

# Proposal to Encode the Luo Lakeside Script in the UCS

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**To:** Script Encoding Working Group (SEWG) / Unicode Technical Committee (UTC)

**From:** Oreen Yousuf

**Subject:** Proposal for encoding the Luo Lakeside script in the UCS

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## General Overview:

We propose the addition of the Luo Lakeside script into the Unicode Standard. A short proposal for this script was submitted on June 11, 2019 by the user community (see the following).

- [L2/19-268](#): "Addition of Luo Lakeside Script"

Our current proposal supersedes the above proposal due to the following reasons:

- More detailed history of the script
- Information on community created fonts
- Additional languages that use the script
- IPA
- Joining information for letters
- Current and old letters
- Chart
- Properties
- Collation
- Publication references
- Several more images of evidence of script use

## I Background

The Luo Lakeside is an alphabetical script used to write the Luo languages, specifically the Dholuo language (ISO 639-3: iuo) of Kenya (which is also spoken in Tanzania). The letters of the script were created by Kefa Ombewa between 2009-2012, and the numerals were separately created by Professor Paul Sidanidi in 2012. The two met on Twitter in 2013 and combined their work. The script is used by users in Kisumu and other parts of Kenya, but is also used by Luo speakers in Botswana. The Batswana users are primarily concentrated in Lobatse. The script has grown far beyond the script inventor's social circles, causing it to become infeasible to keep precise numbering of users.

Two fonts have been created by the Luo Lakeside script community. The first script was created on June 12, 2012. These fonts have been used to create a dictionary, documents, primers, digital media, physical clocks, etc. These materials were made by people other than the script creator(s). There are no other scripts in competition among the user community. The first font was named "KefaSidandi", named after the script creators. Some specifics on how to make a font for the script can be found in Section IX.

Some Batswana script users also use the script to write Setswana (ISO 639-3: tsn). Only in isolated incidents has the proposal author observed the script being used to write Swahili (ISO 639-3: swa) and Oromo (ISO 639-3: orm) in the Luo Lakeside script (see Section XI). Both of these languages are spoken in Kenya as well, yet are linguistically unrelated to Luo.

A keyboard can be found here: [https://keyman.com/keyboards/luo\\_lakeside](https://keyman.com/keyboards/luo_lakeside). As of December 2025, 630+ people have downloaded the keyboard.

## II Script Name

The proposed script name is “**LUO LAKESIDE**”. The user community refers to the script as the “Luo Lakeside Script.” The script is also known as the “Lakeside Script”, “Luo Alphabet”, or the “African Lakeside Script.”

## III Structure

The Luo Lakeside script is an alphabet that is written from left-to-right (LTR) in horizontal lines from the top of a page to the bottom of a page. The script has 33 letters. The script is bicameral, meaning it has an uppercase and lowercase form for (mostly) every letter, however it was at one point unicameral (i.e., having only one form for each sound).

| Letter Name | Letter    |           | IPA    | Latin Luo Orthography |
|-------------|-----------|-----------|--------|-----------------------|
|             | Uppercase | Lowercase |        |                       |
| AA          | እ         | እ         | /a/    | A a                   |
| BA          | ሻ         | ሻ         | /b/    | B b                   |
| CHA         | ڇ         | ڇ         | /tʃ/   | Ch ch                 |
| DA          | ڏ         | ڏ         | /d/    | D d                   |
| EE          | ڦ         | ڦ         | /e/    | E e                   |
| FA          | ڙ         | ڙ         | /f/    | F f                   |
| GA          | ڻ         | ڻ         | /g/    | G g                   |
| NG'A        | ڦ         | ڦ         | /ŋ/    | Ng' ng'               |
| HA          | ڻ         | ڻ         | /h/    | H h                   |
| II          | ڦ         | ڦ         | /i/    | I i                   |
| JA          | ڇ         | ڇ         | /tʃ/   | J j                   |
| KA          | ڻ         | ڻ         | /k/    | K k                   |
| LA          | ڻ         | ڻ         | /l/    | L l                   |
| MA          | ڻ         | ڻ         | /m/    | M m                   |
| MBA         |           | ڻ         | /m'b/  | Mb mb                 |
| NA          | ڻ         | ڻ         | /n/    | N n                   |
| NDA         |           | ڻ         | /n'd/  | Nd nd                 |
| NJA         |           | ڻ         | /n'tʃ/ | Nj nj                 |
| NGA         |           | ڻ         | /n'g/  | Ng ng                 |
| NYA         |           | ڻ         | /n'p/  | Ny ny                 |
| OO          | ڻ         | ڻ         | /o/    | O o                   |
| PA          | ڻ         | ڻ         | /p/    | P p                   |

|             |   |   |                   |                |
|-------------|---|---|-------------------|----------------|
| SHA / CLICK | ‡ | ¶ | /ʃ/<br>and<br>/!/ | Sh sh and* Q q |
| RA          | ꝝ | ꝝ | /r/               | R r            |
| SA          | Ꝝ | Ꝝ | /s/               | S s            |
| TA          | ꝝ | ꝝ | /t/               | T t            |
| THA         |   | ꝝ | /t̪/              | Th th          |
| DHA         |   | ꝝ | /d̪/              | Dh dh          |
| UU          | ꝝ | ꝝ | /u/               | U u            |
| VA          | ꝝ | ꝝ | /v/               | V v            |
| WA          | ꝝ | ꝝ | /w/               | W w            |
| YA          | ꝝ | ꝝ | /j/               | Y y            |
| ZA          | ꝝ | ꝝ | /z/               | Z z            |

Table 1. All letters in the Luo Lakeside script.

Due to QWERTY keyboard limitations and English/Latin-script influence, 7 letters that were once used – ꝝ/mb/, ꝝ/nd/, ꝝ/nj/, ꝝ/ng/, ꝝ/n/, ꝝ/t/, ꝝ/d/ – fell into disuse. The phonemes these letters represented are now spelled with Luo Lakeside script digraphs (i.e., Luo Lakeside letters for m+b, n+d, n+j, n+g, n+y, t+h, d+h, respectively). These letters should however still be encoded to preserve old documents as is agreed upon by the community. When the script became bicameral, the existing letters became the lowercase forms. The previously mentioned 7 letters were dropped before the transition to a bicameral script, therefore, uppercase forms were never created for them.

\*As seen above in Table 1, the Luo Lakeside letter ꝝ/¶ is used for two different sounds. For Luo speakers in Kenya, this letter is used for the foreign sound /ʃ/ (written as <sh> in the Latin script); whereas this same letter is used for the foreign sound /!/ (palatal click) for Luo speakers in Botswana (written as <q> in the Latin script). The latter is due to Batswana Luo Lakeside script users' exposure to Setswana.

Most of the lowercase letters are connected/joined at the bottom in a cursive manner, similar to other scripts (e.g., Adlam, Arabic, NKo, etc.). All letters have the ability to connect to a letter on the right-side, however 17 letters do not have the ability to be connected on the left-side (shown in red in the table below). Below is a table showing all lowercase letters and if they can be connected on the right and/or left-side of the letter.

| Letter | Connects Right | Connects Left | Letter | Connects Right | Connects Left |
|--------|----------------|---------------|--------|----------------|---------------|
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |
| ꝝ      | ꝝ              | ꝝ             | ꝝ      | ꝝ              | ꝝ             |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| l | ل | ل | ك | ك | ك |
| ك | ك | ك | د | د | د |
| ل | ل | ل | ر | ر | ر |
| ك | ك | ك | و | و | و |
| ك | ك | ك | ن | ن | ن |
| ك | ك | ك | ل | ل | ل |
| ك | ك | ك | ك | ك | ك |
| ك | ك | ك | ك | ك | ك |
| ك | ك | ك | ك | ك | ك |
| ك | ك | ك | ك | ك | ك |

Table 2: Details on which side of a lowercase letter can be connected.

Of course, some users may try to connect all letters together in handwriting (especially given that these letters are inherently cursive), but the above table is the default. Uppercase letters are never connected to other uppercase nor to lowercase letters. Even when a word has uppercase among lowercase letters, the uppercase letters still do not connect to other letters (see Figure 1 in Section XI).

## Numbers

The Luo language uses a base-10 (decimal) system to count. The Luo Lakeside script has unique digits/numerals.

| Luo Name | Luo Lakeside Digit | Hindu-Arabic Equivalent |
|----------|--------------------|-------------------------|
| NONO     | ಠ                  | 0                       |
| ACHIEL   | ಠ                  | 1                       |
| ARIYO    | ಠ                  | 2                       |
| ADEK     | ಠ                  | 3                       |
| ANG'WEN  | ಠ                  | 4                       |
| ABICH    | ಠ                  | 5                       |
| AUCHIEL  | ಠ                  | 6                       |
| ABIRIYO  | ಠ                  | 7                       |
| ABORO    | ಠ                  | 8                       |
| OCHIKO   | ಠ                  | 9                       |

Table 3. Luo Lakeside script digits/numerals.

All Luo Lakeside script numbers can also be found at [lakesidescript.com](http://lakesidescript.com), see Reference 24 in Section VII below.

## IV Character Repertoire

| Character | Unicode Name                                     |
|-----------|--|
| ₭         | U+1X000 LUO LAKESIDE CAPITAL LETTER AA           |
| ₭         | U+1X001 LUO LAKESIDE CAPITAL LETTER BA           |
| ₭         | U+1X002 LUO LAKESIDE CAPITAL LETTER CHA          |
| ₭         | U+1X003 LUO LAKESIDE CAPITAL LETTER DA           |
| ₭         | U+1X004 LUO LAKESIDE CAPITAL LETTER EE           |
| ₭         | U+1X005 LUO LAKESIDE CAPITAL LETTER FA           |
| ₭         | U+1X006 LUO LAKESIDE CAPITAL LETTER GA           |
| ₭         | U+1X007 LUO LAKESIDE CAPITAL LETTER NGA          |
| ₭         | U+1X008 LUO LAKESIDE CAPITAL LETTER HA           |
| ₭         | U+1X009 LUO LAKESIDE CAPITAL LETTER II           |
| ₭         | U+1X00A LUO LAKESIDE CAPITAL LETTER JA           |
| ₭         | U+1X00B LUO LAKESIDE CAPITAL LETTER KA           |
| ₭         | U+1X00C LUO LAKESIDE CAPITAL LETTER LA           |
| ₭         | U+1X00D LUO LAKESIDE CAPITAL LETTER MA           |
|           | U+1X00E RESERVED                                 |
| ₭         | U+1X00F LUO LAKESIDE CAPITAL LETTER NA           |
|           | U+1X010 RESERVED                                 |
|           | U+1X011 RESERVED                                 |
|           | U+1X012 RESERVED                                 |
|           | U+1X013 RESERVED                                 |
| ₭         | U+1X014 LUO LAKESIDE CAPITAL LETTER OO           |
| ₭         | U+1X015 LUO LAKESIDE CAPITAL LETTER PA           |
| ₭         | U+1X016 LUO LAKESIDE CAPITAL LETTER SH AND CLICK |
| ₭         | U+1X017 LUO LAKESIDE CAPITAL LETTER RA           |
| ₭         | U+1X018 LUO LAKESIDE CAPITAL LETTER SA           |

|   |  |
|---|--|
| 𦇃 | U+1X019 LUO LAKESIDE CAPITAL LETTER TA |
|   | U+1X01A RESERVED                       |
|   | U+1X01B RESERVED                       |
| 𦇄 | U+1X01C LUO LAKESIDE CAPITAL LETTER UU |
| 𦇅 | U+1X01D LUO LAKESIDE CAPITAL LETTER VA |
| 𦇆 | U+1X01E LUO LAKESIDE CAPITAL LETTER WA |
| 𦇇 | U+1X01F LUO LAKESIDE CAPITAL LETTER YA |
| 𦇈 | U+1X020 LUO LAKESIDE CAPITAL LETTER ZA |
| 𦇉 | U+1X021 LUO LAKESIDE SMALL LETTER AA   |
| 𦇊 | U+1X022 LUO LAKESIDE SMALL LETTER BA   |
| 𦇋 | U+1X023 LUO LAKESIDE SMALL LETTER CHA  |
| 𦇌 | U+1X024 LUO LAKESIDE SMALL LETTER DA   |
| 𦇍 | U+1X025 LUO LAKESIDE SMALL LETTER EE   |
| 𦇎 | U+1X026 LUO LAKESIDE SMALL LETTER FA   |
| 𦇏 | U+1X027 LUO LAKESIDE SMALL LETTER GA   |
| 𦇐 | U+1X028 LUO LAKESIDE SMALL LETTER NGA  |
| 𦇑 | U+1X029 LUO LAKESIDE SMALL LETTER HA   |
| 𦇒 | U+1X02A LUO LAKESIDE SMALL LETTER II   |
| 𦇓 | U+1X02B LUO LAKESIDE SMALL LETTER JA   |
| 𦇔 | U+1X02C LUO LAKESIDE SMALL LETTER KA   |
| 𦇕 | U+1X02D LUO LAKESIDE SMALL LETTER LA   |
| 𦇖 | U+1X02E LUO LAKESIDE SMALL LETTER MA   |
| 𦇗 | U+1X02F LUO LAKESIDE SMALL LETTER MBA  |
| 𦇘 | U+1X030 LUO LAKESIDE SMALL LETTER NA   |
| 𦇙 | U+1X031 LUO LAKESIDE SMALL LETTER NDA  |
| 𦇚 | U+1X032 LUO LAKESIDE SMALL LETTER NJA  |
| 𦇛 | U+1X033 LUO LAKESIDE SMALL LETTER NGGA |
| 𦇜 | U+1X034 LUO LAKESIDE SMALL LETTER NYA  |
| 𦇖 | U+1X035 LUO LAKESIDE SMALL LETTER OO   |

|   |   |
|---|---|
| ፁ | U+1X036 LUO LAKESIDE SMALL LETTER PA            |
| ፂ | U+1X037 LUO LAKESIDE SMALL LETTER SHA AND CLICK |
| ፃ | U+1X038 LUO LAKESIDE SMALL LETTER RA            |
| ፄ | U+1X039 LUO LAKESIDE SMALL LETTER SA            |
| ፅ | U+1X03A LUO LAKESIDE SMALL LETTER TA            |
| ፆ | U+1X03B LUO LAKESIDE SMALL LETTER THA           |
| ፇ | U+1X03C LUO LAKESIDE SMALL LETTER DHA           |
| ፈ | U+1X03D LUO LAKESIDE SMALL LETTER UU            |
| ፉ | U+1X03E LUO LAKESIDE SMALL LETTER VA            |
| ፊ | U+1X03F LUO LAKESIDE SMALL LETTER WA            |
| ፋ | U+1X040 LUO LAKESIDE SMALL LETTER YA            |
| ፌ | U+1X041 LUO LAKESIDE SMALL LETTER ZA            |
| ፍ | U+1X042 LUO LAKESIDE DIGIT ZERO                 |
| ፎ | U+1X043 LUO LAKESIDE DIGIT ONE                  |
| ፏ | U+1X044 LUO LAKESIDE DIGIT TWO                  |
| ፏ | U+1X045 LUO LAKESIDE DIGIT THREE                |
| ፏ | U+1X046 LUO LAKESIDE DIGIT FOUR                 |
| ፏ | U+1X047 LUO LAKESIDE DIGIT FIVE                 |
| ፏ | U+1X048 LUO LAKESIDE DIGIT SIX                  |
| ፏ | U+1X049 LUO LAKESIDE DIGIT SEVEN                |
| ፏ | U+1X04A LUO LAKESIDE DIGIT EIGHT                |
| ፏ | U+1X04B LUO LAKESIDE DIGIT NINE                 |

Table 4. Luo Lakeside script character repertoire.

Due to Unicode not allowing apostrophes in the Unicode name for scripts nor characters, the letters for /ŋ/ (ጀ;ጀ), which are known as NG'A in Luo, was given the Unicode name NGA. However, the letter for /ᵑg/ (ጀ) is known as NGA in Luo. Therefore, we suggest that the Unicode name for this letter be NGGA. Any future educational material created by persons reading this proposal should not be influenced by these Unicode names, which were chosen due to constraints, and should instead adhere to the official names of the letters listed in Table 1 in Section III.

Empty cells are reserved for potential future encoding of uppercase letters for the 7 lowercase letters discussed in Section III that were dropped due to QWERTY limitations.

## Chart

|   | U+1X00 | U+1X01 | U+1X02 | U+1X03 | U+1X04 |
|---|--------|--------|--------|--------|--------|
| 0 | ፩      |        | ፪      | ፫      | ፬      |
| 1 | ፧      |        | ፪      | ፪      | ፪      |
| 2 | ፪      |        | ፪      | ፪      | ፪      |
| 3 | ፩      |        | ፪      | ፪      | ፪      |
| 4 | ፩      | ፩      | ፩      | ፩      | ፩      |
| 5 | ፩      | ፩      | ፩      | ፩      | ፩      |
| 6 | ፩      | ፩      | ፩      | ፩      | ፩      |
| 7 | ፩      | ፩      | ፩      | ፩      | ፩      |
| 8 | ፩      | ፩      | ፩      | ፩      | ፩      |
| 9 | ፩      | ፩      | ፩      | ፩      | ፩      |
| A | ፩      |        | ፩      | ፩      | ፩      |
| B | ፩      |        | ፩      | ፩      | ፩      |
| C | ፩      | ፩      | ፩      | ፩      | ፩      |
| D | ፩      | ፩      | ፩      | ፩      | ፩      |
| E |        | ፩      | ፩      | ፩      | ፩      |
| F | ፩      | ፩      | ፩      | ፩      | ፩      |

### Additional information on characters

#### Phonetic value

See IPA for all letters in Table 1 in Section III above.

#### Joining information

Most lowercase letters join together. However, there are no positional variants in this script. See Table 2 and Section III above for all details.

#### Punctuation

There are no script-specific Luo Lakeside punctuation marks.

#### Numbers

There are script-specific Luo Lakeside digits/numerals. See Table 3 in Section III above.

## V Properties

### General Category and other properties

|   |
|---|
| U+1X000;LUO LAKESIDE CAPITAL LETTER AA;Lu;0;L;;;;;N;;;;;            |
| U+1X001;LUO LAKESIDE CAPITAL LETTER BA;Lu;0;L;;;;;N;;;;;            |
| U+1X002;LUO LAKESIDE CAPITAL LETTER CHA;Lu;0;L;;;;;N;;;;;           |
| U+1X003;LUO LAKESIDE CAPITAL LETTER DA;Lu;0;L;;;;;N;;;;;            |
| U+1X004;LUO LAKESIDE CAPITAL LETTER EE;Lu;0;L;;;;;N;;;;;            |
| U+1X005;LUO LAKESIDE CAPITAL LETTER FA;Lu;0;L;;;;;N;;;;;            |
| U+1X006;LUO LAKESIDE CAPITAL LETTER GA;Lu;0;L;;;;;N;;;;;            |
| U+1X007;LUO LAKESIDE CAPITAL LETTER NGA;Lu;0;L;;;;;N;;;;;           |
| U+1X008;LUO LAKESIDE CAPITAL LETTER HA;Lu;0;L;;;;;N;;;;;            |
| U+1X009;LUO LAKESIDE CAPITAL LETTER II;Lu;0;L;;;;;N;;;;;            |
| U+1X00A;LUO LAKESIDE CAPITAL LETTER JA;Lu;0;L;;;;;N;;;;;            |
| U+1X00B;LUO LAKESIDE CAPITAL LETTER KA;Lu;0;L;;;;;N;;;;;            |
| U+1X00C;LUO LAKESIDE CAPITAL LETTER LA;Lu;0;L;;;;;N;;;;;            |
| U+1X00D;LUO LAKESIDE CAPITAL LETTER MA;Lu;0;L;;;;;N;;;;;            |
| U+1X00E;RESERVED;;;;;;;   |
| U+1X00F;LUO LAKESIDE CAPITAL LETTER NA;Lu;0;L;;;;;N;;;;;            |
| U+1X010;RESERVED;;;;;;;   |
| U+1X011;RESERVED;;;;;;;   |
| U+1X012;RESERVED;;;;;;;   |
| U+1X013;RESERVED;;;;;;;   |
| U+1X014;LUO LAKESIDE CAPITAL LETTER OO;Lu;0;L;;;;;N;;;;;            |
| U+1X015;LUO LAKESIDE CAPITAL LETTER PA;Lu;0;L;;;;;N;;;;;            |
| U+1X016;LUO LAKESIDE CAPITAL LETTER SHA AND CLICK;Lu;0;L;;;;;N;;;;; |
| U+1X017;LUO LAKESIDE CAPITAL LETTER RA;Lu;0;L;;;;;N;;;;;            |
| U+1X018;LUO LAKESIDE CAPITAL LETTER SA;Lu;0;L;;;;;N;;;;;            |
| U+1X019;LUO LAKESIDE CAPITAL LETTER TA;Lu;0;L;;;;;N;;;;;            |
| U+1X01A;RESERVED;;;;;;;   |
| U+1X01B;RESERVED;;;;;;;   |
| U+1X01C;LUO LAKESIDE CAPITAL LETTER UU;Lu;0;L;;;;;N;;;;;            |
| U+1X01D;LUO LAKESIDE CAPITAL LETTER VA;Lu;0;L;;;;;N;;;;;            |
| U+1X01E;LUO LAKESIDE CAPITAL LETTER WA;Lu;0;L;;;;;N;;;;;            |
| U+1X01F;LUO LAKESIDE CAPITAL LETTER YA;Lu;0;L;;;;;N;;;;;            |
| U+1X020;LUO LAKESIDE CAPITAL LETTER ZA;Lo;0;L;;;;;N;;;;;            |
| U+1X021;LUO LAKESIDE SMALL LETTER AA;Ll;0;L;;;;;N;;;;;              |
| U+1X022;LUO LAKESIDE SMALL LETTER BA;Ll;0;L;;;;;N;;;;;              |
| U+1X023;LUO LAKESIDE SMALL LETTER CHA;Ll;0;L;;;;;N;;;;;             |
| U+1X024;LUO LAKESIDE SMALL LETTER DA;Ll;0;L;;;;;N;;;;;              |
| U+1X025;LUO LAKESIDE SMALL LETTER EE;Ll;0;L;;;;;N;;;;;              |
| U+1X026;LUO LAKESIDE SMALL LETTER FA;Ll;0;L;;;;;N;;;;;              |
| U+1X027;LUO LAKESIDE SMALL LETTER GA;Ll;0;L;;;;;N;;;;;              |
| U+1X028;LUO LAKESIDE SMALL LETTER NGA;Ll;0;L;;;;;N;;;;;             |
| U+1X029;LUO LAKESIDE SMALL LETTER HA;Ll;0;L;;;;;N;;;;;              |
| U+1X02A;LUO LAKESIDE SMALL LETTER II;Ll;0;L;;;;;N;;;;;              |
| U+1X02B;LUO LAKESIDE SMALL LETTER JA;Ll;0;L;;;;;N;;;;;              |
| U+1X02C;LUO LAKESIDE SMALL LETTER KA;Ll;0;L;;;;;N;;;;;              |
| U+1X02D;LUO LAKESIDE SMALL LETTER LA;Ll;0;L;;;;;N;;;;;              |
| U+1X02E;LUO LAKESIDE SMALL LETTER MA;Ll;0;L;;;;;N;;;;;              |
| U+1X02F;LUO LAKESIDE SMALL LETTER MBA;Ll;0;L;;;;;N;;;;;             |
| U+1X030;LUO LAKESIDE SMALL LETTER NA;Ll;0;L;;;;;N;;;;;              |

|  |
|--|
| U+1X031;LUO LAKESIDE SMALL LETTER NDA;Ll;0;L;;;;;N;;;;;          |
| U+1X032;LUO LAKESIDE SMALL LETTER NJA;Ll;0;L;;;;;N;;;;;          |
| U+1X033;LUO LAKESIDE SMALL LETTER NGGA;Ll;0;L;;;;;N;;;;;         |
| U+1X034;LUO LAKESIDE SMALL LETTER NYA;Ll;0;L;;;;;N;;;;;          |
| U+1X035;LUO LAKESIDE SMALL LETTER OO;Ll;0;L;;;;;N;;;;;           |
| U+1X036;LUO LAKESIDE SMALL LETTER PA;Ll;0;L;;;;;N;;;;;           |
| U+1X037;LUO LAKESIDE SMALL LETTER SH AND CLICK;Ll;0;L;;;;;N;;;;; |
| U+1X038;LUO LAKESIDE SMALL LETTER RA;Ll;0;L;;;;;N;;;;;           |
| U+1X039;LUO LAKESIDE SMALL LETTER SA;Ll;0;L;;;;;N;;;;;           |
| U+1X03A;LUO LAKESIDE SMALL LETTER TA;Ll;0;L;;;;;N;;;;;           |
| U+1X03B;LUO LAKESIDE SMALL LETTER THA;Ll;0;L;;;;;N;;;;;          |
| U+1X03C;LUO LAKESIDE SMALL LETTER DHA;Ll;0;L;;;;;N;;;;;          |
| U+1X03D;LUO LAKESIDE SMALL LETTER UU;Ll;0;L;;;;;N;;;;;           |
| U+1X03E;LUO LAKESIDE SMALL LETTER VA;Ll;0;L;;;;;N;;;;;           |
| U+1X03F;LUO LAKESIDE SMALL LETTER WA;Ll;0;L;;;;;N;;;;;           |
| U+1X040;LUO LAKESIDE SMALL LETTER YA;Ll;0;L;;;;;N;;;;;           |
| U+1X041;LUO LAKESIDE SMALL LETTER ZA;Ll;0;L;;;;;N;;;;;           |
| U+1X042;LUO LAKESIDE DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;             |
| U+1X043;LUO LAKESIDE DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;              |
| U+1X044;LUO LAKESIDE DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;              |
| U+1X045;LUO LAKESIDE DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;            |
| U+1X046;LUO LAKESIDE DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;             |
| U+1X047;LUO LAKESIDE DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;             |
| U+1X048;LUO LAKESIDE DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;              |
| U+1X049;LUO LAKESIDE DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;            |
| U+1X04A;LUO LAKESIDE DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;            |
| U+1X04B;LUO LAKESIDE DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;             |

## Line breaking information

Answering the following questions will help the Unicode experts determine the appropriate line break properties:

- Words are separated by using U+0020 SPACE.
- Line breaks only occur at word boundaries.
- Special modes like hyphenation are not used to allow line breaks within words.
- Line breaks cannot occur within numbers.
- Line breaks should not occur before full stops.

## VI Collation

The collation (alphabetic order) of the Luo Lakeside script letters is the same as presented in Table 1, with uppercase letters being ordered first and then lowercase letters.

Numbers are ordered before letters; therefore, the full collation of the script is as follows:

## VII References

1. "Luo Lakeside Script Translation", by: Maureen Oyuga; **ISBN**: 978-9966-111-02-9
2. "The Twelve Months of the Year in 850 Languages and Dialects", by: Kukisvoomchor; **ISBN-13**: 978-0464513704
3. "Trailor: THE AFRICOLOGIST | Chronicles of Africa – Award winning Documentary Film". YouTube, February 12, 2014. [https://www.youtube.com/watch?v=\\_mJcfXLm9Gs](https://www.youtube.com/watch?v=_mJcfXLm9Gs)
4. "Kenyan Luo Lakeside Script with useful transliterations and phrases". YouTube, September 10, 2021. [https://www.youtube.com/watch?v=VCYFe2\\_2n7s](https://www.youtube.com/watch?v=VCYFe2_2n7s)
5. "Oromo **A** words typed in the Kenyan Luo Lakeside Script **KE**". YouTube, March 26, 2022. <https://www.youtube.com/watch?v=0SXPuZyMRko>
6. "Part 1 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube, January 16, 2022. <https://www.youtube.com/watch?v=FmOhX4Omtew>
7. "Swahili Part 1 using the Kenyan Luo Lakeside Script - (White Background)". YouTube, February 10, 2022. <https://www.youtube.com/watch?v=71GbMXd-KVE>
8. "Oromo **B** & **C** words typed in the Kenyan Luo Lakeside Script **KE**". YouTube, April 5, 2022. [https://www.youtube.com/watch?v=YNo4zZ\\_A5Fg](https://www.youtube.com/watch?v=YNo4zZ_A5Fg)
9. "Oromo **D** words typed in the Kenyan Luo Lakeside Script **KE**". YouTube. April 11, 2022. <https://www.youtube.com/watch?v=wViMxUvIh8A>
10. "Part 4 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. February 10, 2022. <https://www.youtube.com/watch?v=w5Tf3v7cbag>
11. "Part 5 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. February

- 12, 2022. <https://www.youtube.com/watch?v=GkETbx5MKsc>
12. "Part 2 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. January 26, 2022. [https://www.youtube.com/watch?v=QVL\\_Dkkh-m4](https://www.youtube.com/watch?v=QVL_Dkkh-m4)
13. "Swahili Part 1 using the Kenyan Luo Lakeside Script". YouTube. February 9, 2022. <https://www.youtube.com/watch?v=JSLPOZwJqfI>
14. "Part 6 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. April 12, 2022. <https://www.youtube.com/watch?v=4qR2V9LL5q4>
15. "Part 7 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. April 12, 2022. <https://www.youtube.com/watch?v=9uvBTRYBqo0>
16. "Swahili Part 3 using the Kenyan Luo Lakeside Script KE". YouTube. July 8, 2022. <https://www.youtube.com/watch?v=oPUX1BCDpnI>
17. "Swahili Part 2 using the Kenyan Luo Lakeside Script KE". YouTube. June 27, 2022. <https://www.youtube.com/watch?v=t7HIEjanhu4>
18. "Part 3 - Oromo phrases and sentences typed in the Kenyan Luo Lakeside Script". YouTube. February 7, 2022. <https://www.youtube.com/watch?v=mKzCJsGkoXQ>
19. "The high intelligence of elephants and their great importance to the natural environment". YouTube. April 11, 2022. <https://www.youtube.com/watch?v=e96Sxx1VjC4>
20. "Lakeside Script Tutorial 1". YouTube. May 13, 2016. <https://www.youtube.com/watch?v=p-PsSLTrZHo>
21. "Lakeside Script Tutorial 2". YouTube. May 13, 2016. <https://www.youtube.com/watch?v=6aDd9fL2HfI>
22. "Lakeside Script Tutorial 3". YouTube. May 13, 2016. <https://www.youtube.com/watch?v=uKaFk0VN5Tw>
23. "Lakeside Script Tutorial 4". YouTube. May 13, 2016. [https://www.youtube.com/watch?v=Q4XP1z\\_Lbx0](https://www.youtube.com/watch?v=Q4XP1z_Lbx0)
24. <https://www.lakesidescript.com/>

## VIII Acknowledgements

The proposal author wishes to thank various members of the Luo Lakeside script community for their assistance in clarifying aspects of the Luo Lakeside script.

This project was made possible in part by a grant from the Mellon Foundation to the Script Encoding Initiative at the University of California, Berkeley.

## IX Examples

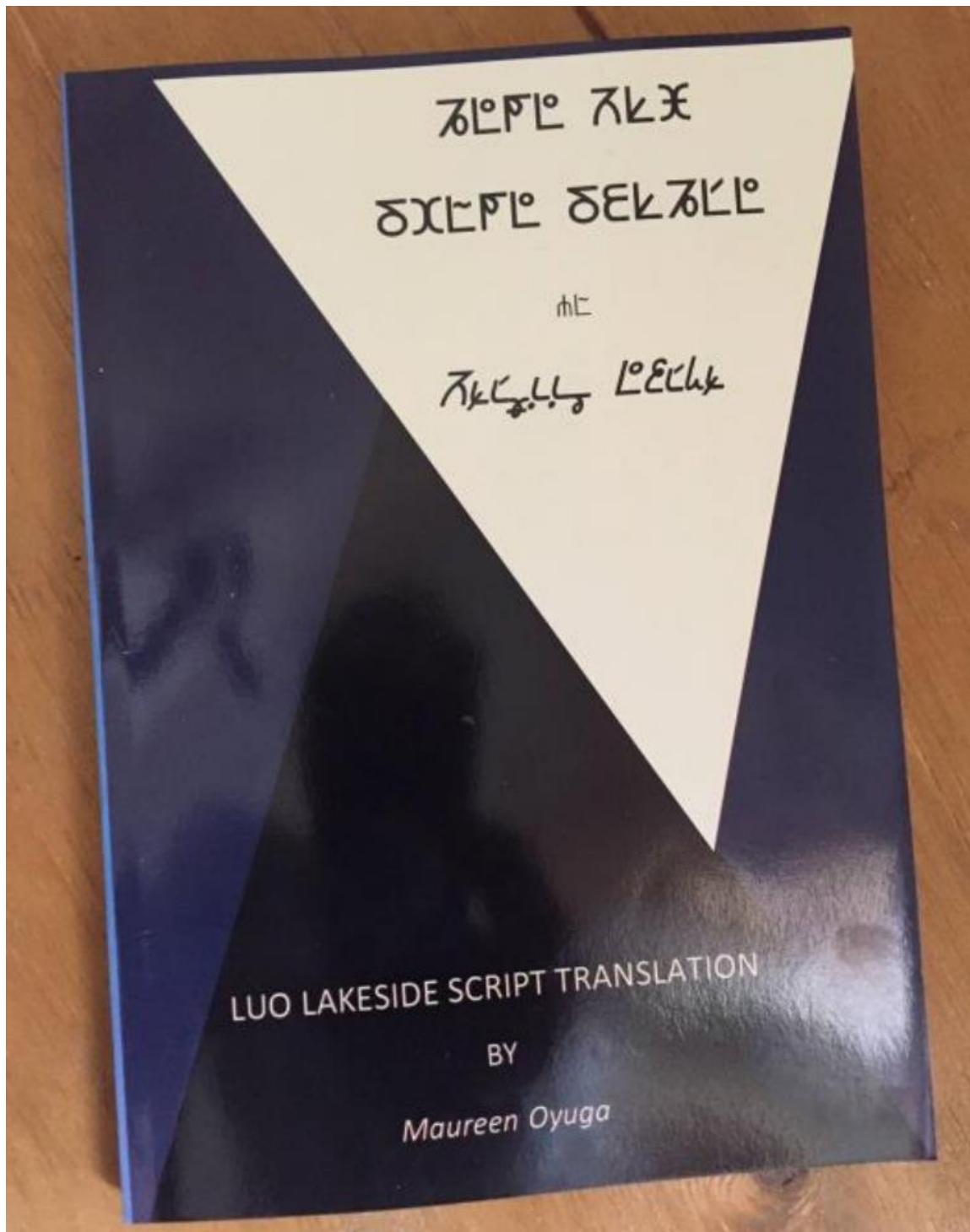


Figure 1.1. A published Luo-English book written in the Luo Lakeside script. See Reference 1 in Section VII.

|       |                                  |       |                                 |
|-------|----------------------------------|-------|---------------------------------|
| ک     | Aa                               |       |                                 |
| ک     | Leave, Originate from            | کوئٹ  | of hide                         |
| کوئل  | A form of paralysis              | کوئ   | Eight                           |
| کوئلک | Of pretentious talk              | کوئلک | Wind musical instrument         |
| کوئلک | Fermented                        | کوئلک | Syphilis                        |
| کوئلک | Fermented cereal                 | کوئلک | Done roughly                    |
| کوئل  | Swim                             | کوئل  | Roasted food                    |
| کوئل  | Uncouthly                        | کوئل  | A plant                         |
| کوئل  | Sideways                         | کوئل  | A small granary                 |
| کوئل  | Crooked                          | کوئل  | Knotted easily                  |
| کوئل  | Flattened                        | کوئل  | Suddenly                        |
| کوئل  | Folded                           | کوئل  | A bird                          |
| کوئل  | A type of bird                   | کوئل  | Eland                           |
| کوئل  | Food without<br>accompaniment    | کوئل  | Floating papyri                 |
| کوئل  | Aggressively                     | کوئل  | Reedbuck                        |
| کوئل  | Patched                          | کوئل  | Waterfall                       |
| کوئل  | Wandering purposelessly          | کوئل  | Futility                        |
| کوئل  | Sitting purposelessly            | کوئل  | Shrub used as vegetable         |
| کوئل  | A kind of grass                  | کوئل  | Gravel                          |
| کوئل  | Five                             | کوئل  | One                             |
| کوئل  | Carefully or Properly            | کوئل  | Afterwards                      |
| کوئل  | Old man's hut                    | کوئل  | A plant with a bad smell        |
| کوئل  | Open fire place for male<br>folk | کوئل  | A black bird                    |
| کوئل  | Seven                            | کوئل  | Hit or Stab with an object      |
| کوئل  | Edible grasshopper               | کوئل  | A plant                         |
| کوئل  | Born prematurely                 | کوئل  | A plant used to make<br>brooms  |
| کوئل  | Boiled food                      | کوئل  | Coercion                        |
| کوئل  | Carelessly                       | کوئل  | Standing                        |
| کوئل  | Lightly, weakly                  | کوئل  | A parasitic plant               |
| کوئل  | Cactus                           | کوئل  | Pneumonia that attacks<br>goats |
| کوئل  | Red ochre bracelet made          | کوئل  | Vulture                         |

L

Figure 1.2. Page excerpt from the book in Figure 1.

Tom Nyakiti says...

በዚ, የተቀባዩ ቅዱስ ስልጣን በቃላች የሆኑ!!

5th December 2019 9:51am

👍0 🗔0 ⚠️Flag 🗨Reply

↳ kefa says...

በዚ

7th December 2019 3:24am

👍0 🗔0 ⚠️Flag 🗨Reply

Geoffrey Kumakech says...

በዚ, የተቀባዩ ቅዱስ ስልጣን በቃላች የሆኑ ይችላል.

11th September 2019 9:15am

👍0 🗔0 ⚠️Flag 🗨Reply

ouma says...

በዚ, የተቀባዩ ቅዱስ ስልጣን በቃላች የሆኑ ይችላል.

2nd August 2019 5:04pm

👍0 🗔0 ⚠️Flag 🗨Reply

↳ kefa says...

በዚ

10th August 2019 6:33am

👍0 🗔0 ⚠️Flag 🗨Reply

kefa says...

በዚ, የተቀባዩ ቅዱስ ስልጣን በቃላች የሆኑ ይችላል.

11th June 2019 12:58pm

👍0 🗔0 ⚠️Flag 🗨Reply

Mwaniki says...

18th April 2019 5:58pm

👍0 🗔0 ⚠️Flag 🗨Reply

↳ Kefo says...

በዚ, የተቀባዩ ቅዱስ ስልጣን በቃላች የሆኑ ይችላል.

19th April 2019 1:16am

👍0 🗔0 ⚠️Flag 🗨Reply

↳ Mwaniki says...

Figure 2. Online forum of script users (<http://kefaombewa.com> via the Wayback Machine).

## 428 Luo [Dholuo]

LUO

Southern Luo dialect with 4.2 million speakers in Kenya and Tanzania. Sinistrodextral (left-to-right-reading) Luo Lakeside script shown, developed by Kefa Ombewa. *Kik iyany nyang' ka pod in ei pi.* ("Do not insult the crocodile when you are still in the water.")

- 01: ዳမာစံ / Dumacel
- 02: ዳမာရိယံ / Dumariyo
- 03: ዳမာဒံ / Dumadek
- 04: ዳမာဗုံ / Dumangwen
- 05: ዳမာပံ / Dumabic
- 06: ዳမာပံယံ / Dumabicel
- 07: ዳမာပံဗံ / Dumabiro
- 08: ዳမာပံဗုံ / Dumaboro
- 09: ዳမာပံယံဗုံ / Dumabungwen
- 10: ዳမာပံ / Dumaapar
- 11: ዳမာပံယံ / Dumaaparachel
- 12: ዳမာပံယံဗုံ / Dumaaparariyo

---

Figure 3. The Luo Lakeside script used in a published book, "The Twelve Months of the Year in 850 Languages and Dialects". See Reference 2 in Section VII.

2<sup>nd</sup> March, 2017.

Figure 4. Digital images of text shared online.

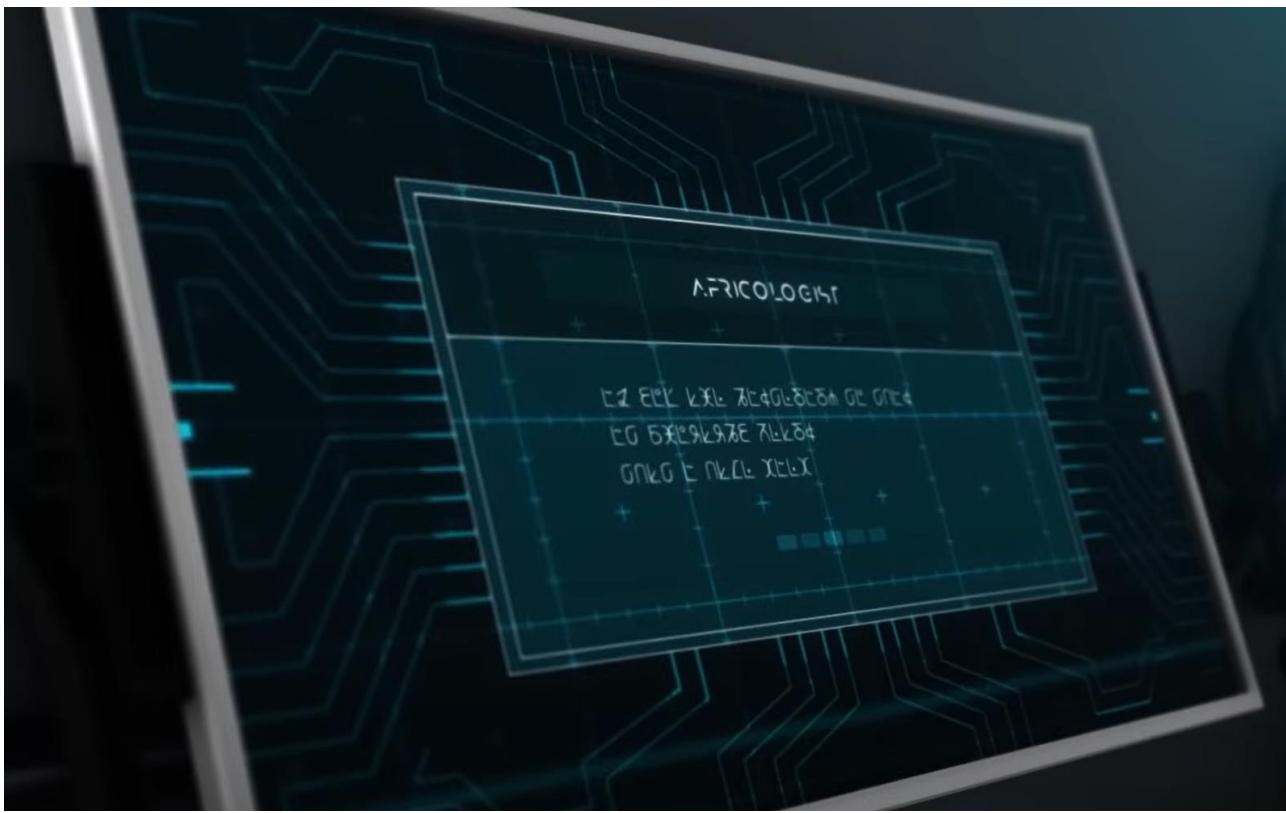


Figure 5. The Luo Lakeside script used in “*The Africologist*”, a documentary on African history, science, and technology. See Reference 3 in Section VII.

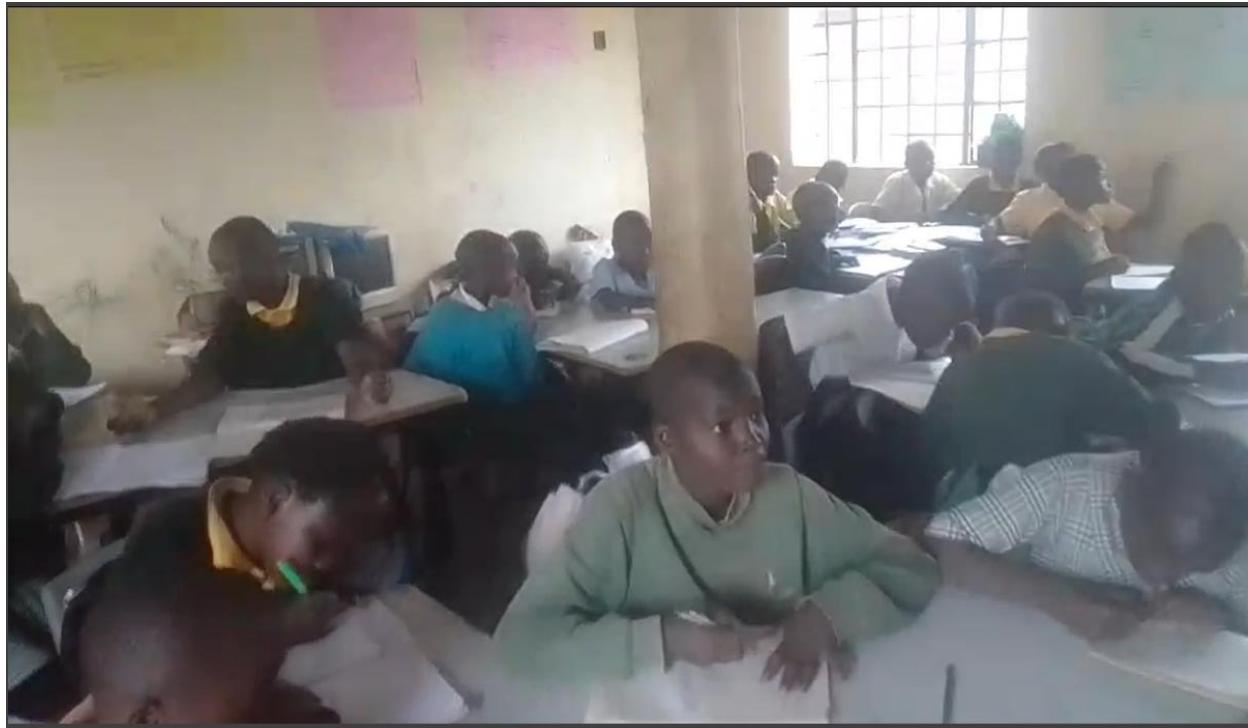


Figure 6. Classroom educated in the Luo Lakeside script at Captain's Choice Academy in Kenya.  
Page 18 of 29



Figure 7. (Left) Botswana Secondary School Principal Ndinaane displays a dual Hindu-Arabic numeral and Luo Lakeside numeral clock. (Right) Mrs. Johnson of Nxakato Junior Secondary School Sowa Town Botswana with a t-shirt using the Luo Lakeside script.



Figure 8. Stand of Luo Lakeside script users promoting the script.

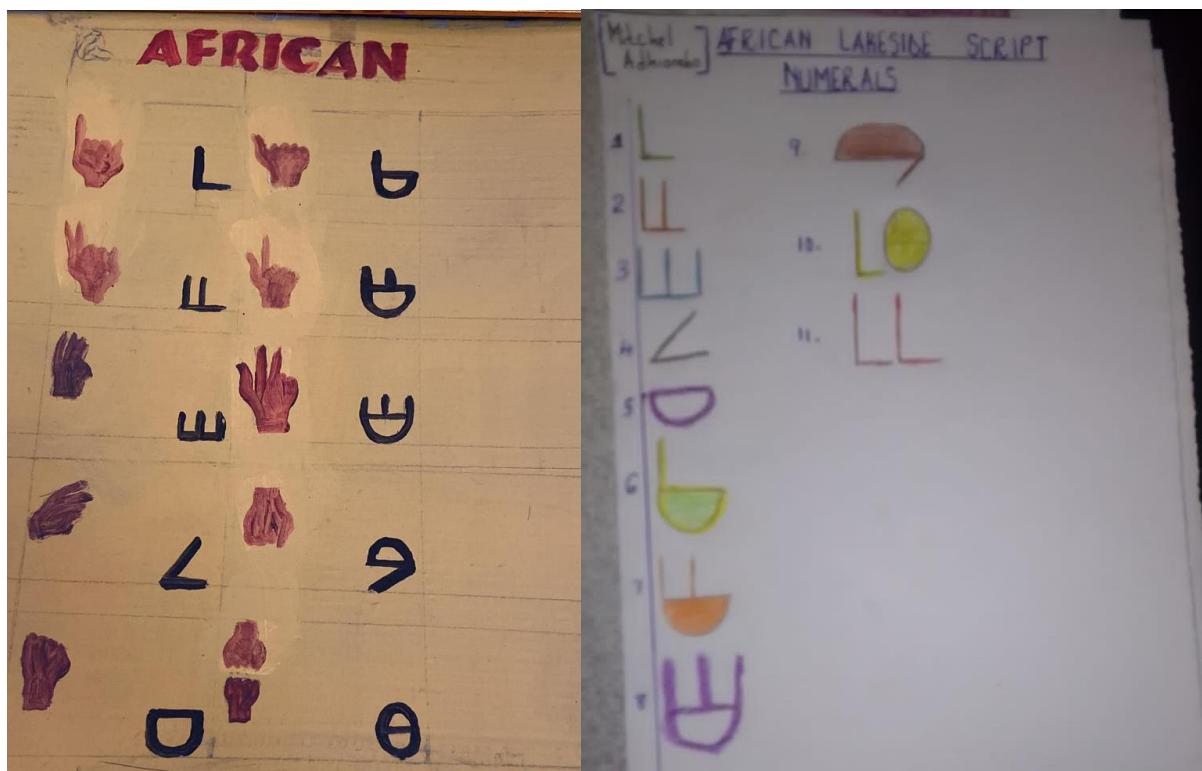
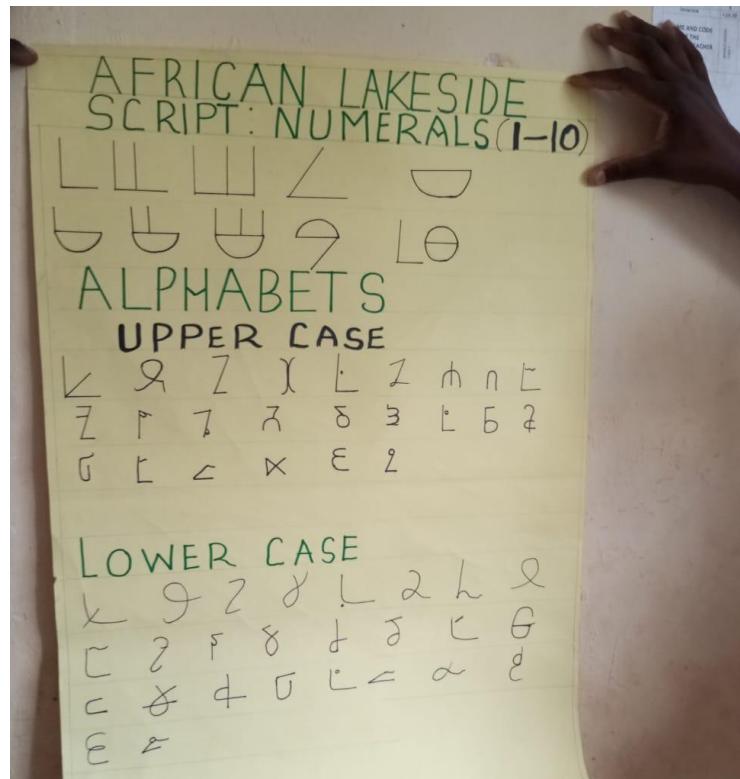


Figure 9. Various charts teachers use in classes.

QkPKEL°, TUL°ZL° ZAKYOK & KJL° L°H°L° ZKXEL°ZL°FL°  
PL°X GL°JSE L°KVL° ZL°PL° ZL°ZL°ZK°K N°H°KJL°!

زاكايو، تينج أو جوالا ساني أو جارافوك كود بيني اوهاتش كاكري  
نوفمبر هيجاني!

Figure 10. Excerpt: A handwritten sentence in Luo Lakeside script in uppercase (top) and lowercase (bottom).

Latin transliteration: zakayo, ting'o jwala sani ogo marufuku kod piny owacho chakre novemba higani!

English translation: "Zakayo, polythene carrier bags are banned by the government from November this year!"

پکايو چوالا ساني او جارافوك كود بيني اوهاتش كاكري.  
Kik iyany nyang' ka pod in ei pii.  
PL°P L°EKL°JSE ZEKL° PL°K GL°X L°J L°L° GL°E.  
KIK IYANY NYANG' KA POD IN EI PII.  
Dont insult a crocodile while you are still in the water.

Figure 11. Excerpt: A Luo proverb written in the Luo Lakeside script in uppercase (top) and lowercase (bottom).



Figure 12. Digital media of 2023 New Year's celebration in the Luo Lakeside script.

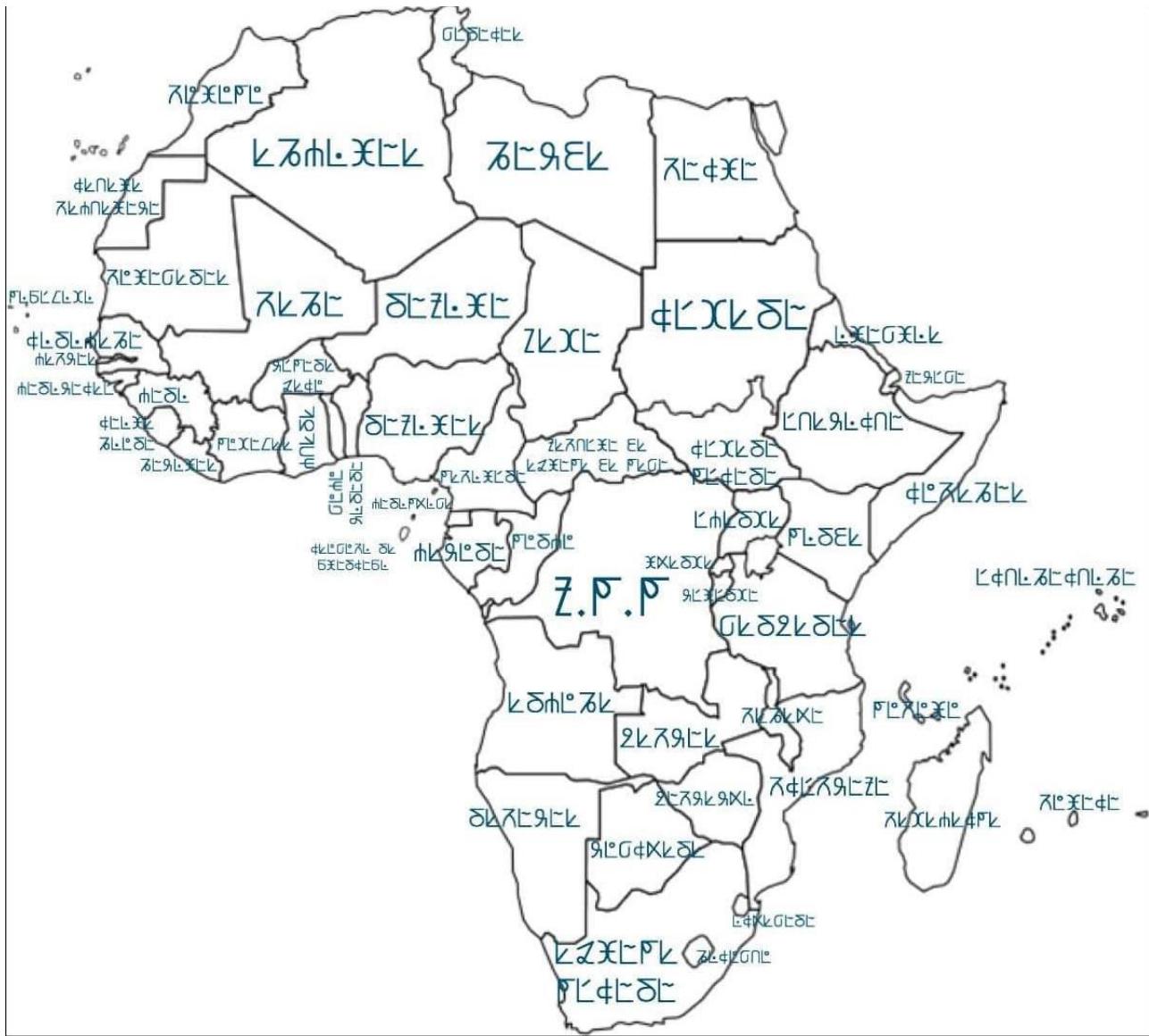


Figure 13. Map of Africa in the Luo Lakeside script.

- Nimeshiba asante
- Nenda kaoge basi
- Nilioga kabla uamke
- Twende safari basi
- Je umebeba nauli
- Ahsante kunikumbusha
- Funga milango
- Tuwe na safari rijema

Figure 14. Video teaching the Luo Lakeside script. See Reference 23 in Section VII.

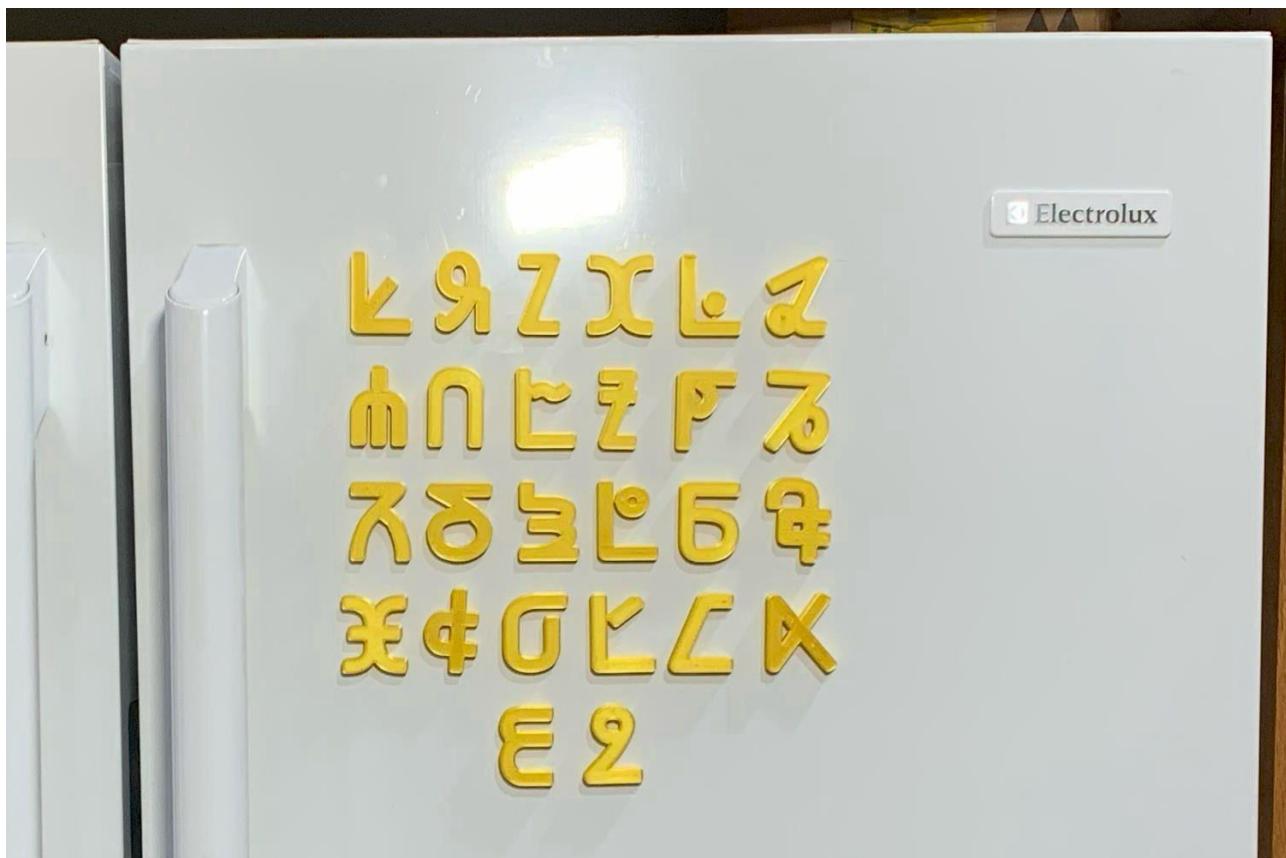


Figure 15. Magnets of the Luo Lakeside script.



Figure 16. Works from artists using Luo Lakeside calligraphy (top-left of both images).

କିମ୍ବାକ, କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ. କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ  
କିମ୍ବାକ. ମିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ, କିମ୍ବାକ  
କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ କିମ୍ବାକ  
କିମ୍ବାକ.

Figure 18. Text shared online.

**Latin transliteration:** “Wuodwa, kik ibed gi samuoyo. Itimo tich maber kabisa. Kaponi abedo jatelo mar Luo, abiro hakikisha ni ndiko miloso ni ema ibiro tiyogo e puiny Luo.”

**English translation:** “Our son, do not falter. You have done a good job. If I become a leader of the Luo, I will ensure the writing is the one to be used in Luoland.”

Amala Isa keessa inni guddaan nama gargaruudha = (His greatest attribute is helping others)  
አማላ ኢሳ ክዱሳ ከንደ ነገሮች ደንብ አማካይ

Amantaa cimaan qaba = I have a firm belief  
አማንታ ፍርማኑ ይገኘ

Amma dammaqqun narra jiraataa? = Do I have to get up now?  
አማ ፍጥምኑ ደቋ እቃዣኑ?

Amma yeroon meeqa? = What time is it?  
አማ ይሬው ሚቋ?

Amma iyyuu muggaan jira = I am still sleepy  
አማ ፍቅር ፈረምኑ ደቋ

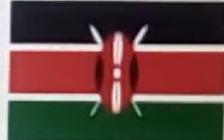
Please = Tafadhali

በታች ተቋርጥ

Please write it down. = Waweza kuiandika.

እኩል የተቋርጥ ስምም.

Do you speak English? = Unazungumza Kingereza?  
ይህንን ስምም የተቋርጥ ስምም?



Do you speak Swahili? = Unazungumza Kiswahili?

ይህንን ስምም የተቋርጥ ስምም?

Sorry = Samahani

ተቋርጥ

Figure 17. Video screenshot of Oromo (top) and Swahili (bottom) being written in the Luo Lakeside script. See Reference 6-7 in Section VII.

## X ISO Proposal Summary Forms

| <b>ISO/IEC JTC 1/SC 2/WG 2</b><br><b>PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS</b><br><b>FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup></b>   |  |
|--|--|
| <b>Please fill all the sections A, B and C below.</b><br><b>Please read Principles and Procedures Document (P &amp; P) from <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html</a> for guidelines and details before filling this form.</b><br><b>Please ensure you are using the latest Form from <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>.</b><br><b>See also <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest Roadmaps.</b> |  |

### A. Administrative

|  |   |  |
|--|---|--|
| 1. Title:  | <b><i>Proposal to Encode the Luo Lakeside Script in the UCS</i></b>                                   |  |
| 2. Requester's name:   | <i>Oreen Yousuf</i>   |  |
| 3. Requester type (Member body/Liaison/Individual contribution): | <i>Individual contribution</i>  |  |
| 4. Submission date:  | <i>2025 December 5</i>  |  |
| 5. Requester's reference (if applicable):                        | <i>oreen.yousuf@gmail.com</i>   |  |
| 6. Choose one of the following:                                  | This is a complete proposal: <b>Yes</b><br>(or) More information will be provided later: <b>.....</b> |  |

### B. Technical – General

|   |  |  |
|---|--|--|
| 1. Choose one of the following:   | a. This proposal is for a new script (set of characters): <b>Yes</b><br>Proposed name of script: <b>.....</b>  |  |
|   | b. The proposal is for addition of character(s) to an existing block: <b>No</b><br>Name of the existing block: <b>.....</b>  |  |
| 2. Number of characters in proposal:  | <b>69</b>  |  |
| 3. Proposed category (select one from below - see section 2.2 of P&P document): | A-Contemporary <input checked="" type="checkbox"/> B.1-Specialized (small collection) <input type="checkbox"/> B.2-Specialized (large collection) <input type="checkbox"/><br>C-Major extinct <input type="checkbox"/> D-Attested extinct <input type="checkbox"/> E-Minor extinct <input type="checkbox"/><br>F-Archaic Hieroglyphic or Ideographic <input type="checkbox"/> G-Obscure or questionable usage symbols <input type="checkbox"/>   |  |
| 4. Is a repertoire including character names provided?                          | a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document? <b>Yes</b><br>b. Are the character shapes attached in a legible form suitable for review? <b>Yes</b>   |  |
| 5. Fonts related:   | a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? <b>Kefa Ombewa</b><br>b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): <b>Kefa Ombewa, kefa.ombewa@gmail.com</b>   |  |
| 6. References:  | a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? <b>Yes</b><br>b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? <b>Yes</b>  |  |
| 7. Special encoding issues:   | Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? <b>No</b>  |  |
| 8. Additional Information:  | Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in |  |

<sup>1</sup> Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database (<http://www.unicode.org/reports/tr44/>) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

### C. Technical - Justification

|  |  |
|--|--|
| 1. Has this proposal for addition of character(s) been submitted before?   | <input checked="" type="checkbox"/> Yes                    |
| If YES explain   | <i>Short proposal submitted - L2/19-268</i>                |
| 2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?          | <input checked="" type="checkbox"/> Yes                    |
| If YES, with whom?   | <i>User community; script creator(s)</i>                   |
| If YES, available relevant documents:  | <i>Enclosed in this proposal</i>                           |
| 3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? | <input checked="" type="checkbox"/> Yes                    |
| Reference:   | <i>Enclosed in this proposal</i>                           |
| 4. The context of use for the proposed characters (type of use; common or rare)  | <input type="checkbox"/> Rare                              |
| Reference:   | <i>Enclosed in this proposal</i>                           |
| 5. Are the proposed characters in current use by the user community?   | <input checked="" type="checkbox"/> Yes                    |
| If YES, where? Reference:  | <i>Kenya (various parts) and Botswana (mainly Lobatse)</i> |
| 6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?                                  | <input checked="" type="checkbox"/> No                     |
| If YES, is a rationale provided?   |  |
| If YES, reference:   |  |
| 7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?  | <input checked="" type="checkbox"/> Yes                    |
| 8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?  | <input checked="" type="checkbox"/> No                     |
| If YES, is a rationale for its inclusion provided?   |  |
| If YES, reference:   |  |
| 9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?               | <input checked="" type="checkbox"/> No                     |
| If YES, is a rationale for its inclusion provided?   |  |
| If YES, reference:   |  |
| 10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?         | <input checked="" type="checkbox"/> No                     |
| If YES, is a rationale for its inclusion provided?   |  |
| If YES, reference:   |  |
| 11. Does the proposal include use of combining characters and/or use of composite sequences?   | <input checked="" type="checkbox"/> No                     |
| If YES, is a rationale for such use provided?  |  |
| If YES, reference:   |  |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?  |  |
| If YES, reference:   |  |
| 12. Does the proposal contain characters with any special properties such as control function or similar semantics?  | <input checked="" type="checkbox"/> No                     |
| If YES, describe in detail (include attachment if necessary)   |  |
| 13. Does the proposal contain any Ideographic compatibility characters?  | <input checked="" type="checkbox"/> No                     |
| If YES, are the equivalent corresponding unified ideographic characters identified?  |  |
| If YES, reference:   |  |