On cuneiform UN and KALAM

To: SAH, UTC
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Summary

The current reference glyph of U+12327 CUNEIFORM SIGN UN GUNU is an appropriate Ur III glyph for the sign UN; but CUNEIFORM SIGN UN is instead the name of the character U+12326 CUNEIFORM SIGN UN.

The current reference glyph of U+12326 CUNEIFORM SIGN UN is an appropriate Ur III glyph for the sign KALAM.

Proposed changes

Swap the reference glyphs of U+12326 and U+12327, and create a formal alias “CUNEIFORM SIGN KALAM” of type “correction” for U+12327.

Before:

12326 CUNEIFORM SIGN UN
12327 CUNEIFORM SIGN UN GUNU

After:

12326 CUNEIFORM SIGN UN
12327 CUNEIFORM SIGN UN GUNU
*CUNEIFORM SIGN KALAM

The issue

As pointed out to us by Enrique Jiménez, Chapter VII of [MZL] cites the contrast between those signs in the code of Hammurapi (P249253, Old Babylonian monumental), see Figure 1. See Table 1 for photographs of the signs on that stele.

The glyphs from [LAK] (Figure 2) are closer to the reference glyphs; the citations from Gudea Statue B (P213189, Lagas II) are read kalam for LAK729 and ug₃ or uŋ₃ (a value of UN) for LAK730; see also see Table 1.

We also looked at the obelisk of Maništusu (P249253, Old Akkadian), which exhibits the same contrast.

For an example from the Ur III period (the main style of the reference glyphs), see Figure 4.

In all cuneiform transcriptions of inscriptions below, U+0052 LATIN CAPITAL LETTER R is used in place of the sign of interest, whether it should be U+12326 or U+12327.
On cuneiform UN and KALAM

500 und 501

nB (vgl. 102) aA KALAM

u.2. "mmn" KALAM

KALAM UN "mmn"

Figure 1. [MZL], p. 660.

Figure 2. [LAK], p. 65.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Photo</th>
<th>Xsux</th>
<th>Transliteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>P213189 c 13′ 15</td>
<td><img src="https://example.com/image1.png" alt="Photo" /></td>
<td><img src="https://example.com/image2.png" alt="Xsux" /></td>
<td>i7-zi-kalam·ma (cdli)</td>
</tr>
<tr>
<td>ibid. c 15′ 29</td>
<td><img src="https://example.com/image3.png" alt="Photo" /></td>
<td><img src="https://example.com/image4.png" alt="Xsux" /></td>
<td>gal·ug3 (cdli)</td>
</tr>
<tr>
<td>ibid. c 21′ 29</td>
<td><img src="https://example.com/image5.png" alt="Photo" /></td>
<td><img src="https://example.com/image6.png" alt="Xsux" /></td>
<td>gal·ug3 (cdli)</td>
</tr>
</tbody>
</table>
Table 1. The contrast between KALAM and UN in Old Akkadian, Lagaš II, and Old Babylonian lapidary inscriptions in the Louvre.
The contrast is clear on attestations spanning five centuries, and in the styles of these periods, the current reference glyph of U+12327 🕳_CUNEIFORM SIGN UN GUNU is the glyph for the sign UN=UG₃=UNגז: we have a problem.

Note: At a glance, the contrast seems less clear in Early Dynastic texts, but it is clear enough on a long enough timespan—which includes the style that the reference glyphs primarily target—that we do have a problem, even if this pair is merged before as well as after this period.

Steve Tinney has pointed out to us that the apparent lack of clarity in the Early Dynastic period might be a product of assumptions made in older scholarship; for instance Meskalamdug, read meš₃-KALAM-dug₃ in etcsr1, is read Mesʼunetdu (mes-علا-دغ) in [Mar15]. He also remarked that the lack of phonetic complements such as -ma or -ŋa₂ makes it less easy to be certain of the reading in these texts. In seal P247679, that name is written 🕳_عسكر_ الحكومة, with a glyph consistent with the Old
Akkadian through Old Babylonian UN in Table 1. We note however that in P221565 r 1 7', we find a mes-kalam-du10 written 𒈩𒌧𒄭𒈬𒊏𒁉.

Two options
In later styles and in OB cursive, the signs UN and KALAM merge; see [MZL] (Figure 1) and [aBZL] (Figure 3). This means that fonts for these later styles have the same glyphs for both characters; for instance Sylvie Vanséveren’s UllikummiA (Hittite) has U+12326 𒌦 and U+12327 𒌧.

There are two ways to deal with this problem: either the name CUNEIFORM SIGN UN is right, in which case the glyphs need to be swapped, and a formal alias needs to be added for KALAM, which is not UN gunû; or the reference glyphs are right, in which case a mess of formal aliases needs to be created to effectively swap the names (creating an alias for the name of another character is of course not possible, but we could call one KALAM and the other KALAM GUNU and write a novel in the chart annotations to explain the mess).

Which way to go should be determined by usage: which character have people been using for UN and KALAM?

Usage
On the font side, Sylvie Vanséveren’s SantakkuM font (OB monumental) is illuminating: it has no glyph for U+12327 CUNEIFORM SIGN UN GUNU, and its glyph for U+12326 𒌦 CUNEIFORM SIGN UN is consistent with the glyph for UN on the stele of Hammurapi, see Table 1: she trusted the name.

While some cuneiform text undoubtedly is produced by staring at the code charts and copying from there, cuneiform text is mostly produced by means of the cuneify tool, or by using an input method. The cuneify tool and both input methods for the cuneiform script ultimately rely on the Oracc Sign List (formerly Oracc Global Sign List), or, in the case of Karljürgen Feuerherm’s input method, “a list [he] received from CDLI’s Steve Tinney two years [before September 2011]” which is presumably the ancestor of the OSL.

The OSL has always used U+12326 for all values un, un₃, ug₃, and kalam; this means that whichever way we go, most text out there that contains both UN and KALAM should be updated. However, UN is vastly more frequent than KALAM, especially in more recent periods: the corpus of the electronic Pennsylvania Sumerian Dictionary has around 15 000 occurrences of un, to 1759 of kalam; the corpus of the State Archives of Assyria online has 1964 occurrences of the sign UN, to 10 of KALAM; the corpus of Bilinguals in Late Mesopotamian Scholarship has 1117 of un, to 43 of kalam.

Retaining the use of U+12326 for UN therefore seems least disruptive both to specialized fonts and to existing encoded text.

The OSL has the value kalamₓ for U+12327; if this proposal is accepted, this should then become regular kalam, and the @list mappings should be split accordingly.

Acknowledgements
Thanks to Enrique Jiménez for bringing this issue to our attention. Thanks to Pascal Leroy for taking the photographs of the stele of 𒈬𒀀𒈬𒉡𒉡𒉣𒉣 shown in Table 1, and for helping with the column- and line-counting involved in taking the other photographs in that table. Thanks to Steve Tinney for reviewing this proposal and providing context on Early Dynastic readings.
References


