Universal Multiple-Octet Coded Character Set
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Title: Revised proposal to encode the Limbu script in the UCS
Source: Boyd Michailovsky and Michael Everson
Status: Expert Contribution
Action: For consideration by JTC1/SC2/WG2
Date: 2002-02-05

This document offers a revision of the proposal accepted for the PDAM to Amendment 2 of ISO/IEC 10646-1, and should inform National Body comments to the PDAM text.

A. Administrative
1. Title
Revised proposal to encode the Limbu script in the UCS
2. Requester's name
Boyd Michailovsky and Michael Everson
3. Requester type
Expert contribution
4. Submission date
2002-02-05
5. Requester's reference
SC2 N3588
6a. Completion
This is a complete proposal.
6b. More information to be provided?
No.

B. Technical -- General
1a. New script? Name?
Yes. Limbu.
1b. Addition of characters to existing block? Name?
No.
2. Number of characters
66.
3. Proposed category
Category B
4. Proposed level of implementation and rationale
Level 3 because there are combining characters.
5a. Character names included in proposal?
Yes
5b. Character names in accordance with guidelines?
Yes

5c. Character shapes reviewable?
Yes
6a. Who will provide computerized font?
Boyd Michailovsky and Michael Everson
6b. Font currently available?
Yes
6c. Font format?
TrueType
7a. Are references (to other character sets, dictionaries, descriptive texts, etc.) provided?
Yes.
7b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached?
Yes.
8. Does the proposal address other aspects of character data processing?
No.

C. Technical -- Justification
1. Contact with the user community?
Yes. Michailovsky discussed the proposal in a meeting with the Kirat Yakthung Chumlung and Bairagi Kainla in December 2001. Two widely respected native authorities on Limbu script, representing current Nepalese and Sikkimese usage, are respectively:
- Mr. Til Bikram Nembang, former member of the Royal Nepal Academy and editor of the completed but still unpublished *Royal Nepal Academy Dictionary of Limbu*. Mr. Nembang writes under the pseudonym of "Bairagi Kainla". He has published a number of books of Limbu ᤌᤢᤶᤛᤢᤶ *mundhum* (traditional rituals) in Limbu, in both Limbu and Devanagari scripts, with Nepali translations. Address: GPO Box No. 3290, Kathmandu, Nepal. E-mail: nembang@wlink.com.np
- Mr. B. B. Subba (Muringla Nugo), Joint Director, Department of Education, Government of Sikkim. Mr. Subba has published a dictionary of Limbu, which he now considers obsolete, and numerous textbooks used in Sikkim. His design of a Limbu font won the President's award in India in 1981. Address: Joint Director, Education Department, Government of Sikkim, Gangtok, Sikkim, India.
- Kirat Yakthung Chumlung is the Limbu cultural association which publishes *Tānchōppa*. Website: http://www.msnepal.org/partners/kyc/index.htm. Address: P.O. Box 4548, Mahalaxmisthan, Lalitpur, Kathmandu, Nepal. E-mail: chumlung@wlink.com.np. Telephone: +977 1 520349

2. Information on the user community?
Speakers of Limbu.
3a. The context of use for the proposed characters?
General use.
3b. Reference
4a. Proposed characters in current use?
Yes.
4b. Where?
Nepal and Sikkim and Darjeeling (India).
5a. Characters should be encoded entirely in BMP?
Yes. Proposed positions: U+1900 - U+194F

5b. Rationale
Accordance with the Roadmap.
6. Should characters be kept in a continuous range?
Yes.
7a. Can the characters be considered a presentation form of an existing character or character sequence?
No.
7b. Where?
7c. Reference
8a. Can any of the characters be considered to be similar (in appearance or function) to an existing character?
No.
8b. Where?
8c. Reference
9a. Combining characters or use of composite sequences included?
Yes.
9b. List of composite sequences and their corresponding glyph images provided?
No.
10. Characters with any special properties such as control function, etc. included?
No.

Proposal.

Introduction
Limbu is a Tibeto-Burman language of the East Himalayish group, spoken by about 200,000 persons mainly in eastern Nepal, but also in the neighboring Indian states of Sikkim and West Bengal (Darjeeling district). Its close relatives are the languages of the East Himalayish (Shafer 1966-1973) or "Kiranti" group in Eastern Nepal. It is only very distantly related to the Lepcha (Róng) language of Sikkim and to Tibetan. Limbu was recognized as an official language in Sikkim in 1981.

The name "Limbu", used in Nepal and in Nepali (the Indo-Aryan national language of Nepal and *lingua franca* of Darjeeling district and Sikkim), is of uncertain origin. In Limbu, the Limbu call themselves *yakthuŋ*. Individual Limbus often take the surname "Subba", a Nepali term (of Arabic origin) for 'headman'. The Limbu script is often called "Sirijanga" after the Limbu culture-hero Sirijanga, who is credited with its invention. It is also sometimes called Kirat, *kirāta* being a Sanskrit term probably referring to some variety of non-Aryan hill-dwellers. It is currently used in Nepali both as a general term (*kirā̃tī*) for Limbus and "Rais" (numerous Tibeto-Burman speaking groups in eastern Nepal), and as a term for the dynasty which is presumed to have preceded that of the Licchavi (?4th century CE) in the Kathmandu valley.

The oldest known writings in Limbu script, most of which are conserved in the India Office Library, London, were collected in Darjeeling district in the 1850s. The modern script was developed beginning in 1925 in Kalimpong (Darjeeling district) in an effort to revive writing in Limbu, which had fallen into disuse. Three versions of the Limbu script are distinguished in the present proposal: the 19th century script, found in manuscript documents; the early

modern script, used in a few, mainly mimeographed, publications between 1928 and the 1970s; and the current script, used in Nepal and India (especially Sikkim) since the 1970s. There are significant differences, particularly between the 19th-century and modern scripts (see below).

The Limbu script is of the Brahmic type. It is far more widely used today than at any time in the past. In areas of Sikkim populated by Limbus, Limbu in the Limbu script has been offered as a vernacular language option in the English-medium state schools since the 1970s. Over 4000 pupils study Limbu for one hour daily, taught by more than 300 teachers. Course books are available for classes 1-12. In Nepal, Limbu script is taught more sporadically on private initiative. A Limbu newspaper, ᤛ᳘ᤠᤱᤛᤢᤴ *Ta:ncho:ppa* ('*Morning Star*'), has been published somewhat irregularly from Kathmandu since 1995. There is some literary production in both Nepal and Sikkim.

Virtually all Limbu speakers are bilingual in Nepali, and far more Limbus are literate in Nepali than in Limbu. For this reason, many Limbu publications contain material both in Nepali and in Limbu, and in some cases the Limbu appears both in the Limbu script and in Devanagari. In some publications, literary neologisims are glossed in Nepali or in English.

Consonants
Consonant letters (and clusters) represent syllable initial consonants (and clusters) followed by the inherent vowel, short *open o* (/ɔ/). Subjoined consonant letters are joined to the bottom of the consonant letters, extending to the right, to indicate "medials" in syllable-initial consonant clusters. There are very few of these clusters in native Limbu words. The script provides for subjoined ○ᤠ -*ya,* ○ᤡ -*ra,* and ○ᤢ -*wa.* Small letters are used to indicate syllable-final consonants. (See below on vowel length for further details.) The following small letter consonants are found: ○ᤰ -*k,* ○ᤱ -*ng,* ○ᤳ -*t,* ○ᤴ -*n,* ○ᤵ -*p,* ○ᤶ -*m,* ○ᤷ -*r,* ○ᤸ -*l,* corresponding to the syllable finals of native Limbu words. These letters are independent forms which, unlike the conjoined or half-letter forms of Indian scripts, may appear alone as word-final consonants (where Indian scripts use full consonant letters and the sign *virāma*). The syllable finals are of course pronounced without a following vowel.

Limbu is a language with a well-defined syllable canon, in which syllable-initial stops are pronounced differently from finals. Syllable-initials may be voiced following a vowel, whereas finals are never voiced but are pronounced unreleased with a simultaneous glottal closure, and geminated before a vowel. Using *virāma* to represent both (1) initials when followed by medials and (2) finals would lead to ambiguity. For example, the word ᤁᤢᤁ᭄ᤞᤱ *kukyaŋ* 'his pestle', has a syllable boundary between ᤁ *ku* 'his' and ᤁ᭄ᤞᤱ *kyaŋ* 'pestle'. It can be pronounced (and could be written) ᤁᤢᤃ᭄ᤞᤱ *kugyaŋ,* but in fact the second syllable would normally be written with initial ᤁ KA and medial ○ᤠ SUBJOINED YA. This is different from a word like ᤐᤰᤧᤞᤠᤴ *phakya:n* 'Amaranth' (actually ᤐᤰ *phak* 'pig' + ᤞᤠᤴ *ya:n* 'weed'), in which the syllable boundary is between the -*k* (which cannot be voiced) and the *y*-, and which in Limbu script would be written with the final ○ᤰ SMALL LETTER K followed by the full consonant ᤞ YA. Coding both combinations as KA + *virāma* + YA would lead to confusion.

The present encoding uses separate codepoints for three subjoined medials and nine syllable-finals. In this way, the character SA-I is only used where the glyph SA-I is actually intended. This

has the advantage of permitting the two native orthographic traditions regarding SA-I (see below) to be represented without ambiguity.

Vowels

The Limbu vowel system has seven phonologically distinct timbres, /i, e, ɛ, a, ɔ, o, u/. The vowel /ɔ/ (*open o*) functions as the inherent vowel in the modern Limbu script. To indicate a syllable with a vowel other than the inherent vowel, a VOWEL SIGN is added over, under, or to the right of the initial consonant letter or cluster. Although the vowel /ɔ/ is the inherent vowel, the Limbu script has a combining vowel sign ŏ which may optionally be used to represent it. Many writers (e.g. Subba 1991) avoid using this sign, considering it to be redundant.

Syllable-initial vowels are represented by the vowel-carrier ꗥ, KIRAT LETTER AM, together with the appropriate vowel sign. Used by itself, the vowel-carrier letter represents syllable-initial /ɔ/, the inherent vowel. The initial consonant letters have been named KA, KHA, etc., in this encoding, although they are in fact pronounced with Z /kɔ/, ɑ /kʰɔ/, and do not represent the Limbu syllables Ẕ /ka/, ɑ̈ /kʰa/, etc. This is in keeping with the usage of learned Limbus in writing the letter-names in Devanagari. It would have been confusing to call the vowel-carrier letter A, however, so the native name AM (ꗥꔲ /ɔm/) has been used here.

Prosodics

Vowel length

Vowel length is phonologically distinctive in many contexts. Length in open syllables is indicated by writing ö KIRAT SIGN KEMPHRENG, which looks like the diaeresis sign, over the initial consonant or cluster: ꗪ̈ *ta:*. In closed syllables, there are two different ways of indicating vowel length:

(1) Vowel length is not indicated by KEMPHRENG; instead, the syllable-final consonant is written as a full form (i.e. like a syllable-initial), marked by ọ KIRAT SIGN SA-I: ꗈ̀Ẕ *pa:n* 'speech'. This sign thus marks vowel length in addition to functioning as *virāma* in suppressing the inherent vowel of the syllable-final consonant.

(2) Vowel length is indicated by KEMPHRENG, as for open syllables, and the syllable-final consonant appears in "small" form without SA-I: ꗈ̈ꔲ *pa:n* 'speech'. Writers who consistently follow this practice reserve the use of SA-I for syllable-final consonants which do not have small forms, regardless of the length of the syllable vowel: Ẕ̀ꔲꔲ *nesse* 'it lay', ꗩꔲ *la:b* 'moon'. Since almost all of the syllable-finals which normally occur in native Limbu words do have small forms, SA-I is only used for consonant combinations in loan words and in some fast-speech phenomena.

The first method is widely used in Sikkim; the second has been advocated recently by certain writers in Nepal. The current proposal allows for either or both to be used.

The Limbu sign ọ SA-I is clearly based on the Indian *halant* or *virāma*, but for a majority of current writers it has a different semantics, since in addition to "killing" the inherent vowel of consonants functioning as syllable finals, it indicates length of the preceding vowel. It is therefore not suitable for use as a general *halant* or *virāma*. Creating a different UCS character – a second *virāma* – to represent this general function would be confusing. It would

be contrary to the native concept of the script and would in any case only save a small number of codepoints. The resulting system would be less transparent, and more difficult to render.

Glottalization

The KIRAT SIGN MUKPHRENG ◌, represents glottalization. For the purposes of this encoding it may be considered as representing a final glottal consonant. (This is not quite satisfactory as a phonological analysis.) MUKPHRENG never appears as a syllable-initial. Although some analysts consider that word-final nasal consonants may be glottalized, this is never indicated in the script; MUKPHRENG is not currently written after final consonants. (No other syllable-final consonant clusters occur in Limbu.)

Collating order

There is no universally-accepted alphabetical order for Limbu script. The excellent Limbu dictionary edited by Bairagi Kainla uses the following alphabetical order, which is followed here (with the addition of the obsolete letters, whose position is not problematic). The colon : is used to indicate kemphreng. The list following is a set of nonsense "words" illustrating the collating order.

am, am:, a, a:, i, i:, u, u:, ee, ee:, ai, oo, oo:, au, e, -e:, o, -o:, sa-i; mukphreng, ka, small ka, kha, ga, gha, nga, small nga, anusvara, ca, cha, ja, jha, yan, ta, small ta, tha, da, dha, na, small na, pa, small pa, pha, ba, bha, ma, small ma, ya, ra, small ra, la, small la, ya, wa, sha, ssa, sa, ha.

Ƶ	kɔ	ƵЧƵ	ka-p-ka	ƵƵ∿	ku-kya
Ƶ̌	ka	ƵЧ෴	ka-p-pa	Ƶᶜƶ̌	ku-k-ka
Ƶ̌,	ka-ʔ	Ƶ̈	ka:	Ƶᶜǯ	ku-k-ya
Ƶ̌,ʑ	ka-ʔ-ma	Ƶ̈Ƶ	ka:-ka	Ƶ෴	ku-pa
Ƶ̌,�	ka-ʔ-re	Ƶ̈෴	ka:-pa	ƵЧƵ̌	ku-p-ka
Ƶ̌Ƶ̌	ka-ka	Ƶ̌,	ki-ʔ	Ƶ̈Ƶ̌	ku:-ka
Ƶ̌ẕ	ka-k_	Ƶ̌Ƶ̌	ki-ka	Ƶ̈෴	ku:-pa
Ƶ̌ᶜ	ka-k	ƵᶜЧ̌	ki-k-wa	Ƶ̀෴	ke-bɔ
Ƶ̌ᶜƵ̌	ka-k-ka	Ƶ̌Ƶ̌ᴬ	ki-kwa	Ƶ̀෴	ke-ba
Ƶ̌ᶜƵ̌,	ka-k-kra	Ƶ̌෴	ki-pa	Ƶ̀෴	ke-b_
Ƶ̌ᶜƵ̌ᴬ	ka-k-kwa	Ƶ̌∵	ki:	Ƶ̌∿	kya
Ƶ̌෴	ka-pa	Ƶ̌∵ᶜƵ̌	ki:-k-ka	Ƶ̌ᴬ	kwa
Ƶ̌Ч	ka-p	Ƶ̌∵ЧƵ̌	ki:-p-ka	෴	pa
Ƶ̌Чʑ	ka-p-'a	Ƶ̌Ƶ̌	ku-ka	෴̈	pa:

In Sikkim, a somewhat different order is used: the letter Ƶ NA is placed before Ɜ TA, and the letter Ч GHA is placed at the end of the alphabet. The order of the 19th-century alphabet is radically original; it is not known how the vowels interfile with the consonants:

 ka, pa, 'a, ma, ta, ya, tha, na, sha, ŋa, sa, wa, ha, la, ca, pha, kha, ra, cha, ña
 a (inherent), *e* (symbol like modern EE), *i, u, e* (symbol like modern E), *o* (symbol like modern A), *o* (symbol like modern OO).

Glyph placement

The vowel signs ○̆ A, ○̂ I, ○̀ OPEN E, and ○̆ OPEN O appear over the initial, ○̣ U appears under the initial, ○꜋ E and ○̆꜊ AI appear to the right of the initial, and both ○̆꜋ O and ○̆꜋꜋ AU appear both over and to the right of the initial. (The vowel sign O is graphically A + E; AU is A + AI.) The KIRAT SIGN KEMPHRENG ○̇ indicating vowel length is written over the initial consonant or vowel-carrier, often slightly to the right, in any case after any superscribed vowel sign. It is placed over the horizontal portion of the vowel signs ○̆ A and ○̂ I: ꠅ *ta꞉*, ꠅ *ti꞉*. The SMALL LETTER syllable-finals ○ᵔ -K, ○ᵕ -N, ○ᵋ -P, ○ᵞ -M and ○ᵁ -L occupy the upper half of the height of full initial consonants (the typographer's "x-height") ꠅᵔ *yak* 'taro', ꠅᵞ *yam* 'body'. The final ○○ -NG, the subjoined medials ○ᵥ -YA and ○ᵤ -WA, and the glottalization sign MUKPHRENG occupy the lower half of this space: ꠅ○ *haŋ* 'king', ꠅᵥ○ *kyaŋ* 'pestle', ꠅᵤ *kwa* 'maternal uncle'. The finals ○̧ -T and ○̧ -R and the sign SA-I occupy the same vertical space as the vowel U, under the space occupied by full initial consonants: ꠅ꠆ꠅ *phattra* 'grass fire', ꠅᵞ *nerwa* 'heart'. The subjoined medial ○̧ -RA appears at this same level, after the initial consonant: ꠅ꠆ꠅ *phattra* 'grass fire'.

Punctuation

The main punctuation mark used is the double vertical line, the DOUBLE DANDA as in Devanagari: ॥. In Nepali, Limbu writers refer to this sign as *virām* 'pause'. This name is avoided here to avoid confusion with the sign SA-I, which is also referred to as *virām* in native sources. The Devanagari sign can be used. The KIRAT QUESTION MARK ⸮ and EXCLAMATION POINT ꠹ have shapes peculiar to Limbu, especially in Sikkimese typography. They are assigned code-points to facilitate the use of both Limbu and Devanagari scripts in the same documents. Subba 1991 proposes nine punctuation marks for Limbu (Figure 7). It is not clear to what extent these have been adopted; most – that is, ".", ":", "॥", " ' ", "—", "-", "()", "{}", "()" – can be supplied from Devanagari or other fonts, and they have not been assigned codepoints here. A short double hyphen "=" is proposed as a marker of caesura, when breaking words at the end of a line. In Figure 2 below, this double hyphen is used as a line-end separator.

Digits

Digits have distinctive forms and are assigned codepoints because Limbu and Devanagari (or Limbu and European) numbers are often used in the same document.

Obsolete characters

Several characters in the encoding are currently obsolete but are necessary for publishing older texts. These are:

1909	ꠌ	KIRAT LETTER JHA	
190A	ꠊ	KIRAT LETTER YAN	(Devanagari *ña*)
191A	ꠚ	KIRAT LETTER SSA	(Devanagari *ṣa*)
1932	○̣	KIRAT SIGN ANUSVARA	
193D	꠽	KIRAT SIGN LO	

LETTER JHA and LETTER SSA are found in early versions of the modern script, e.g. Subba (1928) and Chemjong (?1961). LETTER YAN is also found in early modern alphabets. Nineteenth-century texts made use of SMALL LETTER ANUSVARA ○̣ -*ṁ* which was used interchangeably with ○○ -*ng*. The SIGN LO ꠽ is used for the exclamatory (among other uses) particle *lo!*. (This particle is also often simply spelled out ꠅ꠹.)

With these additions, the coding should be adequate for 19th-century manuscript materials, although the glyphs required are often different from the modern ones.

Devanagari-style conjoined characters

Limbu equivalents for Devanagari conjoined character glyphs are found in some early modern alphabets. As in Devanagari, these appear to fill out the last two rows of alphabet tables which have 5 rows of 5 characters each (stops and nasals) followed by two rows of 4 characters each (liquids, sibilants, and *ha*). The particular glyphs *tra* and *jña* are probably chosen because their composition is less obvious than that of many other Devanagari combined symbols. No codepoints are reserved for these combinations in the present proposal. It is not clear that they have ever actually been used in writing Limbu.

Implementations

There are a number TrueType implementations of the Limbu script in circulation in Nepal. The one used here is *Sirijonga*. The Kirat Yakthung Chumlung believes it holds the rights to the currently used fonts, and agrees that the fonts should be freely available. No computer implementations of older versions of the script are known to the present writer.

Srijunga. ©1994 Karun Thapa. Sat Oct 01 15:12:03 1994. (Srijunga.ttf. saved 05 Sept. 1996 09:47)

Sirijonga. K. Yarang, J. R. Pandhak, Y. Lawoti, Y. P. Yakwa. (Fontmonger) (Sirijng.ttf. saved 11 Feb. 1999 08:55).

Yakthung. K. Yorong & G. Ijam. (Fontmonger) (Yaktng.ttf. saved 12 Jan. 1997 23:01.)

References

Bairagi Kainla, ed. [in press.] *Limbu-Nepali-Angreji śabdakoś.* [Limbu-Nepali-English Dictionary.] Royal Nepal Academy. Kathmandu. [Includes an introduction describing the script.]

Campbell, A., 1955. "Notes on the Limboo Alphabet of the Sikkim Himalaya", in *JASB* XXIV, 202-203. [First published Limbu alphabet. Contains errors: cf. Sprigg 1989.]

Chemjong, Iman Singh. [Publisher's foreword dated B.S. 2018 = 1961]. *Limbu-Nepali-English Dictionary.* Kathmandu, Royal Nepal Academy. [In Devanagari script.]

Driem, George van. 1987. *A Grammar of Limbu.* Mouton de Gruyter. [Appendix: Anthology of Kiranti scripts, pp. 550-558; see comments in Sprigg 1989.]

Shafer, Robert. 1966-1973. *Introduction to Sino-Tibetan.* 5 parts. Wiesbaden. Otto Harrassowitz.

Sprigg, R.K. 1959. "Limbu books in the Kiranti Script", in *Akten des XXIV Internationalen Orientalisten-Kongress, Munich, 1957.* Wiesbaden, DMG. [The modern script described in this work is the early modern script, now outdated.]

Sprigg, R.K. 1989. Review of van Driem 1987, in *BSOAS* 52:1.163-165 [Corrects errors concerning the old Limbu script].

Subba, B. B. 1979. *Limbu Nepali English Dictionary.* Gangtok, Govt. of Sikkim, Directorate of Education. [Limbu and Devanagari scripts.]

Subba, B. B. [1991]. *Yakthuŋ huʔsiŋlam* ('Limbu Self-teaching method') = *Limbu akṣar gāiḍ* ('Limbu letter guide'). Gangtok. Kwality Stores. [In Nepali and Limbu.]

Yoṅhāṅ, Khel Rāj. 2052 B.S. [1995]. *Limbū Nepālī śabdakoś.* [Lalitpur]. [In Limbu script.]

Row 19: LIMBU

	190	191	192	193	194
0	꠨	ꠧ	ꠂ	ꠐ	ꠦ
1	ꠞ	꠷	ꠃ	ꠑ	
2	ꠌ	ꠂ	ꠄ	ꠒ	
3	꠻	꠨	ꠅ	ꠓ	
4	꠩	ꠂ	꠆	ꠔ	ꠧ
5	ꠣ	ꠂ	ꠇ	ꠕ	꠨
6	꠪	ꠂ	ꠈ	ꠖ	ꠐ
7	꠆	ꠂ	ꠉ	ꠗ	ꠑ
8	ꠃ	ꠂ	ꠊ	ꠘ	ꠒ
9	꠆	ꠂ	ꠋ	ꠙ	ꠓ
A	꠆	ꠂ	ꠌ	ꠚ	ꠔ
B	꠆	ꠂ	ꠍ	ꠛ	ꠕ
C	꠆	ꠂ			ꠖ
D	꠆				ꠗ
E	꠆				ꠘ
F	꠆				ꠙ

G = 00
P = 00

Row 19: LIMBU

hex	Name	hex	Name
00	LIMBU LETTER AM		
01	LIMBU LETTER KA		
02	LIMBU LETTER KHA		
03	LIMBU LETTER GA		
04	LIMBU LETTER GHA		
05	LIMBU LETTER NGA		
06	LIMBU LETTER CA		
07	LIMBU LETTER CHA		
08	LIMBU LETTER JA		
09	LIMBU LETTER JHA		
0A	LIMBU LETTER YAN		
0B	LIMBU LETTER TA		
0C	LIMBU LETTER THA		
0D	LIMBU LETTER DA		
0E	LIMBU LETTER DHA		
0F	LIMBU LETTER NA		
10	LIMBU LETTER PA		
11	LIMBU LETTER PHA		
12	LIMBU LETTER BA		
13	LIMBU LETTER BHA		
14	LIMBU LETTER MA		
15	LIMBU LETTER YA		
16	LIMBU LETTER RA		
17	LIMBU LETTER LA		
18	LIMBU LETTER WA		
19	LIMBU LETTER SHA		
1A	LIMBU LETTER SSA		
1B	LIMBU LETTER SA		
1C	LIMBU LETTER HA		
1D	(This position shall not be used)		
1E	(This position shall not be used)		
1F	(This position shall not be used)		
20	LIMBU VOWEL SIGN A		
21	LIMBU VOWEL SIGN I		
22	LIMBU VOWEL SIGN U		
23	LIMBU VOWEL SIGN EE		
24	LIMBU VOWEL SIGN AI		
25	LIMBU VOWEL SIGN OO		
26	LIMBU VOWEL SIGN AU		
27	LIMBU VOWEL SIGN E		
28	LIMBU VOWEL SIGN O		
29	LIMBU SUBJOINED LETTER YA		
2A	LIMBU SUBJOINED LETTER RA		
2B	LIMBU SUBJOINED LETTER WA		
2C	(This position shall not be used)		
2D	(This position shall not be used)		
2E	(This position shall not be used)		
2F	(This position shall not be used)		
30	LIMBU SMALL LETTER KA		
31	LIMBU SMALL LETTER NGA		
32	LIMBU SMALL LETTER ANUSVARA		
33	LIMBU SMALL LETTER TA		
34	LIMBU SMALL LETTER NA		
35	LIMBU SMALL LETTER PA		
36	LIMBU SMALL LETTER MA		
37	LIMBU SMALL LETTER RA		
38	LIMBU SMALL LETTER LA		
39	LIMBU SIGN MUKPHRENG		
3A	LIMBU SIGN KEMPHRENG		
3B	LIMBU SIGN SA-I		
3C	(This position shall not be used)		
3D	(This position shall not be used)		
3E	(This position shall not be used)		
3F	(This position shall not be used)		
40	LIMBU SIGN LOO		
41	(This position shall not be used)		
42	(This position shall not be used)		
43	(This position shall not be used)		
44	LIMBU EXCLAMATION MARK		
45	LIMBU QUESTION MARK		
46	LIMBU DIGIT ZERO		
47	LIMBU DIGIT ONE		
48	LIMBU DIGIT TWO		
49	LIMBU DIGIT THREE		
4A	LIMBU DIGIT FOUR		
4B	LIMBU DIGIT FIVE		
4C	LIMBU DIGIT SIX		
4D	LIMBU DIGIT SEVEN		
4E	LIMBU DIGIT EIGHT		
4F	LIMBU DIGIT NINE		

Example texts

(1) *Ta:ncho:ppa* ('Morning Star') newspaper, year 5 no. 7. 20 July 2000. Kathmandu, Nepal. [Front page in Limbu (Limbu script) and Nepali (Devanagari). The lead story is about the publication of a new Limbu textbook for the third grade – see illustration. Computer print.]

(2) *Galivar-re lamdik.* ('Gulliver's travels'). Abridged translation by B. B. Subba (Muringla Nugo). 1989, re-edition 1996. Dept. of Education, Govt. of Sikkim. Gangtok, Sikkim. viii + 88 pp. [Page 1; offset ms.]

ꖨꕁꗋꗧ ꗖꗔꗝ : याग्राङ्सिङ् फो:ङ्मा

ꖨꕁꗋꗧ ꗖꗔꗝ (७)

य्र - ॐ -	ꖨꗉꗝ य्र ꕀꕁꗐꗝ य्र ॥	- ꖨꗉ ꕀꕁꗐ
	ꖨꗉ ꗊꗋꗉꗝ ꖨꗝꗊ ꗊꗋꗉꗝ ॥	
	ꖨꕁ ꗊꗋꗉꗝ ꕰꗐꗝ ꗊꗋꗉꗝ ॥	- ꗊꗋꕰ
	ꗕꗊ ꗔꗕꗝ ꗕꗉꗟ ꗔꗕꗝ ॥	
	ꗕꕰꗟ ꗔꗕꗝ ꖨꗕꗝ ꗔꗕꗝ ॥	- ꗕꗊꕰ
य्र - य्र -	ꗊꗋꕰꕁꗟ य्र ꗕꗊꕰꕁꗟ य्र ॥	
	ꗊꗕꗝ ꕁꕲ य्र ꗕꗝ ꕁꕲ य्र ॥	- ꗕꗊꗉꗟ
	ꖨꗉ ꗊꗋꗉꗝ ꖨꗝꗊ ꗊꗋꗉꗝ ॥	
	ꖨꕁ ꗊꗋꗉꗝ ꕰꗐꗝ ꗊꗋꗉꗝ ॥	- ꖨꗕꗝ (ꖨꗕꗝꗟ)
	ꗕꗊ ꗔꗕꗝ ꗕꗉꗟ ꗔꗕꗝ ॥	
	ꗕꕰꗟ ꗔꗕꗝ ꖨꗕꗝ ꗔꗕꗝ ॥	

याग्राङ्सिङ् फो:ङ्मा (१)

ए - थो -	तागेरामा ए निङ्वा'फुमा ए ॥	- तागेरा निङ्वा'फु
	तुत्तु से:प्सेरो तुम्म्याङ् से:प्सेरो ॥	
	याक्ला से:प्सेरो सुहाङ्मा से:प्सेरो ॥	- सोधुङ
	मिधुङ पोगिरो मिराक् पोगिरो ॥	
	आङ्सुक् पोगिरो युक्मि पोगिरो ॥	- लेप्मुहाङ्
ए - ए -	सोधुङहाङ्बा ए लेप्मुहाङ्बा ए ॥	
	साप्माङ् कुरु ए आमाङ् कुरु ए ॥	- आङ्सुक्
	तुत्तु से:प्सेरो तुम्म्याङ् से:प्सेरो ॥	
	याक्ला से:प्सेरो सुहाङ्मा से:प्सेरो ॥	- युक्मि (युक्मिरा)
	मिधुङ पोगिरो मिराक् पोगिरो ॥	
	आङ्सुक् पोगिरो युक्मि पोगिरो ॥	

गुरु जगाउँने (१)

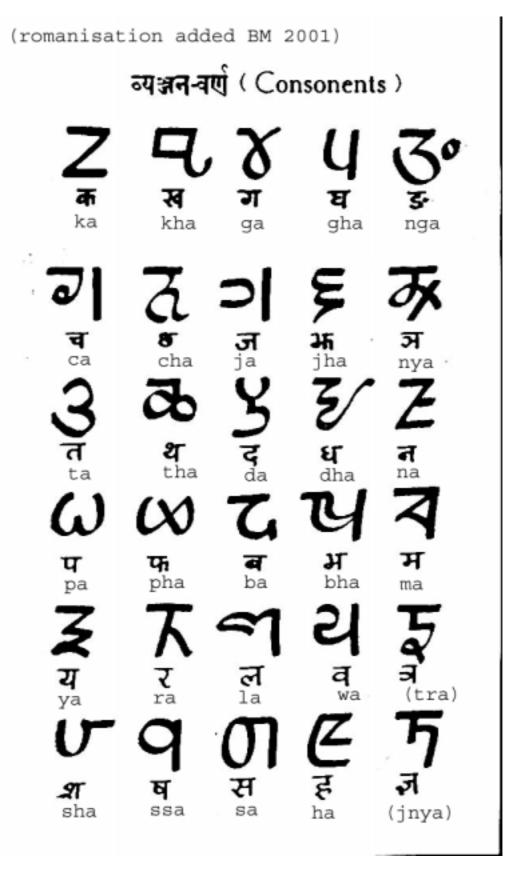|		
ए - माथि -	हे परमेश्वर निङ्वाफुमा ।	- परमेश्वर, ईश्वर
	गण्यमान्य सज्जन र भद्रनारीहरूका	स्वर्गमा बस्ने
	रक्षाका लागि पूजा-अनुष्ठान गर्नलाई	(परमादरणीय)
	आगो र आगोको ज्वाला भई जागौं ।	
	दियालोमा सल्केको डढेलोफैं जागौं ।	- १. लिम्बूजातिको
ए - ए -	परमादरणीय लेप्मुहाङ् ।	आख्यानमा वर्णित
	(हाम्रा पुर्खामा जेठा) ।	स्वर्गका राजा,
	गण्यमान्य सज्जन र भद्रनारीहरूका ।	२. पुर्खामा जेठो
	क्ल्याण र स्वस्तिशान्तिको लागि	
	पूजा-अनुष्ठान गर्नलाई	- सल्लाको खोटो
	आगो र आगोको ज्वाला भैं जागौं, जागौं ।	वा दियालो
	दियालोमा सल्केको डढेलो भैं जागौं, जागौं ।	- डढेलो

(3) *Tongsing tokma mundhum* ['Tongsing Ritual']. Bairagi Kainla. 2052 B.S. [1995-1996]. ix + 389 pp. Royal Nepal Academy, Kathmandu. [One of a series of editions of Limbu rituals with translations, notes, and vocabulary by the same author. The illustrated page, p. 35, is the first page of annotated text. The two upper sections on each page are in Limbu (Limbu and Devanagari scripts); the lower section is a Nepali translation. Computer print.]

(romanisation added BM 2001)

व्यञ्जन-वर्ण (Consonents)

क ka	ख kha	ग ga	घ gha	ङ nga
च ca	छ cha	ज ja	भ jha	ञ nya
त ta	थ tha	द da	ध dha	न na
प pa	फ pha	ब ba	भ bha	म ma
य ya	र ra	ल la	व wa	त्र (tra)
श sha	ष ssa	स sa	ह ha	ज्ञ (jnya)

(5a and 5b) Early modern alphabet from Chemjong (?1961), with romanization added. The subjoined medial RA is omitted, no doubt inadvertently. The table shows the letters JHA, YAN, and SSA, and the sign LO!, which are not used in the current script, as well as the combinations , TRA and JNYA, for which no codepoints have been reserved (see text above). The forms of several other glyphs are different from their current equivalents.

(from Chemjong n.d.)

स्वर-वर्ण (Vowels)

अ	आ	इ	उ	ए
'a	'a	'i	'u	'ee

ऐ	ओ	औ	अः	एः
'ai	'oo	'au	'o	'e

मात्रा तथा संयुक्ताक्षर (Conjoint Letters)

T	f			
a	i	u	ee	ai

				क
oo	au	o	e	-k

ङ	त	न	प	म
-ng	-t	-n	-p	-m

य	र	ल	ब	लो
-y-	-r	-l	-w-	lo!

5b

विराम चिन्ह

६.	(,)	अल्पविराम
∧.	(;)	अर्ध विराम
५.	(॥)	विराम चिन्ह
Ⅹ.	(?)	प्रश्न चिन्ह
६.	(!)	विस्मयादिबोधक
५.	(" ")	उद्धरण चिन्ह
८.	(—)	निर्देशक चिन्ह
Ⅴ.	(-)	संयोजक चिन्ह
७.	(=)	वियोजक चिन्ह
६०.	( )	
	{ }	कोष्टक चिन्ह
	[ ]	

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List of punctuation characters by B. B. Subba. No. 4 is the KIRAT QUESTION MARK, No. 5 is the KIRAT EXCLAMATION MARK, and No. 9 is the end-of-line word separator.