^n d\epsilon\eta = ^\eta k^h e$      $n\grave{a} = \eta o (= sto)$   
         he    book    read = NOM    PST = COP(= PST)  
         ‘He was a student.’

Sentence (364) is said by a mother to her son about a villager who passed away, where the son has knowledge of him having been a student. The reading of copula / $\eta o$ / as evidential marker indicates that the mother has first-hand knowledge of the fact that the person being referred to was a student before he passed away. If the

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<sup>20</sup> The name of a village where BM rTa’u is spoken

mother had no knowledge of his status, she would have used /jə = ɿə/ ‘say = COP’ hearsay evidential as in (365) below.

- (365)    te     tɕə.tə       ʰdeŋ = ʱkʰe    nə = ŋo = sto       jə = ɿə  
              he    book       read = NOM PST = COP = PERF say = COP  
              ‘It it said that he was a student.’

#### 7.10.2 Existential locative verbs /ci/ and /tu/

The only distinction between *ci* and *tu* is of a semantic nature: *ci* occurs with animate subjects/referents while /tu/ occurs with inanimate subjects and or referents. Syntactically, they function as copulas as discussed in (§7.7) where they are called existential copula verbs. The interaction of evidential marking with existential copula is best illustrated in past tense existential copula constructions. However, before I discuss them, it may be helpful to recap briefly how past tense is marked in existential copula verb constructions.

Unlike in other copula verb constructions, past tense in existential copula constructions is marked by either of two morphemes /nə-/ or /tə = /. At first glance, it appears to be constrained by the personal agreement system as shown in (367) and (368) where /nə = / occurs in first person subject constructions while /tə = / is in non first-person constructions. Other directionals do not occur with existentials.

(366)     $\eta a = ki$      $t\phi\acute{a}t\acute{a}$      $tu$   
              I = DAT    book    EXIST  
              ‘I have a book/books.’

(367)     $\eta a = ki$      $t\phi\acute{a}t\acute{a}$      $n\acute{a} = tu$   
              I = DAT    book    **PST** = EXIST  
              ‘I had books.’

(368)     $te = ki$      $t\phi\acute{a}t\acute{a}$      $t\acute{a} = tu$   
              3 = DAT    book    **PST** = EXIST  
              ‘He had books.’

However, further examples reveal that person is not the determining factor in the choice of / $n\acute{a} =$ / vs. / $t\acute{a} =$ / as illustrated in the following examples where both markers occur in the same third person constructions.

(369)     $te$      $n\acute{a} = ci$   
              3    PST:EVI = EXIST  
              ‘He was there.’

- (370)    te            tə = ci  
              3            PST:EVI = EXIST  
              ‘He was there.’

The difference between these two sentences is epistemicity. In sentence (369) the use of /nə = / suggests the speaker was present at the event where ‘he’ was present thus validating the speaker’s authority/commitment to the truth of the message. Furthermore, it suggests, in certain constructions, that the speaker is even responsible for ‘his’ presence at the event. On the contrary, example (370) simply states that ‘he’ was seen at the event thus stating ‘he’ was there, but there is no epistemic relationship between the speaker and the status of ‘himself’. The following examples further clarify that volitionality is another determining factor in the choice of /nə = / vs. /tə = / in first person.

- (371)    ŋa    te            nə = sa-v  
              I        3            PST:EVI    kill-1<sup>ST</sup>  
              ‘I killed it.’

- (372)    ŋa    te            tə = sa-v  
              1        3            PST:EVI = kill-1<sup>st</sup>  
              ‘I killed it.’

Sentence (371) suggests that that the speaker killed it on purpose, knowingly, in contrast to sentence (372) which means the speaker killed it by accident.

#### 7.10.3 Evidentials, Epistemics and Volitionality: /nə=/ and /tə=/

I have just indicated that only two directional markers /nə=/ and /tə=/ can occur with existential verbs, and also argued that they not only mark past/perfective tense but also mark evidentiality, epistemicity and volitionality. In this section, I look at more examples from different sentence structures to argue that /nə=/ and /tə=/ may be grammaticalizing into evidential categories, especially in past/perfective.

/nə=/ and /tə=/ are bound morphemes which display multiple grammatical functions in different sentence structures. In this subsection, the discussion is focused on their evidential marking function in the perfective system. Interestingly, perfective aspect is also marked by the same morphemes suggesting then that this category of evidentiality in the non-perfective system is marked by different morphemes. The particular category of evidentiality indicated by these two morphemes in the perfective system can be described as visual. Both indicate that the event described by the main verb was witnessed by the speaker as in (373) and (374), however, they differ in pertaining to whether the speaker is directly



responsible or involved in the situation described, thus conferring the speaker more authority over the statement.

- (373)     $\eta a-nə = p^h a$      $^n t\dot{s}əpa$      $kə$      $tə$      $ci$   
          1-PL = DAT    guest    ART PERF:VISU    EXIST  
          ‘We had a guest.’ (Lit. There is a guest with us.)

- (374)     $\eta a-nə = p^h a$      $^n t\dot{s}əpa$      $kə$      $nə$      $ci$   
          1-PL = DAT    guest    ART PERF:VOLIT    EXIST  
          ‘We had a guest.’ (Lit. (I) had a guest with us.)

In both statements above, the speaker witnessed the presence of the guest, however the use of / $nə =$ / suggests that the speaker has not only witnessed the presence of a guest but further indicates that the speaker was involved in the event and being present, thus conferring the speaker more authority over the statement.

It might be expected that since / $nə =$ / indicates a greater level of speaker’s commitment to the information conveyed, therefore, it can only occur with first person subjects. / $nə =$ / is nevertheless also found in non first-person speech, as in (375) and (376) below.

(375) t-wk q<sup>h</sup>əzu kə tə=χci sə  
 3-ERG bowl ARG PERF:VISUL=break STP  
 ‘He broke a bowl.’

(376) t-wk q<sup>h</sup>əzu kə nə=χci sə  
 3-ERG bowl ARG PERF:VISUL=break STP  
 ‘He broke a bowl.’

Sentences (375) and (376) have the same meaning, the only difference is that (375) can be interpreted as the speaker having either seen him breaking the bowl by accident or the speaker having seen his worried face and a broken bowl in front of him whilst no one else was present in the room, and therefore the speaker believes that ‘he’ broke the bowl. On the other hand, sentence (376) indicates that the speaker knows for a fact that ‘he’ broke the bowl on purpose, therefore asserting greater level of commitment to the statement conveyed and attributing volitionality to the agent.

#### 7.10.4 Inferential marking

There are two inferential markings, /timi/ and /əmi/, in past tense construction and non-past tense construction respectively; etymologically, the past tense inferential marker consists of the default directional marker /tə=/ and the non-past negative

/mi=/, and /tə=/ is influenced by vowel harmony giving /timi/ which in rapid speech has a variant /tivi/. The non-past inferential marker consists of the directional /ə=/ with the non-past negative /mi/, with vowel harmony giving the form /əmə/.

In general, inferential marking indicates that the speaker is making a statement about an event based on indirect, non-first hand evidence, be it visual, hearsay, or even a dream. Therefore, in conversations with inferential marking, it is customary to follow up the statement with a subordinate clause containing the evidence perceived by the speaker to draw the preceding statement pertaining to event or status concerned.

Non-past inferential is marked by /əmə/. Like other evidential markers, it precedes the main verb of the predicate or the copula verb in copula constructions. The use of /əmə/ indicates that the speaker is not certain of the information being conveyed, and the speaker draws information based on what the speaker perceives to be true. Furthermore, the essence of the inference is not only about expressing uncertainty about the event or state, but instead about the speaker's perceived correlation between the evidence he receives, whether it may be visual, auditory, or even in dreams, and the conclusions he makes. For instance, the speaker may be certain

about the evidence, but may have doubts about his conclusions based on that evidence. Below are some example sentences.

(377) te χəta əmə ci = ɾə

3 home INFER EXIST = COP

‘(I think) he is at home.’ (There is no direct translation of the evidential marker /əmə/, it can be translated into any of the English evidential modals e.g., assume, think,

(378) kə:ta ʔk<sup>h</sup>e te p<sup>h</sup>e əmə ŋo = ɾə

DIR:come NOM DET father INFER COP = COP:PRTCL

‘(It) appears the one coming (towards us) is (our) father.’ (the evidential marking can be translated into other English evidentials or epistemics.)

(379) ŋa ŋo = sce sko c<sup>h</sup>ə əmə ŋo = ɾə

I sick = INSTU cold because EVIDE COP = COP:PRTCL

‘I am sick (I) think because of a cold.’

In sentence (377), the speaker is referring to a particular person known to both the speaker and the addressee. Instead of using an existential declarative form to inform the addressee that ‘he’ is at home, the speaker uses the referential /əmə/ to indicate

that it might be him given what he saw: it may it be his dress, hair style, etc., that he is basing his conclusion on. The importance of using the inference system here is that the speaker is not fully committed to his statement. Inferential markers are commonly used with an existential verb in daily conversation. In sentence (378), you imagine two children waiting for their father's return and they see a figure in the distance, and one kid says (378), assuming that the 'person' coming towards them is their father based on the evidence that they see certain attributes of their father. And similarly, the use of the referential system here indicates that the statement is based on evidence that the speaker perceives relevant for the information derived from it. Sentence (379) is another referential sentence where the subject is in first person, which is fairly rare, however, this does occur and indicates that the speaker is not certain of the statement about his status.

Past-tense inferential marking is indicated by /timi/. Thus, the past tense of sentence (377) is as given below in (380). However, the sentence-final copula particle is not present in past tense constructions.

- (380)    te χəta            timi            ci  
           3 home        INFER        EXIST  
           '(I think) he was at home.'

Inferential marking with copula has the form /nimi/ and sentence (378) and (379) can be restructured as (381) and (382) below, with past tense inferential markings. Notice in past-tense inferential construction, the sentence-final copula particle changes to /sə/ from /ɿə/.

(381) kə:ta      ʔk<sup>h</sup>e      te      p<sup>h</sup>e      nimi      ŋo = sə

DIR:come NOM    DET father    EVIDE    COP = STP

‘(It) appeared the one coming (towards us) was (our) father.’ (Similar to (357) the rendering of evidential marking can be translated into other English evidential modals.)

(382) ŋa      ŋo = sce      sko    c<sup>h</sup>ə      nimi      ŋo = sə

I      sick = INSTU    cold because    EVIDE    COP = STP

‘I was sick (I) think because of cold (sickness).’

#### 7.10.5 Hearsay

The hearsay system is marked by the verb /jə/ ‘to say’, which can be accompanied by two types of particles in the verbal complex that differentiate between direct quote and indirect quote. In Qiang, “Generally there is no difference between second-hand and third-hand reported information, but if the hearsay marker is used in a clause with 1sg marking on the verb, the utterance must be interpreted as

similar to a direct quote” (LaPolla & Huang 2003:205). In this way, BM rTa’u shares a similar pattern to Qiang. In the following sentences, both receive the same marking, but they read differently. The utterance (384) means that the speaker heard from the referent that he (the referent) will go to Lhasa. If instead the verb roots are the third person with hearsay marking, as in (384), then it means that the speaker heard it from a second source that he, the referent mentioned, will go to Lhasa.

- (383) t-wuk      ɬasa      ə = va-ŋ                      ŋo              jə = ɬə  
 3PS-ERG   Lhasa   DIR:FUT = go-1<sup>ST</sup>   COP      say = COP  
 ‘(I was) told that he will go to Lhasa.’ (He told me)

- (384) t-wuk              ɬasa      ə = vi                      to                      jə = ɬə  
 3PS-ERG      Lhasa   DIR:FUT = go   COP                      say = COP  
 ‘(It is) said that he will go to Lhasa.’ (I heard)

The following sentences further exemplify the combination of verb root and hearsay marking. In the past indirect quote, the main clause is followed by the copula /sə/ which is then followed by the hearsay marking, as in (385) and (386).

(385) t-wk      tɕʰətɕin = kə      kə = ɿ-wk      jə = ɿə  
 3-ERG      vehicle = ART      DIR:PST = buy-ERG      say = COP  
 ‘He bought a vehicle.’ (He told me)

(386) t-wk      tɕʰətɕin      kə      kə = v-ɿə      sə      jə = ɿə  
 3PS-ERG      vehicle      ART      DIR:PST = 3-buy      STP      say = COP:PRTCL  
 ‘He bought a vehicle.’ (I heard).



## 8 Ideophones and interjections

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### 8.1 Introduction

In this chapter I discuss four smaller word classes: ideophones, onomatopoeic ideophones, expressives and interjections. Before proceeding further, the difference between onomatopoeia and ideophones needs to be explained. Here I treat onomatopoeia as limited to words imitating sounds, while ideophones are words that evoke all sorts of sensory events — not just sounds, but also colour, smell, taste, texture, and so on. One definition of ideophones is: “a word, often onomatopoeic, which describes a predicate, qualitative or adverb in respect to manner, colour, sound, smell, action, state or intensity (Doke 1935: 118).”

BM rTa'u has a whole range of ideophones which are regularly used during conversations and narratives. It is especially common in narratives when the addresser's verbal depiction of a particular situation is limited; the use of an ideophone creates a vivid mental image in the addressee's mind. In other studies, the term 'expressives' has also been used (Prins 2011:265, Daudey 2014: 460). Dingemanse (2012: 656) reports that in South-East Asian and Japanese linguistics, the term 'mimetic' is common.

### 8.1.1 Ideophones

Ideophones can consist of two identical syllables or four syllables with AABB or less frequently ABAB or ABCB as is also reported in Kyom-kyo rGyalrong (Prins 2011:265). As demonstrated by the following examples in this section, repetition of an ideophone signals a greater degree of intensity of the state that has been indicated by the verbal elements.

The following table provides a some examples of ideophones from different semantic fields, which, as will be demonstrated, reflect different syntactic and morphological features.

**Table 52: Ideophones**

action	IDPH + zji [IDPH + do/doing/does/did]
Four syllables	
<i>ʂqe.ʂqe.ʂqɔ.ʂqɔ</i>	‘describes a fight where objects are thrown around’
<i>pi.pi.pə<sup>vu</sup>.pə<sup>vu</sup></i>	‘describes fierce verbal fighting; or trash-talking’
<i>zji.zji.zjəp<sup>7</sup>.zjəp<sup>7</sup></i>	‘describes a fierce fight where objects are thrown around’
<i>ʂtɕi.ʂtɕi.ʂtɕəp<sup>7</sup>.tʂtɕəp<sup>7</sup></i>	‘describes the scene of fierce fighting’
<i>tɕa..ɪa.ma..ɪa</i>	‘describes a scene where many people are gathered and talking simultaneously’

<i>ə.ɬə.mə.ɬə</i>	‘doing something diligently’
<i>ni.ni.nə<sup>vu</sup>.nə<sup>vu</sup></i>	‘describes someone moving around and making natural gestures’
<i>ni.nə<sup>vu</sup>.ni.nə<sup>vu</sup></i>	‘describes something that is unstable, e.g., tree, bridge’
<i>sti.sti.stoŋ.stoŋ</i>	‘describes an object falling into a deep hole’
<i>bi.bi.bə<sup>vu</sup>.bə<sup>vu</sup></i>	‘describes someone constantly complaining’
<i>p<sup>hi</sup>p<sup>hi</sup>p<sup>hə</sup>wp<sup>hə</sup>vu</i>	‘describes someone complaining and having a verbal fight’
<i>zi.zi.zwa.zwa</i>	‘raining heavily’
<i>ch<sup>i</sup>.ch<sup>i</sup>.chəp̌.chəp̌</i>	‘eating with lots of noise’
Two syllable	
<i>kzəp̌.kzəp̌<sup>7</sup></i>	‘acting cautiously’
<i>vava</i>	‘acting slowly’

In general, the structure of most ideophones comprises two recurrent identical components (syllables). There appears to be clear distinction between ideophones of different semantic content in terms of the type of reduplication allowed in a particular semantically-bound ideophone. Therefore, reduplicability/reduplication is considered one of the main characteristics of an ideophone. The non-reduplicated base does not occur independently with a related meaning. Table 53 below demonstrates alternative reduplication strategies and how these change the semantic nature of the base forms.

**Table 53: Types of reduplication strategies of ideophones**

Base form	reduplication strategy		description
*zji.zjəp̚	AABB	zji.zji.zjəp̚ . zjəp̚	throwing around objects in fierce argument/fight
	ABAB	zji.zjəp̚ zji.zjəp̚	the sound of hitting something slowly and repeatedly
*ɿV + mV	ABCB	tɕa..ɿa.ma..ɿa	to do something quickly and effectively
*va	AA	vava	acting slowly

As shown above, the reduplicated forms AABB are normal. In some cases, ABAB or ABCB are possible with a different meaning, such as /ɲi.ɲi.ɲəʷu.ɲəʷu/ or /ɲi.ɲəʷu.ɲi.ɲəʷu/ to describe something that is moving back and forth slowly and continually.

Phonologically, BM rTa'u ideophones can incorporate sounds and combinations of sounds that are not part of the regular phonology. For example, /ʃ/ and the cluster /ʃp/, /zɖ/ and /ɣʒ/ are only found in ideophones.

Syntactically, ideophones precede the main verb that they relate to. They can be also followed by either form of the light verb /=və/, /zji/ 'to do'. The light verb can show inflection, as in (387).

- (387) tə = <sup>y</sup>u                      xə.ta                      ɣi = tɕ<sup>h</sup>ə                      *ʂqe.ʂqe.ʂqɔ.ʂqɔ*                      tə = zji  
 3:PS = ERG                      home                      come = CONJ                      **IDEO**                      DIR:PST = do  
 ‘He got home and then started throwing things around.’

- (388) tə = <sup>y</sup>u                      sə.tu                      nə = ŋo = ve                      *bi.bi.bə<sup>y</sup>u.bə<sup>y</sup>u*                      zji                      ɹə  
 3:PS = ERG                      when                      DIR:PST = COP = COND                      **IDEP**                      do                      COP:EVI  
 ‘Whenever it is, he complains. (He always complains).’

Ideophones other than action ideophones may occur in the predicate position in copula construction and/or as modifier of the subject position as shown in examples.

Ideophones can also occur in final proposition, as shown below;

- (389) te = ɣnə = <sup>y</sup>u                      ke.t<sup>h</sup>ə                      .ɣəp<sup>ˈ</sup>.ɹi                      sə = tə = ci                      *pi.pi.pə<sup>y</sup>u.pə<sup>y</sup>u*  
 3 = PL = ERG                      fierce                      fight                      PST = DIR = EXIST:EVI                      IDPH  
 ‘They are fighting fiercely, *pi.pi.pə<sup>y</sup>u.pə<sup>y</sup>u*.’

### 8.1.2 Onomatopoeic ideophones

Onomatopoeic forms can be better described as elements that directly imitate sounds in nature. They constitute a small sub-class of ideophones which are best understood as manner adverbs with special phonological and morphological

features. Unlike verbs, they have no possible affixes like those found on most non-copula verbs.

BM rTa'u onomatopoeic ideophones show a greater or lesser degree of sound iconicity or sound-symbolism and often display distinctive syllable structures that are not frequently found in other word classes; for instance, four-syllable words or two-syllable words with identical vowels. Vowel lengthening and other suprasegmental features are not salient with onomatopoeia. They appear to be least comprehensible to speakers of other dialects. Pragmatically, they are mostly used by adult speakers. It is unusual and often regarded as inappropriate to use onomatopoeic ideophones during conversation with mature speakers.

**Table 54: Manner of reduplication and meaning**

<i>Reduplication strategy</i>	<i>description</i>
tɕi.tɕi.ptɕa.ptɕa    AABB	'lots of noise, many people speaking at the same time'
tɕi.ptɕa.tɕi.ptɕa    ABAB	'single noise, repeating over and over'
ʒi.ʒi.vʒa.vʒa        AABB	'the sound of heavy rain'
ʒi.vʒa.ʒi.vʒa        ABAB	'the sound of slight continuous rain'

qi.qi.qo.qo	AABB	‘the sound of many mice digging holes in a hard surface’
qi.qo.qi.qo	ABAB	‘the sound of a mouse repeatedly hitting on a hard surface’

The table above illustrates how reduplication strategies affect the semantics of ideophones. When AABB type reduplication is employed it usually indicates a) greater volume of sound and b) intensification of the situation whereas ABAB reduplication suggests a slow and continuous flow of the action. It is not feasible to give a full list of all the onomatopoeic ideophones as, as mentioned above, practically any type of natural occurrence that produces a sound has a corresponding onomatopoeic ideophone. The following is an illustrative selection.

**Table 55: A partial list of onomatopoeic ideophones in BM rTa'u**

Items	description
ɿtɕiɿtɕiɿtɕəmɿtɕəm	‘the sound people make when crossing a river’
tɕ <sup>h</sup> itɕ <sup>h</sup> itɕ <sup>h</sup> əmtɕ <sup>h</sup> əm	‘the sound of eating food fast’
ʂiʂiʂaʂa	‘the sound of a snake slithering in the field’
ɕiɕiɕwaɕwa	‘the sound of heavy rain’
ɰiɰiɰɕəp <sup>1</sup> ɰəp <sup>1</sup>	‘the sound of heavy objects falling’

### 8.1.3 Expressives

In BM rTa'u, expressives are distinguished from other ideophones in terms of syllable structure. Expressives are commonly trisyllabic with identical second and third syllables (ABB). The first syllable is sometimes an independent lexical adjective that expresses the basic semantic content. However, in most cases, it does not occur independently, instead, it appears mostly in reduplicated form in sentences. The second and third syllables are commonly reduplicated ideophonic forms that express semantic intensity and colouring. Thus, expressives can be said to be marked in terms of reduplicability and applicability of ideophonic suffixes.

There are various way of constructing expressives. The most common way attested in BM rTa'u is through suffixation of ideophonic suffix/forms to an adjective. Further research needs to be conducted to investigate issues of the suitability/applicability of certain suffixes to certain root items, except for certain cases where the choice of suffixes is dictated by the type of attitude the speakers wants to express and/or to describes a particular situation. Colour terms are most common in this category. The following examples describe different shades of a particular colour and or different situation.

Expressives for colours are interesting. There are only seven basic colour terms native to BM rTa'u, and they share the syllabic format of AA. Intensification for



colour expressives is achieved by way of suffixation. There are three suffixes /-ɾə.ɾə/, /-ləp̌.ləp̌/ and /-tɕe.tɕe/ distinguished based on animacy where the former are used to describe inanimate objects while the last is often used to describe animates or humans.

- (390) te      ɲa = ɾə.ɾə = kə      to  
 DEM    black = SUF = ART    COP:EVI  
 ‘This is a very black one.’

- (391) te-vdzi-te      ɲa = tɕe.tɕe = kə      to  
 DEM-person-DEF    black = SUF = ART    COP:EVI  
 ‘This person is dark-faced.’

- (392) tə = ɲjə      kʰə = zə = te      ɲa = ɾə.ɾə = kə      to  
 3PS = PL:POSS    dog = DIMU = DF    back = INTE(IDEOP) = ART    COP:EVI  
 ‘Their dog is a very black dog.’

- (393) te      ɲa = ɾə.ɾə = te      ŋ = i = de      to  
 DEM    black = INTF(IDEF) = DEF      1PS = GEN = SUF    COP:EVI  
 ‘The very black one is mine.’ ‘(Lit)The very black one, mine it is’.

(394) vzdi = te = ɤa    ɲa = sku.sku = kə                      kə = ta            s = tə = ci  
 Person = DEM = CL    black = very:IDEP = ART                      DIR = **come**    ASP = DIR = ASP:COP  
 ‘A person with very dark skin is coming (towards us).’

(395) te                      ɲa = ɹə.ɹə = te                      ŋ = i = de                      to  
 DEM            black = INTF(IDEP) = DEF                      1PS = GEN = SUF    COP:EVI  
 ‘The very black one is mine.’ ‘(Lit)The very black one, mine it is’.

There is one more ideophonic element /fsəʷu.fsəʷu/ which I call a deintensifying ideophone, which reduces the semantic intensity of the word it follows. It can follow all basic colours in BM rTa’u, except for /pɕʰo/ ‘white’ and /tɕʰa/ ‘black and white’.

(396)

- |                    |                |
|--------------------|----------------|
| a. ɲa.fsəʷu.fsəʷu  | ‘light black’  |
| b. na.fsəʷu.fsəʷu  | ‘light red’    |
| c. ʂŋə.fsəʷu.fsəʷu | ‘light blue’   |
| d. sca.fsəʷu.fsəʷu | ‘light grey’   |
| A. ɲə.fsəʷu.fsəʷu  | ‘light yellow’ |

In some situations, the use of ideophonic /fsəʷu.fsəʷu/ indicates a negative attitude as illustrated by the following examples.

(397) t=i ste.mbo=te na.fsəʷu.fsəʷu kə=to  
 3:PS jacket=DEF IDEP:light black ART=COP:EVI  
 ‘His/her jacket is a light black one.’

(398) te vdzi na.fsəʷu.fsəʷu kə=to  
 DEM person IDEP:bad attitude ART=COP:EVI  
 ‘This person is not welcoming (bad attitude).’

In (397) the use of the expressive /na.fsəʷu.fsəʷu/ can be interpreted in two ways:  
 a) the objective description of an item as it actually appears to a lay-person’s eye  
 and b) the speaker’s disapproval as an unsuitable colour for a jacket. Such  
 expression of speaker’s attitude is further evidenced by example (398) where the  
 speaker use /na.fsəʷu.fsəʷu/ to suggest that the person in reference is not  
 welcoming to him. Others are /ɣʒoŋɣʒəŋ/ ‘clear and bright’ and /ləp̣̌.ləp̣̌/ ‘very.’

In general, expressives function like stative verbs and occur in predicate position  
 followed by copula and evidentials. They can also function as adjectives to modify  
 nouns. Alternatively they can appear as an argument of the light verbs /və/ ‘to do’  
 and /tʰa/ ‘to become’. They are distinguished from verbs in one essential way;  
 namely, that is they do not take directional prefixes, therefore expressing a change  
 of state is achieved through light verb constructions.

**Table 56: Expressives of colour terms**

Colour: colour + IDPH + COP:EVI	
ᵿᵿ.ᵿᵿ	‘black’
na.na	‘red’
ᶑᶑᵿ.ᶑᶑᵿ	‘blue’
ptᶑ <sup>h</sup> o.ptᶑ <sup>h</sup> o	‘white’
sca.sca	‘grey’
ᵿᵿᵿ.ᵿᵿᵿ	‘yellow’
tᶑ <sup>h</sup> a.tᶑ <sup>h</sup> a	‘black and white’
ᵿᵿ.ᵿᵿ	Intensification; often denotes positive connotation
ᵿᵿ.ᵿᵿᵿᵿ	‘very black’
ᶑᶑᵿ.ᵿᵿ.ᵿᵿ	‘very blue’
na.ᵿᵿ.ᵿᵿ	‘very red’
tᶑ <sup>h</sup> a.ᵿᵿ.ᵿᵿ	‘very colourful’
sca.ᵿᵿ.ᵿᵿ	‘very grey’
ptᶑ <sup>h</sup> o.ᵿᵿ.ᵿᵿ	‘very white’
tᶑᵿ.tᶑᵿ	Intensification, often denotes negative connotation
na.tᶑᵿ.tᶑᵿ	‘very red’
ᵿᵿ.tᶑᵿ.tᶑᵿ	‘very black’
ᶑᶑᵿ.tᶑᵿ.tᶑᵿ	‘very blue’

*ptɕ <sup>h</sup> o.tɕe.tɕe	‘very white’
fsə <sup>y</sup> u. fsə <sup>y</sup> u	Deintensification
na.fsə <sup>y</sup> u.fsə <sup>y</sup> u	‘light red’
na.fsə <sup>y</sup> u.fsə <sup>y</sup> u	‘light black’
zɰə.fsə <sup>y</sup> u.fsə <sup>y</sup> u	‘light blue’
p <sup>h</sup> əfsə <sup>y</sup> u fsə <sup>y</sup> u	‘light grey’
ɣɕoŋɣɕəŋ	‘crystal clear, very bright’
ksi.ɣɕoŋɣɕəŋ	‘very clear’
ptɕ <sup>h</sup> o.ɣɕoŋɣɕəŋ	‘white crystal clear’
zɰə.ɣɕoŋɣɕəŋ	‘blue crystal clear’
ksi.ɣɕoŋɣɕəŋ	‘very clear’
ptɕ <sup>h</sup> o.ɣɕoŋɣɕəŋ	‘white crystal clear’
zɰə.ɣɕoŋɣɕəŋ	‘blue crystal clear’
ləp <sup>ˈ</sup> .ləp <sup>ˈ</sup>	‘very’
naa.ləp <sup>ˈ</sup> .ləp <sup>ˈ</sup>	‘very red’
na.ləp <sup>ˈ</sup> .ləp <sup>ˈ</sup>	‘very black’
zɰə.ləp <sup>ˈ</sup> .ləp <sup>ˈ</sup>	‘very blue’
ptɕ <sup>h</sup> o.ləp <sup>ˈ</sup> .ləp <sup>ˈ</sup>	‘very white’

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Colour + shape/IDPH + COP: EVI

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jəʷu	‘wide and open area’
na.jəʷu.jəʷu	‘to describe a scene, e.g, mountain, crops, where everything is covered in red’
ɲə.jəʷu.jəʷu	‘to describe a scene, e.g, mountain, crops, where everything is covered in blue’
təŋ	‘cylindroconical shape’
na.təŋ.təŋ	‘a scene where everything is black’
zɲə.təŋ.təŋ	‘a scene of nothing but blue’
sku	‘sharp-headed’
na.sku.sku	‘to describe a very black sharp-headed shaped object’
ptɕʰo.sku.sku	‘to describe a very white sharp-headed shaped object’
ɲə.sku.sku	‘to describe a very blue sharp-headed shaped object’
ɕtəʷu	‘short and stout’
na. ɕtəʷu.ɕtəʷu	‘to describe a very back short and stout object’
ptɕʰo.	“to describe a very white short and stout object”
ɕtəʷu.ɕtəʷu	
ɲə.	‘to describe a very blue short and stout object’
ɕtəʷu.ɕtəʷu	

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#### 8.1.4 Interjections

Watters describes interjections as “single word, emotive outbursts that do not enter into syntactic relations with other parts of the grammar.” He further notes that “they occur in isolation and stand alone as full utterances” (Watters 2002:188). They are included in this chapter along with onomatopoeia because, like onomatopoeia, they can be the sole element in an utterance. A selected sample of interjections is given below. Some interjections may show reduplication of the last syllable for intensification.

**Table 57: Interjections**

Interjection	meaning
yoja	‘Okay’
əhen	‘No’
yən	‘Yes’
(non-pulmonic dental)	‘Wow’ (expresses surprise and admiration or disbelief)
kadi	‘Wow’ (expresses pleasant surprises)
otɕʰədʒədʒa	‘Wow’ (expresses pleasant surprises)
cʰita	‘Wow’ (expresses pleasant surprises)
fiavo	‘Wow’ (expresses great surprise; pity and admiration)
atsatsa	‘Ouch’ (when touching or drinking something hot)
anana	‘Ouch’ (when something causes pain)
aɾaɾa	‘Ouch’ (when something causes pain)
atɕʰutɕʰu	‘Ouch’ (when touching something cold or icy)
ləla	‘Really!’ (expresses confirmation of a statement, or

	amusement at somebody else's statement or action)
aq <sup>h</sup> a	'Sorry' (expresses sympathy)
scala	'Damn it!'
miɕjesce	'Damn it!'
mitɕ <sup>h</sup> əmsce	'Damn it!'

/ɣoja/ is used mainly as an affirmative response to suggestions, recommendations and or commands, whereas /ɣən/ has a function similar to English 'Yes', as a response to Yes-no questions. When the negative interjection /əhen/ 'No' is used it is often followed by a clause containing a corresponding negative marker indicating the proposition to which 'No' is addressed. Therefore, /əhen/ sometimes does not occur alone. It may be followed by a clause containing a negated verb.

(399) Exasperation/commiseration

- a. ahavo                      'Sorry!' (expresses surprise and sadness)
- b. ap<sup>h</sup>a.po                  'Sorry!' (expresses surprise and sadness)
- c. op<sup>h</sup>oɕəɽi                'Sorry!' (expresses surprise and sadness)

Examples in (399) are given in order of the level of surprise or sadness they express.

(399) expresses the greatest sadness, and it is rarely heard in daily conversation. It is mostly used when reacting to terrible news, such as someone's death or accidents.

(399) and (399) are fairly frequent. The highlighted vowel [a] and [o] are common



interjection prefixes that can be attached to other injections, especially common with those expressing pain and sadness.

(403) Pleasant Surprise

- a.     ka<sup>n</sup>di             ‘Whoa!’
- b.     otɕ<sup>h</sup>ədʒadʒa     ‘Whoa!’
- c.     c<sup>h</sup>ita             ‘Whoa!’

These are used to express pleasant surprises. They are arranged in a similar fashion, as the above, to reflect the level of surprise they express. What is interesting about (402) is that it can followed by the Tibetan numeral ‘hundred’ or ‘thousand’, to intensify the meaning. For instance, /c<sup>h</sup>ita/ can be followed by the Tibetan numeral ‘hundred’ /vja/ or ‘thousand’ ‘ston’ as /c<sup>h</sup>itavja/ and /c<sup>h</sup>itaston/.

(404) Sad surprise

- a.     miɕjesce         ‘Uh-oh!’
- b.     mitɕ<sup>h</sup>əmsce     ‘Uh-oh!’
- c.     scala             ‘Oh no!’

Most interjections cannot be analysed morphologically in meaningful ways, however, (402) and (403) have distinctive morphological features. They both begin

with the negative prefix /mi/ and end in the instrumental case marker /sce/. Finally, the stem verb of the interjections can be clearly identified as /ɤje/ in (402) and /tɕʰəm/ in (402) meaning ‘good’ and ‘possible’ respectively.

(405) Pain

- a.     atsatsa     ‘Ouch!’ (associated with stinging or burning)
- b.     anana       ‘Ouch!’ (associated with pain)
- c.     atɕʰutɕʰu   ‘Ouch!’ (associated with shock of cold)
- d.     aɹaɹa       ‘Ouch!’ (associated with bone pains)

Prins (2011:279) notes that in Kyomkyo rGyalrong there are certain interjections used only by females. This is not the case with BM rTa’u; however, interjections indicating surprise and commiseration are exclusively used by adult speakers. Some are considered taboo and only used when the situation is so severe that the use of these interjections indicates the speaker’s uncontainable sentiment towards the events.

There is another type of interjection similar to those of Pumi (Daudey 2014:494) “that function as an interactive device to make the addressee act, and can be seen as one-word commands.” In BM rTa’u, a command consists of a directional prefix

with verb stem with a specific semantic content, however, the following do not have the same morphological makeup.

(406)

- a.    *tɪ.ɪ*                ‘Here it is!’ (Showing/giving something to somebody)
- b.    *nəsto*              ‘Stop it!’
- c.    *kəscu:a*            ‘Watch out!’
- d.    *ka.ɪ*                ‘Let me see/do!’

BM rTa’u has a set of interjections for handling animals. As shown in Table 58 below, these interjections share similar phonological and morphological characteristics with onomatopoeic ideophones but they are not imitative of animals, rather they are the sounds BM RTa’u speakers use to call animals and to chase animals. Following Daudey’s model I have divided them into two categories, each with different forms and meanings: calling animals towards the speaker, versus shooing them away from the speaker. The most striking feature of interjections for handling animals is that they can be repeated up to three to five times in a single utterance, even though they are represented here as two-syllable words.

**Table 58: Interjections for handling animals**

Animal	call	chase
pig	qoqo	qaqa
dog	tətə	ts <sup>h</sup> əɑ
cow	ŋoŋo	c <sup>h</sup> o
horse	oɕoɕo	c <sup>h</sup> o
sheep	lala	lala

## 9 Sentence structure

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In this Chapter, sentence structure is discussed and analyzed in several sub-sections. These sections focus on word order (§9.1), speech acts (§9.2), clausal conjunction (§9.3), clausal disjunction (§9.4), clausal adversative (§9.5), and subordination (§9.6).

### 9.1 Basic word order

The default word order is SOV. Grammatical roles of subject and object are normally indicated by the word order SOV in which the first argument is understood as subject and the second as object. Utterances can be manipulated to provide specific emphasis, usually with case marking to distinguish subject and object.

(400)

a	γə.zə = ʋu	pə.pa	ŋgə	b#	pə.pa	γə.zə = ʋu	ŋgə
	bird = AGT	worm	eat		worm	bird = AGT	eat
	SBJ	OBJ	V		OBJ	SUBJ	V
	'Birds eat worms.'				'Worms, birds eat them.'		

c	γə.zə	pə.pa	ŋgə	d	pə.pa	γə.zə	ŋgə
---	-------	-------	-----	---	-------	-------	-----

bird	worm	eat	worm	bird	eat
SBJ	OBJ	V	SBJ	OBJ	V
'Birds eat worms.'			*‘Worms eat birds.’		

In the case of absence of case marking, a common phenomenon, the argument that appears first is subject and the second as object. Sentence (400) can only mean ‘Worms eat birds.’

In the grammatical example (400), the subject is not marked as agentive, but because it appears first therefore it is an acceptable sentence with acceptable semantic meaning. In example (400) with the word order OSV, the subject is marked for agentive therefore it is an acceptable utterance, which is especially common when the object has emphatic meaning.

## 9.2 *Speech acts*

Four types of speech acts are discussed below, namely declarative, interrogative, imperative. Each relates to a particular speech act, as illustrated in Table 59 below:

**Table 59: Speech Acts**

Sentence type	Speech act	Sub-section #
Declarative	statement	(§9.2.1)
	Negation	(§9.2.1.2)
Imperative	Imperative	(§9.2.2)
	Prohibitive	(§9.2.2.1)
Interrogative	Content question	(§9.2.3.1.1)
	Yes-no questions	(§9.2.3.2)
	Binary questions	(§9.2.3.3)

### 9.2.1 Declarative

Declarative sentences make a statement or assert or deny the truth of a proposition.

If transitive they usually use the default SOV word order. Declarative structures for verbs and copulas are discussed in the subsections below.

Verbs are directly used to express or assert a proposition by taking tense-aspect markers, as in (401).

(401)

a    yə.zə-ŋə =<sup>y</sup>u        pɕɔ.la        to  
      bird-PL = AGT       fly           COP:EVI  
      ‘Birds fly.’

b    pə.sŋə        ji.ka            ɤje            ɿə  
      today        weather        good        STP:EVI  
      ‘Today’s weather is good.’

c    mə        kə-pca            sə  
      sky        DIR-open        PST:EVI  
      ‘Sky has opened.’ (It’s dawn.)

#### 9.2.1.1 Declarative copulas

There are two forms of copulas, namely /to/ and /ŋo/, which are discussed in (§7.7).

Both can be used in declarative utterances. Following are some examples:

(402)

a    te    ŋ = i        p<sup>h</sup>e        to  
      3.P   1.P = GEN   father   COP  
      ‘He is my father.’



b   ŋa   pepa    ŋo

1.P   Tibetan   COP

‘I am Tibetan’

#### 9.2.1.2 *Negation*

BM rTa'u has three negative prefixes. There are only two types of prefixes in the verbal domain of BM rTa'u, the other being directionals (§ 7.3.2.1): the general negators /ŋa= / [ᵐŋa] as in (403), adverbial negative clitics /ma= / in perfective in (404) and /mi= / in non-past tense (405). The general negative clitic /ŋa= / occurs in copula constructions before copulas; the verbal negative clitics occur in verbal predicates. The negative prefix (§9.2.1.2) and prohibitive prefix discussed in (§9.2.2.1) occur in the same position in the verb complex, following the directional prefix, and cannot appear together in the same verb complex, e.g., /yə=ti=tʰi/ (directional prefix + prohibitive + ‘drink’) ‘don’t drink!’ vs. /yə=ma=tʰju/ (directional prefix + negative + ‘drink’) ‘I didn’t drink’. A few examples that illustrate the use of the different negative prefixes are given below.

(403)   te           vlama       ŋa = .ɣə

3SG    monk       NEG = COP

‘He is not a monk.’

(404) te        vlama        y = ma = ʒi = sto  
          3SG    monk        DIR = NEG = become = PERF:COP  
          ‘He did not become a monk.’

(405) te        vlama        y = mi    = ta  
          3SG    monk        DIR = NEG = become  
          ‘He will not become a monk.’

#### 9.2.1.2.1 General negator /mɲa-/

The negator in copula constructions is /mɲa/, or now more commonly /ɲa/. It always occurs with sentence final particle /ɬə/, primarily in non first-person constructions; however, occasionally, one would find /ɬə/ in first-person constructions as well as in (406); but it does not occur in verbal phrases. Its usage is also limited by tense as it only occurs in non-past declarative sentences.

(406) ɲa    vlama        ɲa = ɬə  
          1st   monk        NEG = COP  
          ‘I am not a monk.’

#### 9.2.1.2.2 Verbal negators: / = *mi* = / & / = *ma* = /

Verb forms are negated with the morphemes / = *mi* = / and / = *ma* = /, which precede the verbs they negate. They are distinguished based on tense where / = *ma* = / is used in past tense constructions as in (407) while / = *mi* = / is used in non-past constructions as in (408)

- (407)    *te*    *ma = ɬi*                    *sə*  
          3sg   NEG = arrive        STP  
          ‘He did not arrive.’

- (408)    *te*    *mi = ɬe*                    *to*  
          3sg   NEG = come.FUT   COP  
          ‘He will not come.’

As shown in (409) below, negators are preceded by the appropriate directionals in past tense constructions where the directionals also have the function of past tense marker.

- (409)    *t-wk*                    *tə = ma = v-tsə*  
          3-AGT        PST:DIR = NEG = 3-eat  
          ‘He did not eat.’

In comparing the following two sentences, it can be concluded that existential constructions present some exceptions to the principle of tense determining the form/type of negator that can occur in a construction. (410) and (411) are in the past tense, therefore in theory only /ma-/ should occur in such a sentence, however we see both /mi-/ and /ma-/ with the same meaning but preceded by different directionals. This type of sentence where /=mi=/ occurs in past tense is only possible with existential copula constructions, therefore it is treated as a special type of sentence that does not conform to the negator-tense correspondence rule. However, as discussed in (§7.3.2.1), the directionals here have an evidential function; therefore the fact that the following sentences are identical except for directional indicates in that the speaker did not see the referent, therefore implying he was not there; on the other hand, in (411) the use of /nə=/ indicates that the speaker is involved in the event himself and has direct knowledge that the referent was not there.

(410) te tə = mi = ci

3sg PST:EVI = NEG = exist

‘He was not there.’

(411) te nə = ma = ci

3sg PST:EVI = NEG = exist

‘He was not there.’

### 9.2.2 Imperative

Imperative clauses are marked by a directional when the verb TAM allows. In imperative constructions, the verb is in default stem form, therefore even though [directional + verb] is a common verbal complex occurring in multiple different sentence structures, it cannot be confused with other usages. Furthermore, in imperative utterances, the prefix is stressed. Following are examples showing different directional prefixes used with the same verb.

- |       |    |                         |    |                       |
|-------|----|-------------------------|----|-----------------------|
| (412) | a. | ə-sto!                  | b. | nə-sto!               |
|       |    | ‘DIR-put!’ (up)         |    | ‘DIR-put!’ (down)     |
|       | c. | ɣə-sto!                 | d. | kə-sto!               |
|       |    | ‘DIR-put!’ (downstream) |    | ‘DIR-put!’ (upstream) |

Person is not marked in imperative, however, when a person referent is mentioned in the utterance, it is always accompanied by what can be termed a diminutive particle /g<sup>h</sup>o/, which expresses politeness in imperative expressions, as shown in below. Oftentimes, /g<sup>h</sup>o/ is replaced by /ŋi/, as shown in (413).

(413) nə-ɡ<sup>h</sup>o      kə = ɪɡə  
 2sg-DIM      DIR:IMP = sleep  
 ‘You sleep! (any direction)’

(414) nə-ŋi      kə = ɪɡə  
 2sg-DIM      DIR:IMP = sleep  
 ‘You sleep! (any direction)’

Dynamic verbs can be followed by ‘to go’ /ɕə/ to create imperatives, as shown in (415) to mean ‘go to do V’.

(415) ɪɡə      nə = ɕə  
 sleep      DIR:IMP = go  
 ‘Go sleep!’ (Lit. Go down to sleep.)

Here /nə/ indicates that the bedroom/or bed is located at a lower location from the point where the interlocutors are currently located at the time of speech.

(416) nə-ŋi      ɪɡə      nə = ɕə  
 2sg-DIM      sleep      DIR:IMP = go  
 ‘You go sleep!’ (Lit. You go down to sleep.)

Two types of imperative expressions have been discussed: a) directionals + V, and b) V + DIR + go. They can be further analysed based on two parameters; pragmatics and syntax. Syntactically, in type b) the verb ‘go’ is preceded by the semantically appropriate directional to indicate the direction of the verb, therefore in principle there can be any of five different directionals prefixed to the verb ‘go’. However, in type a) the relationship between directional and the V is rather robust and the only plausible argument as to why /kə = / is normally prefixed to some imperative verbs, such as (417) is lexicalization. Following are some more examples illustrating that only this directional can be prefixed to some verbs in [DIR:IMP + V] imperative constructions.

- (417)    kə = <sup>ɲ</sup>jəm        ‘DIR:IMP = sleep’  
           kə = <sup>n</sup>tsə        ‘DIR:IMP = hide’  
           kə = <sup>ʋ</sup>tse        ‘DIR:IMP = heat’  
           kə = <sup>ɕ</sup>ko        ‘DIR:IMP = become cold’

There do not seem to be specific grammatical reasons why these verbs are usually prefixed by /kə = / instead of other directionals. The meaning is not specifically that the action is taking place upstream. When indication of the verbal direction is pragmatically significant, these verbs can sometimes be prefixed by other directionals, however, in casual conversation, more often than not, it is unnecessary

to pinpoint the specific direction of the verb since it could be derived from context. In such contexts, it is the directional /kə= / that is attached to the verbal root.

Politeness is conceived as an important pragmatic skill. Parents frequently encourage children to speak politely to elders. As an integral part of the grammar of the language, there are certain ways politeness is expressed. In consideration of imperatives, politeness is expressed by using a yes or no question, which does not involve any particular grammatical feature associated particularly with politeness. In the examples below, (418) is a simple imperative with the structure of subject followed by the main verb which is obligatorily prefixed by a directional prefix which not only has its verbal directional content but also an added imperative meaning. This is made more polite by adding a topic marker on the noun. In (419), the polite imperative, the directional/orientational prefix is replaced by the yes or no question maker /ə=/. Notice that /ə= / also functions as one of the directional prefixes, which makes (418) a simple imperative as well. However, /ə= / of question marker and /ə= / as directional prefix is differentiated by suprasegmental features where /ə= / of question maker is realized with an ingressive airstream. (420) shows that in the same clause, both directional prefix and question marker can occur in this order on the main verb, however this is unusual; (419) is more usual.



(418) Simple imperative

tɕətə    te       kə = k<sup>h</sup>o

book    TOP    DIR:IMP = give

‘Give (me) the book.’

(419) Polite imperative

tɕətə    te       ə = k<sup>h</sup>o

book    TOP    Q = give

‘Could (you) give (me) the book?’

(420) Polite imperative

tɕətə    te       kə = ə = k<sup>h</sup>o

book    TOP    DIR = Q = give

‘Could (you) give (me) the book?’

9.2.2.1 *Prohibitives*

Prohibition or negative imperative is expressed by the prefix /ti = / which directly precedes the imperative stem form of a verb. They are then obligatorily preceded by a directional marker. Stress is on the verb root, as in all imperatives.

**Figure 12: Structure of prohibitives**

DIR + ti + V stem
-------------------

The directional prefix is semantically determined. However, when the specification of the directional prefix is not required pragmatically then /tə/ fills this position. It also seems to be the case that some directional prefixes have a conventionalized usage in the sense that when the choice of verbal directional prefix is not significant pragmatically, some directional prefixes occur more often than others as shown in the example (421). /ɪgə/ may be prefixed by any of the directional prefixes indicating where the action will occur from the point where the speaker is, and when this information is not significant in relation to the conversational purpose it is usually /kə/ that is attached to the verbal stem as /kə=ɪgə/ 'Sleep!', thus the negation has the form /kə=ti=ɪgə/ 'Don't sleep!'. Rarely would one hear /nə=ti=ɪgə/ 'Don't sleep!' or /ʏə=ti=ɪgə/ 'Don't sleep!', even though they are perfectly grammatical.

(421) tə=    ti=    ɕə

DIR    NEG    go

'Don't go!'

(422) kə = ti = ɿgə  
 DIR NEG sleep  
 ‘Don’t sleep!’

Unlike in Kyom-kyo rGyalrong (Prins 2011: 491), there is no native term for polite prohibitives. Instead the Tibetan term /k<sup>h</sup>a.t̚so/ ‘please, thanks.’ is used to express polite prohibitives as shown in the following examples.

(423) tə = ʁa ə = ti = ɳc<sup>h</sup>u k<sup>h</sup>a.t̚so  
 3P:S = DAT DIR = NEG = hit please  
 ‘Please, don’t hit him’.

### 9.2.3 Interrogative

#### 9.2.3.1 Content question

A content question is used when the addresser expects some particular information to be provided by the addressee. Content questions are formed with an interrogative word, as in Table 60, which can be inflected by case markers. Table 59: Speech Acts below repeats these forms . As in many other languages, BM rTa’u question words are used to indicate that the clause is a question and to indicate what information is being requested (Payne 1997: 299-300). In content questions, the question word

occurs in its normal slot as in (424) and (425). There is no fronting of the question word.

**Table 60: Content questions**

BM word ‘what’	Case marker	Gloss	meaning
tɕəkə	-k <sup>h</sup> a	‘instrument’	‘by what’
	-vəsce	‘purpose’	‘what for’
	-k	‘agentive’	‘what did what’
sə	-k	‘agentive’	‘who did what’
	-ki	‘dative’	‘to whom’
	-p <sup>h</sup> a	‘comitative’	‘with whom’
	-i	‘genitive’	‘whose’
sətu		‘when’	
<sup>n</sup> da		‘where’	
	-k <sup>h</sup> a	ablative	‘from where’
	-p <sup>h</sup> e	ablative	‘until where’
tɕək <sup>h</sup> a			‘why’
tɕ <sup>h</sup> əsa			‘how many/much’

(424) te tɕəkə to  
 DEM what COP  
 ‘What is this?’

(425) ni sətu xəta ci  
 2sg when home EXIST  
 ‘When are you at home?’

#### 9.2.3.1.1 /tɕəkə/ ‘what’

/tɕəkə/ is the most common question word in BM rTa’u. Even though it may be closely translated as ‘what’, it can mean ‘why’ as well, as exemplified in (427). It can also be used in rhetorical questions for emphasis, as exemplified in (428).

(426) tɕəkə və = sə ci  
 what do = IMPF EXIST  
 ‘What are you doing?’

(427) tɕəkə nə ɔ  
 why hurry COP  
 ‘Why do you hurry?’

- (428) tɕəkə mi dʒen ŋo  
 what NEG miss COP  
 ‘What don’t I miss!’ (Lit. I miss a lot!)

/tɕəkə/ can take case inflections, such as instrument /=k<sup>h</sup>a/ as seen below.

- (429) ni tɕəkə=k<sup>h</sup>a ɣmə dʒen ŋo  
 2sg what=by fire light COP  
 ‘What are you going to light the fire with?’

- (430) t-wk ni=ɣa tɕəkə=k<sup>h</sup>a tə=ʎcu sto  
 3sg=AGE 2sg=DAT what=with PST:DIR=hit PERF:COP  
 ‘What did he hit you with?’ (He hit you with what?)

When inflected by /=vəsce/ it indicates purpose as in (431) below;

- (431) te tɕəkə=vəsce to  
 3sg what=for COP:EVI  
 ‘What is this for?’

The agentive marker /-k/ can be directly cliticised to the question word, as shown below in:

- (432)    tɕəkə-k            tə = <sup>ɲ</sup>cu            sto  
               what-AGE    DIR:PST = hit    PERF:COP  
               ‘What hit you?.'

#### 9.2.3.1.2 /sə/ ‘who’

Below are some examples of /sə/ in different sentences:

- (433)    sə            ɪə            s-wuk = ɣni            kə = ɪja  
               who        and        who-AGT = DU        DIR:PST = go  
               ‘Who and who went there?’

- (434)    s-wuk            tə = χɕi            sto  
               who-AGE    DIR:PST = break    PERF:COP  
               ‘Who broke (this)?’

- (435)    sə = ki            tə = k<sup>h</sup>o  
               who = DAT    DIR:PST = give  
               ‘Whom did you give (it) to?’

- (436) s-uuk                      tə = f-ko                      sto  
 who = AGE    DIR:PST = NON1ST-give    PERF:COP  
 ‘Who gave (it to you)?’

- (437)    te        s=i                    tɕətə        to  
              this    who=GEN    book        COP  
              ‘Whose book is this?’

- (438)    te      tɕətə      te      s=i-de      to  
           this book    TOP    who=GEN-PARTC    COP  
           ‘Whose book is this?’

As shown in the above examples, any marking can occur on the question word such as plural in (433), agentive (434), dative (435), and genitive marking 0.

#### 9.2.3.1.3 /tɕʰəsa/ ‘how many/much’

/tɕ<sup>h</sup>əsa/ when occurring with CL indicates ‘how many’ or ‘how much’ as exemplified below in (439) and (440) below. It can also be followed by stative verbs to indicate the level of state as in (441). It also can occur with /de/ to mean ‘how to’, the way of doing something, as shown in example (442).



(439) jəŋa tɕʰəsa = kə tə = ci  
 sheep how = CL DIR = EXIST  
 ‘How many sheep are there?’

(440) ɣɪə tɕʰəsa = kə tə = tu  
 water how = CL DIR = EXIST  
 ‘How much water is there?’

(441) tɕʰəsa = kə scə ŋo  
 how = CL happy COP  
 ‘How happy (you will be).’

(442) pi tɕʰəsa = de tɕʰə ɲi ɕa to  
 tsampa how = to CONJ makeneed COP  
 ‘How does one make *tsampa*?’

#### 9.2.3.1.4 /sətu/ ‘when’

Below are some examples of the content question word /sətu/ ‘when’. Similar to other interrogative pronouns, /sətu/ can be inflected by case markers.

(443) ni sətʉ ɭi ŋo  
 2sg when arrive:PST COP  
 ‘When did you arrive?’

(444) sətʉ = p<sup>h</sup>e xəta ci  
 when = until home EXIST  
 ‘Until when are you at home?’

(445) sətʉ mə nə = ɭi sto  
 when rain DIR:PST = come:PST PERF:COP  
 ‘When did rain come?’

As shown in (445), unlike other interrogative constructions, the referent/subject may occur after the question word.

#### 9.2.3.1.5 /tɕək<sup>h</sup>a/ ‘why’

When /tɕək<sup>h</sup>a/ ‘why’ is used in an utterance, it is always accompanied by the causative word /sce/, as in (446) and (447), the utterance can be translated as ‘What caused the event/state?’.

(446) ni mdzo sce tɕək<sup>h</sup>a to  
 2sg hungry CAUS why COP

‘Why are you hungry?’ (Lit. what caused you to be hungry?)

(447) ni mi = ɿga sce tɕək<sup>h</sup>a to  
 2sg NEG = happy CAUS why EVI:COP

‘Why are you unhappy?’ (Lit. What caused you to be unhappy?)

A closer look at the morphological elements of /tɕək<sup>h</sup>a/ reveals that it is actually constituted of the first syllable of the question word /tɕəkə/ ‘what’ and the instrumental case marker /k<sup>h</sup>a/. This also explains why sentence built around /tɕək<sup>h</sup>a/ should be better translated as ‘What causes someone to be in that state? Or what causes someone to do something’ instead of ‘Why is someone in that state’ or ‘Why is someone doing something?’. Consider the following example;

(448) tu-k məsə = k<sup>h</sup>a ɳc<sup>h</sup>u = sce tɕək<sup>h</sup>a to  
 3 = AGE stick = INSTR hit = CAUS what:INSTR COP

‘What caused him to hit you with a stick?’

In this example, the instrumental marker /=k<sup>h</sup>a/ appears twice; one in the usual location that is after the noun that indicates the object which has been used for the

action of hitting and the use of instrumental marker right after it just achieves the purpose of marking it as the instrument. The other is with the word /tɕəkə/, and it is evident that it has been grammaticalized to indicate ‘causation of the action’, just like in any other sentence types of /tɕəkə/, however, to achieve that functionality it has to be accompanied by /=sce/, glossed as causative in the interlinear morpheme glosses.

#### 9.2.3.1.6 /<sup>n</sup>da/ ‘where’

The interrogative pronouns, /<sup>n</sup>da/ is exemplified below. Like other interrogative pronouns /<sup>n</sup>da/ takes different inflectional markers. For instance, when inflected by demonstrative marker /=te/, /<sup>n</sup>da=te/ means ‘which one’ as exemplified in (450) which can take the plural marking /=nə/ to mean ‘which ones’ as illustrated in (451).

(449)    ni            <sup>n</sup>da            tə = ɕə            ŋo  
              2PS        where    DIR:PST = go    COP  
              ‘Where did you go?’

(450)    nə = ki        <sup>n</sup>da = te            ɕa  
              2sg = DAT    which = DEM    need  
              ‘Which one do you need?’

- (451)    nda = te = n̩ə                    ytsa      ɿə  
               which = DEM = PL      better    COP  
               ‘Which ones are better?’

#### 9.2.3.2 *Yes-No question*

The term yes/no question or polar question are used to refer to interrogative clauses for which the expected answer is ‘Yes’ or ‘No’. There are two types of polar questions: a copula interrogative clause and a verbal interrogative clause; each has different syntactic properties. A copula interrogative clause is marked by /ti = /, isomorphic with prohibitive, before the sentence final copula, as in (452), while a verbal interrogative clause is marked by the clitic /-i/ cliticised to the directionals that precede the verb root, as illustrated in (453).

The answers to a polar questions can be simply be affirmation or disaffirmation; an affirmative answer to a copula polar question is simply the sentence final copula /to/ when the subject is in third person, which becomes /ŋo/ if the subject is in first or second person and /m̩a = ɿə/ if the answer is negative. Affirmative answers to a verbal interrogative consist of the verbal complex with its directional prefix, which is often cliticized by person agreement marker as (453); disaffirmation has the form of negative marker, /ma = / in past tense and /mi = / in future tense, just before the main verb which can be preceded by the directional prefix as exemplified

in (454); the example also shows that the verb root has agentive marker /=k/, however this is not the case with some verb roots.

(452)

Q:

te	vlama	ti = ŋo
3sg	monk	Q = COP
'Is he a monk?'		

A1. to

'Yes.'

A2. mɲa = ɬə

NEG = COP

'No.'

In connected speech, /tiŋo/ is always pronounced as [tijo] or [tjo] therefore in subsequent sentences, especially in the texts provided, /tiŋo/ is written [tjo].

(453) Q.

ni	xəta	k = i = ɕə
2sg	home	DIR = Q = go

‘Did you go home?’

A.

kə = ɕa-ŋ

DIR:PST = go-1

‘(I) went.’

(454) Q.

ni zama ə = i = tsə

2sg food DIR = Q = eat

‘Did you eat?’

A.

ə = ma = tsu = k

DIR:PST = NEG = eat = ERG

‘(I) did not eat.’

### 9.2.3.3 *Binary question*

BM rTa’u uses several ways of constructing alternative questions. The most common way of expressing an alternative question is a declarative followed by a negative declarative connected by the comparative particle /so/ [V

+ so + NEG + V + COP:EVI]. Alternative questions may be translated as “Is it the case that X or is it not the case that X”, as is exemplified in (455) below.

- (455)    *tur-k*    *vo*            *fti*        *ti=ŋo*        *so*    *mi*    *fti*        *to*  
              3-ERG   alcohol    drink    Q=COP    or    NEG drink    COP:EVI  
              ‘Does he drink alcohol or does he not?’

Another common structure of alternative questions is ‘Is it X or Y’ structure. X and Y can be noun or adjective (state verbs) and this has a similar syntactic structure: X + Q + so + Y + COP. See example (456) below:

- (456)
- a. *te*    *ɲaɲa*    *ti=ŋo*        *so*    *nana*    *to*  
       3P       black    Q=COP    or    red        COP  
       ‘Is this black or red?’
- b. *ɲaɲa*        *to*  
       black        COP  
       ‘(It’s black).’



### 9.3 Clausal conjunction

Nominals can be conjoined in two ways: by the use of /=.ɪə/ and *asyndetically*, section (§3.14) provides a detailed discussions of nominal conjunctions. Here clausal conjunction, which is marked by /tɕʰə/ is discussed. It appears in many syntactic positions with varying meanings and functions. Here I will concern myself with its conjunction usage. First of all, it can be used to join two verbal phrases to express simultaneity as illustrated below.

- (457)    tɕa    fti = tɕʰə                      ɣə = zə                      sə = tə = ci  
          tea    drink = CONJ    DIR:PST = sit                      PST = DIR = EXIST:EVI  
          ‘(He) was sitting and drinking tea.’

- (458)    stemə                      kə = scu = tɕʰə                      ɣə = zə                      sə = ca-ŋ  
          show                      DIR:IMPER = watch = CONJ    DIR = sit    PST = EXIST-1<sup>ST</sup>  
          ‘I am sitting (at home) and watching the show.’

This can also be used to express a consequential/causal relationship between two verbal phrases where the first phrase causes the second phrase, as illustrated below.

- (459) vo fti = tɕʰə vəje = və = ɹə  
 alcohol drink = CONJ drunken = do = EVI:COP  
 ‘He drinks alcohol (which causes him) to act drunk.’

Finally, it can be used to express sequential but not causal relationship between two verbal phrases.

- (460) γə = zo = tɕʰə zama ə = tsə  
 DIR:IMPER = sit = CONJ food DIR:IMPER = eat  
 ‘Sit and then eat food.’

#### 9.4 Clausal disjunction

As discussed in (§3.14.4) disjunction of noun phrases is usually indicated by the disjunctive particle / =so/. The same / =so/ is also used for clausal disjunction as seen below, often in alternative questions.

- (461) te ə = γnoŋ = ɹə = so əkʰi = te γnoŋ = ɹə  
 this Q = beautiful = COP = DJ other = one beautiful = COP  
 ‘Is this one beautiful, or the other one beautiful?’

(462) ni tɕama ə = ŋo = so layjo ŋo  
 2sg chief Q = COP = DJ assistant COP  
 ‘Are you the chief or an assistant?’

(463) ni yɬse tʰi = ə = ŋo = so pi tɕə ŋo  
 2sg tea drink = Q = COP = or tsampa eat COP  
 ‘Are you going to drink tea or eat *tsampa*?’

#### 9.5 Adversative/conditional /kʰe/

The adversative coordinator /=kʰe/ expresses the denial of an expectation. In example (464) below, the speaker went to Tashi’s house expecting to find him there, but he was not there. /=kʰe/ can also be used to express a contrast between a negative and a positive expression where /=kʰe/ connects conflicting expectations of a preceding positive coordinated as in (465) below.

(464) ŋa Tashi = ndo kə = ɕa-ŋ kʰe  
 1<sup>st</sup> PN = house PST = go-1st but  
 te tə = mi = ci  
 3sg PST = NEG = EXIST  
 ‘I went to Tashi’s house, but he was not there.’

- (465) tɕətə ta mɲuuk = ɿə k<sup>h</sup>e k<sup>h</sup>oŋi = te  
 book EMPH know = COP but exam = TOP  
 ə = və = sko  
 MODAL = DIF:FUT = can  
 ‘I am knowledgeable, but I may not pass the exam.’

## 9.6 Subordination

Subordinating conjunctions are used to subordinate the verbal conjunct modified by the conjunction. In BM rTa’u, subordinate clauses occur in sentence initial position preceding the main or independent clause, and are marked by grammatical particles to indicate their relation to the following independent clause. Subordinate clauses in BM do not encode tense or aspect. There are three types: conditional, temporal and concessive.

**Table 61: Subordinating markers in BM rTa’u**

Category	Subordinating terms	Meaning
Conditional	ve	‘if’
	k <sup>h</sup> e	‘if’
Temporal	ʒe.ʒe	‘while’
	tɕ <sup>h</sup> a	‘while’
	tɕ <sup>h</sup> ə	‘since’
	=p <sup>h</sup> e	‘until’

### 9.6.1 Temporal clause /tɕʰa/

BM rTa'u uses several temporal subordinators which temporally relate subordinate clauses to main clauses, e.g., /tɕʰa/ as in as seen below. Simultaneous events can also be expressed by the adverbial conjunction /ʒe.ʒe/ as illustrated in (467) below which can be translated as 'while'. The question word /sətu/ 'when' can be used in a declarative sentence to indicate 'whenever' in English, and if the two clauses have different agentive arguments, it is necessary to insert reference to differentiate who does what as in (468).

- (466)    ɲa    tɕʰa = nu    ci    tɕʰa    te = ki    scu    nə = ɕa-ŋ  
           1    town = LOC    EXIST    while    3 = DAT    visit    DIR = go-1P  
           'While in town, I went to visit him.'

- (467)    t-wuk    tɕətə    scu    ʒeʒe    zama    vdzə    sə = tə = ci  
           3 = ERG    book    look    while    food    eat    PST = DIR = EXIST:EVI  
           'While reading a book, he was eating food.'

- (468)    ɲa    sətu    xəta    ci    tɕʰa  
           1PS    whenever    home    EXIST    while

t-wk	ɲc <sup>h</sup> aɹa	ɭe	to
3-ERG	hang.out	come	COP

‘Whenever I am at home, he comes to hang out with me.’

The postpositional clausal subordination conjunction /tɕ<sup>h</sup>a/ is also used to express a temporal reference. It implies approximate synchronicity of the occurrence of the subordinate clause with the occurrence in the main clause. Usually, the verb in the main clause bears the marker of tense and aspect as in (469). Most often, when /tɕ<sup>h</sup>a/ occurs in a clause as a subordinating conjunction to connect two conjuncts it is often preceded by the existential copula /ci/ which has the same function as nonfinite verbs in English, as shown in (470).

(469)    ɲa    tɕətə    <sup>n</sup>deŋ    tɕ<sup>h</sup>a    te    tə = s-wk    sto  
           1st   book   read    when   3sg   PST = see-1st   COP  
           ‘I knew him when I was a student.’

(470)    ɲa    zamaa    tsə = sə = ci            tɕ<sup>h</sup>a    te    tə = .ɹja  
           1st   food    eat = VP = EXIST    when   3sg   DIR = leave  
           ‘He left when I was eating food.’

To indicate an initial boundary, a sequence of the form of /tɕ<sup>h</sup>a + tɕ<sup>h</sup>ə/ is employed as can be seen in (471) below.

- (471)    ɲu-ni        titiŋa    ɲo    tɕ<sup>h</sup>a        tɕ<sup>h</sup>ə  
              we-DUL    small    COP   while    since  
              ‘Since we were small (we knew each other).’

Another sequential marker is /=p<sup>h</sup>e/ which can be used for ‘until’, as exemplified below:

- (472)    me        ma = ʁi = p<sup>h</sup>e                            xəta        ɣə = zo  
              mother NEG = arrive = until        home    DIR:IMPER = stay  
              ‘Stay home until Mother arrives.’

#### 9.6.1.1 /tɕ<sup>h</sup>ə/

The particle /tɕ<sup>h</sup>ə/ can be used as a clause conjunctive (§9.3). When used as a consecutive temporal clause marker it refers to an event that precedes the main event indicated by the main clause and also serves as a precondition for the occurrence of the main event. In this regard /=tɕ<sup>h</sup>ə/ is partly similar to /=ve/. They are distinguished primarily based on tense parameters: the events denoted by clauses that are linked by /=tɕ<sup>h</sup>ə/ occur in the past tense, whilst those denoted by

/ = ve/ are in non-past tense or hypothetical. See the following examples illustrating the difference in tense.

(473) mə nə = ɣi = ve zbe = to  
rain DIR = come = if get wet = COP  
‘If it rains, (it) will get wet.’

(474) mə nə = ɣi = tɕʰə tə = zbe = sə  
rain DIR:PST = come = CON get wet = COP  
‘Rain came, and it got wet.’

### 9.7 Conclusion

This chapter discussed basic word order in BM rTa’u which is SOV. Second, it discussed different types of speech acts starting off with declarative sentences which are typically characterized by sentence-final copula or TAM markers. The chapter also very briefly discusses clause conjunction and disjunction, as well as various types of clause subordination. There is some overlap between these categories.

This part of the study is very preliminary, there is a great deal more remaining to do on rTa’u discourse structure. For reasons of time and length, these will be pursued in future studies.



## Appendix 1: TEXTS

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### *FOLKTALE: A STRONG MAN AND A CLEVER MAN*

(1): yna.yna.ke.ʒə vdzi ɕe ke = c<sup>h</sup>e = me=kə=rə

long long man strength ADJP=big=NOM=ART=CONJ

vdzi ruuk.pa ke = ts<sup>h</sup>a = me=kə nə=ci=sto

man mind ADJP-clever-NOM=ART DIR:PST=EXIST=PST:COP

Long, long ago there were a strong man and a clever man.

(2): te = yn-juuk ʎa.sa ə = vi = lə tʂi nə = və = sto

3 = PL-ERG Lhasa DIR:FUT = go = NOM discussion DIR:PST = do = PST:COP

They discussed going to Lhasa.

(3): tɕ<sup>h</sup>ə a=sɲə tʂi kə = <sup>n</sup>dzuuk tɕ<sup>h</sup>ə ynə=ʁe=t-uuk

DM one = day discussion DIR:PST = agree CONJ 2=QU=TOP-ERG

ʎa.sa ə = vi = lə nə = və = sto

Lhasa DIR:FUT = go = NOM DIR:PST = do = PST:COP

Then one day they discussed and agreed and they (decided to) go to Lhasa.

(4): tə = ɕu = tɕ<sup>h</sup>ə vdzi = te = le ruuk.pa ke = ts<sup>h</sup>a = me = kə

3 = after = CONJ man = DART = TOP mind ADJP = clever = NOM = ART

nə = ŋo mɲa = rə = ŋo(mɲaro)

DIR:PST = COP NEG = COP = COP(TAGQ)

Then, one man was clever, right?

(5): <sup>h</sup>tse.mk<sup>h</sup>u = nu    γɕo    ə = ma = vzo = tɕ<sup>h</sup>ə

bag = LOC                  tsampa    DIR:PST = NEG = take = CONJ

ɿbu:k    a = se            ə = vzo = sto

sand            one = full    DIR:PST = take = PST:COP

(He) didn't take *tsampa* in the bag, (he) took (a bag) full of sand.

(6): ɕe = tɕin = t-u:k = le                  ŋo.ma = to tə = <sup>n</sup>ts<sup>h</sup>ə                  tɕ<sup>h</sup>ə

strength = NOM = 3-ERG = TOP    true = COP    DIR:PST = think    CONJL

<sup>h</sup>tse.mk<sup>h</sup>u:k = nu    γɕo            a = se            ə = mdze = sto

bag = LOC                  rtsam.pa    one = full    DIR:PST = fill = PST:COP

Strong Man thought it was true (that they really were going to Lhasa and that  
Clever Man's bag was full of *tsampa*) so (he) filled (his) bag with *tsampa*.

(7): γnə = ɤe = t-u:k            ɬasa            ə = ɕə = sto

2 = QU = DART-ERG    Lhasa    DIR:PST = go = PST:COP

Both went to Lhasa.

(8): a.sɳə            sa.kə ə = ɕə            ri.k<sup>h</sup>atə.ɕu

one day    like    PST = go            after then

gin.<sup>m</sup>ba      ti.ti = ŋa = kə = nu      ʒi = sto

monastery   small = DMT = ART = LOC   come = COP

After going like one day, then (they) came to a small monastery.

(9): pə.kə      ŋu = ni      ʃa.sa      mi = ʒe = rə = k<sup>h</sup>e      ti = nu

tonight   1 = two   Lhasa   NEG = reach = COP = so   here = LOC

<sup>n</sup>dzo = tɕ<sup>h</sup>ə      ɣə.ɕi = k<sup>h</sup>a      ŋu = ni      sŋa = tɕ<sup>h</sup>ə

stay = CONJ   tomorrow = ABL   1 = two   early = CONJ

ɕə = lə = ŋo      ə = jə = sto

leave = NOM = COP   DIR:PST = say = PST = COP

"We cannot reach Lhasa (today), so we will stay here tonight and we will leave early tomorrow," said (Clever Man).

(10): tɕ<sup>h</sup>ə      ti = nu      kə = ɰgə = sto = mo = k<sup>h</sup>e

then   here = LOC   PST = sleep = PST:COP = IMPF = so

Then (they) slept there.

(11): dʒo.ka = te = ŋə      tə = zja = ve      so = qi.kə

food = DET = PL   DIR:PST = steal = if   more = problem

γə = ta.rə                      k<sup>h</sup>e                      ton̩.bə    ŋa = rgə = tɕ<sup>h</sup>ə

DIR:FUL = happen    therefore    first    I = sleep = CONJ

tə.ɕu    ni = kə = rgə = k<sup>h</sup>e                      ŋa    rson̩    ə = jə                      sto

then    you = IMPER = sleep = CONJ I                      guard    DIR:PST = say    PST:COP

"If our food is stolen more problems will happen, therefore, first I will sleep, then you sleep and I will guard (our belongings)," said (Clever Man and he slept).

(12): tə.ɕu    ɕe.tɕin = t-wk̚ ʋjəm                      nə = ʎi = tɕ<sup>h</sup>ə                      ho

then    PN = 3-ERG                      sleepy    DIR:PST = feel = so    now

ni    rson̩    ɕa to ə = jə                      s = to

you    guard    need COP    DIR:PST = say    PST:COP

(After a moment) then Strong Man felt sleepy so (he) said, "Now you need to guard."

(13): ɕe.tɕin = le                      mco.tɕ<sup>h</sup>ə                      tə = ʋjəm                      sto

PN = TOP                      quickly                      DIR:PST = sleep                      PST:COP

Strong Man slept quickly.

(14): ʎa-ji                      ja = ɳə = ɤa                      γɕɔ                      a = se

image-GEN    mouth = PL = LOC    rtsampa    one = full

kə = ma      ʒa = nə = ʁa      ɣɔ      a = se  
 DIR:PST = smear   hand = PL = LOC   rtsampa   one = full

kə = ma = tɕʰə      ə.tə.qo-ji   h̥tse.mkʰi = nu  
 DIR:PAST = smear = CONJ   himself-GEN   bag = LOC

xtsə = te = nə      ə.ro      ə = ru      tɕʰə      ɕe = tɕin-ji  
 sand = DET = PL   outside   DIR:PAST = pour   CONJ   strong = man-GEN

h̥tse.mkʰi = nu   ɣɔ = te = nə      ə.tə.qo.te = nu   nə = ru = sto  
 bag = LOC   rtampa = DET = PL   his = in      DIR:PAST = fill = PST:COP  
 (Clever Man) smeared a lot of rtsam pa on the mouths and smeared a lot of rtsam  
 pa on the hands of the images, poured out all the sand in his bag and filled his bag  
 with Strong Man's rtsam pa.

(15): a.qə.tsa      tə=tʰa.ri.kʰa      ɕe.ni      ə = rve = ndi  
 moment   DIR:PST = after   brother   DIR:FUT = get up = DM  
 ə.tə      ɲjəm-ki      tə = sʰi      tɕʰə      ni      ɣɔ = nə  
 he      sleep-DAT   DIR:PST = fell   CONJ   you      PN = PL  
 aji      ʎa = nə-wuk      qo = ʁa = tə = və = sə      ə = jə      sto  
 all   image = PL-ERG   eat = EMPST = do = COP   DIR:PST = say   PST:COP

After a moment, "Brother get up... I fell asleep and the images ate all your tsam pa," said (Clever Man).

(16): ɕe.tɕin ə.ro = ə = rve tɕʰə a.kə kə = scu

PN back = PAST = get CONJ a PT = look

sto.kʰe ɬa = ncə ja = n̩ə = ɤa ɣɕo

CONJ image = PL mouth = PL = LOC rtsam pa

nə = tu tɕʰə tsʰi.pa tə = za tɕʰə

PAST = EXIST so anger PAST = get so

ɬa = ncə ɭa = rə fqa = n̩ə rku = ɤa nə = və sto

image = PL hand = CONJ neck = PL cut = EM PAST = do COP

Strong Man got back from sleep (woke up) and had a look at the images, saw the tsam pa on the images' mouths, got angry, and cut off all the images' hands and necks.

(17) qə.ɕi sɲa = tɕʰə tə = vre tɕʰə ho ni ɣɕo = n̩ə.le

the next day early = ADVL PAST = get upthen now your PN = PL

kə = sə ŋa.ke ɣɕo = kʰa mi = ndəŋ rə.kʰe ŋu.ni

PAST = finish my PN = TOP NEG = enough therefore we

xɕə.ta nə = voŋ ɡə.ɕi .se.ti<sup>21</sup> nə = qo ɣɕo = te  
 home FUT = go tomorrow you = GEN PN = DET  
 kə = lin jo ə.ro ə = taŋ ti = ŋo  
 PST = get again back FUT = come Q = COP

Then (they) got up early the next morning, "Now your rtsam pa is finished and my rtsam pa is not enough (for us) therefore, we will go home tomorrow, the day after tomorrow and (if) we get your rtsam pa back, (if we can find some rtsam pa for you) we will come back again, OK?" (Clever Man said).

(18): tɕ<sup>h</sup>ə ɣnə.ɕe = t-wuk xə.ta nə = ɕə  
 so both = DET-ERG home PAST = go  
 sto tɕi = nu nə = vi = tɕ<sup>h</sup>a ɣsər  
 COP way = LOC PAST = go = IMPF gold  
 ke.c<sup>h</sup>e.me kə kə = len sto  
 big a PAST = find COP

So both went home and on the way they found a big piece of gold.

(19): hoŋu.ni a.tɕi kə = len sto.k<sup>h</sup>e  
 now we together PAST = find therefore

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<sup>21</sup> The day after tommorrow

qə.çi      ti.nu      sə      ɣi = ve

tomorrow here      anybody arrive(FUT) = TOP

te = ke      rje = tɕʰə      t-wuk      ŋa      linə = jə = ve

that = DATask = CONJ      3P-ERG      get      PAST = say = if

ŋa      lin = lə = ŋo      ni      lin      ə = jə = ve

I      get = FUT = TOP      you      get      PAST = say = if

ni      lin = lə = ŋo      ti = ŋo      ə = jə = sto

you      get = FUT = COP      Q = COP      PAST = say = COP

"We found it together therefore, now (we) can't halve it, (we will) stay here and wait and if anybody arrives here tomorrow we will ask that (person who should get the gold) and if (that person) says I should get that gold then I will get it, but if (that person) says you get the gold, then you will get the gold," said (Clever Man).

(20): tɕʰə      ɣnə.ɣi-teu      ti.nu      ə = rŋi      sto = mo.kʰe

then both-ERG      there      PST = wait      COP = IMPF

Then both waited there.

(21): ri.pa.ke.tsʰa.me = te      ri.pa = le = tsʰa = to

clever man = DET      mind = TOP = hot(clever) = COP

vɕa.ɣci      je.me      ə.ro = ə = rve



midnight      around      back = PAST = get up

tɕʰə      xɕə.ta      ə = ɕə      tɕʰə

CONJ      home      PAST = go      CONJ

Clever Man was clever and around midnight (he) got back up and went home and...

(22) tə.ncə      me = ke      ə = jə = tɕʰə      qə.ɕi

his      mother = DAT      PAST = say = CONJ      tomorrow

ni      ɣna = ɕo      lo.lo      nə = ŋcʰə      tɕʰə

you      fuel = collect pretend      IMP = do      CONJ

za.qo = kə      ə = ŋgo = tɕʰə      ə = ʒi      tɕʰə

bucket = DET      IMP = carry = CONJ      IMP = come      CONJ

ŋa.nə = pʰa      kə = tɕu      ri = kʰa      nə = ki

us = DAT      PAST = meet after = then      you = DAT

jou = te      ɣsər      ke.cʰe.me = te      si      linə = jə = ve

FUT = ask      gold      big = DET      who      get      PAST = say = if

(He) said to his mother, "Tomorrow (morning) you pretend to collect fuel, carry a bucket and come, and after you meet us then (if I) ask you who gets the big (piece of) gold," said (Clever Man).

(23): ni    ripa = ke.ts<sup>h</sup>a.me = t-wuk    lin    ə = jə = mo    ə = jə = sto  
 you   clever man = DET-ERG    get   IMP = say = COP    PAST = say = COP  
 "You say, 'Clever Man gets (the gold),' said (Clever Man).

(24): tə.ɕu    ə.ro    ə = ɕə    tɕ<sup>h</sup>ə    scə.stoŋ  
 then    back    PAST = go    CONJ    comfortable  
 nə = və = tɕ<sup>h</sup>ə    ə = nzo = sto  
 PAST = do = CONJ    PAST = stay = COP  
 Then (he) went back (to his friend) and stayed with him comfortably.

(25): tɕ<sup>h</sup>ə    qə.ɕi = k<sup>h</sup>a    me = le  
 then tomorrow = LOC    mother = TOP  
 ə.ta.le.ə.ta    tə = ts<sup>h</sup>ə    tɕ<sup>h</sup>ə    ə = nzo = sto  
 certainly = come    PAST = think    CONJ    PAST = stay = COP  
 "Then tomorrow, Mother will certainly come," (he) thought, staying (with his friend).

(26): me    ŋo.ma    ɭi = sto    me = tuuk  
 mother really    come(pt)    mother = ERG

za.qo = kə = ə = ngo = tɕʰə      ɣi = sto

basket = DET = carry = CONJ    come = PAST

Mother really came... Mother came, carrying a basket (on her back).

(27): tɕʰə      kə = rje = tɕʰə      te      ɣsər

so      PAST = ask-CONJ      this      gold

ke.cʰe.me = te    suk      lin      ə = jə = sto

big = TOP      who      get      PAST = say = COP

So (Clever Man) asked, "Who (should) get this big piece of gold?"

(28): m-wuk      tə = cər      tɕʰə

mother-ERG    PAST = afraid    so

te    ɕe      ke.cʰe.me = t-wuk      lin    ndi      te    ɕe      cʰe    kʰa

DET strength big = DET-ERG      get    otherwise    he    strong    big    so

ŋu.ni    ma = zə = te      ə.mə = fse      ə = jə = sto

us      mother = son = DAT    might = kill      PAST = say = COP

Mother was afraid of (Strong Man) so (she) said, "(Strong Man should) get the gold, he is so (big) and strong otherwise he might kill us—mother and son."

(29): tɕʰə      ɣsər = te      ɕe.tɕin = t-wuk      kə = lin = sto  
 thus      gold = DET      PN = DET-ERG      PAST = get = COP  
 Thus Strong Man got the gold.

(30): ri.pa = ke.tsʰa.me-te      le      tsʰi.pa      tə = za = tɕʰə  
 clever = man = DET      TOP      angry      PAST = get = CONJ  
 xɕə.ta      ə = ɕə      tɕʰə      me = te-ji      ku-ci      a = ci  
 home      PAST = go      then      mother = DET-GEN      head = LOC      NUM = beat  
 kʰa      me = le      tə = fse      sto  
 so      mother = TOP      PAST = kill      COP  
 Then Clever Man got angry (with his mother) so he went home and killed (his)  
 mother by beating her on the head.

(31): tə.ɕu      me = te.ki      za.qo = kə      ŋgo      tə = ʂtʂə      tɕʰə  
 then      mother-DAT      basket = ART      carry      PAST = make      CONJ  
 ɬi = kə = nu      pi.ɣca      kə-ka      ʂten      tɕʰə      zo      tə = ʂtʂə = sto  
 field = ART = loc      stick      DET = LOC      hold      CONJ      stand PAST = make = PAST  
 Then he made his mother's (corpse in a position that it seemed she was)  
 carrying a basket and standing in a field by holding (the corpse) to a stick.

(32): tɕʰə ʒi vda.xpə te-ŋjə qa.na = te

then field owner DET-GNE child = DET

ʒi = tɕʰə ə.tə.ŋjə ko.bə ʂku sə = tə = ci

come(pt) = so their crop cut PST = DIR = EXIST:EVI

jə = tɕʰə a = ɣjə.la = kə = ŋcʰu tɕʰə

yell = CONJ ART = throw = PAST = REV so

me = te tə = vsə.la = sto

mother = DET PAST = knock down = COP

Then the field owner's child came yelling, "The (woman) is cutting our crops," and threw (a stone) at (the woman and) so (he) knocked down (Mother).

(33): me = te tə = fse jə = tɕʰə mnə.ston

mother = DET PAST = kill say = CONJ compensation

ɕa ə = jə = tɕʰə ɕo.vi

need PAST = demand = CONJ money

mu.ma = kə kə = lin = sto

great = ART PAST = get = COP

(Clever Man) demanded, saying, "(You) killed Mother, (I) need money as murder compensation," (so he) got a great (amount of) money.

(34): tə.ɕu    za.nba = kə = tɕ<sup>h</sup>a    yse.nba    a = ʋo

then    bridge = ART = LOC    grass    ART = CL

ngo    tə = ʂtɕə = tɕ<sup>h</sup>ə    nə = sto = sto

carry    PAST = had = CONJ    PAST = leave = COP

Then (he) had (put her corpse in the position of) carrying a load of grass and left (her) on a bridge.

(35): yja    mɕ<sup>h</sup>o    nk<sup>h</sup>e    ɕə.ɕi    ɣi = tɕ<sup>h</sup>ə

yak    drive    NOMsome    come = (pt) = CONJ

Some (people) came driving yaks.

(36): yja = k-wuk    a = ʂce    tə = ɲc<sup>h</sup>u = tɕ<sup>h</sup>ə

yak = ART-ERG    one = bite    PAST = do = CONJ

me.və.la    tə = vsə.la    sto

old woman    PAST = knock over    COP

A yak bit the grass and (the corpse of the) old woman was knocked over.

(37): jo    ɲa.ɲə    me    tə = fse

again    my    mother    PAST = kill

ə = jə = tɕ<sup>h</sup>ə    ɕo.vi    mu.ma = kə    kə = lin = sto

PAST = say = CONJ    money    great = DET    PAST = get = COP

Again, (Clever Man) said, "(You) killed my mother," and (he) got a great (amount of) money.

(38): ti = qə.ɕi                      te = nu  
DET = next day      DET = in  
scə.stoŋ = nə = və = tɕʰə                      ə = nzo = sto  
comfortable = PAST = do = CONJ      PAST = stay = COP  
(He) stayed (at home) comfortably the next day.

(39): ɕi = tɕin              vdo = tɕʰə              ni              tɕə.kʰa = to  
strong = NOM      see = CONJ              you              what = COP  
tsa.kə              rjə = du.sce                      ɣsər = le  
much              property = have              gold = DET  
ŋa      kə = lin                      ə = jə = sto  
1P      PAST = belong      PAST = say = CUP  
Strong Man saw (him) and said, "The gold belonged to me so how could you have so much property?"

(40): ŋa      me = te                      nə = se = tɕʰə                      me = pce.ne  
I              mother = DET      PAST = kill = CONJ              mother = flesh

zi            tə = ɕaŋ = tɕʰə            te.kʰa = to            ə = jə = sto  
 sell        PAST = go = CONJ        because = COP        PAST = say = COP

"Because I killed Mother and went to sell Mother's flesh," said (Clever Man).

(41): ɕi.ke.cʰe = me = l-wk            kə = ɕə = tɕʰə  
 strong = NOM = TOP-ERG            PAST = go = CONJ  
 ə.də.qox-ji            me = te            nə = fse = tɕʰə  
 his-GEN            mother = DET            PAST = kill = CONJ  
 Strong Man went (back home) and killed his mother.

(42): me = pce.ne        suwk = rə = ŋo            jə = tə = ɕə = tɕʰə  
 mother = flesh    who-ERG = buy = COP    say = PAST = go = CONJ  
 a = ʁe.kə = ŋ-wk        sto.mo = sto = sə        nə = tɕi = tɕʰə  
 one = family = PL-ERG    wedding-have-IMPF        PAST-have-CONJ  
 ɲa.ʂko            ə-ɸi-sto  
 beating        PAST-get-COP  
 He went to sell (it), saying, "Who will buy Mother's flesh?" and one family was  
 having a wedding (party so they got angry with him) and (he) got a beating.

(43): tə.ɕu            kə.ro            kə = ɕə = tɕʰə  
 then            back            PAST = go = CONJ



ɕi.ke.c <sup>h</sup> e.meo	ni	vdzi	me.rəp	ŋa = le
PN	you	person	bad	I = TOP
ŋa.ʂko	sa.kə	ə = ʁe	ə = jə = sto	
beating	EM	PAST = get	PAST = say = CUP	

Then Strong Man went back and said to Clever Man, "You bad person, I got a beating."

(44): ni    tɕə.kə            ə = jə = ŋo            ə = jə = sto

you	what	PAST = ask = GNQ	PAST = say = CO
ŋa	me	pce.ne	si = rə = ŋo
I	mother	flesh	who = buy = GNQ
ə = jaŋ	ə = jə = sto		
PAST = say	PAST = answer = COP		

(Clever Man) asked, "What did you say?" and (Strong Man) answered, "I said, 'Who will buy Mother's flesh?'"

(45): ni    ma.ŋi = sə            p<sup>h</sup>e            pce.ne

you	wrong = COP	father	flesh
zi	ɕa.to	ə = jə - sto	
sell	need	PAST = say = COP	

Clever Man said, "You are wrong, you need to sell Father's flesh."

(46): ɕitɕin = t-wuk      ə-ɕə-tɕʰə      pʰe-te      nə-fse-sto  
 PN = DET-ERG    PAST = go = CONJ    father = DET    PAST = kill = COP  
 Strong Man went and killed (his) father.

(47): tɕʰə      pʰe      pce.ne      zi      ɕə = sə.tɕi = tɕʰa  
 then    father    flesh      sell      go = IMPF-when  
 a.ɕe.kə = ŋjə      pʰe.te      tə = se = tɕʰə  
 someone = NEG father      PAST = die = CONJ  
 jo      nə.ɕko      sa.kə      ə = ɕe = sto  
 again    beating      EM      PAST = get = COP  
 Then (when) he went selling (his) father's flesh, someone's father died and  
 again he got a beating.

(48): riʔ.pa.ke.tsʰa = me      ə = jə = tɕʰə      ho  
 mind clever = NOM    PAST = say = CONJ    now  
 nə.qo      ŋa.te      kʰi.ma = kə = nu      nə = ndor = tɕʰə  
 you      me      bag = ART = LOC      FUT = put = CONJ  
 ŋa    ɣrə = nu      nə = qi      ə = jə = sto  
 I    water = LOC    EMP-throw    PAST = say = CONJ

ti = GƏ.çi = ti.nu                      çɪ = tçin = tio

DM = tomorrow(the next day) = LOC    PN = ERG

ri.pa = ke.ts<sup>h</sup>a              tə = ngo = tç<sup>h</sup>ə

man = clever                  PAST = carry = CONJ

za = <sup>m</sup>ba = kə = tç<sup>h</sup>a              ə = çə = sto

bridge = DET = IOC              PAST = go = COP

The next day, Strong Man carried Clever Man and went to a bridge.

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(51): ə.tə.qo          scə.stoŋ          nə = və = tɕʰə          la.ji  
 himself          happily          PAST = do = CONJ          song

nə = və = sto

PAST = do = COP

(Clever Man) was singing happily (to) himself.

(52): ti.nu tsʰe          ɦi.nkʰe = kə          ʒi = sto tɕʰə  
 there goat          herder = DET          come(pt) = COP then  
 kə = ɣje          sto = kʰe          ti.nu          ndze.ɣleŋ = te          ste.mo = te  
 PAST = ask          COP = PF          here          world = GEN          view = DAT  
 vdo.rə          ə = jə = sto  
 see          PAST = answer = COP

There came a goat herder who then asked, (and Clever Man) answered, "Here (in the bag) I can see the view of the world (everything in the world)."

(53): ɦi.ŋa = t-wuk          ŋa = ki.kə          lə = ə = ʂtɕə  
 herder = DET = ERG    I = DAT          get = GNQ = let  
 kʰa.dzə ə = jə = tɕʰə          lə = tə.ʂtɕə sto  
 beg    PAST = say = CONJ          get = in = let    COP

The herder begged, "Let me get into (the bag)," and (he) got into (the bag.)

(54): tə.ɕu      ɕi = tɕin = te      ɭi = tɕʰə  
 then      strong = DET      come(pt) = CONJ  
 ɬi.ŋa = li      rə = nu      tə = wqi = sto  
 herder = TOP      river = LOC      PAST = throw = COP  
 Then Strong Man came and threw the herder into the river.

(55): hori.pa = ke.tsʰa.me = le      tə = sou  
 now clever = DAT = clever      PAST = kill  
 tə = tsʰə = tɕʰə      jo = nu      scə.stuŋ  
 PAST = think = CONJ      home = LOC      comfortable  
 nə = və = tɕʰə      ə = nzo = sto  
 PAST = do = CONJ      PAST = sit = COP  
 (Strong Man) sat at home comfortably (for he) thought (that he) had killed  
 Clever Man.

(56): a.sɲə      tsʰe = te      tə = mɕʰo = tɕʰə  
 one day      goat = DET      PAST = drive = CONJ  
 ɕi.tɕin-ŋə      ɤe-kʰa.ji      kʰa.kə-ɕə-sto.mo.kʰe  
 PN-GEN      door = near      PAST = go = IMPF  
 One day (Clever Man) drove the goats and went by Strong Man's door.

(57): ɕi = tɕin      ts<sup>h</sup>i.pa      tə = za = tɕ<sup>h</sup>ə      ni

strong(man) anger      PAST = get = so      you

rə = nu      tə = ma = se = ŋo      ə = jə = sto

river = LOC      PAST = NEG = die = GEQ      PAST = say = COP

Strong Man was angry (to see Clever Man and he) said, "Didn't you die in the river?"

(58): ni      ŋi = ɕu      nə = mtɕ<sup>h</sup>e = sə

you      me = after      PAST = threw = NOM

rŋə.bu = n̩ə      a.ji      ts<sup>h</sup>e      tə.t<sup>h</sup>a      ə = jə = sto

roasted = barley = seed = PL      all      goat      become(pt)      PAST = say = COP

"The roasted barley seed you threw after me all became goats," said (Clever Man).

(59) ŋa      te = kə      ə = qi      ə = jə = sto

me      DET = DAT      Q = throw      say = PAST = COP

"Could (you) throw me into a river?" said (Strong Man).

(60): tɕ<sup>h</sup>ə      ɕi.tɕin = te      k<sup>h</sup>əx.ma      nu

so      strong = DAT = man      bag      in

nə = ndo = tɕ<sup>h</sup>ə

rə.nu = da

nə = wɕe = sto

PAST = put = CONJ

river = LOC

PAST = throw = COP

So (Clever Man) put Strong Man in a bag and threw (him) into a river.

*FOLKTALE: THE OLD WOMAN AND THE FROG*

Speaker: 'jigs med

(1): ɣna = ke = ʒə      və.ta.la = kə      nə = ci = sto

long ago = LOC    old woman = DET    PAST = EXIS = COP

Long ago there was an old woman.

(2): ti    ma = te    nbə.sṇə.sṇə.ma    nə = ŋo = sto

her foot = DET all the time      PAST = problem = COP

(She) had problems with her foot all the time.

(3): a = sṇə      ɣdo = te      tə = ŋgo = tɕʰə      ɣrə      kʰəp

one = day    water bucket = DAT    PAST = carry = CONJ    water    fetch

no = ɕə = sto = kʰeŋ      a = rgətə.zə.la = tɕʰə      ma = te      gə = zdir = sto

PAST = go = COP = IMPF    ART = PAST = fall = so      foot = the    PAST = hurt = PST:COP

tɕʰə      pʰa.wonɣ = kə = tɕʰa      ɣə = nzo = tɕʰə      ma = ʌa

then      stone = DET = LOC    PAST = sit = CONJ    foot = LOC

ə = ŋcʰu      sto.mo = kʰe

PAST = beat      IMP = CONJ

One day (she) carried a water bucket and went to fetch water (and on the way)

she fell and hurt her foot, then she sat on a stone and beat her foot.



(4): ma = nu = k<sup>h</sup>a.le      spə.cər = kə      tə = rfa = sto

foot = LOC = from    frog = DET      PAST = emerge = COP

A frog emerged from the foot.

(5): ho      ŋa      ni = te      s = uk = ŋo      ə = jə = tɕ<sup>h</sup>ə

now    I      you = TOP    kill = ERG = COP    PAST = say = CONJ

rgə.me    ke.c<sup>h</sup>e.me = kə      ə = wzo = sto      spə.cər

stone      big = ART      PAST = take = COP      frog

tə = scər.tɕ<sup>h</sup>ə      k<sup>h</sup>a.dzo      ə = jə = sto

PAST = frighten      beg      PAST = say = COP

(She) took a big stone and said, "Now I will kill you," (and) Frog was frightened and said, "I beg (you to not kill me)."

(6): spə.cər = k-uk      ske.tɕa    fɕe.lə = te      ke.mts<sup>h</sup>ər

frog = ART-ERG      speak    know = DEM      strange

tə = nts<sup>h</sup>ə = tɕ<sup>h</sup>ə      nə = ma = fse

PAST = think = so    DIR = NEG = kill

(She) thought "It is strange (that) Frog can speak," so (she) did not kill (it).

(7): tɕ<sup>h</sup>ə    spə.cər    ə = jə = tɕ<sup>h</sup>ə      ho      ŋa

then    frog      PAST = say = CONJ    now    I

ni ɣjo.mə nzu ə=jə=sto

your servant be PAST = say = COP

Then Frog said, "Now I will be your servant."

(8): me.və.la.ɲə smi.ŋa te=ɣa ko

old woman girl DET = DAT able

la=mi.tɕʰo=ɳkʰe=kə nə=ci=sto

at all = NEG = NOM = ART PAST = have = COP

Old Woman had a girl able (to do) nothing at all.

(9): tɕʰə a.ɳə.tə=ɲə=le

then one day their = GEN = LOC

tsʰə nə.ma sto

salt have no COP

Then one day their (family) had no salt.

(10): a.ma ŋa tsʰə=kə ʂkə ti=ɕa-ŋ ə=jə=sto

mom I salt = DET steal FUT = go-1PS PAST = say = COP

(Frog) said, "Mom may I go and steal salt?"

(11): ni = sa = k-wuk                      ts<sup>h</sup>ə.kə = ʂkə = lə = lin

You = like = ART-ERG              steal = can = NOM = get

mi.ts<sup>h</sup>əm    ə = jə = sto

impossiblePAST = say = COP

"(It is) impossible (that an animal) like you can steal salt," said (Old Woman).

(12): ɕaŋ = ŋo    jə = tɕ<sup>h</sup>ə                      ʂər.bə.kə = ndo              ɰi = to

go = COP    say(pt) = CONJ              kingdom = LOC              come(pt) = COP

"I am going," said (Frog and) left, (and then he) came to a kingdom.

(13): ts<sup>h</sup>ə = kə              ə = k<sup>h</sup>o              ə = jə = sto              mi = k<sup>h</sup>o              ə = jə = sto

salt = DET              GEQ = give              PAST = say = COP              NEG = give              PAST = say = COP

"Give (me) salt," said (Frog but the king) said, "(I will) not give (you salt)."

(14): ɣtsə = rə = mə.ko = ɲə              ŋge.ŋgi = lə = kə              mi = vi = ve              ə = jə = sto

earth = CONJ = sky = PL              shake = NOML = ART              NEG = make = Q              PAST = say = COP

"(If you don't give me salt I will) make earth and sky shake," said (Frog).

(15): ni              tɕə.kə              ɣpər.lə              nə.tu = ve              nə.ɣpər              ə = jə = sto

you    any              ability    have = TOP              demonstrate    PAST = say = COP

"You can demonstrate any abilities (you) have," (said the king).

(16): ʏo.ja    ə = jə = tɕʰə                      nə = nqʰe                      sto = mo = kʰe

OK            PAST = say = COP            PAST = laugh            PAST = do = IMF

ʏtsə = rə = mə.ko = nə    tə.nge.ngi                      sto = mo = kʰe

earth = and = sky = PL    PAST = shake            PAST = IMF = COP

"OK," said (Frog) and (started) laughing, then earth and sky shook.

(17): kʰa.dzo.kʰa.dzo ho    nə = sto = kʰe                      nə = ki                      tsʰə = kʰu

beg                      now IMP = stop = CONJ            you = DAT salt = give

ə = jə = tɕʰə                      tsʰə                      mu.ma.kə                      tə = vko = sto

PAST = say = CONJ    salt                      much                      PAST = give = COP

(The king) begged and said, "Stop now, (I will) give you salt," and gave much salt (to him).

*FOLKTALE: THE TALKING DOG AND THE OLD WOMAN*

(1): ɣna = ke = ʒə                      c<sup>h</sup>əm.ts<sup>h</sup>oŋ = kə   nə = ci = sto

long ago = DET = LOC   family = DET   PAST = EXIST = COP

Long ago there was a family.

(2): c<sup>h</sup>əm.ts<sup>h</sup>oŋ = te = nu smi.ŋa   ɣso = ʁenə = ci = sto

family = this = in   girl                      three = QUPAST = EXIST = COP

Three girls were in this family.

(3): a = sŋə = tɕ<sup>h</sup>a.ku   tə.<sup>ŋ</sup>ʒə     ɤja = te     tə = np<sup>h</sup>e = sto

one = day = LOC   their   yak = DM   PAST = loose = COP

One day their yak was lost.

(4): tə.ɕu   smi.ŋa   zi.k<sup>h</sup>a   c<sup>h</sup>a = va = t-wk                      ɕa.va   tə = ɕə = sto

then   girl   most                      big = NOM = DET-ERG   search   PAST = go = COP

Then the oldest girl went to search.

(5): a.da                      me.və.la = kə                      nə = ci = sto

down there old woman = DET   PAST = EXIST = COP

Down there was an old woman.

(6): tə.ɕu me.və.la = t-ʉk ə = jə = tɕʰə nə.qʰo kə.ro  
 then old woman = DET-ERG PAST = say = CONJ you over here  
 kə = ʒi = tɕʰə tɕa ɣə = tʰi ə = jə = sto  
 IMP = come = CONJ tea IMP = drink PAST = say = COP  
 Then Old Woman said, "You come over here and drink tea."

(7): smi.ŋa = t-ʉk non kə = ɕə = sto  
 girl = DET-ERG inside PAST = go = CONJ  
 kʰə = kə nə = ci sto  
 dog = DET PAST = EXIST COP  
 (The) girl went inside (the courtyard gate) and a dog was there.

(8): ni pʰa = te tə = vko = ve pʰa = te = fɕor  
 you half = DET FUT = give = if half = DET = tell(FUT)  
 "If you give (me) half (of the bread), (I will) tell (you) half (of everything I know)."

(9): a.ji.te tə = vko = ve a.ji.te fɕor ə = jə = sto  
 everything FUT = give = if everything tell PAST = say = COP  
 "If (you) give (me) everything (I will) tell (you) everything (I know)," said (the dog).

(10) t = ʉk = le      la = tə.ma = vko = tɕʰə      noŋ = kə = ɕə = sto  
 3P = ERG = TOP EM = NEG = give = CONJ      into = PAST = go = COP  
 She gave nothing and went into (the house).

(11): tə.ŋjə      a.ti = t = ʉk      ɕa.va      tə = ɕə  
 their      elder sister = DET = ERG      search      PAST = go  
 sto = kʰe      jo      te = me.və.la = te = pʰa  
 COP = CONJ      again      the = old woman = DAT  
 kə = tɕu = tɕʰə      noŋ      kə = ʒi      ə = jə = sto  
 PAST = meet = CONJ      inside      IMP = come      PAST = say = CONJ  
 Their elder sister went searching (for her) and again (the girl) met the old  
 woman and then (the old woman) said, "Come inside."

(12): tə.ɕu.kʰa      scə.se      pʰa = kə      tə = vko = tɕʰə      pʰa = te      nə = vɕe = sto  
 then      bread      half = DET PAST = give = so half = DET PAST = tell = COP  
 Then (the girl met the dog again and) gave half (of her) bread (to the dog and)  
 so (the dog) told (her) half (of what it knew).

(13): te = me.və.la = te      ju = to      ə = jə = sto.  
 this = old woman = TOP      ghost = COP      PAST = tell = COP  
 (The dog) told (her) this old woman was a ghost.

(14): tɕʰə tə.ŋjə me.və.la = t = uk yrə = kʰəp nə = ɕə ə = jə = sto  
 then their old woman = 3PS = ERG water = fetch IMP = go PAST = say = COP  
 Then their old woman said, "Go, fetch water."

(15): o.ja ə = jə = tɕʰə nə = ɕə sto = kʰe  
 OK PAST = say = COP PAST = go PAST = IMPF  
 (The girl) said, "OK," and left.

(16): yrə = te = tə = kʰəp tɕʰə ə = ʒi = sto = kʰe  
 water = COP = PAST = fetch CONJ PAST = come = PF = CONJ  
 rvə = kə ə = vzo = tɕʰə ɤe = nu ə = rŋi ə = nzo = sto  
 ax = DET PAST = hold = CONJ door = LOC PAST = wait stay = PAST = COP  
 (The girl) fetched (water) and was returning (and the old woman) was  
 staying at the door holding an ax waiting (for her).

(17): təu noŋ kə = we = tɕʰa ɤu = ɤa = a.ci = kʰa tə = fse sto  
 she inside PAST = get = while head = LOC = attack = with PAST = kill = COP  
 (While) she was getting into (the room, the old woman) killed her with an  
 attack on the head.



## Appendix 2: Two=stem verbs

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(2)	STEM 1/3	STEM 2	meaning
	lə	ləʷu	‘to get in’
	me	məu	‘to blow’
	mʲə.cə	mʲə.cəʷu	‘to play’
	mɲə	mɲəʷu	‘to know’
	ŋgo	ŋgu	‘to carry’
	pʰi	pʰjəʷu	‘to vomit’
	ŋkʰi	ŋkʰəʷu	‘to wear shoes’
	ntʰo	ntʰu	‘to start fire’
	ɿgə	ɿgəʷu	‘to sleep’
	ʃfa	ʃfau	‘to emerge’
	ɿno	ɿnu	‘to smell sth’
	ɿŋji	ɿŋjəʷu	‘to wait’
	sna.ɿa	sna.ɿau	‘to scratch’
	vdo	vdu	‘to see’
	pcʰo	pcʰu	‘to drive cattle’
	ⁿcʰa.ɿa	ⁿcʰa.ɿau	‘to play with’
	ɿgə	ɿgəʷu	‘to sleep’

	χ̣ei	χ̣ə̃ʷ	‘to break’
	və	və̃ʷ	‘to do’
	nṭʰi	nṭʰə̃ʷ	‘to hear’
	p̣ʰji	p̣ʰjə̃ʷ	‘to escape’
	sto	stu	‘to put down’
	tʰe	tʰəu	‘to kick out’
	mdze	mdzəu	‘to load’
	pʰo	pʰu	‘to cover’
	sca	scau	‘to explode’
	le	ləu	‘to pee’
	ɸ̣ei	ɸ̣ə̃ʷ	‘to break’
	fsi	fsə̃ʷ	‘to sharpen’
	ntʰo	ntʰu	‘to burn’
	ske.le	ske.ləu	‘to cry’
	ʂka	ʂkau	‘to catch’
	m̥no	m̥nu	‘to swallow’
	ɸ̣ei	ɸ̣ə̃ʷ	‘to break’
	v̥za	v̥zau	‘to avoid’
	ntʰə	ntʰə̃ʷ	‘to jump’
	ta	tau	‘to become’

	ɣtsɔ	ɣtsu	‘to kick’
	po.sto	po.stu	‘to give kiss’
	stji	stjəʷu	‘to give drink/food’
	pc <sup>h</sup> o	pc <sup>h</sup> u	‘to drive (animals)’
	pc <sup>h</sup> i	pc <sup>h</sup> əʷu	‘to flee’
	ptɕa	ptɕau	‘to make sth’
	li	ləʷu	‘to do’
	zə	zəʷu	‘to tie sth’
	scə	scəʷu	‘to be happy’
	ɣkə	ɣkəʷu	‘to steal’
	sci	scəʷu	‘to extinguish’
	ma	mau	‘to smear’
	sme	sməu	‘to close eyes’
	ɲje	ɲjəu	‘to drive away’
	mdze	mdzəu	‘to fill up’

### Appendix 3: Three-stem verb list

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t <sup>h</sup> ji	t <sup>h</sup> jə <sup>y</sup> u	fti	‘to drink/eat’
k <sup>h</sup> o	k <sup>h</sup> u	fko	‘to give’
t <sup>h</sup> o	t <sup>h</sup> u	fto	‘to catch’
c <sup>h</sup> ə	c <sup>h</sup> ə <sup>y</sup> u	fcə	‘to lift up’
ɕə.ɕe	ɕə.ɕəu	fɕə.ɕe	‘to wipe’
k <sup>h</sup> e	k <sup>h</sup> əu	fke	‘to cut’
q <sup>h</sup> e	q <sup>h</sup> əu	fqe	‘to throw’
ɕə.ɕe	ɕə.ɕəu	fɕə.ɕe	‘to wipe’
se	səu	fse	‘to kill’
tsə	ts <sup>y</sup> u	vdzə	‘to eat’
kə	kə <sup>y</sup> u	vgə	‘to wear’
ʒe	ʒəu	vʒe	‘to peel off’
ts <sup>h</sup> o	ts <sup>h</sup> u	ftso	‘to milk’

## Appendix 4: Glossary

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The glossary contains 697 words of which ninety (thirteen percent) appear to be Tibetan loanwords and four (less than one percent) appear to be Chinese loan words. Tibetan, including Wiley transliteration, is given for Tibetan loanwords, and Chinese characters and pinyin transcription are given for Chinese loanwords. Alphabetization follows the Latin alphabet; the alphabetization hierarchy for non-Latin IPA symbols is as follows:

- Aspirated plosives and affricates immediately follow their non-aspirated counterparts; for example, /c<sup>h</sup>/ follows /c/.
- Affricate digraphs follow single occurrences of their initial graphical element; for example, /dz/ follows /d/.
- Other non-Latin IPA symbols follow their closest Latin graphical counterpart; for example, /ɑ/ follows /a/.
- /ŋ/ follows /ŋ̥/ after /n/.
- /z̥/ follows /z̥/ after /z/.
- /ɣ/ follows /G/ after /g/.
- /ɭ/ follows all digraphs beginning with /d/ after /d/.
- /ɮ/ follows /t<sup>h</sup>/ and all digraphs beginning with /t/ after /t/.
- /ʔ/ appears after all other symbols.

### ***List of abbreviations***

<b><i>adj.</i></b>	adjective
<b><i>(E)</i></b>	English loanword
<b><i>adv.</i></b>	adverb
<b><i>cop.</i></b>	copula
<b><i>intr.</i></b>	intransitive
<b><i>dem.</i></b>	demonstrative
<b><i>pl.</i></b>	plural stem
<b><i>intr.</i></b>	intransitive conjugation
<b><i>refl.</i></b>	reflexive
<b><i>mid.</i></b>	middle conjugation
<b><i>tr.</i></b>	transitive
<b><i>n.</i></b>	noun
<b><i>(T)</i></b>	Tibetan loanword
<b><i>pron.</i></b>	pronoun ~ alternates with
<b><i>tr.</i></b>	transitive conjugation
<b><i>v.</i></b>	verb
<b><i>qu.</i></b>	quantifier
<b><i>ppn</i></b>	proper name
<b><i>adp</i></b>	adposition
<b><i>conj.</i></b>	conjunction

***dir.***      directional

/a /

**a.<sup>n</sup>da** *n.* down there.

**a.ji** *n.* all, every one.

**a.kə.ta** *n.* there.

**a.kə.ta.te** *n.* that one.

**a.ko** *n.* elder brother.

**a.lo** *n.* one.

**a.ni** *n.* aunt.

**a.<sup>9</sup>gə** *n.* number.

**a.qə.tsa** *adj.* few.

**a.rgə** *adj.* same.

**a.se** *n.* full.

**a.sṇə** *n.* one day.

**a.ti** *n.* elder sister.

**a.təe** *n* with, together.

**a.təi.nzo** *n.* to sit together (to marry).

/b/

**ba.ca** *n.* coral-studded silver ornament worn on the left side for both men and women during wedding and the New Year period

**ba.la** *n.* leaf.

**ybə** *n.* sun.

**bəŋ.tṣʰa** *n.* large wooden box used to store barley and protect the grain from mice

**bə.sṇə.sṇə.ma** *n.* everyday.

/c/

**<sup>n</sup>c<sup>h</sup>a ra** *v. intr.* to play.

**ci** *v.* to exist.

**cə** *v.* to harvest.

**<sup>n</sup>cəm** *v. intr.* to sleep.

**cwuk** *n.* type of *tsampa*

**co** *n.* lawsuit.

/c<sup>h</sup>/

**c<sup>h</sup>a.va** *n.* older, bigger

**c<sup>h</sup>e.ki.və** *n.* armpit.

**c<sup>h</sup>əm.ts<sup>h</sup>oŋ** *n.* (T) ཁྱིམ་ཚང་། khyim.tshang, family.

**<sup>n</sup>c<sup>h</sup>u** *v. tr.* to hit; (2) to speak

**<sup>n</sup>c<sup>h</sup>ə.c<sup>h</sup>u** *v. intr.* to fight.

/ʃ/

**<sup>9</sup>jəm** *v.intr.* to sleepy.

/ʕ/

**ʕa** *n.* barley. *v.* to need.

**ʕə.ʕi** *n.* some.

**ʕa.ɕo** *n.* name of local mountain deity altar and the mountain deity to whom the altar is dedicated

**ʕe.ra.t<sup>h</sup>ə** *ppn.* (T) ཤལ་བ་ཐང་། Shwa.ba.thang

**ʕa** *v. tr.* to need.

**ʕa.tsa** *qu.* many.

**ʕa.va** *v. tr.* to search, to look for.

**ʕe** *n.* strength.

**ʕe.ŋi** *n.* brother.

**ʕə** *n.* tooth,

*v.* to go

**ʕə.ʕe** *v. tr.* to wipe.

**ʕə.re** *v. intr.* to find way.

**ʕi.vzo** *n.* carpenter.

**ʕin.toʔ** *n.* (T) ཤིང་རྩོག་། Shing.tog, fruit.

**ʕi** *n.* (T) ཤིག་། Shig, louse.



**ci.c<sup>hi</sup>** *adj.* common.

**co** *v. tr.* to collect.

**co.vi** *n.* paper, money.

**cu** *n.* later, after.

**cu.tɕ<sup>hə</sup>** *adj.* afterward.

/d/

**<sup>n</sup>da** *n.* where.

**də.zə** *n.* a wooden box to measure barley.

**<sup>n</sup>den** *v. tr.* (1) to sing; (2) to read.

**<sup>n</sup>dzo** *v. intr.* to stay.

**<sup>n</sup>də** *adj.* heavy.

**dəm.c<sup>h</sup>a** *n.* homemade flail used to thresh wheat.

**dəŋ.sker** *ppn.* (T) ལྷོང་སྐར Stong.skar, (Ch) Dōnggǔ 东谷

**<sup>n</sup>di** *adv.* only.

**<sup>n</sup>dor** *v. tr.* to put.

/dz/

**dza.kər** *n.* moon.

**<sup>n</sup>dze.ɣlən** *n.* world.

**<sup>n</sup>dzo** *v. tr.* to live; to marry

**<sup>n</sup>dzer** *v. tr.* to stab.

/dz/

**dze.ne** *n.* (T) བྱལ་མདའ་ Brag.mda', (Ch.) Zhāngdá 章达

**dzə.lo** *ppn.*

**dzi** *n.* discussion.

**dzin** *v.* to remember.

**dzo** *v. tr.* honorific verb equivalent to 'invite'.

**dzo.ka** *n.* food.

**dzon.dzon** *adj.* (T) བྱང་བྱང་

Drung.drung, straight.

**dzon.ʒa** *n.* right hand.

/ʒ/

**ʒa** *n.* arm.

**ʒə.zə** *n.* barley flour.

**ʒi** *v. intr.* (1) to arrived.

*n.* (2) arable land, field.

/ʎ/

**ʎa.sa** *pp.* (T) ལྷ་ས་ Lhasa,

**ʎi** *v. intr.* to herd.

**ʎu. ʎu** *adj.* wet.

/f/

**fɕe** *v. intr.* to say

**fɕe.ŋk<sup>h</sup>e** *n.* speaker

**fɕok.pa** *n.* (T) གཤོག་པ། Gshog.pa, wing.

**fqa** *n.* neck.

**fse** *v. tr.* (T) བསད། Bsad; to kill.

**vse.rta** *ppn.* (T) གཤེར་རྟ། Gser rta, (Ch)

色达 Sèdá

**fsə.la** *v. tr.* to split.

**fsi** *v. tr.* to recognize.

/g/

**gə.ŋa** *n.* egg.

**giŋ.ba** *n.*(T) དགོན་པ། Dgon.pa,  
monastery.

/G/

**ge** *adj.* difficult.

**gə.ɕi** *n* tomorrow.

**go.go** *adj.* hole.

/Y/

**ya.va** *n.* diligent person.

**ynə.ri** *n.* two times

**ybo** *n.* a measure for grain; a wooden container used to measure peas, wheat, rice, and barley. A ybo of barley weighs seven and a half kilograms.

**ybə** *n.* cloud.

**ybə.snə.snə.ma** *n.* adv. every day [all the time].

**ybi** *n.* sand.

**yɕ<sup>h</sup>u** *v. tr.* (1) to reach a place. (2) to hit.

**yɕi** *v. tr.* (1) to break. (2) *n.* manure.

**ydo** *n.* water bucket.

**ydo.mə** *n.* fog.

**ydzɿ.ləp** *n.* (T) སྒྱིག་ལམ། Sgrig.lam,  
procedures.

**ydzɔ** *n.*(T) སྒྱུ་ལ། Sgrol, feature.

**yə.zə** *n.* bird.

**yma.mə** *n.*(T) དམག་མི། Dmag.mi, army.

**ylu** *n.* animal skin.

**ymə** *n.* (1) rain. (2) fire

**ynə.ri** *n.* two times.

**yɾə** *n.* water.

**yro** *n. intr.* to dry.

**ysi.ysi** *adj.* new.

**ysor.snə** *n.* three days .

**yɕək** *num.* six.

**yɕo** *n.* barley flour.

**yɕse** *adj.* warm.

**yɕa** *adj.* thick.

**yɕə** *num.* four.

**yɕə.zə** *n.* barley flour.

**yɕəm** *v. tr.* to soften animal skin.

/h/

**ha.ji** *adv.* more

**ha.ji** *n.* lard

**ha.ko** *v.*(T) to know,

**ha.vdo** *n.* now.

**ha.ɕi** *adv.* moreover.

/j/

**ja** *n.* mouth.

**ja.və** *n.* last year.

**ja.və.ndzə.və** *n.* year before last year.

**je.me** *prep.* around.

**jə** *v. intr.* to call. to say

**ji.ləm** *n.* (T) ཡིག་སྒྲོག། Jig.slob, student.

**jo** (1) *adv.* again. (2) *n.* house.

**jo.kə** *n.* another, one more.

**ju** *n.* ghost.

**juʔ.yʃ<sup>h</sup>o** *n.* left.

/k/

**ka.mzi** *ppn.* (T) དཀར་མཛེས། Dkar mdzes, Ch. Gānzī 甘孜) one of the two Tibetan Autonomous Prefectures in Sichuan Provinc.

**ka.tʰe.va** *adj.* important.

**ke.ca.me** *adj.* good condition

**ke.c<sup>h</sup>e.me** *adj.* big

**ke.kə** *adv.* (1) few. (2) about

**ke.mts<sup>h</sup>ər** *adj.* strange.

**ke.qə.tsa** *adj.* a little .

**ke.ge.me** *adj.* difficult.

**ke.ʃco.me** *adj.* bad.

**ke.t<sup>h</sup>ə.me** *adv.* much,

**ke.tʰi.me** *n.* long (distance).

**ke.ts<sup>h</sup>a** *n.* clever.

**ke.li** *adv.* sometimes.

**ke.rji** *n.* ceramic bowl

**kə.lə** *n.* clothing

**kə.lin** *v. intr/tr.* to get.

**kə.pa** *n.* Tibetan robe made of animal skin

**kə.ro** *n.* directional

**kə.zə** *n.* evening, night.

**kə.zə.k<sup>h</sup>a** *adv.* at night.

**ko** *v. tr.* (T) གོ Go, to know.

**ko.rbə** *n.* crop.

**ko.mʑ** *n.* unsoftened animal skin.

**ko.mi.tʰo** *adj.* incapable.

**ko.ni** *adv.* probably.

**ko.ta** *n.* leather bag.

**ko.tʰo** *adj.* capable.

/k<sup>h</sup>/

**k<sup>h</sup>a** *conj.* because.

**k<sup>h</sup>a** (1) *adv.* after; (2) *adp.* from.

**k<sup>h</sup>a.dzo** *v* (T) ཁ་རྩོ to beg

**k<sup>h</sup>a.ji** *adp.* next to; near; beside .

**k<sup>h</sup>a.k<sup>h</sup>a** *adj.* (T) ཁ་ཁ་ Kha.kha, other, different

**k<sup>h</sup>a.ts<sup>h</sup>on** *adv.* (T) ཁ་ཙོང་ Kha.tshong, all.

**k<sup>h</sup>a.wa** *n.* (T) ཁ་བ་ Kha.ba, snow.

**k<sup>h</sup>e** *v. tr.* to cut.

**k<sup>h</sup>e.ma** *n.* domesticated animal.

**k<sup>h</sup>e.ta** *n.* belt.

**k<sup>h</sup>ə** *n.* dog.

**k<sup>h</sup>əp** *v. tr.* to fetch (water)

**k<sup>h</sup>ə.bə** *n.* something to carry on the back.

**k<sup>h</sup>o** *v. intr.* to give.

**k<sup>h</sup>on.ʕi** *n.* (T) ཁང་ཤུག་ Khang.Shug, deserted homes

**k<sup>h</sup>on.ndzə.va** *n.* monks invited to the home of the deceased to chant at a funeral.

/l/

**la** *adv.* at all.

**la.ji** *n.* folk song

**la.ma** *n.* (T) ལྷ་མ། Bla.ma, monk.  
**la.vja** *n.* wide.  
**la.tɕʰa** *n.* (T) ལག་ཆ། Lag.cha, tool.  
**lə** *v. intr.* to get in.  
**li** *v. tr.* (T) ལས། Las, to do.  
**lin** *v. intr.* (T) ལོན། Lon, to get  
**li.ska** *n.* work.  
**Lo** *n.* (T) ལོ། Lo, year; age.  
**lo.lo** *v.* to pretend.  
**lo.honj.tɕiŋ** *n.* (Ch) 老红军 Lǎo Hóngjūn, 'old' Red Army,  
**lo.tʰo** *n.* ground.  
**lo.tɕʰonj** *adj.* (T) ལོ་རྒྱུད། Lochung, young.

/m/

**ma** (1) *n.* foot. (2) *v.* have no. (3) *v. tr.* to smear.  
**ma.la** *n.* butter.  
**ma.ndza.sce** *adj.* outstanding; exceptional.  
**ma.rji.mə** *ppn.* local term for a local mountain.  
**mbe** *num.* five.  
**mco.tɕʰə** *adv.* quickly.  
**mdo** *ppn.* (T) མདོ། Mdo, (Ch) 康定 Kāngdìng  
**mdzə.ha** *n.* nomad.  
**mdzə.ɣə** *ppn.* (T) རྩོམ་རྩ། Tre Hör (Ch) Zhūwēi 朱倭  
**mdzə.ri** *n.* (T) འབྲུ་རིགས། 'bru.rigs, crop.

**mdzi** *n.* (T) འབྲས། 'bras, rice.  
**mdzi** *n.* (T) འབྲུག། 'brug, dragon.  
**me** (1) *v. intr.* to blow.  
 (2) *n.* mother.  
**me.ɣe** *n.* tree.  
**me.və** *n.* grandmother.  
**me.və.la** *n.* old woman.  
**mə.ko** *n.* sky.  
**mə.ni** (1) *n.* jaw  
 (2) *v. intr.* to get dark at night  
**mə.ni.tɕʰa** *adv.* at dusk.  
**mə.ri** *n.* (T) མི་རིགས། Mi.rigs nationality, ethnicity.  
**mə.sə** *n.* firewood.  
**mə.ha** *n.* husband.  
**mi.mɳi** *v. intr.* don't know.  
**mi.ndzə** *v. intr.* not allowed.  
**mi.sko** *v. intr.* can't.  
**mi.sku** *adj.* dull (not sharp).  
**mi.tɕʰəm** *adj.* impossible.  
**məʸu** (1) *n.* (T) མིག། Mig, eye  
 (2) *adj.* needy  
**mi.ji** *n.* starvation.  
**mjə.jə** *v. tr.* to play.  
**mkik** *n/clf.* year.  
**mkʰə** *n.* smoke.  
**mjə** *adj.* quick.  
**mɳə** *v. intr.* to know.  
**mɳə.stuŋ** *n.* restitution.  
**mɳuɿk** *v. intr.* to know.  
**mpʰe** *v. tr.* to loosen.

**mdzɔŋ** *n.* wild yak.  
**mt<sup>h</sup>o.va** *adj.* higher.  
**mtɕ<sup>h</sup>e** *v. tr.* to throw.  
**mts<sup>h</sup>e.ri** *n.* difficulty.  
**mts<sup>h</sup>o** *n.* (T) མཚོ Mtsho, lake.  
**mts<sup>h</sup>o.sŋon** *ppn.* (T) མཚོ་སྤོང་།  
 Mtsho.sngon; (Ch.) Qīnghǎi Province  
 青海省  
**mtɕ<sup>h</sup>i** *n.* snake.  
**mtɕ<sup>h</sup>o.mtɕ<sup>h</sup>o** *adj.* white.  
**mu.ma** *adv.* many, much.

/n/

**na.na** *adj.* red.  
**naʔ** *v.* (T) ནགས། Nags, forest,  
**ne** *v. intr.* to reach.  
**nə.nə** *pp.* you [PL].  
**nə.qo** *pp.* you [intimate in you]  
**nə.ro** *dir.* downward.  
**nə.ɣe** *n.* two people.  
**nə.ɣpər** *v. intr.* to demonstrate; show  
 off.  
**nə.sɳə** *n.* two days.  
**nə.sto** *v.* stop!  
**nə.ʂce.le** *v.* to scratch.  
**ngo** *v. tr.* to carry.  
**pi** *pn.* you [SIN].  
**no.no** *n.* breast.  
**noŋ** *adp.* in.  
**noŋ.tɕ<sup>h</sup>ə** *n.* internal organs.

/ŋ/

**ŋa** (1) *adj.* black.  
 (2) NEG  
**ŋa.ŋa** *adj.* black.  
**ŋa.rə.rə** *adj.* black-entirely.  
**ŋa.ʂko** *n.* beating.  
**ŋə** plural suffix.  
**ŋə.ɣci** *n.* mid-day.  
**ŋə.tə** *n.* drug (opium).  
**ŋi.ŋi.rtsa.rtsa** *n.* relatives.  
**ŋin.mo** *n.* (T) ཉིན་མོ། Nyin.mo;  
 (Ch) Yímù 宜木  
**ŋo.sɳə** *n.* next next day  
**ŋu** *n.* ear

/ŋ/

**ŋa** *pron.* I, me.  
**ŋa.nə** *pron.* our, we.  
**ŋa.nga** *pron.* our, we.  
**ŋa.ŋgi** *pos.pron* our, us.  
**ŋa.<sup>h</sup>ʂə** *pos.pron.* our.  
**ŋa.ŋi** *pron.* myself.  
**ŋəm** *v. intr.* to breathe.  
**ŋge.ŋgi** *v. intr.* to shake or move.  
**ŋgo** *v. intr.* to float.  
**ŋk<sup>h</sup>ə.rva** *v. intr.* to turn.  
**ŋk<sup>h</sup>i** *v. tr.* to wear (shoes and trousers).  
**ŋi** *pron.* my.  
**ŋo** *adj.* sick.  
**ŋo.ma** *adj.* (T) རྩེ་མ། Ngo.ma, real; true.  
**ŋo.re.tə.to** *adv.* probably.

**ŋu.ni** *pron.* we.

**ŋu.ni.ske.tɕa** *n.* our secret.

/p/

**pce.ne** *n.* meat.

**pco.la** *v. intr.* to fly.

**pe.ske** *n.* Tibetan language

**pe.tɕʰi** *n.* Tibetan dress.

**pə** *adj.* thin.

**pə.ta** *n.* dry noodles.

**pə.zə** *n.* ornamented sword and scabbard.

**pə.və** *n.* this year.

**pɿ.ɣca** *n.* wood stick.

**po.po** *qu.* pile.

**po.zə.** *n.* (Ch) 包子 bāozi, steamed dumpling.

**ptɕa** *v. intr.* to swim.

/pʰ/

**pʰa** *n.* half.

**pʰa.woŋ** *n.* (T) ཕ་བོ་པ། Pha.bong, boulder.

**pʰe** *n.* father.

**pʰe.te** *conj.* until.

**pʰe.və** *n.* grandfather.

**pʰeŋ.zə** *n.* (Ch) 盘子 pánzi, plate.

**pʰə.wa** *n.* belly.

**pʰək.rtəm** *n.* robe pouch.

**pʰi** *v. intr.* to vomit.

**pʰi.rko** *n.* barley flour bag.

**pʰi.ɕə.ni** *adv.* never.

/q/

**qa.na** *n.* child.

**qa.na.ŋə** *n.* children.

**qe** *v. intr.* to throw.

**qə.bə** *n.* horn.

**qə.zə** *n.* bowl.

**qor** *n.* hole in the ground.

**qʰo.ste** *n, adp.* back.

/r/

**ra.ɣu** *ppn.* (T) བྲག་མགོ། Brag mgo, (Ch)

Lúhuò 炉霍.

**ra.tɕo** *n.* horn.

**rdi.pʰo** *qu.* group.

**rdzi** *n.* fingernail, toenail.

**re.rɲe** *n.* horse carcass.

**rə** *v. tr.* to buy.

**rəm.ra** *v. tr.* husk.

**rə.ŋgo** *n.* (T) རི་མགོ། Ri.mgo, mountain.

**rə.ra** *n.* bone.

**rə.taʔ** *n.* (T) རི་དྭགས། Ri.dwgas, animal.

**rə.və** *n.* village.

**rfa** *v. intr.* to emerge.

**rgə** *v. intr.* to sleep.

**rgə.me** *n.* stone.

**riʔ.kʰa** *conj.* after.

**riʔ.ʰpa** *n.* (T) རིག་པ། Rig.pa, intelligence

**rja** *v. intr.* went.

**rjəp** *n.* wife.

**rja** *n.* (T) རྒྱ། Rgya, Han.

**rjab.ri** *v. intr.* fight.



**scu** *v. int.* to look.  
**scu.sce** *n.* donation.  
**sə** *n.* (T) ལུ Su, who  
**sə.mu** *ppn.* (T) སྤེན་མོ Srib mo; (Ch)  
 Sīmù 斯木  
**sə.ʂtʂon** *ppn.* (T) སེཾ་མྱོན་ Si khron; (Ch)  
 四川 Sìchuān  
**si** *n.* blood.  
**ske** *n.* (T) སྐད་ Skad, language.  
**ske.tʂa** *n.* language.  
**skər.ma** *n.* funeral.  
**sklo** *n.* rope (made of animal skin).  
**sku** *adj.* sharp.  
**smə.ləm** *ppn.* person's name.  
**smi** *n.* female.  
**smi.ŋa** *n.* young girl.  
**sna.ra** *v. tr.* to scratch.  
**snə** *n.* nose.  
**sno** *n.* sister.  
**snə.bə** *n.* worm.  
**snə.le** *n.* day time.  
**sŋa** *adj.* early.  
**sŋə.rə** *adp.* ahead.  
**spə.cər** *n.* frog.  
**ste.mo** *n.* (1) view; (2) performance  
**ste.wu** *ppn.* (T) རྟམ་ Rta 'u; (Ch) 道孚  
 Dàofú  
**sto.mo** *n.* wedding.

/ʂ/

**ʂce** *v. tr.* to bite.

**ʂco** *adj.* bad, dirty.  
**ʂjə.la** *v. tr.* to tie.  
**ʂka.ŋər** *n.* (T) དཀའ་ངལ་ Dka' nga,  
 difficulty.  
**ʂke.mə** *n.* nun.  
**ʂkə** *v.* (T) སྐད་ Skud, steal.  
**ʂkə.mə** *n.* thief.  
**ʂki** *v. tr.* to push.  
**ʂko** *adj.* cold.  
**ʂkoŋ.ma** *n.* infantry.  
**ʂpaʔ** *n.* bark.  
**ʂtsa** *n.* (T) རྩ་ Rtsa, root.  
**ʂtsə** *v. intr.* to count.  
**ʂtʂə** *v. tr.* to make.

/t/

**ta** *v. intr.* to become.  
**te** (1) *pp.* he.  
 (2) *demo.* this.  
**te.di** *adv.* except.  
**tə.ɕu** *adv.* then.  
**tə.tu** *v. intr.* to have.  
**ti.nu** *adv.* here.  
**ti.ti.ŋa** *adj.* small; young.  
**to.kʰa** *adv.* from here.  
**toŋ.bə** *num.* (T) དང་པོ་ Dang po, first.  
**tor.ma** *n.* (T) དོར་མ། Dor ma, trousers.  
**tor.ʂcoŋ** *n.* trousers (old style trousers  
 made of cloth)  
**toʔ** *adj.* (T) རྩོག་ dog, narrow.  
**tu** *v. tr.* to have.



/tʰ/

**tʰaʔ.ni** *adj.* (T) ཐག་ཉེ། Thag nye, short distance.

**tʰaʔ.tʃi** *adj.* far.

**ᵐtʰo** *v.* to burn.

**tʰi** *v. tr.* to drink.

**tʰi.fle** *n.* dust.

**tʰoŋ.kʰa** *n.* (T) ཐང་ཀླ། Thang kha, Tibetan scroll painting.

**tʰoʔ** *n.* (T) ཐོག། Thog, crop.

/tɕ/

**tɕa** *n.* (T) ཇ། Ca, tea.

**tɕa.lo** *n.* tea leaf.

**tɕe** *n.* road.

**tɕə.kə** *que.* what.

**tɕə.ma** *v. tr.* need not.

**tɕə.tə** *n.* book.

**tɕə.tɕe** *v. tr.* to pull.

/tɕʰ/

**tɕʰa** *ad.* during.

**tɕʰe** *n.* anything.

**ᵐtɕʰi** *v. tr.* hear.

**ᵐtɕʰə** *v. tr.* to slaughter.

**tɕʰə** *conj.* then, therefore.

**tɕʰə.dziŋ** *n.* truck.

**tɕʰə.sa** *que.* how.

/dz/

**ᵐdzəm** *v. tr.* to suck.

/ts/

**tsa.kə** *adj.* like this.

**ᵐtsʰə** *v. intr.* to think

**tsə** *v.* (1) *intr.* to be rotten.

(2) *tr.* to eat.

**tsə.kə** *n.* cloth.

**tsər** *v. intr.* to fall.

**ᵐtsʰo** *v. intr.* to gather.

**tsoŋ.kʰoŋ.ŋi.dzə** *n.* land tax, crops given to the local government.

/tsʰ/

**tsʰa.ra** *v. intr.* take care of.

**tsʰe** *n.* goat.

**tsʰe.zoŋ** *n.* vegetable-land.

**tsʰə** *n.* salt.

**tsʰi.pa** *v. intr.* anger.

**tsʰoŋ** *v.* (T) ཚོང། Tsong, to trade,

**tsʰu** *n.* fat .

/ᵐdz/

**ᵐdza.ndza** *adj.* (T) འདྲ་འདྲ། 'dar.'dra, same

**ᵐdzə.və** *n.* year before last year.

**ᵐdzəʔ** *v. intr.* (T) འབྲིག། 'grig, to agree.

/tɕʰ/

**tɕʰəm** *n.* (T) ཁྲིམས། Khrims, policy.

**ᵐtɕʰə** *n.* money.

/v/

**va** *n.* pig.

**va.va** *adv.* slowly and secretly.

**va.zə** *n.* (Ch) 袜子 wàzi, sock.

**vɕa** *n.* night.

**vɕa.ɣci** *adv.* midnight.

**vɕa.ra** *n.* cloth made of yak hair and sheep wool.

**vɕa.rji** *n.* sky burial.

**vɕe** *v. intr.* (T) བཤད། Bshad, to speak.

**vɕəm** *v. tr.* to display.

**vɕi** *v. tr.* to destroy.

**vda.xpə** *n.* owner.

**vdo** *v. intr.* to see.

**vdzi** *n.* man, person.

**vle** *n.* tongue

**ve.ko** *n.* thin small pigs.

**ve.tɕʰə** *n.* pig fat.

**vko** *v. tr.* to give.

**vla** *n.* leg.

**vla.ma** *n.* (T) བླ་མ། Bla ma, lama.

**vle** *v. tr.* to send.

**vli** *v. tr.* to make.

**vo** *n.* liquor.

**vo.ɣze** *v. tr.* to make liquor.

**vda** *n.* the work of going to Dar rtse mdo and bringing tea back to Brag mgo.

**vda** *v. tr.* to possess .

**vdzə** *n.* friend.

**vzo** *v. tr.* to sew.

/x/

**xə.ta** *n.* home.

**xtse** *n.* flat noodle soup.

**xtse.mkʰi** *n.* barley flour bag.

/χ/

**χləm** *v. tr.* to bury.

**χtsə** *n.* sand.

**χpə.rji** *n.* wind

**χtɕər** *v. tr.* to squeeze.

**χpər** *v. intr.* ability

/z/

**za.go** *n.* back basket made of bamboo.

**za.kʰoŋ** *n.* (T) ཟ་ཁང་། Zakhang, restaurant.

**ⁿzo.re** *n.* stay-place [hotel, house].

**zdɕ** *v. tr.* to hurt (a wound that is not yet healed).

**zdi** *v. intr.* sad.

**ze.kʰa** *adv.* most.

**zə.la** *v. intr.* to fall down.

**zə.pa** *n.* shoe.

**zi.kʰa** *adv.* most.

**ⁿzo** *v.* stay.

**zji.re** *n.* shop [selling-place].

**zi.scə** *adj.* best time; most comfortable.

**zjɕ** *n.* heart.

**zja** *v. tr.* to take away; steal.

/ʈ/

**ʈə.kə** *adv.* about; around.

**ʈə.vda** *n.* (T) གཞི་བདག། Gzhi bdag,  
mountain deity.

## Appendix 5: Tibetan Loanwords

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a.ʒo maternal uncle, ཨ་ཙང་། a zhang

cʰəm.tsʰoŋ family, ཁྱིམ་ཙང་། khyim tshang

ɕi louse, ཤིག། shig

ɕin.toʔ fruit, ཤིང་རྟོག། shing tog

fɕox.pa wing, གཤོག་པ། gshog pa

gə.ŋa egg, སྒོང་ང། sgong nga

giŋ.ba monastery, དགོན་པ། dgon pa

ɣja yak, གཡག། g-yag

ɣma.mə army, དམག་མི། dmag mi

ɣna long ago, གན་ལ། gna'

ɣnəm.vɕa plane, གནམ་བྱ། gnam bya

ɣsər gold, གསེར། gser

ɣdzo feather, སྒོ། sgrol

ɣdʒi.ləx procedures, སྒྲིག་ལམ། sgrig lam

ji.ləm student, ཡིག་སྒྲིབ། yig slob (ཡི་གེ་སྒྲིབ་མཁན།)

ha.ko to know ཉ་གོ། ha go

ka.mzi Gānzī, དཀར་མཛེས། Dkar mdzes

ko to know, གོ go

k<sup>h</sup>a.k<sup>h</sup>a other, different, ཁ་ཁ་ kha kha

k<sup>h</sup>a.ts<sup>h</sup>oŋ all, ཁ་ཚང་ཀྱ་ kha tshang

k<sup>h</sup>a.wa snow, ཁ་བ་ཀྱ་ kha ba

la.t<sup>h</sup>a tool, ལག་ཚལ་ lag cha

li sheep, ལུག་ཀྱ་ lug

lo year, age, ལོ lo

lo.t<sup>h</sup>oŋ young, ལོ་རྒྱུང་ཀྱ་ lo chung

ma mother, མ་མཁུ་ a ma

mdo དར་རྩེ་མཛོད་ Dar rtse mdo 康定,

mdzi rice, འབྲས་ཀྱ་ 'bras

mdzi dragon, འབྲུག་ཀྱ་ 'brug

mə.ri nationality, people, མི་རིགས་ཀྱ་ mi rigs

mə<sup>y</sup>u eye, མིག་ཀྱ་ mig

mts<sup>h</sup>o lake, མཚོ་ཀྱ་ mtsho

naʔ forest, རགས་ཀྱ་ nags

ndze.ylenj world, འཛམ་གླིང་ཀྱ་ 'dzam gling

ndza.ndza same, འདྲ་འདྲ། 'dra 'dra

ndzəʔ to agree, འགྲིག། 'grig

ŋo.ma real, true, རྟོ་མ། ngo ma

pe.ske Tibetan language, བོད་སྐད། Bod skad

p<sup>h</sup>a.woŋ boulder, huge rock ཕ་བོང་། pha bong

ra.bu Lúhuò (炉霍), བྲག་འགོ། Brag mgo

rə.taʔ animal, རི་དྭགས། ri dwgas

riʔ.pa mind, རིག་པ། rig pa

rja China, Chinese, རྒྱ། Rgya

rja.ma scale, རྒྱ་མ། rgya ma

rjər.bə king, རྒྱལ་པོ། rgyal po

ro.rgəŋ coffin, རོ་སྐམ། ro sgam

rta horse, རྟ། rta

rzon county, རྫོང་། rdzong

sa.tʰa place, ས་ཆ། sa cha

ske language, dialect, སྐད། skad

smə.ləŋ མྱོན་ལམ། smon lam

ška.ŋər difficulty, དཀའ་ངལ། dka' ngal

škə to steal, རྒྱུ། rku

ška.mə thief, རྒྱུ་མ། rkud ma

skoŋ-γma infantry, རྒྱུ་དམག། skang dmag

toʔ narrow, རྒྱ། dog

t<sup>h</sup>uʔ.ni near, ཐག་ཉེ། thag nye

t<sup>h</sup>oŋ.k<sup>h</sup>a Tibetan scroll painting, ཐང་ཀ། thang ka

ts<sup>h</sup>oŋ to trade, ཐོང་། tshong

ts<sup>h</sup>əm policy, order, ཐུམས། khrim

toŋ.bə first, དང་པོ། dang bo

fse to kill, བསད། bsad

vʦe to speak, བཤད། bshad

vla.ma monk, བླ་མ། bla ma

vtʂo.ŋa.mtʂ<sup>h</sup>o.ba butter sculpture, བཙུ་ལ་མཚན་པ། bco lnga mchod pa

za.k<sup>h</sup>oŋ restaurant, ཟེ་ཁང་། za khang

ʒə.vta mountain deity, གཞི་བདག། gzhi bdag

dzoŋ.dzoŋ straight, གྲང་གྲང་། drung drung

ʎa deity, ལ། lha

la.sa Lhasa, ལ་ས། Lha sa



## Appendix 6: Chinese Loanwords

Item	Meaning	Chinese	Pinyin
lo.hoŋ.tɕiŋ	Old Red Army,	老红军	Lǎo Hóngjūn
po.zə	steamed dumpling	包子	bāozi
p <sup>h</sup> ɛŋ.zə	plate	盘子	pánzi
va.zə	sock	袜子	wà
tja.ʂi	television	电视	diànshì
ɕo.ɕav	school	学校	xuéxiào
tɕ <sup>h</sup> ədziŋ	vehicle	汽车	qìchē
ʂu.pav	school bag	书包	shūbāo
jan. <sup>m</sup> bi	pencil	铅笔	qiānbǐ
ji.kwe	closet	衣柜	yīguì
pi.ɕaŋ	refrigerator	冰箱	bīngxiāng
tɕo.tsə	table	桌子	zhuōzǐ
pei.pei	cup	杯杯	bēibēi
ʂa.fɑ	sofa	沙发	shāfā
tjã. <sup>n</sup> den	light bulb	点灯	diǎndēng
kaŋ.lu	metal stove	缸炉	gānglú
jã. <sup>n</sup> tɕoŋ	chimney	烟囱	yāncōng
djã.lu	electronic stove	电炉	diànlú

ʂuuk.tɕi	cellphone	手机	shǒujī
djã. <sup>ŋ</sup> tɕ <sup>h</sup> ə	battery	电池	diànchí
djan.ɕjan	electric wire	电线	diànxiàn
diã. <sup>ŋ</sup> gã	electricity pole	电杆	diàngǎn
djã.hwa	phone call	电话	diànhuà
djan. <sup>ŋ</sup> ton	electric flashlight	电筒	diàntǒng
kã. <sup>m</sup> bu	official	干部	gànbù

## Appendix 7: Place names

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mts<sup>h</sup>o.sñon, Mtsho sngon མཚོ་སྤོང་། Qīnghǎi Province 青海省

jin.nin, Yun nan ཡུན་ནན་། Yúnnán Province 云南省

sə.ʂtʂon, Si khron སེ་ཁྲོན་། Sìchuān Province 四川省

### Prefectures in Si khron Province

ŋa.wa, Rnga ba རྩ་བ། Ābà Prefecture 阿坝州

ka.mzi, Dkar mdzes དཀར་མཛེས་། Gānzī Prefecture 甘孜州

### Counties in Rnga ba Prefecture

ḏam. thon, 'dzam thang འཛམ་ཐང་། Rǎngtáng County 壤塘县

ḏin.ḏ<sup>h</sup>a, Btsan lha བཙན་ལྷ། Jīnchuān County 金川县

### Counties in Dkar mdzes Prefecture

be.ji, Dpal yul དབའ་ཡུལ་། Báiyù County 白玉县

dan.pa, Rgya rong ཐུ་རོང་། Dānbā County 丹巴县

do.fu, Rta 'u རྩ་འུ་། Dào fú County 道孚县

ka.yzi, Dkar mdzes དཀར་མཛེས་། Gānzī County 甘孜县

dər.mdo, Dar rtse mdo དར་རྩེ་མདོ་། Kāngdìng County 康定县

ra.ḡu, Brag mgo བྲག་མགོ་། Lúhuò County 炉霍县

vse.rta, Gser rta གསེར་རྟ་ Sèdá County 色达县

#### Townships in Brag mgo County

sə.mu, Srib mo སྤུ་མུ་ Sīmù Township 斯木乡

ṇin.mo, Nyin mo ཉིན་མུ་ Yímù Township 宜木乡

ʒə.mda, Gzhi mda' གཞི་མདའ་ Rēndá Township 仁达乡

mdzə.ʁə, Tre Hör ཐྲེ་ཧོར་ Zhūwēi 朱倭乡

dəŋ.sker, Stong skar ལྷོང་སྐར་ Dōnggǔ 东谷

#### Villages in Nyin mo Township

dze.ne, Brag mda' བྲག་མདའ་ Zhāngdá 章达

ʕe.ra.tʰo, Shwa ba thang ཤལ་བ་ཐང་ Xiālātuó 虾拉坨

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