To: UTC

Title: Request for annotations for Sindhi and Behdini Kurdish

From: Lorna Priest Evans (SIL International)

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Introduction

Both Sindhi [snd] and Behdini Kurdish [kmr] have glyph variants. In order for font developers to better support these languages, these variants should be documented in the Unicode standard.

Sindhi

The Sindhi [snd] language is spoken by over 31+ million people in Pakistan and India. Sindhi can be written with the Arabic, Devanagari, Gurmukhi, and Khojki scripts (script use is generally based on the country or region of use although the Arabic script is the primary script in use) [1].

U+204F REVERSED SEMICOLON and U+2E41 REVERSED COMMA

See Figures 1, 2, 3.

The Sindhi comma and semicolon are vertical flips of the standard design:

Desired outcome

In **Chapter 9: Middle East-I** of the Unicode Core Spec [4], in a section on "Punctuation", it says "Sindhi uses U+2E41 REVERSED COMMA and U+204F REVERSED SEMICOLON." Because some fonts have used features to offer an alternate design of U+060C and U+061B, this should instead say "Sindhi uses U+2E41 REVERSED COMMA and U+204F REVERSED SEMICOLON. Some fonts have used glyph variants of U+060C ARABIC COMMA and U+061B ARABIC SEMICOLON, although this is not recommended."

U+0645 ARABIC LETTER MEEM

See Figure 2.

The Sindhi *meem* has a short tail in isolate and final positions:

Default shape: مهمه مهم Sindhi shape: مهمه

Desired outcome

An annotation should be added to this character.

0645 ARABIC LETTER MEEM
• Sindhi uses a short tail

Additionally, Chapter 9 in the Core Spec should be updated to give an image of the short tail. After Table 9-2 some text and another table could be added:

In general, the distinction between a long tail and a short tail is stylistic. However, Sindhi specifically prefers the *meem* to have a short tail in isolate and final positions:

Table 9.x Sindhi Meem design

Default Shape	Sindhi Shape
مممم	مممم

No properties need adjusting for this character. Since we are not asking for a change in the charts, the Presentation forms block should not need adjusting.

U+06FE ARABIC SIGN SINDHI POSTPOSITION MEN

See Figure 2.

U+06FE ARABIC SIGN SINDHI POSTPOSITION MEN was added to Unicode specifically for the Sindhi language. In Figure 2 we can see that this has a short tail (matching the short tail used for U+0645). In the Unicode charts, U+06FE currently has a glyph matching the standard meem.

Chart shape: ۾ Sindhi shape: م

Desired outcome

We believe the glyph for U+06FE should be changed in the charts to have a short tail. If this is done, no annotations are required.

No properties need adjusting for this character. This character is not present in the Presentation forms block.

Sindhi heh

Sindhi also has a different form of heh. Another document will be submitted regarding the Sindhi heh.

Northern/Behdini Kurdish

See Figure 4, 5, 6.

Behdini is a local variant of Northern Kurdish [kmr] spoken by 1.5-2.0 million people in northern Iraq. This variant uses the Arabic script. Most of the [kmr] speakers are in Turkey; if they read and write Kurdish, they use a Latin-based script. There are [kmr] speakers in Iran, but we are not familiar with their writing conventions. There is a small enclave of [kmr] speakers in Armenia who use Cyrillic script.

U+0647 ARABIC LETTER HEH

For close to 20 years, Behdini Kurdish has used both U+0647 ARABIC LETTER HEH (a a) and U+06D5 ARABIC LETTER AE (a a). Since the standard initial and final shapes of *heh* match the shapes for *ae*, they must be distinguished. In order to distinguish them, Behdini Kurdish has a glyph variant for *heh* which should be documented so that font designers will begin to support this variant. This is also documented in Kew, section 3.6, page 7 [2]. The Behdini *heh* represents the same sound as it does in the Arabic language.

	Default	Behdini Kurdish
U+0647	agao	a aga

Pournader [3] also mentions Behdini Kurdish and Kew's [2] document in his paper "The right hehs for Arabic script orthographies of Sorani Kurdish and Uighur." He simply says: "Further research and clarification is needed for various hehs used in the diverse orthographies using the Arabic script. Among those with similar challenges for heh are Sindhi, Kazak, Kirgiz, and Behdini Kurdish. Kew 2005 addresses some of them issues, but the author of the present proposal does not agree with all of its recommendations. Future proposals will address those orthographies." There is no mention of an alternative solution for Behdini Kurdish. While this document contains a great deal of information on Sorani Kurdish and Uyghur a separate document should be submitted for those languages.

Desired outcome

Chapter 9 in the Core Spec should be updated to give an image of the Behdini *heh*. Suggested additional text in blue below:

Letter heh. In the case of U+0647 ARABIC LETTER HEH, the glyph o is shown in the code charts. This form is often used to reduce the chance of misidentifying heh as U+0665 ARABIC-INDIC DIGIT FIVE, which has a very similar shape. The isolated forms of U+0647 ARABIC LETTER HEH and U+06C1 ARABIC LETTER HEH GOAL both look like U+06D5 ARABIC LETTER AE. However, for Behdini Kurdish the isolate, initial, and final forms are knotted.

Table 9.x Behdini Kurdish heh design

Common Shape	Behdini Kurdish Shape
agao	aasa

No properties need adjusting for these characters. Since we are not asking for a change in the charts, the Presentation forms block should not need adjusting.

Samples

پرم خواه هيكاندي كوم هيطنا كاهلي ۽ كانتر آل ايتري قدر له غالب پتجي ويبرن جو نتين اوناوي پرش جي ضرورت ٿي، جو اونگه پيل ڀاوت كي سنجيوني ٻوڻي سنگهائي سرجيت كري، اهو ست پرش سري وامكرشن جي صورت وٺي آيو، پر هؤ ڀڳتي ۽ گيان جو سروپ هو ليكن ڀارت كي له خاص طور كرم جي ضرورت هئي، ان لاء كو لائق كرم و بر كيندو هو، جو پرياء جي ڪو لائق كرم و بر كيندو هو، جو پريا سان وويكانند جي روپ پر ڀارت كي پڙ پير، سري وامكرشن شكتي هو له وريكانند أن جو جلوو، بجليء جو بائنمو له سري وامكرشن هي جيهن پنهنجي ڪر بنت وويڪائند كي وامكرشن هي جيهن پنهنجي ڪر بنت وويڪائند كي

Figure 1: U+060C ARABIC COMMA and U+061B ARABIC SEMICOLON in Sindhi language. [sd-1]

جي هٿن ۾ موجود ڊڪشنريءَ تي لڳ ڀڳ نون سالن تائين سنڌي ٻوليءَ ۽ لسانيات جا عالم ۽ ماهر جناب سراج الحق ميمڻ ۽ اڪٽر غلام علي الآنا, پروفيسر قلندر شاه لڪياري جناب سيد حاڪم علي شاه بخاري ۽ ڊاڪٽر فهميده حسين ترجمي ۽ ادارت جي مرحلن ۾ شامل رهيا ۽ رهنمائي ڪندا رهيا. سنڌيڪارن جي چونڊ جي مرحلي ۾ ممتاز دانشورن ڊاڪٽر نبي بخش خان بلوچ, جناب محمّد ابراهيم جويق ڊاڪٽر غلام علي الانا ۽ جناب سراج الحق ميمڻ صاحب جن مدد فرمائي.

ٻين علمي ۽ تعليمي اشاعتن سان گڏوگڏ اوڪسفرڊ جو تمام اهم ڪم لغت سازي آهي. دنيا ۾ انگريزي لغتن جي شروعات سورهين صدي عيسويءَ جي پڇاڙڪن سالن کان ٿئي ٿي. انگريزي لغت نويسيءَ جي تاريخ ۾ سيموئل جانسن (1755ع) جو نالو چوٽيءَ تي آهي. بعد ۾ ٻه لساني لغتن جو سلسلو شروع ٿئي ٿو جيڪو سدائين کان ئي نهايت ڪٺن پئي رهيو آهي. ڇاڪاڻ ته اهو دراصل هڪ مڪمل تهذيب ۽ تاريخ کي ٻي تهذيب جي تجربن ۾ بيان

Figure 2: U+060C ARABIC COMMA, U+0645 ARABIC LETTER MEEM, and U+06FE ARABIC SIGN SINDHI POSTPOSITION MEN. Sindhi language. [sd-2]

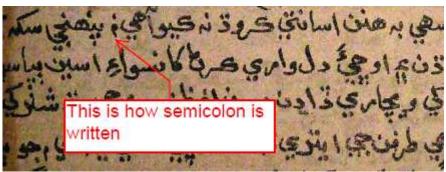


Figure 3: U+061B ARABIC SEMICOLON. Sindhi language. [sd-3]

خال ، خال دێ بوته گهلهك باشتر چێكهم و تۆزا كهتيه سهر.....

-باشه بهس یی هشیار بی تبلین ته یین پیس ب گورا من نهکهفن.

-بلا خال ل سەر ھەردوو چاڤێن خۆ..

-ها ها چافین ته ئهوین وهکی یین سفوران، تو دچیه قوتابخانی ؟

- بەلىّ خال ، ل ريْزا سيىّ .

-ئەۋە چو كويسەلەيە دگەل تە ؟

-ئەو نە كويسەلەيە خال ، ئەو برايى من يى بچويكە، پيچەك دفنا خۆ خوراند، پى من يى چەپى كورترە ژيى راستى وەختى دزڤرمەڤە مال نەشيم سندۆفكا خۆ بھەلگرم ئەو ھارى من دكەت. پری قەرەبالغە ، ھندەك زەلامین ب چەك ژ وئ ترۆمبیلی ھاتنە خار بەری خودانا بازنگان پەییا ببیت زەلامەكی دەرگەھ بۆ قەكر، دەنگی شیلكەكا گۆللەیان ژدوویر دھات، ھندەك گەنجا پشتا خۆ یا دایه دیوارەكی و ئیکی زنجیرەكا د دەستی داو ھەر ییل دۆر تبلەكا خۆ دزفرینیت و بەر ددەت ، سەری وی وەكی ئامیرەكی راداری ھەری دزفریت چەپ و راست ، جار دەنگی كاویس ئاغای و لافژا لو خالۆ لو خالۆ، جار یی داخل حەسەن ، جار مافی مافی و جار گولەشەنگەم، جار ئەیاز یی ھاوار دكەت چپكەم ئەز ؟ ژ وی تۆمارگەھا ل دووماھیكا پری باند دبیت.

سندوّفکا وی یا بویاغیّ یا ل ئاخیّ دخشییّت و ملیّ وی ییّ چهپیّ ییّ خار کری گههشته بهرانبهر قورکیّن چیچوییّ چایچی.

خودانيّ زكيّ مهزن هيِّشتا ييّ فورجِكا ل جاييّ د Figure 4: ARABIC LETTER HEH (isolate, initial and medial). Behdini Kurdish language. [kmr-1].

(۱۰) [ئەڭ نە گويىي حەنەكانە]

بنیاتا فی گوتنی دبیرن جاره کی رویقیهك ل ناف ریله کیدا بی بهری خوه دایی هرچهك وا ژویقه تی ، ناگهه ژ خوه نینه وی هرچ دیت و هرچی نهو به دیت رابی خوه ل ناف ده فی کیدا _ تهراشه کیدا _ قه شارت ، حه تا هرچ هات ل صهمتا وی ، ل هرچی کره (پخك ۰۰۰) هرچ نیف گازی ژناخی بلند بی و بی چرچرا قوینا وی و بازدا حه تا ژوی دی دویسر کهت ، پشتی هنگی هزرین خوه کرن و گوت : نهو نهف نه ده نگی وی

Figure 5: ARABIC LETTER HEH (isolate, initial and medial). Behdini Kurdish language. [kmr-2].

سيه سالى لگوندا

Figure 6: ARABIC LETTER HEH (final). Behdini Kurdish language. [kmr-3].

References

- [1] Eberhard, David M., Gary F. Simons, and Charles D. Fennig (eds.). 2020. *Ethnologue: Languages of the World*. Twenty-third edition. Dallas, Texas: SIL International. Online version: http://www.ethnologue.com. (accessed 14-Aug-2020).
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 https://scripts.sil.org/cms/scripts/render_download.php?format=file&media_id=arabicletterusagenotes&filename=ArabicLetterUsageNotes.pdf
- [3] Pournader, Roozbeh. 2014. The right hehs for Arabic script orthographies of Sorani Kurdish and Uighur http://www.unicode.org/cgi-bin/GetMatchingDocs.pl?L2/14-136. (Accessed 6 Nov 2020) Minutes: https://www.unicode.org/L2/L2014/14100.htm Still an open action item for Roozbeh: https://www.unicode.org/L2/L-SD2.htm
- [4] The Unicode Consortium. The Unicode Standard, Version 13.0.0, (Mountain View, CA: The Unicode Consortium, 2020. ISBN 978-1-936213-26-9) http://www.unicode.org/versions/Unicode13.0.0/

Sindhi References (with thanks to Abdul Majid Bhurgri for these examples)

- [sd-1] Swami Vivekanand published by Sahtia Academiy, New Delhi in 1965.
- [sd-2] Oxford Concise English Sindhi Dictionary. Publishing in 2010.
- [sd-3] This lithographed book is dated 22 December 1911 and was printed in 1913 by Nawalkishore press Lahore.

Behdini Kurdish References

[kmr-1]. Peyv – Journal of Duhok Writers Union no 82. Page 106.

[kmr-2] Miştaxa Çiye- M. M. Dêrşewî. 1979. Page 7.

کرته لیره بکه بوّ دابهزاندن [kmr-3]