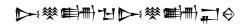
On cuneiform UN and KALAM

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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 ➡ The current reference glyph of U+12326 ➡ 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 単冊 CUNEIFORM SIGN UN

12327 ➡ CUNEIFORM SIGN UN GUNU

After:

12326 <mark>⊯</mark> 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 Ḥammurapi (<u>P249253</u>, 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 ($\underline{P213189}$, Lagaš 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.

500 und 501		
nB (vgl. 102) aA	ab 🚧	群 時長 時時
u.S. mnm For E	Υ u.ä.	
KH KALAM M	UN FAMILY	

Figure 1. [MZL], p. 660.

	v		
729	THE STATE OF THE S	(4) gal-R, 12760,9, 9113,2. (4) En-dulgj-R, 12660,1:12556,11;	
		1262 7 7. me - K - si 12759,9. 🔼 - R 9070 2 . R-su-du 124266	
		R-na + J-gub-ba, 9095, 12. PT 10 THT 7, DP59, 4. 925 (En-kalam-mi)	
		(Lugalyag. OBI 87 I 40/42. aid-Dir	Mrr
		July July July July July July July July	
		RTC 399 R 4, 18.	
730	# PM >	DO-R, 12497,16, 90 74,12, 9111,17.	> ₩
		(= ing)-gà, Gud. B 8, 16; se "già 1(15,5.	FIP
		John J-il, pass. Tyn. Ur. s. n. 729 (Eugalzag).	

Figure 2. [LAK], p. 65.

Reference	Photo	Xsux	Transliteration
P213189 c 13′ 15		[☑ ¶無 R 1년	i7-zi- kalam -ma (cdli)
ibid. c 15′ 29	San James Ja	₽ R	gal- ug3 (cdli)
ibid. c 21′ 29	小小小	₽ R	gal- ug3 (cdli)

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Reference	Photo	Xsux	Transliteration
P213189 viii 64		¶™R [™] LI ■■I	<u>niŋir kalam-ma-</u> <u>ke₄</u> (etcsri)
<i>ibid</i> . viii 16	1-11-00 To 11	R ➡️ ��┤ ◆田◆郎��	uŋ ₃ -ŋa2 gu3 u3-na-de2-a (etcsri)
<i>ibid</i> . ix 18		R〒I旬II 小冷小上州	uŋ ₃-ŋa₃ ra-a igi na-ši-bar- re (etcsri)
P249253 a 1 7	A TOWN	[산⁻난] ₩ ⊠ R	[szi-ma]-at _kalam _ (cdli)
ibid. a 5 24	The contract between KALAM and UN in Old Al	[一日]R	[asz-ku]- un (cdli)

Table 1. The contrast between KALAM and UN in Old Akkadian, Lagaš II, and Old Babylonian lapidary inscriptions in the Louvre.

169) UN				312 (500)
TYTY.	DT THE	河州	CA 116 M ₂	CA 17 H
		河科	LSU 509 D	Id-D A 26 H
	H		CA 258 S	CA 39 N ₃
			LSU 493 O	CA 154 S
		ATT T	CA 168 L	NMŠ 117 UrB
	UN	kalam, uĝ ₃ , un		

Figure 3. [aBZL], p. 67.



Figure 4. Lines o 10 # $\mathbb{R} \times \mathbb{H} \times \mathbb{H$

The contrast is clear on attestations spanning five centuries, and in the styles of these periods, the current reference glyph of U+12327 \square CUNEIFORM SIGN UN GUNU is the glyph for the sign UN=UG₃=UN₃: 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 <u>meš₃-KALAM-dug</u> in etcsri, is read Mes'unedug (mes-un₃-dug₃) in [Mar15]. He also remarked that the lack of phonetic complements such as -ma or -na₂ makes it less easy to be certain of the reading in

these texts. In seal <u>P247679</u>, that name is written \Leftrightarrow with a glyph consistent with the Old

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Akkadian through Old Babylonian UN in Table 1. We note however that in <u>P221565</u> r 17′, we find a mes-kalam-du10 written ★ ♦.

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 HT and U+12327 HT.

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 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 <u>cuneify tool</u>, 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, uŋ₃, 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 <u>electronic Pennsylvania Sumerian Dictionary</u> has around 15 000 occurrences of un, to 1759 of kalam; the corpus of the <u>State Archives of Assyria online</u> has 1964 occurrences of the sign UN, to 10 of KALAM; the corpus of <u>Bilinguals in Late Mesopotamian Scholarship</u> 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 kalam_x for U+12327; if this proposal is accepted, this should then become regular kalam, and the @list mappings should be split accordingly.

Acknowledgements

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References

[aBZL] Catherine Mittermayer. Altbabylonische Zeichenliste der sumerisch-literarische Texte. 2006.

[LAK] Anton Deimel, Liste der archaischen Keilschriftzeichen von Fara. 1922.

[MZL] Rykle Borger, Mesopotamisches Zeichenlexikon. 2003.

[Mar15] Gianni Marchesi, "Toward a Chronology of Early Dynastic Rulers in Mesopotamia". In Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean III (2015), pp. 139–156.