To:      SAH / UTC
From:  Debbie Anderson (SEI, UC Berkeley) on behalf of Viktor Kovács
Date:  21 December 2023
Subject: Additional comments on L2/21-115 (Proposal for modifying the Old Hungarian block)

The attached document addresses comments on L2/21-115, specifically discussing:

(1) numbers, including ‘500’ (also discussed in section 2c of L2/22-285)
(2) the proposed addition of Q, W, X, Y, Dz, Dzs (which are not needed and are discussed in L2/23-067 and N4268R =L2/12-168R)
(3) UEE, which the author describes as handwritten OLD HUNGARIAN RUDIMENTA UE (hence no new character is required)
(4) an “alias” [=annotation] for NIKOLSBURG OE (U+10C9D and U+10CDD) “also used for ü by Ferenc Sólyom from the end of the 20th century.”

The only actionable request in this document is to consider the request for an annotation for NIKOLSBURG OE (U+10C9D and U+10CDD).
Please take note of the facts set out below:

Proposals to the Old Hungarian section of Unicode

Chart: https://unicode.org/charts/PDF/U10C80.pdf

8.8 point of currently document: https://www.unicode.org/versions/Unicode15.0.0/UnicodeStandard-15.0.pdf

(1) There is an article about rovas numbers from http://www.rovasirasforrai.hu/

Here is the English extract from the article by Klára Friedrich:

Klára Friedrich offers the following illustration of the structure of Old Hungarian numbers at the beginning of her article:

The runic numerals are written in the order in which they are pronounced. For example, 2014: write KÉT - EZER - TIZen – NÉGY (two thousand fourteen)

We do not write down the thousand twice, because if we were to continue in this way, as a consequence of this wrong reasoning, we would have to write down the thousand a hundred times, for example, a hundred thousand times.

Helytelen: incorrect, helyes: correct

Figure 2.

One more example, 4452 write NÉGY - EZER - NÉGY - SZÁZ - ÖTven – KETTŐ (four thousand four hundred fifty two) We do not write four times either the thousand or the hundred, because this incorrect reasoning would require us to write very long strings of numbers

The full rulebook:
The Old Hungarian numbers were used by shepherds and cowherds for contracts and accounts. The numbers were written on a wooden board, a unique mark was written on each end of the board, and then each party split it in two and took their copy. At the counting, the two pieces of wood were joined together. This ensured that fraud was avoided.
Gulya: herd of cows.
Juh: sheep.
Sertés: pigs.

The shepherds could not use a separate 500 digit, because that would only complicate the writing down of the numbers.
Two authentic runic scholars, Adorján Magyar and Sándor Forrai, did not record 500 separately in their works.
Hungarian Adorján's numbers:

Magyar: Hungarian, Etruszk: Etruscan, Római: Roman.

The document L2/21-115, whose authors include members of the Rovás Foundation (RA in the digital signature) refers to the following image:

However, on the Rovás Foundation's own website (rovas.info) you can read the following

The runic inscriptions of Tászok-Tető "found" by Lajos Lénárth Barátosi are easy to read - if one knows the alphabet of 1902 by Mihály Tar...

**Pseudo-roof monuments in Taszok**

It seems more and more that not only nowadays, but also seventy years ago, Hungarians could be dazzled with all kinds of cobbled together runic alphabets and runic monuments. In fact, it was enough just to report on it, but the memory itself is supposed to have disappeared, destroyed. Lajos Barátosi Lénárth (1892-1968 [link]), who was also famous for his Petőfi legends, did
not complicate the matter: he took the Mihály Tar alphabet, which was popular at the beginning of the last century, and filled in the vowels with a different kind of kriksz-krax. These became the runic monuments on the roofs of the tassos, what an interesting coincidence that the same alphabet had been "found" earlier in a "lamasery"...

I note that Mihály Tar's alphabet is not an authentic historical alphabet either.

Neither the Ethnographic Museum nor the Museum of Agriculture has a 500 numeral on the sticks on display.
In other words, the use of the 500 is neither logically nor historically justified.

I therefore request that the digit 500 be ignored from the request. (Code point requested: 10CBF)

(2) In the 20th century, there were attempts to incorporate certain characters (Q, W, X, Y, DZ, DZS) into Old Hungarian, but these did not catch on. They were not needed, as they are not needed now.
See the alphabets:

The next figure is the alphabet of Dezső Verpeléti Kiss. It can be clearly seen that the letter DZ (ʣ) and the letter DZS (ʤ) do not resemble at all the letterform requested in document L2/21-115. Alphabet of Dezső Verpeléti Kiss is shaped from left to right.
Document L2/21-115 Forms of DZ (dz) and DZS (dʒ):

The Rovás Foundation used to refer to a 20th century scout knife:
Letters underlined in red are incorrect: letter "B" in the shape of a Y, letter "H" in the shape of an X, letter "LY" more like "L", letter "O" in the shape of a triangle, letter "Ü" in the shape of a criss-cross, letter "Zs" in the shape of a downward-pointing arrow. The letter "Ty" is missing.

Alien letters underlined in blue: letter "W" has a crossed out Old Hungarian "V" look, letter "Y" looks more like Old Hungarian "J", letter "Q" has a unique shape. No "X".
On rovas.info there is a reference to a „renewed Szekler-Hungarian rovás” script:

There is a gross error in this alphabet: the Old Hungarian "aK" has been dubbed "Q". There are no letters "DZ" (ʣ) and "DZS" (ʤ). The sign intended as the letter ‘Y’ is not similar to the sign in document L2/21-115.

The alphabets listed above can only be used to show that there have been attempts at "modernisation".

About the foreign letters Q, X, Y, W and the letters DZ, DZS in document L2/21-115, we can write that their shapes are not clearly deducible, they are not historical signs! If the Institute for Hungarian Studies and the Rovás Foundation want to modernize the Old Hungarian alphabet, they should include the letters "Ż", "Ł", "Ř", for example!
About "Q", "W", "X", "Y": the n4268r document describes how to specify these symbols as ligatures.
Today, there are keyboards that allow ligature navigation. In keyman.com multiplatform projects for Windows, macOS, iPad, iPhone, Linux, Android. In the xkeyboard-config project for all Linux distributions.

DZ: 10CB3, 10CF3 code points. Please disregard!
DZS (ʤ, form:ʒd): 10CB4, 10CF4 code points. Please disregard.
Q (actually "KV" ligature, i.e. "QU"): 10CB5, 10CF5 code points. Please disregard!
W: 10CB6, 10CF6 code points: please ignore!
X (Ksz ligature, can also be written as k+s):10CB7, 10CF7 code points. Please ignore!
Y (actually "IJ" or "JI" ligature): 10CB8, 10CF8 code points. Please disregard!

Reason:
Most of the above letters in this form did not exist before the 21st century!
There is no example of the westernisation of historical writing in other writings!
Not recommended to be included in the core of the Old Hungarian standard!
(3) The letter "Old Hungarian uee" in document [L2/21-115](#) is actually an handwritten "Old Hungarian Rudimenta uc" (Ü). Sources cited:
Hensel map: (first row is the Old Hungarian alphabet)

![Hensel map](image)

Also handwritten „Old Hungarian Rudimenta uc” in the Harsányi or Hicks-Harsányi alphabet:

![Harsányi alphabet](image)
Rudimenta UE in the standard:

```
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0100</td>
<td>0101</td>
<td>0102</td>
<td>0103</td>
</tr>
<tr>
<td>0104</td>
<td>0105</td>
<td>0106</td>
<td>0107</td>
</tr>
<tr>
<td>0108</td>
<td>0109</td>
<td>010A</td>
<td>010B</td>
</tr>
<tr>
<td>010C</td>
<td>010D</td>
<td>010E</td>
<td>010F</td>
</tr>
<tr>
<td>0110</td>
<td>0111</td>
<td>0112</td>
<td>0113</td>
</tr>
<tr>
<td>0114</td>
<td>0115</td>
<td>0116</td>
<td>0117</td>
</tr>
<tr>
<td>0118</td>
<td>0119</td>
<td>011A</td>
<td>011B</td>
</tr>
<tr>
<td>011C</td>
<td>011D</td>
<td>011E</td>
<td>011F</td>
</tr>
</tbody>
</table>
```

We object that the authors of document L2/21-115 would give an extra sign by naming it “historical UEE” (page 5 in the referenced document), marked in yellow in the table:

```
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10C8</td>
<td>10C9</td>
<td>10CA</td>
<td>10CB</td>
</tr>
<tr>
<td>10CC</td>
<td>10CD</td>
<td>10CE</td>
<td>10CF</td>
</tr>
<tr>
<td>10D0</td>
<td>10D1</td>
<td>10D2</td>
<td>10D3</td>
</tr>
<tr>
<td>10D4</td>
<td>10D5</td>
<td>10D6</td>
<td>10D7</td>
</tr>
<tr>
<td>10D8</td>
<td>10D9</td>
<td>10DA</td>
<td>10DB</td>
</tr>
<tr>
<td>10DC</td>
<td>10DD</td>
<td>10DE</td>
<td>10DF</td>
</tr>
<tr>
<td>10E0</td>
<td>10E1</td>
<td>10E2</td>
<td>10E3</td>
</tr>
<tr>
<td>10E4</td>
<td>10E5</td>
<td>10E6</td>
<td>10E7</td>
</tr>
<tr>
<td>10E8</td>
<td>10E9</td>
<td>10EA</td>
<td>10EB</td>
</tr>
<tr>
<td>10EC</td>
<td>10ED</td>
<td>10EE</td>
<td>10EF</td>
</tr>
<tr>
<td>10F0</td>
<td>10F1</td>
<td>10F2</td>
<td>10F3</td>
</tr>
<tr>
<td>10F4</td>
<td>10F5</td>
<td>10F6</td>
<td>10F7</td>
</tr>
<tr>
<td>10F8</td>
<td>10F9</td>
<td>10FA</td>
<td>10FB</td>
</tr>
<tr>
<td>10FC</td>
<td>10FD</td>
<td>10FE</td>
<td>10FF</td>
</tr>
</tbody>
</table>
```

If every single handwritten letter were put into the Unicode standard, new sections would have to be added. For example, consider the letter “gy” in the Hickers-Harsányi alphabet:

```
VII Antiqua Hunnorum Elementa:

f e s d c z b A

```
(4) In section 3.2 of document L2/21-115, under 8. on page 8, there is a request for the letter "OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG OE" to be assigned the alias "also used for ü" as the letter "OLD HUNGARIAN SMALL LETTER NIKOLSBURG OE" is assigned the alias "also used for Ü" to the capital letter (the letter "OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG OE").

This is not acceptable in this form, as the letter in question is only an "ü", according to Ferenc Sólyom's reading, from the end of the 20th century.
The alphabet of Ferenc Sólyom:
My suggestion: add the alias "also used for ű" to 10CDD to "also used for ű by Sólyom Ferenc from the end of the 20th century".
In this case, the alias for 10C9D should be:
"also used for Ü by Sólyom Ferenc from the end of the 20th century"
Note: We do not know how the entry "also used for ű" got there.

The figure 500 is not included here either.