1. Introduction. A syllabic script for the Kpelle language was devised in the 1930’s by Gbili, a chief of Sanoyea, in Bong County, Liberia, during the 1930’s. Accounts usually mention that Gbili was inspired by revelation in a dream. In one retelling, Gbili dictated the script in nearly complete form to Lee-Polu-Mala-Yale, from the village of Zongkai. The script was actively used for a few decades after its invention, by other chiefs, including Bono-Boi of Yanekwele, their scribes, and by one of the wives of Gbili, Neni-Tee. Uses included sending messages, keeping tax and store records, recording legal debts, and compiling a recipe book. (Stone 1990:136-137; Dalby 1967:30, f.n. 2). It has not been determined how many of these texts may have survived the Liberian civil wars, but probably very little if any original material remains.

The first scholarly reference to the Kpelle script comes from Johannes Friedrich (1937), who offered little in the way of accompanying detail. A first attempt at analysis came through with Lassort (1951), who included data from two sources, collected separately in the field. David Dalby published an analysis in 1967 based on the Lassort data, and Ruth Stone (1990) has produced a more recent article, using her own field research, the collection of which dates from 1970. The use of the script has been light, but continued at least through the 1980’s among the Kpelle.

2. Structure. One of the unique features of the Kpelle syllabary is that it encodes for pairs of syllables, what Dalby terms “mutational pairs”, that are related by the phonological similarity of their initial consonants; thus reducing the total number of characters encoded by about half of what it would be otherwise. In this proposal, only one character has been proposed for these mutational pairs for example, 16C02 KPI-GBI is used for both kpi and gbi.

Sometimes, however, a mutational pair has two glyphs available for use interchangeably. Thus, for the pair of related syllables ka and ga, either Ꝋ KA-GA or ꝋ GA-KA may be used, and for the pair of related syllables ka and ga, either Ꝋ TI-DI or Ꝍ DI-TI may be used. Lassort’s data is presented as two full sets of glyphs across the range of characters, and his data is largely repeated in the Dalby source in a compiled tabular form that attempts to unify the two Lassort sources. Comparing the data presented in Lassort and Stone, there are small sets of characters found in one but not the other. The most notable of these are the Kpelle digits, which Stone notes, “were added later also. The late Peter Giddings, a young boy at the time of the script’s invention, recalled how he returned to Sanoyea during a school vacation, to be shown the script. Peter said that he pointed out the absence of characters for numbers to Gbili. He then helped him devise a system, which supplemented the original characters of the script.” (Stone 1990:139). Most series of syllables can be traced cleanly through from Lassort to Stone.
Dalby’s chart shows a number of glyph variants. It is likely that these should be treated as Vai and Bamum glyph variants have been: that if they are required, either a dedicated font for them should be used, or OpenType tables to invoke alternate forms. The forms used in the chart are the primary ones given in Dalby.

3. Collating order. Collation order is as in the code chart. Lassort’s method of collation loosely follows a Latin-based sort, using the initial consonant of transliterated syllables as the primary key to the collation, with the ending vowels of the syllable serving to provide the secondary collation weight. Dalby and Stone both opt for a tabular presentation of the data, ordered nearly identically to each other, following Welmers (1973), with the initial consonants beginning each row in their associated pairs—p/b, b/m, kp/gb, f/v, t/d, l/n, h(s)/j(z), y/ny, k/g, kw/gw, y(ŋ̃), ɣ or w, w(ŋ̃w)—followed by nasal syllables and the syllable lengthening characters Ṽ M, Y-NY, and Ṽ NG.

4. Character names. The usual UCS conventions are used, with BH representing b, B representing ɓ, EE representing e, E representing e, OO representing o, O representing ɔ, and NG representing ŋ. Nasalized consonants are written with a final -N.

5. Linebreaking. Letters behave as in Vai and Bamum.

6. Punctuation and digits. To date, no script-specific punctuation has been seen. Characters exist for the numbers one through ten; no zero has yet been attested.

7. Unicode Character Properties.

8. Acknowledgements. This project was made possible in part by a grant from the U.S. National Endowment for the Humanities, which funded the Universal Scripts Project (part of the Script Encoding Initiative at UC Berkeley) in respect of the Kpelle encoding. Any views, findings, conclusions or recommendations expressed in this publication do not necessarily reflect those of the National Endowment of the Humanities.

9. Bibliography


Leger, Jean Le P. [1975?] *Dictionnaire guerzé, kpélè, wo*. [Nzerekore?: s.n.]


**Table IV The Kpelle Syllabary**

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>a</th>
<th>u</th>
<th>e</th>
<th>ε</th>
<th>o</th>
<th>-</th>
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<td></td>
<td>#</td>
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<tr>
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**Figure 1.** Table of Kpelle syllables from Dalby 1967.
Figure 2. Table of Kpelle syllables from Stone 1990.

<table>
<thead>
<tr>
<th></th>
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<th>a</th>
<th>u</th>
<th>e</th>
<th>o</th>
</tr>
</thead>
<tbody>
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<td>p/h</td>
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<td>D</td>
<td>N</td>
<td>F</td>
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<td>F</td>
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<td>F</td>
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<td>F</td>
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<tr>
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<td>F</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>w/(h)w</td>
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<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Sample of handwritten Kpelle text (a tax table).
A. Administrative

1. Title
Preliminary proposal for encoding the Kpelle script in the SMP of the UCS

2. Requester’s name
Michael Everson and Chuck Riley

3. Requester type (Member body/Liaison/Individual contribution)
Individual contribution.

4. Submission date
2010-02-23

5. Requester’s reference (if applicable)

6. Choose one of the following:
6a. This is a complete proposal
No.
6b. More information will be provided later
Yes.

B. Technical – General

1. Choose one of the following:
1a. This proposal is for a new script (set of characters)
Yes.
1b. Proposed name of script
Kpelle.
1c. The proposal is for addition of character(s) to an existing block
No.
1d. Name of the existing block
2. Number of characters in proposal
114.

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)
Category A.

4a. Is a repertoire including character names provided?
Yes.
4b. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document?
Yes.
4c. Are the character shapes attached in a legible form suitable for review?
Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?
Jason Glavy and Michael Everson.
5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:
Michael Everson, FontLab.
6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
Yes.
6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?
Yes.

7. 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)?
Yes.

8. 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 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/Public/UNIDATA/UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

See above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.
No.

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?
No.

2b. If YES, with whom?

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?
See above.

4a. The context of use for the proposed characters (type of use; common or rare)
Relatively rare.

4b. Reference

5a. Are the proposed characters in current use by the user community?
Yes.

5b. If YES, where?

Scholars and some local use in Guinea and Liberia.

6a. After giving due consideration to the principles in the P&P document must the proposed characters be entirely in the BMP?
No.

6b. If YES, is a rationale provided?

6c. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
Yes.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?
No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?
No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?
No.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?
No.

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
No.

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?
No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?
No.

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?