Lesson 4

Beyond the Syllable

4.1 Tone Sandhi

When syllables are put together, the internal working of a language sometimes "fixes" unnatural sequences to become easier to articulate for native tongues or better-sounding to native ears. This is called sandhi. Sandhi rules are typically language specific, with or without phonetic motivation. The changes in the sequences *a egg to an egg in English, *beau ami to bel ami in French, *la agua to el agua in Spanish, etc., are all examples of sandhi rules at work. In Lhasa Tibetan, sandhi rules fix tonal combinations unnatural to native speakers’ ears. This section discusses the two tone sandhi rules in Lhasa Tibetan and some peripheral issues around tones.

4.1.1 General Review of Tones

In Lesson 3, we encountered falling risings tone created by the suffix, which completes the four-tone paradigm. It is important to know that Lhasa Tibetan did not emerge with these four tones from scratch (i.e., the toneless Old Tibetan) all at the same time. As we mentioned earlier, at the start there were only high tone and low tone, a new system made necessary by the disappearance of the voiced consonants and their subsequent merging with the voiceless ones. That is, the difference between the voiceless [kʰa] and the voiced [ga] in (toneless) Old Tibetan has shifted from a contrast in voicing to a contrast in tone: [kʰã] and [kʰã]. Some suffixes did modify the pitch contour, by turning HH(55) to HL(52) with an audible obstruent suffix. Yet, because the suffixes were, although continuously being weakened, still pronounced, the pitch contour served only as a secondary feature. For instance, the contrast between [tʰã] and [tʰã] [tʰãk] would rely more on the final consonant [k] of the second word rather than the tone difference between [ã] and [ã]. Only much later, almost until present day, when the suffixes were weakened to complete (or, for some speakers, almost complete) silence, did the rising and falling pitch contours start to take up the burden and function as full-fledged tones.

Due to this historical development, the four tones in Tibetan do not behave entirely independently from one another. The high tone (HH) and the falling tone (HL), which is derived from the former, constitute a small tonal group, different from the low tone (LL) and the rising tone (LH), which forms the other. For convenience sake, we use the term “key” (instead of the confusing term “register”) to classify the two groups. High-keyed tones are the high level and the falling, while the low-keyed tones are the low level and the rising. The concept of H or L key will play a crucial role in understanding the tone
sandhi rule. The following diagram represents very roughly, but sufficiently for our purposes, the development of the tonal system in Tibetan.

Stage 1          Stage 2          Stage 3

Toneless        [kʰâ] vs. [kʰâ]
[kʰa] vs. [ga]   [kʰâ] vs. [kʰâ]

H-key           H-key

Stage 2          Stage 3

H               HL
[kʰâ] vs. [kʰâ]  [kʰâ] vs. [kʰâ]

L-key           L-key

[kʰa] vs. [ga]   [kʰa] vs. [ga]

The diagram offers a simple and somewhat idealized scenario of the tonal development. It is phonologically true to those who have dropped the final glottal stop [ʔ] and distinguish [kʰâ] from [kʰâ] solely based on the tonal contrast. For the minority few who still retain the faint [ʔ] and who rely on it to distinguish [kʰâ] from [kʰâ], stage 3 has not been completed, although the authors believe that it ultimately will. For either group, the level tone vs. contour tone distinction has transcended from a secondary role in stage 2 to a primary (if not exclusive) feature in present day Lhasa Tibetan.

The above description is the more abstract phonological, or mental, representation of the tones. The following chart links it to the actual phonetic properties of the four tones.

<table>
<thead>
<tr>
<th>phonological representation</th>
<th>phonetic description of tones in a disyllabic word</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>short rhyme</td>
</tr>
<tr>
<td></td>
<td>citation or 2nd σ</td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>HH</td>
<td>54</td>
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<tr>
<td>HL</td>
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<td>L</td>
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<tr>
<td>LL</td>
<td>12</td>
</tr>
<tr>
<td>LH</td>
<td>132</td>
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</tbody>
</table>
Summary of Tones of Lhasa Tibetan

The dotted portion of a tone indicates the “tail” in citation form or in a word final position. Note that the tail, although articulated, is not really in the “mindset” of the speaker (see 1.2.3). There are a few more things to note from the above summary chart of tones. First, while syllables with a long rhyme tend to be equally long in duration, averaging 0.32 seconds, syllables with a short rhyme differ in duration more widely, ranging from the super-short 0.12 seconds of Ɪ[kʰɒ], the standard 0.16 seconds of Ɪ[tä], to the oversized Ꭓ[säŋ], which tried to fit in as a short rhyme with a duration of 0.21 seconds (cf. Ꭓ[säŋ] 0.32 seconds without the post-suffix.) The long vs. short division will play a crucial role in the tone sandhi rule called “Long Rhyme Rising” in Lhasa Tibetan. Second, there is no underlying long rhymed falling tone or rising tone in the system, even though the capacity is there to allow their existence. Momentarily, we will introduce this Long Rhyme Rising, which derives a long rhymed rising tone in disyllabic words. Third and lastly, rhyme is a separate notion from tone. Even though there are some predictable correlations between the two, for instance, it is easier to maintain the long rhymed high tone as 55 (without the slackening tail) than the short rhymed 54 (with the tail), the 55 and 54 are best understood as having the same HH tone. Similarly, the short 12 and the long 113 are both LL in nature.

4.1.2 Disyllabic Tone Sandhi

We have come a long way to understand the Tibetan tones and how to read Tibetan orthography with the correct sounds as well as the correct tones. There is one last hurdle in the homestretch before we are truly able to see Tibetan words and know immediately how to pronounce them, most of which are not isolated syllables. Although the smallest meaningful unit, or morpheme, in Tibetan is usually single syllables, the bulk of the lexicon consists of disyllabic words. Thus, learning how to adjust the tone of a single syllable in disyllabic combination is essential.

The discussion in the previous section provides us the necessary background to understand how tone sandhi works in Tibetan disyllabic words. Mathematically, the four lexical tones in Lhasa Tibetan should produce 16 (4x4) possible tonal combinations (some tones have long and short variations) for all disyllabic words. In reality, disyllabic combinations exhibit only five tonal patterns, namely, HH + HH, HH + HL, LL + HH, LL + HL and a fifth LL + LH. In other words, 16 different inputs of combining different tones into disyllabic compounds only yield five outcomes. This fact suggests that there must be tone sandhi rules at work, merging different tones into simpler patterns. This tremendous merging is all the more remarkable if one compares the Tibetan data with the Chinese (Mandarin) tone sandhi. In Mandarin Chinese, which also has the four tones similar to those in Lhasa Tibetan, the 16 possible combinations of a disyllabic word in Mandarin actually yield 15 well-formed outputs. Only one combination, namely LL + LL, needs fixing (to LH + LL). Yet, Tibetan has only 5 outputs out of 16. To say that so many combinations are unnatural and need fixing by sandhi rules is apparently missing something more general. We contend that the tone sandhi rule for disyllabic words
applied much earlier (at stage 2, as indicated in the diagram above) while the system had only two tones (H and L) rather than the current stage with four tones. Let’s examine the data first. Leaving the fifth pattern LL + LH as the result of an additional rule, the other four possible combinations can be represented by the following diagram, the various tones in a box indicate the possible inputs of each specific pattern.

In Pattern A, for example, the first syllable (σ₁) comes from three possible sources, all H-key, namely a HH short rhyme (54), HH long rhyme (55), or HL (52). No matter what the input tone is, it is pronounced as a sustained 55 (for both short and long rhyme). The second syllable (σ₂) has four possible sources, all level tones, namely, HH short rhyme (54), HH long rhyme (55), LL short rhyme (12), or LL long rhyme (113). Unlike σ₁, the tone of σ₂, also HH, allows the two variations 54 (short rhyme with tail) and 55 (long rhyme). All four Patterns A, B, C, and D reviewed, there seems to exist a predetermined tonal pattern for disyllabic words: σ₁ must be level and σ₂ must be H-key, i.e., high level or falling.

The above observation supports our claim that the tone sandhi rule must have been operated on a simpler tonal system (i.e., stage 2), where “key” is the key factor. Given the data, it is adequate to assume that, in a two tone system, H + H and L + H combinations are OK and H + L and L + L must undergo sandhi and change the second syllable from L to H. The rule is amazingly simple:

1) Sandhi Rule in Stage 2: If σ₂ is L, change it to H.

This is why the first syllable is fixed as a level tone: it reflects and preserves the pronunciation of Lhasa Tibetan in Stage 2. The second syllable is word-final and has the room to develop the tonal contours, thus the predetermined H-key and the variations in level (HH) and contour (HL) tones.

Putting the above diachronic analysis aside, from a contemporary perspective, it is sufficient to describe the tone sandhi rule as follows:

2) Dissyllabic Key-Contour Rule
In a disyllabic word $\sigma_1\sigma_2$, $\sigma_1$ must be level, whether it is HH or LL depends on the Key of $\sigma_1$; $\sigma_2$ must be H-key, whether it is HH or HL depends on the shape (level or contour) of $\sigma_2$.

The rule says, in a disyllabic word $\sigma_1\sigma_2$, the tone of $\sigma_1$ is decided by its key; and the tone of $\sigma_2$, already set at H-key, is decided by its shape (level or contour). In pattern B, for example, the input sources are H-keyed HH (54, 55) or HL (52), therefore, $\sigma_1$ is HH; whereas, in pattern C, since the inputs for $\sigma_1$ are all L-keyed, $\sigma_1$ is realized as LL. Note that, whether short or long, $\sigma_1$ is always a clean-cut, tail-less 55 or 11. In patterns B and D, the possible inputs for $\sigma_2$ are contour tones, therefore, it is realized as a falling tone (since the key is predetermined at H). The following summarizes the four tonal patterns in terms of the deciding factors for each syllable (key for $\sigma_1$ and shape for $\sigma_2$).

(3) Disyllabic Key-Contour Rule and the Resulting Four Tonal Patterns
- **A**: H-keyed tone + level tone $\rightarrow$ HH + HH
- **B**: H-keyed tone + contour tone $\rightarrow$ HH + HL
- **C**: L-keyed tone + level tone $\rightarrow$ LL + HH
- **D**: L-keyed tone + contour tone $\rightarrow$ LL + HL

The Tibetan orthography becomes very handy in deciphering the tonal pattern. Since the tonal key of a syllable is decided by the onset and the shape (level or contour) by the coda, one only needs to glance at the onset of $\sigma_1$ and the coda of $\sigma_2$ to be able to tell the output combination. (Recall that the level shape of $\sigma_1$ and H-key of $\sigma_2$ is predetermined.) Below is an exhaustive list of examples grouped in tonal patterns:

**Pattern A**: HH-HH
- (1) ོ་ས [lʰā] + [sā] $\rightarrow$ [lʰāsā] ‘Lhasa’ (HH54 + HH54 $\rightarrow$ 55 + 54)
- (2) འཕ ང [kʰā] + [pā] $\rightarrow$ [kʰāpāː] ‘telephone’ (HH54 + HH55 $\rightarrow$ 55 + 55)
- (3) བོ་ ཐམ ཤ [pʰā] + [mā] $\rightarrow$ [pʰāmā] ‘father and mother’ (HH54 + LL12 $\rightarrow$ 55 + 54)
- (4) ས་ ཀ ཤ [pʰā] + [mā] $\rightarrow$ [hālām] ‘almost’ (HH54 + LL113 $\rightarrow$ 55 + 55)
- (5) ས་ ད བ ཀ [tsāmā] + [pā] $\rightarrow$ [tsāmpā] ‘tsampa’ (HH55 + HH54 $\rightarrow$ 55 + 54)
- (6) མི་ མི་ [cēːn] + [cōːŋ] $\rightarrow$ [cēmcōːŋ] ‘siblings’ (HH55 + HH55 $\rightarrow$ 55 + 55)
- (7) ། ླྀ ཁམ ས [kār] + [mā] $\rightarrow$ [kārmā] ‘star’ (HH55 + LL12 $\rightarrow$ 55 + 54)
- (8) ཁམ ག [sāŋ] + [nīːn] $\rightarrow$ [sāṅnīːn] ‘tomorrow’ (HH55 + LL113 $\rightarrow$ 55 + 55)
- (9) ཌྷ ླྀ ག [tsʰā] + [shā] $\rightarrow$ [tsʰāshā] ‘yak meat’ (HL52 + HH54 $\rightarrow$ 55 + 54)
- (10) མི་ མ ང [cʰōː] + [cʰāŋ] $\rightarrow$ [cʰōcʰāŋ] ‘chang’ (HL52 + HH55 $\rightarrow$ 55 + 55)
(11) ོགས་ [lòp] + [trʰá] → [lòpträ] ‘school’ (HL 52 + LL 12 → 55 + 54)

(12) བོད་ [kʰyè] + [rāng] → [kʰyērāng] ‘you’ (HL 52 + LL 113 → 55 + 55)

Pattern B: HH-HL

(13) གོ་[tśi] + [shì] → [trāshì] ‘personal name’ (HH 54 + HL 52 → 55 + 52)

(14) ཏུ་[cū] + [trʰú] → [cūtrù] ‘sixteen’ (HH 54 + LH 132 → 55 + 52)

(15) བོད་[shing] + [tö] → [shīngtö] ‘fruit’ (HH 55 + HL 52 → 55 + 52)

(16) གོ་[kyè] + [kʰzèn] → [lʰzènkyè] ‘together’ (HH 55 + LH 132 → 55 + 52)

(17) གོ་[tā] + [tā] → [tātā] ‘exactly’ (HL 52 + HL 52 → 55 + 52)

(18) ོགས་ [lòp] + [trʰö] → [lòptrö] ‘classmate’ (HL 52 + LH 132 → 55 + 52)

Pattern C: LL-HH

(19) ཀོ་[nā] + [tsʰä] → [nātšä] ‘illness’ (LL 12 + HH 54 → 11 + 54)

(20) བོད་[rī] + [mō] → [rīmō] ‘painting’ (LL 12 + LL 12 → 11 + 54)

(21) ཤོ་[kõ:m] + [pā] → [kõ:mþ] ‘monastery’ (LL 113 + HH 54 → 11 + 54)

(22) སོ་[trʰång] + [mō] → [trʰångmō] ‘cold’ (LL 113 + LL 12 → 11 + 54)

(23) སོ་[shö] + [pā] → [shöpā] ‘morning’ (LH 132 + HH 54 → 11 + 54)

(24) ཤོ་[shāp] + [shū] → [shāpshū] ‘to serve’ (LH 132 + LL 12 → 11 + 54)

*(25) སོ་[lō] + [sār] → [lösār] ‘new year’ (LL 12 + HH 55 → 11 + 55)

*(26) སོ་[kē] + [kē:n] → [kēkē:n] ‘teacher’ (LL 12 + LL 113 → 11 + 55)

*(27) སོ་[trôm] + [kʰāng] → [trōnkāng] ‘hotel’ (LL 113 + HH 55 → 11 + 55)

*(28) སོ་[nām] + [kyū:n] → [nāmkyū:n] ‘usual’ (LL 113 + LL 113 → 11 + 55)

*(29) སོ་[mī] + [mār] → [mīngmār] ‘school’ (LH 132 + HH 55 → 11 + 55)

*(30) སོ་[pʰö] + [pār] → [pʰöpār] ‘Tibet-Burma’ (LH 132 + LL 113 → 11 + 55)

Note that in Pattern C, when the second syllable is long, such as the asterisksed examples from (25) to (30), the pattern undergoes an additional rule in colloquial Lhasa speech that further changes the 11 + 55 pattern to 11 + 14. See 4.1.3 for more detail.

Pattern D: LL-HL

(31) སོ་[lā] + [pʰù] → [lāpù] ‘radish’ (LL 12 + HL 52 → 11 + 52)

(32) སོ་[rā] + [lù] → [rālù] ‘goats and sheep’ (LL 12 + LH 132 → 11 + 52)
4.1.3 Long Rhyme Rising

The disyllabic tone sandhi rule is a simple yet powerful one that predicts all the possible combinations. In some U-Tsang dialects, this seems to be the only operating sandhi rule, e.g. Dartze county to the east of Lhasa. However, a subgroup of Pattern C (LL-HH), namely the asterisked examples from (25) to (30), is pronounced in Lhasa Tibetan with a twist. That is, the pronunciation of 

\[ nyːkāːng \] ‘bedroom’ is not the predicted \[ nyːkāːng \] (LL-HH), but instead \[ nyːkāːng \] (LL-LH). This is the result of an additional rule to the more general disyllabic sandhi we discussed in the previous section. In Lhasa Tibetan, when the first syllable is low (from all L-key sources, short or long), the second syllable, if and only if long, becomes rising (LH). In other words, this additional rule changes all the (LL-HH(long)) combinations to (LL-LH). We call this rule Long Rhyme Rising:

1. Long Rhyme Rising: LL-HH(long) → LL-LH

This is worth noting because all contour tones are short in duration, this rising long rhyme only exists in this derived context. However, it is not to be taken as a new tone; it is simply combining the LH tonal contour to a long rhyme, something allowed in the capacity of the system. Lhasa speakers simply take advantage of this capacity and fill in a gap. More examples:

2. \[ chā + kāːng \] → [cʰäkāːng] ‘teahouse’ (LL₁⁺ + LH₁⁴)

3. \[ chā + tōːŋ \] → [cʰātōːŋ] ‘tea churn’ (LL₁⁺ + LH₁⁴)

4. \[ chā + māː \] → [cʰāmāː] ‘tea and butter’

5. \[ tūn + lām \] → [tūnlām] ‘future’

6. \[ rī + kūː \] → [ringkūː] ‘area near mountain top’

7. \[ cʰāng + shāː \] → [cʰāngshāː] ‘northeast’

Note that this rule does not apply to the LL-HH combination when the second syllable is short, cf. examples from (19) to (24) in the previous section.

4.1.4 Neutral Tone

Tibetan syllables, judged from the orthography, all have a tone. However, in a string of words, some syllables become toneless. Most of these syllables are functional categories such as case markers, structural particles, and sentential particles, which do not have a semantic content per se. There are interesting interactions between the toneless syllable and the syllable it is attached to.
The negator [ma] ‘not’, for example, is a toneless functional category. It is phonologically attached to the verb that follows it and form a “tonal foot” (a prosodic unit where tone sandhi rules apply) with the verb. Being in the tonal foot, [ma] needs a tone.

Since it does not have a tone of its own, it is specified by the (tonal) key of the hosting verb. Consider the following examples from Hu (1979):

1. [ma] + [tè] → [mātè] ‘did not look’
2. [ma] + [t̄è] → [māt̄è] ‘did not sit’
3. [ma] + [sè] → [māsè] ‘did not kill’
4. [ma] + [s̄è] → [mās̄è] ‘did not kill’

We can see that the same negator [ma] can be pronounced either as [mā]-HH or [mā]-LL, depending on the phonological context it appears in, i.e. the key of the verb which follows [ma]. What is worth noting here is that, after the tone of [ma] is decided, the new tonal foot ([ma] + verb) becomes subject to the disyllabic tone sandhi rule discussed earlier in 4.1.2. The contrast between the falling tone [tè] and the rising tone [t̄è] disappears (both become [tè], as a result of the tone sandhi), but their respective original tone is reflected by the negator [ma].

Proclitic toneless syllables such as [ma] which precede their phonological host and participate in tone sandhi are in the minority. Most toneless syllables are enclitics, attaching themselves to the end of a preceding syllable. Toneless syllables of this sort typically do not participate in the disyllabic tone sandhi rule, which means they do not cause tone change on the preceding syllable. Examples:

1. [pè] + [a] → [pèa] ‘Go.’
2. [trö] + [tu] → [trötu] ‘Let’s go.’

It should be noted that, although the above examples are transcribed as a disyllabic unit (as they are indeed), the first syllable retains its original tone, be it level or contour. This would not be possible if the second syllable had a tone, which would have triggered the disyllabic tone sandhi and changed the first syllable to a level tone.

In the situation where the toneless syllable is attached to a disyllabic word, the attachment does not affect the tonal pattern of the host. Examples:

5. [trāshì] + [la] → [trāshila] ‘to Trashi’
6. [trö:nkáng] + [la] → [trö:nkā:ngla] ‘in a hotel’

4.2 Contraction of Syllables

Tibetan orthography is supposed to allow one vowel diacritic per syllable (or none if the vowel is [a]). Yet, it is not rare to see syllables marked with more than one vowel diacritics. This is mainly due to the contraction of syllables, a writing convention mainly
designed to reflect the pronunciation more faithfully. This section discusses the most common cases.

### 4.2.1 Morphological suffixes and grammatical particles

We will learn during the course of this textbook all the major morphological suffixes and grammatical particles. Morphological suffixes seldom take different written forms even though they may have different pronunciations. Grammatical particles, on the other hand, usually have different written forms to reflect the difference in pronunciation. 

(3) Genitive case, (Ergative case), (Oblique case), etc. all have a variant form when attached to an open syllable. They are, respectively, (Genitive), (Ergative), (Oblique). The last two morphemes, and , are written as the suffix of the previous syllable and present no particular difficulty. The pronunciation of the original word is modified in the same manner as by the orthographic suffix .

1. (Genitive case marker) ‘I’

2. (oblique case marker) ‘in Lhasa, to Lhasa’

Note that the Oblique suffix only lengthens the vowel and does not have the option of being pronounced as a [r]. This is different from the true, or orthographic, suffix .

The Genitive case marker often creates a syllable with two diacritics, such as the following examples: ‘my’, ‘of people’, ‘whose’, ‘of fire’, ‘his’, etc. Note that these examples are cases of syllable contractions. The is not to be taken as the dummy suffix . As indicated by the phonetic transcription, the pronunciation of this genitive is identical to the suffix , i.e., it triggers umlauting on [a, o, u] and lengthens all vowels.

A common diminutive nominal suffix is written together with the preceding open syllable, e.g., ‘colt, foal’ (from ‘horse’) and ‘pebble, small stone’. The can be read as a separate syllable, in which case the tonal pattern follows the disyllabic tone sandhi rule. Or, in casual speech, [u] combines with the preceding vowel and form a diphthong.

### 4.2.2 Alternations of the letter [pʰ]: [pʰa], [wa], and glottal stop

We have seen that the bilabial stop [pʰ]-LL creates a group of remarkable exceptions in pronunciation when subjoined, superjoined, or prefixed. It does not hurt to repeat them
here: \[w\]-HH, \[ch\]-LL, \[y\]-HH, \[c\]-LL, \[tr\]-LL, and \[r\]-HH. This very naughty \(\text{\texte}\) itself has in fact other exceptional pronunciations. When \(\text{\texte}\) takes the default vowel \([a]\) or the mid back \([o]\) (\(\text{\texte}\)), in a second syllable, it is pronounced \([w]\)-LL, instead of \([p]\)-LL. For instance, \(\text{\texte}\) \(\text{\texte}\) \(\text{\texte}\) \(\text{\texte}\) ‘hope’ and \(\text{\texte}\) \(\text{\texte}\) \(\text{\texte}\) ‘mountain’. Note that in the case of \(\text{\texte}\), vowel harmony also takes place (\([r\text{\texte}w\text{\texte}] \rightarrow [r\text{\texte}w\text{\texte}]\) ). See 4.3.3.

In the colloquial pronunciation, the second syllable onset \(\text{\texte}\) deletes itself so that the vowel of the second syllable joins the vowel of the first syllable to form a long vowel (with \([a, o, e]\)) or a diphthong (with \([i, u]\)). Examples:

1. \(\text{\texte}\) \(\text{\texte}\) [k\(\text{\texte}\w\text{\texte}] \rightarrow [k\text{\texte}ː] ‘pillar’
2. \(\text{\texte}\) \(\text{\texte}\) [tr\(\text{\texte}\w\text{\texte}] \rightarrow [tr\text{\texte}ː] ‘net’
3. \(\text{\texte}\) \(\text{\texte}\) [k\(\text{\texte}\w\text{\texte}] \rightarrow [k\text{\texte}] ‘leather’
4. \(\text{\texte}\) \(\text{\texte}\) [c\(\text{\texte}\w\text{\texte}] \rightarrow [c\text{\texte}ː] ‘canine (tooth)’
5. \(\text{\texte}\) \(\text{\texte}\) [t\(\text{\texte}\w\text{\texte}] \rightarrow [t\text{\texte}ː] ‘smoke’

If unsure about the pronunciation, the learner can always resort to the formal reading of \(\text{\texte}\) in the above examples as \([w]\).

In casual speech, the morpheme \(\text{\texte}\) ‘person’, when attached to a disyllabic host, is toneless and can be treated as a simple suffix -\(\text{\texte}\). For example:

6. \(\text{\texte}\) \(\text{\texte}\) [l\(\text{\texte}\w\text{\texte}] (from \(\text{\texte}\) \(\text{\texte}\) [l\(\text{\texte}\w\text{\texte}]\) ) ‘a person from Lhasa’
7. \(\text{\texte}\) \(\text{\texte}\) [tr\(\text{\texte}\w\text{\texte}] (from \(\text{\texte}\) \(\text{\texte}\) [tr\(\text{\texte}\w\text{\texte}]\) ) ‘a person from Yadong’

Note that the original trisyllabic word is reduced to disyllabic, with the tone change on \(\sigma\) from high to falling because of the “suffix” \(\text{\texte}\).

4.2.3 Diphthongs of other sources

Diphthongs are unusual in the Tibetan phonological system. Native words tend to have single vowel nuclei. Diphthongs created by the diminutive -\(\text{\texte}\) mentioned earlier are relatively rare. However, language contacts with other languages, Chinese in particular, have made it necessary to develop some writing conventions to accommodate loan words that contain diphthongs in the original source. The following chart is a summary of the common long vowels and diphthongs used to spell foreign loan words.

<table>
<thead>
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<th>u:</th>
<th>e:</th>
<th>o:</th>
<th>ai</th>
<th>ao</th>
<th>iu</th>
<th>uo</th>
<th>eo</th>
<th>ou</th>
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<td>(\text{\texte})</td>
<td>(\text{\texte})</td>
<td>(\text{\texte})</td>
<td>(\text{\texte})</td>
<td>(\text{\texte})</td>
</tr>
</tbody>
</table>
Since Tibetan already has the long vowels [aː, iː, uː, eː, oː] (ལོག་ཚོགས་ཏས་གཉིས་), the inclusion of the long vowels in the chart above needs some explanation. Recall that all the long vowels are derived from a single short vowel with sonorant suffix. Foreign long vowels do not have these underlying sonorant in the coda position, so it makes sense to distinguish them as “bare” long vowels with a different spelling. For example, The Chinese province of Gansu is written in Tibetan as ཀྲུ་སུ [kʰɛṃsû]. Chinese political terms such as zhǔxí ‘chairman’ is borrowed into Tibetan as བྲུ་སུ, with a long [u]. These “irregular” writings should not concern our reader too much, as these words tend to appear only in political and economic contexts, which is hardly the theme or level of this textbook.

4.2.4 Special writing rules

Traveling in Lhasa, one is bound to see such mysterious signs as ཚུ་ outside many restrooms or outhouses. How does one pronounce a syllable with two vowel diacritics on a single root letter? This particular word is actually a shorthand for སྙིད ‘girl’, an instance of the many special writing conventions accumulated over time in Tibetans’ daily use of the writing system. Another often seen example is the contraction of the word རྣག་གིས ‘auspicious’ into རྣ་, still read as [trɔʃi] as the original disyllabic word.

❖ 4.3 Phonological Interactions Between Syllables

Did we say that pre-onset elements (prefix and superfix) are silent? If we did, we meant that “they are silent when the syllable is pronounced in isolation.” In a disyllabic word, the consonant(s) between the vowel of each syllable can undergo phonological changes. The otherwise silent pre-onset element in the second syllable may also interact with the first syllable as well. In this section, we will discuss some common phonological rules in Lhasa Tibetan. Some of these rules are subconscious to native speakers, but foreign learners tend to notice these sound changes in spoken Lhasa Tibetan because some changes are quite obvious. We consider it helpful to discuss these rules here.

4.3.1 Disyllabic Deaspiration

Earlier we learned that pre-onset elements make a third column obstruent (ʃ, s, z, h, c and the derived ʒ, ʃ, z, ʒ, ʒ, ʒ, and ʒ) lose its aspiration. This is a rule conscious to native speakers, the result of its application filling in five gaps in the sound inventory, namely [k]-LL, [c]-LL, [t]-LL, [pʰ]-LL, and [ts]-LL. The sound change is reflected in the orthography by a superfix or a prefix and native speakers are very much aware of the change. We may call this rule Pre-onset Deaspiration.

There is in fact another deaspiration rule that applies to all aspirated consonants, including the high tone (h, s, z, ʃ, c and the derived ʒ, ʃ, z, ʒ, ʒ, ʒ, ʒ, and ʒ). This rule applies when the second syllable in a disyllabic word has an aspirated onset (H
This phenomenon was noted earlier in Pronunciation Drill 1.5.4, when we practiced reading disyllabic words. Some of the previous examples in this section also exhibit the application of this rule. We may call it Disyllabic Deaspiration. Examples:

1. \[ khā + chū → kʰācʰū \] ‘saliva’ (not \[ khɑ̄chū \])
2. \[ chū + khā → chūkʰā \] ‘by the water’ (not \[ chūkhɑ̄ \])
3. \[ ō + chă → ōcʰā \] ‘milk tea’ (not \[ ōchɑ̄ \])
4. \[ wāːng + cʰ → wāːncʰ \] ‘power, rights’ (not \[ wɑːngcʰ \])
5. \[ yāː + khā → yɑ̄kʰā \] ‘summer’ (not \[ yɑ̄khɑ̄ \])

The first two examples are particularly telling: Both syllables have an aspirated onset \[ cʰ \] or \[ kh \] but it is always the onset in the second syllable that loses the aspiration.

As a side note, the two deaspiration rules have very different linguistic natures. The Pre-onset deaspiration rule is obligatory, expressed in the orthography, and the speakers are conscious about it. Failing to apply the Pre-onset Deaspiration rule to a prefixed/superfixed third columner is like pronouncing cheap as sheep. It’s simply wrong. The Disyllabic Deaspiration rule, although important to know, is not as obligatory. Pronouncing \[ yāːkʰā \] ‘summer’ as \[ yɑ̄kʰɑ̄ \] sounds unnatural and unauthentic to native ears, but it would not be considered entirely wrong. This is similar to the variations of \[ t \] in American English. The Pre-onset Deaspiration rule, which applies to prefixed or superjoined third columners, may be compared to the English rule alternating the \[ t \] sound in words such as nation \[ sh \] and native \[ t \]. The Disyllabic Deaspiration rule compares more closely to the flapping of \[ t \] in butter. Failure to flap the \[ t \] in butter in casual talk may only reveal one’s status as a non-native speaker of American English, whereas pronouncing native as nashive is simply unacceptable. Even though the distinction between the two deaspiration rules is clear, since the Disyllabic Deaspiration rule is extremely common, one should internalize it and apply it whenever appropriate.

4.3.3 Leftward Liaison

Tibetan pre-onset elements may be pronounced in certain sound environments. For example, the words four \[ shī \] and ten \[ cū \] both have the prefix \[ ≈ \], which is silent in both words in their citation form. However, the word forty \[ shǐcū \] (literally, four-ten) is \[ shǐpcū \] with the prefix \[ ≈ \] of the second syllable \[ cū \] overtly pronounced as \[ p \]. This phenomenon is identical to a well known phonological rule in French called liaison, where a word-final silent, or more accurately, latent, consonant becomes overtly pronounced in specific sound environment. For instance, the final \[ t \] in petit \[ pti \] 'small' and the \[ s \] in les \[ le \] 'the' are both silent in isolation but become pronounced when preceding a vowel-initial word which is syntactically close enough, e.g., petit ami \[ pti̯ami \] 'boyfriend' and les enfants \[ lε̯ɑ̃fɑ̃ \] 'the children'. The only difference between Tibetan and French in this regard is the direction of liaison: French liaison links the right margin (i.e. the word-final position) latent consonant to the following vowel as its onset, Tibetan liaison links the left
margin (i.e. pre-onset element) leftward to the preceding vowel as its coda. We may call the Tibetan case Leftward Liaison.

There exist numerous examples of the Leftward Liaison in Tibetan disyllabic words, for the two syllables (usually also two morphemes) are always morphologically close.

(1) евой [cū] + ऋ [shī] → ्युधशी [cūpshī] ‘fourteen’ (ś liaisoned)

(2) ऋ [lā] + ऋ [kō] → ऋशंको [lāngkō] ‘superfix la’ (ś liaisoned)

(3) ध [tā] + ऋ [kō] → धशंको [tāngkō] ‘horse head’ (ś liaisoned)

Leftward Liaison applies not only within words, it can also take place across word boundaries, when the two words are syntactically close enough and form one prosodic unit. Examples:

(4) ठ [mī] + ठ [tū] → ठंटु [mīntū] ‘not have’ (nasal ś liaisoned)

Leftward liaison can be understood as the leftmost latent consonant of a syllable surfacing as the coda of the preceding syllable, which has to be open (coda-less) prior to the liaison. However, there are cases when the preceding syllable does contain a suffix in writing but since it is entirely silent, the liaison rule still applies.


Note that the latent nasal sound of the superfix ś is pronounced despite the coda ś in the previous syllable.

Recall from Lesson 3 that the alveolar nasal suffix ś triggers umlauting on the back vowels [a, o, u] to [ɛ, ɔ, ü], creating long rhymes [ɛn, ɔm, ūn]. It is important to note that the liaisoned nasal sound, coming from three different pre-onset sources (ś, ś, and ś), do not trigger any change, no umlauting nor lengthening, on the vowel. In other words, Tibetan makes a distinction between a true coda [Vn] and a liaisoned coda [Vn] such that only the true coda causes umlauting and lengthening in the vowel. Examples:


As expected, the liaisoned coda [n] does not trigger umlauting, thus ठंट्रो [māntrō] and not *[māntrō]. Exceptions exist, however. Some disyllabic words are such core vocabulary in the daily use of the language that, during the evolution, the liaisoned coda is somehow taken as the true coda. The numeral ठङ्ग [cōngā] ‘fifteen’ (from ठङ्ग [cū] ‘ten’ + ङ्ग [ngā] ‘five’) offers an excellent example. First, the vowel [u] lowers to [o] due to the low vowel [a] in the following syllable to [cō.ngā] (see vowel harmony, next section); then the superfix ś becomes liaisoned as a nasal coda and triggers umlaut to form [cōngā]. Readers should not feel concerned about these less predictable pronunciations, as they will all be phonetically transcribed in the vocabulary.
4.3.4 Vowel Harmony

Vowel harmony refers to a fairly common phonological phenomenon of adjacent vowels (allowing intervening consonants) affecting one another, or a chief one affecting others, in such a way that they become more similar. In Lhasa Tibetan, vowel harmony is manifested in the power of the high vowels [i, u, ü] to raise non-high vowels (e.g. [a, e, o]) in their vicinity to a higher position (i.e., more similar in height), with the low vowel [a] raising to [ə], and [e, o] sounding closer to their higher counterparts [i, u]. This is an allophonic variation subconscious to native speakers but learners may be able to hear this vowel raising effect clearly. Examples:

(1) [kʰa] + [cʰu] → [kʰɛcʰu] ‘saliva’
(2) [cʰu] + [kʰa] → [cʰukʰa] ‘by the water’
(3) [mᵃ] + [pʰu] → [mʰpʰu] ‘mother and son’
(3) [mᵃ] + [pʰu] → [mʰpʰu] ‘mother and son’
(4) [pʰu] + [mō] → [pʰum³] ‘girl’
(5) [kʰur] + [m³] → [kʰum³] [kyürm³] ‘sour’

Earlier in 4.1.2, we encountered two words [lᵃpᵘ] ‘radish’ and [rᵃlᵘ] ‘goats and sheep’. Due to vowel harmony, the actual pronunciation should be [lᵉpᵘ] and [rᵉlᵘ], respectively.

In some cases, vowel harmony is shown in a different way by lowering the high vowels [i, u] to the level of the non-high [e, o]. For example, the same word [pʰom³] can alternatively be pronounced [pʰom⁴]. This lowering type of vowel harmony goes a long way back in the history of the language, sometimes even reflected in the orthography. In the previous section we saw that the vowel [u] in the morpheme [sʰ] ‘ten’ lowers to [o] in [sʰo] ‘fifteen’. The word [sʰ³] ‘eighteen’ is another example of this type of vowel harmony. Note that, whether it is [pʰum⁴] or [pʰom⁴], the effect of vowel harmony involves a high vowel. Mid vowels [e, o] typically do not have the force to trigger vowel harmony. For instance:

(5) [tʰa] + [l⁰] → [tʰal⁰] ‘this year’ (not *[tʰal⁰])
(6) [o] + [cᵃ] → [očᵃ] ‘milk tea’ (not *[očᵃ])

Note that, since vowel harmony is an allophonic rule (like the flapping of [t]), orthography does not always reflect it.

❖ 4.4 Punctuation

Tibetan has its own set of punctuation marks. There is no between-word spacing of the western style in Tibetan writing (i.e., no marking of word boundaries.) The smallest unit for punctuation is the syllable. To separate syllables (usually one syllable
corresponds to one morpheme, the smallest meaningful unit in the language), a dot (་) is marked by the right shoulder of the last letter of the syllable.

There is no strict definition of a sentence in the English sense. Clausal units that resemble a complete sentence or a subordinate clause can be marked by a single vertical line called ལོང་འདི. There is no distinction among declarative, interrogative, or exclamatory sentences. For all three types, for which English would employ a period, a question mark, and an interjection mark, respectively. Tibetan uses a uniformed ལོང་འདི.

Examples:

1. ཧོ་ཏ་རོ་ཅུ་ཤེས་པ་དང་།  Are you a student?

2. བོད་དོ་ལོ་མོ་ཤེས་པ་དང་།  My name is Mike.

3. བོད་དོ་ སུ་གེའི་  Oh!

When one uses ལོང་འདི at the end of a clause, one normally does not need to use the ལོང་འདི to finish marking the last syllable. There are two exceptions. First, when the last letter of the last syllable is ལ, one has to dot the ལ before one writes the vertical ལོང་འདི. This is to prevent ལ from sitting too close to the vertical line and being misread as ལ. Second, when the last letter of the sentence is ཤ or ཭, the long vertical stroke of the letter itself is considered to represent the ལོང་འདི. There is no need for an additional vertical line ལོང་འདི.

4. བོད་དོ་ལོ་མོ་ཤེས་པ་དང་།  Good day. How are you? (dot and the vertical mark before ལ)

5. བོད་དོ་ལོ་མོ་ཤེས་པ་དང་།  There are only nine students here today.  (no vertical mark ལོང་འདི)

To end a paragraph, two vertical lines ལོང་འདི (་) can be used instead of ལོང་འདི. At the end of a larger section of an essay, one may double up the ལོང་འདི and use four vertical lines ལོང་འདི (ལོང་འདི) to end the entire section of the text. The beginning of a text is marked with ལོང་འདི (ལོང་འདི); ལོང་འདི (ལོང་འདི) starts chapters or sections; and ལོང་འདི (ལོང་འདི) starts a new line that contains only one syllable so that it does not look
dangling.

Although there are quite a few calligraphic styles in Tibetan writing, there is no equivalent to the capital and lower cases of the alphabet in the western sense. As a result, there is no way to distinguish common nouns from proper names. To make reading Tibetan text even more difficult for foreign learners, as we mentioned earlier, since the punctuation mark ཐུ is only used to separate syllables, there is no indication of word boundaries to help the reader decide where a word begins and where it ends. Diligence seems to be the only solution to this problem.

4.5 Exercises

4.5.1 Pronunciation Drill (I): words with HH-HH surface tonal pattern

(1) རིུ་པོ། (17) དིིུ་པོ། (33) དིིུ་དྲིི། (49) ང་ཤིི་པོ། (65) ང་ཤིི་བོ།

(2) རངེ། (18) རངེ། (34) ང་ཤིི་དྲིི། (50) ང་ཤིི་བོ། (66) ང་ཤིི་བོ།

(3) ང་ཤིི་དྲིི། (19) ང་ཤིི། (35) ང་ཤིི། (51) ང་ཤིི། (67) ང་ཤིི།

(4) ང་ཤིི། (20) ང་ཤིི། (36) ང་ཤིི། (52) ང་ཤིི། (68) ང་ཤིི།

(5) ང་ཤིི། (21) ང་ཤིི། (37) ང་ཤིི། (53) ང་ཤིི། (69) ང་ཤིི།

(6) ང་ཤིི། (22) ང་ཤིི། (38) ང་ཤིི། (54) ང་ཤིི། (70) ང་ཤིི།

(7) ང་ཤིི། (23) ང་ཤིི། (39) ང་ཤིི། (55) ང་ཤིི། (71) ང་ཤིི།

(8) ང་ཤིི། (24) ང་ཤིི། (40) ང་ཤིི། (56) ང་ཤིི། (72) ང་ཤིི།

(9) ང་ཤིི། (25) ང་ཤིི། (41) ང་ཤིི། (57) ང་ཤིི། (73) ང་ཤིི།

(10) ང་ཤིི། (26) ང་ཤིི། (42) ང་ཤིི། (58) ང་ཤིི། (74) ང་ཤིི།

(11) ང་ཤིི། (27) ང་ཤིི། (43) ང་ཤིི། (59) ང་ཤིི། (75) ང་ཤིི།

(12) ང་ཤིི། (28) ང་ཤིི། (44) ང་ཤིི། (60) ང་ཤིི། (76) ང་ཤིི།

(13) ང་ཤིི། (29) ང་ཤིི། (45) ང་ཤིི། (61) ང་ཤིི། (77) ང་ཤིི།

(14) ང་ཤིི། (30) ང་ཤིི། (46) ང་ཤིི། (62) ང་ཤིི། (78) ང་ཤིི།

(15) ང་ཤིི། (31) ང་ཤིི། (47) ང་ཤིི། (63) ང་ཤིི། (79) ང་ཤིི།

(16) ང་ཤིི། (32) ང་ཤིི། (48) ང་ཤིི། (64) ང་ཤིི། (80) ང་ཤིི།
### 4.5.2 Pronunciation Drill (II): words with HH-HL surface tonal pattern

1. དབུགས་ ་(7) ནབུགས་ ་(13) བུགས་ ་(19) གོང་ ་(25) བོད་
2. དབུགས་ ་(8) སྨོར་ ་(14) སྨོར་ ་(20) སྨོར་ ་(26) བོད་
3. གོང་ ་(9) ཨོམ་ ་(15) ཨོམ་ ་(21) སྨོར་ ་(27) བོད་
4. སྨོར་ ་(10) སྨོར་ ་(16) སྨོར་ ་(22) སྨོར་ ་(28) བོད་
5. སྨོར་ ་(11) སྨོར་ ་(17) སྨོར་ ་(23) སྨོར་ ་(29) བོད་
6. སྨོར་ ་(12) སྨོར་ ་(18) སྨོར་ ་(24) སྨོར་ ་(30) བོད་

### 4.5.3 Pronunciation Drill (III): words with LL-HH surface tonal pattern

1. གོང་ ་(11) གོང་ ་(21) གོང་ ་(31) གོང་ ་(41) གོང་
2. གོང་ ་(12) གོང་ ་(22) གོང་ ་(32) གོང་ ་(42) གོང་
3. གོང་ ་(13) གོང་ ་(23) གོང་ ་(33) གོང་ ་(43) གོང་
4. གོང་ ་(14) གོང་ ་(24) གོང་ ་(34) གོང་ ་(44) གོང་
5. གོང་ ་(15) གོང་ ་(25) གོང་ ་(35) གོང་ ་(45) གོང་
6. གོང་ ་(16) གོང་ ་(26) གོང་ ་(36) གོང་ ་(46) གོང་
7. གོང་ ་(17) གོང་ ་(27) གོང་ ་(37) གོང་ ་(47) གོང་
8. གོང་ ་(18) གོང་ ་(28) གོང་ ་(38) གོང་ ་(48) གོང་
9. གོང་ ་(19) གོང་ ་(29) གོང་ ་(39) གོང་ ་(49) གོང་
10. གོང་ ་(20) གོང་ ་(30) གོང་ ་(40) གོང་ ་(50) གོང་

### 4.5.4 Pronunciation Drill (IV): (words with LL-HL surface tonal pattern)

1. གོང་ ་(11) གོང་ ་(21) གོང་ ་(31) གོང་ ་(41) གོང་
2. གོང་ ་(12) གོང་ ་(22) གོང་ ་(32) གོང་ ་(42) གོང་
4.5.5 Pronunciation Drill (V): (words with LL-LH surface tonal pattern)

(1) བོད་ (9) སྱེ་ (17) ཚེ་ (25) མི་ (33) སྤེ་ (43) སྤེ་

(2) དོ་ (10) སླེ (18) སླེ (26) སླེ (34) སླེ

(3) རྒྱ་ (11) རྒྱ་ (19) རྒྱ་ (27) རྒྱ་ (35) རྒྱ་

(4) རྡོ་ (12) རྡོ (20) རྡོ (28) རྡོ (36) རྡོ

(5) ཨོ་ (13) ཨོ་ (21) ཨོ་ (29) ཨོ་ (37) ཨོ་

(6) འཛོ (14) འཛོ (22) འཛོ (30) འཛོ (38) འཛོ

(7) འཛོ (15) འཛོ (23) འཛོ (31) འཛོ (39) འཛོ

(8) རྡོ (16) རྡོ (24) རྡོ (32) རྡོ (40) རྡོ

4.5.6 Pronunciation Drill (VI): phrasal and irregular pronunciation

(1) བཞེ་ (7) བཞེ (13) བཞེ (19) བཞེ

(2) ཚུ་ (8) ཚུ (14) ཚུ (20) ཚུ

(3) སྲུ་ (9) སྲུ (15) སྲུ (21) སྲུ

(4) སྲུ (10) སྲུ (16) སྲུ (22) སྲུ
4.5.7 Oral Spelling (I): spell out the syllables

(1) གཞི་བཞི། (5) སྱོད་བཞི། (9) སྐྲིད་བཞི། (13) སྐབས།
(2) སྐལ་བཞི། (6) སྐྲིན་གྲོ། (10) སྭ་ོ་མ་ (14) རྟོལ་ལ།
(3) གཞན་པཞི། (7) སྐྱོན་པཞི། (11) སརྭ་ོ་པ། (15) རྭ་བོ་ས།
(4) གཞི་ལོགས། (8) སྐྲུབ་བཞི། (12) སྐྱོད་བཞི། (16) སྐྱོད་བཞི།