

A New Logogram for <HUL> “to Arrive” – Implications for the Decipherment of the Month Name *Cumku*

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As part of our work on a new catalogue of Maya signs and their graphs, we are currently evaluating and revising Eric Thompson’s *Catalog of Maya Hieroglyphs* (1962). We are critically scrutinizing his system with the help of his original grey cards and supplementing it with signs that were not included in Thompson’s original catalogue. Despite its known shortcomings and incompleteness, his catalogue is still regarded as the standard work for Maya epigraphers, which is why we adopt Thompson’s nomenclature while removing misclassifications and duplicates, merging graph variants under a common nomenclature, and adding new signs or allographs to the sign index in sequence, starting with the number 1500.

Further, allographs are also systematized with the help of newly defined classification and systematization criteria, which we described in detail in Prager and Gronemeyer (2018). Basically, many graphs of Maya writing can be divided into two or more segments along their horizontal and vertical axes. These segmentation principles are designated by a two-letter code that is suffixed to the sign number. Thus, 1537bl, for instance, refers to a variant of the character 1537 (hand-with-moon sign) that has been vertically separated into two parts with only the left segment shown in that context, i.e., the hand without the moon sign (Figure 1). The revision of existing catalogues and their expansion, including a systematic index of all known allographs of each sign, will form the basis for our machine-readable text corpus of Classic Maya (Diehr et al. 2018).

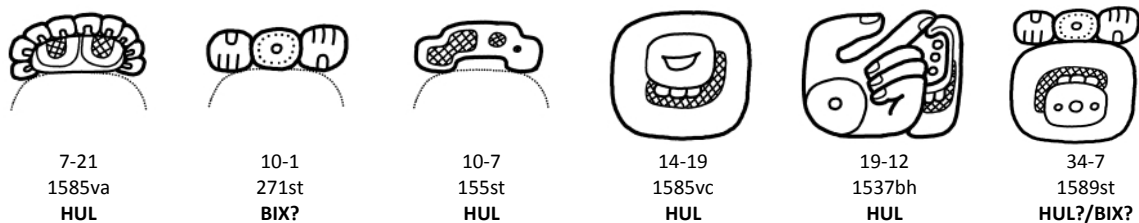


Figure 1. Logographs for <HUL> and <BIX> “to arrive at one place” with Tokovinine’s, Thompson’s (1962) and the project’s extended nomenclature of graphs. Drawings by Alexandre Tokovinine (2017).

The focus of this report is on an element in Maya writing that has not yet been listed in any of the published sign inventories (Figure 2). Due to its position in the Lunar Series in the inscription on Copan Temple 11, north entrance, eastern jamb, this element must represent the logogram **HUL** as so-called Glyph D and can be translated as “to arrive (at a place)” (MacLeod 1990; Stuart 2005:63). In Classic Mayan, *hul* is a common intransitive verb, for which numerous hieroglyphic variants were used due to its frequent occurrence in the corpus. Besides the phonetic spelling **hu-li**, a number of logographic spellings have been identified and deciphered for Glyph D in the past thirty years. In the most recent version of his visual catalogue of Maya glyphs, Tokovinine (2017) for example lists six entries with the value **HUL**, although he considers the decipherment **HUL** for the sign 34-7 questionable (Figure 1).



Figure 2. A new sign for <HUL> “to arrive”: full and partial rendering in Glyph D and Cumku or *hul ohl*. Drawings by Christian Prager.

With at least 60 occurrences in historical narratives and about 360 references in calendar-astronomical sections of hieroglyphic texts, the verbal root *hul* is one of the most frequently attested entries in the Classic Mayan lexicon. In the so-called Supplementary Series, which was described for the first time by Sylvanus G. Morley (1916) and whose components were designated with the letters A to G as well as X and Y in the absence of linguistic readings, *hul* occurs in the context of Glyphs E and D. This complex, first associated with moon age by the astronomer and Mayanist John Teeple (1925, 1931), consists of the coefficients 1 to 29 combined with the term *hul*. The coefficients count the number of days elapsed after the last new moon: “# days (since last new moon) arrived” would be the free translation of this slot in the Supplementary Series. Morley’s early structural analysis already documented different spellings of Glyph D. Among them is the phonetic substitution **hu-li** in the texts of Palenques (Figure 3, examples no. 27–31), which was not deciphered until the 1990s in efforts which also led to the phonetic decipherment of the Glyph E-D complex (MacLeod 1990).

HOLMES ANNIVERSARY VOLUME	GLYPH G	GLYPH F	GLYPH E	GLYPH D	GLYPH C	GLYPH X	GLYPH B	MORLEY-PLATE IV GLYPH A
No. 25. Yaxchilan, Stela 11 (fold). 9.16.1.0.0 11 Ahau 8 Tzac.	D							
No. 26. Yaxchilan, Stela 1. 9.16.9.0.0 1 Ahau 3 Zip.	D							
No. 27. Palenque, Temple of The Cross. 12.19.13.4.0 8 Ahau 18 Tzac. Contemporaneous date undetermined.	DM							
No. 28. Palenque, Temple of The Sun. 12.18.5.9.6 13 Cimi 20 Ceh. Contemporaneous date 9.16.10.0.0 13 Ahau 18 Kanin	D							
No. 29. Palenque, Temple of The Foliated Cross. 1.18.5.4.0 8 Ahau 13 Muc. Contemporaneous date 9.13.0.0.0 9 Ahau 6 Uuc.	DM							
No. 30. Palenque, Palace, House A, Pier. 5.8.7.7.7 7 7 Tzac.	DM							
No. 31. Palenque, Stela 1. 9.17.8.5.8 3 Lamat 6 Zac.	D							
No. 32. Ocosingo, Stela Initial Series date undetermined.	D							

SUPPLEMENTARY SERIES AT (25-26) YAXCHILAN, (27-31) PALENQUE, (32) OCOSINGO

Figure 3. Excerpt from Morley’s structural analysis of the Supplementary Series, with logographic and syllabic spellings of Glyph D. After Morley (1916:pl. IV).

More spellings of *hul* in the context of Glyph D can be found in a later overview of the Supplementary Series as it was understood at the time (Schele et al. 1992). This compilation shows, for example, that the sign 155 is never used in the context of the Lunar Series. Its functional substitution with the sign 1585 or **HUL** in the month name Cumku, however, could be an indication that the character 155 also reads **HUL** (see Tokovinine 2017). However, Peter Bíró's, Barbara MacLeod's and Michael Grofe's (2014:155) as well as Alejandro Garay's (2018) most recent discussion of the sign 155 with their reading proposal **BIX** for sign 155 show, however, that these glyphs' linguistic decipherments have not yet been conclusively clarified and that further evidence must be collected in order to finally assign linguistic values to them.

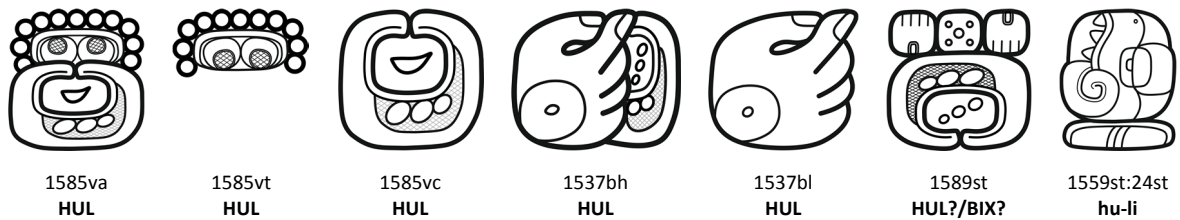


Figure 4. Logographic spellings and a phonetic substitution for *hul* "arrive at a place" in the context of Glyph D, with the TWKM project's nomenclature and suggested transliteration values. Drawings by Christian Prager.

Summarizing our currently state of knowledge about Glyph D, we can now identify seven spellings of the verb *hul* in the Supplementary Series (Figure 4). These include the syllabic spelling 1559st:24st or **hu-li**, as well as three logographic realizations with different renderings of the signs 1585, 1537 and 1589. For the sign 1585, scribes used the three graph variants *va*, *vt* and *vc*; for T1537, the two variants *bh* and *bl*; and for the character 1589, the variant *st* (see Prager and Gronemeyer 2018 for discussion of the segmentation principles).

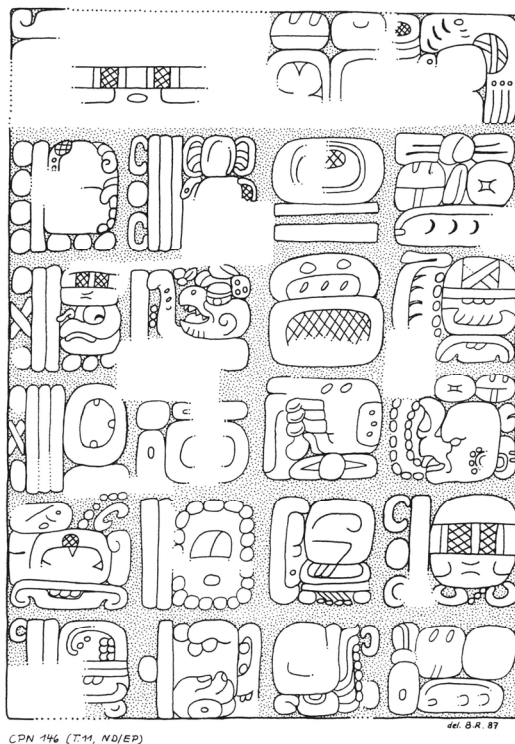


Figure 5. Drawing and photograph of the inscription of Copan Temple 11, North Entrance, Eastern Jamb. Drawing and photograph by Berthold Riese.

As a result of our work, we successfully identified a previously undocumented sign in the context of the Lunar Series inscribed on the eastern jamb of the northern doorway to Temple 11 in Copan (Figure 5). The sign in question is found in the slot for Glyph D and thus can be assumed to denote the linguistic value **HUL**. The corresponding calendar date is 9.16.12.5.17 6 Caban 10 Mol (June 30, 763). It represents the accession date of Yax Pasaj Chan Yopaat (Proskouriakoff 1960:468; Schele 1982:93) and is followed by a Supplementary Series with Glyph G9 and Glyphs D, C, X, B, and A of the Lunar Series. In the slot for Glyph D, the as-yet undocumented sign for the verb *hul* is prefixed with the coefficient 11. Schele, Stuart and Grube described this unusual variant of Glyph D, but did not draw any further conclusions about its possible phonetic reading (Schele et al. 1991:2). In our sign and graph inventory, the newly identified sign is listed under the number 1512.

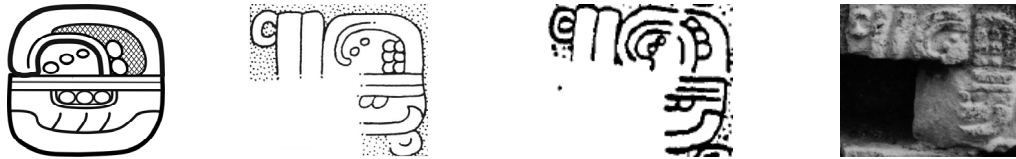


Figure 6. Drawings and photographs of sign 1512. Drawings by Christian Prager, Berthold Riese, Linda Schele; photograph by Berthold Riese.

The icon of this sign and graph, which until now has been noted only once in previous research, shows a half moon sign tilted by 90° over the sky sign (561). It represents the new moon crescent above the horizon and visualizes this physical phenomenon as the basis for calculating the age of the new moon, as implied by use of the linguistic term *hul* “to arrive at a place” following the numerical coefficient. Due to its undoubted function here as Glyph D, it can be assumed that this sign, like the other logographs identified for Glyph D, also denotes the value **HUL**. However, this assumption can also be tested with the help of other references.

That identification of the sign 1512 represents a moon crescent above the horizon and can be linguistically deciphered as **HUL** are further confirmed by three occurrences of the sign which have not previously been recognized. In his dictionary, Erik Boot (2009:84) published three instances of the month sign Cumku, which according to him should be read as **ja-wa**. In all these references, what appears to be a form of the sign 181 for the syllable value **ja** that has been rotated 90° counter-clockwise appears above the sign 506 **OL**. Boot assumed that the sign 506 probably also represented the phonetic value **wa** in late texts, which is why he transliterated this unusual variant of the month Cumku as *jaw*.

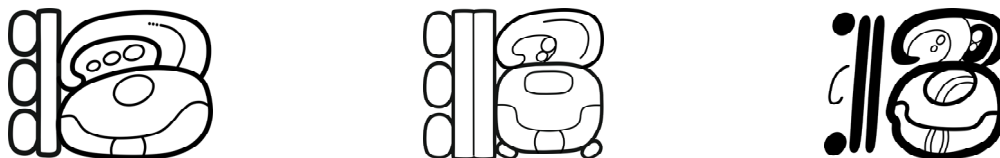


Figure 7. Three occurrences of the month name Cumku with the spelling 1512bt:506st for *hul ohi* on a) CRN Elm. 9; b) CPN 285 (Incensarios); c) Kerr 791. Drawings by Christian Prager.

However, with the identification of the sign 1512 for **HUL**, we can revise Boot’s reading of the month Cumku. The sign above 506 **OL** that is turned 90° to the left is not a rendering of the sign 181 for the syllable **ja**, but an instance of the crescent moon that constitutes part of the graph of the sign 1512. According to our system of allographic classification, the sign 1512 can be segmented into two parts along its horizontal axis, whereby in the case of these hieroglyphs for Cumku, only the upper, crescent

moon element is visible and the sign 506 or **OL** is superimposed over the bottom half of 1512 (Figure 8).



Figure 8. Composition principle of the hieroglyph Cumku: The sign 506 is superimposed over the lower segment of the hieroglyph 1512 <HUL>, so that only the crescent moon of the sign's icon is visible. In our system, this variant of 1512 is designated as 1512bt. Drawings by Christian Prager.

In addition, this unusual spelling of the month name Cumku with the newly identified logogram 1512 for **HUL** now confirms the previous decipherment of the month name Cumku as **HUL OL** (Stuart 2006:68). The functional substitution of the sign 1512 in the context of Glyph D with other graphic renderings for **HUL** is, on the one hand, evidence for the reading of 1512 as **HUL**. On the other hand, ethnohistorical sources attest to the terms *hulol* and *ulol* as this month name in colonial and late colonial Tzeltal and Tzotzil (Thompson 1950:106). Last but not least, the occurrence of the spelling 1585vt:506st **HUL:OL** for the month name Cumku, as attested at Tonina (Fragment 43), is evidence for a substitution between 155 **HUL** and 1512 **HUL** (Figure 9). This occurrence confirms *hul ohl* as the original phonetic reading of the month Cumku.



Figure 9. Tonina, Fragment 43 exhibiting the spelling 1585vt:506st <HUL:OL> for the month name Cumku. Photograph by Karl Herbert Mayer.¹

¹ Download: https://classicmayan.kor.de.dariah.eu/resolve/image_no/KHM_1980_F94_R03_13)

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