2022.2.17
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Sindhi Heh
Since last posting comments on July 15, 2021, I have continued to investigate this matter with the aim of making a definitive recommendation. Lorna Evans (SIL) was first to draw attention to confusion around the use of Heh (h) in writing Sindhi in Perso-Arabic script.

Let's first summarize some phonetic traits of the Sindhi language so we can discuss how they are typically represented in its orthography. The two most frequent sounds represented by a variant of the letter Heh are:

1. The aspirated component [ʰ] of a consonant (ڙ ج ل م ن گ ڻ) which is represented as the second

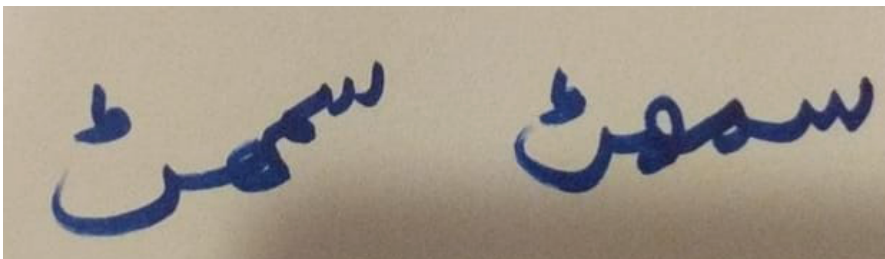letter in a digraph such as ڱﻬ

2. The [h] phoneme

Since July 2021, I continued a series of exchanges with Sindhi expert, Abdul-Majid Bhurgri, in the hope of clarifying the main points in question, I'm pleased to report the fruits of this dialog.

To further examine the needs of Sindhi orthography, I pursued the answer to a phonetic question:

Q If the orthography were to use the same character to represent both [ʰ] and [h], could the reader always the intended one by context? For example, if the same consonantal digraph *mh* (Meem-Heh) were used to represent both [mʰ] and [mh], could the reader always deduce the intended reading? A The answer is definite *no*. In many cases, the reader needs different forms of Heh to deduce the right meaning.

Besides confirming the need for two distinct Heh letters, this result tells us that the current inconsistent use of Heh variants can confuse the reader. Mr. Bhurgri confirmed that it is difficult to establish a standard Sindhi orthography based on existing typeset documents because they are so inconsistent. In one of our numerous exchanges, I asked him to write two words that differed only in the type of *h* sound. In the following graphic—showing his handwriting—the word on the right uses a normal Heh in the sequence [mh], while the one on the left contains the aspirate Heh [mʰ].

Let's refer to the shape on the right as a *bowtie* Heh and the one on the left as a *knotted* Heh.

Frequency of Use
Based on Sindhi text I've examined, I've identified four uses of the h sound, with the first appearing most frequently:

1. Normal Heh, represents [h]
2. Aspirated Heh, represents [ʰ]
3. Arabic Heh, represents [h]
   Note that phonetically and semantically, this Heh is identical to the normal Sindhi Heh, but
   by convention, Sindhi documents have used a different glyph for them to point out
   cited Arabic phrases.
4. Silent Heh, represents [∅]
    This Heh is extremely rare. Normal keyboard layouts contain no input key for it.

Positional Variants
1. For the normal Heh, I propose the following positional variants:

ه ھب بھب بھ or بہ

2. For the aspirate Heh, the following positional variants:

ه ھب بھب بھ

   Although normal and aspirate Heh share the same initial shape, the only

   existing ambiguous case is the sequence   ...ژهّ

   For those wishing to eliminate all ambiguity in this case, the following form
   (attested in calligraphy) is a reasonable alternative:

ھب

3. For the Arabic Heh, the following positional variants:

ه ھب بہب بہ

4. For the Silent Heh, the following positional variants:

ه بہ

Encoding
1. In current keyboard layouts for Sindhi, the commonly used code is u+0646.
    I propose we support this convention by recommending u+0646 for the normal Heh.

2. For the aspirate Heh, I recommend u+06BE as used for Urdu.

3. For the Arabic Heh, one could resort to stylistic variant for u+0646, or use u+06C1

4. For the Silent Heh, I recommend u+06D5

Font Considerations
The orthographic conventions of Sindhi make it impossible to use a font configured for Urdu-
language requirements. The forms needed for Sindhi require one of two solutions:
a. Fonts configured exclusively for Sindhi
b. Fonts that use the OpenType *locale* feature to meet Sindhi needs