

Title: Introducing the Khema Script for Writing Gurung
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1 Introduction

The purpose of this document is to bring to the attention of the Unicode Technical Committee (UTC) the Khema script for writing Gurung. The name ‘Gurung’ refers to two languages, Eastern Gurung (ISO 639: ggn) and Western Gurung (ISO 639: gvr). It is known indigenously as ‘Tamu’. *Ethnologue* reports that these two languages do not have “adequate intelligibility to handle complex and abstract discourse”.¹ Gurung is typically written using Devanagari, but at least two native scripts have been developed for it.

The Khema script (also called ‘Khema Phri’ or ‘Tamu Khema Phri’) is an alphasyllabary based upon the Brahmi model. A preliminary analysis suggests a requirement for encoding 58 characters. Consonants possess an inherent vowel. Vowels have independent and dependent forms. There is a VIRAMA-like character. Script-specific digits are attested. Punctuation is indicated using DANDA-like characters.

Information on the use of Khema is limited. Evidence shows that books and other materials are printed using Khema. It appears that at least two digital fonts have been developed for the script (see figures 1 and 2). The script is described on websites about the Gurung language.

Recently, Man Bahadur Gurung of the Tamu (Gurung) Language-Script Culture Development Foundation, Nepal submitted a document requesting the encoding of another script for Gurung (L2/11-047). This script appears to be newer than the Khema script.

Research on Khema is underway. This document provides a preliminary list of characters and specimens of the script. An allocation for it should be made in the roadmap to the Supplementary Multilingual Plane.

2 Character Repertoire and Properties

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xx00;KHEMA LETTER A;Lo;0;L;;;;N;;;;;
xx01;KHEMA LETTER AA;Lo;0;L;;;;N;;;;;
xx02;KHEMA LETTER I;Lo;0;L;;;;N;;;;;
xx03;KHEMA LETTER U;Lo;0;L;;;;N;;;;;
xx04;KHEMA LETTER E;Lo;0;L;;;;N;;;;;
xx05;KHEMA LETTER AI;Lo;0;L;;;;N;;;;;
xx06;KHEMA LETTER O;Lo;0;L;;;;N;;;;;
xx07;KHEMA LETTER AU;Lo;0;L;;;;N;;;;;
xx08;KHEMA LETTER KA;Lo;0;L;;;;N;;;;;
xx09;KHEMA LETTER KHA;Lo;0;L;;;;N;;;;;
xx0A;KHEMA LETTER GA;Lo;0;L;;;;N;;;;;
xx0B;KHEMA LETTER GHA;Lo;0;L;;;;N;;;;;
xx0C;KHEMA LETTER NGA;Lo;0;L;;;;N;;;;;
xx0D;KHEMA LETTER CA;Lo;0;L;;;;N;;;;;
xx0E;KHEMA LETTER CHA;Lo;0;L;;;;N;;;;;
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¹ Lewis 2009.

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xx0F;KHEMA LETTER JA;Lo;0;L;;;;;N;;;;;
xx10;KHEMA LETTER JHA;Lo;0;L;;;;;N;;;;;
xx11;KHEMA LETTER HA;Lo;0;L;;;;;N;;;;;
xx12;KHEMA LETTER TTA;Lo;0;L;;;;;N;;;;;
xx13;KHEMA LETTER TTHA;Lo;0;L;;;;;N;;;;;
xx14;KHEMA LETTER DDA;Lo;0;L;;;;;N;;;;;
xx15;KHEMA LETTER DDHA;Lo;0;L;;;;;N;;;;;
xx16;KHEMA LETTER VA;Lo;0;L;;;;;N;;;;;
xx17;KHEMA LETTER TA;Lo;0;L;;;;;N;;;;;
xx18;KHEMA LETTER THA;Lo;0;L;;;;;N;;;;;
xx19;KHEMA LETTER DA;Lo;0;L;;;;;N;;;;;
xx1A;KHEMA LETTER DHA;Lo;0;L;;;;;N;;;;;
xx1B;KHEMA LETTER NA;Lo;0;L;;;;;N;;;;;
xx1C;KHEMA LETTER PA;Lo;0;L;;;;;N;;;;;
xx1D;KHEMA LETTER PHA;Lo;0;L;;;;;N;;;;;
xx1E;KHEMA LETTER BA;Lo;0;L;;;;;N;;;;;
xx1F;KHEMA LETTER BHA;Lo;0;L;;;;;N;;;;;
xx20;KHEMA LETTER MA;Lo;0;L;;;;;N;;;;;
xx21;KHEMA LETTER YA;Lo;0;L;;;;;N;;;;;
xx22;KHEMA LETTER RA;Lo;0;L;;;;;N;;;;;
xx23;KHEMA LETTER LA;Lo;0;L;;;;;N;;;;;
xx24;KHEMA LETTER SA;Lo;0;L;;;;;N;;;;;
xx25;KHEMA VOWEL SIGN AA;Mc;0;L;;;;;N;;;;;
xx26;KHEMA VOWEL SIGN I;Mc;0;L;;;;;N;;;;;
xx27;KHEMA VOWEL SIGN U;Mn;0;NSM;;;;;N;;;;;
xx28;KHEMA VOWEL SIGN E;Mc;0;L;;;;;N;;;;;
xx29;KHEMA VOWEL SIGN AI;Mc;0;L;;;;;N;;;;;
xx2A;KHEMA VOWEL SIGN O;Mc;0;L;;;;;N;;;;;
xx2B;KHEMA VOWEL SIGN AU;Mc;0;L;;;;;N;;;;;
xx2C;KHEMA SIGN ANUSVARA;Mn;0;NSM;;;;;N;;;;;
xx2D;KHEMA SIGN VIRAMA;Mn;9;NSM;;;;;N;;;;;
xx30;KHEMA DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
xx31;KHEMA DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;
xx32;KHEMA DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;
xx33;KHEMA DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;
xx34;KHEMA DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;
xx35;KHEMA DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;
xx36;KHEMA DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
xx37;KHEMA DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;
xx38;KHEMA DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;
xx39;KHEMA DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;

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3 References

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- Lewis, M. Paul [ed]. 2009. *Ethnologue: Languages of the World*. 16th edition. Dallas: SIL International. http://www.ethnologue.com/show_language.asp?code=ggn
- Subba, Jash Raj. 2008. *The Evolution of Man and the Modern Society in Mountainous Sikkim*. Delhi: Gyan Publishing House.

खेमा प्ही लुब
(सिक्ने तरिका)

क	का	ख	खा	ङ
कखे	खखे	गखे	घखे	ङखे
च	चा	ज	जा	ण
चखे	छखे	जखे	झखे	हखे
ट	टा	ड	डा	ण
टखे	ठखे	डखे	ढखे	वखे
र	रा	ड	डा	ऌ
रखे	थखे	दखे	धखे	नखे
ठ	ठा	थ	था	य
पखे	फखे	बखे	भखे	मखे
प	र	ळ	इ	
यखे	रखे	लखे	सखे	

Figure 1: Consonants of the Khema script (from 'Gurung Language' 2011).

7.8 Khema Script of Gurungs:

The Gurung language is written in Khema script and taught in the schools up to the primary level of education since the recognition

अ	आ	इ	उ	ऋ	ॠ
अं	आं	इं	उं	ऋं	ॠं
क	ख	घ	च	ज	झ
द	ध	न	त	थ	द
प	फ	ब	म	य	र
श	स	ह	ळ		
०	।	८	३	५	७

of Gurung language as one of the official languages of Sikkim in 1997. It is yet to be ascertained who, where and when the Khema script was developed. A majority of Gurung experts suggest that the script was developed in Nepal from the Sambhota Tibetan script, but looking at the form of the letters, the script has strong influences of both, the

Devnagari and Sambhota Tibetan scripts. In any case, the script was perhaps developed based on Brahmi script after the development of Sambhota and Devnagari scripts. The Khema script has the characters of both Sambhota and Devnagari scripts.

The Khema script of Gurungs has 7 vowels (a, e, u, i, ii, o, au), 7 vowel signs (aa, e, u, i, ii, o, au) and 29 consonants (same as Devnagari post-fixed with “khe”). The alphabets are the same as those of Devnagari but the vowels are read with post-fixed “ma” while the consonants post-fixed with “khe” (Gurung, Meghraj in Lipi Sangalo (ed) by Limboo, R.B.1998: 63-68).

Figure 3: A description of the Khema script (from Subba 2008: 97).

Gurung (Tamu Khema Phri) Scripts

Vowels

अ A	आ Ama	अं E-ma	अः U-ma
अं Ye-ma	अं Yai-ma	अं O-ma	अं Ou-ma

Consonants www.gorkhatimes.wordpress.com

क Kakhe	का Khake	ख Gakhe	खा Ghake	ङ Ngakhe
च Chake	चा Chhakhe	ज Jakhe	जा Jhake	ञ Hakhe
ट Takhe	टा Thake	ठ Dakhe	ठा Dhake	ड Wakhe
ण Takhe	णा thake	त dakhe	ता dhakhe	न nakhe
प Pakhe	पा Phakhe	थ Bakhe	था Bhakhe	म Makhe
य Yakhe	र Rakhe	ल Lakhe	स Sakhe	

Figure 4: Hand-written chart of the Khema script (from 'Gorkhatimes' 2009).