

ABSTRACT

A Preliminary Phonological Analysis of Lowa (loy)

Sarah Henn

Director: Steve Watters, Ph.D.

This thesis is a preliminary description of the phonetics and phonology of Lowa (loy), a Tibeto-Burman language of the Bodish branch spoken in the Upper Mustang district of Nepal. Drawing on a data corpus of approximately 1200 words elicited from two mother tongue language informants, this phonological sketch introduces many of the basic features of Lowa, including its phonemes and several major phonological processes. After introducing the language, its people, and the methodology, consonants and vowels are discussed with regard to their phonemic contrasts, phonotactic constraints, and related phonological processes. Then follows a discussion of register with specific attention paid to pitch contrasts. The conclusion notes some concerns regarding the present-day orthography in light of the previous findings, touching on the long-term impact of this research.

APPROVED BY DIRECTOR OF HONORS THESIS:

Dr. Steve Watters, SIL International

APPROVED BY THE HONORS PROGRAM:

Dr. Elizabeth Corey, Director

DATE: _____

A PRELIMINARY PHONOLOGICAL ANALYSIS OF LOWA (LOY)

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Sarah Henn

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to gather data, and provided a listening ear for me to talk through whatever puzzle I was working on at the moment. This thesis is as much their accomplishment as it is mine.

CHAPTER ONE

Introduction

1.1 Background on Lowa (loy)

Tucked away in the Upper Mustang district of northwest Nepal, the northernmost division of the Mustang district, rests a community of Himalayan villages (see Figure 1). They are united by a number of commonalities: a king residing in the regional capital, Lo Manthang; an annual soccer, volleyball, and archery tournament between villages; and a shared language, Lowa (loy), as their native tongue.

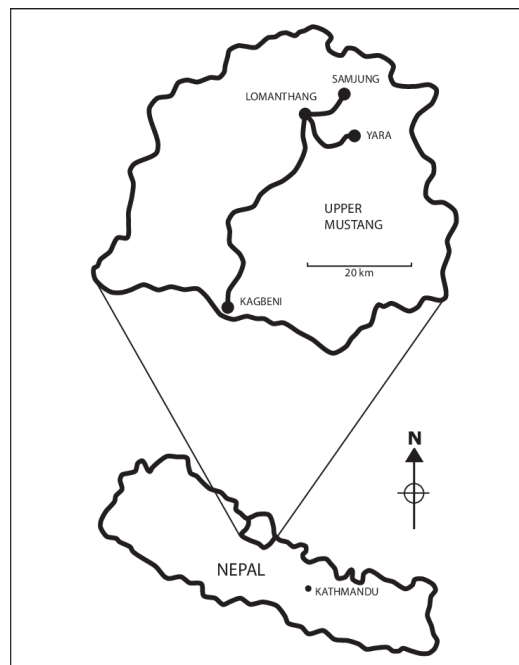


Figure 1: Map of Upper Mustang district of Nepal¹

¹ Image from Paudel et al. (2016).

Lowa is a language in the Tibeto-Burman language family, which, according to Bradley (1997), “are the principal languages of the Himalayan region” (p. 1). Lowa’s linguistic lineage can be summarized by Figure 2 below.² All the languages included at the bottom of the tree will be referenced throughout the thesis.

While some members of the community estimate anywhere from 8,000 to 9,000 total speakers, including those living in other countries, the Ethnologue (2019) records 7,500 mother tongue speakers. It is also common for members of more communities to speak Lowa as their second language, such as native Dolpo or Seke speakers. As of 2019, Lowa has an EGIDS (Expanded Graded Intergenerational Disruption Scale) rank of 6a, or “vigorous” (Ethnologue, 2019). This means that “intergenerational transmission of the language is intact and widespread in the community” and that “the language use and transmission situation is stable or gaining strength” (Lewis & Simons, 2010, p. 13).

Most mother tongue speakers of Lowa are multilingual. While members of the community are Nepali citizens, they share a number of cultural, religious, and linguistic characteristics with Tibetans, the ethnic region north of Nepal in southern China. As a result, both Nepali and Tibetan languages play a major role in the lives of Lowa speakers. Lowa is spoken primarily in the home and in local domains; Tibetan is used in the religious domain, especially in Buddhist texts; and Nepali is the primary language of politics and education, the latter of which also includes a significant portion of instruction in English. As of 2020, children are not educated in Lowa.

² This chart is derived from Bradley (1997).

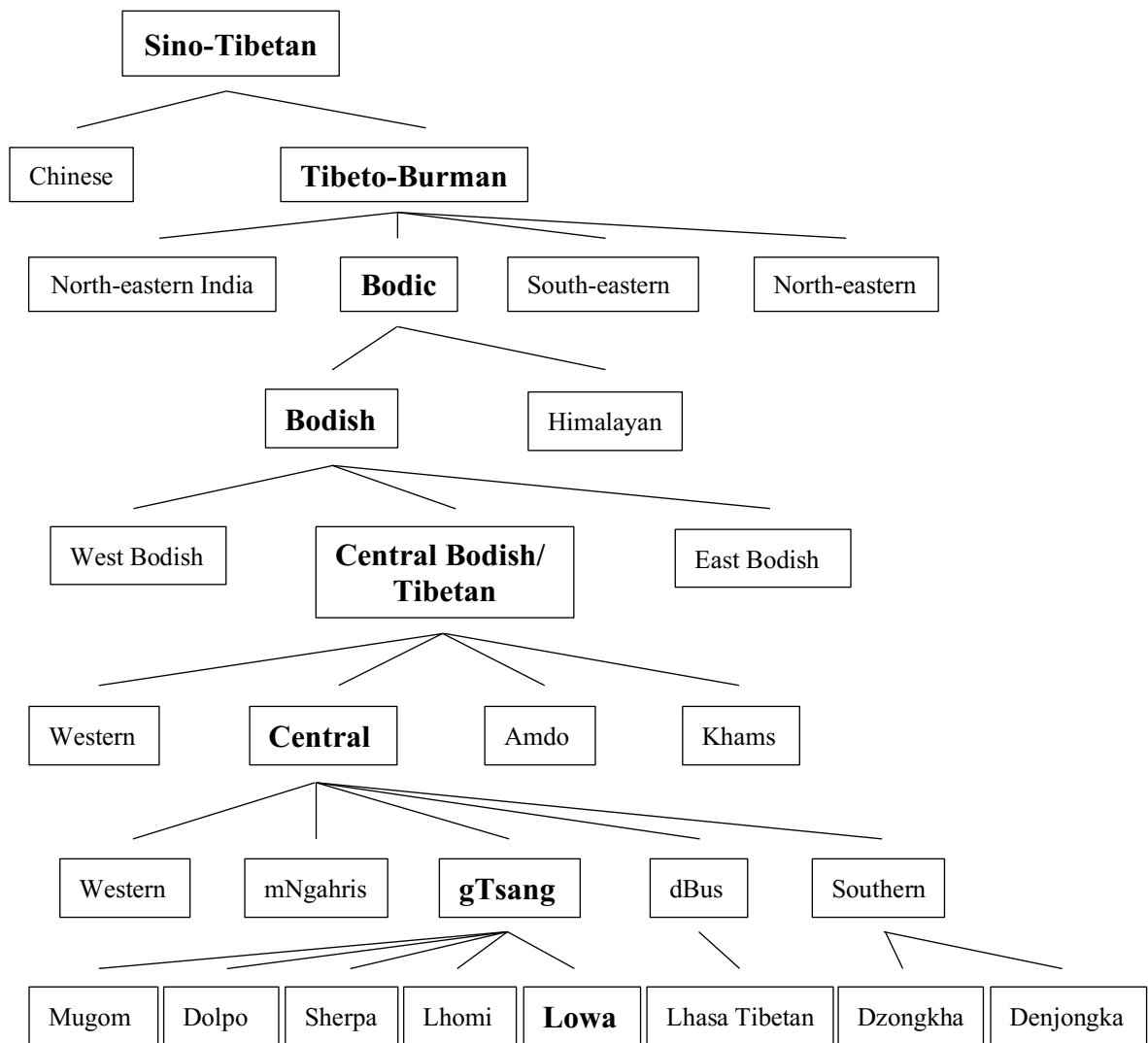


Figure 2: Language Tree for Lowa

This is partially due to the lack of a standardized orthography for Lowa. Due to the simultaneous Nepali and Tibetan identities of Lowa speakers, Lowa ideally requires two orthographies, one in Devanagari³ and one in Tibetan script. These are currently in development by the two language informants consulted for this study. While a Devanagari orthography was developed by researchers decades ago, it does not seem to have been put into ubiquitous use, nor are more than a handful of Lowa speakers proficient in using it to write Lowa. The Tibetan script orthography is even less developed than the Devanagari; it is currently being pioneered by one of the language consultants for this study.

1.2 The Present Analysis

The following preliminary phonological analysis is intended to fill a research gap in the literature on Lowa with the ultimate end being to serve as a foundation for a more comprehensive phonological analysis of the language. As the language consultants work to standardize their orthographies, a phonological analysis can aid in identifying the essential phonemic contrasts necessary to represent in their writing systems. While this analysis is not sufficiently comprehensive to conclusively determine all these contrasts, it will serve as base for further research and even suggest a small number of potential problem areas in the current Devanagari orthography.

The thesis is organized as follows: Methodology (Chapter 2), Analysis (Chapters 3, 4, and 5), and Conclusion (Chapter 6). The analysis deals first with consonants, vowels, and then tone. The consonant and vowel chapters follow similar structures,

³ Alphabet used for Nepali, Hindi, Sanskrit, and other languages.

first listing phonemic contrasts, identifying phonotactic constraints, and then explaining specific phonological processes. The tone chapter provides a discussion of the convention of register in studies of Tibetic languages, focusing its analysis of Lowa on pitch and F_0 . The conclusion summarizes the most notable features of the analysis and notes the ways the analysis applies to the orthography data supplied by the language consultants.

CHAPTER TWO

Methodology

The methods for this analysis were developed under the guidance of the thesis director and loosely followed the methodology described in Watters (2002). His extensive experience in the field conducting analyses and consulting for other such projects makes him aware of best practices in wide currency today. He provided the researcher with the recording equipment used to gather the data, as well as arranged the details of connecting with the Loma language consultants, two young women originally from Upper Mustang, but now residing in Kathmandu. They will be referred to as KC and DG in this analysis.

The recording sessions took place over the course of a week, five workdays, at a resort in Denpasar, Indonesia, where both the researcher and the two language consultants were staying. In order to record both consultants, two lapel microphones were connected to the recorder, one for each of the language consultants; the microphones were sensitive enough to pick up the researcher's voice when reading out each entry of the wordlist. The recorder was attached to a tripod and suspended above the table in order to minimize any potential sound interference from the vibrations of the table or the humming of the laptops on the table. All recordings were saved to an SD card.

The wordlist consists of approximately 1200 words adapted for Tibetic languages and used by the researcher's advisor for analyses of related languages. While

not in the neighborhood of 3000 words, the approximate preferred length for a comprehensive phonological analysis of a language, this wordlist suffices for a preliminary sketch that can be expanded later on for a larger project. The wordlist contains the English and Written Tibetan¹ (WT) translations for each of the words which the language consultants, fluent in both languages, used to determine the Lowa word desired. In addition to the wordlist, the researcher elicited a short story from the language consultants, the Lowa and English translations of which are in Appendix A. The short story was not used in the analysis to follow, but could be used for future research with Lowa.

The elicitation of the wordlist went as follows. The researcher read the number of the entry, as indicated on the wordlist, followed by the English translation. Then each consultant read the Lowa word four times slowly in citation, with adequate spacing in between the words. Then they said the word in two different frames, the first with the target word at the beginning of the sentence and the second with it mid-sentence. The second frame was added to the process at entry 0096 when it was determined that a mid-sentence frame would also be beneficial. The first frame translates to “Foreigners can’t say X.” The second frame translates to “What does X mean?” These frames were selected because the position of target word does not restrict the part of speech. These frames were used to provide other environments in which to analyze the words besides isolation, an environment which, despite one’s best efforts, can sometimes mask certain features of casual speech that are equally important to analysis as careful speech,

¹ The WT is provided as a transliteration into Roman alphabet, not Tibetan script, following the Wylie transliteration system (Wylie 1959). WT transliterations and transliterations of the Tibetan script spellings of Lowa words will all follow this system.

if not more important. After the formal entry elicitation, occasionally some discussion might follow regarding the pronunciation of the word, or the researcher might ask a clarifying question. This dialogue was also recorded and consulted as needed during analysis.

In addition to providing the Lowa words orally, each of the informants provided the written Lowa word for most of the entries. DG provided the Devanagari spelling, and KC provided the Tibetan script spelling. As mentioned in Chapter 1, these spellings are not standardized, but they were useful in the transcriptions, as they provided an idea of what the language consultants thought they were saying.

As for preparation of the elicited data, first each of the sound files was labeled according to entry number. Then, Audacity was used to combine the voice tracks from the two microphones and cut out any unnecessary recording time, thereby reducing the sizes of the files. If needed, excessive ambient noise was reduced. After that, Praat was used to listen to and transcribe each of the entries using the International Phonetic Alphabet² (IPA). Transcriptions were exported to an Excel spreadsheet and from there converted to SFM file format using the SIL International converter SheetSwiper. Finally, the SFM data were exported to an SIL International phonological analysis software aid, Phonology Assistant (PA). This software parses phonetic transcriptions and helps with organizing and searching large data sets.

Analysis was conducted primarily by searching for minimal/analogous pair contrasts for whatever feature was being analyzed. Patterns were noted and explored further if necessary, especially when studying phonological processes. In some cases,

² All Lowa words will be phonetically represented in IPA in the following analysis.

statistics were helpful to determine contrasts. Throughout the thesis, methodologies will be expounded upon on a case-by-case basis if further detail is required.

The present analysis stems primarily from the collected data; however, it draws significantly on similar analyses conducted on languages closely related to Lwa. This is for a number of reasons. First, there is adequate reason to believe that Lwa will demonstrate many of the same characteristics as languages to which it is closely related. Second, the majority of the sources consulted were conducted by researchers with significant experience with Tibetic languages, experience that can help shed light on the data collected. Last, interpreting the present data using previous analyses as a guide ensures that this analysis follows previously established conventions for describing Tibetic languages.

CHAPTER THREE

Consonants

3.1 Consonant Phonemes and Contrasts

Lowa has 38 contrastive consonantal phonemes presented in the International Phonetic Alphabet (IPA) in Table 1. These phonemes are distributed across seven points of articulation and in five manners of articulation. Also included in the chart are notable phones contained in () parentheses. These sounds are not contrastive, but can be predicted based on phonological processes described in Section 3.3.

	bilabial		alveolar		postalveolar	retroflex		palatal	velar		glottal
plosive	p	b	t	d		t̠	ɖ		k	g	(ʔ)
	p ^h	p'	t ^h	t'		t̠ ^h	t̠'		k ^h	k'	
affricate			<u>ts</u>	<u>dz</u>	<u>tʃ</u>	<u>dʒ</u>					
			<u>ts^h</u>	<u>ts'</u>	<u>tʃ^h</u>	<u>tʃ'</u>					
fricative		(β)	s	(z)	ʃ	(ʒ)			(x)	(ɣ)	h
				s'	ʃ'						
nasal		m		n				(ɲ)	ŋ		
approximant			l̥	l			j				w
			ɭ̥	r							

Table 1: Consonantal Phonemes and Phones in Lowa

Table 2 illustrates these 38 consonantal contrasts using minimal or analogous sets. These sets are grouped according to place of articulation and manner of articulation in order to demonstrate the most salient contrasts.

IPA	Gloss
Obstruents	
<i>Bilabial</i>	
[p̚ɐ̃ʋ]	‘picture’
[pʰe:ʋ]	‘mongoose’
[pʰɐ̃:ʋ]	‘wool’
[b̚ɐ̃ʋ]	‘fence (generic)’
<i>Alveolar</i>	
[t̚ɐ̃ʋ]	‘horse’
[tʰɐ̃ʋ]	‘valley’
[tʰɐ̃ʋ-m̚ɐ̃ʋ]	‘clear, clean, crisp (weather)’
[d̚ɐ̃ʋ]	‘arrow’
<i>Retroflex</i>	
[t̚u:ʋ]	‘child’
[tʰỵʋ kʰj̚ɐ̃b-j̚ɐ̃ʋ]	‘bathe (v)’
[t̚u:ʋ]	‘boat’
[d̚u:ʋ]	‘travel, journey’
<i>Velar</i>	
[k̚e:ʋ]	‘pillar’
[kʰe:ʋ]	‘snow’
[kʰɐ̃ʋ]	‘saddle’
[g̚ɐ̃-j̚ɐ̃ʋ]	‘cross (v)’
Affricates	
<i>Alveolar</i>	
[t̚ɐ̃ʋ]	‘vein’
[t̚ɐ̃ʋ]	‘salt’
[t̚ɐ̃ʋ-j̚ɐ̃ʋ]	‘send (v)’
[d̚ɐ̃ʋ]	‘gunpowder’
<i>Alveopalatal</i>	
[t̚ɐ̃kʰʋ]	‘iron’
[t̚ɐ̃kʰʋ]	‘hand [honorific]’

[tʃʰɛ˧]	‘bird’
[dʒɛkʰ˧dʒɛkʰ˧]	‘sticky’
Fricatives	
[su˧]	‘who’
[sʰu˧ / sʰu˧ʔ˧]	‘body’
[ʃu˧tʃe˧]	‘peel (v)’
[ʃʰu˧]	‘bow (archery)’
[hɛ˧ʈʰɛ˧]	‘toward over there’
Nasals	
[mɛ˧˥]	‘low’
[nɛ˧˥]	‘nose’
[ŋɛ˧˥]	‘five’
Approximants	
<i>Laterals</i>	
[lɛm˧tʰɛ˧]	‘fool, foolish’
[lʰɛm˧tʰɛ˧ kʰjɛb˧tʃe˧]	‘patch cloth’
<i>Rhotics</i>	
[rɛ˧tʃe˧]	‘tear (transitive) (v)’
[rʰɛkʰ˧tʃe˧]	‘burn (v)’
<i>Glides</i>	
[wɛŋ˧]	‘spiritual empowerment’
[jɛŋ˧tʃe˧]	‘look for (v)’

Table 2: Consonantal Contrasts in Lowa

3.1.1 Obstruents

As noted in Watters’ (2002) study of five languages (Dzongkha, Lhomi, Sherpa, Dolpo Tibetan, and Mugom Tibetan) closely related to Lowa, there is a four-way contrast in the word-initial position for obstruents differentiated by voicing and aspiration. Lowa is consistent with this analysis. The four phonation types of obstruents (see Table 3) are voiceless unaspirated, voiceless aspirated, devoiced, and

prevoiced. All four phonation types are distributed across four places of articulation: bilabial, alveolar, retroflex, and velar.

The voiceless unaspirated and voiceless aspirated phonation types are self-explanatory. The devoiced phonation type, according to Watters (2018), “derives historically from a simple voiced stop onset (as attested in the written Tibetan and Dzongkha orthography)” (p. 28). However, in Lowa and related languages, diachronic change has resulted in a loss of voicing, as the name reflects. Watters goes on to note that “while phonetically voiceless, the devoiced series in Dzongkha has not merged with either of the voiceless aspirated or unaspirated series, retaining unique contrastive characteristics such as breathy voice quality in the following vowel and low pitch” (p. 28-29). This is the case in Lowa, and the interaction of phonation type and these other contrastive characteristics is explained in more detail in Chapter 5.

The prevoiced series is the only phonemically voiced phonation type in the obstruent series, but acoustically, it is more precisely characterized as prevoiced or even prenasalized. Voicing occurs with the articulatory tract closed, but does not persist through the release of the word-initial consonant.

Phonation	Phonemes
voiceless unaspirated	/p/ /t/ /t̚/ /k/
voiceless aspirated	/p ^h / /t ^h / /t̚ ^h / /k ^h /
devoiced	/p̥/ /t̥/ /t̥̚/ /k̥/
prevoiced	/b/ /d/ /d̪/ /g/

Table 3: Phonation Types of Obstruents

As noted in both Watters (2002) and Yliniemi (2005), the retroflex stops derive from Tibetan consonant clusters, where a plosive used to be followed by [r]. This has changed over time, and as a result, these retroflex obstruents have a somewhat rhotic quality to them. In the word-initial position, these retroflex stops act in much the same way as the other obstruents, but as will be discussed in Section 3.2, the diachronic history of this class of stops affects the syllable positions in which it can occur.

3.1.2 Affricates

As with obstruents, affricates demonstrate a four-way phonation contrast in the word-initial position: voiceless unaspirated, voiceless aspirated, devoiced (lightly aspirated), and prevoiced. Affricates are articulated in either the alveolar or alveopalatal position. Table 4 provides a list of the phonemic affricates and their phonation types.

Phonation	Phonemes
voiceless unaspirated	<u>/ts/</u> <u>/tʃ/</u>
voiceless aspirated	<u>/ts^h/</u> <u>/tʃ^h/</u>
devoiced	<u>/ts' /</u> <u>/tʃ' /</u>
prevoiced	<u>/dz/</u> <u>/dʒ/</u>

Table 4: Phonation Types of Affricates

One thing of note about the alveopalatals in the word-initial position is that there is a fair degree of variation in the pronunciation between the two language informants. For a given entry, KC might clearly prevoice every word-initial affricate, both in isolation and in the sentence frames, while DG might completely omit prevoicing and front the consonant to sound almost alveolar. There are two ways to interpret this

finding. First, this could simply demonstrate a regional or individual difference in pronunciation. However, this might also demonstrate that, while in careful speech, the consonant might be realized decidedly in the alveopalatal position, it is also acceptable to slightly front this set of consonants. More data and more recordings of conversational speech are required to further study acceptable pronunciations of the alveopalatal affricate.

3.1.3 Fricatives

There are five phonemic fricatives in Lowa distributed across three places of articulation. The alveolar and alveopalatal sibilants have voiceless and devoiced counterparts (see Table 5), and in the glottal position is the fricative /h/.

Phonation	Phonemes
voiceless unaspirated	/s/ /ʃ/
devoiced	/sʰ/ /ʃʰ/

Table 5: Phonation Types of Alveolar and Alveopalatal Fricatives

3.1.4 Nasals

Nasals are contrastive for three points of articulation: bilabial /m/, alveolar /n/, and velar /ŋ/. Another nasal phone encountered frequently is the palatal [ɲ], but this analysis does not consider it a phoneme, but rather, following Yliniemi (2005), as a consonant cluster of a nasal phoneme with the glide /j/.

3.1.5 Approximants

Lowa contains approximants in four places of articulation: alveolar laterals /l, l^h/, alveolar rhotics /r, r^h/, palatal /j/, and labio-velar /w/. The voiceless aspirated lateral /l^h/ is characterized by a considerable amount of aspiration starting before articulation of the lateral and sometimes overlapping with the closure. Similarly, the voiceless rhotic /r^h/ is also accompanied by a strong airflow that sometimes precedes the start of the consonant. This friction can result in a whistle- or sibilant-like quality that, to a novice listener, might be mistaken for the fricative [ʃ].

3.1.6 Summary

This section has presented the 38 phonemes in Lowa, their minimal/analogous sets, and some notes about the phonation and phonetic realizations of the phonemes. The next section offers phonotactic restrictions for these phonemes, providing diachronic explanations for certain restrictions when relevant and specifying specific environments in which phonemes can be found.

3.2 Phonotactic Restrictions

3.2.1 Coda Restrictions

The consonants that can be found in the coda position are /p/, /k/, /m/, /n/, /ŋ/, /r/, /r^h/, and /l/ (Table 6).

Coda Consonant	IPA	Gloss
p	[nɐp̚ʈ]	‘snot’
k	[nɛk̚ʈ]	‘pus’
m	[nɛmʋ]	‘sky’
n	[mɛnʋ]	‘medicine’
ŋ	[nɐŋʋ]	‘house’
r	[ʃɛrʋ]	‘east’
r̥	[pɛr̥ʋ]	‘picture’
l	[neʈpɛʈ]	‘Nepal’

Table 6: Consonants in the Coda Position

The bilabial and velar stops are realized in the word-final position as the unreleased voiceless [p̚] and [k̚]. The unreleased word-final velar can be realized as a glottal stop [ʔ], as demonstrated in the word [luk̚ʈ / luʔʈ] ‘sheep,’ where the language informants pronounced the word-final velar as [k̚] when giving the word in citation (probably a result of careful speech), but as [ʔ] in the sentence frames (a result of less careful, more natural speech). This is not the case with the unreleased word-final bilabial; although some glottalization does characterize the bilabial coda, there are no cases of total replacement by a glottal stop.

The nasal set of codas are generally well distributed following most primary vowels,¹ except for /n/, a subject that will be treated in greater detail in Chapter 4. The lateral and rhotic codas are relatively uncommon, and the voiceless rhotic /r̥/ only occurs after the vowel /ɐ/. While this seems to suggest a phonological process might be at work, more research is necessary to determine whether this is the case.

¹ Primary vowels are /ɐ, e, i, o, u/. Secondary vowels are /y, ø/.

Alveolar Codas. One curiosity about the obstruent class is their distribution in the coda position. A phonologist typically expects natural classes of phonemes to act in similar ways and show up in similar environments to each other. Lowa has bilabial and velar stops in the coda position, but there is a curious absence of alveolar and retroflex stops in the coda position that should be accounted for.

One source that provides insight as to what has happened to Lowa's apparently missing word-final alveolar stops is research on a related language. In her phonological description of Lhasa Tibetan, Hari suggests an 'umlaut' effect that an underlying word-final alveolar stop might have on preceding non-front vowels, offering the following outputs (Hari, 1979, p. 57):

/ut/ → [yʔ]

/ot/ → [øʔ]

/at/ → [ɛʔ]

Furthermore, she suggests that, since there is no corresponding umlaut vowel for the front vowels, the disappearance of the word-final alveolar stop has no effect on vowel quality of front vowels and only surfaces as a glottal stop [ʔ] to output:

/it/ → [iʔ]

/et/ → [eʔ]

With this suggestion in mind, the analysis turns to Written Tibetan (WT) in search of a diachronic explanation for how word-final alveolar codas might surface in Lowa. Table 7 provides a comparison of Lowa words with their WT equivalents. These entries were selected because the WT contains either the alveolar stop <d> or the alveolar fricative <s> in the coda position (neither of which surface in Lowa).

Table 8 demonstrates this information more concisely and postulates how word-final alveolars are represented in present-day Lwa.

WT Vowel	WT	Lwa IPA	Gloss
i	mid pa	[mikʰpɐ]	‘throat’
	gnyid	[ɲiɫ]	‘sleep’ morpheme
	gnyis	[ɲiːɻ]	‘two’
e	phyed ka	[pʰeɻ]	‘half’
	ngo shes	[ŋoɫʃeɫjeɻ]	‘recognize (v)’
a	tshad	[tsʰeɫ / tsʰeɻɫ]	‘measure, size’
	sngas	[ɲeːɻ]	‘pillow’
u	phud	[pyɫjeɻ]	‘take off (v)’
	gram rus	[dɐmɫryɫ / dɐmɫryɻɫ]	‘jaw’
o	od	[høɻɫ]	‘light’
	spos	[pøɻ]	‘incense’

Table 7: Diachronic Comparison of Words with Word-Final Alveolar

WT Vowel ²					
i	e	a	u	o	WT Coda
ik / i(ɻ) ³	eɻ	eɻ	y(ɻ)	øɻ	d
iː	e(ː)	eː	y / yɻ	øː	s

Table 8: Lwa Equivalents of WT Vowel-Coda Combinations

From the tables above, one can observe a similarity to Hari’s evaluation of Lhasa Tibetan. Generally, word-final alveolar obstruents seem to surface as a glottal

² Table labels represent Roman glosses of Tibetan script letters for vowels and codas.

³ Table items represent Lwa phonetic pronunciations, not spellings. Items in () parentheses represent hypothesized phones if the syllable were word-final.

stop in Lowa, having an umlaut effect on the non-front vowels /e/, /u/, and /o/.

Departing from Hari's research, however, it appears that the disappearance of the word-final alveolar fricative /s/ generally results in maintaining the same vowels as before, but with a lengthening effect. In this analysis, these hypotheses are based on relatively few available examples, so more data is needed to verify this suggestion for how word-final alveolars surface in Lowa.

*Retroflex Coda*s. Like alveolar stops, retroflex stops do not occur in the coda position as bilabial and velar stops do. An explanation for this can be found in the retroflexes's evolution from WT. Hari notes that "historically [retroflex stops] derive from various stops clustering with /r/," a fact that is evident from comparing WT onsets to present-day Lowa (Hari, 1979, p. 9).

<khrom> → [tʰomʌ] 'bazaar, market'
<gro> → [tʰo-] 'wheat'
<gru> → [tʰu-] 'boat'
<bru> → [dʌ-] 'grain'

A glance at WT finds that stop-rhotic clusters are not legal in the coda position. As a result, retroflex stops do not occur in the coda position in Lowa either.

3.2.2 Register and Onset Consonant

Register is a term used by Tibetanists to describe concomitant clusters of suprasegmental features. This will be discussed in more detail in Chapter 5; however, simply put, high register is characterized by high pitch and modal voice, and low register by low pitch and occasionally breathy voice. Furthermore, there are certain onset consonant features characteristic of each register that constrain which consonants

can precede vowels of each register. The three following consonants can only occur in the word-initial position in words in the high register. These are /l̥^h/, /h/, and /ʔ/, and each case will be discussed below.

The voiceless, aspirated lateral [l̥^h] occurs only in the word-initial position and before vowels in the high register, a finding also noted by Vesalainen (2016) for Lhomi. However, the voiceless lateral is not the only one that can precede vowels of the high register. There are several examples of the voiced lateral [l] preceding vowels in the high register (see Table 9 for a sample), and there does not seem to be any articulatory motivation for a change in the onset consonant that would indicate an allophonic relationship between [l̥^h] and [l]. Furthermore, Table 2 in Section 2.1 demonstrates a minimal contrast for /l̥^h/ and /l/.

IPA	Gloss
[ləb ^h je ^h]	teach (v)
[lə ^h me ^h]	lama
[lo ^h ʔ ^h te ^h]	school
[lo ^h me ^h]	tray (bamboo winnowing)
[lo ^h wə ^h]	lung

Table 9: Voiced Lateral Preceding High Register Open Vowels

The voiceless glottal fricative /h/ and the glottal stop /ʔ/ only occur word-initially where they contrast in analogous environments (see Table 10). Preceding vowels in the high register, the glottal fricative has a substantial amount of air and friction, and the glottal stop is clearly articulated. Preceding vowels in the low register, however, this distinction is lost, resulting in a breathy, but not especially aspirated

onset. Yliniemi (2005) suggests (based on contrastive sets he found in the high register between /ʔ/ and /h/ for Denjongka, but none in the low register) that the distinction between the two word-initial sounds is neutralized to the weakly pronounced [h] in the low register.

Phoneme	IPA	Gloss
/ʔ/	[ʔeʔloŋʋ]	‘earring’
/h/	[heʔleʋ]	‘toward over there’

Table 10: Analogous Set for Glottal Phonemes

One similarity between the above two cases is the strong aspiration in the high register and the weak (or absent) aspiration in the low register. As will be discussed in more detail in Chapter 5, these are known characteristics of onsets in the high register according to related literature (Watters 2002). High register words feature stronger aspiration in onset consonants than low register words. Perhaps a contrast in the high register is neutralized in the low register, as Yliniemi (2005) suggests for the glottals, or perhaps these consonants are phonotactically constrained by register. More research is necessary to determine this, but the laterals and glottal consonants are good consonants to study this phenomenon.

3.2.3 Summary

This section has provided an explanation of consonant coda restrictions and presented constraints regarding word-initial phonemes that can only precede vowels in

the high register. The next section provides a discussion of some phonological processes acting on consonants in certain environments.

3.3 Phonological Processes

3.3.1 Coda Neutralization

The bilabial and velar stops are realized in the word-final position as their unreleased voiceless [p̚] and [k̚]. This situation technically renders the underlying phoneme inconclusive, leaving open the possibility of obstruent coda neutralization, a phonological process that has been suggested in some analyses (Yliniemi, 2005).

Without access to the morphology that might offer evidence of the underlying forms necessary to verify if neutralization is or is not at work, the orthography can provide an insight into what the Lowa language informants perceive their underlying forms to be.

A consultation of the written Lowa in Devanagari orthography reveals that all word-final velars are spelled with a क <k> while in Tibetan script, these word-final velars are all spelled with ཀ <g>. Save the three examples below in Table 11 that end in the Devanagari ब , word-final bilabials demonstrate mostly the same orthographic trends as the word-final velars: प <p> in Devanagari and བ in Tibetan script. According to one of the language informants, Lowa spellings using Tibetan script generally reflect the spellings of Written Tibetan (WT) more than they attempt to reflect her understanding of the phonology. As a result, the Devanagari spelling variation in word-final bilabials offers the strongest suggestion of word-final obstruent neutralization, but it is hardly sufficient to prove neutralization is at work. Rather, the simplest interpretation is to treat the Devanagari spelling variation as an

arbitrarily determined convention and maintain that obstruent codas are simply phonotactically restricted to be voiceless and unreleased.

IPA	Devanagari Gloss	English Gloss
[tʰu:p̚˥]	ढुब	‘buckwheat (bitter)’
[pʰep̚˥]	फाब	‘yeast (brewing)’
[nep̚˥]	‘नाब	‘snot’

Table 11: List of Word-Final Bilabials Spelled with < ब >

3.3.2 Obstruent Lenition

Lenition is the process whereby a sound is articulated weakly, often a result of a voiced environment. Table 12 illustrates the lenited phones of the obstruent series for which there is evidence in Lowa, and Table 13 below it presents examples of this process.⁴

Phoneme	Lenited Phone
/b/	[β], [w]
/k/	[x]
/g/	[ɣ]

Table 12: Obstruent Lenition Phones

⁴ There is reason to refrain from staunchly limiting the list of phonemes subject to lenition to just those listed here (Watters 2018, Yliniemi 2005). Given that elicitation of the present data set was characterized by mostly careful speech, even in sentence frames, it is possible that some less frequent instances of lenition did not surface during data collection. Discussed here are only those evident from the data set.

Phone	IPA	Gloss
/b/	[dʲi-βu- / dʲi-wu-]	‘seed’
/k/	[le-kɐ- / le-xɐ-]	‘work (n)’
/g/	[t'o-kon- / t'o-gon- / t'o-ɣon-]	‘stone’

Table 13: Intervocalic Lenition of Obstruents

In contrast to the related literature and to the bilabial and velar obstruents, the intervocalic alveolar obstruent is not realized as the alveolar fricatives [θ] or [ð]. While this might also be a result of the small sample size and the relatively rare occurrence of lenition in general, it also might simply be an area where Lowa departs from its linguistic neighbors. It is possible that the phonological process whereby the alveolar coda is elided and reflected in a change in vowel quality (see Section 3.2.1) occurs before lenition of medial obstruents in Lowa. While merely a hypothesis, this could explain the absence of the alveolar fricatives [θ] and [ð].

3.3.3 Voicing Assimilation

Voicing assimilation is the process by which a sound assimilates to the voicing of its environment. Here the class of consonants in question is obstruents, and the environment under investigation is a preceding consonant in the coda of the first syllable of a disyllabic word. This section investigates the possibility of voicing assimilation in word-medial consonant clusters on the boundary between syllables.

There is some evidence, albeit minimal, for voicing contrast on the second syllable of a disyllabic word (see Table 14).

[p]	[b]
[k'om-lpɐʎ] 'monastery'	[kom-lbɐʎ] 'peel (n)'
[tʰoŋ-lpɐʎ] 'plough'	[toŋ-lbɐʎ] 'empty'

Table 14: Analogous Set for Bilabial Obstruents Following Nasals

There is also some evidence for free variation for obstruents in this environment, as given by Table 15. These voicing variations vary based on speaker, but sometimes even the same speaker can produce this voicing variation while eliciting a single entry.

Voiceless	Voiced	Gloss
[kɐŋ-lpɐʎ]	[kɐŋ-lbɐʎ]	'foot'
[toŋ-lpɐʎ]	[toŋ-lbɐʎ]	'empty'
[riŋ-ltʰuŋʎ]	[riŋ-lduŋʎ]	'length, height'

Table 15: Voicing Variation for Second Syllable Onset

This analysis takes the position that there is a voicing contrast in the environment at hand and that in these word-medial consonant clusters, voiced obstruents are elided and voiceless obstruents demonstrate optional voicing assimilation. Table 16 below illustrates all the Lowa pronunciations of native orthography in Tibetan script with a <ba> morpheme following a consonant coda. The orthography identifies an underlying bilabial obstruent after the phonemes /ŋ/ and /k/, and the Lowa IPA transcriptions demonstrate how this surfaces in speech.⁵

⁵ While the native orthography is not necessarily firm evidence for underlying forms, it does provide an idea of what the speaker thinks she is saying. Morphological evidence of underlying forms is far superior, but without much access to the morphology at present, the analysis relies on orthography. With that in mind, this analysis should be taken tentatively.

Tibetan Orthography	IPA	English Gloss
srung ba	[ṣoŋ˥wə˨]	‘amulet, talisman’
rogs ba	[rɔ˥˩wə˨]	‘friend (close)’
gag ba	[kʰə˥˩˨wə˨]	‘difficult’
dog ba	[tʰo˥˩wə˨]	‘narrow’

Table 16: Voiced Obstruent Elision in Consonant Cluster

From the tables above, compare <srung ba> [ṣoŋ˥wə˨] ‘amulet, talisman’ to <stong pa> [toŋ˥pə˨ / toŋ˥bə˨] ‘empty’. In analogous environments, an underlying voiceless obstruent surfaces as either its voiceless or voiced counterpart (presumably a result of optional voicing assimilation) and an underlying voiced obstruent surfaces as its lenited phone, in this case, [w] for the phoneme /b/. Thus, this analysis tentatively proposes a voicing contrast for obstruents following a consonant coda and voicing assimilation for underlying voiceless obstruents.

Optional voicing assimilation for voiceless bilabial obstruents has been tentatively postulated. More data and investigation is required to determine this for other obstruents in the series.

3.3.4 Summary

This section concludes the discussion of consonants with an overview of a few phonological processes at work: coda neutralization, obstruent lenition, and voicing assimilation. While several of these findings are preliminary hypotheses that would benefit from further research, a larger sample size, and more attention to morphology, they provide a basic framework from which to begin understanding the way consonants work in Lowa.

CHAPTER FOUR

Vowels

This chapter presents a discussion of the vowels in Lowa. First, a summary and description of the vowel phonemes and characteristics will be given, followed by phonotactic restrictions and relevant phonological processes acting upon the vowels.

4.1 Vowel Quality and Vowel Length Phonemes

Vowel quality and vowel length will be described in this section; phonemic status where problematic will be discussed.

4.1.1 Phonemic Vowel Quality

Table 17 represents the vowel phoneme chart for Lowa. Following in Table 18 are the phonemic vowel quality analogous contrasts in two different environments.

	Front		Central	Back	
	Unrounded	Rounded	Unrounded	Rounded	
Close	i	y		u	
Mid	e	ø		o	
Open			ə		

Table 17: Vowel Phoneme Chart for Lowa

Vowel	[alveolar fricative]_#	[velar obstruent]_#
/i/	[s'iɪ] 'onyx'	[kiɪ] 'dog (wild)'
/y/	[syɪ] 'whose'	-
/e/	[seɪjeɪ] 'kill (v)'	[keɪɪ / keɪ] 'language'
/ø/	[s'øɪpɐɪ gom-ɪjeɪ] 'endure (v)'	[k'øɪ] 'ethnic dress'
/ɐ/	[sɐɪ] 'floor'	[kɐɪ] 'decree'
/u/	[suɪ] 'who'	[kuɪ] 'honorific prefix for parts of the body'
/o/	[soɪ] 'tooth'	[k ^h oɪ] 'he'

Table 18: Phonemic Vowel Quality Contrasts

Important to note is the relatively low distribution of the phone [y] (only 12 in the collected data). This suggests that it is possible the phone might be an allophone of another phoneme, and a discussion of the feasibility of this idea follows.

The two most likely candidates for the phoneme of which [y] is an allophone are /u/ and /ø/, as they differ in only one feature from the phone, in backness and height respectively. The phoneme /u/ is unlikely to be the phoneme of the phone [y] because of the minimal pairs demonstrated in Table 19 below. However, there are no such minimal pairs for the phones [y] and [ø], although there are some analogous sets that tentatively suggest a contrast, but not conclusively (see Table 20).

[y]	[u]
[pyɪjeɪ] 'take off (v)'	[puɪjeɪ] 'offer (v)'
[syɪ] 'whose'	[s'uɪɪ] 'body'
[ʃyɪjeɪ] 'slide (v)'	[ʃuɪjeɪ] 'copy (v)'

Table 19: Minimal Pairs for [y] and [u]

[y]	[ø]
[lyʔɿ] ‘compost’	[t'okʰɿløʔɿ] ‘narrowness’
[syɿ] ‘whose’	[s'øɿpɐɿ gomɿjeɿ] ‘endure (v)’

Table 20. Analogous Sets for [y] and [ø]

Although more data is needed, this analysis considers /y/ to be a phoneme for several reasons. First, there is no evidence of a phonological environment that would change /ø/ to [y]. More data would be needed to better determine if there is an environment conditioning an underlying phoneme to change to the surface [y]. Second, related Tibeto-Burman languages (Lhomi, Dzongkha, Dolpo Tibetan, Mugom Tibetan, Lhasa Tibetan, and Denjongka) all contain /y/ in their phoneme sets (Vesalainen, 2016; Watters, 2002; Hari, 1979; Yliniemi, 2005). It would be quite notable if Lowa differed from its linguistic neighbors in this respect, although not impossible. Third, the Devanagari orthography developed by native speakers marks the two vowels with different vowel signs. While this analysis would benefit from more data, the present analysis considers /y/ to be a phoneme.

4.1.2 Phonemic Vowel Length

The data supports a phonemic contrast for vowel length on the open monosyllable for most vowels (not for /i/, /y/, or /u/) and on the closed monosyllable for one vowel (/ɐ/). These contrasts for each speaker are presented in Table 21. Along with the contrasts, the table lists the average vowel length of four tokens¹ of each word

¹ The average vowel length for KC's [k'ô:] reflects only three tokens due to noise interference in the recording.

elicited in citation. These lengths are given in seconds (s), and the standard deviation for the four token sets are given in () parentheses.

Measuring vowel length consistently in Praat can be challenging, especially on open syllables when the phonation can trail off for a good amount of time before ceasing altogether. In order to maintain the integrity of the vowel length measurements, the onset of the vowel was marked at the first full periodic wave following the onset consonant. For short vowels ending with a bit of aspiration and for vowels on closed syllables, the end of the vowel was marked after the last periodic wave before the sound waves became aperiodic. For long vowels, the amplitude of the voicing bar in the spectrogram acted as a guide; the end of the vowel was marked when the amplitude decreased, even if the voicing bar persisted longer.

Vowel	Gloss	IPA	KC Mean Length (s) (Std Dev)	DG Mean Length (s) (Std Dev)
Open Syllable				
i	no contrastive data available			
y				
e	‘peak’	[tse:ɿ]	0.60 (0.05)	0.62 (0.04)
	‘point (n)’	[tseɿ]	0.26 (0.03)	0.25 (0.02)
ø	‘color’	[tsʰø:ɿ]	0.46 (0.05)	0.52 (0.02)
	‘ripe’	[tsʰøɿ]	0.32 (0.03)	0.31 (0.01)
ɐ	‘grass’	[tsɐ:ɿ]	0.47 (0.04)	0.41 (0.01)
	‘nerve’	[tsɐɿ]	0.17 (0.02)	0.18 (0.02)
u	no contrastive data available			
o	‘door’	[kʰo:ɿ]	0.32 (0.03)	0.35 (0.01)
	‘he’	[kʰoɿ]	0.18 (0.01)	0.22 (0.02)
Closed Syllable				
ɐ	‘cliff’	[tʰɐ:kɿ]	0.45 (0.05)	0.44 (0.03)
	‘blood’	[tʰɐkɿ]	0.16 (0.02)	0.17 (0.03)
	‘when’	[nɐ:mɿ]	0.14 (0.02)	0.13 (0.01)
	‘sky’	[nɐmɿ]	0.12 (0.02)	0.11 (0.01)
	‘copper’	[sʰɐŋɿ]	0.21 (0.05)	0.24 (0.02)
	‘incense’	[sɐŋɿ]	0.14 (0.01)	0.10 (0.01)

Table 21: Phonemic Vowel Length Contrasts on the Monosyllable

The box and whisker plots in Figures 3 and 4 below reflect all individual tokens of the words illustrated in Table 21. In these figures, the open syllable plots should be compared against one another and the closed syllable plots against one another. In order to conclude that the long and short vowel lengths reflect statistically distinct populations, the medians should not overlap, even if there is some overlap in the maximums and minimums of the data sets. This is most conclusively evident for each

speaker on the open syllable where the boxes do not overlap at all. This demonstrates statistical evidence for vowel length contrast on the open syllable. The closed syllable sets less conclusively support vowel length contrast on the closed syllable even though the median values do not overlap. This is because the median values are significantly closer together and the first quartile and minimum values closely reflect each other. Furthermore, coarticulation of the nasal coda can somewhat mask the vowel length contrast. At present, more data is needed to establish a vowel length contrast on the closed syllable.

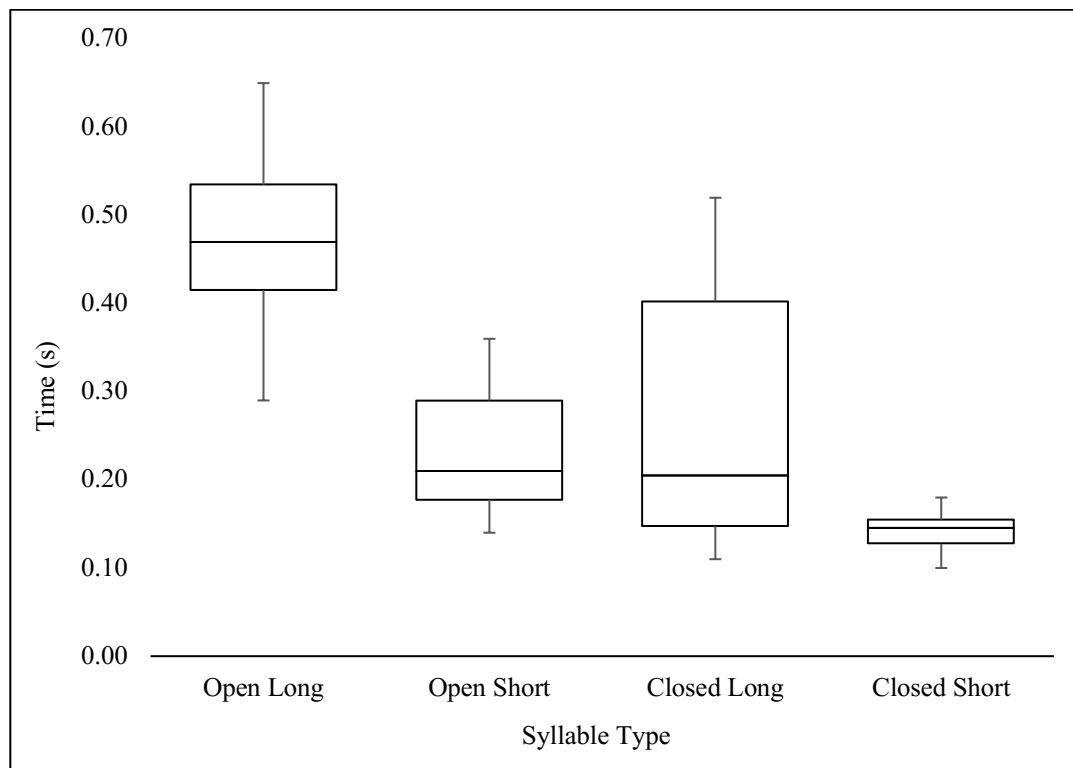


Figure 3: KC Vowel Length Distributions

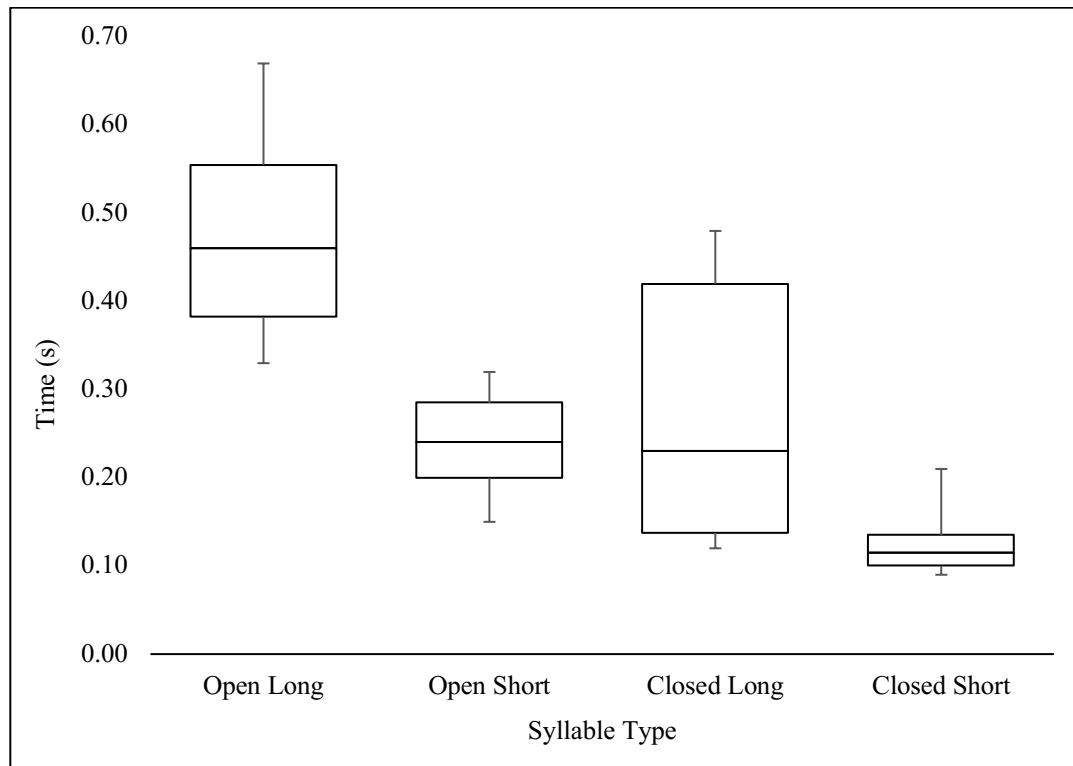


Figure 4: DG Vowel Length Distributions

As given by the figures above, there is evidence to support a vowel length contrast on the open syllable and a small amount of evidence to suggest contrast on the closed syllable with the vowel /e/ with a word-final /k/, /m/, and /ŋ/. There is not sufficient data to provide evidence of a vowel length contrast with a word-final /p/ or /n/; however, it is likely that these codas follow suit.

4.1.3 Summary

Phonemic evidence has been given for the vowel phonemes /i, y, e, ø, v, o, u/ and for a vowel length contrast on the open monosyllable. Minimal/analogous pairs have demonstrated the vowel phoneme contrasts, and vowel lengths measurements of open monosyllables have demonstrated the two statistically distinct vowel lengths.

Furthermore, preliminary evidence has been suggested for a vowel length contrast on the closed monosyllable. The following section will address phonotactic constraints of the phonemes already identified.

4.2 Vowel Constraints

4.2.1 Vowels and Syllable Structure

In addition to the CVC# and CV# syllable structures demonstrated examples from Table 21 in section 4.1.2, vowels can also form a #V syllable. However, the data limits this condition to only the vowels illustrated in Table 22. It is unclear at present whether this is a phonological constraint or a product of the small sample of #V syllable patterns (21 instances in the data).

Vowel	#V
/i/	[ʔiʔziʌ] ‘sister, older’
/y/	-
/e/	[ʔeʔwɛʔ peʔjeʌ] ‘sort (v)’
/ø/	-
/ɐ/	[ʔɐ:ʌ] ‘bad’
/u/	[ʔu:ʌ] ‘stepfather’
/o/	-

Table 22: Word-initial Vowels

4.2.2 Vowel Clusters

Vowels can occur in clusters, too, although the distribution is low (16 instances in the data set). The vowel clusters are presented in Table 23. Interestingly, these

clusters seem to only involve the primary vowels /i/, /e/, /ɐ/, /u/, and /o/, not the secondary /y/ and /ø/. This analysis considers these cases to be vowel clusters as opposed to diphthongs² for two reasons. First, the distribution is quite low and relatively spread out across cluster combinations, suggesting these vowels do not act as one unit, but two successive units that can be combined with another primary vowel. Second, the vowel clusters never occur on the closed syllable in a *CVVC syllable structure, a sign that the vowel clusters are not acting as a single vowel unit like an isolated vowel does in a CVC syllable structure.

Vowel Cluster	Frequency	IPA	Gloss
iu	3	[piˈtʊʌ]	‘monkey’
eu	2	[tʰeˈtʊʌ]	‘thumb’
ɛi	1	[mɛˈliː]	‘buffalo’
ɛu	2	[pɛˈtʊʌ]	‘skin’
ɛo	5	[mɛˈtoː]	‘red’
oɐ	2	[pʰoˈtɛʌ]	‘stomach’
ou	1	[tsʰoˈtʊʌ]	‘nephew’

Table 23: Vowel Clusters and Frequency

4.2.3 Summary

Restrictions for vowel placement in Iowa syllable structure have been presented along with evidence of vowel clustering. It has been suggested that these be considered vowel clusters as opposed to diphthongs. The following section will briefly address a phonological process affecting vowels.

² Here, diphthong is defined as “a vowel sound forming the center of a single syllable, but including a change from one vowel quality to another” (Ladefoged & Disner, 2012, p. 201).

4.3 Phonological Processes

4.3.1 Nasalization

Lowa vowels are subject to nasal assimilation when occurring before a nasal consonant, caused by an early opening of the nasal tract in preparation for articulation of the nasal. Sometimes, this occurs as total assimilation. Take, for instance, the word for ‘take (v)’ for which there are two acceptable pronunciations, [lɛn-ɭjeɽ] and [lẽ-ɭjeɽ]. In one case, the nasal consonant is retained; in the other, the only trace that remains is in the nasalization of the preceding vowel. While the previous case demonstrates variation, this total assimilation can be distinctive, too (see Table 24). Table 25 provides examples of nasal vowels for every vowel quality except /y/ for which there was not sufficient data to find an example.

IPA	Gloss
[seɽjeɽ]	‘kill (v)’
[sẽɽjeɽ]	‘hear (v) [honorific]’

Table 24: Minimal Pair for Nasalized Vowels

Vowel	IPA	Gloss
i	[tʰɐkˈrĩɖɐ]	‘distance (btwn two points)’
y	-	-
e	[lẽɖ / lɛnɖ]	‘take (v)’
ø	[tʰõɖ / tʰønɖ]	‘leave (v)’
ɐ	[dẽɖ]	‘equal’
u	[tsiɖ]	‘pool’
o	[tʃõɖ]	‘small’

Table 25: Nasalized Vowels

It is unclear whether nasalization of the vowel preceding a nasal consonant always occurs. For example, in neither [nɐɖ] ‘bride’ nor [rimɖ] ‘by turns’ do the vowels seem to be nasalized. It is suspected that only in the case of total nasal assimilation as in Table 24 does the vowel predictably surface with a [+nasal] feature.

CHAPTER FIVE

Tones

5.1 Background on Tone and Register in Tibeto-Burman Languages

The previous sections of this thesis have discussed some of the major segmental features of Lowa: consonants, vowels, and vowel length. This section will present a brief discussion of the relevant tone terminology and a preliminary acoustic analysis of F_0 in Lowa.

5.1.1 Defining Tone, Register, and Voice Quality

There is still some discussion amongst Tibetanists on whether Lowa and related Tibeto-Burman languages are tonal in the proper sense of the term (Hari, 1979). Snider (2018) defines a tone language as one that “distinguishes, to one degree or another, at least some morphemes by means of pitch contrasts” (p. 3). As will be seen, in Lowa and related languages pitch contrasts are not the sole distinction between otherwise identical morphemes. Rather, other characteristics, such as onset consonant and voice quality, are often concomitant with pitch contrasts. While this analysis will not provide an opinion on the status of Lowa as a tone language or not, it will attempt to characterize pitch in Lowa in relation to some related languages.

In research on Tibetic languages, register is a term used to describe the packages of pitch contrasts, voice quality, and a number of other characteristics of syllables (Watters, 2002; Watters, 2018; Hari 1979). Hari (1979) defines high register as “the

correlation of relatively high pitch and modal voice” and low register as “the correlation of relatively low pitch and breathy voice” (p. 61). Table 26 represents a summary of high and low register characteristics in relation to certain environments.¹

Environment	High Register	Low Register
Voice Quality of Vowel	modal voice	often breathy voice
Syllable Initial Glottal Consonants	glottal stop/glottal fricative distinction	syllable initial vowels have weak aspiration
Voiceless Stops	strong aspiration or no aspiration	vary between slight and no aspiration
Vowel Length	vowel length is contrastive	vowel quality contrasts maintained rather than length

Table 26: Features of High and Low Register Syllables

Modal voice and breathy voice refer to the different voice qualities used in Tibeto-Burman languages related to Lowa. Chávez-Peón (2010) describes modal voice as the “standard vibration type” during which “the vocal folds are adducted along their full length and with a suitable degree of tension to allow vibration in a rhythmic manner” (p. 104). By contrast, breathy voice “is where the folds are held partly apart while the vibration continues” (Chávez-Peón, 2010, p. 104).

Breathiness can be evaluated in two ways. The first is by ear alone; breathy voice sounds like someone speaking between a normal, modal voice and a whisper. The second way is by acoustic analysis using a program such as Praat. Breathiness is measured by taking the spectral tilt of the open central vowel /ə/ for a given speaker.

¹ The majority of this table, although not all, is directly taken from Watters (2002). It is reorganized in some places. What is not taken from Watters is from the present analysis.

The difference between the first and second harmonics on the spectral slice of a breathy /ɐ/ are compared to the same of a modal /ɐ/. The smaller the difference between the two harmonics, the breathier the voice quality.

As noted in Gordon and Ladefoged (2001), phonation types can be described better as a phonation continuum of the tightness of vocal folds rather than as binary features. This means that, within a specific context, so long as a syllable marked underlyingly as [+glottis] is acoustically more breathy than the environment marked [-glottis], the contrast is represented.

The above discussion is here used to demonstrate how the present data, small in size and elicited primarily in citation, does not lend itself to a sophisticated study of breathiness.² The acoustic measurement is limited to the vowel /ɐ/, making the small sample size especially limiting in analyzing breathiness. A more in-depth study of Iowa voice quality would require significantly more data and would benefit especially from data elicited in a wide variety of environments, which the present data is not able to support. For now, this analysis will treat voice quality as a feature of register, not an independent feature.

5.1.2 Pitch, F_0 , and the Present Study

Snider (2018) provides a useful distinction between pitch and F_0 , or fundamental frequency, saying that “while pitch is a perceptual term that denotes tone as it is “heard,” F_0 is an acoustic term that denotes ‘the lowest frequency component in a complex sound wave’ (Crystal 2008:203-204)” (p. 63). In order to acoustically

² Breathiness has been marked in the Glossary by ear, not by acoustic analysis (Appendix B).

demonstrate the perceptual pitch contrasts in Lowa words, F_0 has been measured as the primary indicator of pitch, and by extension, register. This is as opposed to taking into account both F_0 and voice quality to determine register. This method has been selected primarily because F_0 can be acoustically measured on any vowel, not just [e], expanding the usable data for analysis.

Similar to voice quality, pitch is a feature highly dependent on its relationship to its environment and one that can be described on a continuum. This can also make pitch difficult to measure in citation, the type of data on which this analysis primarily draws. Given the limitations of the data, the following analysis should be taken as a preliminary discussion of the F_0 representative of pitch in Lowa and how they might interact with other phenomena to make words contrast.

The words for the data below were intentionally selected based on predicted register and vowel length. Because of the known concomitance of onset phonation and register in related languages, onset consonants were the means of predicting the register of each word. The present F_0 analysis deals only with monosyllabic open syllables with bilabial and velar obstruent onsets.³ For each token (four in citation per word), F_0 was measured in Praat⁴ every 5 milliseconds for the duration of the vowel.⁵ These measurements were moved to an Excel spreadsheet and using the line graph generator, F_0 contours were displayed. To generate one line representing the eight tokens (four per place of articulation), the average of all eight data points per 5 milliseconds was taken

³ Due to resource limitations, sonorant onset data was not included in this analysis. This is an excellent direction for further research: verifying pitch contrasts for monosyllables with sonorant onsets.

⁴ The settings in Praat were the same for both speakers: pitch range: 150 Hz to 350 Hz, max. number of candidates: 15, silence threshold: 0.03 dB, voicing threshold: 0.45 dB, octave cost: 0.01, octave-jump cost: 0.25, voiced / unvoiced cost: 0.14.

⁵ The same criteria was used to determine the duration of the vowel as in Chapter 5 with vowel length.

and graphed separately, connected by a line. Some tokens last longer than others, so toward the end of a vowel utterance, fewer data entries are averaged together.

5.2 F_0 Contrasts

The pitch contours listed below represent the intersection between register and vowel length, resulting in four distinct pitch contours. They are generated by measuring F_0 . This is the way Watters (2002) characterized the tonal differences in five Tibeto-Burman languages. Hari (1979), on the other hand, characterizes the tones in Lhasa Tibetan as an intersection of register and pitch contour (p. 65). A pitch is either moving (falling in high register, rising in low register) or basically level. The present analysis approaches the tones of Lowa following Watters; that is, pitch contours are treated as a result of the intersection of register and vowel length, not as contrastive in themselves.

Table 27 lists the words used for F_0 analysis. The long prevoiced condition (low register) was omitted due to insufficient data; there were no long monosyllabic entries beginning with either /b/ or /g/.

	bilabial onset		velar onset	
	short	long	short	long
High Register				
-v, -asp	[piʋ] ‘hips’	[pɛːʋ] ‘curry’	[kɛʋ] ‘decree’	[kɛːʋ] ‘pillar’
-v, +asp	[pʰeʋ] ‘half’	[pʰeːʋ] ‘mongoose’	[kʰeʋ] ‘mouth’	[kʰeːʋ] ‘snow’
Low Register				
devoiced	[pʰeːʋ] ‘cat’	[pʰɛːʋ] ‘wool’	[kʰeːʋ] ‘saddle’	[kʰɛːʋ] ‘dance’
prevoiced	[buʋ] ‘insects’	-	[goʋ] ‘head’	-

Table 27: Words Selected for F_0 Analysis

Pitch contours were obtained by measuring F_0 for each of the two language informants, KC and DG, and were kept separate from each other. Thus, each F_0 graph has two counterparts.

5.2.1 High/Low Pitch Contrast for Short Vowels

The following data demonstrate the F_0 contrast between short vowel words in the high register and those in the low register. High register words are in gray, while low register words are in black. Series labels represent the onset phonation types, e.g., the label *-v*, *-asp* represents words beginning with /p/ and /k/.

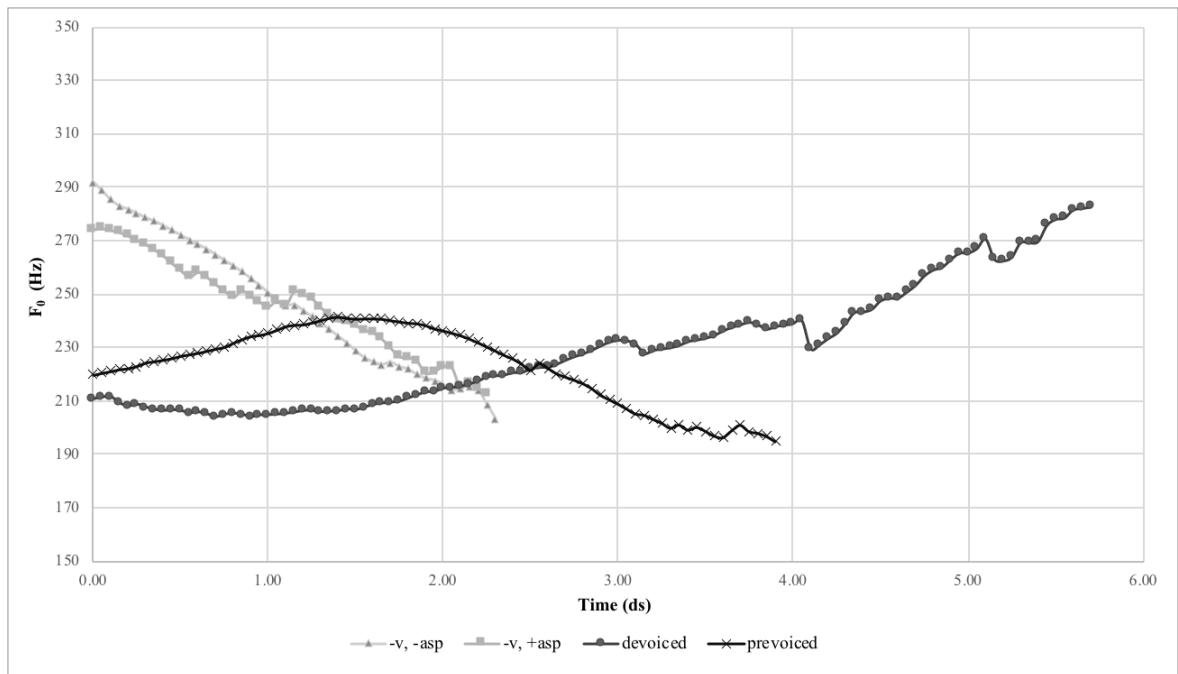


Figure 5: KC F_0 for Short Vowels

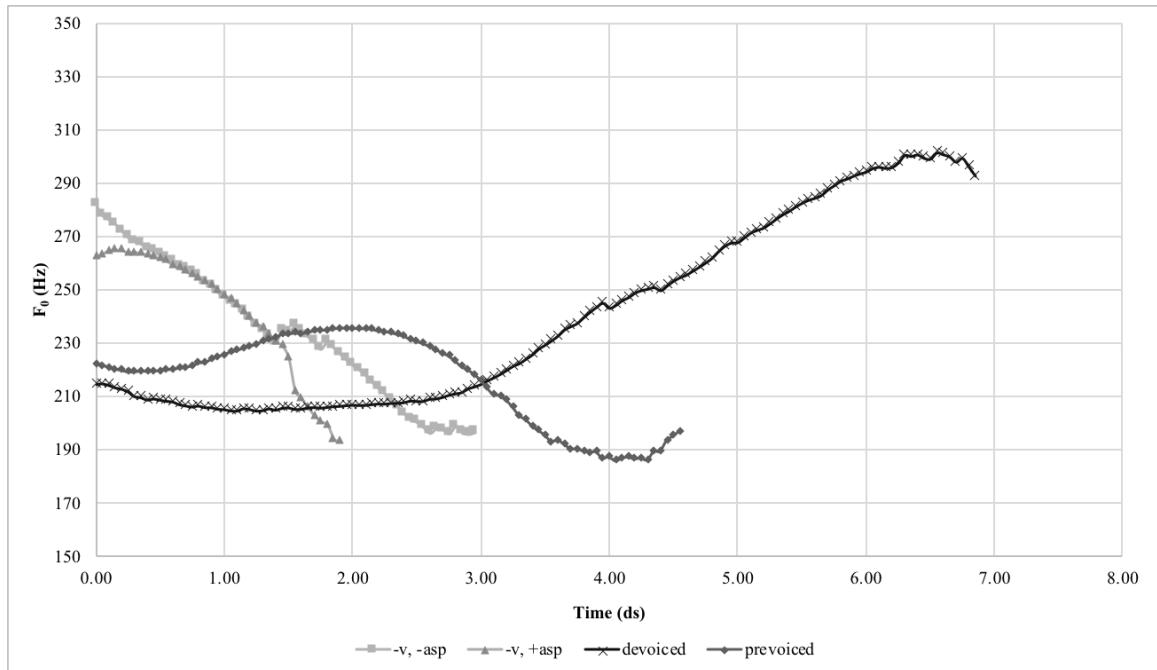


Figure 6: DG F_0 for Short Vowels

As evident from the charts, words beginning with a voiceless unaspirated onset and a voiceless aspirated onset (traditionally associated with beginning words in the high register) do, in fact, demonstrate a higher beginning F_0 than low register words. While the end point F_0 of high register words might reach a similar or even lower F_0 than low register words, the beginning point is higher, somewhere between 260 Hz and 290 Hz for both speakers. By contrast, beginning F_0 of words with devoiced and prevoiced onsets is between 210 Hz and 230 Hz for both speakers.

Equally important as F_0 range for each register is F_0 contour. While in Lowa, there appears to be a quantitative contrast in F_0 height for words in the high and low registers, Watters (2002) cites cases in related Tibetan languages where beginning and end F_0 points are identical, but F_0 contour and voice quality differ (p. 31). Short vowel words in the high register demonstrate a sharp and immediate decline in F_0 from the

onset, one that is slightly more pronounced in voiceless unaspirated onset words. On the other hand, F_0 contour in the low register can be described in two ways: rising and then falling or gradually rising. Here, these appear to differ by onset consonant; however, more research is needed to determine if this is true on a broader scale. As it is, beginning F_0 values differ quantitatively between the two registers, and pitch contour may not be an essential component of register contrast. Further research is needed to determine the role of F_0 contour in pitch contrasts.

5.2.2 High/Low Pitch Contrast for Long Vowels

The following figures demonstrate the F_0 contrasts on the long monosyllable.

The prevoiced counterpart is not listed due to insufficient data.

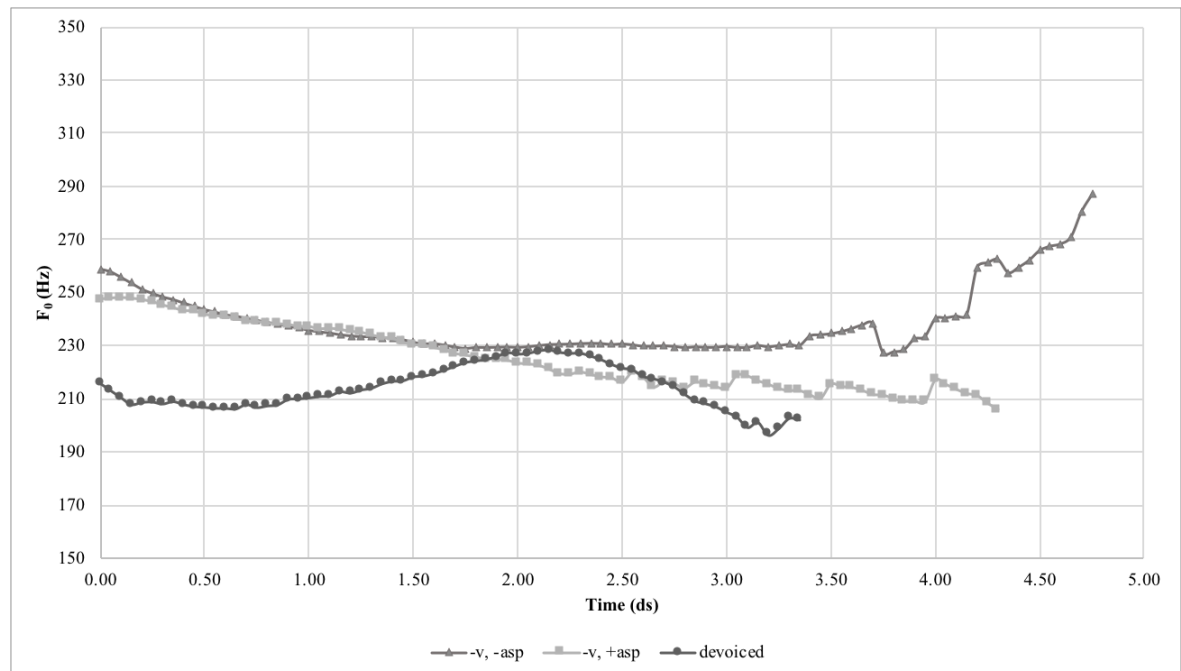


Figure 7: KC F_0 for Long Vowels

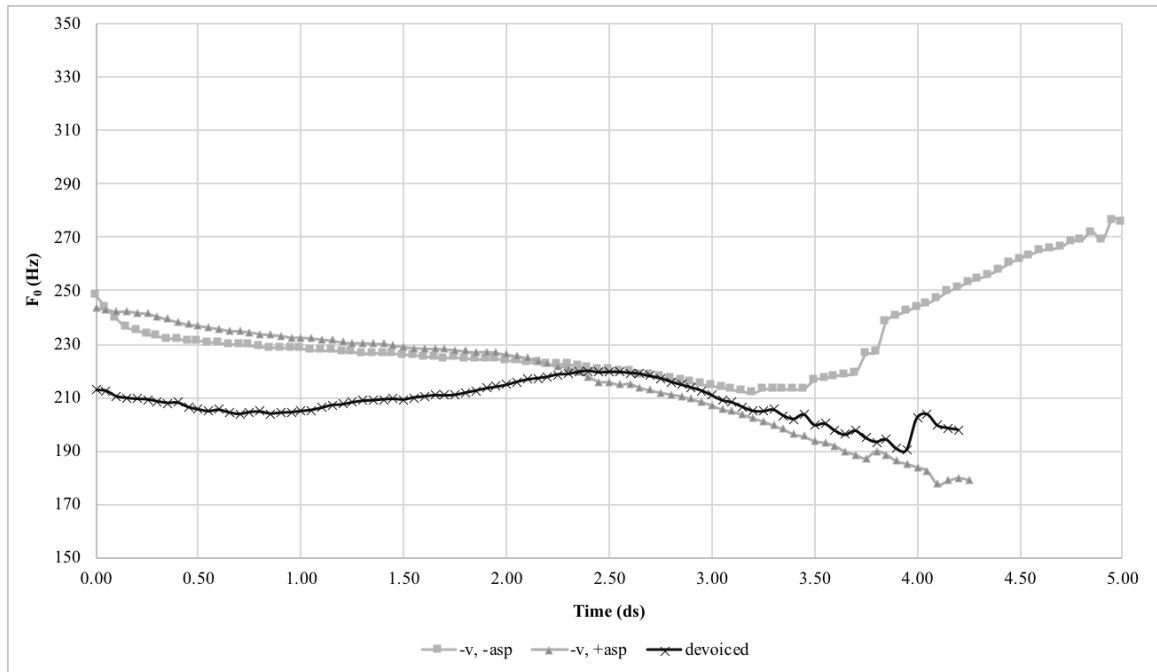


Figure 8: DG F_0 for Long Vowels

Similar to the short vowels, F_0 in the long vowels appears to be quantitatively different between the two registers. The F_0 contours in gray representing high register words with voiceless unaspirated or aspirated onsets have beginning F_0 between approximately 245 Hz and 260 Hz. The F_0 contours in black representing the low register have beginning F_0 in the range of 210 Hz and 220 Hz. While there is some variability in F_0 ending point, the beginning point demonstrates a distinct F_0 difference between high and low register words.

With regard to F_0 contour, the devoiced series demonstrates a rising and then falling contour similar to the short prevoiced series. The high register words demonstrate a gradually falling F_0 , with the unaspirated series then rising at the end. Again, further research is needed to determine how pervasive these pitch contours are within their respective registers.

5.2.3 Limitations

Discussions of F_0 contour ought to be taken tentatively in this analysis. As noted in Hari (1979), intonation overlays tone in Lhasa Tibetan. One factor that is quite difficult to mitigate when eliciting data in citation is the intonation that results from listing tokens repetitively. For this reason, data elicited in frames can be helpful to obtain data with differing intonation patterns; however, the present data contains insufficient frames to perform this analysis thoroughly or conclusively, so it is limited to words in citation.

One other factor that might affect the F_0 data above is speaker mimicry. Both language informants were in the same room while eliciting data, and seldom did the second speaker, DG, vary in pitch pronunciation from KC. It would be naïve to assume that listening to the rhythm and pitches of KC's elicitation just prior did not affect DG's pronunciations and reduce the variation of acceptable pronunciations in the data. Data elicited individually would likely have yielded greater variation in F_0 values and contours that could provide a better picture of the essential pitch contrasts in spite of overlaid intonation.

5.2.4 Summary of Pitch on the Monosyllable

While Watters (2002) notes the pitch contours that Hari (1979) posits as distinctive, he rather characterizes these as “predictable on the basis of the length of the syllable” (p. 35). Lowa seems to fit into this typology. The F_0 data above supports a pitch contrast consistent with the predicted register of the words selected. It did not, however, treat voice quality separately from register, rather treating voice quality as a characteristic predictable by register. Thus, the distinctive contrasts differentiating open

monosyllabic words result from an intersection of register, including pitch (illustrated with F_0 data above) and voice quality (taken as a given) characteristics, and vowel length (illustrated in Chapter 4). This analysis yields the following table of the tone system for open monosyllables.

	Vowel Length	
Register	High Short	High Long
	Low Short	Low Short

Table 28: Four Tones for Open Monosyllable

Further research should extend this study to open monosyllables with sonorant onsets, closed monosyllables, disyllabic words, and data elicited in multiple frames.

The present study has neglected closed monosyllables due to the limitations with determining vowel length contrasts on the closed syllable (see Chapter 4), and it has left out sonorant onset monosyllables and disyllabic words due to the limited scope of the project.

CHAPTER SIX

Conclusion

6.1 Lowa Orthographies

The preceding analysis provides preliminary evidence for a number of distinctive contrasts in Lowa, contrasts that, if not predictable by some other phonological feature of the word, ought to be accounted for in written form in order to avoid confusion with non-homophonic words. As explained earlier in this thesis, presently the language informants are spelling Lowa words phonetically based on contrasts they are aware of using only their metalinguistic knowledge as native speakers, not data-supported phonological analysis. This final chapter will identify potential problem areas in the orthographies as they exist today based on the preliminary phonological evidence presented above. The majority of the observations will be on Devanagari, but some general observations will be made on the Tibetan script as well.

6.1.1 Devanagari Orthography Observations

Due to the simpler, more one-to-one mapping of Devanagari letters to sounds (as opposed to Tibetan script), this thesis will pay greater attention to orthography issues related to Devanagari.

Vowel Length Marking. Section 4.1.2 provides evidence of a distinctive contrast for vowel length on the open monosyllable. It is likely that further research on Lowa will more conclusively support a distinction on the closed monosyllable, and possibly even on the disyllable, as related research suggests.

Currently, Lowa Devanagari orthography does not mark consistently for vowel length. The data shows seven instances (five unique morphemes) where vowel length has been marked in the orthography. These unique morphemes are listed in Table 29.

English Gloss	IPA	Devanagari
‘thick (of milk or suji)’	[kɐːʌ]	काः
‘pillar’	[kɐːʌ]	काः
‘dance (n)’	[kʰɐːʌ]	गाः
‘snow’	[kʰɐːʌ]	खाः
‘many’	[mɐːʌ]	माः

Table 29: Devanagari Spellings Marking for Vowel Length

While the above data proves that the Devanagari orthography could certainly accommodate vowel length marking, unfortunately it does not mark consistently at the moment. Table 30 below demonstrates why this proves a problem in reading Lowa words. The table provides the Devanagari spellings for three of the minimal/analogous sets statistically demonstrated in section 4.1.2 to be contrastive for vowel length.

English Gloss	IPA	Devanagari
‘peak’	[tseːʎ]	चे
‘point (n)’	[tseʎ]	चे
‘color’	[tsʰøːʎ]	छो
‘ripe’	[tsʰøʎ]	छो
‘grass’	[tsɐːʎ]	चा
‘nerve’	[tsɐʎ]	चा

Table 30: Long Vowel Lowa Words and Spellings

As the table demonstrates, the spellings for words distinctively contrastive for vowel length are spelled identically. A reader of Lowa in Devanagari would have nothing aside from part of speech (if they are fortunate) and surrounding context to determine the meaning of the word they are reading. Fortunately, as demonstrated in Table 29, this distinction can be easily marked without introducing a new symbol to the orthography that is not already present.

Register Marking. As demonstrated in section 5.2, the quantitative F_0 differences in Lowa support a contrast between high and low register on the open monosyllable for obstruent onsets. Section 5.2 demonstrates how this F_0 difference is concomitant with phonation type of the onset obstruent; however, it is unlikely, according to the related literature, that this is causative. That is, register differences are not determined by onset phonation. Rather, onset phonation was assumed to be a predictor of register in order to select entries to use for F_0 analysis, which then demonstrated a pitch distinction as a feature of a register distinction.

While words with obstruent onsets demonstrate register, in part, by phonation of the onset consonant, words with approximant or nasal onsets only demonstrate register

by pitch contrasts or voice quality (where applicable). As neither pitch nor breathiness are marked in Devanagari orthography and neither are predictable by vowel quality, register ought to be marked in the orthography in order to differentiate high from low register. Fortunately, high register is currently being marked with a word-initial dot in words with non-obstruent onsets, as demonstrated by the sample given in Table 31.¹

English Gloss	IPA	Devanagari
‘rust’	[jɐːʈ]	‘या
‘sky’	[nɐmʌ]	‘नाम
‘bull, ox’	[lɔŋʈ]	‘लुङ

Table 31: Words Marked for High Register

This present discussion is included for two reasons. The first is to encourage the use of having this marking for high register in all words with an onset consonant that does not demonstrate onset phonation variation as a feature of the word’s register. In some cases, it is the only symbol differentiating two otherwise identical words, such as the high register [mɐʌ] ‘wound’ म्मा and the low register [mɐʈ] ‘butter’ म्म. The second reason this discussion is included is to introduce the question of whether, for consistency’s sake, this high register marking ought to be included in spellings of words with obstruent onsets, even though the onset already bears features that indicate the register. A suggested answer for this question is outside the scope of this thesis and would warrant both a close look at orthographic conventions related languages have adopted and consultation with the Lowa-speaking community. Nevertheless, the

¹ The entries selected for Table 31 have not been proven statistically to be high register words. Rather, they are marked as high register in transcriptions based on the researcher’s auditory impressions of the words.

observation is made that words beginning with approximant or nasal onsets mark for register, while those with obstruent onsets do not.

Low Register Obstruent Marking Consistency. The final observation to be made regarding the Devanagari orthography is the inconsistency with marking obstruent onsets in the low register, namely the devoiced and prevoiced counterparts. Table 32 demonstrates the sound each Devanagari letter represents in Nepali.

Voiced Unaspirated		Voiced Aspirated	
ब	<ba>	भ	<b ^h a>
द	<da>	ध	<d ^h a>
ड	<ɖa>	ढ	<ɖ ^h a>
ग	<ga>	घ	<g ^h a>

Table 32: Letter to Sound Correspondence in Nepali

Rather than a voiced aspirated obstruent, Lowa differs from Nepali in that it features the unique ‘devoiced’ series. While the distribution of the letter-phoneme mapping loosely suggests that the devoiced series has replaced the voiced aspirated series in Devanagari, this is by no means consistent. Table 34 represents a frequency chart of the number of times each letter is used to represent each phoneme in the collected data.

Letter	Prevoiced	Devoiced	Total
	[b]	[p']	
ब	12	4	16
भ	9	14	23
	[d]	[t']	
द	18	30	48
ध	3	15	18
	[ɖ]	[t']	
ड	9	8	17
ढ	6	30	36
	[g]	[k']	
ग	11	33	44
घ	4	39	43

Table 33: Frequency of Low Register Letters

As evident from the frequency chart, there remains considerable inconsistency in marking obstruents in the low register. Logically, consistency in an orthography is paramount for ensuring accurate reading. As a result, it is the suggestion of the present analysis that special care be taken when determining the spelling of words in the low register with obstruent onsets.

6.1.2 Tibetan Script Orthography Observations

The issues related to the Tibetan script orthography are of a somewhat different nature than those related to Devanagari. As such, they are outside the scope of the present analysis. Nevertheless, some of the challenges as learned from the language consultants will be briefly described below for further research.

Perhaps counterintuitively, the primary source of the difficulty with the Tibetan script orthography is how closely Lowa is linguistically related to Tibetan. It will be remembered that many Lowa-speakers are fluent readers of Written Tibetan, Lowa's linguistic ancestor. A large portion of Lowa words are derived from WT words that Lowa-speakers already know and read. The present trouble with the orthography is knowing whether to develop the Lowa orthography maintaining many of the WT spellings, or developing it as the Devanagari orthography has been, as a more or less phonetic spelling of Lowa sounds.

In its current state, it appears that KC has erred on the side of maintaining the familiar WT spellings. This means that the present analysis can comment little on an orthography that is not necessarily attempting to represent the Lowa sounds phonetically in its spellings. Rather, the questions surrounding the development of the Tibetan script are of a nature that requires significantly more knowledge of the speakers and theories of orthography development.

6.2 Limitations and Further Research

The preceding analysis of Lowa was conducted using a wordlist of approximately 1200 words. While many of the observations are corroborated by research on related languages, the small sample size prohibits them from being entirely conclusive in their own right. Rather, this analysis should be treated as a substantial foundation for more research with a larger data set.

Further research, after verifying with a larger sample size the consonant and vowel phonemes identified above, should focus efforts on expanding the studies of

vowel length contrasts and pitch contrast. In the present analysis, vowel length was only demonstrated to be contrastive on the open monosyllable and provided preliminary evidence of contrast on the closed monosyllable. It did not attempt to determine contrast on the disyllable.

Furthermore, pitch contrasts were only demonstrated on the open monosyllable, partly due to the limited evidence for a vowel length contrast on the closed monosyllable. Again, pitch contrasts on the disyllable were not analyzed. Further research should focus its efforts on more comprehensively characterizing pitch contrasts.

Finally, due to the small sample size and difficulty measuring voice quality, breathiness was not analyzed in the present study. A larger sample size would yield more entries on which to perform the acoustic analysis necessary to determine the role of voice quality in contributing to register contrasts.

6.3 Summary

At the outset of the thesis, it was stated that this phonological analysis was intended to serve as a foundational description of the sounds of Lowa. The phonemes and a number of phonological processes affecting consonants and vowels have been demonstrated. A vowel length contrast on the open monosyllable has been statistically demonstrated, and high/low register contrast has been supported by acoustic analysis of pitch on the open monosyllable. Finally, potential problem areas with the Devanagari orthography have been identified, including the absence of a consistent vowel length

marker, the lack of a high register marker on words with obstruent onsets, and the inconsistency of marking obstruent onsets in the low register.

APPENDICES

APPENDIX A

Short Story

Lowa: ताक धाड फीन्डीगी तापे

धाडबो धाडबो यु च्यीक होतालाक। धेनी होदे युरु ताक होरी धीन्डु से धेनी मी से झ्येरी 'मीच्यी मीक्याला दुक्पु तेरालाक। होदेने धा होदे युरु नाडजाड च्यीक होतालाक। खुड 'डीउ श्याकमो च्यीक शयीडला लेगा झ्येरी नाडला लोकपालाक। धेनी केमीगो मे तारी ग्याड ग्यावी होतालाक। धा 'रो रुक्कु झयीदाराड ताकगो खुडगी घोच्चारु हुडगीनगो छोरती खुड 'डीउ लाम्साड जामा नाडदु हीप्पालाक। धेनी ताकगो नाडदु जुरी थापगी ढाम्दु हुडाराड थापला मे भारकीनगो छोरती, धा दुरु मी होतालाक 'नेरी साम्दी खो होदुरु घुक्ती धेपालाक।

धेनी थुक्का नाडदु ख्योवागी, “केमी केमी डा फीन्डी स्योरकु झयीदी” 'नेवालाक। धेनी केमीगी “गाली तोडा” 'नेरी धेनी खी पी: 'नेरी चीमे च्यीक तावालाक। याड चीमे च्यीकने केमीगी ख्योवाला, “ख्योवा, ख्योवा डा फीन्डी स्योरकु झयीदी” 'नेरी ख्योवागीया: मोला गाली तोड 'नेवालाक।

धा मो 'मीच्यी फोवा भोरी भाड 'नेरी तावालाक। धेनी जामागोवा ग्येरी ताकगोवा 'नाम धीवा हीन्डु साम्दी ज्यी डोरी सोवालाक।

धा होदे डीमाने 'हाला ताकगो होदे युरु फुक्की लोक्ती मायोवालाक।

English: The Tiger and the Fart

Once upon a time, there was a village, and in that village people were troubled by a tiger who used to come and kill their animals and people, too. Now there was a couple in that village. One day they came home from working in the field, and the wife made a fire and started making bread. Now when it was about to be dark, they sensed the tiger in their front yard, so they immediately hid inside a big, clay pot. Then the tiger entered the

house. Seeing the fire in the mud stove, he knew that there were people here, so he waited there. Now inside the clay pot, the husband said to the wife, “Wife, wife, I need to fart.” And the wife said, “Then fart slowly.” And, *peeee*, he farted a small fart. Again, after a while, the wife said to the husband, “Husband, husband, I need to fart.” And the husband also told her to fart slowly. Now because her stomach was bloated, she farted with a *bang!* Then the clay pot cracked, and the tiger thought the sky was falling, so he ran far away. From that day on, the tiger never returned to that village.

APPENDIX B

Glossary

Gloss	IPA	Devanagari	Tibetan Script
geographical objects and features			
<i>regions below the surface of the earth</i>			
hell	ɲe˧˥we˧˥	‘ऊयाल्वा	དུལ་བ་
<i>heavenly bodies</i>			
moon	de˧˥e˧˥	धावा	ཐཱ་བ་
sky	ne˧˥m˧˥	‘नाम	གནམ་
star	ke˧˥r˧˥lme˧˥	कारमा	སྐར་མ་
sun	ɲi˧˥lme˧˥	डीमा	ཉི་མ་
world	dzem˧˥lɪŋ˧˥ / tsem˧˥lɪŋ˧˥	जाम्लीङ	འཇམ་བླ་སྤྱིང་
<i>the earth's surface</i>			
cave	pʰu˧˥	फु	ཕུག་
cliff	tʰe˧˥k˧˥	डाक	བླ་
earth, ground	se˧˥	सा	ས་
forest	ʃiŋ˧˥ne˧˥k˧˥	स्यीडनाक	ཤིང་ནགས་
hill	ri˧˥	री	རི་
jungle	ʃiŋ˧˥ne˧˥k˧˥	स्यीडनाक	ཤིང་ནགས་
land	se˧˥ʃi˧˥	साश्यी	ས་གཤི་
mountain	kʰeŋ˧˥ri˧˥	घाडरी	གངས་རི་
mountain pass	le˧˥	ला	ལ་
peak	tse˧˥	चे	ཅེ་

Gloss	IPA	Devanagari	Tibetan Script
valley	t ^h ɛŋ¹	थाङ	ཐང་
<i>depressions and holes</i>			
deep	tiŋ¹riŋ¹ɛ¹	तीङरीङा	གྲིང་རིང་ང་
hole	mi¹u¹	मीउ	མི་ལུ་
pit (hole)	toŋ¹doŋ¹	दोङ-दोङ	དོང་དོང་
shallow	tō¹tō¹	दोङ-दोङ	དོང་དོང་
<i>bodies of water</i>			
bubble	bo¹ɛ¹	बुवा	བུ་བ་
lake	ts ^h o¹	छो	མཚོ་
ocean	k'jem¹ts ^h o¹	ग्याछो	རྒྱ་མཚོ་
pond	tsi¹ü¹, tʃu¹mik¹	इयीडु, क्षुमीक	ཇིང་ལུ་, ཁུ་མིག་
pool	tsi¹ü¹	इयीडु	ཇིང་ལུ་
rapids; waves	bɛ¹lɛp¹	भालाप	བ་ལྷབས་
river	tsɛŋ¹bo¹	चाङपो	གཙང་པོ་
sea	ts ^h o¹	-	-
stream	k'jok¹tʃu¹	ग्युकक्षु	རྒྱལ་ཁུ་
<i>government administrative areas</i>			
border	sɛ¹ts ^h ɛ:m¹	साछाम	ས་མཚོམས་
<i>population centers</i>			
village	ju¹	यु	ཡུལ་
<i>pastures and cultivated lands</i>			
pasture	tsɛ¹t ^h ɛŋ¹	चाथाङ	ཙྰ་ཐང་
<i>thoroughfares: roads, streets, paths, etc.</i>			
road; way	lɛ:m¹	लाम	ལམ་ག་

Gloss	IPA	Devanagari	Tibetan Script
natural substances			
<i>elements</i>			
oil	mu-lkuɿ	मुगु	མུ་གུ་
kerosene	ʈʰuɿmu-lkuɿ	क्षुमुगु	ཁུ་མུ་གུ་
ray, beam	hø:ʔɿ	होक	འོད་
ashes	kok-ltʰɛ:ɿ	गोकथा	གོག་ཐལ་
fire	me:ɿ	मे	མེ་
smoke	tʰi-lpɛɿ	धीपा	དྱེད་པ་
water	ʈʰu:ɿ	क्षु	ཁུ་
water, hot boiled	ʈʰuɿ kʰo-lmɛɿ	क्षु खोमा	ཁུ་ཁོལ་མ་
<i>earth, mud, sand, rock</i>			
dust, dirt	tʰɛ-lɛɿ	थाला	ཐལ་ལ་
mud	dɛm-lbɛɿ	दाम्बा	འདམ་བག་
sand	p'e-lmɛɿ	भेमा	བྱེ་མ་
stone	t'o-lkoŋɿ	धोगोङ	དོ་གོང་
<i>precious and semiprecious stones and substances</i>			
onyx	s'iɿ	शी	གཟི་
copper	s'ɛŋɿ	शाङ	ཟངས་
gold	se:rɿ	सेर	གསེར་
iron	ʈʰɛ:kʰɿ	च्याक	ཕྱགས་
rust	jɛ:ɿ	या	ཡ་
silver	ŋo:ɿ	डु	དབུལ་
plants			
<i>plants (general meaning)</i>			
plant	ʈsi-lʃiŋɿ	चीस्यीड	ཅི་སྤེང་

Gloss	IPA	Devanagari	Tibetan Script
tree	t'ɔŋ-lbo¹	दोडबो	ཐོང་བོ་
<i>parts of trees</i>			
bark	ʃiŋ-lbək¹¹	स्यीडपाक	ཤིང་ལྗགས་
branch	je-lkɛ¹	याल्गा	ཡལ་ག་
flower	me-lto¹	मेतोक	མེ་རྟོག་
leaf	lo-lme¹	लोमा	ལོ་མ་
root	tse-lwɛ¹	चावा	ཙ་བ་
seed	dj-lβu¹	ढीउ	འབྲས་ལུ་
thorn	tsʰe-lme¹	छेरमा	ཚེར་མ་
tree trunk	t'ɔŋ-lme¹	दुडमा	ཐོང་མ་
<i>plants that are not trees</i>			
bamboo	noŋ-lme¹	‘ड्युडमा	ལྷུག་མ་
grass	tse:¹	चा	ཙ་
mushroom	ʃje-lmo¹	स्यामो	ཤ་མོ་
nettles	s'e:¹	शा	ཟ་
vine	kun-ltʃʰɛŋ¹	घुन्छ्याड	གུན་ཁང་
<i>fruit and fruit parts of plants</i>			
fruit	ʃiŋ-do?¹	स्यीडदोक	ཤིང་རྟོག་
banana	ke-lrɛ¹	केरा	ཀེ་ར་
apricot	tʃu-lɪ¹	चुली	ཅུ་ལི་
orange	tsʰe-lɪu-lme¹, siŋ-to-lɛ¹	छालुमा, सुडतोला	ཚེ་ལུ་མ་, སིང་རྟོ་ལ་
peach	kʰum-lbu¹	खाम्बु	ཁམ་ལུ་
peel (n)	kom-lbɛ¹	कोम्बा	ཀོམ་བ་
<i>vegetables</i>			

Gloss	IPA	Devanagari	Tibetan Script
<i>wood and wood products</i>			
firewood	ʃiŋ¹	स्यीड	ཤིང་
splinter	ʃiŋ¹gjo¹ʔ	स्यीडक्योक	ཤིང་ཁྱེག་
wood	ʃiŋ¹, t'on¹-mɛ¹	स्यीड, दुडमा	ཤིང་, རྩོང་མ་
animals			
<i>animals (domestic)</i>			
animals (domestic)	t'yn¹dɔ¹	धीडु	དུད་འཕྱོ་
animal	sem¹dʒɛn¹	सेम्चेन	སེམ་ཅན་
buffalo	mɛ¹li¹	माई	མ་ཉེ་
bull, ox	lon¹	‘लुङ	ལུང་
cat	p'ɛ¹	ब्ये	བེ་
cow	p'ɛ¹lɛŋ¹	भालाङ	བ་ལང་
dog	ki¹	की	ཁྱི་
donkey	p'uŋ¹	भोङ	བོང་
goat	rɛ¹	रा	ར་
horse	tɛ¹	ता	རྟ་
mule	t'ɛ¹ʔ¹	ड्ये	དེ་
pig	pʰɛk¹lɛ¹	फाक्पा	ཕག་པ་
sheep	luk¹	लुक	ལུག་
yak	jɛ:k¹	‘याक	གཡག་
<i>animals (wild)</i>			
animal (wild)	sem¹dʒɛn¹	सेम्चेन	སེམ་ཅན་
antlers	nɛ¹ʔ¹	‘ना	གནའ་
bat	pʰɛ¹tʃɔŋ¹ t'o¹ko¹rɛ¹	फायोङ ढोकोरा	ཕ་ཡོང་ཁྱོ་གོ་ར་
bear	t'om¹	दोम	དོམ་
crocodile	tʃʰu¹tʃiŋ¹	क्षुजीङ	ཁུ་ཤིན་

Gloss	IPA	Devanagari	Tibetan Script
deer	ʃe˧˥we˧˥	स्यावा	ཤ་བ་
dog (wild)	ki˧˥	की	ཁྱི་
elephant	leŋ˧˥bo˧˥tʃʰe˧˥	लाडपोक्षे	ལྷང་པོ་ཆེན་
jackal	ʃe˧˥lo˧˥we˧˥	स्याल्लोवा	ཤ་ལོ་བ་
leopard	sʰik˧˥	शीक	གཟིག་
mongoose	pʰe˧˥	फे	ཐེ་
monkey	pi˧˥tu˧˥	पीउ	པིཊ་
rat	pʰu˧˥dʒi˧˥ / pʰu˧˥tʒi˧˥	फुची	ཕུ་ཤེ་
squirrel	kʰe˧˥le˧˥ri˧˥	ग्येलारी	གེ་ལ་རི་
tiger	tək˧˥	ताक	རྟ་ག་
wolf	tʃuŋ˧˥ku˧˥	च्याडकी	ལྷུང་གི་
<i>parts of animals</i>			
claw	tʰe˧˥mo˧˥	देमो	ཐེར་མོ་
hoof	re˧˥lo˧˥	रावु	ར་བུ་
horns	re˧˥kjo˧˥kʰo˧˥	राक्योक	ར་རྟོག་
snout	ne˧˥toŋ˧˥	नातोड	སྐ་གཏོང་
tail	ŋe˧˥me˧˥	डामा	ང་མ་
whiskers	me˧˥re˧˥	मारा	མེ་ར་
<i>birds</i>			
bird	tʃʰe˧˥	इया	ཅ་
chick	tʃʰip˧˥tʰu˧˥	ज्यीप्टुक	ཅིཊ་ཐུག་
chicken (hen)	tʃʰe˧˥mo˧˥	इयामो	ཅ་མོ་
crow	kʰo˧˥trok˧˥	खोरोक	ཁོ་རོག་
duck	ŋe˧˥pʰe˧˥	डाडपा	ངང་པ་
eagle	tʃʰe˧˥kø˧˥	इयागो	ཅ་ཁྱོད་
egg	kʰo˧˥ŋe˧˥	घोडा	གློ་ང་

Gloss	IPA	Devanagari	Tibetan Script
hen	tʃʰe-lmoɿ	-	བྱ་མོ་
owl	hoʔ-peɿ	हुक्पा	འུག་པ་
rooster	tʃʰe-loɿ	इयाउ	བྱཱ་
<i>parts of birds</i>			
beak	tʃuʰtoɿ	छुतो	མཚུ་རྟི་
crest (of bird or wild boar)	s'eɿweɿ	शेवा	ཟེ་བ་
feather	tʃʰe-ltokʰɿ	इयाढोक	བྱ་ཐོག་
wings of a bird	ʃokʰɿpeɿ	स्योकपा	གཤོག་པ་
<i>insects</i>			
insects	buɿ	बु	འབྲུ་
ant	tʰeɿ nokʰɿpeɿ	डा ंड्योकपा	ཤ་རྟོག་པ་
bed bug	tʰiɿʃikʰɿ	ढीस्यीक	འདྲེ་ཤིག་
bee	tʰeɿɱbuɿ	ढाडबु	ཐྱང་བྱ་
body louse	ʃikʰɿ	स्यीक	ཤིག་
butterfly	pʰeɿliɱmeɿ	फीलीडमा	ཕི་ཁིང་མ་
caterpillar	buɿ puɿsokʰɿ	बु पुसोक	འབྲུ་ཐུ་སོག་
centipede	buɿ keɱɿ kʰjeɿpeɿ	बु काड ग्यापा	འབྲུ་རྒྱང་བརྒྱ་པ་
firefly	reɱɱmeɿ	राडमा	རང་མ་
flea	kiɿʒikʰɿpeɿ	कीस्यीक्पा	ཁྱི་ཤིག་པ་
grasshopper	ʔiɿliɿ tʃʰekʰɿtʃʰekʰɿ	ईली चाक्चाक	ཞི་ལི་ཚག་ཚག་
honey	tʰeɿɱtsiɿ	ढाडची	ཐྱང་ཅི་
houseflies	reɱɱmeɿ	राडमा	རང་མ་
louse	ʃikʰɿ	स्यीक	ཤིག་
mosquito	tʰokʰɿ-tʰeɱɱ	दुक्ढाड	དུག་ཐྱང་
scorpion	tʰikʰɿpeɿreɱɱtseɿ	धीक्पाराचा	ཐྱིག་པ་ར་ཅ་
spider	buɿtomɿ	बु दोम	འབྲུ་ཐོམ་

Gloss	IPA	Devanagari	Tibetan Script
spider web	tom-kɪɫ tsʰɛŋɫ	दोमगी छाड	ཐོམ་གྱི་ཚང་
tick	kiɫʃikɫ	कीस्यीक	ཁྱི་ཤིག་
wasp	tʰɛŋ-lbuɫ	ढाडबु	ཐྱང་བུ་
worm	buɫ	बु	འབུ་
<i>reptiles and other creeping things</i>			
frog	bɛɫwɛɫ	भावा	ཐལ་བ་
wild lizard	ʔuɫmeɫjɛɫ	उमेया	དབུ་མེ་བ་
shell	ɲɛ-sokɫ, bøɫkjoɫ	ड्यासोक, भोक्चोक	ཉ་སོག་, འབུ་ཁྱེག་
snail	buɫtoŋɫ	बुदोड	འབུ་དོང་
snake	buɫtʰulɫ	बुडुल	འབུ་སྐལ་
tortoise	ruɫbilɫ	रुबेल	རུས་ཐལ་
<i>fish and other sea creatures</i>			
crab	tʰɛkɫɫ rɪŋɫ	दीक रीन	ཐྱིག་ཐིན་
fish	ɲɛɫ	ड्या	ཉ་
<i>animal homes</i>			
den	siŋɫkeɫ tsʰɛŋɫ	सीङगेगी छाड	སིང་གེའི་ཚང་
nest	tʃʰɛɫtsʰɛŋɫ	इयाछाड	བྱ་ཚང་
foods and condiments			
<i>food (cooked and uncooked)</i>			
bread	kʲjɛŋɫ-gɛɫ, kʲjɛŋɫ	ग्याङगा, ग्याङ	གྱང་ག་, གྱང་
curry	pɛɫɫ	पा	པག་ཙ་
food	sʰɛɫmeɫ	शामा	ཟ་མ་
gravy; juice	kʰuɫwɛɫ	खुवा	ཁུ་བ་
rice (cooked); food	hɛɫpɛɫ tʰɛɫ	हाबा डे	ཧ་པ་འབྲས་
snack (n)	dʒɛɫɾɛɫ	जारा	ཇོ་ར་

Gloss	IPA	Devanagari	Tibetan Script
uncooked	meːt͡sʰø˧lɡɪn˧, me˧t͡sø˧t͡sɐ˧	‘माछोगीन, ‘माचोचा	མ་འཚོས་ཀྱིན་, མ་བཅོས་ཅ
<i>meat</i>			
some meat	ʃɐ˧ re˧	स्या रे	ཤ་རེས་
beef	lɛŋ˧ʃɐ˧	‘लाडस्या	སྤང་ཤ་
fat	t͡sʰi˧lɪu˧?	छीलुक	ཚེལ་ལུག་
meat	ʃɐ˧	स्या	ཤ་
pork	pʰɛk˧ʃɐ˧	फाक्स्या	ཕག་ཤ་
<i>dairy products</i>			
butter	me˧	मा	མར་
yoghurt, curd	ʃjo˧	श्यो	ཞོ་
<i>spices</i>			
spices	me˧lne˧	‘मेन्ना	སྤོན་མ་
salt	t͡sʰɛ˧	छा	མོ་
sugar	t͡ʃɪ˧ni˧, ke˧lre˧	चीनी, कारा	ཅི་ནི་, ཀ་ར་
turmeric	be˧sɛr˧	भेसार	བེ་སར་
yeast (brewing)	pʰɛp˧	फाब	ཕབས་
<i>drink</i>			
buttermilk	tʰɛ˧lre˧	दारा	སྤོར་
milk	ho˧lme˧	होमा	འོ་མ་
tea	t͡ʃɛ˧	इया	ཇ་
wine; beer	t͡ʃʰɛŋ˧	छ्याङ	ཇང་
artifacts			
<i>instruments used in agriculture and husbandry</i>			
artifacts	lek˧˧t͡ʃɛ˧	लाक्चा	ལག་རྩལ་

Gloss	IPA	Devanagari	Tibetan Script
axe	tiɫriɫ	तीरी	ཐྱི་རི་
saddle	k'ɛɫ	गा	ག་
sickle	s'oɫɾɛɫ	शोरा	ཤོ་ར་
small knife	tʰiɫtʃiɫmeʔɫ	ढीचीमे	ཐྱི་ཅི་མེ་
traps, snares	nɪpɿkɕɛʔɫ	‘डीपक्या	ཉི་ཀྱ་
trap	nɪpɿɫ	‘डीप	ཉི་
<i>weapons and armor</i>			
arrow	dɛɫ	दा	མདའ་
bow (archery)	ʃ'uɫ	शु	གཞུ་
bullet	diɫuɫ	दीउ	མདེའུ་
gun	mɛɳɫdɛɫ	मेन्दा	མེ་མདའ་
gunpowder	dʒɛɫ	जा	རྩ་
knife	t'iɫ	ढी	ཐྱི་
stick	p'eɫkjoʔɫ	भेक्योक	བེ་ཁྱོག་
<i>boats and parts of boats</i>			
boat	t'uɫ	डु	ཐུ་
<i>instruments used in marking and writing</i>			
glue	tʃ'ɛɾɫtsiʔɫ	ज्यारची	འཇུར་ཅི་
ink	nɛkɿtsʰɛɫ	‘नाक्छा	རྩལ་ཁ་
seal; imprint	tʰɛɫtseɫ	थेचे	ཐེལ་ཅེ་
<i>musical instruments</i>			
cymbal	rokɿmoɫ	रोक्मो	རོག་མོ་
drum	ɳɛɫ	‘डा	རྩ་
<i>images, idols, and religious artifacts</i>			

Gloss	IPA	Devanagari	Tibetan Script
amulet, talisman	ɾoŋ˥˩we˥˩	रुडा	ཐུང་བ་
dance (mask)	bək˥˩-tʃʰem˥˩	भाक्छाम	འབག་འཆམ་
dough effigy	tor˥˩me˥˩	तोरमा	ཏོར་མ་
image [hon]	lʰe˥˩	ल्हा	ལྷ་
incense	pø˥˩, səŋ˥˩	पो, साङ	ཐོས་, བསང་
mask	bək˥˩	भाक	འབག་
offertory vessel [sacred water]	p'um˥˩-be˥˩	भुम्पा	བུམ་པ་
offertory vessel [oil lamp]	ʔuŋ˥˩gu˥˩	उङ्गु	དབུང་གུ་
offertory vessel [water bowl]	t'un˥˩-dzɛ˥˩	दुन्जा	དུན་ཙ་
prayer flag	tʰɛ˥˩-dʒo˥˩ʔ˥˩	दारच्योक	དར་ཚུག་
prayer wheel [handheld]	mɛ˥˩-ni˥˩	मानी	མ་ནི་
rosary	tʰɛ˥˩ŋe˥˩	ठाडा	ཐེང་ང་
<i>containers</i>			
bag (for small things)	pʰe˥˩ki˥˩ʔ˥˩, bɛ˥˩-kʰu˥˩	फेकी, -	ཐེ་གི་, -
purse	kʰu˥˩ma˥˩	खुमा	ཁུམ་མ་
bag for grains	ʃek˥˩-pʰe˥˩	याक्फे	གཡག་ཐེ་
bag [generic]	dʒo˥˩-le˥˩	जोला	ཇོ་ལ་
balloon	pʰu˥˩kɛ˥˩	फुकका	ཕུ་ཀ་
basket (bamboo)	s'ɛ˥˩-me˥˩	शेमा	གཟེང་མ་
basket (large bamboo carrying)	kom˥˩be˥˩	कोम्बा	ཀོམ་པ་
box	k'em˥˩	गाम	སྐམ་
cover [lid]	kʰɛp˥˩-tʃo˥˩	खापस्यो	ཁབས་ཇོ་
cupboard	tʃ'e˥˩-gem˥˩	ज्येगाम	རྩ་སྐམ་
shelf	p'ɛŋ˥˩-tʃi˥˩	भाडठी	བང་ཁྱི་

Gloss	IPA	Devanagari	Tibetan Script
<i>cloth, clothing, and leather</i>			
cloth	re˧	रे	རས་
clothes	k'o˧˥lok˧˥	घोलोक	གོས་ལོག་
ethnic dress	k'ɤ˧	घो	གོས་ ལུ་ཇེ་
hat [honorific]	ʔu˧˥ʃe˧	उस्या	དབུ་ལྗ་
hat, cap	ʃ'e˧˥mo˧	श्यामो	ལྗ་མོ་
leather	ko˧˥we˧	कोवा	ཀོ་བ་
loom	tʰi˧˥dze˧	ठीजे	ཁྱིཛེ་
needle	kʰe˧˥p˧˥	खाप	ཁཔ་
pillow	ɲe˧˥ko˧˥, ɲe˧˥	‘ङ्येगो, ‘ङ्ये	ལྷས་མགོ་, ལྷས་
scarf	kʰe˧˥tʰi˧	खाटी	ཁ་དགྱིས་
shawl; bed spread	tʃe˧˥der˧	च्यादार	ཅ་དར་
shirt	to˧˥tse˧	तोचे	ཁྱོད་ཅེ་
shoe [one of a pair]	po˧˥le˧ ɲe˧˥˥ tʃik˧˥	पोले या च्यीक	པོ་ལེ་ཡ་གཅིག་
shoes	po˧˥le˧	पोले	པོ་ལེ་
shoes (traditional)	s'om˧˥˥pe˧	शोम्पा	མོམ་པ་
shoes (honorific)	ʃ'jɛ˧˥˥pʰem˧	श्याप्हाम	ཞལས་ལྷམ་
string	tʰek˧˥˥pe˧	थाक्पा	ཐག་པ་
thread	ku˧˥pʰe˧	कुपा	ཁུད་པ་
trousers	ke˧˥num˧	केनुम	ཀེད་སུམ་
wool	p'ɛ˧˥	भा	བལ་
<i>adornments</i>			
bracelet	dip˧˥	दीप	གདིབ་
earring	ʔe˧˥˥lon˧	आलोङ	ཨ་ལོང་
necklace	ɲɛ˧˥˥k˧˥˥te˧	ङ्याक्ता	ཉག་ཐག་
ring	so˧˥˥top˧˥	सोतोप	སོར་གདུབ་
<i>plant products</i>			

Gloss	IPA	Devanagari	Tibetan Script
cane (sugar)	k'u-ɭɿŋɿ	घुशयीङ	གུ་ཤིང་
mat	tɛnɿ	तेन	གངན་
mat (rice)	tsɛ¹tenɿ	चातेन	ཚཱ་གངན་
thatch (weave)	tsɛ¹tʰoʔɿ	चाथोक	ཚཱ་ཐོག་
<i>medicines</i>			
medicine	mɛnɿ	मेन	མེན་
poison	tʰukɿ	दुक	དུག་
<i>instruments used in the home</i>			
broom	tʃʰɛ¹mɛɿ	छ्याक्मा	ཉི་མོ་ ལྷགས་མ་
chopping block	ʃɛ¹tenɿ	स्येतेन	
cup (wooden)	pʰo¹rɛɿ	फोरा	ཕོར་ར་
cup (glass)	kɛ¹iɿ	काई	ཀ་རི་
lock	k'on-ɿdʒɛkɿ	घोन्च्याक	གྲོ་ལྷགས་
mill stone	tʰɛkɿ¹toɿ	थाक्धो	ཐག་རྩོ་
mortar	tyn¹boɿ / tym¹boɿ	तीन्बो	གཏུན་པོ་
pestle	jy-ɿtɔnɿ	युतीन	ཡུ་གཏུན་
pot (steel)	hɛ¹jɛŋɿ	हायाङ	ཏ་ཡང་
pot (earthenware)	ts'ɛ-ɿmɛɿ	जामा	རྩ་མ་
tray (bamboo winnowing)	lo¹mɛɿ	लोमा	ལྷོལ་མ་
<i>miscellaneous</i>			
camera	pɛr¹tʃʰɛɿ	पारक्षे	པར་ཆས་
comb	ʃikɿ¹tʃɛɿ	स्यीक्स्ये / स्यीक्ये	ཤིག་ཤང་
dice	ʃoɿ	स्यो	ཤོ་
hammer	tʰo¹wɛɿ	थोवा	ཐོ་བ་
picture	pɛɽɿ	पार	པར་
rope	tʰɛkɿ¹pɛɿ	थाक्पा	ཐག་པ་

Gloss	IPA	Devanagari	Tibetan Script
tub	tʰyɿʃoŋɿ	ठीशयोङ	ཁུས་གཞོང་
constructions			
<i>buildings</i>			
buildings	kʰeŋɿpeɿ	खाङपा	ཁང་པ་
house	kʰeɿŋpeɿ, nɛŋɿ	खाङपा, नाङ	ཁང་པ་, འང་
house [honorific]	sʰimɿkʰeŋɿ	शीम्खाङ	གཟིམས་ཁང་
monastery	kʰomɿpeɿ	घोम्पा	དགོན་པ་
monastery (central) (where students live)	tʰɛɿtsʰeŋɿ	ढा छाङ	གྲ་ཚང་
office	leɿkʰuŋɿ	लेखुङ	ལས་ཁུངས་
palace	pʰoɿtʰeŋɿ, kʰjɛɿkʰeŋɿ	फोडाङ, ग्याखाङ	པོ་བྲང་, རྒྱལ་ཁང་
prison	tsənɿkʰeŋɿ	चोन्खाङ	ནེཾན་ཁང་
restaurant	sʰɛɿkʰeŋɿ	शाखाङ	ཟ་ཁང་
school	lopɿtʰeɿ	लोप्टा	སློབ་གྲྭ་
shop	tsʰoɿkʰeŋɿ	छोङखाङ	ཚོང་ཁང་
temple	lʰeɿkʰeŋɿ, tʰʃoɿkʰeŋɿ	ल्हाखाङ, क्षोखाङ	ལྷ་ཁང་, མཆོད་ཁང་
<i>parts and areas of buildings</i>			
bathroom	tʰyɿkʰeŋɿ	ठुखाङ	ཁུས་ཁང་
door	kʰoɿɿ	घो	གྲོ་
fence (generic)	bɛɿɿ	भार	བར་
floor	seɿ	सा	ས་
kitchen	tʰepɿɿzɛŋɿ	थाब्जाङ	ཐབ་ཚང་
ladder	tɛɿweɿ	टेवा	རྒྱས་བ་
oven, stove	tʰepɿɿ	थाप	ཐབ་
pillar	keɿɿ	काः	ཀ་བ་
roof	tʰokɿɿ	थोक	ཐོག་

Gloss	IPA	Devanagari	Tibetan Script
stairs	t ^h eɿpeɿ	थेबा	ཐེ་བ་
wall	tsik ^ʰ ɿpeɿ, k'jɛŋɿ	चीकपा, ग्याङ	ཅིག་པ་, གྲང་
window	k ^h uŋɿ	खुङ	ཁུང་
<i>miscellaneous constructions</i>			
bridge	s'ɛmɿpeɿ	शाम्पा	ཟམ་པ་
stone wall	tsik ^ʰ ɿpeɿ	चीकपा	ཅིག་པ་
tent	k'urɿ	घुर	གུར་
body, body parts, and body products			
<i>body</i>			
body	s'uɿ	शु	གཟུགས་
body [honorific]	kuɿsuk ^ʰ	कुसुक	སྐྱ་གཟུགས་
honorific prefix for parts of the body	kuɿ	कु	སྐྱ་
<i>parts of the body</i>			
ankle	kɛŋɿts ^h ik ^ʰ	काङ्छीक	ཀང་ཚེགས་
arm	puŋɿbeɿ	पुङपा	དཔུང་པ་
back (the whole)	k'jɛɿkonɿ	ग्याकुङ	རྒྱུ་གོང་
backbone	k'jɛɿbryɿ	ग्यापरी	རྒྱུ་ཐུས་
beard	k ^h eɿpuɿ	खापु	ཁ་ཐུ་
belly, abdomen	t ^ʰ ɔɿpeɿ	ढोपा	ཐོང་པ་
bone	roɿkɔk ^ʰ	रुकोक	རུས་ཀོག་
breast	hɔɿmeɿ	होमा	འོ་མ་
buttocks	kup ^ʰ	कुप	རྒྱུ་པ་
cheek	dɛmɿbeɿ	डाम्पा	འགྲམ་པ་
chest	t ^ʰ ɛŋɿkoɿ	ढाङगो	བང་ཁོག་
chin	mɛɿleɿ	माले	མ་ལེ་

Gloss	IPA	Devanagari	Tibetan Script
ear	ʔeɪmdʒoʔɿ	आम्जोक	མཇམ་འཇོག་
elbow	tʰuɪmoɪ	डुमो	བྱ་མོ་
eye	mikɿ	मीक	མིག་
eyebrow	mikɿtpuɿ	मीकपु	མིག་ཐུ་
face	ŋoɪdoŋɿ	डोदोङ	ངོ་གདོང་
face [honorific]	ʃjɛɪɿ	श्या	ཞལ་
finger	dzuɿ	जु	མཇུ་བ་
finger nail	seɪmoɪ	सेमो	གཟེར་མོ་
foot	kɛŋɪbɛɿ	काङपा	ཀང་པ་
forehead	tʰeɪpɛɿ	थेपा	ཐོད་པ་
hair	rɛɿ	रा	རྩ་
hair (body)	pʰuɿ	पु	ཐུ་
hand	lɛkɿpɛɿ	लाक्पा	ལག་པ་
hand [honorific]	tʃʰɛkɿ	क्षाक	ལྷག་
head	goɿ	गो	མགོ་
head [honorific]	ʔuɿ	उ	དབུ་
heel	tiŋɪpɛɿ	तीङपा	རྟིང་པ་
hips	piɿ	पी	དཔེ་
jaw	dɛmɪryɿ	डाम्री	བཤམ་རུས་
joints	tsʰikɿ	छीक	ཚིགས་
knee	piɪmoɪ	पीमो	ཐུས་མོ་
leg	kɛŋɪpɛɿ	काङपा	ཀང་པ་
leg (lower)	ɲɛɪkɛŋɿ	ड्याकाङ	ཉ་ཀང་
leg [honorific]	ʃjɛpɿ	श्याप	ཞབས་
lip	poɪtoɿ	पोत्तो	པོ་རྟོ་
moustache	mɛɪrɛɿ	मारा	མཱ་ར་
mouth	kʰɛɿ	खा	ཁ་
navel	deɿ	द्ये	ཐྱེ་

Gloss	IPA	Devanagari	Tibetan Script
neck	mik̚˥˩pe˥˩, ɲɛk̚˥˩tse˥˩	मीकपा, ‘ड्याक्चा	མིང་པ་, ནྟག་ཙྰ
neck (back of)	tɛk̚˥˩pe˥˩	ताकपा	ལྷག་པ་
neck (front of)	mik̚˥˩pe˥˩	मीकपा	མིང་པ་
neck [honorific]	ɲon̥˥˩ke˥˩	‘ड्योनक्ये	ནོན་ཀླེ་
nose	nɛ˥˩, nɛ˥˩ki˥˩	‘ना, ‘नाकी	སྒ་, སྒ་ཀླེ་
palm	lɛk̚˥˩pe˥˩ tʰi˥˩	लाक्ये थी	ལག་པའི་མཐེལ་
ribs	tsik̚˥˩lme˥˩	चीकमा	ཅིབས་མ་
shin	ɲɛ˥˩kɛɲ˥˩	ड्याकाङ	ན་རྒྱང་
shoulder	tʰɛk̚˥˩pe˥˩	ठाकपा	ཐླག་པ་
skin	pe˥˩lu˥˩	पाउ	པགས་པོ་
stomach	pʰo˥˩tɛ˥˩, tʰɔ˥˩pe˥˩	फोवा, ढोपा	པོ་པ་, རྫོང་པ་
thigh	lɛ˥˩ʒɛ˥˩	‘लास्या	བཟ་ཤ་
throat	mik̚˥˩pe˥˩	मीकपा	མིང་པ་
thumb	tʰɛ˥˩lu˥˩	थेउ	མཐེ་པོ་
tongue	tʃɛ˥˩mo˥˩	च्येमो	ལྷེ་མོ་
tooth	so˥˩	सो	སོ་
waist	ke˥˩pe˥˩	केपा	ཀེང་པ་
<i>physiological products of the body</i>			
blood	tʰɛk̚˥˩	ठाक	ཐླག་
blood [honorific]	ku˥˩tʰɛk̚˥˩	कुठाक	སྐུ་ཐླག་
earwax	nek̚˥˩lɔŋ˥˩	‘नाक्लुङ	ནྟག་ལྷང་
feces	kɲɛk̚˥˩pe˥˩	क्याकपा	སྐྱག་པ་
pus	nek̚˥˩	‘नाक	ནྟག་
snot	nɛp̚˥˩	‘नाब	སྒ་བས་
sweat	ɲu˥˩nɛk̚˥˩	‘डुनाक	རྩལ་ནྟག་
tear	tʃʰi˥˩lme˥˩	क्षीमा	མཆི་མ་
urine	tʃiŋ˥˩	च्यीड	གཅིན་

Gloss	IPA	Devanagari	Tibetan Script
<i>organs of the body</i>			
brain	leʔpeʌ	लेपा	ལྷན་པ་
heart	niŋʌ	डीङ	སྡིང་
intestines	kʲju-ɫmɛʌ	ग्युमा	རྩུ་མ་
kidney	kʰɛʔmɛʌ	खामा	མཁལ་མ་
liver	ʈʂʰimʔbeʌ	क्षीन्बा	མཆིན་པ་
lung	loʔweʌ	लोवा	ལྷོ་བ་
nerve	tseʌ	चा	ཙ་
spleen	ʈʂʰerʔpeʌ	क्षेरपा	མཆེར་པ་
vein	tseʌ	चा	ཙ་
people			
<i>human beings</i>			
corpse	roʌ, pʰoŋʔboʌ	रो, फुडबु	རོ་, སུང་པོ་
old (human)	kʲje-ɫpoʌ, kʲje-ɫmoʌ	घ्येपो, घ्येमो	གྱེ་པོ་, གྱེ་མོ་
person	miʌ	मी	མི་
single; by oneself (masc)	pʰoʔrɛʌ	फोराङ	པོ་རང་
single; by oneself (fem)	moʔrɛʔmɛʌ	मोराङमा	མོ་རང་
young (general)	ʃʰøʔmpɛʌ	श्योम्पा	གཤོན་པ་
young (male)	kʰjokʔʔtoŋʌ	ख्योक्तोङ	ཁྱོག་རྟོང་
young (female)	nuʔʒuŋʔmɛʌ	नुज्युङमा	ནེ་རྩུ་མ་
<i>males</i>			
bachelor	pʰoʔrɛʌ	फोराङ	པོ་རང་
man	keʔweʔ cʰweʔ	केवे ख्योवा	ཆེས་བཞི་ཁྱོག་
man (old)	kʲje-ɫpoʌ	घ्येपो	གྱེ་པོ་
<i>females</i>			

Gloss	IPA	Devanagari	Tibetan Script
bachelorette	mo-lr̥e-lmeɳ	मोराडमा	མོ་རང་མ་
woman	ke-lmeɳ	केमी	ཚུམ་དམན་
woman (old)	k'je-lmoɳ	घ्येमो	ནུས་མོ་
<i>children</i>			
baby	tʰuɫ me-lnjeɳkʰɫ	टु 'माझ्याक	ཐུ་མ་ཉག་
boy	p'i-lzeɳ	भीजा	བི་ཇ་
child	tuɳ	टु	ཐུ་
girl	p'o-lmoɳ	भोमो	བུ་མོ་
son; lad; boy	p'i-lzeɳ	भीजा	བི་ཇ་
<i>persons for whom there is affectionate concern</i>			
friend (close)	ro-lweɳ	रोक्चा	རོགས་པ་
kinship terms			
<i>groups and members of groups of persons regarded as related by blood but without special reference to successive generations</i>			
household member (opposite of a guest)	neɳ-lmiɳ	नाडमी	ནང་མི་
<i>kinship relations involving successive generations</i>			
daughter	p'o-lmoɳ	भोमो	བུ་མོ་
father	ʔe-lkeɳ	आके	ཨ་ཁྱེ་
father [honorific]	jɛpʰɫ	याप	ཡཔ་
forefather	t'ɛɳ-lbuɫ me-lmeɳ	घाडबो मेमे	དང་པོ་མེ་མེ་
granddaughter	tsʰɛ-lmoɳ	छामो	ཚ་མོ་
grandson	tsʰɛ-lɔɳ	छाउ	ཚ་པོ་
mother	ʔe-lmeɳ	आमा	ཨ་མ་
mother [honorific]	juɳ	युम	ཡུམ་
nephew	tsʰo-luɳ	छाउ	ཚ་པོ་

Gloss	IPA	Devanagari	Tibetan Script
niece	ts ^h e ¹ mo ¹	छामो	མ་མོ་
parents	p ^h e ¹ me ¹	फामा	ཕ་མ་
race, lineage	k'jy ¹ -pe ¹ , rik ¹ -lkju ¹	ग्युपा, रीग्यु	རྒྱུད་པ་, རིགས་རྒྱུད་
<i>kinship relations of the same generation</i>			
brother (older)	?e ¹ zo ¹	आज्यो	ཨ་ཇོ་
brother (younger)	no ¹	नो	བུ་པོ་
cousin	pøŋ ¹ gje ¹	पीनया	ཕུན་ཀྱ་
siblings	pøn ¹	पीन	ཕུན་
sister, older	?i ¹ zi ¹	ईज्यी	ཨ་ཇི་
sister, younger	nu ¹ -mo ¹	नुमो	བུ་མོ་
<i>kinship relations based upon marriage</i>			
bride	ne ¹ me ¹	नामा	མཚན་མ་
bride groom	mek ¹ -pe ¹	माक्पा	མག་པ་
husband	c ^h jo ¹ we ¹	ख्योवा	ཁྱོ་ག་
stepfather	?u ¹	उ	བུཊ་
stepmother	?e ¹ me ¹ me ¹ -jok ¹ -me ¹	आमा मायोक्मा	ཨ་མ་མ་གཡོག་མ་
wife	kje ¹ mi ¹	केमी	ཁྱེས་དམན་
groups and classes of persons			
<i>general</i>			
beggar	lon ¹ gen ¹	लोङगेन	སྒོང་མཁན་
buyer	no ¹ -ken ¹	ङ्योकेन	ཉོ་མཁན་
enemy	t'e ¹	डा	དག་
farmer	ʃ'in ¹ -pe ¹	शयीङपा	ཞིང་པ་
guest	dø ¹ -bo ¹	ढोन्पो	མགོན་པོ་
herdsman	ts'i ¹ -u ¹	जीउ	རྩི་པོ་

Gloss	IPA	Devanagari	Tibetan Script
limping, lame	kɛŋ˥kjok˨˩, ʃ˥ɛ˨˩kjok˨˩	काङक्योक, श्याक्योक	ཁང་ཀྱོག་, -
porter	ku˥li˨˩	कुली	གུ་ལི་
servant	jok˨˩˥po˨˩	‘योक्पो	གཡོག་པོ་
sick person	nɛ˨˩˥pɛ˨˩	नेपा	ནད་པ་
thief	ku˥mɛ˨˩	कुमा	རྒྱུན་མ་
<i>socio-religious</i>			
abbot	kʰɛm˥po˨˩	खेन्यो	མཁན་པོ་
adept, expert	kʰɛ˥wɛ˨˩	खेवा	མཁས་པ་
astrologer	tsi˥˩pɛ˨˩	चीपा	ཇེས་པ་
gelong	tʰɛ˥˩wɛ˨˩	ढावा	ཤྱ་པ་
lama	lɛ˥˩mɛ˨˩	‘लामा	ལྷ་མ་
monk	tʰɛ˥˩wɛ˨˩	ढावा	ཤྱ་པ་
shaman; ritual healer	ŋɛk˨˩˥pɛ˨˩	‘डाक्पा	ཐྱགས་པ་
teacher	kʰɛ˥˩kɛn˨˩	गेघेन	དགོ་མཁན་
<i>socio-political</i>			
king	kʰjɛ˥˩lu˨˩	ग्यावो	རྒྱལ་པོ་
lord, chief	tso˥˩wo˨˩, pɔm˥˩po˨˩	चोवो, पोन्यो	གཙོ་པོ་, དཔོན་པོ་
nobleman	ku˥˩tɛk˨˩	कुडाक	སྤྱངས་
prince	rɛ˥˩lu˨˩	‘रेउ	སྲས་པོ་
princess	rɛ˥˩mo˨˩	‘रेमो	སྲས་མོ་
soldier	mɛk˨˩˥mi˨˩	‘माक्मी	དམག་མི་
<i>ethnic-cultural</i>			
blacksmith	gɛ˥˩rɛ˨˩	घारा	མགར་ར་
carpenter	ʃiŋ˥˩tso˥˩wɛ˨˩	स्यीडचोवा	ཤིང་བཅོ་པ་
donor; boss	tʃiŋ˥˩dɛk˨˩	ज्यीन्दाक	ཕྱིན་བདག་

Gloss	IPA	Devanagari	Tibetan Script
hero	hi˧ro˨	हीरो	དི་རོ་
hunter	kʰi˧rɛ˧tʰwɛ˨	खयीरावा	ཁྱི་ར་བ་
owner, master	tʰɛ˧-kʰpo˨	दाक्पो	བདག་པོ་
supernatural beings and powers			
<i>supernatural beings</i>			
demon, devil	dɛ˧	ढे	འདྲེ་
dragon	duk˧˥	डुक	འབྲུག་
ghost	ty˧˥	धी	བདུད་
god	kən˧tʃʰɔ˧˥	कोन्क्षोक	དགོན་མཆོག་
spirit	sem˧ɲi˨	सेम्डी	སེམས་ཉིད་
be, become, exist, happen			
<i>state</i>			
be (v)	jm˧	यीन	ཡིན་
<i>change of state</i>			
change, convert (v)	gɲyr˧	ग्युर	འགྱུར་
physical events and states			
<i>weather</i>			
clear, clean, crisp (weather)	tʰɛŋ˧-mɛ˨, tsɛŋ˧-mɛ˨	दाडमा, चाडमा	དངས་མ་, གཙང་མ་
cloud	ɲiŋ˧pɛ˨	रीडपा	རྩིན་པ་
cold (weather)	tʰɛŋ˧-mo˨	ढाडमो	གང་མོ་
cool	si˧lɛ˨	सीला	བསིལ་ལ་
fog	mok˧˥tʰpɛ˨	मुक्पा	མུག་པ་
hot (weather)	tsʰɛ˧tʰbɛ˨	छाबा	ཚ་བ་
warmth	tʰɛ˧-mo˨	ढोमो	དྲོ་མོ་
wind	loŋ˧tʰbo˨	लुङबु	རྒྱང་བོ་

Gloss	IPA	Devanagari	Tibetan Script
rain	tʃe¹we¹	क्षावा	ཆར་བ་
hail	se¹re¹	सेरा	ཤེར་ར་
rain	tʃʰe¹we¹	क्षावा	ཆར་བ་
rain (v)	tʃʰe¹we¹ be¹bje¹	क्षावा भाप्ये	ཆར་བ་འབབ་ཡས་
snow	kʰe:¹	खाः	ཁ་བ་
<i>thunder and lightning</i>			
lightning	lok¹¹me¹	लोकमार	ལྷོག་དམར་
storm	tʃʰe¹lloŋ¹	क्षारलुङ	ཆར་རྒྱུང་
thunder	du¹ke¹	डुक्के	འབྲུག་རྒྱུང་
<i>events involving liquids and dry masses</i>			
boil (v)	kʰo¹je¹	खोये	ཁོལ་ཡས་
dew	s'i¹pe¹	शीवा	ཟླེལ་བ་
dissipate (v)	je¹je¹	येये	ཡལ་ཡས་
drip (v)	tʰik¹¹pe¹ tʰe¹je¹	थीक्पा थीक्ये	ཐིག་པ་ཐིག་ཡས་
frost	p'ɛ¹mo¹	बामो	བ་མོ་
melt (v)	ʃ'u¹je¹	श्युये	བཞུ་ཡས་
steam	le¹we¹	लावा	ལྷངས་བ་
light	hø¹¹	हो	འོད་
lighten (v)	jeŋ¹tu¹ tɛŋ¹je¹	याङदु ताङये	ཡང་དུ་གཏོང་བ་
rainbow	dʒɛ¹	जा	འཇའ་
darkness	mi¹nɛk¹¹pe¹	मीनाक्पा	མུན་ནག་པ་
burning	tsʰik¹¹je¹	छीक्ये	འཚོགས་ཡས་
burn (v)	rɛk¹¹je¹	राक्ये	སྒག་ཡས་
<i>movement of the earth</i>			
dawn (pre)	nɛm¹ s'ɛ¹re¹s'e¹ri¹	नाम शाराशीरी	གནས་ཟ་ར་བེ་རི་

Gloss	IPA	Devanagari	Tibetan Script
dawn (v)	nəm ¹ lɛŋ ¹ jeɻ	नामलाडये	ནམ་ལངས་ཡས་
sun rise (v)	ni ¹ lmɛ ¹ : ʃɛr ¹ jeɻ	डीमा स्यारये	དི་མ་ཤར་ཡས་
evening	k'o ¹ lmoɻ	घोमो	དགོང་མོ་
set (for the sun to) (v)	ni ¹ lmɛ ¹ tʰip ¹ jeɻ	डीमा ढीप्ये	དི་མ་ཞིབ་ཡས་
turn dark (v)	r̥u ¹ ru ¹ jeɻ	रु रुक्ये	རྒྱུ་རྩག་ཡས་
explode (v)	tʰor ¹ jeɻ	थोरये	འཕོར་ཡས་
earthquake	suŋ ¹ guɻ, sɛ ¹ jomɻ	सुडगु, सायोम	སུང་གུ་, ས་ཡོམ

linear movement

move, come/go

go (v)	soŋɻ	सोड	སོང་
go [honorific]	p ^h ep ¹	फेप	ཐེབས་
travel, journey	duɻ	डु	འགྲུལ་
roam (v)	k ^h jɛm ¹ jeɻ	ख्याम्ये	འཁྱམ་ཡས་

pass, cross over, go through, go around

cross (v)	gɛ ¹ jeɻ, dɛ ¹ jeɻ	गाये, दाये	གླེལ་ཡས་, འདྲའ་ཡས་
leave (v)	t ^h ɔn ¹ jeɻ	थोन्ये	ཐོན་ཡས་
send (v)	ts'ɛŋ ¹ jeɻ	जाडये	རྩང་ཡས་
flee (v)	tʰɔjeɻ	डोये	ཐོས་ཡས་

move, come/go

encounter (v)	t ^h uk ¹ jeɻ	थुक्ये	ཐུག་ཡས་
meet together (v)	dzom ¹ jeɻ	जोम्ये	འཇོམས་ཡས་
meet [honorific]	dʒuɛ ¹ jeɻ	ज्याये	མཇུག་ཡས་
visit (v) [honorific]	tʃɛr ¹ jeɻ	च्यारये	བཅར་ཡས་

come, come to, arrive

arrive (v)	leb ¹ jeɻ	लेप्ये	ཞེབས་ཡས་
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Gloss	IPA	Devanagari	Tibetan Script
come (v)	hoŋ-ljeɻ	हुडये	ཡོང་ཡས་
exit (v)	dɔ-ljeɻ	डोये	འགོ་ཡས་
come [honorific] (v)	p ^h ep ^ɿ ɻ	फेप	ཤེངས་
<i>return</i>			
return (v)	lok ^ɿ -ljeɻ	लोक्ये	སློག་ཡས་
come/go into	ʃok ^ɿ	स्योक	སྟོན་
enter (intrans)	leb-ljeɻ	लेप्ये	སླེབས་ཡས་
enter (trans)	dzu-ljeɻ	जुये	འཇུག་ཡས་
<i>come/go down, descend</i>			
descend (v)	p ^h ɛb-ljeɻ	भाप्ये	འབབ་ཡས་
fall (v)	l ^h ɛm-ljeɻ	ल्हीम्ये	ཞེན་ཡས་
slide (v)	ʃy-ljeɻ	स्यीये	ཤུད་ཡས་
slip (v)	dɛ-ljeɻ	ढेये	འབྲེད་ཡས་
topple (v)	t ^h iɸ-ljeɻ	धीप्ये	ཞེབ་ཡས་
tumble (v)	gu-tiɻ lo-lj ^ɿ ɻ	गोती लोक्ये	མགོ་རྒྱུང་སློག་ཡས་
<i>gather, cause to come together</i>			
gather (v)	rok ^ɿ -ljeɻ	रुक्ये	རུབ་ཡས་
gather stuff (v)	t ^h y-ljeɻ	धीये	འདུ་ཡས་
together	mu-lleɻ	मुला	ཐུ་ལ་
<i>follow, accompany</i>			
follow after (v)	ʃɛɻbeɻlleɻ	स्याबाला	གཤམ་བ་ལ་
follow	dɛŋ-ljeɻ	ढाडये	འབྲངས་ཡས་
pursue (v)	t ^h e-ljeɻ	देये	
<i>drive along, carry along</i>			
send (v)	tɛŋ-ljeɻ	ताडये	བཏང་ཡས་

Gloss	IPA	Devanagari	Tibetan Script
bring (v)	k ^h jer ^l te ^l hō ^l je ^l	खेरती हुडये	འཕྱིར་ཡོང་ཡས་
carry away (v)	k ^h jer ^l te ^l dzo ^l je ^l	खेरती डोये	འཕྱིར་ཏེ་འགྲོ་ཡས་
escort (v)	tə ^l dok ^l tʃ ^l i ^l je ^l	तादोक इयीये	ཐྱ་དོག་ཐུང་ཡས་
lead (v)	t ^h ig ^l je ^l	ठीक्ये	འབྲིང་ཡས་
offer (v)	pu ^l je ^l	पुये	འབུལ་ཡས་
take out (v)	tō ^l je ^l	तोन्ये	ཐྱོན་ཡས་
<i>walk, step</i>			
trample (v)	le ^l je ^l	लेये	ལེད་ཡས་
walk (v)	k ^l jo ^l j ^{ye} l	ग्युक्ये	རྒྱུག་ཡས་
run	p ^h en ^l tən ^l je ^l	भाड ताडये	བང་གཏོང་ཡས་
run away (v)	t ^l ø ^l je ^l	डोये	ཐོས་ཡས་
leap	tʃ ^h on ^l je ^l	क्षोडये	མཚོང་ཡས་
jump (v)	p ^h et ^l j ^{ye} l	फाक्ये	འཕག་ཡས་
dance (n)	k ^l ɛ ^l l	गाः	གར་
dance (v)	k ^l ɛ ^l tse ^l je ^l	गाः चेये	གར་ཅིང་ཡས་
dance (traditional) (v)	ʃ ^l ep ^l ro ^l k ^l je ^l b ^l je ^l	श्याप्पो ग्याप्ये	འབས་རོ་རྒྱུག་ཡས་
<i>fly</i>			
fly (v)	p ^h ur ^l je ^l	फुरये	འཕུར་ཡས་
swing (v)	gu ^l je ^l	घुये	འགུལ་ཡས་
swim (v)	kjə ^l kjəb ^l je ^l	क्या ग्याप्ये	རྒྱལ་རྒྱུག་ཡས་
roll (trans) (v)	ri ^l je ^l	रीये	རིལ་ཡས་
roll (intrans) (v)	ri ^l je ^l	-	-
non-linear movement			
coil around (v)	t ^h i ^l je ^l	ठीये	འབྲིལ་ཡས་
comb hair (v)	ʃje ^l je ^l	स्येये	ཤད་ཡས་
cover (v)	kəp ^l je ^l	काप्ये	བཀག་ཡས་

Gloss	IPA	Devanagari	Tibetan Script
lift up (v)	kjɛˈljɛʌ	क्याक्ये	བཀྲུག་ཡས་
mix up (v)	rɛˈljeʌ	रेये	ཐྱེ་ཡས་
open (trans) (v)	peˈljeʌ	पेये	བས་ཡས་
open (intrans) (v)	pʰɛˈljeʌ	बेये	བས་ཡས་
open a lid (v)	kʰɛˈl peˈljeʌ	खा पेये	ཁ་བས་ཡས་
peel (v)	ʃuˈljeʌ	स्युये	སྤྱ་ཡས་
point (v)	tsuˈljɛʌ	चुक्ये	བརྟུགས་ཡས་
put down (v)	ʃʰɛkˈljeʌ	श्याक्ये	བཞག་ཡས་
put into something	luˈljɛʌ, tʃukˈljeʌ	लुक्ये, च्युक्ये	ལྷུག་ཡས་, བརྟུག་ཡས་
remove (v)	tsʰɛˈljeʌ	जेये	འཇོ་ཡས་
shake (v)	guˈljeʌ, liŋˈliŋˈ tʃiˈljeʌ	घुये, लीङलीङ इयीये	སྒྲུལ་ཡས་, ལིང་ལིང་ཐྱེད་ཡས་
shake down (v)	pɛpˈljeʌ	पाप्ये	བཟ་ཡས་
shake something (v)	guˈguˈl tɛŋˈljeʌ	घुघु ताड्ये	གུལ་གུལ་གཏོང་ཡས་
sharpen (v)	ʃʰɛrˈljeʌ	श्यारये	ཁར་ཡས་
shiver (v)	dɛrˈljeʌ	दारये	འདར་ཡས་
shut up, close (v)	kʰjɛpˈljeʌ	ग्याप्ये	ཁྱུག་ཡས་
sign your fingerprint	tʰɛˈltseˈl kjɛbˈljeʌ	थेचे ग्याप्ये	ཐེལ་ཅེ་ཁྱུག་ཡས་
skin (v)	pɛˈluˈl ʃuˈljeʌ	पाउ स्यीये	སྐགས་ཐུ་སྤྱད་ཡས་
smear (v)	kuˈljeʌ	कुये	བསྒྲུ་ཡས་
sort (v)	ʔɛˈlwɛˈl peˈljeʌ	येवा पेये	གཡས་བ་བས་ཡས་
split (trans) (v)	tʃɛˈljeʌ	टाये	ཐྱེ་ཡས་
split (intrans) (v)	tʃɛˈljeʌ	ढाये	འབྲལ་
stir (v)	tukˈljeʌ	टुक्ये	དྲུག་ཡས་
stretch (trans)	tʰɛnˈljeʌ	थेन्ये	འཐེན་ཡས་
stretch (intrans)	lɔrˈljeʌ	लोरये	ལྷོར་ཡས་
stretch out (v)	kjɛŋˈljeʌ	क्याड्ये	བརྒྱང་ཡས་
throw (v)	juˈljɛʌ	युक्ये	གཡུག་ཡས་

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wave (v)	joɽjeɭ	‘योये	གཡོ་ཡས་
wind up (v)	korɽjeɭ	कोरये	རྫོང་ཡས་
wrap around (v)	tɿɽjeɭ	टीये	ཐྱི་ཡས་
stances and events related to stances			
<i>stand</i>			
rise (trans) (v)	lənɽjeɭ	‘लाडये	ལང་ཡས་
rise (intrans) (v)	lənɽjeɭ	लाडये	བསྐྱངས་ཡས་
sit (v)	t'eɽjeɭ	धेये	ཐོང་ཡས་
wait (v)	k'okɽjeɭ	घुक्ये	སྐྱུག་ཡས་
<i>prostrate as an act of reverence or supplication</i>			
prostrate oneself in obeisance (v)	tʃʰɛkɿɽ tsʰɛɽjeɭ	क्षाक छाये	ཕྱག་འཇོལ་ཡས་
<i>recline</i>			
recline	niɽjeɭ	‘डीये	ཉེས་ཡས་
relax (v)	l̥ʰøɽl̥ʰøɽ tʃʰiɽjeɭ	ल्होल्हो इयीये	ཨོང་ཨོང་ཕྱེད་ཡས་
lie down (v)	ɲɛɽjeɭ	ड्याये	ནལ་ཡས་
lie flat on your back (v)	k'ɛɽkeɽl̥ʰøɽ ɲɛɽjeɭ	घाकेला ड्याये	ག་གེ་ལ་ནལ་ཡས་
<i>bend over, straighten up</i>			
droop (v)	reɽjeɭ	रेये	ཐྱེ་ཡས་
<i>grasp, hold</i>			
catch (v)	s'iɽɽjeɭ	शीम्ये	ཟིན་ཡས་
fasten	t'ɛɽɽjeɭ	दाम्ये	དམ་ཡས་
stick (trans)	tʃʰɛɽjeɭ	ज्यारये	འཇར་ཡས་
hang (v)	koɽjeɭ, kɛɽjeɭ, tɛkɿɽteɽɽ tʃʰɛɽjeɭ	कोये, काये, ताक्ती श्याक्ये	བགལ་ཡས་, རྫོང་ཡས་, -

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physical impact			
<i>hit, strike</i>			
beat someone (v)	t'on-ljeɻ, tər-ljeɻ	ढुडये, तारये	རུང་ཡས་, ལྷར་ཡས་
chop (into bits) (v)	tsɛpˈljeɻ	चाप्ये	བཅོང་ཡས་
chop off (v)	tupˈljeɻ	तुप्ये	གཏུབ་ཡས་
cut (v)	tʃeˈljeɻ	च्येये	བཅད་ཡས་
fight (v)	tʰukˈtɕɛˈtɕɛˈljeɻ, t'u-lɕɛˈtɕɛˈljeɻ	ठुक्पा ताडये, दुगा ताडये	འཇུག་པ་གཏོང་ཡས་, སུག་ག་གཏོང་ཡས་
fight (war) (v)	mɛkˈtɕɛˈljeɻ	‘माक टाप्ये	དམག་ཁྲབ་ཡས་
hit (v)	ʃur-ljeɻ	शयुरये	གཞུ་ཡས་
hit oneself accidentally (v)	tʰɛp-ljeɻ	दाप्ये	ལྷབ་ཡས་
kick (v)	t'okˈtɕɛˈtɕɛˈljeɻ	दोकचे शयुरये	དྲོག་ཅོ་གཞུ་ཡས་
knock over (v)	loˈtɕɛɻ	‘लोक्ये	སློག་ཡས་
slap (v)	dɛm-lɕɛkˈtɕɛˈljeɻ	ढ्याम्चाक शयुरये	འབྲམ་ལྷག་གཞུ་ཡས་
<i>split, tear</i>			
tear (trans) (v)	rɛˈljeɻ	‘राये	རལ་ཡས་
tear (intrans) (v)	rɛˈljeɻ	राये	འབྲལ་ཡས་
<i>break, break through</i>			
break (v)	tʃɛˈtɕɛɻ	चाक्ये	གཅག་ཡས་
come apart (v)	tʃɛˈljeɻ	ढाये	གྲལ་ཡས་
sever a rope (trans) (v)	tʰɛkˈtɕɛˈtɕɛˈljeɻ	थाक्पा चेये	ཐག་པ་བཅད་ཡས་
sever a rope (intrans) (v)	tʰɛkˈtɕɛˈtɕɛˈljeɻ	थाक्पा क्षेये	ཐག་པ་ཆད་ཡས་
<i>press</i>			
press down (v)	nɛmˈtɕɛɻ	‘नेम्ये	གཞོན་ཡས་
squeeze (v)	tsirˈtɕɛɻ	चीरये	གཅོར་ཡས་

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dig up (v)	tʰuːlje˧	ड्युये	འབྱུ་ཡས་
violence, harm, destroy, kill			
kill (v)	se˧lje˧, rok˧˥ tʃe˧lje˧	सेये, ‘रोक चेये	བསང་ཡས་, རྩོག་བཅད་ཡས་
kill [honorific]	ton˧lje˧	टोडये	བཞོངས་ཡས་
danger, risk, safe, save			
<i>cause to be safe, free from danger</i>			
hide (v)	bɛ˧lje˧	बाये	ཟ་ཡས་
protect (v)	kjop˧˥lje˧, roŋ˧lje˧	क्योप्ये, ‘रुडये	རྩོལ་ཡས་, སྤང་ཡས་
trouble, hardship, relief, favorable circumstances			
<i>difficult, hard</i>			
difficult	kʰɛk˧˥˩we˧	घाक्चा	གག་བ་
difficulty	kɛ˧lle˧ kʰɛ˧we˧	काल्ले घाक्चा	དཀའ་ལས་གག་བ་
easy, light	le˧lle˧	लेला	ལེ་ལ་
light (weight)	jɛŋ˧we˧	याडा	ཡང་ང་
<i>favorable circumstances or state</i>			
peace	ʃi˧˥de˧	शयीदे	ཁི་བདེ་
physiological processes and states			
<i>eat, drink</i>			
bark (v)	mug˧lje˧	‘मुक्ये	རྒྱག་ཡས་
bite (v)	so˧ kʰjɛb˧lje˧	सो गयाप्ये	སོ་རྒྱག་ཡས་
chew (v)	le˧lje˧	‘लेये	ལྡད་ཡས་
drink (v)	tʰoŋ˧lje˧	थुडये	འཐུང་ཡས་
eat (v)	sʰɛ˧lje˧	शाये	ཟ་ཡས་

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eating (while doing something)	s'iɪs'iɪ	शी-शी	ཟིའི་ཟིའི་
full (stomach) (v)	dɛŋ-ljeɫ	डाङये	བླང་ཡས་
hungry (v)	tok ^ɾ -ljeɫ	तोक्ये	ཁྱོགས་ཡས་
lick (v)	dɛk ^ɾ -ljeɫ	दाक्ये	ལྷག་ཡས་
swallow (v)	mik ^ɾ -ljeɫ	मीक्ये	མིད་ཡས་
thirsty (v)	komɫjeɫ	कोम्ये	སྐོམ་ཡས་
spit (n)	tʃ ^h iɪlmɛk ^ɾ	क्षीमाक	མཆིལ་མ་
spit (v)	tʃ ^h iɪlmɛk ^ɾ torɫjeɫ, tʃ ^h iɪlmɛɫ juɫj ^ɥ eɫ	क्षीमाक तोरये, क्षीमाक 'युक्ये	མཆིལ་མ་འདྲོར་ཡས་, མཆིལ་མ་གཤུག་ཡས་
<i>birth, procreation</i>			
birth (v)	kjeɫjeɫ	केये	སྐུ་ཡས་
birth [honorific] (v)	t ^h oŋɫjeɫ	ठुङये	འབྱུངས་ཡས་
deliver a child (v)	tuɫ kjeɫjeɫ	टु केये	སུ་སྐུ་ཡས་
<i>sleep, waking</i>			
dream (n)	miɫlɛmɫ	'मीलाम	མི་ལམ་
dream (v)	miɫlɛmɫ miɫj ^ɥ eɫ	'मीलाम 'मीक्ये	མི་ལམ་མི་ཡས་
sleep (v)	ɲɛɫ-ljeɫ	ड्याये	ནལ་ཡས་
fall asleep (v)	ɲiɫ loɫj ^ɥ eɫ	'डी लोक्ये	གཉིད་ལོག་ཡས་
sleep (v) [honorific]	s'iɪm-ljeɫ	शीम्ये	གཟིམས་ཡས་
wake (v)	lɛŋ-ljeɫ	लाङये	ལང་ཡས་
<i>live, die</i>			
die (v)	ʃiɫjeɫ	स्यीये	ཤི་ཡས་
die [honorific]	t'oŋ-ljeɫ	ढोङये	ཤོངས་ཡས་
<i>sickness, disease, weakness</i>			
blind	ʃ'ɛɫɾɛɫ	शयारा	ཁ་ར་

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boil	tʃʰuˈlke˧	क्षुक्का	ལུག་ཀ་
cough (n)	lo˧	‘लो	ལུང་བ་
cough (v)	lo˧ kʼjɛb-lje˧	‘लो ग्याप्ये	ལྷོ་རྒྱལ་ཡས་
cripple	ʃʰɛ˧.kjo˧ʔ˧	श्याक्योक	འགྲོག་
deaf	kʼɔ˧-wɛ˧	घोवा	གོ་བ་
fever (hot)	tsʰɛ˧˥we˧	छावा	ཚ་བ་
fever, cold	tʃʰɛm˧˥pe˧	क्षाम्पा	ཆམ་བ་
goiter	ɡɛn-lɛ˧	गाःडा	ག་ང་
leprosy	dze˧	जे	མཛེ་
pain	sʼuk˧˥	शुक	ཟུག་
sick (v)	nɛ-lje˧	नाये	ན་ཡས་
sickness	nɛ-tsʰɛ˧	नाछा	ན་ཚ་
sneeze (v)	ri-lpe˧ kʼjɛb-lje˧	रीपा ग्याप्ये	རི་པ་རྒྱལ་ཡས་
swell (v)	bɔ˧-lje˧	बोये	བོ་ཡས་
vomit (v)	kju˧˥tjɛ˧	क्युक्ये	ལུག་ཡས་
wound	mɛ˧	‘मा	མ་
<i>breathe, breath</i>			
breathe (v)	ʔup˧˥ tɛŋ-lje˧	उप ताडये	དབུགས་གཏོང་ཡས་
<i>rot, decay</i>			
decay (v)	ru-lje˧	रुये	རུ་ཡས་
ripe	tsʰø˧	छो	ཚོས་
ripen (v)	tsʰø˧˥lje˧	छोये	ཚོས་བ་
rotten; decayed	ru-lre˧	रुरा	རུ་ར་
unripe	mɛ˧tsʰø˧˥tsɛ˧	‘माछोचा	མ་ཚོས་ཀྱིན་
<i>miscellaneous physiological processes</i>			
close eyes (v)	mik˧˥ tsum-lje˧	‘मीक चुम्ये	མིག་བཟུམ་ཡས་

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scratch an itch (v)	tʰe-ljeɭ	ढ्येये	བད་ཡས་
itch (v)	jɐ-ljeɭ	‘याये	ཡ་ཡས་
sniffle (v)	nom-ljeɭ	‘नुम्ये	སྒོམ་ཡས་
snore (v)	niʈkeʔɪ tɕ-ljeɭ	‘डीके तोन्ये	གཉིད་སྐད་སྒྲོན་ཡས་
yawn (v)	jɐɪ kʰjɐb-ljeɭ	‘या ग्याप्ये	གཡལ་ཐུག་ཡས་
<i>health, vigor, strength</i>			
well; in a good state of affairs	tʰɛɪŋɐɪ	थाडा	ཐང་ང་
sensory events and states			
<i>see</i>			
look (v)	tɐ-ljeɪ	ताये	ཏླ་ཡས་
look (v) [honorific]	sʰikʰ-ljeɪ	शीक्ये	གཟིགས་ཡས་
see (v)	tʰoŋ-ljeɪ	थोङ्ये	མཐོང་ཡས་
see (v) [honorific]	dʒɐ-ljeɪ	ज्याये	མཇལ་ཡས་
hear (v)	kʰor-ljeɪ	घोरये	གོ་ཡས་
hear (v) [honorific]	sɛ-ljeɪ	सेन्ये	གསེན་ཡས་
listen (v)	ɲɛn-ljeɪ	डेन्ये	ནྟན་ཡས་
<i>smell</i>			
smell (n)	tʰi-lmɐɪ	ढीमा	དྲི་མ་
smell (v)	tʰi-lmɐɪ num-ljeɪ	ढीमा ‘नुम्ये	དྲི་མ་སྒྲོམ་ཡས་
stink (v)	tʰi-lmɐɪ kʰɐ-ljeɪ	ढीमा खाये	དྲི་མ་ཁ་ཡས་
<i>taste</i>			
taste (v)	tʰo-lwɐɪ lɛ-ljeɪ	ढोवा लेन्ये	ཐོ་བ་ལེན་ཡས་
<i>touch, feel</i>			
feel (v)	tsʰor-ljeɪ	छोरये	ཚོར་ཡས་

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touch (yourself accidentally) (bump) (v)	t ^h uk [˧] ˧je˧1	थुक्ये	ཐུག་ཡས་
<i>pain, suffering</i>			
tired; desperate	t ^h ɛŋ˧1 tʃ ^h e˧je˧1	थाड क्षेये	ཐང་ཆད་ཡས་
disappear (v)	je˧je˧1	येये	ཡལ་ཡས་
sense (v)	ts ^h or˧je˧1	छोरये	ཚོར་ཡས་
attitudes and emotions			
<i>love, affection, compassion</i>			
like (v)	k'ɛ˧je˧1	घाये	དགའ་ཡས་
love	tse˧1wɛ˧1	चेवा	བཤེ་བ་
<i>happy, glad, joyful</i>			
happy (v)	ɲɛ˧1mo˧1 k'ɛ˧je˧1	झ्यामो घाये	ཉམ་མོ་དགའ་ཡས་
happy [honorific]	t ^h u˧1 k'je˧je˧1	थुक गयेये	ཐུགས་དགེས་ཡས་
<i>laugh, cry, groan</i>			
cry (v)	ɲu˧je˧1	डुये	དུ་ཡས་
cry (v) [honorific]	ʃum˧je˧1	स्युम्ये	བསུམ་བ་
crying (while doing something)	ɲy˧1ɲy˧1	झयी-झयी	དུས་དུས་
laugh (v)	kø˧1 ʃor˧je˧1	घो स्योरये	དགོང་ཤོར་ཡས་
<i>patience, endurance, perseverance</i>			
endure (v)	s'ø˧1pɛ˧1 gom˧je˧1	शोपा घोम्ये	བཞོང་བ་སྒྲིམ་ཡས་
be embarrassed (v)	ɲo˧1ts ^h ɛ˧je˧1	डोछाये	ངོ་ཚ་ཡས་
make sb embarrassed (v)	ɲo˧1ts ^h ɛ˧1ru˧1 tʃ ^h ug˧je˧1	डोछारु च्युक्ये	ངོ་ཚ་རུ་བརྩུག་ཡས་
shame (bring) (v)	ɲɛ˧1 tʃe˧je˧1	ना चेये	སྤྲ་བཅད་ཡས་

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make sb feel shame (v)	ŋo-t͡sʰɛ¹ peb-t͡je¹	डोछा पाप्ये	ངོ་ཚ་འབབ་ཡས་
<i>surprise, astonish</i>			
startle (v)	høŋ¹ tʰor-t͡je¹	‘होन थोरये	ཉོན་འཛོར་ཡས་
surprise (v)	hɛŋ¹ sɛ-t͡je¹	‘हाडसाये	དང་སང་ཡས་
<i>fear, terror, alarm</i>			
fear (v)	d͡ʒik¹-t͡je¹	जयीक्ये	འཇིགས་ཡས་
fearsome, scary	d͡ʒik¹-t͡pɛ¹t͡ʃʰe¹	जयीकटाक्षे	འཇིགས་སྒྲག་ཆེ་
sad (v)	sem¹ pʰɛm-t͡je¹	सेम फाम्ये	སེམས་སྦས་ཡས་
sad (v) [honorific]	tʰok¹¹ pʰɛm-t͡je¹	थुक फाम्ये	ཐུགས་སྦས་ཡས་
sorrow	tʰoŋ¹-t͡je¹	दुडा	ཐུག་བ་
<i>envy, jealousy</i>			
jealous (v)	tʰɛ¹tok¹¹ t͡ʃʰi¹-t͡je¹	ठादोक झयीये	ཐག་དོག་བྱེད་ཡས་
<i>anger, be indignant with</i>			
angry (v intr.)	loŋ¹ sʰɛ¹-t͡je¹, ʃʰe¹dɛŋ¹ lɛŋ¹-t͡je¹, t͡sʰik¹¹t͡pɛ¹ sʰɛ¹-t͡je¹	‘लुङ शाये, श्येताङ ‘लाङये, छीकपा शाये	རླུང་བ་ཡས་, ཞེ་སྒྲང་ལང་ཡས་, ཆོག་བ་བ་ཡས་
bitterly angry, malicious	kʰon¹dɔ¹ lɛŋ¹-t͡je¹	खोङडो लाङये	ཁོང་ཁྲོ་ལང་ཡས་
psychological faculties			
mind	sem¹	सेम	སེམས་
mind [honorific]	tʰuk¹¹	थुक	ཐུགས་
learn			
instruct (v)	ku¹-t͡je¹	कुये	བཀུ་ཡས་
learn (v)	t͡ʃʰɛŋ¹-t͡je¹	झ्याङये	བྱུང་ཡས་
read (v)	lo¹t͡jɛ¹	‘लोक्ये	ལྟོག་ཡས་

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study (v)	tʰo-lj ^y ɛl	ढोक्ये	སློབ་ཡས་
teach (v)	lɐb-ljɛl	‘लाप्ये	སློབ་ཡས་
<i>learn the location of something</i>			
find (v)	ɲiljɛl	‘डीये	ཉིད་ཡས་
look for (v)	tsɛ-ljɛl, jɛŋ-ljɛl	चाये, ‘याडये	འཚོལ་ཡས་, གཤམ་ཡས་
lose (v)	tor-ljɛl	तोरये	ཁྱོར་ཡས་
<i>recognize</i>			
recognize (v)	ŋo-l ʃɛ-ljɛl	डो स्येये	ངོ་ཤེས་ཡས་
know			
know	ʃɛ-ljɛl	स्येये	ཤེས་ཡས་
know [honorific]	k ^h ɛn-ljɛl	खेन्ये	མཁྱེན་ཡས་
know (the content of knowledge)	hɛ-lk'o-ljɛl	‘हाघोये	ཉ་གོ་ཡས་
knowledge	ʃɛ-ljɔn-l	स्येयोन	ཤེས་ཡོན་
memory and recall			
<i>storing of information</i>			
concentrate (v)	tɔ-lnɛŋ-l ter-ljɛl	दोनाङ तेरये	དོ་སྦྱང་ཉེས་ཡས་
<i>recalling from memory</i>			
recall (v)	tʰɛm-lpɛ-l so-ljɛl	ढेम्पा सोये	དྲན་པ་གསོ་ཡས་
remember (v)	tʰɛn-ljɛl	ढेन्ये	དྲན་ཡས་
<i>not remembering, forgetting</i>			
forget (v)	tʰɛ-ljɛl	ज्येये	བརྟེན་ཡས་
think			

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<i>to think, thought</i>			
think (v)	semʈloʈ tɛŋtʃeɻ	साम्लो ताडये	བསམ་ཐོ་གཏོང་ཡས་
thought	semʈloɻ	साम्लो	བསམ་ཐོ་
opinion	semʈʃiɻ	साम्शयी	བསམ་གཞི་
<i>to intend, to purpose, to plan</i>			
plan (n)	ʈʃʰeʈʃiɻ	क्षाशयी	འཆར་གཞི་
plan (v)	ʈʃʰeʈʃiɻ tɛŋtʃeɻ	क्षाशयी तीडये	འཆར་གཞི་བཏིང་ཡས་
plot (v)	ʈʃʰyŋɛnʈ ʈʃʰiɻjeɻ	ज्यीडेन ड्यीये	རྩལ་བྲུ་ཐུང་ཡས་
communication			
<i>language</i>			
language	keʈɻ	के	ཀེ
<i>written language</i>			
letter; alphabet	jikɻɪ	यीक	ཡིག་
story	ʈoŋɻ	रुड	རྩལ་
word	tsʰikɻ	छीक	ཅིག་
decree	kɛɻ	का	བཀའ་
<i>speak, talk</i>			
say	neʈjeɻ	नाये	སྟེན་ཡས་
saying (while doing something)	niɪniɪ	नी-नी	སྟེན་སྟེན་
tell	ʃeʈjeɻ	स्येये	ཤོད་ཡས་
speak (v)	lepɻɪ tɛŋtʃeɻ	लाब ताडये	ལཔ་གཏོང་ཡས་
<i>sing, lament</i>			
shout (v)	pʰeɪreɪ kʲɛb-jeɻ, keʈɪ kʲɛb-jeɻ	फेरा गयाप्ये, के क्याप्ये	ཤེར་རྒྱུག་ཡས་, ཀེ་ཕྱེག་ཡས་

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song	luɳ	लु	ལུ་
<i>name</i>			
introduce (v)	ŋo-ɬoɫ tʃi-ɬjeɳ	ङोटो झयीये	ངོ་ཚོད་ཐེད་ཡས་
name	miŋɳ	मीड	མིང་
name [honorific]	tsʰɛnɳ	छेन	མཚན་
<i>ask for, request</i>			
ask (v)	tʃi-ɬjeɳ	ढीये	འདྲི་ཡས་
ask [honorific] (v)	ʃu-ɬjeɳ	श्यीये	ཁུ་ཡས་
beg (ask for alms) (v)	lɛŋ-ɬjeɳ	लाडये	སྒོང་ཡས་
plead (v)	ʃo-ɬwɛɫ po-ɬjeɳ	श्योवा पुये	ཁུ་བ་སུལ་ཡས་
<i>question, answer</i>			
answer (n)	lɛnɳ	लेन	ལན་
answer (v)	lɛnɫ k'jɛb-ɬjeɳ	लेन गयाप्ये	ལན་རྒྱལ་ཡས་
question (n)	tʃi-ɬwɛɳ	ढीवा	དྲི་བ་
question (v)	tʃi-ɬwɛɫ ku-ɬjeɳ	ढीवा कुये	དྲི་བ་རྒྱལ་ཡས་
<i>advise</i>			
advice, counsel	lɛp-ɫɬɬjeɳ	लाप्चा	བསྐྱབ་བྱ་
<i>language</i>			
call (v)	keɫ tɛŋ-ɬjeɳ	के ताडये	སྐད་གཏོང་ཡས་
invite (v)	dɔnɫ p'ɔ-ɬjeɳ	ढोन भोये	མགོན་འབོད་ཡས་
argue (v)	kʰɛɫ tʰɛb-ɬjeɳ	खा थाप्ये	ཁ་འཐབ་ཡས་
association			
<i>join, begin to associate</i>			
with, along with	mu-ɬlɛɳ	मुला	སུ་ལ་

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divorce	kʰɛ¹ tʰɛ¹je¹	खा डाये	ཁ་བྲལ་བ་
marry (v)	nɛ¹mɛ¹ lɛ¹je¹	‘नामा लेन्ये	མཉམ་མ་ལེན་ཡས་
help, care for			
<i>serve</i>			
serve (v) [honorific]	ʃʰɛ¹tʃi¹ ʃʰu¹je¹	श्याप्ची श्युये	ཞབས་ཉི་ལུ་ཡས་
help	ro¹wɛ¹ tʃʰi¹je¹	रोवा इयीये	རོགས་བ་ཉེད་ཡས་
<i>help</i>			
care for (v)	tɛ¹dɔk¹¹ tʃʰi¹je¹	तादोक इयीये	ཐྱ་དོག་ཉེད་ཡས་
love, care (n)	tse¹wɛ¹	चेवा	བརྟེ་བ་
control, rule			
<i>exercise authority</i>			
inspect (v)	ʃʰim¹dzu¹ tʃʰi¹je¹	शयीम्जु इयीये	ཞིབ་འཇུག་ཉེད་ཡས་
rule, govern	wɛŋ¹ tʃʰi¹je¹	वाङ इयीये	དབང་ཉེད་ཡས་
government	ʃʰjoŋ¹	श्युङ	གཞུང་
independence	rɛŋ¹tse¹	राङचे	རང་བཙན་
responsibility	kʰe¹len¹	गेलेन	འགན་ལས་
<i>seize, take into custody</i>			
arrest (v)	sʰim¹je¹	शीम्ये	ཟེན་ཡས་
<i>guard, watch over</i>			
guard, keep (v)	roŋ¹je¹	‘रुङये	སྒྱུང་ཡས་
hostility, strife			
<i>opposition, hostility</i>			
block/stop (trans) (v)	kɛk¹¹je¹	काक्ये	བགག་ཡས་
block (intrans) (v)	gɛk¹¹je¹	गाक्ये	འགག་ཡས་

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hinderance (n)	p'ɛr-tʃeʔɿ	बारचे	བར་ཆད་
make fun (v)	meʔtʃuʔ tɛŋ-tjeɿ	‘मेज्यु ताङये	མེ་ཇུ་བྱང་ཡས་
tease	jeʔʔ tʃɛ-tjeɿ	‘डे चाये	རྟེ་བཅལ་ཡས་
pester (v)	ɲupʔ-tʰøʔ tʃu-tjɛɿ	ड्योप्तु च्युक्ये	ཉལ་ཏུ་བཅུག་ཡས་
behavior and related states			
<i>behavior, conduct</i>			
behavior	tʃøʔpɛɿ	चोपा	ཇུང་བ་
perform, do			
<i>function</i>			
close [a window] (v)	kʰoŋʔ k'jɛb-tjeɿ	खुड गयाप्ये	ཁུང་རྒྱག་པ་ཡས་
use; employ	p'ø-tʃøʔ tɛŋ-tjeɿ	भोचे ताङये	བོད་ཇུང་གཏོང་ཡས་
<i>do, perform</i>			
copy (v)	ʃuʔtjeɿ	स्युये	བསྐྱས་ཡས་
do (v)	tʃ'i-tjeɿ	इयीये	ཇུང་ཡས་
do (v) [honorific]	dʒɛ-tjeɿ	जेये	མཛོད་ཡས་
make (v)	s'ɔ-tjeɿ	शोये	བཟོ་ཡས་
make arrangements (v)	tʰɛ-dʒikʔʔ tʃ'i-tjeɿ	ढाडीक इयीये	ཤ་སྐྱིག་ཇུང་ཡས་
<i>work, toil</i>			
work (n)	le-kɛɿ	लेका	ལས་ཀ་
work (v)	le-kɛʔ tʃ'i-tjeɿ	लेगा इयीये	ལས་ཀ་ཇུང་ཡས་
work [honorific]	tʃʰɛkʔʔleʔ dʒɛ-tjeɿ	क्षाक्ले जेये	ཕྱག་ལས་མཛོད་ཡས་
agriculture			
<i>activities related to planting</i>			
plant (v)	tsuʔtjɛɿ	चुक्ये	བཟུགས་ཡས་
plough (v)	moʔtjeɿ	‘मोये	མོ་ཡས་

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sow (v)	tɛp˥˩jeɫ	ताप्ये	བཏབ་ཡས་
<i>activities related to harvest</i>			
pluck (v)	tʰu˥˩jeɫ	थुये	འཐུ་ཡས་
pluck [by hand] (v)	kok˥˩jeɫ	कोक्ये	བཀོག་ཡས་
sift rice back and forth (v)	tsɛk˥˩jeɫ	चाक्ये	འཚོག་ཡས་
winnow (v)	tʃʰɛɾ˥˩jeɫ	क्षारये	འཐུར་ཡས་
<i>land, plots</i>			
compost	lyʔɿ	ली	ལུང་
field	ʃi˥˩ɿ	शयीड	ཁིང་
<i>artifacts used in agriculture</i>			
hoe	tok˥˩tseɫ	तोक्चे	རྟོག་ཅེ་
plough	tʰoŋ˥˩peɫ	थोङपा	ཐོང་པ་
yoke	ɲɛ˥˩ʃiŋɿ	ड्यास्यीड	གཉེན་ཤིང་
animal husbandry, fishing			
graze (v)	tsʰo˥˩jeɫ	छोये	འཚོ་ཡས་
hunt (v)	kʰi˥˩ɾɛ˥˩ kʲjɛb˥˩jeɫ	खयीरा ग्याप्ये	ཁྱི་ར་རྒྱལ་ཡས་
milk (v)	ho˥˩mɛ˥˩ dʒo˥˩jeɫ	होमा ज्योये	འོ་མ་འཚོ་ཡས་
nets	ɲɛ˥˩ɾɛɫ	ड्यारे	ཉ་རས་
tether (v)	tʰɛm˥˩jeɫ	दाम्ये	དམ་ཡས་
household activities			
<i>activities related to cooking</i>			
brew (v)	kʰo˥˩ɾu˥˩ tʃʰu˥˩jeɫ	खोरु च्युक्ये	འཁོལ་རུ་བཟུག་ཡས་
fry (v)	ŋo˥˩jeɫ	डोये	རྫོང་ཡས་
heat up (food)	tʰo˥˩mo˥˩ s'o˥˩jeɫ	ढोमो शोये	རྫོན་མོ་བཟོ་ཡས་

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<i>activities related to cleaning</i>			
clean (v)	tʂɛŋ¹mɐ¹ s'o¹je¹	चाडमा शोये	གཙང་མ་བཟོ་ཡས་
polish (v)	hø¹¹ tð¹je¹	हो तोन्ये	འོང་ཁྱོན་ཡས་
activities involving liquids or masses			
<i>movement of liquids or masses</i>			
fill (v)	kɐŋ¹je¹	काडये	བཀང་ཡས་
pour (v)	lu¹jɣe¹	लुक्ये	ལུག་ཡས་
spill over (v)	tʃ'o¹je¹	ज्योये	འཇོ་ཡས་
spill (v)	po¹je¹	पोये	པོ་ཡས་
<i>uses of liquids</i>			
bathe (v)	tʰy¹ k'jɐb¹je¹	ठी गयाप्ये	བླུས་ཀླག་ཡས་
rinse (v)	ʃɐ¹je¹	स्याये	གཤམ་ཡས་
wash (v)	tʰu¹je¹	ठीये	བླུས་ཡས་
activities involving cloth			
patch cloth (v)	lʰɛm¹pɐ¹ k'jɐb¹je¹	लहेम्पा गयाप्ये	ལྷན་པ་ཀླག་ཡས་
sew (v)	tɕɛm¹je¹	चेम्ये	འཛོམ་ཡས་
weave (v)	tʰɛk¹¹je¹	थाक्ये	འཐག་ཡས་
fold cloth (v)	dɛb¹je¹	दाप्ये	དབ་ཡས་
activities involving clothing and adorning			
dress (oneself) (intran) (v)	k'ð¹je¹	घोन्ये	གོན་ཡས་
dress (sb else) (tran) (v)	køn¹je¹	क्योन्ये	བགོན་ཡས་
put on (a kira)	k'ð¹je¹	घोन्ये	གོན་ཡས་
take off (v)	py¹je¹	पीये	ཕུད་ཡས་
contests and play			
traditional dance (n)	ʃ'ɛp¹¹ro¹	श्याप्रो	ཞབས་རྩོ

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show; movie	te ¹ mo ¹	तेमो	ཐུས་མོ་
funerals and burial			
bury (v)	koŋ ¹ je ¹	कुडये	སྐྱང་ཡས་
cremation	r̥e ¹ je ¹	राक्ये	ཐེག་ཡས་
dead	ʃi ¹ ʒe ¹	स्यीस्या	ཤི་ག་
grave; cemetery	t'y ¹ to ¹	धीटो	དུར་ཐོང་
mourning (v)	tok ¹ r̥oŋ ¹ je ¹	दुक रुडये	སྐྱག་སྐྱང་ཡས་
religious activities			
<i>religious practice</i>			
circumambulate (v)	ko ¹ r̥e ¹ po ¹ je ¹	कोरा पुये	མོར་ར་ཐུག་ཡས་
hoist a prayer flag (v)	loŋ ¹ de ¹ teŋ ¹ je ¹ , t'ɛr ¹ tʃo ¹ tʃu ¹ je ¹	लुङ्दा ताडये, दारच्यो च्युक्ये	ཐུང་དྭག་ཏོང་ཡས་, དར་ཆོ་འཇུག་ཡས་
turn a prayer wheel (v)	m̥e ¹ ni ¹ kor ¹ je ¹	मानी कोरये	མ་ནི་མོར་ཡས་
<i>dedicate, consecrate</i>			
spiritual empowerment	wɛŋ ¹	वाङ	དབང་
possess, transfer, exchange			
<i>have, possess, property, owner</i>			
property/wealth	k'ju ¹ no ¹	ग्युनोर	རྒྱ་ཁོར་
<i>have sufficient</i>			
luck, fortune	so ¹ te ¹ , so ¹ ne ¹ m ¹	सोद्ये, सोनाम	བསོད་དེ་, བསོད་ནམས་
<i>be rich, be wealthy</i>			
rich	tʃ ^h uk ¹ to ¹	क्षुक्पो	ཐུག་པོ་
<i>be poor, be needy, poverty</i>			

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pitiful	ɲeˈtʃʰeɻ	‘ऊयाक्षे	ཉ་བ་ཆེ་
poor	ʔuˈtʃeɻ	उटे	དུཅན་ཇི་
possess, transfer, exchange			
<i>take, obtain, gain, lose</i>			
get, obtain (v)	ɾɛˈtʃʰeɻ, tʰobˈtʃeɻ, dʒorˈtʃeɻ	राक्ये, थोप्ये, ज्योरये	རགས་ཡས་, འཕྱོང་ཡས་, འཕྱོར་ཡས་
take (v)	lɛˈtʃeɻ	लेन्ये	ལེན་ཡས་
take (v) [honorific]	numˈtʃeɻ	‘नुम्ये	ལྷུང་ཡས་
take away (v)	kʰerˈtʃeɻ	खेरये	འཁྱེར་ཡས་
<i>give</i>			
give (v)	terˈtʃeɻ	तेरये	ཐེར་ཡས་
give (v) [honorific]	nɛŋˈtʃeɻ	‘नाङ्ये	གནང་ཡས་
hand over (v)	tsiˈl kʲɛbˈtʃeɻ	ची गयाप्ये	བཅི་ཐུག་ཡས་
<i>exchange</i>			
return (something) (v)	loˈtʃʰeɻ	‘लोक्ये	ལོག་ཡས་
<i>tax, tribute</i>			
tax	tʰɛɻ	ठा	ཐྱལ་
sell	tsɔŋˈtʃeɻ	चोड्ये	གཤོང་ཡས་
price	goŋɻ	गोड	གོང་
affordable	noˈl tʰubˈtʃeɻ	ऊयो थुप्ये	ཉོ་ཐུབ་ཡས་
buy (v)	noˈtʃeɻ	ऊयोये	ཉོ་ཡས་
cheap	kʰjeɻ	ख्ये	ཁེ་
expensive	goŋɻ tʃʰeɻ	गोड क्षे	གོང་ཆེ་
<i>earn, gain, do business</i>			

Gloss	IPA	Devanagari	Tibetan Script
bazaar, market	tʰomʌ	ठोम	ཁྲོམ་
<i>lend, loan, interest, borrow, bank</i>			
borrow (v)	kiʈjeʌ	कीये	གེ་ཡས་
lend (v)	jeɾʈjeʌ	‘यारये	གཡར་ཡས་
debt	p'u-lɛnʌ	भुलेन	བུ་ལོན་
owe (return) (v)	loʔɿ k'o-ʈjeʌ	‘लोक घोये	ལོག་དགོས་ཡས་
owe (pay) (v)	tʃɛŋɿ k'o-ʈjeʌ	ज्याड घोये	འཇང་དགོས་ཡས་
incur (v)	sɛkʰʈjeʌ	साक्ये	བསག་ཡས་
nature, class, example			
<i>appearance as an outward manifestation of form</i>			
appearance	s'ɔpʰ-lɛʌ	शोप्ता	བཟོ་བ་ལྟ་
<i>same or equivalent kind of class</i>			
equal	dʃɛ-lɛʌ	डाढा	འདྲ་འདྲ་
like, as	tʃo:lɛʌ	च्योकरे	ཅོག་རེ་
same	tʃikʰ-lɛʌ	च्यीक्पा	གཅིག་པ་
<i>different kind of class</i>			
different	mɿ-lɛʌ	मेडा	མི་འདྲ་
<i>new, old (primarily non-temporal)</i>			
new	sɛʈbɛʌ	साबा	གསར་པ་
old	niŋʈbɛʌ	‘डीडबा	རྒྱུང་པ་
quantity			
<i>many, few (countables)</i>			
extra	lʰɛkʰ-lɛʌ	ल्हाक्मा	ལྷག་མ་
more	mɛ:lɛʌ	मा: / माडा	མང་ང་

Gloss	IPA	Devanagari	Tibetan Script
few	tiˈtɛɫ	तीदे	དི་དི་
many	mɛːɫ	माः	མང་ང་
more than	l̥ʰɛkˈɻ	ल्हाक	ལྷག་
very much	miˈtʃiˈlkeˈɫ mɛːɫ	‘मीचयीकी माडा	དམི་ཅིག་གི་མང་ང་
<i>much, little (masses, collectives, extensions)</i>			
little	ɲõˈɫwɛɫ	ड्युडा	ཁུང་ང་
<i>all, any, each, every (totality)</i>			
all	kˈiːɾiɫ	घीरी	གི་རི་
<i>full, empty</i>			
empty	toŋˈɫbɛɫ	तोडपा	རྟོང་པ་
full	kˈɛŋɻ	गाड	གང་
full, brimming	demˈɫdemɻ	देम-देम	དེམ་དེམ་
<i>enough, sufficient</i>			
plenty	meˈtʃʰoˈliˈɫ	मेछोली	མོ་ཅོ་ལི་
sufficient (v)	dɛŋˈɫjeɫ	दाडये	འདང་ཡས་
<i>abundance, excess, sparing</i>			
remaining	l̥ʰɛkˈɻˈɫɛɫ	ल्हाक्ला	ལྷག་ལ་
<i>increase, decrease</i>			
decrease (v)	ɲoŋˈɫduˈɫ dɔˈɫjeɫ, tʃʰɛkˈɻˈɫjeɫ	ड्युडदु डोये, क्षाक्ये	ཁུང་དུ་འགོ་ཡས་, ལྷག་ཡས་
increase in number (v)	mɛŋˈɫduˈɫ dɔˈɫjeɫ, pˈhɛɾˈɫjeɫ	माडदु डोये, फारये	མང་དུ་འགོ་ཡས་, འཕར་ཡས་
number			
one	tʃikˈɻ	चयीक	གཅིག་

Gloss	IPA	Devanagari	Tibetan Script
two	niːʌ	‘डो	གཉིས་
three	sumʌ	सुम	གསུམ་
four	ʃiːʌ	शयी	བཞི་
five	ɲɐʌ	‘डा	ལྔ་
six	tʰukʌ	डुक	དྲུག་
seven	tʰonʌ	धीन	བདུན་
eight	kʰjɛʔʌ	ग्ये	བརྒྱད་
nine	kʰuʌ	घु	དགུ་
ten	tʃuːʌ	च्यु	བརྒྱ་
eleven	tʃukʰʌ tʃikʰʌ	च्युक च्यीक	བརྒྱ་གཅིག་
twelve	tʃukʰʌ niʌ	च्युक ‘डो	བརྒྱ་གཉིས་
twenty	ni-ʈuʌ	डीस्यु	ཉི་ལྔ་
one hundred	kʰjɛʌ	ग्या	བརྒྱ་
thousand	tonʌ	तोड	ལྔ་ཅུ་
ten thousand	tʰiʌ tʃikʰʌ	ठी च्यीक	ཁྱི་གཅིག་
one million	bumʌ dʒikʰʌ	बुम च्यीक	འཇུག་གཅིག་
half	pʰɛʔʌ	फे	ཕད་
sequence			
count (v)	tʰɛŋ-ɣɛʌ kʰjɛb-ʈjɛʌ	ढाडगा ग्याप्ये	གྲང་ཀ་རྒྱུག་ཡས་
by turns	rim-ʈrimʌ	रीम-रीम	རིམ་རིམ་
line, row	nɐ-ɾɛʌ	नारी	ན་རེ་
arrange, organize			
<i>put together, arrange (of physical objects)</i>			
arrange nicely (v)	kʰɛ-moʌmɐʌ tʰɛɣ-ʈjɛʌ	घामोमा ढीक्ये	དགའ་ཚོ་མ་སྒྲིག་ཡས་
arrange stuff (v)	tɛ-ʈjɛʌ	ढीक्ये	སྒྲིག་ཡས་
stack (v)	tsikʰʌʈjɛʌ	चीक्ये	བཅོགས་ཡས་

Gloss	IPA	Devanagari	Tibetan Script
whole, unite, part, divide			
<i>whole</i>			
whole	høːleʔ˥	होले	ཉོད་ལེ་
<i>divide</i>			
divide (v)	k'ɔːlje˥	गोये	བགོ་ཡས་
share; division	kɛ˥de˥	कादा	སྐལ་ད་
value			
<i>good, bad</i>			
bad	ʔɛː˥, t'uk'˥tʃɛ˥	आ, दुक्चा	ཨ་, སྤྱག་ཅག་
good	k'ɛː˥, s'ɛːɲɛ˥	घा, शाडा	དགའ་, བཟང་ང་
pure	tʃɛ˥ɲɛ˥	चाडा	གཙང་ང་
<i>useful, useless</i>			
useless; waste	pʰɛn˥tok'˥ me˥gin˥	फेन्थोक मेगीन	ཕན་ཚོག་མེད་ཀྱིན་
waste	tʰop'˥le˥	ठोप्ला	ཁྲོལ་ལ་
proper, improper			
suitable (v)	lɛm˥po˥	लेम्पो	ལེན་པོ་
time			
<i>points of time</i>			
before	ʔɛn˥le˥	एन्ला	ཡོན་ལ་
after	ʃjem˥ʃjem˥	स्याम-स्याम	གཤམ་གཤམ་
early in the morning	ɲɛ˥tʰi˥	‘डात्ती	ཟླ་ཏི་
last night	deŋ˥ tʃɛ˥mo˥	दाङ छेमो	གངང་མཚན་མོ་
late (be) (v)	pʰi˥tje˥	फीये	ཐི་ཡས་

Gloss	IPA	Devanagari	Tibetan Script
later	ʃ'ok¹-lɐl	शुक्ला	ལྷག་ལ་
morning	ɲɐ¹rok¹ʋ	‘डारोक	ཟླ་མོག་
night	tsʰe¹moʋ	छेमो	མཚན་མོ་
noon	ɲi¹moʋ	डीडमो	ཉིན་མོ་
now	tʰɛn¹tɐl	धान्दा	ད་ལྟ་
summer	jeʔ¹kɐʋ	‘यारका / ‘याका	དུས་ཁ་
three days ago	ʃ'i¹ɲi¹	शयीडी	བཞི་ཉིན་
three days hence	ʃ'e¹	शये	ཞེ་
today	t'i¹riŋ¹	धीरीङ	དེ་རིང་
tomorrow	ɲɛ¹to¹	‘डेटो	ཉིང་
two days ago	kʰi¹ɲi¹	खीडी	ཁི་ཉིན་
two days hence	ne¹	‘ना	ན་
winter	k'uŋ¹ɢɐ¹	घुङगा	དུས་ཁ་
year (after next)	ʃ'e¹wi¹	शयेवी	ཞེ་བའི་
year (before last)	ʃ'i¹ɲi¹	शयीडी	བཞི་ཉི་
year (last)	ne¹ɲi¹	नाडी	ན་ཉི་
year (next)	seŋ¹pø¹	साङपो	སང་མོའི་
yesterday	dɛŋ¹	दाङ	གང་
<i>units of time</i>			
age	lo¹	लो	ལོ་
day	ɲi¹me¹	डीमा	ཉིན་མ་
day (twenty-four hour time period)	ʃ'ɛʔ¹mo¹	श्याक्मो	བཞག་མོ་
month	dɛ¹we¹	धावा	ཟླ་བ་
week	tʰɔn¹dɐ¹	धीन्डा	བདུན་ཟག་
year	lo¹	लो	ལོ་
year (this)	tʰɛ¹lo¹	दालो	ད་ལོ་

Gloss	IPA	Devanagari	Tibetan Script
aspect			
<i>complete, finish, succeed</i>			
exhaust (v)	tʰɛŋ¹ tʃʰe¹je¹	थाड क्षेये	ཐང་ཆེད་ཡས་
finish, complete (v)	ts'o-lj⁵e¹, tsʰɛr¹je¹, dʊp¹¹je¹	इयोक्थे, छारये, डुप्ये	ཇོགས་ཡས་, ཚར་ཡས་, ལྷུབ་ཡས་
<i>rapidity, suddenness</i>			
fast, quickly	gjo¹wɛ¹	ग्योक्या	མགྲོགས་བ་
slow	tʰɛ¹le¹, kʰɛ¹le¹ kʰɛ¹le¹	दाला, गाली-गाली	དལ་ལ་, ག་ལི་ག་ལི་
false	s'ok¹¹po¹	शोकपो	ཚོག་པོ་
true	t'em¹pe¹	धेन्या	བདེན་བ་
true; factual	ŋo¹ne¹	‘डोने	དངོས་གནས་
features of objects			
<i>beautiful, ugly</i>			
attractive	dze¹wɛ¹	जेवा	མཛེས་བ་
<i>color</i>			
black	nek¹¹po¹	नाकपो	ནག་པོ་
blue	ŋom¹po¹	‘डोन्पो	ཇོན་པོ་
color	tsʰø¹	छो	ཚོན་
green	dʒʊŋ¹go¹	इयाङगु	ལྗང་གུ་
red	mɛ¹to¹	‘माउ	དམར་པོ་
white	kɛ¹to¹	काउ	དཀར་པོ་
yellow	se¹wo¹	सेउ	སེར་པོ་
<i>sweet, bitter, tasteless</i>			
bitter	kʰɛ¹¹ti¹je¹	खाक्तीया	ཁ་རྩོག་བ་
salty	tsʰɛ¹¹to¹wɛ¹	छाटोवा	ཚ་ཐོ་བ་

Gloss	IPA	Devanagari	Tibetan Script
sour	kju˥mu˧	क्युरमु	སྐུར་མོ་
spicy	kʰe˧tsʰe˧	खाछा	ཁ་ཚ་བ་
sweet	ŋe˧mo˧	‘डारमो	མངར་མོ་
tasty	ʃim˧bo˧	शयीम्बो	ཞིམ་པོ་
<i>clean, dirty</i>			
clean	tsɛŋ˧me˧	चाङमा	གཙང་མ་
clean, clear	sɛ˧lɛ˧	साला	གསལ་ལ་
clear; crystal clear (water)	tʰɛŋ˧me˧	दाङमा	དངས་མ་
dirty	tsok˧˥pe˧, tsʰo˧re˧	चोकपा, ज्योरा	བཙོག་པ་, འཛོར་ར་
<i>blemished, unblemished</i>			
blemish, imperfection	kjøn˧	क्योन	སྐྱོན་
<i>hot, lukewarm, cold</i>			
cold (temperature)	tʰɛŋ˧mo˧	ढाङमो	གང་མོ་
hot (temperature)	tsʰe˧di˧	छादी	ཚ་དི་
lukewarm	mɛ˧˥mo˧ti˧	‘मामोई	མ་མོ་དི་
<i>wet, dry</i>			
dry	kɛm˧bo˧	काम्बो	སྐམ་པོ་
dry (v)	kɛm˧je˧	काम्ये	སྐམ་ཡ་
sticky	dʒɛk˧˥dʒɛk˧˥	ज्याक-ज्याक	རྩག་རྩག་
wet	lɛm˧be˧	‘लोन्बा	ལྷོན་པ་
<i>uneven (rough), level (smooth)</i>			
rough	tsu˧˥wɛ˧	चुवा	རྩལ་བ་
smooth	dʒɛ˧be˧	ज्याबा	འཇམ་པ་
<i>straight, crooked</i>			

Gloss	IPA	Devanagari	Tibetan Script
bent; crooked	k'o-lkoł	घु-घु	གུག་གུག་
curved	kjok [˦] lkjok [˦]	क्योक-क्योक	འཕྱོག་འཕྱོག་
straight	k ^h ep [˦] teł	खाप्ते	ཁ་ཐ་
twisted	tʃ ^h u [˦] rił k'jɛp [˦] lkjɛł	च्युरी ग्याप्का	བཙུམ་རི་བརྒྱབ་ཀྱ
sharp	k ^h ɛł nołweł	खा 'नोवा	ཁ་ཚྭ་བ་
blunt	k ^h ɛł nołweł me-lkeł	खा 'नोवा मेगीन	ཁ་ཚྭ་བ་མེད་ཀྱིན་
sharp (of a blade)	nołreł	'नोरा	ཚྭ་ར་
<i>soft, tender</i>			
hard	rɛːł	'रा	ཐ་བ་
soft	dʒɛ-lbeł, sop [˦] lsop [˦] ł, bo-lbeł	इयाबा, सोप-सोप, भोला	འཇམ་པ་, སོབ་སོབ་, འབྲེལ་ལ་
<i>large, small</i>			
fat, plump	k'jɛ-lw [˦] ɛł	ग्याक्चा	རྒྱགས་བ་
large	tʃ ^h ɛːł	क्षे	ཆེ་
small	tʃ ^h õłɛł	च्युडा	ཆུང་ང་
thin	keɪłboł	काम्बो	སྐམ་པོ་
<i>tight, loose</i>			
loose	luk [˦] luk [˦]	लुक-लुक	ལུག་ལུག་
tight	t'ɛ-lmeł	दामा	དམ་མ་
spatial dimensions			
<i>measure, to measure</i>			
measure (grain)	t'ɛb-ljeł	दाप्ये	ལྷུང་ཡས་
measure (of oil); jug	k'er-ljeł	घारये	འགར་ཡས་
measure (v)	ts ^h ɛ [˦] ł k'jɛb-ljeł	छे ग्याप्ये	ཚད་རྒྱག་ཡས་

Gloss	IPA	Devanagari	Tibetan Script
measure, size	ts ^h eɭ	छे	ཚད་
<i>high, low, deep</i>			
height	riŋɫɕuŋɭ	रीङथुङ	རིང་ཐུང་
high	t ^h oɫwɐɭ	थोवा	མཐོ་བ་
long	riŋɫɐɭ	रीङा	རིང་ང་
low	mɛɫɭ	मावा	དམའ་བ་
tall	riŋɫɐɭ	रीङा	རིང་ང་
<i>long, short, far</i>			
length	riŋɫs ^h eɭ	रीङछे	རིང་ཚད་
short	toŋɫɐɭ	तुङा	ཐུང་ང་
narrow	t'oɫwɐɭ	दोक्वा	དོག་བ་
wide	jɛŋɫɐɭ	याङा	ཡང་ང་
broad	ʃjɛŋɫtɕ ^h eɭ	श्याङक्षे	ཞེང་ཆེ་
broadness	ʃjɛŋɫgɐɭ	श्याङगा	ཞེང་ག་
narrowness	t'okɫɫɔɫɭ	दोक्लो	དོག་བ་
thick (of clothes or feet)	t ^h uɫwɐɭ	थुवा	མཐུག་བ་
thick (of milk or suji)	kɛɫɭ	काः	ག་
<i>specific measures of length</i>			
distance (between two points)	t ^h ɛkɫɫɪɫɐɭ	थाकरीङा	ཐག་རིང་ང་
length (clothing)	riŋɫt ^h uŋɭ	रीङथुङ	རིང་ཐུང་
spatial orientations			
<i>north, south, east, west</i>			
flat	lepɫɫɛpɫɫɐɭ, ɖʒɐɫɖʒɐɭ	लेप-लेप, ज्या-ज्या	ལེབ་ལེབ་, རྩ་རྩ་
point (n)	tseɭ	चे	ཅེ་

Gloss	IPA	Devanagari	Tibetan Script
east	ʃerʌ	स्यार	ཤར་
north	tʃʰeŋʌ	इयाङ	བྱང་
north east	tʃʰeŋʌ ʃerʌ	इयाङ स्यार	བྱང་ཤར་
north west	tʃʰeŋʌ nupʌ	इयाङ नुप	བྱང་རུབ་
south	lʰoʌ	ल्हो	ཨོ་
south east	lʰoʌ ʃerʌ	ल्हो स्यार	ཨོ་ཤར་
south west	lʰoʌ nupʌ	ल्हो नुप	ཨོ་རུབ་
west	nupʌ	नुप	རུབ་
left	jønʌ	‘योन	གཡོན་
right	jeʌ	‘ये	གཡས་
straight	kʰepʰteʌ	खाप्ते	ཁབ་ཐད་
directly	ʃeʰreʌ	स्यारे	ཤརེ་

spatial positions

here, there

here	duʌruʌ	दुरु	འདི་ཙུ་
there	ʔuʌruʌ	हुरु / उरु	འུ་ཙུ་
toward here	tsʰuʌlleʌ	छुला	ཚུ་ལ་
toward over there	heʰlleʌ	‘हाला	ཏར་ལ་

where, somewhere, everywhere

everywhere	kʰeʰseʰt kʰeʰruʌ	गासा घरु	ག་ས་ག་ཙུ་
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among, between, in, inside

in, inside of	neŋʌduʌ	नाडदु	ནང་ཙུ་
middle (in the)	kʰuŋʌlleʌ	घुडला	གུང་ལ་

at, beside, near, far

far	tʰekʰʰrinʌlleʌ	थाकरीडा	ཐག་རིང་ང་
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Gloss	IPA	Devanagari	Tibetan Script
near	neɿ	ऊँ	ཉེ་
<i>in front of, face to face, in back of, behind</i>			
behind, in back	k'jɛpɿ	ग्याप	ཐུབ་
front	donɿ	दोड	གདོང་
front [honorific]	koɿdɔnɿ	कुदीन	སྐྱེ་མདུན་
in front/ahead	donɿdonɿ	धोड-धोड	གདོང་གདོང་
<i>on, upon, on the surface of</i>			
on	kʰɛɿlɛɿ, k'ɛŋɿlɛɿ	खाला, गाडला	ཁར་ལ་, གང་ལ་
on top	tʰokɿɿlɛɿ	थोक्ला	ཐོག་ལ་
<i>above, below</i>			
above; up	tɔɿlɛɿ	तोला	ཐོད་ལ་
below; under	hokɿɿlɛɿ	होकला	ཨོག་ལ་
spatial extensions			
down	mɛɿlɛɿ	माला	མར་ལ་
up	jɛɿlɛɿ	याला	ཡར་ལ་
existence in space			
fit (v)	ʃonɿjɛɿ	स्योडये	ཤོང་ཡས་
weight	tʃɛɿliɿ	च्येली	ཐེད་ལོད་
heavy	tʃɛɿ	च्ये	ཐེ་
light (not heavy)	jɛɿŋɛɿ	याडा	ཡང་ང་
status			
respect; honor	kuɿʃɛpɿ	घुस्याप	གུས་ཞབས་
moral and ethical qualities and related behavior			

Gloss	IPA	Devanagari	Tibetan Script
<i>goodness</i>			
virtue/decency	tʃʈʰ s'ɛŋʌ	च्यो शाङ	ལྷོད་བཟང་
<i>honesty, sincerity</i>			
honest	t'ɛŋ-ɛʌ	ढाङा	ངང་ང་
honest one	t'ɛŋ-poʌ	ढाङपो	ངང་པོ་
humble	ɲɛm'tʃʈʰŋʌ	'ड्याम्चुङ	ཉེམ་ཚུང་
<i>mercy, merciless</i>			
mercy, pity	ɲiŋ'tʃɛʌ	'डीङजे	ཉིང་ཇེ་
<i>sensible behavior, senseless behavior</i>			
fool, foolish	kuʔ'ɪpɛʌ, lɛm'ɪpɛʌ	कुक्पा, 'लेन्पा	ཁུག་པ་, ལེན་པ་
inept, sloppy	me-lɛm'ɪpɛʌ	मेलाम्पा	མེད་ལམ་པ་
<i>bad, evil, harmful, damaging</i>			
sin	t'ik'ɪpɛʌ	धीक्पा	ཐྱིག་པ་
discourse markers			
in this way, thus	ho'tʃ'e-ɾɛʌ	होइयेरी	འོ་ཅུས་རེ་
not	mɛ-lɛk'ɪʌ	मालाक	མ་ལགས་
discourse referentials			
<i>pronouns</i>			
1st person sing reflexive	ɾɛŋ'ɾɛŋʌ	राङ-राङ	རང་རང་
2nd person pl reflexive	mi-ɾi'ɾi-mi-ɾiʌ	मीरी-मीरी	མི་རེ་མི་རེ་
I	ŋɛʌ	ङा	ང་
he	kʰoʌ	खो	ཁོ་
he (hon)	kʰoŋʌ	खोङ	ཁོང་
she	moʌ	मो	མོ་

Gloss	IPA	Devanagari	Tibetan Script
Lowa	lo˦lwe˧˥	लोवा	ལྷོ་བ་
Mustang	mu˦lsteŋ˧˥	मुस्ताङ	མུ་སུ་ཏང་
Nepal	ne˦pəl˧˥	नेपाल	ནེ་པལ་
Kathmandu	jəm˦bu˧˥	याम्बु	ཡམ་བུ་
America	ʔe˦ri˧˥	आरी	ཨ་རི་
India	k˦jɛ˧˥k˦ɛ˧˥	ग्यागा	རྒྱ་གར་
China	k˦jɛ˧˥nɛk˧˥	ग्यानाक	རྒྱ་ནག་

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