

## Phonetic Analysis of dGudzung Tibetan The Vernacular of Khams Tibetan spoken in the rGyalrong Area

メタデータ	言語: eng 出版者: 公開日: 2012-04-10 キーワード (Ja): キーワード (En): 作成者: 鈴木, 博之 メールアドレス: 所属:
URL	<a href="https://doi.org/10.15021/00003880">https://doi.org/10.15021/00003880</a>

## Phonetic Analysis of dGudzung Tibetan The Vernacular of Khams Tibetan spoken in the rGyalrong Area

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ギャロン地域のカムチベット語・丹巴県格宗[dGudzung]方言の音声分析

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dGudzung Tibetan is spoken in Danba County, Ganzi Tibetan Autonomous Prefecture in West Sichuan, China. It belongs to “twenty-four-villages’ patois,” an independent dialect group of Khams Tibetan spoken in the rGyalrong area. Apart from my several linguistic reports, there are no detailed descriptions of this variety of Khams Tibetan. In this paper, the phonetic analysis of the dGudzung dialect is treated with special attention paid to the synchronic phonological framework of the dGudzung dialect as well as to several remarkable diachronic features through a comparison with Written Tibetan forms. The phonetic analysis is divided into three parts: consonants, vowels and suprasegmentals; the diachronic analysis also mentions typological characteristics among the Khams Tibetan dialects. At the end of the article, a list of the basic vocabulary (ca. 1000 words) is added.

中国四川省西部に位置する丹巴県は、チベット文化圏のギャロンと呼ばれる地域に属する多言語地域である。本稿では、丹巴県に分布するカムチベット語の1つであるdGudzung方言について、音韻論的枠組みを考慮しつつ音声分析を行い、加えてチベット語文語形式との比較を通して音対応を考察する。音声分析は子音・母音・超分節音（声調）に分けて行い、また文語形式との対応関係については特にカムチベット語諸方言の中での類型の特徴にも触れる。末尾に基本語彙（約1000語）を付す。

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**Key Words** : Tibetan, Khams Tibetan, twenty-four-villages’ patois, rGyalrong, phonetics  
**キーワード** : チベット語, カムチベット語, 二十四村方言, ギャロン, 音声学

1 Introduction	2.4 Tonemes
1.1 Background	3 Diachronic Analysis
1.2 Framework of the description	3.1 Initial
2 Synchronic Description	3.2 Rhyme
2.1 Syllable structure	3.3 Tones
2.2 Consonants	4 Summary and Conclusion
2.3 Vowels	

## 1 Introduction

### 1.1 Background

Danba 丹巴 County, which is the central spiritual place of the rGyalrong region as well as being an ethnic boundary of Tibetan, Qiang and Han Chinese in Ganzi 甘孜 Tibetan Autonomous Prefecture, western Sichuan, is a multilingual area. Tibetans living in Danba speak several languages: Situ-rGyalrong, Geshitsa, the Sichuan variation of Mandarin Chinese, Amdo nomadic Tibetan as well as Khams Tibetan. The Tibetans in Danba identify themselves as rGyalrong, and their culture, traditions and heritage are also similar to those of other rGyalrong people who speak rGyalrong languages. The architectural heritage treated in Darragon (2005) clearly indicates the common characteristics among the rGyalrong and eastern Khams areas, including Danba.

The Khams Tibetan spoken in Danba is recognised by local Tibetans as a kind of standard variant of the Tibetan language which is comparable to the Derge dialect. It is called *ershisi cun hua* 二十四村話 “twenty-four-villages’ patois.” This variety is spoken in several villages such as Sogpho 梭坡 [Sog-pho], dGudzung 格宗 [dGu-rdzong], sProsnang 中路 [sPro-s nang], Yozha 岳扎, Rongbrag 章谷 [Rong-mi Brag-’go / Rong-brag] and R watso 水子 [Rwa-tso] as well as Panan 潘安 in Xiaojin 小金 County, which are located at the uppermost region of Daduhe 大渡河 River.

This vernacular is one of the isolated Khams Tibetan dialects (Suzuki 2006; 2009: 17, named *Rongbrag* dialect), surrounded by Situ-rGyalrong to the north (the Chuchen variety) and the east (the bTsanlha variety), Geshitsa to the west and Guiqiong to the south. According to local Tibetans, this dialect consists of several idioms, which can be identified by the names of rivers and mountains, namely, Sogpho, dGudzung, sProsnang and R watso. The differences among these idioms are comparatively minor with respect to their grammatical features, but are great with respect to their phonetic features. The speakers of this dialect group use their native dialect only in their own villages, in other villages in Danba they generally use Chi-

nese (the Sichuan variety of Mandarin) because of the linguistically intricate situation mentioned above.

In previous studies on Tibetan linguistics, there have been several monographs published in China such as Qu (1991), Jiang (2002) and Zhang (2009), but they provide neither information nor data of the varieties spoken in Danba, although many brief introductions to the “twenty-four villages’ patois” have been provided, for instance, in *Danba Xianzhi* (Sichuansheng Danba Xianzhi Bianzuan Weiyuanhui 1996: 174) and Lin (2006), both presented short descriptions of the “twenty-four-villages’ patois.” However, both were written from the viewpoint of the introduction to the languages spoken in Danba, thus, they mention these vernaculars as standard Tibetan dialects, which is the way the local people consider their dialects. Consequently, only a few linguistic studies have so far been produced. The present author’s works Suzuki (2005a; 2005b; 2007a; 2007b; 2008a; 2008b) provide us with the first preliminary descriptions of the phonetic characteristics, the phonological system and the dialectal characteristics of the four vernaculars: Sogpho, sProsang, Rongbrag and dGudzong.

## 1.2 Framework of the description

This paper explores the synchronic phonetic analysis with a basic phonological treatment and diachronic sound changes of dGudzong Tibetan with a remark on its characteristics from both typological and contrastive viewpoints with reference to the Tibetan dialectology.<sup>1)</sup>

The description in this paper occupies a portion of the Tibetan dialectology, meaning that the description is not simply an object of descriptive linguistics proper, but is done with the object of providing a unified descriptive framework throughout all of my works on the Tibetan dialects. The framework of the description is primarily phonetic, and it is consistent with the author’s description of all the Tibetan dialects (circa 150 dialects at present; cf. Suzuki 2007a: 42–56), in order to avoid any confusions that may occur when one checks only the described forms for comparative study (cf. Zhu 2008: 303; Zhang 2009: 358). The phonetic symbols include the IPA set with some additional phonetic symbols that have been adopted for Sino-Tibetan languages, such as those given in Zhu (2010). These symbols are used for the description of phonemes, and no orthographic conventions are used, as has been done in Tournadre (2005: 24).

In this paper, I have not attempted to apply any particular theory of phonology nor do I discuss the advantages of one specific theory over another. Any theoretical analyses are left for monographs.<sup>2)</sup> Phonetic variants are also described unless they are simply free-variants of a certain phoneme, and the phonetic characteristics to represent dGudzong Tibetan may be displayed in the description. Phonemes should be primarily identified through the presence of minimal or near minimal pairs, however, there are some phonemes for which minimal pairs have not yet been found.

## 2 Synchronic Description

### 2.1 Syllable structure

The most complicated syllable structure can be illustrated as in the following:

$${}^cC_iGVCC$$

preinitial  ${}^c$  : preaspiration, prenasal, glottal stop and labial obstruent only.

main initial  $C_i$  : all the consonants.

glide  $G$  : /w/ or /j/ only.

syllable core  $V$  : all the vowels.

final  $C$  : /p/, /ʔ/, /ɣ/, /ɾ/, /w/, and /j/;  $CC$  : /wʔ/ and /jʔ/ only.<sup>3)</sup>

### 2.2 Consonants

The consonant inventory is displayed below:

Table 1: consonant inventory

plosive	aspirated	p <sup>h</sup>	t <sup>h</sup>	t̪ <sup>h</sup>		k <sup>h</sup>	
	non-aspirated	p	t	t̪	c	k	ʔ
	voiced	b	d	d̪	ɟ	g	
affricate	aspirated		ts <sup>h</sup>		tɕ <sup>h</sup>		
	non-aspirated		ts		tɕ		
	voiced		dz		dʒ		
fricative	aspirated		s <sup>h</sup>	ʃ <sup>h</sup>	ç <sup>h</sup>	x <sup>h</sup>	
	non-aspirated	ɸ	s	ʃ	ç	x	h
	voiced	β	z	ʒ	ʝ	ɣ	ɦ
nasal	voiced	m	n		ɳ	ɳ̠	
	voiceless	m̥	n̥		ɳ̥	ɳ̥̠	
liquid	voiced		l	r			
	voiceless		l̥				
semi-vowel	voiced	w			j		

#### 2.2.1 Simplex initials

##### 2.2.1.1 Plosives and affricates

All the plosives and affricates except /c, ɟ, ʔ/ have a three-way distinction aspirated/non-aspirated/voiced.

The palatal plosives /c, ɟ/ are included in the consonant inventory, but they do not appear as a simplex (cf. 2.2.2.1 and 2.2.2.6). These sound values may include a

phonetic variant of palatalised velar plosives, but the velar plosive series generally do not include a phonetic variant of palatal plosives. These two series, therefore, are still distinctive, but it is supposed that they may merge into velar ones in the near future.

/p <sup>h</sup> /	/ṽp <sup>h</sup> a ṽga/ ‘father’
/p/	/ṽpaṽ paṽ/ ‘level’
/b/	/ṽbuṽ/ ‘wide’
/t <sup>h</sup> /	/ṽt <sup>h</sup> a ʒuṽ/ ‘cockscorn’
/t/	/ṽta ro/ ‘yoghurt’
/d/	/ṽde: mo/ ‘log’
/t <sup>h</sup> /	/ṽt <sup>h</sup> eṽ/ ‘blood’
/t̪/	/ṽt̪o/ ‘hair’
/d̪/	/ṽd̪ṽ/ ‘wheat’
/k <sup>h</sup> /	/ṽk <sup>h</sup> a fio/ ‘snow’
/k/	/ṽkə zi/ ‘barley’
/g/	/ṽgi ṽga/ ‘teacher’
/ŋ/	/ṽŋa mi/ ‘grandfather’
/ts <sup>h</sup> /	/ṽts <sup>h</sup> ā bu liṽ/ ‘dragonfly’
/ts/	/ṽtsəṽ buṽ/ ‘wrinkle’
/dz/	/ṽdzar/ ‘paste’
/tɕ <sup>h</sup> /	/ṽtɕ <sup>h</sup> uṽ/ ‘water’
/tɕ/	/ṽtɕa bu/ ‘thing’
/dʒ/	/ṽdʒa mo/ ‘steelyard’

#### 2.2.1.2 Fricatives

The alveolar, retroflex, prepalatal and velar fricative series have a three-way distinction aspirated/non-aspirated/voiced, while the bilabial and glottal fricative series have a two-way distinction aspirated/voiced. The prepalatal series are always pronounced with a prepalatal (or alveopalatal) articulation.

/ʋ/	/ṽʋoṽ kə/ ‘cover’
/β/	/ṽβu loṽ/ ‘rise’
/s <sup>h</sup> /	/ṽs <sup>h</sup> i gu/ ‘charcoal’
/s/	/ṽsō sō/ ‘light’
/z/	/ṽzi tɕ <sup>h</sup> ə/ ‘dog year’
/ʂ <sup>h</sup> /	/ṽʂ <sup>h</sup> uṽ po ʋe/ ‘cypress’
/ʂ/	/ṽni ʂuṽ/ ‘twenty’
/z̪/	/ṽz̪i: n̪i/ ‘three days after tomorrow’
/ɕ <sup>h</sup> /	/ṽɕ <sup>h</sup> i ʋe/ ‘tree’
/ɕ/	/ṽɕi ʋej/ ‘forest’
/ʐ/	/ṽts <sup>h</sup> e ʒiṽ/ ‘the first day’
/x <sup>h</sup> /	/ṽx <sup>h</sup> oṽ/ ‘fold’

/x/     /ʼxo<sup>h</sup>po/ ‘torch’  
 /ɣ/     /ʼɣə dɔ/ ‘rain (v)’  
 /h/     /ʼhɛ zu/ ‘pepper’  
 /fi/     /ʼfiɑ pu/ ‘stretch’

The bilabial fricatives /ɸ, β/ rarely appear, and can be distinguished from /p<sup>(h)</sup>, <sup>h</sup>b/ respectively, e.g.:

/ɸ/-/p/-/p<sup>h</sup>/     /ʼɸoʔ kə/ ‘cover’; /ʼpoʔ/ ‘Tibetan’; /ʼs<sup>h</sup>õ p<sup>h</sup>o/ ‘next year’  
 /β/-/b/     /ʼβu loʔ/ ‘rise’; /ʼ<sup>h</sup>buʔ/ ‘shed’

The velar fricative /ɣ/ often appears in word-medial position, and it does not alternate with a plosive [g] even in careful speech. /ɣ/ and /g/ are therefore distinctive.

### 2.2.1.3 Resonants (nasals, liquids and semi-vowels)

The resonants except /r, w, j/ have a two-way distinction voiced/voiceless. The nasal /n/ is always pronounced as a prepalatal, and the variant of the palatal articulation is not included.

/m/     /ʼmõ/ ‘cow’  
 /m̥/     /ʼm̥ɑ/ ‘medicine’  
 /n/     /ʼnaʔ tɕ<sup>h</sup>we/ ‘ear’  
 /n̥/     /ʼn̥ɔ/ ‘nose’  
 /ɲ/     /ʼɲo/ ‘fish’  
 /ɲ̥/     /ʼɲ̥õ/ ‘heart’  
 /ŋ/     /ʼŋo/ ‘five’  
 /ŋ̥/     /ʼŋ̥go ŋi:/ ‘pillow’  
 /l/     /ʼla mo/ ‘leaf’  
 /l̥/     /ʼl̥ɛʔ bo/ ‘frost’  
 /r/     /ʼrə be/ ‘rabbit’  
 /w/     /ʼwo/ ‘fox’  
 /j/     /ʼje s<sup>h</sup>o/ ‘last night’

### 2.2.2 Complex initials

Complex initials can be classified according to the preinitial type. There are six preinitial types: (1) preaspirations, (2) prenasals, (3) labial plosive preinitials, (4) labial fricative/approximant preinitials, (5) glottal stop preinitials and (6) glides. These features, except the glide, are summarised as follows:

	(1)	(2)	(3)	(4)	(5)
nasality	–	+	–	–	–
labiality	–	–(+)	+	+	–
continuity	+	+	–	+	–

## 2.2.2.1 Preaspiration type

Most non-aspirated and voiced consonants can occur preaspirated:

<sup>h</sup> p	<sup>h</sup> t	<sup>h</sup> ʈ	<sup>h</sup> c	<sup>h</sup> k	<sup>h</sup> ts	<sup>h</sup> tɕ
<sup>h</sup> s <sup>h</sup>	<sup>h</sup> s	<sup>h</sup> ɕ <sup>h</sup>	<sup>h</sup> ɕ	<sup>h</sup> x	<sup>h</sup> ʈ	
<sup>ɦ</sup> b	<sup>ɦ</sup> d	<sup>ɦ</sup> ɖ	<sup>ɦ</sup> ʄ	<sup>ɦ</sup> g	<sup>ɦ</sup> dz	<sup>ɦ</sup> dʒ
<sup>ɦ</sup> z	<sup>ɦ</sup> ʐ	<sup>ɦ</sup> ʑ				
<sup>ɦ</sup> m	<sup>ɦ</sup> n	<sup>ɦ</sup> ɳ	<sup>ɦ</sup> ŋ	<sup>ɦ</sup> l	<sup>ɦ</sup> r	<sup>ɦ</sup> j

The voicedness of the preaspiration depends on that of the main initial. The preaspiration feature is always phonetically weaker than the main consonant of the initial.

Examples:

/ <sup>h</sup> p/	/ʰpej bo/ ‘shoulder’
/ <sup>h</sup> t/	/ʰto/ ‘horse’
/ <sup>h</sup> ʈ/	/ʰleʔ <sup>h</sup> ʈəʔ/ ‘bracelet’
/ <sup>h</sup> c/	/ʰma <sup>h</sup> ci/ ‘jaw’
/ <sup>h</sup> k/	/ʰku mo/ ‘thief’
/ <sup>h</sup> ts/	/ʰtsə wo/ ‘grass’
/ <sup>h</sup> tɕ/	/ʰtɕi/ ‘tongue’
/ <sup>h</sup> s <sup>h</sup> /	/ʰs <sup>h</sup> əʔ/ ‘gold’
/ <sup>h</sup> s/	/ʰsã/ ‘three’
/ <sup>h</sup> ɕ <sup>h</sup> /	/ʰɕ <sup>h</sup> a/ ‘be born’
/ <sup>h</sup> ɕ/	/ʰla <sup>h</sup> ɕo/ ‘thigh’
/ <sup>h</sup> x/	/ʰsa <sup>h</sup> xã ʳã:/ ‘seed’
/ <sup>h</sup> ʈ/	/ʰʈeʔ/ ‘eagle’
/ <sup>ɦ</sup> b/	/ʰbuʔ dɕ/ ‘leather bellows’
/ <sup>ɦ</sup> d/	/ʰda wo/ ‘moon’
/ <sup>ɦ</sup> ɖ/	/ʰda: mo/ ‘sap of pine’
/ <sup>ɦ</sup> ʄ/	/ʰjiʔ <sup>ɦ</sup> dʒu/ ‘back’
/ <sup>ɦ</sup> g/	/ʰgu/ ‘nine’
/ <sup>ɦ</sup> dz/	/ʰdzã: ji mə/ ‘false’
/ <sup>ɦ</sup> dʒ/	/ʰdʒu mo/ ‘intestine’
/ <sup>ɦ</sup> z/	/ʰzo <sup>ɦ</sup> zo/ ‘leaning’
/ <sup>ɦ</sup> ʐ/	/ʰzɕ/ ‘four’
/ <sup>ɦ</sup> ʑ/	/ʰʑi/ ‘exchange’
/ <sup>ɦ</sup> m/	/ʰməj/ ‘low’
/ <sup>ɦ</sup> n/	/ʰna ɦo/ ‘Mongolian gazelle’
/ <sup>ɦ</sup> ɳ/	/ʰnə/ ‘two’
/ <sup>ɦ</sup> ŋ/	/ʰŋa: mə/ ‘sweet’
/ <sup>ɦ</sup> l/	/ʰlaʔ po/ ‘brain’



$/^{\text{h}}\text{r}/$      $/^{\text{h}}\text{ra: wo/}$  ‘cowshed’  
 $/^{\text{h}}\text{j}/$      $/^{\text{h}}\text{je?/}$  ‘yak’

### 2.2.2.2 Prenasal type

All the aspirated and voiced plosives and affricates as well as several continuants can occur prenasalised:

$^{\text{m}}\text{b}$      $^{\text{n}}\text{d}$      $^{\text{n}}\text{d}$      $^{\text{n}}\text{g}$      $^{\text{n}}\text{dz}$      $^{\text{n}}\text{dz}$      $^{\text{n}}\text{ɣ}$   
 $^{\text{n}}\text{p}^{\text{h}}$      $^{\text{n}}\text{t}^{\text{h}}$      $^{\text{n}}\text{t}^{\text{h}}$      $^{\text{n}}\text{k}^{\text{h}}$      $^{\text{n}}\text{ts}^{\text{h}}$      $^{\text{n}}\text{tɕ}^{\text{h}}$      $^{\text{n}}\text{x}^{\text{h}}$      $^{\text{n}}\text{s}^{\text{h}}$      $^{\text{n}}\text{ɕ}^{\text{h}}$      $^{\text{n}}\text{l}$

The voicedness of the prenasal depends on that of the main initial. Almost all prenasals are homorganic, but there are also a few heterorganic, labialised prenasals, e.g.:

$^{\text{m}}\text{g}$   
 $^{\text{m}}\text{ts}^{\text{h}}$

The prenasal feature is always phonetically weaker than the main consonant of the initial.

Examples:

$/^{\text{m}}\text{b}/$      $/^{\text{m}}\text{bu le?/}$  ‘worm’  
 $/^{\text{n}}\text{d}/$      $/^{\text{n}}\text{da/}$  ‘read’  
 $/^{\text{n}}\text{d}/$      $/^{\text{n}}\text{di:/}$  ‘rice’  
 $/^{\text{n}}\text{g}/$      $/^{\text{n}}\text{go/}$  ‘go’  
 $/^{\text{n}}\text{dz}/$      $/^{\text{n}}\text{dzu/}$  ‘mdzo’  
 $/^{\text{n}}\text{dz}/$      $/^{\text{n}}\text{dzɑ? xɔ/}$  ‘shoe’  
 $/^{\text{n}}\text{ɣ}/$      $/^{\text{n}}\text{ɣə t}^{\text{h}}\text{ə/}$  ‘bite’  
 $/^{\text{m}}\text{p}^{\text{h}}/$      $/^{\text{m}}\text{p}^{\text{h}}\text{a/}$  ‘fly’  
 $/^{\text{n}}\text{t}^{\text{h}}/$      $/^{\text{n}}\text{t}^{\text{h}}\text{u/}$  ‘high’  
 $/^{\text{n}}\text{t}^{\text{h}}/$      $/^{\text{n}}\text{t}^{\text{h}}\text{e}^{\text{h}}\text{po/}$  ‘gall bladder’  
 $/^{\text{n}}\text{k}^{\text{h}}/$      $/^{\text{n}}\text{k}^{\text{h}}\text{o li/}$  ‘roof’  
 $/^{\text{n}}\text{ts}^{\text{h}}/$      $/^{\text{n}}\text{ts}^{\text{h}}\text{u/}$  ‘lake’  
 $/^{\text{n}}\text{tɕ}^{\text{h}}/$      $/^{\text{n}}\text{tɕ}^{\text{h}}\text{u}^{\text{h}}\text{kui/}$  ‘mouth’  
 $/^{\text{n}}\text{x}^{\text{h}}/$      $/^{\text{n}}\text{ji:}^{\text{n}}\text{x}^{\text{h}}\text{ɔ/}$  ‘village’  
 $/^{\text{n}}\text{s}^{\text{h}}/$      $/^{\text{n}}\text{na mo}^{\text{n}}\text{s}^{\text{h}}\text{u/}$  ‘marry’  
 $/^{\text{n}}\text{ɕ}^{\text{h}}/$      $/^{\text{n}}\text{du:}^{\text{n}}\text{ɕ}^{\text{h}}\text{ɑ/}$  ‘dance’  
 $/^{\text{n}}\text{l}/$      $/^{\text{n}}\text{lɑ?/}$  ‘shoot’  
 $/^{\text{m}}\text{g}/$      $/^{\text{m}}\text{gu,}^{\text{n}}\text{gu}^{(4)}/$  ‘head’  
 $/^{\text{m}}\text{ts}^{\text{h}}/$      $/^{\text{m}}\text{ts}^{\text{h}}\text{a mɔ/}$  ‘sweep’

### 2.2.2.3 Labial plosive type

A limited set of the voiceless plosives and affricates can occur prelabialised:<sup>5)</sup>

$\text{p}^{\text{h}}\text{t}$      $\text{p}^{\text{h}}\text{t}^{\text{h}}$      $\text{p}^{\text{h}}\text{t}$      $\text{p}^{\text{h}}\text{k}$      $\text{p}^{\text{h}}\text{ts}^{\text{h}}$      $\text{p}^{\text{h}}\text{ts}$      $\text{p}^{\text{h}}\text{tɕ}$

Voiced counterparts are not found. The prelabial plosive is always articulated lightly, and its audibility is very weak. It cannot, however, vary with a prelabial continuant such as a fricative or an approximant in the normal speech, but it is sometimes omitted. Not all of the prelabialised plosives have minimal pairs with non-prelabialised plosives.

Examples:

/ <sup>p</sup> t/	/ʔ <sup>p</sup> ta: juʔ/	‘riddle’	
/ <sup>p</sup> tʰ/	/ʔ <sup>p</sup> tʰa ɣa: pʰe/	‘poplar’	
/ <sup>p</sup> t̚/	/ʔ <sup>p</sup> t̚o: ʱjiʔ/	‘breast’	
/ <sup>p</sup> k/	/ʔ <sup>p</sup> ki:/	‘carry on the back’	
/ <sup>p</sup> tsʰ/	/ʔ <sup>p</sup> tsʰe: mo/	‘broom’	
/ <sup>p</sup> ts/	/ʔ <sup>p</sup> tso/	‘cock’	cf. /ʔtsə ru/ ‘coral’
/ <sup>p</sup> tɕ/	/ʔ <sup>p</sup> tɕu/	‘ten’	cf. /ʔtɕə/ ‘house’

#### 2.2.2.4 Labial fricative/approximant type

A labial fricative/approximant can stand before a limited set of consonants<sup>6)</sup>:

ϕ <sub>t</sub>	ϕ <sub>t̚</sub>	ϕ <sub>tɕ</sub>	ϕ <sub>s</sub>		ϕ <sub>l̥</sub>
<sup>w</sup> d̥	<sup>w</sup> g	<sup>w</sup> d̥ɕ	<sup>w</sup> z̥	<sup>w</sup> n	<sup>w</sup> l̥

The voicedness of the pre-labial continuant depends on that of the main initial. The pre-labial continuant feature is always weaker than the main initial on the phonetic aspect. It does not alternate with pre-labial plosives. It can be distinguished from a preaspiration type without a labial feature.

Examples:

/ϕ <sub>t</sub> /	/ʔ <sup>h</sup> tu:/	‘swelling’	cf. / <sup>h</sup> t/	/ʔ <sup>h</sup> sa <sup>h</sup> tuʔ/	‘dinner’
/ϕ <sub>t̚</sub> /	/ʔ <sup>h</sup> t̚u/	‘wash’			
/ϕ <sub>tɕ</sub> /	/ʔ <sup>h</sup> tɕō ne bo/	‘December’			
/ϕ <sub>s</sub> /	/ʔ <sup>h</sup> sā/	‘feed’	cf. / <sup>h</sup> s/	/ʔ <sup>h</sup> sā/	‘three’
/ϕ <sub>l̥</sub> /	/ʔ <sup>h</sup> l̥ā/	‘clap’	cf. / <sup>h</sup> l̥/	/ʔ <sup>h</sup> leʔ/	‘eagle’
/ <sup>w</sup> d̥/	/ʔ <sup>h</sup> pu <sup>w</sup> d̥ā/	‘animal’s hair’			
/ <sup>w</sup> g/	/ʔ <sup>w</sup> gu/	‘share’	cf. / <sup>h</sup> g/	/ʔ <sup>h</sup> gu/	‘door’
/ <sup>w</sup> d̥ɕ/	/ʔ <sup>w</sup> d̥ɕaʔ/	‘eight’			
/ <sup>w</sup> z̥/	/ʔ <sup>w</sup> z̥a/	‘shave’	cf. / <sup>h</sup> z̥/	/ʔ <sup>h</sup> z̥ə/	‘four’
/ <sup>w</sup> n/	/ʔ <sup>w</sup> nō <sup>h</sup> tɕə/	‘swear’			
/ <sup>w</sup> l̥/	/ʔ <sup>w</sup> la <sup>h</sup> ɕə/	‘thigh’	cf. / <sup>h</sup> l̥/	/ʔ <sup>h</sup> la wo/	‘musk’

### 2.2.2.5 Glottal stop type

Nasals and approximants can be with a pre-glottal stop:

<sup>ʔ</sup>m      <sup>ʔ</sup>n      <sup>ʔ</sup>j

Glottal stop is really clear phonetically, and it does not vary with glottal continuants. It can be distinguished from simplex and preaspiration types.

Examples:

<sup>ʔ</sup> m/	/ʔma <sup>h</sup> laʔ/ ‘fall down’	cf. /m/-/ <sup>h</sup> m/	/ʔma <sup>h</sup> ci/ ‘moustache’
			/ʔmaʔ dzo/ ‘peacock’
<sup>ʔ</sup> n/	/ʔne <sup>ʔ</sup> ne/ ‘sharp’	cf. /n/-/ <sup>h</sup> n/	/ʔna ni/ ‘last year’
			/ʔna mo/ ‘bride’
<sup>ʔ</sup> j/	/ʔja <sup>ʔ</sup> tu/ ‘expand’	cf. /j/-/ <sup>h</sup> j/	/ʔjaʔ, ʔja:/ ‘do’
			/ʔjeʔ/ ‘yak’

No minimal pairs are found only with/without the pre-glottal stop. But the existence of this glottal feature is extremely evident, thus it is described.

### 2.2.2.6 Glide type

There are many combination patterns including a glide /w/ or /j/:

bw	t <sup>h</sup> w	tw	kw	gw	ts <sup>h</sup> w	tɕ <sup>h</sup> w	tɕw	s <sup>h</sup> w
sw	ʂ <sup>h</sup> w	ʂw	ɕ <sup>h</sup> w	ɕw	ʐw	xw	ɣw	mw
ɲw	lw	rw						
p <sup>h</sup> j	pj	bj	tj	ɕj	xj	nj	lj	rj

In addition, there are several complex types with both of a preinitial and a glide, consider the following examples:

<sup>h</sup> mw	<sup>m</sup> bw	<sup>h</sup> cw	<sup>n</sup> jw	<sup>ɸ</sup> kw	<sup>h</sup> kw	<sup>p</sup> ts <sup>h</sup> w	<sup>h</sup> tsw	<sup>h</sup> gw
<sup>h</sup> sw	<sup>h</sup> lw	<sup>h</sup> k <sup>h</sup> w	<sup>h</sup> dɕw	<sup>n</sup> dɕw	<sup>h</sup> ɕw			
<sup>p</sup> tɕj	<sup>h</sup> mj							

The pronunciation of the glide is clear, and its omission is not accepted. Minimal pairs with/without a glide are not numerous. Examples illustrating the distinction are:

/b/-/<sup>m</sup>bw/-/bj/      /ʔrə be/ ‘rabbit’      /ʔ<sup>m</sup>bweʔ/ ‘be mad’      /ʔpa: bje/ ‘leather’

## 2.3 Vowels

The vowel inventory is displayed below:

i	ɯ	u
e	ɵ	o
ɛ	ə	ɔ
a	ɑ	

Each vowel can be articulated oral or nasalised. Short and long vowels are distinctive. Only monophthongs can become an element of the syllable.

### 2.3.1 Normal vowels

With articulatory contrast

/i/-/e/	/ʼs <sup>hi</sup> wo/ ‘hail’; /ʼs <sup>he</sup> mo/ ‘nail’
/e/-/ɛ/	/ʼmejʔ/ ‘eye’; /ʼ <sup>h</sup> mej/ ‘low’
/a/-/ɑ/	/ʼ <sup>h</sup> tɕaʔ pa/ ‘excrement’; /ʼ <sup>h</sup> tɕaʔ/ ‘cut’
/ɑ/-/ɔ/	/ʼtɕaʔ/ ‘pull up’; /ʼtɕɔʔ/ ‘patch’
/ɔ/-/o/	/ʼk <sup>h</sup> ɔwʔ/ ‘needle’; /ʼ <sup>m</sup> bowʔ/ ‘awl’
/u/-/o/	/ʼs <sup>hu</sup> ‘tooth’; /ʼs <sup>ho</sup> ‘earth’
/ʉ/-/ə/	/ʼs <sup>hu</sup> ‘who’; /ʼs <sup>h</sup> ə ʼpu/ ‘yellow’
/u/-/ʉ/	/ʼ <sup>h</sup> du:/ ‘split up’; /ʼdʉ/ ‘wheat’

With length contrast

/i/	/ʼmi/ ‘fire’; /ʼni:/ ‘highland barley’
/e/	/ʼ <sup>h</sup> teʔ/ ‘tiger’; /ʼs <sup>he</sup> mō/ ‘nail’
/ɛ/	/ʼle le/ ‘breast’; /ʼ <sup>h</sup> tɕe ma/ ‘cliff’
/a/	/ʼ <sup>h</sup> ɕa fio/ ‘deer’; /ʼɕa na/ ‘front’
/ɑ/	/ʼnaw/ ‘sky’; /ʼro kə ʼra wo/ ‘cowshed’
/ɔ/	/ʼ <sup>h</sup> no/ ‘nose’; not found
/o/	/ʼ <sup>h</sup> dzo/ ‘rainbow’; /ʼ <sup>h</sup> to/ ‘belly’
/u/	/ʼs <sup>hu</sup> ‘tooth’; /ʼpa ʁu:/ ‘knee’
/ʉ/	/ʼtɕ <sup>h</sup> ʉ/ ‘water’; /ʼ <sup>h</sup> ku:/ ru/ ‘hip’
/ʉ/	/ʼdʉ/ ‘wheat’; not found
/ə/	/ʼ <sup>h</sup> tə/ ‘cloud’; /ʼtə tsə/ ‘seed’
/ə/	/ʼpə te/ ‘noodle’; not found

### 2.3.2 Nasalised vowels

Except /ʉ/ and /ə/, each vowel can be nasalised as in:

/i/	/ʼjĩ/ ‘be’
/e/	/ʼ <sup>h</sup> t <sup>h</sup> ẽj/ ‘drink’
/ɛ/	/ʼ <sup>h</sup> k <sup>h</sup> ẽ ʼdi/ ‘kidney’
/a/	/ʼ <sup>h</sup> gã ʼbu/ ‘box’
/ɑ/	/ʼrō mə/ ‘other person’
/ɔ/	/ʼtõ/ ‘drag’
/o/	/ʼ <sup>h</sup> põ/ ‘government official’
/u/	/ʼts <sup>h</sup> ə jũ/ ‘merchant’
/ʉ/	/ʼbũ/ ‘wide’
/ə/	/ʼ <sup>h</sup> ã/ ‘heart’

## 2.4 Tonemes

Tone is distinctive in dGudzong Tibetan. It is realised not by an relative pitch height but by a pitch pattern. Four distinctive tones exist.

A tonal sign is given before each word as follows:

ˉ: high level [<sup>55</sup>/<sub>44</sub>] ˊ: rising [<sup>24</sup>/<sub>35</sub>] ˆ: rising-falling [<sup>132</sup>] ˋ: falling [<sup>53</sup>/<sub>42</sub>]

The tonal pitch value is not uniquely determined, thus /ˉ/ can be phonetically realised as [<sup>55</sup>] or [<sub>44</sub>], /ˊ/ as [<sup>53</sup>/<sub>42</sub>] or [<sup>52</sup>/<sub>51</sub>], etc. Therefore, the most important feature for the distinction is the pitch pattern (level or contour).

Examples of monosyllabic words:

/ˉS/ /ˉmu/ ‘to rake’  
/ˊS/ /ˊmi/ ‘fire’  
/ˆS/ /ˆmɛj/ ‘low’  
/ˋS/ /ˋmɛj/ ‘eye’

At present, there are no minimal pairs which are distinctive only with the difference respect to tone. In this paper, the tonal description reflects the actual pronunciation of native speakers, lest they judge a word as a non-dGudzong vernacular form.<sup>7)</sup>

In the case of bisyllabic words, the tonal value of the beginning of the second syllable is restricted to two high tone types [<sup>55</sup>] and [<sup>53</sup>], except for an atonal syllable. This means that dGudzong Tibetan has word tone,<sup>8)</sup> and polysyllabic words also show the same tonal pattern. Bisyllabic words can become as follows:

/ˉS<sub>1</sub>S<sub>2</sub>/ : main tonal value described as S<sub>1</sub>[<sup>55</sup>]S<sub>2</sub>[<sup>55</sup>]  
/ˊS<sub>1</sub>S<sub>2</sub>/ : main tonal value described as S<sub>1</sub>[<sup>24</sup>]S<sub>2</sub>[<sup>55</sup>]  
/ˆS<sub>1</sub>S<sub>2</sub>/ : main tonal value described as S<sub>1</sub>[<sup>24</sup>]S<sub>2</sub>[<sup>53</sup>]  
/ˋS<sub>1</sub>S<sub>2</sub>/ : main tonal value described as S<sub>1</sub>[<sup>55</sup>]S<sub>2</sub>[<sup>53</sup>]

Words with more than two syllables also show the same pattern as bisyllabic ones and after the third element no proper tonal value is given (atonal).

Except for pitch tone, suprasegmental features such as a stress and a phonation type are not phonetically evident. Theoretical treatments are not applied any more in this paper.

## 3 Diachronic Analysis

This section presents a diachronic analysis of the dGudzong dialect through a correspondence with Written Tibetan (WrT) forms. I add in the footnotes some explanations for remarkable sound changes from the viewpoint of Tibetan dialectology.<sup>9)</sup>

However, there are some difficulties describing the precise sound change of the dGudzong dialect because of the lack of WrT correspondences in multiple examples,

some of which may originate from obscure non-Tibetan languages, which are not considered here. The analysis is divided into three parts: initial, rhyme, and tone.

### 3.1 Initial

#### 3.1.1 Development of simple initials

##### 3.1.1.1 WrT obstruents

The general tendency of the diachronic development of obstruents in initial position can be characterised as follows:

- Reflexes of WrT simplex voiceless initials have remained voiceless in dGudzung.
- Reflexes of WrT simplex voiceless fricative initials have become aspirated in dGudzung.
- Reflexes of WrT simplex voiced initials are devoiced in dGudzung.
- Reflexes of devoiced WrT simplex initials are associated with low-tone syllables in dGudzung.

Examples:

/ʼka wo/ ‘pillar’ *ka ba*

/ʼs<sup>h</sup>o/ ‘earth’ *sa*

/ʼpoʔ/ ‘Tibetan’ *bod*

/ʼʂu/ ‘melt’ *zhu*

A significant articulatory innovation which sets the dGudzung dialect apart from most other Tibetan dialects is the split of the WrT alveopalatal spirants into retroflex series as well as alveopalatals, e.g.:

/ʼtɕe ʒi/ ‘field’ ? *zhing*

/ʼɕ<sup>h</sup>i ʈe/ ‘tree’ *shing phung*

/ʼʂ<sup>h</sup>o/ ‘meat’ *sha*

/ʼʂ<sup>h</sup>a ʃio/ ‘deer’ *shwa ba*

/ʼʈ<sup>h</sup>zə/ ‘four’ *bzhi*

As far as the actual data of dGudzung is concerned, the condition of the split is the vocalic quality, alveopalatals are kept in the position preceding the narrow vowels /i/ and /e/.<sup>10)</sup>

##### 3.1.1.2 WrT sonorants

The WrT sonorants included four nasals (*m*, *n*, *ny*, *ng*), two liquids (*l*, *r*), and two glides (*w*, *y*). In the dGudzung dialect, the WrT simplex sonorants are generally kept and realised with a low tone, e.g.:

/ˈmə/ ‘man’ *mi*  
 /ˈno/ ‘be sick’ *na*  
 /ˈnɔ/ ‘fish’ *nya*  
 /ˈŋo/ ‘I’ *nga*  
 /ˈlāw/ ‘road’ *lam*  
 /ˈro/ ‘goat’ *ra*  
 /ˈwo/ ‘fox’ *wa*  
 /ˈjõ mə/ ‘light’ *yang*

### 3.1.2 Development of complex initials with prefixes

WrT has nasal (*m-*, *-*) as well as oral (*g-*, *d-*, *b-*, *r-*, *l-*, *s-*) prefixal consonants.

#### 3.1.2.1 With nasal prefix

Almost all the WrT nasal prefixes merged before obstruent root initials (in this case stop/affricates), resulting in homorganic prenasalised consonants in the dGudzong dialect,<sup>11)</sup> as in:

/ˈmbu leʔ/ ‘worm’ *ˈbu* ?  
 /ˈndzə ɣi/ ‘finger’ *mdzu gu*  
 /ˈtɕʰəʔ/ ‘cold’ *ˈkhyags*  
 /ˈtɕʰu/ ‘lake’ *mtsho*

I have found only a few words with non-homorganic prenasal elements, some of them are:

/ˈmgu, ˈgu/ ‘head’ *mgo*  
 /ˈmʰtsʰa mə/ ‘sweep’ *ˈphyag*

These examples can be explained with the WrT form, the preinitial *m* or *ʰ* preceding a labial consonant. The example ‘head’ has a variant of the homorganic prenasalised initial, which means that it is in a transitory stage from the heterorganic prenasal to the homorganic one. The heterorganic prenasal will merge into the homorganic one in the near future.

#### 3.1.2.2 With oral prefix

WrT oral prefixes such as *g-*, *d-*, *b-*, *r-*, *l-* and *s-* were lost or developed as preaspiration. The prefix *b-* is associated with a labial preinitial. As far as voicing is concerned, the preinitial elements remained voiced if the root initial was voiced except for the initial nasal with the prefix *s-* changing into a voiceless nasal as follows:<sup>12)</sup>

/ˈmwo:/ ‘wound’ *rma*  
 /ˈm̥a/ ‘medicine’ *sman*

/ʼnaʔ tɕʰwe/ ‘ear’ *rna chogs*  
 /ʼŋə/ ‘nose’ *sna*

Examples of WrT prefix *b-* are as follows:

/ʰtɕ/        /ʰtɕu/ ‘ten’ *bcu*  
 /ʰt/        /ʰtɕ/ ‘wash’ *bkru*  
 /ʷg/        /ʷgu/ ‘share’ *bgo*  
 /ʷdʒ/       /ʷdʒaʔ/ ‘eight’ *brgyad*

### 3.1.3 Development of complex initials with a glide

There are four WrT glides, *-y-*, *-r-*, *-l-* and *-w-*. Dialectologically the development of the complex with a glide is very important.

WrT glide *-w-* (*wa zur*) has been dropped without compensation:

/ʃʰa fio/ ‘deer’ *shwa ba*  
 /ʰtsə wo/ ‘grass’ *rtswa*

The palatal glide *-y-* could combine with labial and velar plosives, as well as with the labial nasal *m-*. WrT labial plosives co-occurring with the *-y-* glide were transformed into alveolar affricates with a slight labial plosive preinitial:<sup>13)</sup>

/ʰtso/ ‘cock’ *bya*  
 /ʰtsʰe/ ‘open’ *phye*  
 /ʰtsə ru/ ‘coral’ *byu ru*  
 /ʰdzar/ ‘paste’ *sbyar*

The prelabial plosive has been lost in several examples, but the voiced prelabial plosive is not attested, so that its lack as in ‘paste’ can be because of the phonological restriction.

WrT velar plosives taking the *-y-* glide were transformed into alveopalatal affricates or palatal plosives:<sup>14)</sup>

/ʰdʒo/ ‘Han Chinese’ *rgya*  
 /ʰtɕə ʰmə/ ‘sour’ *skyur*  
 /ʰco/ ‘ride (a horse)’ *rkyā*  
 /ʰjweʔ mə/ ‘quick’ *mg̃yogs*  
 /ʰjiʔ ʰdzɕu/ ‘back’ *rgyab*

The WrT medial *-r-* could be added to labial, alveolar, and velar plosives, as well as to the spirants *s* and *h*. Considering first the stop-based clusters, we observe all sequences merging as retroflexed plosives:

/ʰtʰeʔ/ ‘blood’ *khraḡ*  
 /ʰdʱ/ ‘wheat’ *gro*



/ʰtɕw/ ‘wash’ *bkru*

/ʰtɕwʔ/ ‘six’ *drug*

/ʰtə mə/ ‘ask’ *dri*

/ʰtɕe: ma/ ‘cliff’ *brag ma*

/ʰtə/ ‘write’ *bri*

/ʰtɕi/ ‘tear up’ *dbral*

As can be seen, almost all WrT labial plosives with glide *r* developed as retroflexes with labial plosive preinitials.

*r* dropped from the cluster *sr-*, *r* leaving the remaining *s* aspirated or unaspirated.<sup>15)</sup>

/ʰsʰweʔ/ ‘life’ *srog*

/ʰsʰwo mə/ ‘hard’ *sra mo*

/ʰsa: mo/ ‘soy’ *sran ma*

The WrT glide *-l-* could be added to labial and velar plosives, as well as to the spirants *s* and *z*. We observe all sequences merging to become a voiced preaspirated alveolar laterals on the stop-based clusters, while *sl* became a voiceless preaspirated alveolar lateral and *zl* became a voiced preaspirated alveolar plosive:

/ʰlɔ̃/ ‘cattle’ *glang*

/ʰlaʔ po/ ‘brain’ *klad pa*

/ʰlɔ̃/ ‘take’ *blangs*

/ʰda: wo/ ‘moon’ *zla ba*

/ʰlɔ̃wʔ/ ‘learn’ *slob*

### 3.1.4 Special remarks on the initials

Almost all of characteristic phonemes in the dGudzung dialect such as /ɕ, β, ʱl, ʰxʰ/ probably have a non-Tibetan origin,<sup>16)</sup> the source of which is still unobvious. Among them, /ɕ/ is associated with the WrT *ph* initial, but it cannot freely change into [pʰ], as:

/ʰtɕsa ɕu/ ‘cock’ *bya pho*

/ɕweʔ/ ‘have shot’ *ʰphog*

Etymologically, the word-medial /ɕ/ is surely associated with WrT *ph* initial and it is possible to analyse it as a lenition of the aspirated labial plosive, but not all the cases observed in the WrT word-medial *ph* are realised as a labial fricative, thus we cannot treat [ɕ] as a conditioned variant of /pʰ/.

Preaspirations preceded by an aspirated initial can be regarded as a special combination, but some of them have a WrT origin: /ʰsʰə/ ‘gold’ *gser*. This type of

sound change is not conditioned.

Resonants preceded by a glottal stop are also noticeable (see 2.2.2.5). This combination is rare and its form is near to WrT, but no correspondence with a glottal stop exists in WrT. For example, the morphemes /<sup>2</sup>ja:/ and /<sup>2</sup>ma/<sup>17)</sup> are related to WrT *yar* ‘upward’ and *mar* ‘downward,’ respectively.<sup>18)</sup>

## 3.2 Rhyme

### 3.2.1 WrT open syllables

The quality of WrT vowels in open syllables (including WrT ‘final’) was generally not retained in the dGudzung dialect. They developed as in follows:<sup>19)</sup>

WrT	dGudzung
<i>a</i>	/o/      /ʃ <sup>h</sup> o/ ‘earth’ <i>sa</i>
<i>i</i>	/ə/      /ʀə/ ‘mountain’ <i>ri</i>
<i>u</i>	/ʊ/      /ʃ <sup>h</sup> ʊ/ ‘who’ <i>su</i>
<i>e</i>	/i/      /ʃ <sup>h</sup> mi/ ‘fire’ <i>me</i>
<i>o</i>	/u/      /ʃ <sup>h</sup> u/ ‘tooth’ <i>so</i>

The correspondences above are particularly observed in word-final position, while in word-internal position WrT *a* and *o* retained their vocalic quality as in:<sup>20)</sup>

/ʃ <sup>h</sup> a ɕ <sup>h</sup> o/ ‘land’ <i>sa cha</i>
/ʃ <sup>h</sup> o <sup>h</sup> kō/ ‘gum’ <i>so</i> ?

There are, naturally, other correspondences in the dGudzung dialect, some of them include a reflex of the glide /w/ and /j/, as in:

/ʃ <sup>h</sup> mwo/ ‘wound’ <i>rma</i>
/ʃ <sup>h</sup> gwə ʒã/ ‘entrance’ <i>sgo</i> ?

### 3.2.2 WrT closed syllables with nasals

Almost all WrT nasal finals caused the nasalisation of the preceding vowel without losing their segmental phonemic status, but in a case WrT nasal final has been lost as in:

/ʃ <sup>h</sup> tɕe ʒi/ ‘field’ ? <i>zhing</i>
/ʃ <sup>h</sup> mɕa/ ‘medicine’ <i>sman</i>

The condition of the omission of the final nasal is not explained based on the WrT form.

Vowel quality has developed depending on the final nasal. The main correspondences are displayed as follows:

V\F	<i>ng</i>	<i>n</i>	<i>m</i>
<i>a</i>	/õ/	/ã/	/ã/
<i>i</i>	/ĩ/	/ĩ/	/ẽ/
<i>u</i>	/ũ/	/ã/	/ũ/
<i>e</i>	/ẽ/	/ã/	?
<i>o</i>	/õ/	/õ, ã/	/ũ/

### 3.2.3 WrT closed syllables with non-nasals

Almost all WrT plosive finals (*b*, *d*, *g*) have developed into glottal stops. The vowel quality does not change when followed by the final WrT *d*, but changes drastically when followed by the final *g*.<sup>21)</sup> Vowel quality has developed depending on the final consonant. The main correspondences are displayed as follows:

V\F	<i>g</i>	<i>d</i>	<i>b</i>
<i>a</i>	/(j)eʔ/	/aʔ/	/ɔ(w)ʔ/
<i>i</i>	/ejʔ/	?	?
<i>u</i>	/u(w)ʔ/	/uʔ/	/u(w)ʔ/
<i>e</i>	?	/əʔ/	?
<i>o</i>	/weʔ/	/oʔ/	/aʔ/

Examples:

/<sup>h</sup>kaʔ/ ‘voice’ *skad*  
 /<sup>m</sup>buʔ/ ‘call’ ‘*bud*  
 /<sup>ʔ</sup>poʔ/ ‘Tibetan people’ *bod*  
 /<sup>p</sup>jeʔ/ ‘pig’ *phag*  
 /<sup>h</sup>mejʔ/ ‘eye’ *mig*<sup>22)</sup>  
 /<sup>ʔ</sup>tuwʔ/ ‘six’ *drug*<sup>23)</sup>  
 /<sup>h</sup>sweʔ/ ‘life’ *srog*

A final *b* can change to /w/ as in:

/<sup>h</sup>kɔwʔ/ ‘needle’ *khab*  
 /<sup>ʔ</sup>saw soʔ/ ‘deep’ *zab zab*

WrT continuants (*s*, *r*, *l*) lost their segmental phonemic status resulting in occasional compensatory lengthening. The vowel quality has developed depending on the final consonant. The main correspondences are displayed as follows:

V\F	<i>r</i>	<i>l</i>	<i>s</i>
<i>a</i>	/a:/	?	/i:/
<i>i</i>	?	?	?
<i>u</i>	/u:/	/i/	?
<i>e</i>	/i:/	/i:/	/i:/
<i>o</i>	/o:/	/u:/	/u, o/

Examples:

/ʼtʃi:/ ‘mule’ *drel*  
 /ʼnɕi:/ ‘rice’ *’bras*

Several examples show no compensatory lengthening, as in:

/ʼma/ ‘butter’ *mar*  
 /ʰsʰə/ ‘gold’ *gser*  
 /ʰkʰu/ ‘boil’ *’khol*

### 3.2.4 Special remarks on the rhymes

There are two vowels /ʰ, ə/ which have not explained above. They are seldom related to WrT forms. For example, /ʼpə ləʔ/ ‘Tibetan dumpling’ has both of the two vowels, but this word is not of a WrT origin.

### 3.2.5 Summary of the rhyme development

The rhyme development in dGudzung Tibetan presented above can be summarised from the viewpoint of the oral forms as follows:<sup>24)</sup>

#### open rhyme

short		long	
dGudzung	WrT	dGudzung	WrT
i	-e, -ul, -os	i:	-er, -el, -as, -es
a	-a (word-medially)	a:	-ar
o	-a (word-initially)	o:	-or
u	-o, -ol, -os	u:	-ur, -ol
ʉ	-u		
ə	-i		

#### nasalised rhyme

dGudzung	WrT
ĩ	-ing, -in
ẽ	-eng
ã	-an, -un
ǣ	-en, -on, -am
õ	-ang, -ong, -on
ũ	-ung, -um, -om
ǿ	-im

#### checked rhyme

dGudzung	WrT
(j)eʔ	-ag
ejʔ	-ig

weʔ	-og
aʔ	-ad, -ob
ɔ(w)ʔ	-ab (word-finally)
aw	-ab (word-medially)
oʔ	-od
uʔ	-ud
u(w)ʔ	-ug, -ub
uʔ	-ud
əʔ	-ed

The rhyme forms with no obvious source are omitted.

### 3.3 Tones

An analysis of tonogenesis is inevitable for understanding the diachronic phonology of Khams Tibetan. As mentioned in the synchronic analysis (2.4), the tone system in dGudzung Tibetan is analysed as a tonal type and a word tone system because of the variety of tonal values and of the restriction of the tonal pattern in the second syllable. This method of analysis is different from that taken by most of the previous works dealing with the description of Tibetan dialects such as Huang (1994) and Jiang (2002: 260–283). The result of the analysis of dGudzung Tibetan, therefore, can be only partially shared with such works. For the sake of an effective analysis of the tonogenesis, the analysis below is separated into two cases: monosyllabic words and polysyllabic ones. Nevertheless, only a tendency of the relation between the tonal type and WrT can be indicated.

#### 3.3.1 Monosyllabic words

The genesis of tone from WrT forms is clearly evident on monosyllabic words. The tonal distribution of high and low is associated with the kind of WrT initial as follows:

high (ˊ and ˋ): voiceless obstruents (with/without preinitials/glides) and resonants with preinitials

low (ˊ and ˋ): voiced resonants, voiced obstruents without preinitials

The split between high and low at the beginning of a word is common to most Khams Tibetan dialects, as indicated by Huang (1994) and Jiang (2002: 268–276).

high tone type	low tone type
/ˊteʔ/ ‘tiger’ <i>stag</i>	/ˋti:/ ‘3 <sup>rd</sup> person singular’ <i>de</i>
/ˊsʰo/ ‘earth’ <i>sa</i>	/ˋpoʔ/ ‘Tibetan’ <i>bod</i>
/ˊh̥tō/ ‘release’ <i>gtong</i>	/ˋso/ ‘eat’ <i>za</i>
/ˊtsʰo/ ‘salt’ <i>tshwa</i>	/ˋləwʔ/ ‘sheep’ <i>lug</i>
/ˋn̥o/ ‘nose’ <i>sna</i>	/ˋkweʔ/ ‘tan’ <i>gog</i>
/ˋl̥ō/ ‘ox’ <i>glang</i>	/ˋrə/ ‘mountain’ <i>ri</i>

However, WrT voiced obstruents with preinitials have developed as either high or low tone under conditions which are not clear, as in:<sup>25)</sup>

- /ˈdā/ ‘seven’ *bdun*  
 /ˈdzo/ ‘Han Chinese’ *rgya*  
 /ˈwɔ/ ‘eight’ *brgyad*

While the presence of falling or non-falling tones cannot be associated with the WrT form, they can be associated with vowel length in other dialects. For example, in the Derge (cf. sKal-bzang ’Gyur-med and sKal-bzang dByangs-can 2002: 108) and the mBathang dialects, falling tone appears when the vowel is short, and the non-falling one appears when the vowel is long. Clearly dGudzung Tibetan does not belong to this type.

### 3.3.2 Polysyllabic words

The tonal pattern of polysyllabic words in the dGudzung dialect can be represented by that described for bisyllabic word (see 2.4). But the relation between the tonal pattern and WrT is less obvious than it is for monosyllabic words. There are several compounds which include two words which /tɕʰu/ *chu* ‘water’ (high-level tone) and /ʰtso/ *bya* ‘cock’ (rising tone) show multiple tonal patterns, for example:

- /tɕʰu kʰu/ ‘boiled water’ *chu khol*  
 /tɕʰu tsʰā/ ‘hot spring’ *chu tshan*  
 /tɕʰu ʰlɔw/ ‘wave’ *chu rlabs*  
 /tɕʰu meʔ/ ‘pond, well’ *chu mig*  
 /ʰtso ʰtɕeʔ/ ‘cock’s excrement’ *bya skyag*  
 /ʰtso ɸu/ ‘cock’ *bya pho*  
 /ʰtso mu/ ‘hen’ *bya mo*

As shown above, the tonogenesis of the polysyllabic word is not the same as that for WrT forms, and needs further study.<sup>26)</sup>

## 4 Summary and Conclusion

The sketch of the synchronic phonetic status and its evolution in the dGudzung dialect demonstrates that little known dialects possess a typologically distinctive phonetic characteristics and sound changes in the Tibetan dialects, which are summarised as follows:

1. WrT *sh/zh* partially became retroflexes.
2. WrT *Py* became alveolar affricates.
3. WrT *a* became /o/.
4. WrT vowels with the final *g* changed their vocalic quality.

From a typological viewpoint, the characteristics mentioned above are quite rare, especially the fourth feature, that is not shared with any other dialects belonging to “twenty-four villages’ patois.”<sup>27)</sup> This subgroup of Kham Tibetan is characterised not only by its distinctive phonological aspects, but also by its unique lexical traits and grammatical features. Further linguistic investigation is to be done in this area.

## Notes

- 1) The content of the section two is based on Suzuki (2007a: 128–133).  
The field research was funded mainly by a Grant-in-Aid for Scientific Research of Japan Society for the Promotion of Science (“Linguistic Substratum in Tibet” headed by Yasuhiko Nagano, No. 6102001) and by a Grant-in-Aid for Scientific Research of Japan Society for the Promotion of Science (“Dialectological Study of the Tibetan Minority Languages in the Tibetan Cultural Area in West Sichuan,” No. 19-250). Many thanks to Xiao Tianyu and A-grong for providing the data for this paper as well as to Xiao Songying and Zla-ba sGrol-ma for coordinating my research in Gezong village, and to You-Jing Lin for giving me many useful comments for this paper. I wish to also thank Lawrence Reid for help in English editing and for assistance in presentation of the data.
- 2) The phonological description is changeable depending on the position of each scholar. We should note that there are multiple interpretations of phonology. Even in Central Tibetan represented by Lhasa Tibetan, which has been described the most in detail, many systems of its phonology are produced. See Tournadre (1996: 53–54) and Kitamura (1977: 1–2).
- 3) Among the final consonants, /p/, /ɣ/, and /r/ rarely appear.
- 4) As in this example, the consonant cluster /<sup>m</sup>g/ will merge into a homorganic prenasalised type in the near future.
- 5) This type, as explained in the section 3 (diachronic analysis), can be associated with WrT labial initials plus glide *y* or prefix *b-*. The limited distribution of the prelabialisation in the synchronic status can originate from this that of WrT.
- 6) Same as the footnote above.
- 7) This is to avoid the possibility that a form might be considered to have come from some other varieties in “twenty-four-villages’ patois.”
- 8) Cf. the analysis of Lhasa Tibetan in Kitamura (1977: 1).
- 9) The data on other Tibetan dialects is also based on my description in order to guarantee an identical phonetic description. Data from previous works will only be used when I have no data from the dialects concerned.  
See Qu (1991), Jiang (2002) and Zhang (2009) for detailed informations of the historical study of Tibetan dialects.
- 10) This type is also found in Sogpho 梭坡 (Suzuki 2005b), Zhongu 熱務溝 (Sun 2003), and some of the dialects spoken in Xiangcheng 鄉城 and Deqin 德欽 counties (Suzuki 2007a). The condition of the split is similar to Zhongu. Other dialects in which almost all WrT alveopalatal spirants transformed into retroflexes are: sProsnang 中路, gTorwarong 東旺, rGyalthang 建塘 (香格里拉), Byagzhol 霞若, mThachu 塔城, Zhollam 嘎嘎塘, etc.
- 11) In almost all Kham Tibetan dialects, the same process took place. There are several descriptions that claim that prenasals did not exist before aspirated obstruents, but according to my fieldwork, a slight prenasal element before the aspirated obstruents still exist in many Kham Tibetan dialects (Suzuki 2007a).
- 12) In almost all Kham Tibetan dialects, the same process took place.
- 13) This is one of the most characteristic sound changes in “twenty-four-villages’ patois,” and this phenomenon is also found in the Tibetan loanwords in nDrapa, a Qiangic language spoken in Daofu 道孚 and Yajiang 雅江 counties as well as in Zhongu (Sun 2003). In addition, the case of the Khyungpo 瓊波 (sBrachen-Khromtshang 巴青沖倉) dialect, spoken in the eastern area of Baqing 巴青 County, Naqu 那曲 District, Tibet Autonomous Region, is the same as in the “twenty-four-villages’ patois.” Data from the sBrachen dialect is also cited in Zhang (2009: 316).

- Concerning the transformation into alveolar sounds, a correspondence of alveolar fricatives to WrT Py is found in the gTsangtsa 漳扎 and Phyuigtsi 樹正 (Jiuzhaigou 九寨沟) dialects as well as the dialects spoken in Xiangcheng, Daocheng 稻城 and Muli 木里 counties plus the gTorwarong dialect.
- 14) The WrT velar with the glide -y- changed into a palatal plosive generally in nomadic varieties of Amdo Tibetan, and it also occurred in some of the Kham Tibetan dialects such as Lhagang 塔公 as well.
  - 15) Many Kham Tibetan dialects underwent the same development of WrT *sr-* as dGudzung Tibetan, for instance, mBathang 巴塘 and Rangakha 新都橋 dialects as well as the dialects spoken in Xiangcheng County etc.
  - 16) Neighbouring languages such as Geshitsa or Situ-rGyalrong do permit a combination such as /<sup>h</sup>l<sub>3</sub>, <sup>h</sup>x<sup>h</sup>/ in their phonotactics.
  - 17) These are not used alone, the tonal sign is thus not added.
  - 18) The oral form of these two WrT words *yar* and *mar* takes a high-tone type in several neighbouring Kham Tibetan dialects such as Sogpho, Lhagang and Rangakha.
  - 19) Almost the same transformation of the vowels in open syllable is also found in the nDappa 稻城金珠 dialect. Similar sound changes are also observed in dialects spoken in Xiangcheng and Muli, as well as in gTorwarong.
  - 20) A similar phenomenon is observed in the gSerpa 色爾壩 dialect (Sun 2005).
  - 21) This type of sound change is not reported in Qu (1991). But almost the same type as in dGudzung dialect is also found in several vernaculars spoken in Batang 巴塘 such as Sowanang 蘇哇龍 and Dangba 黨巴 (personal communication with sKal-bzang 'Gyur-med 格桑居冕 in Batang 2006), and spoken in Khyungpo (sBrachen).
  - 22) This word must originate from Old Tibetan *dmig*.
  - 23) This word may not be directly associated with WrT *drug* because of its oral form with high tone.
  - 24) A multiple sound correspondence between the oral forms and WrT is not rare in dGudzung Tibetan. Only the main correspondences are mentioned.
  - 25) This is also true in the Derge 德格 and the mBathang dialects (cf. sKal-bzang 'Gyur-med 1985). Probably it is a quite common phenomenon among Kham Tibetan dialects, but its effect is still uncertain (cf. Jiang 2002: 264–268).
  - 26) I have observed a similar tonal phenomenon in some rGyalrongic languages such as Geshitsa, Lavrung and Situ-rGyalrong. In addition, Wang (2008) reports a similar tonal phenomenon in the bisyllabic word in Guqiong. These languages are spoken in the neighbouring areas of Danba, thus a mutual linguistic influence can be supposed on the suprasegmental aspect of Tibetan dialects spoken in the rGyalrong area.
  - 27) Among the characteristics listed above, the second and the fourth are shared with the Khyungpo dialect spoken in Baqing, Naqu, T.A.R., i.e. a place far from Danba.

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## Appendix: Vocabulary of English-dGudzung

The following English-dGudzung vocabulary lists circa 1000 basic lexical items. The verbal conjugation is not attested except for the verbs with a suppletive paradigm.

afternoon	ʼza ro <sup>fi</sup> ʒuʔ	be called	ˀm̥buʔ
again	ʒo: roʔ	be cooked	ˀptsu
age	ˈlu	be done; accomplish	ˀtʰa: ɳõ
agree; consent	ˈtõ ˀqo ʒi	be drunk	ˀdʒe
air; breath	ˈpuʔ	be dry	ˀkã
alcoholic drink	ˀtɕʰõ	be full; fill up	ˈkõ
all	ʒiʔ tɕʰi ɣu	be hungry	ˀtʃe:
alone	ˈmã ʒejʔ	be ill	ˈno
animal; beast	ˈrã ge	be like	ˀtsa
ankle	ˀkõ <sup>hi</sup> tiʔ	be old	ˀga:
answer; reply	ˈle: ɕaʔ	be ripe	ˀtsʰu
ant	ˈtwe: ˈmo: mo	be one's turn	ˀdʒi
anus	ˈrõ ho ma	be shy	ˀtʰi
arm	ˈle: bo	be sleepy	ˈnõ: ziʔ
armpit	ˀtɕʰõ	be startled	ˀtʃe:
arrive	ˈpa roʔ	be thirsty	ˀkʰo kã
ask	ˈtʃã mã	be tired	ˀkõ
at present; now	ˈʔa to	bean flour	ˈsa: mo ˀtsʰe
aunt (father's sister)	ˀʔa <sup>hi</sup> tsã	bear	ˈtaŋ <sup>fi</sup> ga
autumn and winter	ˈga: nã	bear [fruit]	ˀtʰeʔ
awl	ˀm̥bowʔ	beautiful	ˀdze: mã
baby	ˈtʰã ɣi tʰu tʰu	become crazy	ˀm̥bweʔ
back	ˀʒiʔ <sup>fi</sup> dʒu	become curved; bent	ˈkwi kwi
backside	ˀku <sup>fi</sup> dʒoʔ	bed	ˀtʰã
bad	ˀmã ɳi: mã	bee	ˀqõ mo
bald; bare	ˀgo <sup>fi</sup> du	beg [for food]	ˀtsi: mã
bamboo	ˈɕu: mo	beggar	ˀtʃo ma
barley	ˀkã zi	believe in	ʒi <sup>fi</sup> sã
basket carried		belly	ˀtʃo:
on the back	ˈse ʒu	belt	ˀka reʔ
be	ʒi	big; large	ˀtɕã
be afraid	ˀtʃeʔ	bind; tie up	ˀge: mã
be angry	ˀtu ˈlõ	birch	ˈtɕe ɳe: ˀpʰe
be boiling	ˀkʰu	bird	ˈpi <sup>hi</sup> ka
be born	ˀɕʰã	birthday	ˈnãw ˀɕã zã mõ
be broken	ˈlã	bite	ˀɣã tʰã / ˀdaʔ

bitter	ʰkʰɔ: mə	butterfly	ʰsʰã bui li? ʼmə tɕʰe: mə
black	ʼnje? ɣə	button	ʼdwe
black-eared kite	ʰle?	buttocks	ʰku: ru
blind person	ˋmej? mi ʰdi bu	buy	ˋni
blink; wink	ʰmej? ʼtsã ɰi ʼtsã ɰi	cadre	ʰpō
blissful; happy	ʰtɕə? ʰgə	calculate	ʰtsə ru: ʰdɕə
block up	ˋtsu:	can	ˋtʰo: zə ˋtʰo:
block; obstruct	ˋkʰwe?	carry on the back	ˋki:
blood	ˋtʰe?	carry [a child]	
blow [the trumpet]	ˋmbu?	on the back	ʰdʒaw? ˋkʰu: mə
blue	ʲã ˋmbu	carry [sthg] with a	
blunt; dull	ˋtsu: mə	pole on the shoulder	ʼxor lo?
boar	ʼpə li?	carve; engrave	ˋki:
boat	ʼtu	cat	ʼtsə lo / ˋtsə lo
body	ˋlu ʰpu	catch; hold	ʰdʒə?
boiled water	ˋtɕʰu kʰu	cattle	ʼtsʰa pje
bone	ʼru ʰpo	cause to mix	ˋsa ma ˋsa ʰse?
boot	ˋxʰã	cave in; sink	ˋma: tɕʰe? ˋkwe mə
borrow	ʰja	cave; hole	ʼtō
bottle	ˋʂʰaj dō	chaff; bran	ʼdɔ
bottom; base	ˋtsa wo	change	ʼma: ɰi lo?
bowl	ʼpʰə ro	charcoal	ʼʂʰi gu
bracelet	ʼle? ʰtə?	chase after	ˋʂʰu?
braces; suspenders	ʼʂʰi: xe?	cheese cake	ˋtɕʰō ɣo
braid; plait	ʼri: bo	chest	ˋtʰo: ʰji?
brain	ʰla? po	chest; trunk	ʰgã ˋmbu
break to pieces	ˋtsʰe tsʰe ˋɸwe?	chicken	ˋtso
break; snap	ʰtɕa: du: dɔ?	child	ʼtʰə ɰi
break; smash [a bowl]	ʰdʒe:?	chin	ʼma ʰci
breakfast	ʼtɕʰo ɣu	Chinese chives	ʰgwe ɣo
bridge	ʰtsō ˋmo	Chinese priskly ash	ʰji ʰmo
broad bean	ʼtə ʰga: du du	choose; select	ʼrə no? ʰdã
broom	ˋtsʰe: mo	chop down	ˋtɕa?
brother	ˋpu ɰi?	chop; cut [meat]	ʼlã dzə
brown bear	ʼtaŋ ʰga ʼtə mō	chop [wood]	ˋtɕi:
bucket	ˋtɕʰu lō zo	chopsticks	ʼtʰə ʰmo
bud; sprout	ʼla mo ˋtʰə ɰi	circle; circular	ˋko ʰde ʰde
bull	ˋpʰu	clap	ˋɰã
bury	ʰgej?	claw	ˋʂʰe: mō
busy	ˋtsʰaw zi	clean	ˋtsō mo
butter	ʼma	clear	ˋda:

clever	<sup>ŋ</sup> go mə	cut [paper, cloth]	<sup>h</sup> tɕa: mə
cliff	<sup>ɸ</sup> tɕ: ma	cut down	ʼtɕ <sup>h</sup> a? ro?
climb up [tree]	ʼɦa <sup>ŋ</sup> dze?	cut off	<sup>h</sup> tɕa?
close [the mouth]	ʼpə tsũ	cut up [vegetable]	<sup>h</sup> ti?
close [the door]	<sup>ŋ</sup> da?	dare	<sup>ɸ</sup> pu?
cloth	ʼre:	date	ʼnā xo?
cloth robe	ʼko zi	daughter	ʼpu mo
cloud	<sup>ɸ</sup> tə	daughter-in-law	<sup>ɦ</sup> na mo
cock	<sup>ɸ</sup> tsa ɸu	day after tomorrow	ʼnō nā
cockscorn	<sup>h</sup> a zu?	day before yesterday	ʼk <sup>h</sup> a nā: <sup>h</sup> ke
cold [weather; water]	<sup>h</sup> tɕ <sup>h</sup> ə?	daytime	ʼna: <sup>h</sup> ke
collar	ʼna <sup>h</sup> ko?	deaf person	<sup>ɸ</sup> na ŋə
collect; gather		deceive; cheat	ʼzā <sup>ɦ</sup> je?
[firewood]	<sup>h</sup> tɕə?	decoct; cook in [tea]	<sup>h</sup> ku γə
comb	<sup>ŋ</sup> gu ɕ <sup>h</sup> a? so?	deep	ʼsaw so? rə ma
come	ʼs <sup>h</sup> we?	deer	<sup>ɸ</sup> ha fio
commend; praise	<sup>ɸ</sup> to ro: ʼjə?	die	<sup>ɸ</sup> hə
compare	ʼpu <sup>ŋ</sup> dzu: mə	die out	<sup>h</sup> tu
connect; join; link	<sup>ŋ</sup> dj <sup>ŋ</sup> dj ʼru:	difficult	<sup>h</sup> ko
consult; discuss	ʼtu bo: ʼje?	dig out with finger	<sup>ŋ</sup> dwe?
cook; boil	<sup>ɸ</sup> tsu	dig; excavate	<sup>ɦ</sup> lwe?
cooking stove;		dig; scoop [out]	ʼlɕ?
kitchen range	<sup>ɦ</sup> dza ʼow?	dirty	<sup>ɦ</sup> dō ŋa:
cool	ʼto: ʼmi ts <sup>h</sup> ej?	disappear; vanish	ʼme?
coral	ʼtsə ru	divide; share	<sup>ɸ</sup> gu
corner; angle	ʼsu <sup>h</sup> ko	do not have	ʼme: ŋo?
corpse	ʼna ru	do business	<sup>h</sup> ts <sup>h</sup> ej ʼjə?
count [numbers]	<sup>h</sup> tsə ru: <sup>ɦ</sup> dza?	do; make	ʼjə?
cover [the mouth]	<sup>ŋ</sup> dza mə	dog	ʼbe tɕ <sup>h</sup> ə
cover up	<sup>ŋ</sup> gu ɕka?	donkey	<sup>h</sup> kə rə
cow	ʼmō	door	<sup>ɦ</sup> gu
crawl	<sup>ŋ</sup> dze:	dove	<sup>ɸ</sup> hi? ka
crops	ʼmə t <sup>h</sup> e?	down; hair	<sup>h</sup> pu
cross [a bridge]	<sup>h</sup> xē <sup>ŋ</sup> go	doze off; nod	<sup>h</sup> tɕwe ji ʼjor
crow	<sup>ɸ</sup> tsa rwe?	dragon	<sup>ŋ</sup> du?
cry; weep	ʼŋu	dragonfly	ʼts <sup>h</sup> ā ʼbu li?
cuckoo	ʼs <sup>h</sup> i: γwe?	draw [a picture]	<sup>ɸ</sup> tə
cuddle	ʼkwe?	drink	<sup>h</sup> t <sup>h</sup> ēj
cupboard; cabinet	<sup>ɦ</sup> gā <sup>ɸ</sup> bu	dry	<sup>h</sup> kā <sup>ɸ</sup> bu
curtain	<sup>ɦ</sup> ga k <sup>h</sup> e ke so?	dry by fire	<sup>h</sup> kā tɕu
curved; bent	ʼgwi gwe	dry land	ʼla ʒi

dry; drought	`naw <sup>h</sup> kā	father-in-law	`ta <sup>fi</sup> gā
dry [clothes] is the sun	<sup>fi</sup> di?	feather	´dza <sup>h</sup> puw
dumpling	ʔa xu tɕ <sup>hi</sup> mu	feed; suckle	ʔsā
dusk; twilight	´maj? duw ruw zi	fetch; draw [water]	ʔtɕə?
dust	<sup>fi</sup> di wo	few; little	´ne: mə
dye	ˉts <sup>he</sup> ma ˉ <sup>fi</sup> dʒā	field	ˉtɕe zi
each; every	ˉkwe? ´di ʒə?	fierce; sharp	ˉk <sup>h</sup> aj mə
ear	´na? tɕ <sup>h</sup> we	fifteen	ˉ <sup>p</sup> tɕō <sup>fi</sup> ŋo
early	ˉ <sup>n</sup> ʒwe? mə	fifty	ˉŋa <sup>p</sup> tɕu
earrings	ʔa lu	finger	ˉ <sup>n</sup> dʒə ʒi
earth; ground	ˉs <sup>h</sup> o	finish	ˉt <sup>h</sup> a:
earthen jar	´za mo	fire	´mi
earthquake	ˉs <sup>h</sup> o ˉ <sup>n</sup> gi ro	fire [a shot]	ˉlā
easy	´le: ʎo: mə	firewood	ˉtɕ <sup>hi</sup> :
eat	´so	first	´nō ŋā ˉbi: ʒə?
egg	ˉ <sup>fi</sup> go fiā	fish	´no
eight	ˉ <sup>w</sup> dʒa?	fist	ˉk <sup>h</sup> u zuw
eighteen	ˉtɕu? ˉ <sup>w</sup> dʒa?	five	ˉŋo
eighty	ˉ <sup>fi</sup> dʒa: zuw	flat	´pa? pa?
elder brother	ˉkuw ʒu	flea	´dzo wo
elder sister	ˉtse tse	float	ˉ <sup>fi</sup> di: wo
eleven	ˉtɕu <sup>h</sup> tɕi?	flood	ˉtɕ <sup>h</sup> u <sup>fi</sup> ˉ <sup>h</sup> tɕ <sup>h</sup> ə?
embrace; hug	´fia ʒwe ˉrə s <sup>h</sup> ō	flour	ˉts <sup>he</sup> : ru
embroider	ˉ <sup>h</sup> tse?	flow; run	ˉrō
empty	ˉpej bo	flower	ˉ <sup>m</sup> bui de?
ewe	´ləw? mo	fly	ˉ <sup>fi</sup> dō ŋe?
exchange	ˉtsə <sup>fi</sup> ˉpa <sup>fi</sup> ʒi jī	fog	´ra bo
excrement	ˉ <sup>h</sup> tɕa? pa	follow	ˉkə <sup>fi</sup> dʒu: ´pə ro?
expand; swell	ˉʔja: ˉ <sup>h</sup> u	food steamer;	
extract [oil]	ˉzə	steam box	´se: s <sup>h</sup> o
eye	ˉmej?	foodstuff; grain	ˉ <sup>n</sup> də <sup>n</sup> də
eyebrow	´mej <sup>h</sup> puw	foot	ˉkə bo
face	´de: p <sup>h</sup> o	force; compel	ˉ <sup>p</sup> tsā <sup>m</sup> bui la?
fall	ˉ <sup>ʔ</sup> ma <sup>h</sup> ʎa?	forehead	ˉs <sup>h</sup> a <sup>n</sup> ga:
fall asleep	´me ˉ <sup>ʔ</sup> tu? ro	forest	´ci ˉ <sup>ʔ</sup> ej
false	ˉ <sup>fi</sup> dʒā: ʒi mə	forget	ˉʎə: xwi ˉtə
family members	ˉtɕ <sup>h</sup> ā: nō kə ´mə	forty	´rə <sup>h</sup> tɕu
far	ˉt <sup>he</sup> : ´ri mə	foundation	´tɕə s <sup>h</sup> o
fart	ˉ <sup>h</sup> tsa?	four	ˉ <sup>fi</sup> zə
fat	ˉts <sup>h</sup> u: mə	fourteen	ˉtɕu: ˉ <sup>w</sup> zə
father	ˉp <sup>h</sup> a <sup>fi</sup> ga	fox	´wo

freeze; ice up	<sup>h</sup> kʰiʔ	gum	ʼsʰo ʰkõ
fresh	ˉsʰa ʰpo ʰtse seʔ	hail	ˉsʰi: wo
friend	ʼrweʔ	hair	ˉʈo
frighten; scare	ˉhʈe: lə ʰfioʔ	half	ˉʰtsʰə ke: ʔəʔ
frog	ˉʰbi ʰgã	Han Chinese	ʼdzo
front	ˉŋa: na	hand	ˉʈe: bo
frost	ˉʈeʔ bo	happy	ˉʰgo
frying pan	ˉtsʰaj ji ʼso: kə ʼsõ	hard	ˉʰkə
full	kõ mə	hard; solid	ˉsʰwo mə
fur-lined jacket	ˉhʈsaʔ pe	hat	ʼmow mow
future	ʼna ka: zi	hate	ˉʈu ŋu
gall bladder	ˉhʈe ʰpo	have a fever	ˉtsʰej ro ʈu
garden	ˉʰgu ʰtso	have a headache	ˉŋgu ʼno
garlic	ˉʰgo re	have found	ˉʰtʰa ʔə
gather [water]	ˉhswi	have hit [the target]	ˉʰweʔ rə
gentle; amiable	ʼzõ: ˉŋde: mə	have [money]	ˉtʰe tsʰa ʼfioʔ
get angry; flare up	ˉʈuʔ lõ	he; she; it	ʼti:
get dark	ʼme: ʼruw	head	ˉmgu
get; acquire	ˉhʈeʰaʔ roʔ / ˉhʈeʰaʔ roʔ	hear	ˉhʈu
get; fetch	ˉw lõ	heart	ˉhã
girl	ʼpu mo ˉtʰə ʁi	heat up [cold rice]	ˉtsʰo
glass	ˉsʰaj ʰda	heavy	ˉhʈdʒəʔ mə
gnaw; nibble	ʼfiã ˉdʒaʔ	help	ʼra: wu mə /
go upstairs	ˉŋgo		ˉli ʰko: ˉruw mə
go; leave	ˉsʰowʔ / ˉsʰũ	hen	ˉʰtsa mu
goat	ʼro	herdsman	ˉhʈsə pe: ʔə mə /
god	ˉʈo		ˉhʈsə pe: ˉgjo mə
gold	ˉhʰsʰə	here	ʼʔa ra
good	ʼni: mə	hide	ˉŋgo: mə
goods	ˉtʰa bu	high; tall	ˉhʈu
government official	ˉhʰpõ	highland barley	ʼni:
grandfather	ˉʔa mi	hill; mountain	ʼrə
grandmother	ʼʔa tsʰə	hillside;	
grass	ˉhʈsə wo	mountain slope	ʼrə ˉŋgu
grassland	ˉhʈse ʰpo	hold; grasp	ˉhʈeʰu ʰku kə
green	ˉŋã ˉbu rũ	honest	ʼmə ʼni: mə
grey	ˉʰdi wo	hoof	ʼsuʔ pu
grind [flour]	ˉʰtsʰi ʰko:	horizontal	ˉxwã ˉhʰi
grow up	ˉtʰəʔ lo: ʼtsə	horse	ˉhʰto
gruel; porridge	ˉdʒi sʰoʔ	hot	ˉtsʰejʔ
guest	ˉdũ ˉbu	hot pepper	ˉhe zu

hot spring	ṭɕʰu tsʰã	last night	ʼje sʰo
hot; spicy	ʰzaw mə	last year	ʼna ni
house	ʼtɕɔ	laugh; smile	ʰgwoʔ
how	ʰtɕe ʳdɔ ɾə	lax; loose	ʰlo: mə
how many	ʼka ʰtɕo: ɾə	lazy	ʼtɕi tɕi ʼmi: mə
Huizu; Muslim	ʼlwe ljo	lead [the way]	ʼlāw ʳtʰɔʔ
human being	ʼmə	leaf	ʼla mo
hundred	ʼdzo	leaf mustard	ʰku: bo
husband	ʰga bu	learn; study	ʰlowʔ
I	ʼŋo	left	ʰjeʔ le
ice	ʰtɕʰaʔ roʔ	leopard; panther	ʼzejʔ
in the evening	ʼnə mo: ɾɐʔ	level; flat	ʰtʰō ʳtʰō
in the past	ʰñã ri	Lhasa	ʼla sʰo
incense	ʰpu:	lie	ʰtɕeʔ
inn; hotel	ʼmə ʰda: sʰo	life	ʰsʰweʔ
insect; worm	ʰmbu leʔ	lift up; carry	ʰtɕjeʔ
install; fix	ʰŋa: mə	lift [the lid]	ʰkweʔ
intestine	ʰdzu mo	light	ʰsʰō sʰō
iron	ʰtɕeʔ	light; bright	ʰza wu sʰo: mə
iron pot; iron pan	ʼsō	light <weight>	ʼjō mə
jackal	ʼkʰã zeʔ	like; love	ʰgo:
joint	ʳu ʰpo ʰda ri: sʰo	lion	ʰsʰə
jump	ʼjɐ: ʰtɕʰi	lip	ʰtɕʰu ʰpi:
just now	ʼto zi	listen	ʼni:
kerchief	ʰto: ri	live	ʰkāj ʰduʔ
key	ʰdɔ ʰtɕeʔ ʰtsʰe: sʰo	live charcoal	ʰsʰe ɳweʔ
kick	ʼle ʰdo ʰlã	liver	ʰtɕʰɔ ʰbo
kidney	ʰkʰɛ ʰdi	livestock;	
kill	ʰɕʰoʔ	domestic animals	ʼtsʰuʔ suʔ
king	ʰge: mo	lock	ʰdɔ ʰtɕeʔ
kiss	ʰwu: ʼjeʔ	lock [the door]	ʰdɔ tɕe ʰdɔ
kitchen	ʼse: sʰo	long	ʰšã
knee	ʼpa ɕu:	lose; defeated	ʼtɕo: mə
kneel	ʼpa ɕu: ʼtsʰuʔ	lose [sthg]	ʰma ʲaʔ
knife	ʼtɕə zi	loud; sound	ʼtɕe:
knock; strike	ʰndzə	louse	ʰdɔ ʰsʰeʔ
know	ʼŋeʔ ɕʰiʔ	low; short	ʰmej
know [to write]	ʰɕʰi roʔ	lukewarm	ʼtsã ʰbu
ladle	ʰcweʔ	lunatic	ʰbwe mə
lake	ʰtsʰu	lunch	ʼdza ro
lamp	ʰsō sō	lung	ʰlo wə

magpie	<sup>h</sup> tɕə ɣo	move [a stool]	<sup>h</sup> x <sup>h</sup> oʔ mə
maize; corn	ˉju mi	mow; cut [grass]	<sup>h</sup> tɕəʔ
make a row	ˉmeʔ	mule	ˈti:
make turn	<sup>h</sup> k <sup>h</sup> o	mushroom	ˈʂa mu
make; cause	<sup>h</sup> miʔ	musk	<sup>h</sup> la <sup>h</sup> tsə
make [tea]	<sup>h</sup> bō	nail	ˈs <sup>h</sup> e: mo
man	ˈpu ɰi	nail; tack	<sup>n</sup> dzɯ ɣe
many; much	ˈmō mə	narrow	ˈpje de rə ma
mare	<sup>h</sup> ta mu	navel	<sup>h</sup> tə ɣi
marrow	ˈru ɰəʔ	near	ˈtsə <sup>h</sup> kwe
marry	<sup>h</sup> na mo <sup>n</sup> s <sup>h</sup> ɯ	neck	ˈnə <sup>h</sup> ka
maternal aunt	ˈma jo	needle	<sup>h</sup> k <sup>h</sup> əwʔ
maternal uncle	<sup>h</sup> ta jo	nephew	<sup>h</sup> ts <sup>h</sup> a wu
meal; food	ˈse	new	<sup>h</sup> s <sup>h</sup> a <sup>h</sup> po
meat	<sup>h</sup> ʂo	New Year	ˈlu s <sup>h</sup> a <sup>h</sup> po
medicine	ˉmɔ	next year	<sup>h</sup> s <sup>h</sup> ō p <sup>h</sup> o
meet	<sup>n</sup> dzɯ	nine	<sup>h</sup> gu
merchant	<sup>h</sup> ts <sup>h</sup> ə jū	nineteen	<sup>h</sup> tɕɯ <sup>h</sup> gu
middle	<sup>h</sup> tɕi xuʔ	ninety	<sup>h</sup> gu ɰu
midnight	<sup>h</sup> ts <sup>h</sup> a p <sup>h</sup> ts <sup>h</sup> ə	nit	<sup>h</sup> sə mo
milk	ˈle le	nod	<sup>n</sup> gu <sup>h</sup> gu
milch cow	ˈru: ɰə: mə	noodles	ˈpə te
milk skin	ˈsa ɰwo	noon	ˈza ro: zi
mirror	<sup>h</sup> ʂ <sup>h</sup> aj <sup>h</sup> <sup>h</sup> go	nose	<sup>h</sup> no
money	ˈt <sup>h</sup> e tsa	nostril	<sup>h</sup> no kə ˈpo: pu
Mongolian gazelle	<sup>h</sup> na fio	notify; inform	ˈtɕi ziʔ <sup>h</sup> ʂ <sup>h</sup> aʔ
monkey	ˈʔa <sup>h</sup> ti	oat	ˈjowʔ pu
monk's cloth	<sup>n</sup> la ɣu	of course; certainly	ˈʔa <sup>n</sup> do ˈji
month	<sup>h</sup> da ɰiʔ	offer as an excuses	<sup>n</sup> p <sup>h</sup> i tɕo:
moon	<sup>h</sup> da: wo	offer; dedicate	<sup>h</sup> ta
morning	ˈʂwo <sup>h</sup> tɕi	offspring of a bull and	
morning		a female yak	<sup>n</sup> dzu
(before the noon)	ˈza ro raw	oil	ˈjəwʔ
mosquito	<sup>n</sup> bu <sup>h</sup> tsiʔ	old lady	<sup>h</sup> ge mo gwe
mother	ˈma <sup>h</sup> ga	old man	<sup>h</sup> ga bu: gwe
mother-in-law	ˈma <sup>h</sup> ga	old; elderly	ˈlu tɕa: mə
mountain cave	ˈpu pu	on the target	ˈla: tɕ <sup>h</sup> o: mə
mouse	<sup>h</sup> tsə wo	on [the table]	ˈte
moustache	<sup>h</sup> k <sup>h</sup> a <sup>h</sup> pu	on [the wall]	<sup>h</sup> x <sup>h</sup> eʔ
mouth	<sup>h</sup> tɕ <sup>h</sup> u <sup>h</sup> k <sup>h</sup> u	one	<sup>h</sup> tɕejʔ
move	<sup>n</sup> gi <sup>n</sup> gi roʔ	oneself	ˈrō riʔ



onion; scallion	<sup>ŋ</sup> go dɛ	pillow	<sup>ŋ</sup> go ŋi:
open [a door]	<sup>p</sup> ts <sup>h</sup> e	pit	<sup>k</sup> a fiu
open [the mouth]	<sup>h</sup> dɔ	pitiful	<sup>ʔ</sup> pej ɕe?
oppose	<sup>ʔ</sup> mi go	place	<sup>s</sup> h <sup>a</sup> ɕ <sup>h</sup> o
orphan	<sup>ʔ</sup> p <sup>h</sup> a mo <sup>ʔ</sup> me? mə	placenta	<sup>ʔ</sup> t <sup>h</sup> u ɣi kə <sup>ʔ</sup> ru we
other people	<sup>ʔ</sup> rō mə	plank; board	<sup>ʔ</sup> ɕ <sup>h</sup> i: ze
others; else	<sup>ʔ</sup> tə rō	plant [trees]	<sup>ʔ</sup> tsu?
outside	<sup>ʔ</sup> ts <sup>h</sup> ə na	plant ash	<sup>ʔ</sup> ʃi? k <sup>h</sup> a
owl	<sup>ʔ</sup> wu? <sup>h</sup> ga: me: sə	plant; raise [wheat]	<sup>ʔ</sup> tə: tsə
ox; cattle	<sup>h</sup> lō	plate; dish	<sup>h</sup> də <sup>h</sup> mo
pack-horse	<sup>h</sup> to <sup>ʔ</sup> ki: ɬə	play; amuse oneself	<sup>ʔ</sup> tɕ <sup>h</sup> ə
pad; cushion	<sup>h</sup> ta: ti ɕ <sup>h</sup> ə	plough	<sup>ʔ</sup> mū
paddle [a boat]	<sup>h</sup> tā	pluck [flowers]	<sup>h</sup> tɕa?
paddy; rice	<sup>ʔ</sup> dʒi:	point at; point out	<sup>h</sup> tā:
palm	<sup>ʔ</sup> le: ɬu:	point; tip	<sup>ʔ</sup> něj s <sup>h</sup> o?
pare; pell with a knife	<sup>h</sup> zwe?	pointed; tip	<sup>ʔ</sup> ne <sup>ʔ</sup> ne
parent	<sup>ʔ</sup> p <sup>h</sup> a mo	polite; courteous	<sup>ʔ</sup> dzi <sup>ʔ</sup> dzi
parrot	<sup>ʔ</sup> ʃi gə?	pond	<sup>ʔ</sup> tɕ <sup>h</sup> u me?
paste	<sup>ʔ</sup> dzar	poor	<sup>h</sup> tō mə
patch [clothivg]	<sup>ʔ</sup> tɕə?	poplar	<sup>ʔ</sup> t <sup>h</sup> a ɣa: p <sup>h</sup> e
paternal aunt	<sup>ʔ</sup> a s <sup>h</sup> ə	prepare	<sup>ʔ</sup> a <sup>ʔ</sup> dɔ <sup>ʔ</sup> je <sup>ʔ</sup> je bje
paternal uncle	<sup>ʔ</sup> a ro	press; push down	<sup>h</sup> ni:
pea	<sup>ʔ</sup> sa: <sup>h</sup> ka	press	
pea; bean	<sup>ʔ</sup> a ʃo?	[with palm or finger]	<sup>ʔ</sup> ne zje
peach	<sup>ʔ</sup> k <sup>h</sup> ā <sup>ʔ</sup> mbu	promise; consent	<sup>ʔ</sup> k <sup>h</sup> o: te
peacock	<sup>h</sup> ma? dzo	pull up	<sup>ʔ</sup> tɕa?
pear	<sup>ʔ</sup> lə	pull; tug	<sup>h</sup> tā
peasant	<sup>ʔ</sup> li? <sup>ʔ</sup> ko: mə	pulse; beat	<sup>h</sup> dzu <sup>h</sup> po ɣə <sup>h</sup> tɕ <sup>h</sup> i
peck at [rice]	<sup>ʔ</sup> t <sup>h</sup> u	punch [a hole]	<sup>ʔ</sup> p <sup>h</sup> u?
people	<sup>ʔ</sup> mə <sup>h</sup> sə	puncture	<sup>ʔ</sup> t <sup>h</sup> o?
peppery; hot	<sup>ʔ</sup> zaw	push; shove	<sup>ʔ</sup> p <sup>h</sup> i
permit; allow	<sup>ʔ</sup> pe fiɛ <sup>ʔ</sup> ɕ <sup>h</sup> wɛ?	put in [salt]	<sup>h</sup> ta?
pheasant	<sup>ʔ</sup> tso ɣo	put on [the shoe]	<sup>h</sup> dzwō
pick up; collect	<sup>ʔ</sup> t <sup>h</sup> a?	put [soil] on	<sup>ʔ</sup> ɬo? kə
pick up [food with chopsticks]	<sup>ʔ</sup> lō	puttee	<sup>h</sup> kō <sup>h</sup> tə?
pig	<sup>ʔ</sup> p <sup>h</sup> je?	quarrel	<sup>ʔ</sup> t <sup>h</sup> a <sup>ʔ</sup> mə ɣə <sup>ʔ</sup> ja?
pig food	<sup>ʔ</sup> p <sup>h</sup> je? zi	quick; fast	<sup>ʔ</sup> ɰwe? mə
piglet	<sup>ʔ</sup> p <sup>h</sup> je? ɣi	quickly	<sup>ʔ</sup> a do <sup>ʔ</sup> a do
pile up; stack up	<sup>h</sup> dzwe? <sup>h</sup> dzwe?	rabbit	<sup>ʔ</sup> rə be
pillar; column	<sup>ʔ</sup> ka wo	rafter	<sup>h</sup> gwə <sup>h</sup> tso
		rain	<sup>ʔ</sup> tɕ <sup>h</sup> a bo

rain falls	ʼtɕʰa bo: ʼγə dəʔ	run	ʰdzuʔ
rainbow	ʱdzə	sad	ʰduru zi
raise [chickens]	ʰsuʔ	safe	ʰsəʔ ʰtsi: me:
raise [the tail]	ʰjeʔ ʰtɕi:	saffron	ʰpũ ʱbu dəʔ
read	ʱda	salive	ʼtɕʰu mo
remember	ʰsũ ʈo:	salt	ʼtsʰo
receive	ʰtʰa:	sand	ʱtsə mo
recognise	ʰneʔ ɕʰi	sandalwood	ʰdza ʱdzə
red	ʰma ʰpu	savory	ʰd̥ mə
reduce	ʼle: bwe ʼluʔ	scald; burn [the hand]	ʰtseʔ
relative	ʼno fio	scar	ʰmwo
release; set free	ʰlweʔ tō ʼʈo	scatter [seeds]	ʼrā:
rely; lean	ʼdzurʔ ʰta	scissors	ʼtɕa ʰtoʔ
remember	ʼʈō tɕʰo	scoop up [water]	ʰtɕu
repay	ʼlwe: ʰta	sea	ʰtsʰu dza
rescue; save	ʰsu: ʰtɕuʔ	see [a doctor]	ʼnō ʱdzurʔ
reserve [seeds]	ʰtsʰurʔ ʱdzəʔ	see; catch sight of	ʰtsʰoʔ zə
rest	ʼmi: suʔ	seed	ʰsʰā xā
return	ʼlwe: pə	seek; look for	ʼni fu ʰro
reverse side	ʼkwiʔ ʱdzəʔ tsʰweʔ	sell	ʰtsiʔ
rice	ʱd̥j:	send; dispatch	
rice straw	ʱd̥j: sʰweʔ	[a person]	ʰtō
rich	ʰtsʰurʔ mə	send [a letter]	ʰkor
riddle	ʱta: juʔ	set	ʰma ʈaʔ
ride	ʰco	set on fire	ʰmi ʱbu
right [hand]	ʼʈō le sʰweʔ	seven	ʰdā
right; correct	ʼni: mə	seventeen	ʰtɕuʔ ʱdā
right; front	ʰja nə ʰtsʰweʔ	seventy	ʰdā ʱu
ring	ʰpəʔ ʈo:	sever; sharp	ʰzawʔ ʼʈo: mə
rise; come out	ʰbu loʔ	sever [a rope]	ʰtɕaʔ
rise; stand up	ʰji lā	shake [head]	ʱgu ʰtuwʔ
river	ʰtɕʰu	shallow	ʼmi saw mə
river deer	ʰla wo	shave [the head]	ʰzə
road	ʼlōw	sheep	ʼlōwʔ
rob; loot	ʰtʰweʔ	shell [peanuts]	ʰkweʔ
robber	ʰku mo	shirt	ʼnō ʰtɕəʔ
rock	ʰtɕ: kəʔ	shoe	ʱdzəʔ xā
roll up [cloth]	ʰd̥e	shoot [an arrow]	ʰʈaʔ
roof	ʰkʰo li	short	ʰtʰuj
root	ʰkō	shoulder	ʰpej bo
rough	ʰtsoʔ ʰtsoʔ	show	ʱdzəʔ ʰtɕuʔ

shy; shame	ʰtɕʰi:	spider	ʹtwe leʔ
side	ʹdaw na	splash; sprinkle	ʹʰdɰ
sing	ʹɰ	split up	ʰɰ: / ʹtɕʰɛ:
sink	ʰma: ʰti	spring	ʹtɕʰu
sister	ʹmi: sʰi:	spring and summer	ʹʰje ʰko
sit; stay	ʹʰdɔwʔ	sprinkle; spray	ʰdɰwʔ
six	ʹɰwʔ	spurt; sprint	
sixteen	ʹtɕu ruʔ	[in the front]	ʰdɰ
sixty	ʹɰw ɰu	sputum	ʹkʰa luʔ
skin	ʰpa: bje	squeeze [for milk]	ʰɰ
skirt	ʹma: ɕõ	squirrel	ʹʰtsə lə
sky	ʹnaw	stairs	ʹʰki:
slanting; leaning	ʰzo ʰzo	stallion	ʹʰta pʰu
sleep	ʹmɛ ʰɰʔ	stand	ʹlõ
sleeve	ʹʰa dejʔ	star	ʹʰka: mo
slippery [road]	ʹndɛ: mə	steal	ʹʰku
slow	ʹdə ʰdə ʹrã ʰgo mə	steam	ʹʰla bo
small	ʹtɕʰejʔ	steamed stuffed bun	ʹʰa xu
smell	ʹnõ ʰbo ʹno	steamed bun	ʹpə ləʔ
smoke	ʹta ʰpo	steelyard; scales	ʹdza mo
smooth	ʰdɰ ʰdɰ:	step on; trample	ʹʰdajʔ
snail	ʹmbu wo wo	stepfather	ʹʰa jo
snake	ʹndi: tɕɔʔ	stepmother	ʹma jo
snap [a thread]	ʹɰ ʰtɕeʔ	stick down	
sneeze	ʹʰdɔʔ ʰpo: rə	[an envelope]	ʹkʰa tɕ
snow	ʹkʰa ʰo	sticky; glutinous	ʹʰkʰa mə
soft	ʹlo mə	stomach	ʹʰa ʰo
soil; earth	ʹsʰo	stone	ʹʰdɔ ʰgɛʔ
soldier	ʹʰmjeʔ mə	stool; bench	ʹmə ʹdo: sʰo
solid	ʹtã da:	stop; cease	ʹta mō ʹgo
some	ʹʰtsʰə ke: zəʔ	storehouse	ʹtɕa bu ʹze: sʰo
sometimes	ʹjow pə ʹjow	straight	ʹtõ tõ
son	ʹpu zi	stroke; touch	ʹmĩ ɰweʔ
son-in-law	ʹpu le	suddenly	ʹlu ʹdzo: xʰoʔ
sound	ʹʰkaʔ	sugar	ʹʰdõ
soup	ʹtsʰaj tɕʰu	suitable	ʹrãʔ / ʹraʔ
sour	ʹʰtɕə ʰmə	sun	ʹni mə
sow	ʹpʰjeʔ mu	sunbathe; to sun	ʹnə mo: ʹdiʔ
soybean	ʹsa: mo	sunflower	ʹnə mɔ: ʹmu deʔ
sparrow	ʹtɕʰu ʰgwe tɕʰo: ɣo	supper	ʹsa ʰtuʔ
speak	ʹʰswaʔ	support; raise	ʹʰsu: tɕo:

swallow	<sup>n</sup> tsa gə ˈri: ti	this	ʔa ra / ˈnə
swear; vow	ˈw nō ˈtɕə	this side; here	ˈnə ˈtsʰweʔ
sweat	ˈh tsa ɕʰu	this way; like this	ʔa ˈnɕə ra
sweep	ˈm tsʰeʔ	this year	ˈtə ʒe
sweet	ˈŋa: mə	those	ˈtə rā
swim	ˈtɕʰu ˈtɕi ˈdzoʔ	thousand	ˈtɕej tɕʰo
table	ˈse ˈso sʰo	thread	ˈku bo
tadpole	ˈtɕə no: kə ˈtɕa pa	three	ˈsā
tail	ˈdzuʔ mo	three days ago	ˈxʰa ɳā: ˈke
tailor	ˈkuʔ zi ˈʔo: mə	threshold	ˈŋwə tā
take out	ˈjəʔ pʰəʔ	throat	ˈko ˈloʔ
take; hold; get	ˈxʰoʔ	throw; toss	ˈnɕō
tea	ˈtɕo	throw oneself	
tea with milk	ˈsa tɕo	on the earth	ˈtsʰeʔ ˈtsʰe
teach	ˈlaʔ	throw up; vomit	ˈtɕuʔ ˈtʰa: ja
teacher	ˈgi ˈga	thumb	ˈdzə ɣi ˈdza ma
tear up; rip	ˈpi	thunder	ˈɕuʔ
tears	ˈmej tɕʰu	Tibetan robe	ˈpoʔ ɣu
tell	ˈli tɕa: ˈhɕaʔ	Tibetan	ˈpoʔ
ten	ˈpɕu	tiger	ˈteʔ
ten thousand	ˈtʰə sʰwi ˈzəʔ	time	ˈnā xʰoʔ
tendon	ˈdzu ˈpo	to blossom	ˈgi:
tense	ˈtā dɑ:	to buckle; button up	ˈɕweʔ ˈdzə
that	ˈpʰa: ˈtu ˈmbe	to change	ˈzi
that [over there]	ˈti:	to comb	ˈɕaʔ
that [way] / [like] that	ˈtə ˈnɕə ra	to cough	ˈsʰawʔ
there	ˈtə ra	to dance	ˈɕu: ˈɕʰā
there is; exist	ˈjoʔ	to dream	ˈmə la: ˈmɕjʔ
thereupon; then	ʔa ˈnɕo / ˈtu ˈdzo	to fish	ˈzə
these	ʔa na ˈrō ˈmə ˈgə	to fly	ˈpʰa
they	ˈtə rā	to guard; defend	ˈse: bo
thick	ˈtuʔ tuʔ rə ma	to hang; suspend	ˈtsō
thief	ˈku mo	to harvest	ˈdəʔ
thigh	ˈla ˈɕo	to hook	ˈtsʰəʔ tʰa
thin	ˈsəʔ səʔ rə ma / ˈgwe mə	to itch; tickle	ˈɕa
thin <in diameter>;		to leak	ˈse:ʔ
fine	ˈtʰo	to light [a fire]	ˈbuʔ
thing	ˈtɕa bu	to light [a light]	ˈbaʔ
think	ˈsā	to lightning	ˈlowʔ ˈma
thirteen	ˈtɕu ˈsā	to marry	ˈtɕʰō ˈne
thirty	ˈsʰō ˈtɕu	to measure	ˈje ˈdzi:

to open	<sup>ˈ</sup> tsʰi	ugly	ˈmi ˈdze: mə
to pad	<sup>ˈ</sup> di:	uncle (maternal)	ʔa rō
to plait; weave	ʔlo mə	uncle	ʔa ni
to rake	ˈmu mə	under [the table]	ˈɕaw
to reverse	<sup>ˈ</sup> tsʰə ɬu ˈtswe mə	understand; know	ˈɕʰi / ˈɕʰiʔ
to saw	ˈka ra	unseam [clothing]	ˈhɬɕaʔ mə
to scold	ˈtʰawʔ	upstairs	ˈkʰo ti
to shave [hairs]	ˈtɕʰō	urine	ˈhɬɕō
to shoulder	ˈpejʔ po: ˈtʰe:	used; old	ˈni: bo
to skin [cattle]	ˈze: mə	uvula	ˈhɬɕi: ˈtɕʰə ɣi
to smoke [a cigarette]	<sup>ˈ</sup> tʰ ɕj	valley	ˈlej ku
to swallow	ˈmejʔ	vat; jar	ˈda wo
to thunder	ˈtʰweʔ ʔoʔ	vegetable oil	ˈma: nu
to work	ˈli ʰko: ʔjoʔ	vertical	ˈjeʔ tsə: mə
to wrap	<sup>ˈ</sup> ge: mə	very; quite	ˈzejʔ
to yawn	ˈhaʔ hi: gə	village	ˈji: ˈxʰō
tobacco	<sup>ˈ</sup> tsʰa ja	vinegar	ˈtɕu: tsʰu
today	ˈtə ri	vulture	ˈtsa ˈgoʔ
toilet	<sup>ˈ</sup> dzeʔ kʰō	waist	ˈkəʔ po
tomorrow	ˈnə ka	wait	ˈsʰe jō
tomorrow night	ˈnə ka: ˈnə mo	wake up	ˈni: sʰa
tongue	ˈhɬɕi	walk	ˈgo
tonight	ˈtə mo	wall	ˈhɬɕejʔ po
tooth	ˈsʰu	walnut	ˈta ˈgo
tortoise	<sup>ˈ</sup> dzi: bo	want; need	<sup>ˈ</sup> gu:
treasure	ˈnō ˈgo	want [to go]	ˈsā
tree	ˈɕʰi ɕe	warm	ˈtu: ro
trousers	ˈtə mo	wash [clothes]	ˈtu
true	ˈtō miʔ	watch	ˈdzoʔ
trunk	ˈɕʰi ʰka	water	ˈtɕʰu
try; attempt	ˈtsʰa sa ˈdzoʔ	wave	ˈtɕʰu ˈləu
turn inside out	ˈtsʰə ˈdzoʔ	we	ˈme ɕa
twelve	ˈtɕu: ˈnə	we <inclusive>	ˈme ɕā tɕu ɬio
twenty	ˈni ɕu	weak	ˈzə za mə ɬi mə
twenty-one	ˈni ɕu ˈtsa ziʔ	wear [a garment]	ˈtɕwā
twins	ˈtʰə ɣi ˈni wō	wear [a hat]	ˈtɕā
two	ˈnə	wear [a turban]	ˈpor
two days after		weather is fine	ˈnāw ʰka
tomorrow	ˈzi: ɬi	weave [a basket]	ˈtʰe mə
two of them	ˈtə ɬi: ˈnə	web	ˈtwe leʔ ˈtsʰō so
two of us	ˈme ɬi: ˈnə	weigh [food]	ˈdə ˈdə ˈtɕeʔ

welcome; greet	<sup>h</sup> suu <sup>h</sup> k <sup>h</sup> or	woman	ʼmə re: jō
well	ʼtɕ <sup>h</sup> uu me?	wood; log	ʼde: mo
wet	<sup>h</sup> ba ra:	wooden bowl	<sup>h</sup> ɕ <sup>h</sup> i kə ʔ <sup>h</sup> ə ro
what	<sup>h</sup> tɕe	woodpecker	ʼtə: ʼmu: kwa
wheat	ʼdɕə	wool	ʼləw? <sup>h</sup> pu
wheat straw	ʼtə s <sup>h</sup> we?	worry; be anxious	<sup>h</sup> duw ro
when	<sup>h</sup> nā	wound	<sup>h</sup> mwo: te: tɕ <sup>h</sup> o?
where	ʼkaj	wrinkle	<sup>h</sup> tsə <sup>m</sup> bui
whet [a knife]	<sup>h</sup> da?	write	ʔ <sup>h</sup> tə
whip; thrash	<sup>h</sup> ɕ <sup>h</sup> da?	wrong	ʼmə ɲi: mə
white	<sup>h</sup> ka <sup>h</sup> pu	yak	<sup>h</sup> je?
who	<sup>h</sup> s <sup>h</sup> u	year	ʼlo ʒe
wide <in diameter>	ʼbu	year before last	ʼʒe ni ɣu
wife	<sup>h</sup> gi mu	year after next	ʼrə p <sup>h</sup> o / ʼrə ɕo
wild boar	<sup>h</sup> p <sup>h</sup> je? <sup>h</sup> go?	yellow	ʼs <sup>h</sup> ə <sup>h</sup> pu
wild goose	ʔtsa gə ʼri: ti	yesterday	ʼk <sup>h</sup> a zō
willow	<sup>h</sup> do wō p <sup>h</sup> e	yoghurt	ʼta ro
win; gain	<sup>h</sup> t <sup>h</sup> ow?	you (sg)	<sup>h</sup> tɕ <sup>h</sup> e?
wind	<sup>h</sup> lū ma?	you (pl)	<sup>h</sup> tɕ <sup>h</sup> e? ʒā
wind blows	<sup>h</sup> lū ma: ʼlō	you two	<sup>h</sup> tɕ <sup>h</sup> e? ɲi: <sup>h</sup> ɲə
window	<sup>h</sup> ga k <sup>h</sup> e	young	ʼlu tɕ <sup>h</sup> i: mə
wing; fin	<sup>h</sup> da pu	younger brother	<sup>h</sup> sa ɲi
wipe	<sup>m</sup> ts <sup>h</sup> a mə	younger sister	<sup>h</sup> s <sup>h</sup> i: mo
wolf	<sup>h</sup> pa fio		