

Introduction to the Lepcha Script



This short introduction to the Lepcha script is intended for people with no prior experience but can be used by anyone looking for more information on this unique script. It is based on the current Unicode proposal to encode Lepcha and the successful implementation of the Lepcha script by XenoType Technologies on a Macintosh running OS X 10.2.x.

The main purpose of this document is to provide information for software developers in an effort to promote the support of Lepcha-enabled operating systems and support applications. We will not however delve into the specifics of programming support for Lepcha — the information herein should provide an adequate starting point regardless of the operating system or technology involved.

To this end, we will frequently diverge from traditional linguistic terminology in an effort to point out or emphasize certain features of this script. Linguists and purists will have to forgive us.

Consonants

As currently encoded, the Lepcha alphabet consists of 67 basic letter shapes, or nominal glyphs, which can be further divided into consonants, vowel signs, diacritics and digits. The 36 consonants, or base glyphs, are shown here:

ᱵ ᱦ ᱧ ᱨ ᱩ ᱪ ᱫ ᱬ ᱭ ᱮ
ᱯ ᱰ ᱱ ᱲ ᱳ ᱴ ᱵ ᱶ ᱷ ᱸ
ᱹ ᱺ ᱻ ᱼ ᱽ ᱾ ᱿ ᱺ
ᱽ ᱾ ᱿ ᱺ ᱻ ᱼ ᱽ

You may occasionally see or hear that there are only 35 consonants — this is because the sign ᱺ is frequently classified as a vowel. It is typically taught as a vowel sign in native primers but, in reality, it's more of a vowel carrier with some special properties that allow it to combine with diacritics normally reserved for consonants. For our purposes, we'll refer to it as a consonant.

The seven glyphs in the last row are combinations of consonant plus medial /-l-/. In **Tamsang's Lepcha English Encyclopædic Dictionary**, these are usually listed after all occurrences of the corresponding base consonant. In native sources, these glyphs are taught as ligatures of a base consonant plus LEPCHA CONSONANT SIGN L.

Visually, these glyphs share no distinguishing characteristic with each other and this fact may have been the justification for encoding them as nominal glyphs. However, this decision is somewhat counterintuitive, particularly since other, similarly formed, characters have not been encoded. Nevertheless, these additional glyphs (discussed below) can be formed adequately under the current proposal.

There are several dozen other glyphs that represent combinations of consonant plus medial /-y-/ and /-r-/. These composite glyphs are however not encoded as nominal glyphs in Unicode since their forms can be viewed as composites of separate entities, and formed accordingly as ligatures. Consequently, there are two exceptional glyphs (᱙, ᱚ) encoded in the Lepcha block to facilitate this.

Both **Mainwaring** and **Chakraborty** use these individual signs but native publications teach these composites as ligatures of two or more characters. Lepcha support from XTT currently supports 32 such ligatures. Some examples:

ᱥ ᱦ ᱧ ᱨ ᱩ ᱪ

In function, the resulting ligature glyphs are no different than those representing consonant plus medial /-l-/ but since these ligatures incorporate a common feature to express the medials /-y-/ and /-r-/, we feel that it is appropriate to consider these exceptional glyphs as nominal glyphs.

It should be noted that /-r-/ and /-y-/ can occur together forming yet another potential nominal glyph. However, since the correct form using both medials can be expressed as a ligature using the two exceptional glyphs mentioned above, there's no need to introduce an artificial glyph to express this combination. There are 8 such ligatures included in XTT's Lepcha support. Some examples:

ᱥ ᱦ ᱧ ᱨ

Vowels

The 7 Lepcha vowel signs cannot occur without one of the base glyphs above. But they can and do frequently occur with the special glyph ᱡ at the beginning of a syllable (word-initial or elsewhere) and this is how they are illustrated below:

ᱡ ᱢ ᱣ ᱤ ᱥ ᱦ ᱧ

Most noteworthy is the position of several vowel signs *before* their base consonants. This is not unlike several other scripts already supported in many operating environments and poses no significant difficulties. This feature distinguishes the values of two otherwise identical glyphs (LEPCHA VOWEL SIGN AA and LEPCHA VOWEL SIGN OO).

Diacritics

Lepcha uses a series of additional marks to indicate various things — we refer to them simply as diacritics. Of the 11 diacritics encoded in the Lepcha block, 9 of them are used exclusively to indicate syllable-final consonants (although we recommend that one of these be dropped), and as such must always occur after a base glyph or base glyph plus vowel combination. For the sake of variety, we illustrate them here with the base glyph ᱦ.

ᱦ ᱦ ᱦ ᱦ ᱦ ᱦ ᱦ ᱦ ᱦ

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Two final punctuation marks, which do not appear to exist in Unicode, are what could be termed Lepcha periods. Two varieties occur even though they serve the same purpose. For this reason, it is advisable to consider them as one character and allow font developers to choose the variant they want to support.

$\mathcal{F}_x \quad \mathcal{F}_*$

Below is a sample text that illustrates modern Lepcha and most of the features required for proper display. This text is taken from a Lepcha primer for children.

ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ
ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ ᐱᓂᐸᑦᐱ

[illegible][illegible]