

Lesson 1

The Alphabet and the Sound System

❖ 1.1 The Tibetan Alphabet

1.1.1 The Alphabet

The invention of the Tibetan alphabet is credited to Thon-mi Sambhota (ཐོན་མི་སམ་བྷོ་ར།), a scholar and minister who served under the reign of King Srong bTasn sGam Po (སྟུང་བཙན་སྐམ་པོ།) in the seventh century. Modeled after Brahmi writing, the Tibetan alphabet consists of 30 letters and 4 vowel diacritics. The basic unit of writing is the syllable and not the word.

In the traditional alphabet chart, letters are arranged, in principle, according to their place of articulation (in rows) and manner of articulation (in columns). In the last three rows, the rationale for the arrangement becomes less apparent. For example, the letters ར and ལ of the sixth row, which behave similarly to the third-column letters in the previous five rows, are placed elsewhere. That said, it is important to memorize the order of the alphabet as all Tibetan dictionaries list lexical entries in that order.

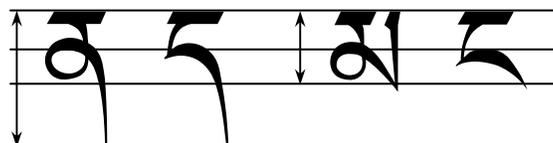
In the following chart of the Tibetan alphabet, the standard Latin transcription (SLT), which is the spelling adopted by scholars to transcribe literary Tibetan, and the phonetic transcription of the Lhasa dialect are both given for each letter, with the SLT followed by the phonetic transcription of the Lhasa dialect in brackets. For example, the letter ག is transcribed as ga [k^ha], “ga” being the SLT and [k^ha] being the phonetic transcription. To the upper right of each letter, one finds a tonal notation of either LL or HH. They represent the tone associated with each consonant. We will introduce tones in section 1.2. For a precise description of the phonetic symbols adopted in this book, please see the explanations in section 1.3.1. The use of the four vowel diacritics at the lower right corner of the chart will be explained in 1.3.4.

Column I	Column II	Column III	Column IV
ka [ka] ཀ HH	kha [k ^h a] ཁ HH	ga [g ^h a] ག LL	nga [nga] ཎ LL
ca [ca] ཅ HH	cha [c ^h a] ཅ HH	ja [c ^h a] ཇ LL	nya [nya] ཉ LL
ta [ta] ཏ HH	tha [t ^h a] ཏ HH	da [t ^h a] ཏ LL	na [na] ཏ LL
pa [pa] ཐ HH	pha [p ^h a] ཐ HH	ba [p ^h a] ཐ LL	ma [ma] མ LL
tsha [tsha] ཅ HH	tsha [ts ^h a] ཅ HH	dza [ts ^h a] ཇ LL	wa [wa] མ LL
zha [sha] ཉ LL	za [sa] ཟ LL	'a [a] ཨ LL	ya [ya] ཙ LL
ra [ra] ཨ LL	la [la] ཨ LL	sha [sha] ཨ HH	sa [sa] ཨ HH
ha [ha] ཨ HH	a [a] ཨ HH	། ུ ཾ ཿ ེ	

Chart 1.1 The Tibetan Alphabet

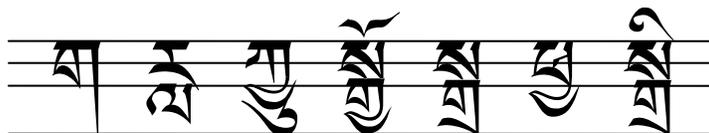
1.1.2 Writing (Stroke Order) of the Alphabet

There are two things to note about the writing of Tibetan letters. First, the "base" line of the letters is at the top. All letters are lined-up downwards from that base line. Second, all letters are not of the same "height". As shown in the diagram below, ཉ and ཏ are almost twice as "high" as མ and ཎ.



Letters that resemble ཉ and ཏ in height are called long-legged letters. Besides ཉ and ཏ, there are also ཀ, ཁ, ག, ཅ, ཏ, ཉ, ཏ, ཏ, ཏ, ཏ, ཏ, and ཏ: ten altogether. The rest of the letters

of the alphabet have about the same height as མ and ར. It is important to make this distinction, to avoid writing ར and ར too similarly. In Lesson 2, the learner will encounter stack-up (i.e., superjoined or subjoined) letters, where two or three letters are written vertically, one on top of the other. The stack-up letters have the same height, more or less, as a single long-legged letter, as shown below:



The following chart shows the standard calligraphic stroke order of the Tibetan alphabet, as taught in their elementary schools. Note that this is the correct stroke order when one intends to produce handwriting of an elaborate calligraphic quality. In casual handwriting, though, the rules loosen and the strokes are more fluid.

ག Row	ཅ Row
ག - 𑀧 𑀨 𑀩 𑀪	ཅ - 𑀫 𑀬 𑀭 𑀮
ཁ - 𑀯 𑀰 𑀱 𑀲	ཆ - 𑀳 𑀴 𑀵
ག - 𑀶 𑀷 𑀸 𑀹	ཇ - 𑀺 𑀻 𑀼 𑀽
ང - 𑀾 𑀿	ཉ - 𑀿 𑀿 𑀿 𑀿 𑀿
ཏ Row	ལ Row
ཏ - 𑀿 𑀿	ལ - 𑀿 𑀿
ཐ - 𑀿 𑀿 𑀿 𑀿 𑀿	ཤ - 𑀿 𑀿 𑀿 𑀿
ད - 𑀿 𑀿	བ - 𑀿 𑀿
ན - 𑀿 𑀿 𑀿 𑀿	མ - 𑀿 𑀿 𑀿 𑀿 𑀿

ཅ Row

ཅ	- ཅ ཅ ཅ ཅ
ཆ	- ཆ ཆ ཆ ཆ
ཇ	- ཇ ཇ ཇ ཇ
ཉ	ཉ ཉ ཉ ཉ ཉ

ཞ Row

ཞ	- ཞ ཞ ཞ ཞ
ཟ	- ཟ ཟ ཟ ཟ
འ	- འ འ འ འ
ཡ	ཡ ཡ ཡ ཡ

ར Row

ར	- ར ར ར
ལ	- ལ ལ ལ ལ
ཤ	ཤ ཤ ཤ
ས	- ས ས ས

ཧ Row

ཧ	- ཧ ཧ ཧ
ཨ	ཨ ཨ ཨ ཨ

vowel diacritics:

--

The style of the alphabet we introduce here is called *Wuchan* (དབུ་ཅན). The style used in all printed material. In the U-Tsang region, elementary school children learn a different style called *Wumed* (དབུ་མེད). Only in higher grades do they learn to read *Wuchan*, but at that time, they also learn to write in a cursive script called *Chu* (འབྲུག་གྲི). It is probably safe to say *Wuchan* is by far the most important and practical style to master in reading, if not also in writing.

When it comes to calligraphy as a traditional art, there are many more different styles (or rather sub-styles). See the cultural notes in Lesson 5 for a brief introduction to Tibetan calligraphy and some examples.

❖ 1.2 Lhasa Tibetan as a Tone Language

Most speakers of Indo-European languages (including English) are unfamiliar with the notion of tone and its use in a natural language. With more than half of the human population speaking a tone language natively (yes, speakers of non-tonal languages are actually in the minority), it is worthwhile to know the fundamental concepts of tones.

While some adult learners have the enviable ability to imitate tones with amazing accuracy just by hearing the word, it is the authors' observation that most learners cannot. The purpose of the discussion on tone is to provide to the majority of the readership important insights into the workings of tones. For learners of Lhasa Tibetan, this piece of linguistic knowledge is essential if they want to possess a natural and good accent.

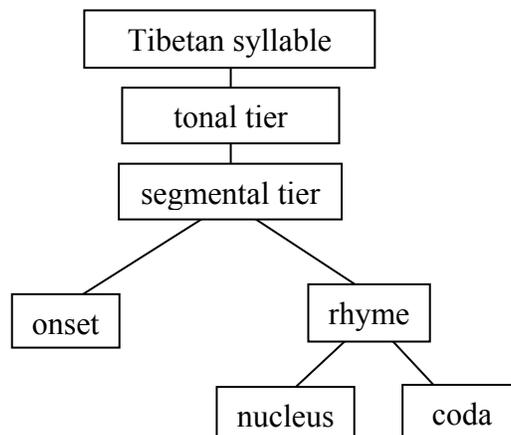
We will start with a number of universal properties regarding tones in general and then move on to an analysis of the tones in Lhasa Tibetan in light of these tonal universals.

1.2.1 Tone as an inalienable component of the syllable

Human speech employs change of pitch all the time. When a syllable starts with a lower pitch and ends with a higher pitch, one hears a "rising" pattern. In the following context of English, for example, the word *yes* can be pronounced with a rising pitch pattern to signify that Speaker B (John) is ready for Speaker A to ask a question: A: *John?* B: *Yes?* This is to contrast with the *yes* pronounced with a "falling" pitch change when a football fan yells out *Yes!* when watching his favorite running back score the winning touchdown in the last seconds of a game. The change of pitch is highly audible and an effective means to convey messages in human speech. The excitement conveyed in an emphatic "falling" *yes* is obvious to all native speakers of English.

In a tone language, the use of pitch, whether by sustaining the same pitch height for the entire syllable or by changing the pitch from high to low (i.e. falling) or low to high (i.e. rising), is an integral part of the pronunciation of that word/syllable. The pitch level or contour associated with the syllable in determining its meaning is tone. A syllable with a rising tone, for example, can only be pronounced as such regardless of the speaker's emotional state. (To show emotions or other pragmatic information, speakers of tone languages typically use other linguistic devices such as sentential particles and adverbs.)

Lhasa Tibetan is a tone language. Thus, the entirety of the pronunciation of a Tibetan syllable must be represented by two equally essential components: (i) the part that deals with sound segments such as consonants and vowels and (ii) the part that deals with the tone. Technically, the former component is called segmental tier, as it consists of sound segments. The latter, called the tonal tier, represents the distinct pitch pattern designated to each syllable.



The tone associated with a lexical item must be consciously remembered and clearly pronounced as one would the sound segments (consonants and vowels). Failure to pronounce the tone correctly is no less frustrating to the listener than, for another example drawn from English, the speaker's failure to distinguish the English vowels clearly or to keep the final consonants of a syllable. Imagine the difficulty for us to understand someone's speech when he pronounces *big, bit, beat, bees, beep*, etc. all as *be*. Occasionally, one finds books about Lhasa Tibetan that promote the idea to not learn the tones correctly but to resort to the discourse context to help convey the meaning. In response to this idea, the authors invite the reader to point at a book to an English speaker and say "*plays gave may they bake*" (intended: please give me the book.) or "*plee gee mee thee bee*." The listener may understand the request perfectly, with the help of the gesture and the discourse context; but imagine the impression he has on the poor proficiency level of your English. Likewise, speaking a tone language without tones may present serious communication problems. Even though one's toneless utterances are understood (usually by great effort from the listener), the strangeness of the pronunciation simply reflects a poor command of the language. The defective nature becomes even more apparent in telephone conversations, when the listener is deprived of any visual aid from the linguistic or pragmatic environment.

This textbook recognizes the difficulty for English speakers to internalize tones as an inalienable component of the syllable but would like to emphasize that it is essential to learn the tones well if one expects to learn the language accurately from the very beginning. At the initial stage, spend time on practicing the pronunciation of the tones with the CD recording. The time will be well spent in acquiring a good accent.

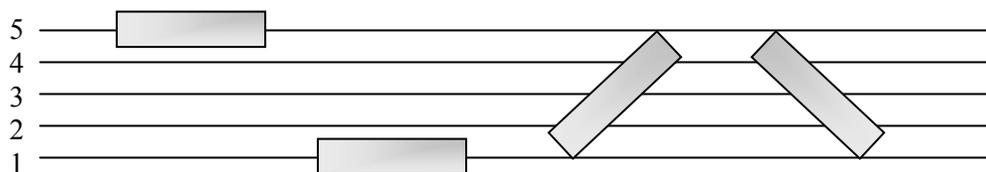
1.2.2 Basic Terminology: Pitch, Register, Level and Contour Tone

The rising or falling contour in pitch in the English word *yes* as we just discussed is called intonation, not a tone, for it is not a built-in part of the word *yes*. In a tone language, pronunciation of a syllable in a particular pitch pattern decides the meaning of that word in the same way as the vowel does in each of the English words such as *boat, but, boot, bate, bat, bet*, etc. The good news is, typically, there are far less tonal patterns than vowels in any human language.

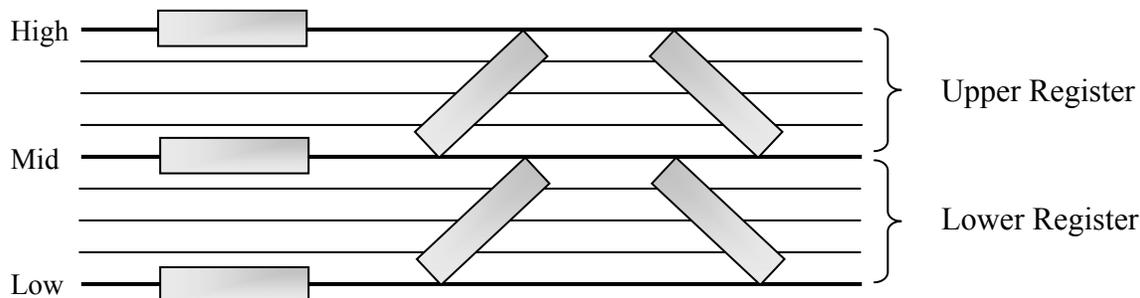
In order to function "tonally", a tone language must at least have two tones at two different (contrasting) pitches: high and low. Without any change in pitch (i.e. the same pitch height is sustained for the duration of the syllable), there are two tones: HH and LL. The combination HH indicates the start-point (the first H) and the end-point (the second H) of the syllable; same for LL. These are called level tones. Most of the African tone languages operate on this simple two-tone (high vs. low) system. Asian tone languages typically have more than the said two level tones, but they all have these two basic tones in their tonal repertoire.

The pitch pattern of a syllable can also change from high to low or vice versa, creating two additional tones: rising and falling. Rising and falling tones are instances of simple contour tones (as opposed to level tones), which can be represented by LH (rising) and HL (falling), respectively. Theoretically, with only two contrasting pitches H and L in the system, a tone language can effectively (and with utmost economy) employ four tones that have the maximal contrasting shapes for easy differentiation by its speakers. Lhasa Tibetan is such a language. In other words, Lhasa Tibetan has these four tones, which are

most commonly seen and easy to distinguish: high level (HH), low level (LL), rising (LH), and falling (HL), as shown in the diagram below in the customary 1-5 pitch scale. (Think piano.)



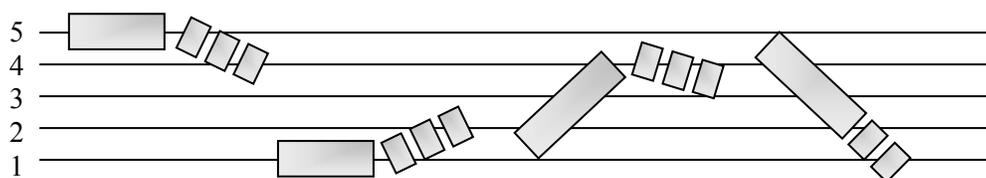
As a side note, in a more complicated tonal system, such as that of Taiwanese or Cantonese from the other branch of the Sino-Tibetan language family, there exist three level tones: high (HH), mid (MM), and low (LL). The existence of these three contrasting pitches allows the possibility of two kinds of falling tones, from high to mid (HM) or from mid to low (ML), as well as two rising tones, from low to mid (LM) and from mid to high (MH). This kind of system is described as having two different tonal registers, as shown below. Fortunately for us, Lhasa Tibetan has only one register, as discussed earlier. Sometimes the term "register" is used erroneously to refer to "pitch height" in Tibetan. Learners should not be confused by this misnomer.



1.2.3 Body and Tail of a Tone

The two-pitch-four-tone system described above for Lhasa Tibetan is the ideal phonological model. In the real world, when listening to the recording of the Tibetan alphabet, the learner will detect that the letters designated with the high level tone (HH) such as ཨ or ཨྱ sound slightly falling (54 or 53), instead of the perfectly level 55.

Likewise, the actual surface sound of letters of the low level tone (LL) such as ཨྱ or ཨྱ shows an obvious rising shape (12 or 13) and not the expected level shape sustained at low pitch (11). This is because the syllables are being pronounced in isolation (i.e. without any following syllable) and, in pronouncing a syllable in isolation (*aka* the citation form), the vocal chords controlling the pitch height slacken towards the end of the utterance and create an unintended contour of the tone. The typical slackening of the pitch towards the end of the four tones pronounced in isolation is shown below by the dotted line.



The four tones pronounced in isolation

We may call this unintended (dotted) part "the tail" of the tone, as opposed to its main body. It is important to remember that the tail, which is clearly audible in a syllable's citation form, is not to be taken as part of the underlying tonal shape. The third tone in the diagram, for example, seems to have a rising-falling contour (pitch change: 1-3-2). Many Tibetan linguists describe this tone at its face value as a complex contour tone (rising then falling combined). The authors argue that it is best analyzed as a simple rising tone (with a falling tail in citation form, of course). The main evidence is that the determined climb from the beginning to the peak (the 1-3 climbing part) is both longer in duration (measured 3: 1 in length) against the 3-2 falling part and stronger in sound intensity than the dotted falling part. It also patterns with the falling tone in tone sandhi rules. Similarly, the second tone in the diagram, although customarily expressed in numerical notation as 12 or 113 if long, has a unmistakable flat (level) part before the pitch rises. This differs sharply from the determined climb observed in the third tone just mentioned. It is best analyzed as a low tone with a tail. Its tail, or the unintended rising part, can be explained by the following articulatory account. Produced fairly close to the bottom of a speaker's natural vocal range, a level low tone requires more effort from the speaker to sustain at that pitch height than any other tone. When pronouncing an isolated low-tone syllable, the vocal chords, after sustaining the low pitch for the initial duration, slacken and the pitch bounces up, rendering a more audible tail than that of other tones. In continued utterances, when a tone is followed by another tone, the unintended slackening does not happen and the tail does not show. For example, e.g. ཀུ in isolation is [ku]-54 or 53, with a falling tail; but in ཀུ་ཤི འཕྲུབ་ *apple*, ཀུ has a clean, sustained, high level tone [ku]-55. Similarly, ཉེ in isolation is [nya]-12, with a rising tail; but in ཉེ་ཤི རྩིས་ *fish meat*, ཉེ has a clean, sustained, low level tone [nya]-11. When listening to the recording of the exercises 1.5.3 and 1.5.4, one should immediately notice that the first syllable of any disyllabic word is pronounced with a clean-cut, tailless, sustained 11 or 55. This is when the true colors of the high and low level tones are seen, or more precisely, heard.

1.2.4 The Four Lexical Tones in Lhasa Tibetan

Following the previous discussion of tones in general, we can consider Lhasa Tibetan to have developed a typical (simple yet complete) tonal system, which contains two contrasting pitches H and L (no mid level tone) and the logical, or logically allowed, four tones, namely, high level (HH), low level (LL), falling (HL), and rising (LH). All single letters are pronounced as level tones. The contour rising (LH) and falling (HL) tones evolved from level tones in syllables with suffixes in orthography. They will be discussed

in Lesson 3, where we focus on suffixes and their effects on the rhyme and the tonal shape of the syllable.

To help the learner acquire a habit to always treat the tone as an integral part of the pronunciation, the authors will notate the pronunciation of each word with a phonetic symbol that marks the tone of that syllable. The following tone marks mean exactly the same as the notation using H and L.

HH: — LL: ∪ LH: ↗ HL: ↘

Since the vowel is the actual tone-bearing unit of a syllable, we put the tone marks on the vowel of each syllable. Note that the low level tone is represented by “∪” for two reasons. First, the level marker “—” is already used for the high tone HH. Second, the tail of the low tone, when overt, does have a salient rising contour (12 or 113). Remember, however, when followed by another syllable, the tail of the low tone is truncated and the true low level tone (11) should be pronounced.

Given the tone marks, the first row of the alphabet can be notated as ཀ [kā], ཁ [k^hā], ག [k^hǎ], and ལ [ngǎ], instead of the cumbersome ཀ [ka]-HH, ཁ [k^ha]-HH, ག [k^ha]-LL, and ལ [nga]-LL. Some learners with sensitive listening ability may be able to hear a difference in pitch height between the aspirated high ཁ [k^hā] (starts at 5) and the non-aspirated ཀ [kā] (starts slightly lower at 4). This impression is accurate. Indeed, aspirated stops and affricates [p^h, t^h, k^h, c^h, ts^h] do have a slight higher pitch (54 or 55) than the non-aspirated high toned [p, t, k, c, ts] (43 or 44). This acoustic difference is not phonologically significant. In a native speaker's mind (or to his ear), it is the same tone: HH.

❖ 1.3 Writing System vs. Sound System

English has a rather rich inventory of vowels. There are twelve altogether (e.g. *beat*, *bit*, *bait*, *bet*, *bat*, *bar*, *bought*, *boat*, *but*, *boot*, *put*, *atop*), not counting the three diphthongs (*about*, *bite*, *boy*) Yet, when asked about the number of vowels of the language, many native English speakers would say five (*a, e, i, o, u*), or five and a half, counting *y* in. The discrepancy in number (5, as opposed to the actual 12) comes from a common confusion between the sound system of a language, which contains consonants and vowels, and the writing system that is a set of symbols used to represent those sounds. In other words, the letters in the alphabet are merely symbols, not sounds themselves. Ideally, an alphabetical writing system is supposed to phonetically represent the sound in an unambiguous way. That is, one sound, one symbol (letter). However, due to all sorts of reasons, sound change through time for one, very few languages have that ideal one-to-one correspondence. In fact, English, for example, employs five letters in different combinations and phonological environment to represent a much larger number of vowel sounds. The situation is similar in various Tibetan dialects.

The Tibetan alphabet was designed (or standardized) in the seventh century and was believed at the time to represent the speech sounds in a one-to-one correspondence. Through gradual evolution of the sound system, among other parts of the grammar, Lhasa Tibetan spoken today has lost some consonants from old Tibetan (most notably the voiced

obstruents such as [b, d, g, z] etc.) and, in compensation, developed tones. Its inventory of vowels also grew from the original five to a richer group of eight. The spelling of words, however, changed little over time to fully reflect the new pronunciations, despite the three orthographic reforms that took place in the 7th to 8th century, the beginning of the 9th century, and the 11th to 13th century. What we have in hand today is an alphabet system of 30 letters and four vowel diacritics to represent the current Lhasa sound system of 25 consonantal sounds, 8 vocalic sounds, and a well developed tonal system of 4 distinct tones.

Fortunately, the sounds and the writing representing them are consistent, allowing almost no exceptions to the pronunciation. That is to say, one only needs to learn the rules in order to be able to read the Tibetan orthography in its current Lhasa pronunciation. The task of Lessons 1 to 4, thus, is mainly to teach the readers how to look at a Tibetan syllable and know immediately its pronunciation, with the correct tone, of course. The remainder of this lesson will simply highlight the important differences between the Tibetan orthography and the sound system of Lhasa Tibetan. The bulk of Lessons 2, 3, and 4 deal with rules that link the writing to the actual pronunciation.

1.3.1 Sound inventory of Lhasa Tibetan

The following chart is a complete inventory of contrastive consonants, 25 in total, in Lhasa Tibetan. Note that we treat the palatalized [ky] and [k^hy] as combined sounds. If included, they will make the inventory of Lhasa dialect consist of 27 consonants. Through historical evolution, syllable-final [k, t, s] are weakened to a glottal stop in some Lhasa Tibetan's speech and disappeared in others'. For the latter group, the phonological value of [ʔ] is replaced by the contour tone it produces. At any rate, the glottal stop [ʔ] is not a steady phoneme on equal footing with the others to warrant its inclusion in the chart.

manner place	labial	alveolar	(alveo-) palatal	velar/glottal
stops	p, p ^h	t, t ^h	(ky, k ^h y)	k, k ^h
fricatives		s	sh	h
affricates		ts, ts ^h	c, c ^h	
retroflexes			tr, tr ^h , sr	
nasals	m	n	ny	ng
liquids		l, , l ^h	r	
glides			y	w

Chart 1.2 Complete Inventory of Consonants in Lhasa Tibetan

The diagram below shows the inventory of all contrastive vowels, 8 in total, in Lhasa Tibetan. We shall discuss the vowels in Lesson 3.

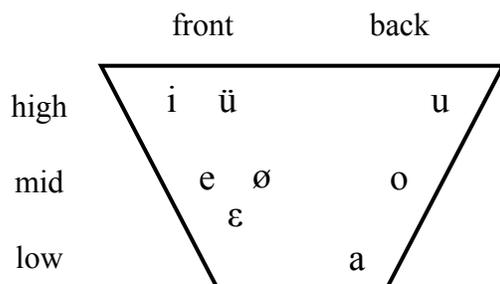


Chart 1.3 Complete Inventory of Vowels in Lhasa Tibetan

1.3.2 Consonants represented by single letters

Below is a detailed description of sounds (in Lhasa Tibetan) represented by single letters of the alphabet.

Letter	Sound Description	Adopted Phonetic Symbol	IPA Equivalent	Tone	Examples
ཀ	non-aspirated voiceless velar stop	k	k	HH	k in <i>sky</i> (English); c in <i>caro</i> (Spanish); <i>gao</i> 'tall' (Chinese)
ཁ	aspirated voiceless velar stop	k ^h	k'	HH	c in <i>cake</i> (English), <i>kai</i> 'open' (Chinese)
ག	ཁ	k ^h	k'	LL	identical to the sound of ཁ (different tone)
ང	velar nasal	ng	ŋ	LL	ng in <i>long</i> and <i>singer</i> (English), can appear syllable-initially
ཅ	non-aspirated alveo-palatal affricate	c	tʃ	HH	j in <i>jia</i> 'home' (Chinese)
ཆ	aspirated alveo-palatal affricate	c ^h	tʃ'	HH	q in <i>qi</i> 'seven' (Chinese), ch in <i>chair</i> (English) without [round] feature
ཇ	ཆ	c ^h	tʃ'	LL	identical to the sound of ཆ (different tone)
ཉ	palatal nasal	ny	ɲ	LL	ñ in <i>niño</i> (Spanish); gn in <i>oignon</i> (French)

ཏ	non-aspirated voiceless alveolar stop	t	t	HH	t in <i>sty</i> (English), t in <i>tener</i> (Spanish); d in <i>dai</i> 'to bring' (Chinese)
ཐ	aspirated voiceless alveolar stop	t ^h	t'	HH	t in <i>tie</i> (English), t in <i>tai</i> 'too' (Chinese)
ཏ	ཐ	t ^h	t'	LL	identical to the sound of ཐ (different tone)
ན	alveolar nasal	n	n	LL	n in <i>no</i> (English)
པ	non-aspirated voiceless bilabial stop	p	p	HH	p as in <i>spot</i> (English); p in <i>pan</i> 'bread' (Spanish); <i>bai</i> 'white' (Chinese),
པ	voiceless bilabial stop aspirated	p ^h	p'	HH	p as in <i>pot</i> (English)
པ	པ	p ^h	p'	LL	identical to the sound of པ (different tone)
མ	bilabial nasal	m	m	LL	m as in <i>my</i> (English)
ཅ	non-aspirated voiceless alveolar affricate	ts	ts	HH	z in <i>zou</i> 'go' (Chinese)
ཅ	aspirated voiceless alveolar affricate	ts ^h	ts'	HH	z in <i>Zeit</i> (German), c in <i>ca</i> 'wipe' (Chinese), ts in <i>lets</i> (English), can appear syllable initially
ཅ	ཅ	ts ^h	ts'	LL	identical to the sound of ཅ (different tone)
ཞ	labio-velar glide	w	w	LL	w in <i>way</i> (English)
ཧ	voiceless alveo-palatal fricative	sh	ʃ	LL	xia 'blind' (Chinese), sh in <i>she</i> (English) without [+round] feature
ཨ	voiceless alveolar fricative	s	s	LL	s in <i>sun</i> (English)

ཨ	no segmental phonetic value	(a)	(a)	LL	N/A (space-filler to carry the vowel diacritic)
ཡ	palatal glide	y	j	LL	y in <i>yes</i> (English)
ར	alveo-palatal retroflex liquid	r	ʐ / ʀ	LL	word initially, r in <i>rang</i> 'let' (Chinese), r in <i>red</i> (English) without [+round] feature
ལ	alveolar lateral liquid	l	l	LL	l in <i>let</i> (English)
ཤ	ཤ	sh	ʃ	HH	identical to the sound of ཤ (different tone)
ས	ས	s	s	HH	identical to the sound of ས (different tone)
ཧ	voiceless glottal fricative	h	h	HH	h as in <i>hello</i> (English)
ཨ	no segmental phonetic value	(a)	(a)	HH	N/A (space-filler to carry the vowel diacritic)

Chart 1.4 Sounds represented by individual letters

Among the 30 letters of the Tibetan alphabet, two (ཨ and ཨ) are used as "space fillers" in Tibetan orthography for onsetless syllables (i.e. syllables that begin with vowels). So, ཨ and ཨ do not actually have any consonantal (or any phonetic) value. That is, they are used for syllables without an initial consonant so that the vowel diacritic can be written above or under them like a regular syllable. ཨ, in addition, can be used as a prefix (representing a nasal sound) or suffix (no phonetic value). We will discuss these situations in Lessons 2 and 3, respectively. Of the remaining 28 letters, only 21 sounds, or phonemes, are represented, summarized in the consonant chart below.

	labial		alveolar		alveo- palatal		velar/glottal	
unaspirated stops	p	HH པ	t	HH ཅ			k	HH ཀ
		LL ?		LL ?				LL ?
aspirated stops	p ^h	HH པ	t ^h	HH ཅ			k ^h	HH ཀ
		LL པ		LL ཅ				LL ཀ
fricatives			s	HH ས	sh	HH ས	h	HH ས
				LL ས		LL ས		LL ?
unaspirated affricates			ts	HH ཅ	c	HH ཅ		
				LL ?		LL ?		
aspirated affricates			ts ^h	HH ཅ	c ^h	HH ཅ		
				LL ཅ		LL ཅ		
nasals	m	HH ?	n	HH ?	ny	HH ?	ng	HH ?
		LL མ		LL མ		LL མ		
liquids			l	HH ?	r	HH ?		
				LL ལ		LL ལ		
glides					y	HH ?	w	HH ?
						LL ཡ		LL ཡ

Chart 1.5 Tone-Consonants represented by single letters in Tibetan

Chart 1.4 shows the corresponding Tibetan letters for each sound (with a designated tone). Note that some consonants only have one tone associated with it, such as the unaspirated stops [p, t, k] and affricates [ts, c], both of which lack the low tone. Sonorant sounds, including the four nasals [m, n, ny, ng], the two liquids [l, r], and the two glides [y, w], all represent low tones, lacking the corresponding high tone. Indeed, more than half of the consonants have only one tone represented here. These missing tones, highlighted in the shaded areas in Chart 1.5, give a false impression that Lhasa Tibetan is not fully using the high-low tonal contrast with all its consonants, which would be a significant waste of its tonal capacity. In Lesson 2, we will see that with the combination of letters in the syllable initial position, all consonants do show the expected high-low contrast, with only a very small number of accidental gaps.

1.3.3 Additional consonants in the sound system

Compare the complete inventory of consonants listed in Chart 1.2 and the sounds represented by single letters of Chart 1.4, one immediately finds that these 21 sounds, in fact, are a subpart of the complete inventory of Tibetan consonants, which has a total number of 25. The 4 missing sounds that are not represented by individual letters in the previous chart are the three retroflexes [tr, tr^h, sr] and the aspirated lateral liquid [l^h].

In English, when certain letters are put together, the combination may represent new sounds such as *ch*, *sh*, *th*, etc. In Lhasa Tibetan, the situation is exactly the same. The three retroflexes [tr, tr^h, sr] are created by combining certain letters and the letter *ra* ར and the aspirated lateral [l^h] a combination of *la* ལ and *ha* ཅ. The peculiar writing of these combinations will be introduced in Lesson 2, where we introduce the writing of Tibetan syllables. For the time being, we will focus on the sounds themselves, which are described in the following chart.

Letter(s)	Sound Description	Adopted Phonetic Symbol	IPA equivalent	Tone	Examples
1st column stop + ར	non-aspirated voiceless alveolar retroflex	tr	tr	HH	zh in <i>zhidao</i> 'know' (Chinese)
2nd column stop + ར	aspirated voiceless alveolar retroflex	tr ^h	tr'	HH	ch in <i>chi</i> 'eat' (Chinese)
3rd column stop + ར	aspirated voiceless alveolar retroflex	tr ^h	tr'	LL	ch in <i>chi</i> 'eat' (Chinese)
ཤ	voiceless alveolar retroflex	sr	ʂ	HH	sh in <i>shi</i> 'teacher' (Chinese)
ལྷ	aspirated voiceless lateral fricative	l ^h	ɬ	HH	no close equivalent in familiar languages; try pronounce [l] simultaneously with lots of air

Chart 1.6 Four sounds not represented by individual letters

1.3.4 The Vowels Represented by Vocalic Diacritics

1.3.4.1. The Basic Five-Vowel Writing System

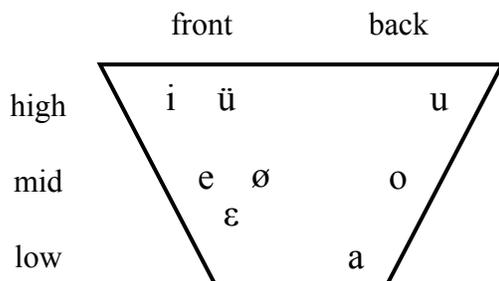
Old Tibetan has a five-vowel system consisting of the usual [a, i, u, e, o]. The four vowel diacritics in the Tibetan writing system were designed to represent the five-vowel system at the time of its invention. Of the five vowels, the vowel [a], treated as default, is unmarked. The other four, called གི་སུ [k^hikū], རཤམ་ལུ [shäpkyū], འབྲེང་བུ [trë:ngpō], and ར་རོ [näro], representing the vowels [i, u, e, o] in that order, are written as ཨི, ཨུ, ཨེ, and ཨོ, with གི་སུ (ཨུ) being the only diacritic written beneath the “root” letter. Note that the letter ཨ is only a space filler and not a part of the diacritics. To denote the default vowel [a],

nothing needs to be written, ཨ itself is sufficient. When there is a consonant in the syllable initial position, the vowel diacritics basically look like this:



1.3.4.2. The Actual Eight-Vowel System

The five-vowel system has evolved in Lhasa Tibetan into a basic eight-vowel system. Three additional vowels [ɛ], [ø] and [ü] (see descriptions of the IPA symbols in the chart below) are introduced as the result of a umlaut rule, which changes the back vowels [a], [o] and [u] to the front [ɛ], [ø] and [ü]. The vowels shown in Chart 1.3, repeated below, are described in chart 1.7.



Vowel	Sound Description	Adopted Phonetic Symbol	IPA equivalent	Examples
ཨ	low back	a	a	a in <i>father</i>
ཨི	high front	i	i	ee in <i>deed</i> without the final glide j
ཨུ	high back	u	u	oo in <i>food</i> without the final glide w
ཨེ	mid front	e	e	ay in <i>may</i> without the final glide j
ཨོ	mid back	o	o	o in <i>no</i> without the final glide w

(ཨ) + d,s, l,n	mid front lax	ɛ	ɛ	e in <i>bed</i>
ཨི + d,s, l,n	high front rounded	ü	y	u in <i>bu</i> 'drunk' (French); u in <i>xuyao</i> 'need' (Chinese)
ཨོ + d,s, l,n	mid front rounded	ø	ø	eu in <i>feu</i> 'fire' (French)

Chart 1.7 Vowels in Lhasa Tibetan

The five basic vowels have close equivalents in English and should cause no difficulty to the reader. Some unlauded vowels, although unavailable in English, are fairly common in other Indo-European languages. In Lhasa Tibetan, they are created by the presence of one of certain syllable-final consonants, known as suffixes in Tibetan writing. As shown in the chart, the four suffixes [d, s, n, l] which trigger umlauting on the preceding vowel are all alveolar consonants. We will come back to the issue of umlauting in Lesson 3. For the exercises in this lesson, focus on the five basic ones.

Before we move on, it is worth noting that sometimes the vowel [a] is weakened to sound like a mid central unrounded schwa [ə]. This is especially prominent in certain grammatical particles and when the [a] is adjacent to a syllable containing a high vowel [i] or [u]. This "ninth" vowel [ə] should be considered as a variant, or allophone, of [a] and not a distinct vowel in the system.

❖ 1.4 Exercises

1.4.1 The Alphabet: Repeat after the recording. Pay attention to the tonal contrast between HH (54) and LL (12).

ཀ [kā]	ཁ [k ^h ā]	ཀྱ [k ^h ǎ]	ང [ngǎ]
ཅ [cā]	ཅཱ [c ^h ā]	ཅྱ [c ^h ǎ]	ཉ [nyǎ]
ཇ [tā]	ཇཱ [t ^h ā]	ཇྱ [t ^h ǎ]	ཏ [nǎ]
པ [pā]	པཱ [p ^h ā]	པྱ [p ^h ǎ]	མ [mǎ]
ཅུ [tsā]	ཅཱུ [ts ^h ā]	ཅུྱ [ts ^h ǎ]	མུ [wǎ]
ཤ [shǎ]	ཤྱ [sǎ]	ཤྱ [ǎ]	ཡ [yǎ]
ར [rǎ]	ལ [lǎ]	ཤྱ [shā]	ས [sā]
ཧ [hā]	ཨ [ā]		

1.4.2 Pronunciation Drill (I): The basic five vowels. Repeat after the recording.

[k] ཀ་གི་གྲུ་གེ་གོ།	[k ^h] ཁ་ཁི་ཁུ་ཁེ་ཁོ།	[k ^h] ག་གི་གྲུ་གེ་གོ།	[ng] ང་ངི་ངུ་ངེ་ངོ།
[c] ཅ་ཅི་ཅུ་ཅེ་ཅོ།	[c ^h] ཆ་ཆི་ཆུ་ཆེ་ཆོ།	[c ^h] ཇ་ཇི་ཇུ་ཇེ་ཇོ།	[ny] ཉ་ཉི་ཉུ་ཉེ་ཉོ།
[t] ཏ་ཏི་ཏུ་ཏེ་ཏོ།	[t ^h] ཐ་ཐི་ཐུ་ཐེ་ཐོ།	[t ^h] ཎ་ཎི་ཎུ་ཎེ་ཎོ།	[n] མ་མི་མུ་མེ་མོ།
[p] པ་པི་པུ་པེ་པོ།	[p ^h] བ་བི་བུ་བེ་བོ།	[p ^h] ཇ་ཇི་ཇུ་ཇེ་ཇོ།	[m] མ་མི་མུ་མེ་མོ།
[ts] ཅ་ཅི་ཅུ་ཅེ་ཅོ།	[ts ^h] ཆ་ཆི་ཆུ་ཆེ་ཆོ།	[ts ^h] ཇ་ཇི་ཇུ་ཇེ་ཇོ།	[w] མ་མི་མུ་མེ་མོ།
[sh] ཞ་ཞི་ཞུ་ཞེ་ཞོ།	[s] ཟ་ཟི་ཟུ་ཟེ་ཟོ།	[] འ་འི་འུ་འེ་འོ།	[y] ཡ་ཡི་ཡུ་ཡེ་ཡོ།
[r] ར་རི་རུ་རེ་རོ།	[l] ལ་ལི་ལུ་ལེ་ལོ།	[sh] ག་གི་གྲུ་གེ་གོ།	[s] ས་སི་སུ་སེ་སོ།
[h] ཏ་ཏི་ཏུ་ཏེ་ཏོ།	[] ཨ་ཨི་ཨུ་ཨེ་ཨོ།		

1.4.3 Pronunciation Drill (II): Repeat after the recording. Note that the second syllable in a disyllable word is subject to tone change. Note that the four logical combinations (H + H, H + L, L + H, L + L) yield only two surface tonal patterns, namely H + H and L + H. Imitate the tonal patterns closely.

- | | | | |
|-------------|-------------|------------|-------------|
| (1) རི་མོ། | (11) ར་ལོ། | (21) ཎ་ལོ། | (31) ཨ་མ། |
| (2) གྲུ་ལུ། | (12) ལུ་མོ། | (22) འོ་ན། | (32) འོ་མ། |
| (3) ག་རེ། | (13) ཨ་ནེ། | (23) སེ་ར། | (33) བ་སེ། |
| (4) ཉ་ཤ། | (14) ཞི་མི། | (24) ཉི་ཤ། | (34) སུ་སུ། |
| (5) མ་མོ། | (15) བོ་ལོ། | (25) ཉི་མ། | (35) འོ་མ། |
| (6) ཆ་པོ། | (16) རེ་བ། | (26) ཎ་ལོ། | (36) ཨ་མ། |
| (7) ཉ་ག། | (17) བ་མ། | (27) འོ་ན། | (37) འོ་མ། |
| (8) མ་སུ། | (18) ཨ་ནེ། | (28) སེ་ར། | (38) བ་སེ། |
| (9) རི་བོ། | (19) ཞི་མི། | (29) ཉི་ཤ། | (39) སུ་སུ། |
| (10) མ་མོ། | (20) བོ་ལོ། | (30) ཉི་མ། | (40) ཉི་མ། |

1.4.4 Pronunciation Drill (III): Repeat after the recording. Note that, in addition to the tone change practiced in the previous exercise (1.5.3), the second syllable, if aspirated in isolation, loses its aspiration. Pay attention to the deaspiration of the second syllable.

- | | | | |
|------------|-----------|------------|------------|
| (1) ཀཤམ། | (6) བ་ཚུ། | (11) བཤི། | (16) ཨ་ཚ། |
| (2) བ་མ། | (7) ཞི་བ། | (12) བ་ཤི། | (17) བ་ཚེ། |
| (3) ཉ་བ། | (8) ཨ་མ། | (13) ཡི་བ། | (18) འོ་མ། |
| (4) བི་བུ། | (9) ཚུ་བ། | (14) ཨ་བུ། | (19) བ་ཚ། |
| (5) ཨ་ཕོ། | (10) བ་ཚ། | (15) བ་ཚོ། | (20) ཨ་ཚུ། |