



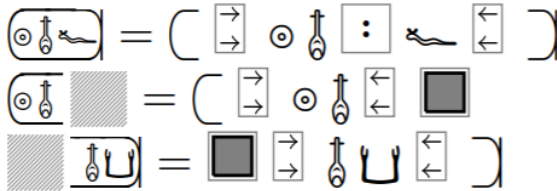
To: Unicode Technical Committee
From: Debbie Anderson, SEI, UC Berkeley and Andrew Glass
Subject: Summary from Zoom calls on Egyptian Hieroglyphs
Date: 17 December 2020

The following summarizes discussion as of 17 December 2020 in meetings with Egyptologists, Andrew Glass, Michel Suignard, and Debbie Anderson. This document is intended to relay the current direction of the discussion, but the decisions may change in the future.

1. Enclosures

- The current agreed-upon approach for enclosures (plain cartouche, SEREKH, and HWT) involves using paired arrows,  and , that create enclosures with extensions. The paired arrows appear after delimiters (endcaps, etc.).

Examples of the syntax:



An extra pair of arrows may be needed for walled enclosures.

- Delimiters can also be stand-alone characters in which case the paired arrows are not used. The orientation of the stand-alone delimiters depends upon text direction.

2. Middle Insertion

- Whether there is a semantic distinction between a single center insertion and more fine positioning in the center insertion is not clear.

Examples of center insertion:



- The general agreement seemed to be in favor of a single center insert middle control character. An inventory is needed that shows the set of signs that open at the top or bottom. Discussion continues, however, as some members are in favor of three insertions: middle top/middle center/middle bottom. (Variation Selectors and the OpenType feature Stylistic Sets and were also discussed as options.)

3. Mirroring and Rotation

- The group agreed that mirroring and rotation are important and need to be supported.
- The options for handling mirroring and rotation include dedicated control characters or use of variation selectors.

- Andrew favors variation selectors. The process involves registering sequences with Unicode, which is faster and more lightweight than proposing new characters. The sequences would be made up of a character base and one of three VSeS that will result in the base being:
 - mirrored and rotated
 - mirrored
 - rotated (without mirroring)Andrew recommends registering sequences for all Gardiner base characters that are not visually symmetrical.
- Mirroring and Rotation are still being discussed. Questions were raised about registering variation sequences.

Shading and fillers will be taken up at the January Zoom call, specifically whether shading should be done on the individual sign or a group (or a hybrid model). Shading is used in Egyptian hieroglyph printed text materials to indicate damaged text if over a glyph or, if not over a glyph, that the writing area has been destroyed. The decision on how shading is handled for Egyptian hieroglyphs could impact the representation of other historic script text materials, such as cuneiform or Maya hieroglyphs.