



# Glyph Dwellers

Report 68

March 2021

## Drawing of Mayan Inscription on Stone Sphere (K6582) with Epigraphic Commentary

David F. Mora-Marín

davidmm@unc.edu

University of North Carolina, Chapel Hill

This note presents a drawing of the inscription on K6582, a Maya stone sphere in the collection of the Los Angeles County Museum of Art (LACMA) (M.2010.115.247), described as having the following dimensions: 22.352 x 25.4 x 25.4 cm.<sup>1</sup> It first came to my attention when it was posted on the FAMSI website, specifically on Justin Kerr's Portfolio in 2003, where the sphere is described as having a circumference of 79.4 cm.<sup>2</sup> **Figure 1** shows Justin Kerr's photo of the sphere.

---

<sup>1</sup> The Los Angeles County Museum of Art's information on this artifact is found at: <https://collections.lacma.org/node/1903397>.

<sup>2</sup> Justin Kerr's Portfolio entry for K6582: [http://research.mayavase.com/portfolio\\_hires.php?search=stone&date\\_added=&image=6582&display=8&rowstart=208](http://research.mayavase.com/portfolio_hires.php?search=stone&date_added=&image=6582&display=8&rowstart=208).



**Fig. 1.** Stone Sphere, Los Angeles County Museum of Art M.2010.115.247. Photograph by Justin Kerr (K6582).

The drawings presented here were prepared in 2009 by printing out enlarged versions of the photos available on Justin Kerr's Portfolio, which are for the most part adequate in resolution, except perhaps for the one at the bottom of that page (cf. **Fig. 2b**), and then tracing the photos with ink pens on tracing

paper using a light table. Originally, my hope had been to visit LACMA to examine this and other artifacts to make necessary corrections to my drawing. Recently, after comparing my drawings against the available photos on the LACMA website I decided they were largely accurate and a trip to examine the artifact in person would not be necessary.

Next, I describe the content of each of the five cartouches on the piece, the one on the top of the sphere and the four spread around its circumference. I offer a few comments about each of the glyphs and its component signs, and perhaps more importantly, about the order of the cartouches, which is not obvious from either set of available photographs (i.e. Justin Kerr's, LACMA's). I also draw a brief comparison to a carved ceramic plate lid that not only seems to mention the same individual named on the stone sphere, at least on the iconographically-embedded text, but also exhibits the same general textual formatting—five cartouches, one on the top functioning primarily pictorially, the other four arranged along the circumference of the lid. I conclude with some very preliminary remarks on aspects of the signs that could be of paleographic interest in a subsequent and more thorough comparative study.

### Order of Cartouches

The sequential arrangement of the photos in the Justin Kerr Portfolio is demonstrably not correct; two of the photos available in the LACMA website suggest a different order, with the OLD.GOD glyph positioned immediately before the MAN.INSIDE.SNAKE glyph, itself immediately before the likely **?AJAW** glyph. This leaves the RAISE.THE.STONE glyph necessarily first in the sequence. **Figure 2** presents this order, and labels the glyphs within each cartouche with numerals. Glyph 4, argued below to be an elaborate version of the **?AJAW** 'lord, ruler' sign, is posed as the last glyph in the sequence. Something that is not clear yet is whether the top cartouche is meant to be part of the text, or intended as a pictorial portrait. Below I argue that it is the latter, and that it in fact constitutes a combination of two of the glyphs found around the circumference. That said, I also note that in Mayan art and writing there is often a continuum between the two, rather than a clear, dividing line, leaving the door open for a future analysis that includes the top cartouche in the text, possibly as its first expression.

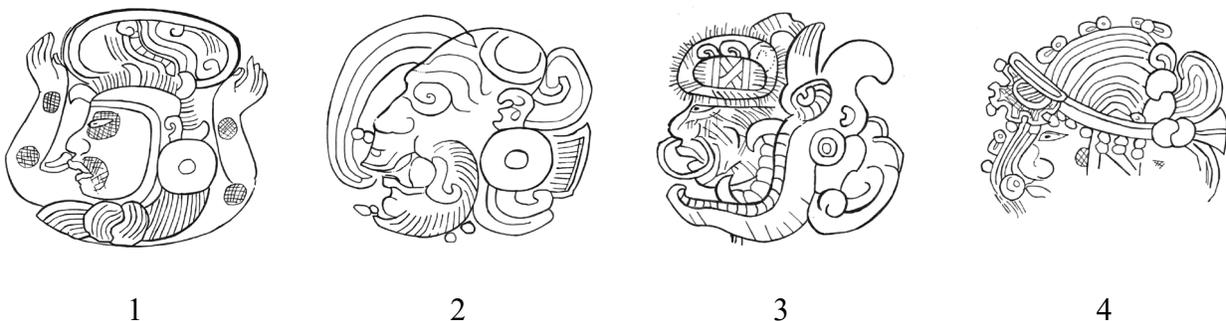
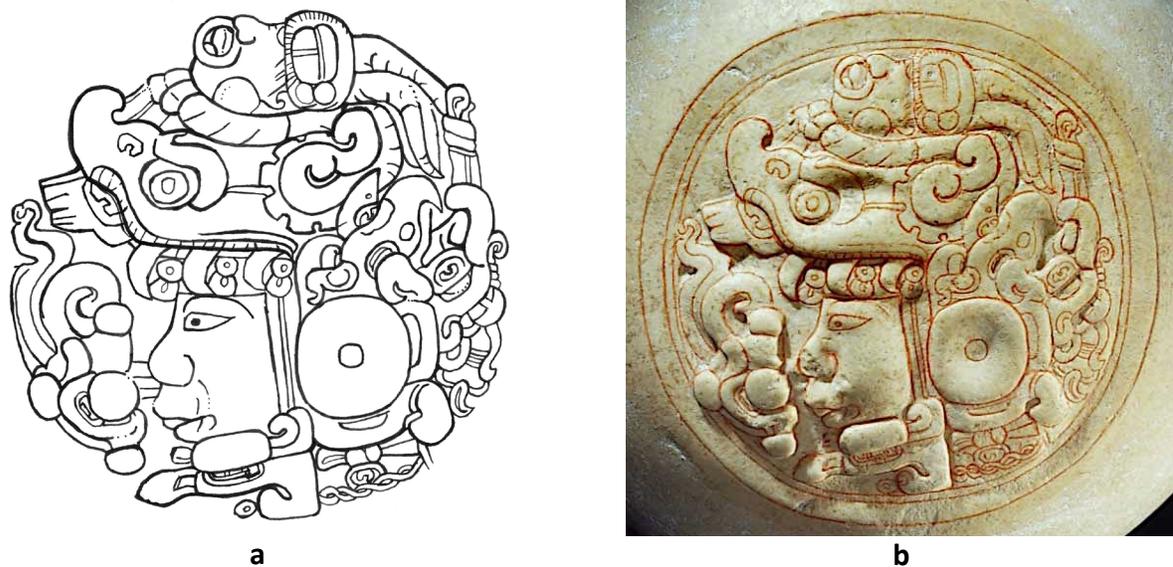


Fig. 2. Text on circumference of sphere.

### The Top Cartouche

The top of the sphere bears a cartouche with an portrait, shown in **Figure 3**. It shows an individual wearing an elaborate headdress.



**Fig. 3.** Glyphic cartouche on top of stone sphere. **a.** Drawing by author, **b.** Photograph by Justin Kerr.

The headdress worn by the left-facing human figure on the top cartouche (**Fig. 4a**) is topped by a glyphic head (**Fig. 4b**) that appears elsewhere in the text, specifically as part of Glyph 3 (**Fig. 4c**). This glyphic head (**Fig. 4b**) is characterized by a profile view of a man wearing a septum ring ornament, and a two-sign composition placed on his forehead: one sign resembles a cartouche with a fuzzy outline, possibly depicting hair or feathers; within the cartouche are two smaller signs, somewhat non-descript, one resembling a form of T518/2M1b, the other resembling two circles stacked vertically. This is the only obvious difference with the details of Glyph 3, described below in more detail, but I would argue that it is intended to represent the same individual or glyph, possibly a version of the Maize God sign. Another point of similarity between the portrait on the top cartouche and Glyph 3 is found in the similarity between the shark- or snake-like creature that makes up part of the headdress (**Fig. 4d**) and the shark- or snake-like creature with open maws depicted as half of Glyph 3 (**Fig. 4e**). I do not think this is a coincidence: the top cartouche portrait bears iconographically-embedded glyphs, a well-documented practice in Mayan art and writing (Berlo 1983). Next, the top cartouche portrait can be shown to share traits with Glyph 4, which I argue below to be the **?AJAW** 'lord, ruler': Glyph 4 exhibits a headband and beads arranged along the headband (**Fig. 4f**), rendered in a similar fashion to the royal headband worn by the seated personage on the Dumbarton Oaks quartzite pectoral (Coe 1966; Mora-Marín 2001), and the headdress that Personage 21 is about to place on the head of Personage 22 on the San Bartolo west wall mural (Taube et al. 2010). On the top cartouche the royal headband is visible underneath the zoomorphic headdress, with the beads showing between the zoomorphic headdress' fangs, and part of the headband seen arranged vertically between the figure's face and the earflare (**Fig. 4g**). This suggests that the cartouche on the top of the sphere portrays the protagonist of the text. I revisit Glyphs 3 and 4 below. For now I simply propose that the top cartouche is more pictorial than glyphic in nature, and not meant to be read in the same fashion as the glyphic cartouches around the sphere's circumference.

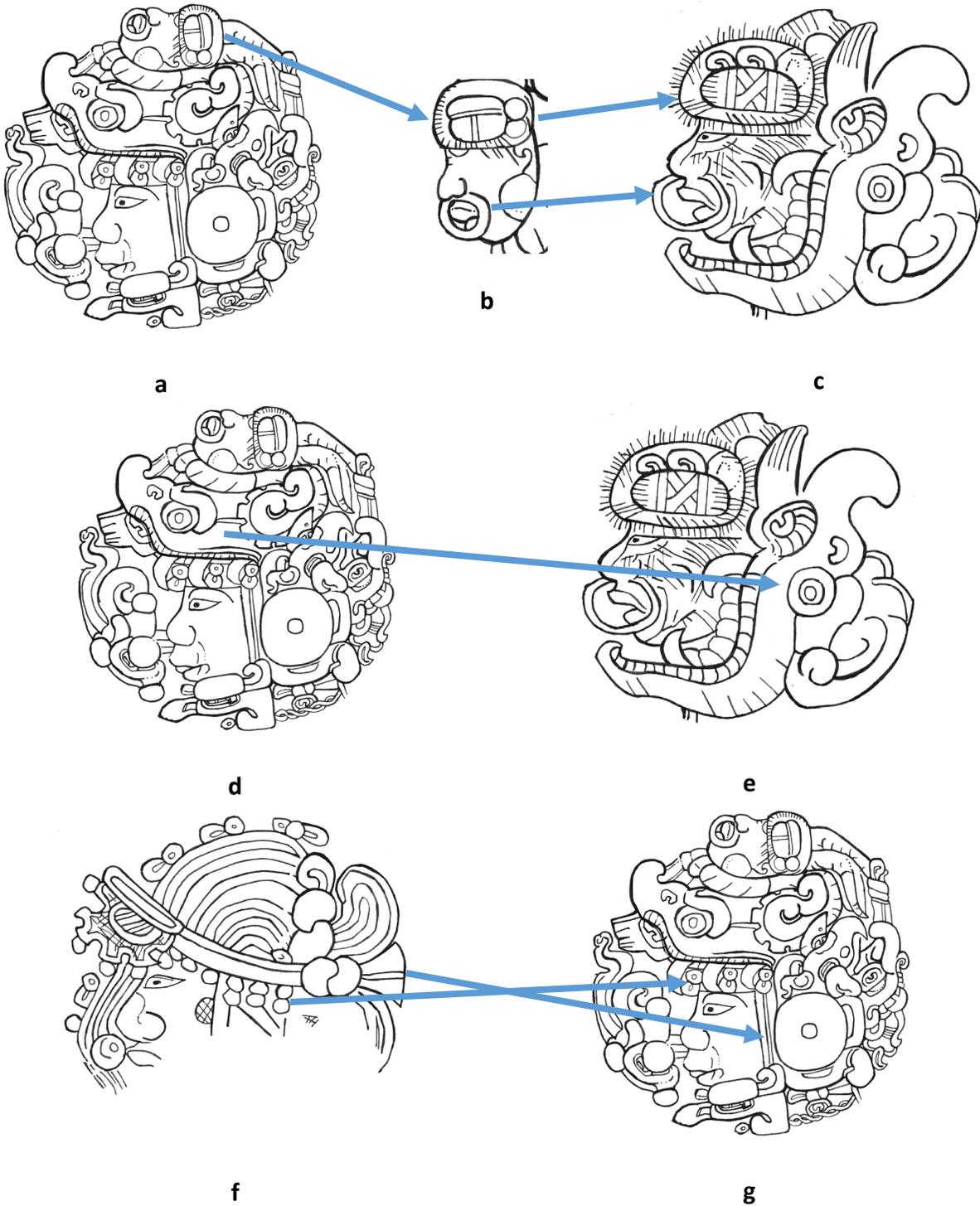


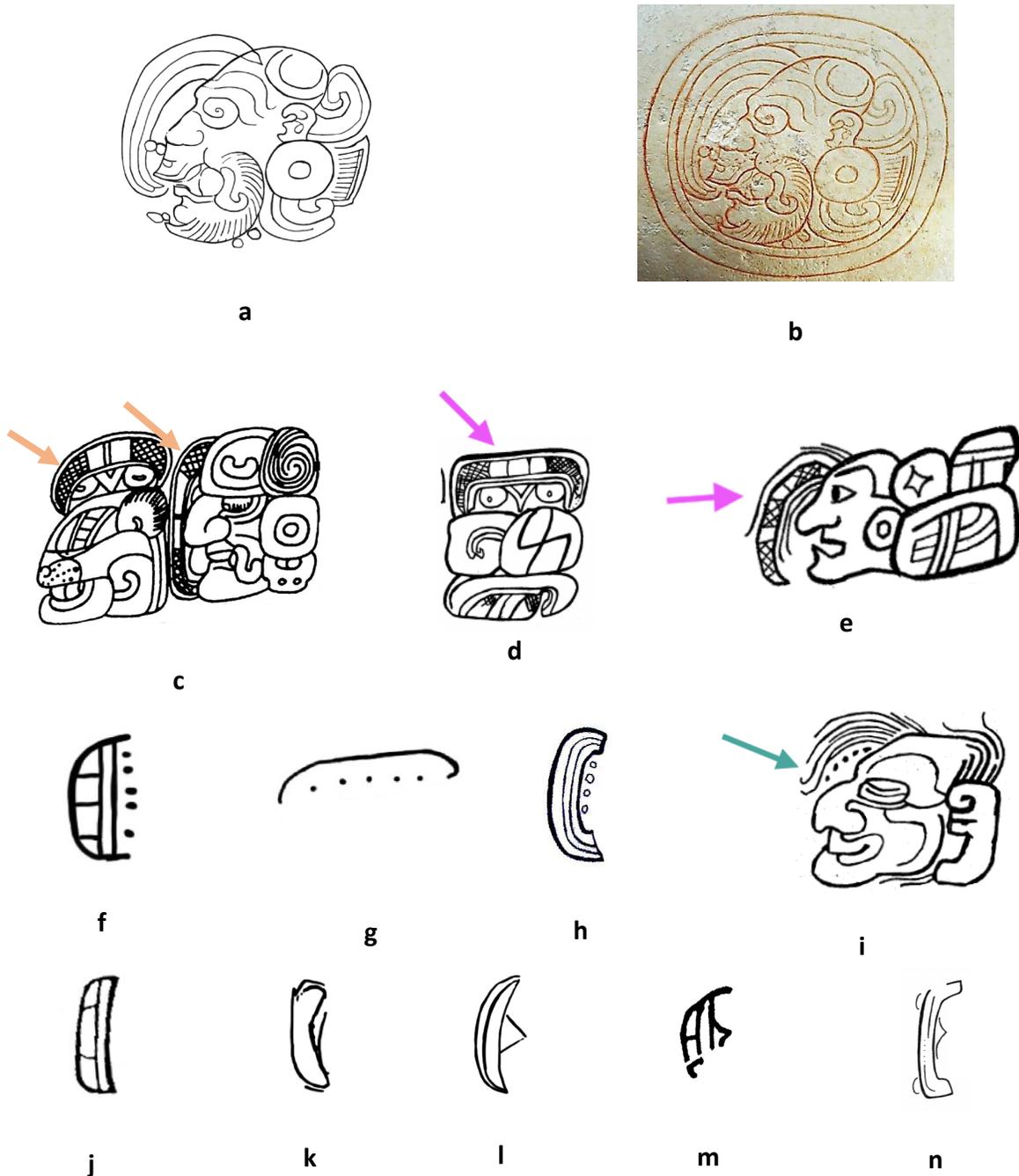
Fig. 4. Comparison of top cartouche and glyphs on circumference of sphere.

### Circumference Cartouches: The Text

Somewhat arbitrarily, I begin with the Glyph 2 in **Figure 2**, enlarged in **Figure 5**. This glyph depicts the so-called Old God (e.g. God N, God D). As described in Mora-Marín (2007), there are several versions of this



OLD.GOD sign, each with different values and functions, but often overlapping traits; ultimately they may point to the same sign, one that developed polyvalency, and possibly accrued, as time passed, graphic and iconographic traits that would tend to distinguish its values. This version exhibits a prominent beard, fish barbell, and a prominent shark-like tooth, which Mora-Marín (2007:2, Table 1) found to be diagnostic of the verbal function of this sign in the context of dedicatory texts. The circular element that normally makes up a part of the netted hat is not diagnostic for any of the values; neither is the prominent earflare. There is an element on the back of the head, beside the earflare, that is difficult to define: it shows a comb-like structure, but it is not clear whether it is a form of AA1/T25 **ka** or an early form of some other sign, such as 1S2/T116 **ni**; or it could be an iconographic, rather than graphemic element too. Mora-Marín (2007) also showed that many of the traits of the OLD.GOD sign, regardless of its value or function, tend to overlap. In the case at hand, it is possible that what looks like bangs dropping in front of the Old God's face includes a conflated form of HE6/T1 **?u**, which would mean the glyph could be read **?u-MAM**, and thus as a noun instead of a verb. If one assumes the main sign is an example of the logogram **MAM**, often translated as 'ancestor' by epigraphers (Stuart, Houston, and Robertson 1999; Stuart 2007), a very different analysis is obtained. Such confluations were common with the **MAM** sign. **Figure 5c** shows a case from Tikal Stela 31 where the "bangs" of the OLD.GOD sign are conflated with the HE6/T1 design that is used multiple times, in fact, almost exclusively, on that inscription, as suggested by the cross-hatching and horizontal-band details. A similar design of HE6/T1 **?u** visible on the Hauberg Stela (**Fig. 5d**) is comparable to the example conflated with the OLD.GOD sign's bangs on a well-known bird effigy vessel (**Fig. 5e**). A design of HE6/T1 **?u** lacking a central triangular element and showing more than two dots (**Fig. 5f-h**) may also be seen conflated in the bangs of the OLD.GOD sign on occasion (**Fig. 5i**). Not only are there examples of HE6/T1 **?u** that bear no "dots" (**Fig. 5j-n**), but there are also cases of it conflated with the bangs of the OLD.GOD glyph, as seen in **Fig. 5e**, rendering **?u:MAM-?AJAW**. If this is the case with the OLD.GOD glyph on the stone sphere, then perhaps it reads **?u:MAM** for *u-mam* 'the grandson/nephew/grandfather of', cf. Proto-Ch'olan \*mam 'grandson, nephew, grandfather' (Kaufman and Norman 1984:125), and one or more of the glyphs that follow it would name the grammatical possessor. It is possible, alternatively, that the OLD.GOD glyph represents either the verbal glyph common in Primary Standard Sequence-style texts, i.e. the GOD.N sign, proposed to have a value as **HU?** 'to blow (soplar)' (Mora-Marín 2007), but argued by Stuart (1995; 1998; 2005) to be read **T'AB'** 'to rise, to go up'. It seems more plausible that a nominal function is intended since the signs that follow provide a person's name and title; the verbal OLD.GOD sign, in the past transcribed as GOD.N-**yi**, is typically followed by a noun referring to a crafted/constructed object that is somehow being dedicated or inaugurated, rather than a human referent.



**Fig. 5.** **a.** God N glyphic portrait on stone sphere. **b.** Photograph by Justin Kerr. **c.** Tikal Stela 31 I1-J1. Drawing JM00856 by John Montgomery (<http://www.famsi.org/research/montgomery/index.html>), **d.** Detail from Hauberg Stela, **e.** Glyph 4 on incised avimorph ceramic vessel (Fields and Reents-Budet 2005), **f.** Sign from Deletaille vase with Ucanal Emblem Glyph. After drawing by Lin Crocker-Deletaille provided by Donald Hales, **g.** Denver Art Museum jade plaque, **h.** Metropolitan Museum of Art Spouted Limestone Vessel, **i.** Pearlman Conch Shell A1 (Coe 1982), **j.** T1/HE6 from Hombre de Tikal statuette (Fahsen 1988:4, fig. 4), **k.** T1/HE6 from jade belt plaque from Costa Rica, **l.** T1/HE6 from jade belt plaque reportedly from Rio Azul, **m.** T1/HE6 from jade belt plaque from Costa Rica (INS 4442), **n.** T1/HE6 from jade belt plaque (K8749). **a, d, e, f, g, h, i, k** drawings by author.



Next is Glyph 3, already discussed above (**Fig. 2 and 4**), shown somewhat enlarged in **Figure 6**. This sign constitutes a portrait glyph, showing a human head with a septum ring within the maws of a zoomorphic creature resembling a shark (prominent shark tooth), though some of the traits are suggestive of a reptilian mouth, likely a snake (scales, fangs). It could of course constitute an instance of the open-maw SNAKE logogram, ACH in Macri and Looer (2003:59), **CHAN/KAN**, for reflexes of Proto-Mayan \*kaan 'snake' (Proto-Ch'olan \*chan). The human head component bears two signs on its forehead, one of them seemingly the syllabogram **to** graphically infixed within another sign consisting of a cartouche with a fuzzy (hair- or fur-like) outline. This sign is also present on the headdress worn by the glyphic portrait shown in **Figure 3**. Since a headdress is a prime location for iconographically-embedded glyphic names, it makes sense that Glyph 3 is the name of the individual. This would make the open-maw SNAKE sign part of the individual's name, or perhaps a title. This is in accordance with the interpretation by Matthew Looer and Yuriy Polyukhovych (personal communication, 2020), who suspect that Glyph 3 corresponds to two of the signs present on the Nakum clamshell effigy pectoral pendant (Żrałka et al. 2011:897–898). The glyphs in question have been read as **IXIIM? CHAN** 'Maize(-God) Snake' by Simon Martin (cf. **Fig. 10** below). If they are the same sign, the **to** syllabogram present on the example on the sphere would suggest a different reading. I return to this issue below.



a

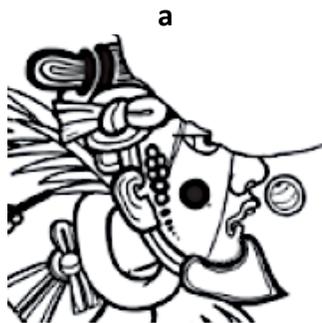
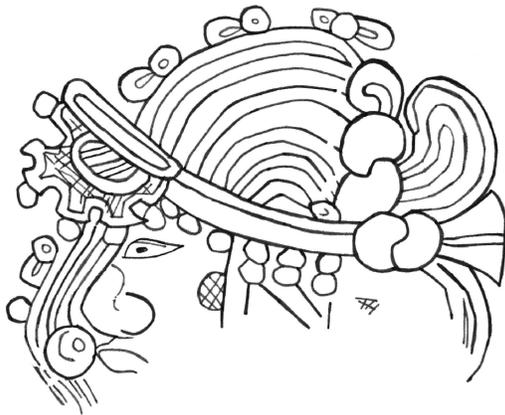


b

**Fig. 6.** Glyph from sphere showing a human head within the maw of a zoomorphic, possibly piscine, creature. **a.** Drawing by this author, **b.** Photograph by Justin Kerr.

The next glyph, Glyph 4, shown in **Figure 7**, was also discussed briefly in relation to the top cartouche (**Fig. 4**). With its prominent headband, lined with beads and tied into a knot on the back, as well as the cross-hatched spot on the cheek, it is almost certainly an example of the glyph **?AJAW** representing a reflex of Proto-Mayan \*?aajaaw, with the meaning 'lord, ruler' during the Classic period. The figure also dons a hair bun, tied with a piece of cloth or lace into a knot. The front, central jewel of the headband is strongly reminiscent of T699/ZZA, the syllabogram **tza**, minus the component that resembles T74/32A **ma**. These traits—hair bun, headband, spot on the cheek—are also seen among the figures performing

blood sacrifice on the San Bartolo murals (**Fig. 7c-d**). In fact, the headband does not only span across the forehead, but typically also wraps downward, as seen in the examples from the San Bartolo imagery, but also elsewhere (**Fig. 7e-f**). The downward-wrapping component of the headband is not obvious on Glyph 4, especially due to the damage that erased the bottom part of the sign. However, it is visible on the version of this sign that is seen in the top cartouche, as already discussed (**Fig. 4g**).



**e**

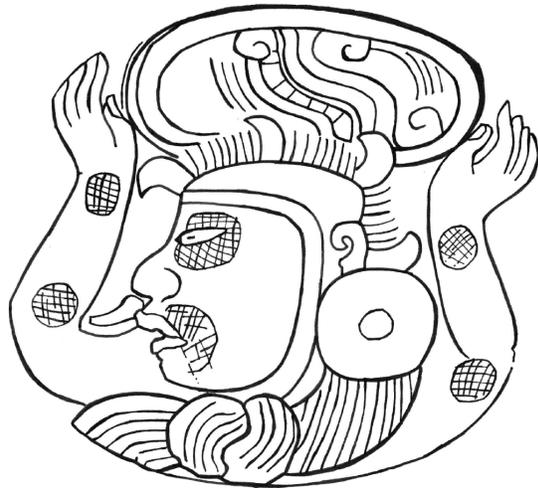
**f**

**Fig. 7.** a. Probable **?AJAW** 'lord, ruler' glyph on sphere. Drawing by this author, b. Photograph by Justin Kerr, c-d. depictions of individuals on San Bartolo West Wall (Structure Sub-1A). Drawing by Heather Hurst from Taube et al. (2010:10-11, Fig. 7), e. Individual from Mound J Tablet at Monte Alban. Drawing from Taube et al. (2010:17, Fig. 11), f. Individual from Izapa Stela 25. Drawing from Taube et al. (2010:17, Fig. 11).



**Figures 8a-b** show Glyph 1. This glyph is likely a conflation of two (?PE5:?MB1/MB3/MB4) or three (?PE5:?MB1/MB3/MB4:?1M2) signs. It shows a partial human figure holding up or raising up (?MB1/MB3/MB4) a stone or celt (?1M2) with both hands. The figure shows spots or moles, suggestive of sign PE5. A close match, but one lacking the spots or moles, is seen in a Late Classic example, functioning as a likely passive verb in *-h...-aj*, on the famous Altar de Sacrificios Vase, seen in **Figure 8c**. Instead of the spots or moles on the human figure, it is characterized by miniature “Cauac” markings consistent with those on the T528/ZC1 graphic element of T175/MB4, a sign that is likely read **TIL** for either Proto-Ch’olan *\*til* ‘to burn’, an intransitive root, or Proto-Ch’olan *\*til* ‘to untie’, a transitive root, based on phonetic substitutions **ti-li** (Grube, Schele, and Fahren 1991). Recently, Marc Zender (Zender 2016) proposed that this sign constitutes an allogram with respect to the “flat hand” sign, which has the value **K’AL** in verbal contexts, for *k’al* ‘to close, to tie, to bind’. For now, I will only assume that the ?MB1/MB3/MB4 sign likely represents a verb, and that, as is often the case with other verbs in dedicatory expressions, including the **K’AL** expression, the logogram may stand for the fully inflected form of the verb, without the need for explicit syllabograms to represent necessary derivational and inflectional suffixes—whether in part or whole.

Regarding the presence of the STONE or CELT (T617/1M2) sign above the head of the figure, the example on the Altar vase is likely not meant to be read, as the verb is most likely referring to an action done to the vase itself, or both the painting/writing and the vessel, not a stone or celt. That said, on the stone sphere, things could be different. Perhaps this early text dates to a time before the STONE/CELT above the head of the figure had become graphically fossilized, incorporated into a verbal logogram. Or perhaps there is a double reading at play, with the STONE/CELT sign functioning both as a graphic element that is part of the verbal logogram, as well as a separate grapheme referring to ‘stone’ (since the sphere is not a celt). If so, the T617/1M2 sign could refer to the ‘stone’, the stone sphere itself, a suggestion made by MatthewLooper and Yuriy Polyukhovych. Given the conflation that is at work, this is plausible. If so, then the human figure with the raised hands could be conflated with the sign representing a human head in profile with spots or moles, PE5, which bears a syllabographic value **?u** (**Fig. 8d-f**). Its likely function here would be as a possessive proclitic *u-* ‘his/her/its’ to *tun* (< *\*tuun*) ‘stone’. Thus, the more likely analysis of Glyph 1 would be as VERB[-*aj*/-*Vy*] *u*-STONE, or ‘his stone was/got/became VERBed’. As suggested by MatthewLooper (personal communication, 2021), another alternative would be a possessed noun preceded by a verbal (stative or participial) modifier, ‘[it is] the VERBed stone of...’.



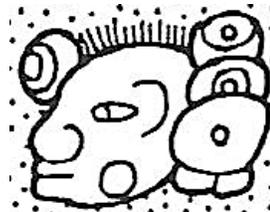
a



b



c



d



e



f

Fig. 8. a. Glyph showing person raising up or holding up stone. Drawing by this author, b. Photo by Justin Kerr, c. Drawing of glyph from Altar de Sacrificios Vase (Adams 1963) by John Montgomery (#03206), d. PE5 on Nelson-Atkins Museum panel. Drawing by Christian Prager, e. PE5 on Houston panel. Drawing by Alexandre Safronov, f. G5 on Tablet of 96 Glyphs at Palenque. Drawing by Linda Schele.

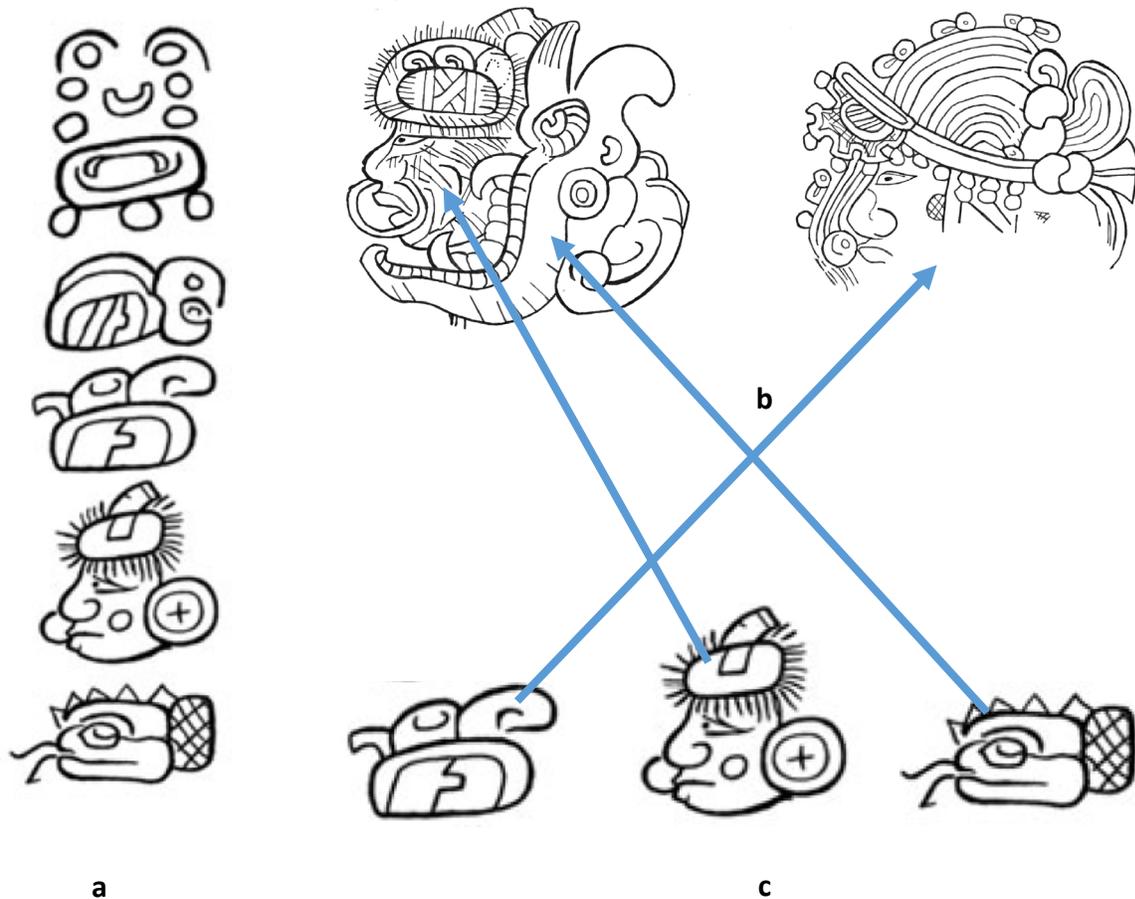
Figure 9 summarizes the suggestions posed above. At this point there are too many unknowns to offer a definitive solution. Instead, the reading provided within single quotes is what I consider to be the simplest solution, but it requires ignoring many assumptions, and possibly reading too much in some cases (i.e. the proposed conflation in Glyphs 1 and 2). No matter what interpretation is followed, there would seem to be a need to call for scribal omissions of linguistically obligatory grammatical markers, or graphemic allowances, or both. If as suggested above, Glyph 1 conflates a verbal sign with two additional signs corresponding to a possessed noun, then a reading for the whole sentence would be 'The stone of the grandfather/grandson/nephew of ?-? Snake Lord was VERBed'.



			
1	2	3	4
ʔMB4:ʔPE5?:1M2	ʔʔu:ʔMAM	ʔ[to]:ʔCHAN/KAN	ʔAJAW
<p>Passive/Inchoative Verb (MB1/3/4) (Person with raised arms) conflated with following possessed noun (PE5, spotted individual; 1M2, oblong polished stone/celt)</p> <p>VERB + ʔu-ʔSTONE</p> <p>'the stone of ... became VERBed' (VERB-<i>aj</i>/-<i>V<sub>1y</sub></i>)</p>	<p>Possessed noun</p> <p>ʔu:MAM for <i>u-mäm</i> 'his grandfather, grandson, or nephew' (or 'the grandfather, grandson, or nephew of...')</p>	<p>Name of Possessor (ʔto-ʔ), Name of Location (Snake)</p>	<p>Title <i>ʔajaw</i> (&lt;<i>ʔaajaaw</i>) 'lord, ruler'</p>
'the stone of ... became VERBed'	... the <i>mäm</i> of...	ʔ-ʔ Snake	Lord
'The [stone] of the <i>mäm</i> (grandfather?) of ʔ-ʔ Snake Lord was/got/became VERBed'			

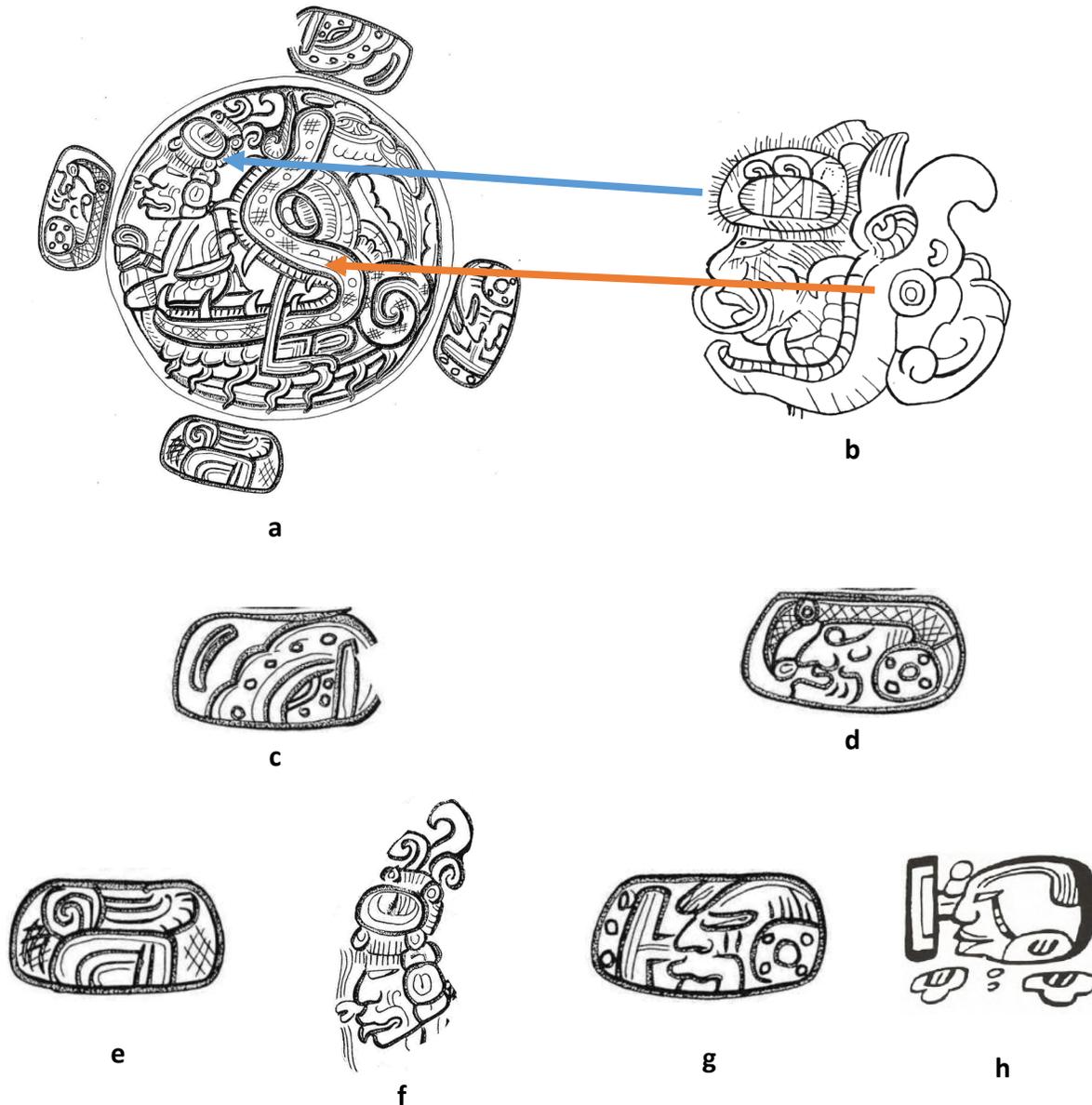
Fig. 9. Transcription, translation and commentary on text of sphere.

An observation made by Matthew Looper and Yuriy Polyukhovych offers an alternative analysis of the order of the glyphic cartouches, and therefore of the structure of the text. Those authors have observed an interesting parallel between several of the glyphs on K6582 and three of the glyphs on the Nakum clamshell effigy jade pectoral (Żrałka, Koszkuł, Martin, and Hermes 2011:897), illustrated in **Figure 10a**. More specifically, they have observed that what I have labeled Glyphs 3 and 4, seen in **Figure 10b**, are consistent with the last three glyphs on the Nakum pectoral text, seen in **Figure 10c**. This of course could require that the ʔAJAW glyph is not the last glyph in the text, and if so, that the text in reverse direction from that suggested by the glyphic faces, right-to-left instead of left-to-right. It is possible that the difference in sequential order correlates with a difference in linguistic structure. If one assumes that SNAKE refers to the Snake kingdom, functioning as a toponym or polity name, then two analyses could be offered: ʔ-ʔ SNAKE LORD could be read 'ʔ-ʔ from Snake(-place), (a) lord', while LORD ʔʔIXIM SNAKE could be read 'lord, *ixim* from Snake(-place)'.



**Fig. 10.** Parallels between text of stone sphere and Nakum clamshell effigy pectoral pendant. **a, c.** Inscription on Nakum clamshell effigy pectoral pendant. Drawing by Simon Martin in Żrańka, Koszkul, Martin, and Hermes (2011:897), **b.** glyphs from sphere

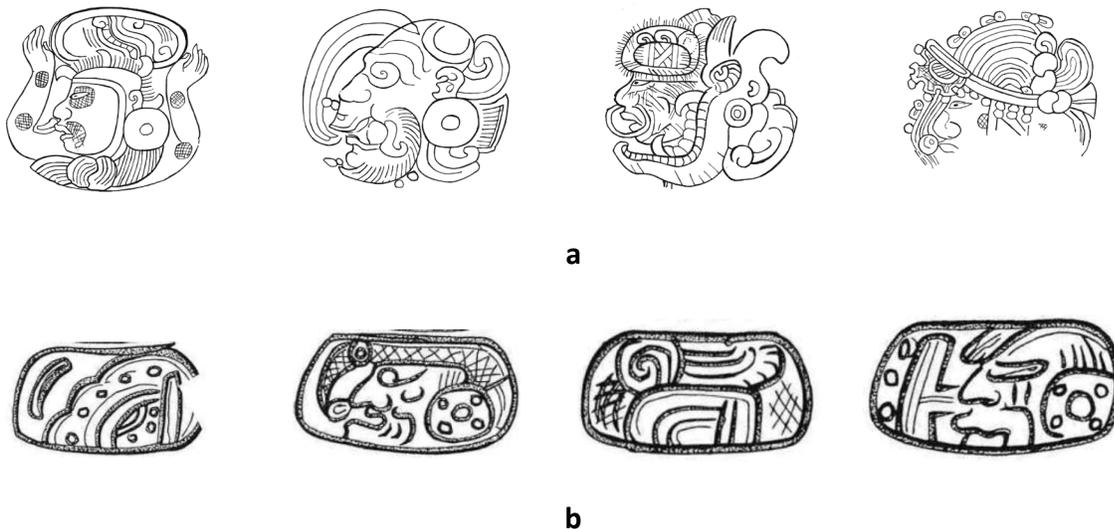
Yet another reference to the individual named on the stone sphere may appear on a ceramic plate. **Figure 11** shows a drawing by Donald and John Hales of a carved ceramic plate lid housed at the de Young Museum (2009.1.49), corresponding to K1369. The top surface of the lid is decorated with a full-figure glyphic name, seemingly the same name as in Glyph 3 of the stone sphere (**Fig. 11a, b**), including the human-head glyph that may correspond to the Maize God's name, and the open-mouthed snake, sign ACH (Macri andLooper 2003). The more typical text on this plate includes four glyphic cartouches: the first is the STEP sign (**Fig. 11c**), followed by the OLD.GOD/GOD.N sign (**Fig. 11d**), followed by a sign that resembles part of the portrayed individual's headdress (**Fig. 11e, f**), who closely resembles the Maize God, and concluding with a glyphic collocation identical with the logogram for NORTH, with the addition of the numerical logogram 'three', 3-NORTH (**Fig. 11g**), perhaps ?UX-NAH/nah/na-?NA(HA)L. The 'north' expression from Rio Azul's Tomb 12 is seen in **Figure 11h** for comparison.



**Fig. 11.** a. Carved Early Classic ceramic plate lid at de Young Museum in San Francisco (2009.1.49). Drawing by Donald & John Hales (1976, revised October 2000, All Rights Reserved), b. Glyph 3 on K6582, c. First glyphic cartouche on de Young plate lid, d. Second glyphic cartouche on de Young Museum plate lid, e. Third glyphic cartouche on de Young Museum plate lid, f. Portrayed seated individual on top of lid, g. Fourth glyphic cartouche on de Young Museum plate lid, h. Detail from Tomb 12 at Rio Azul. Drawing by David Stuart in Stuart (1987:162, fig. 41).

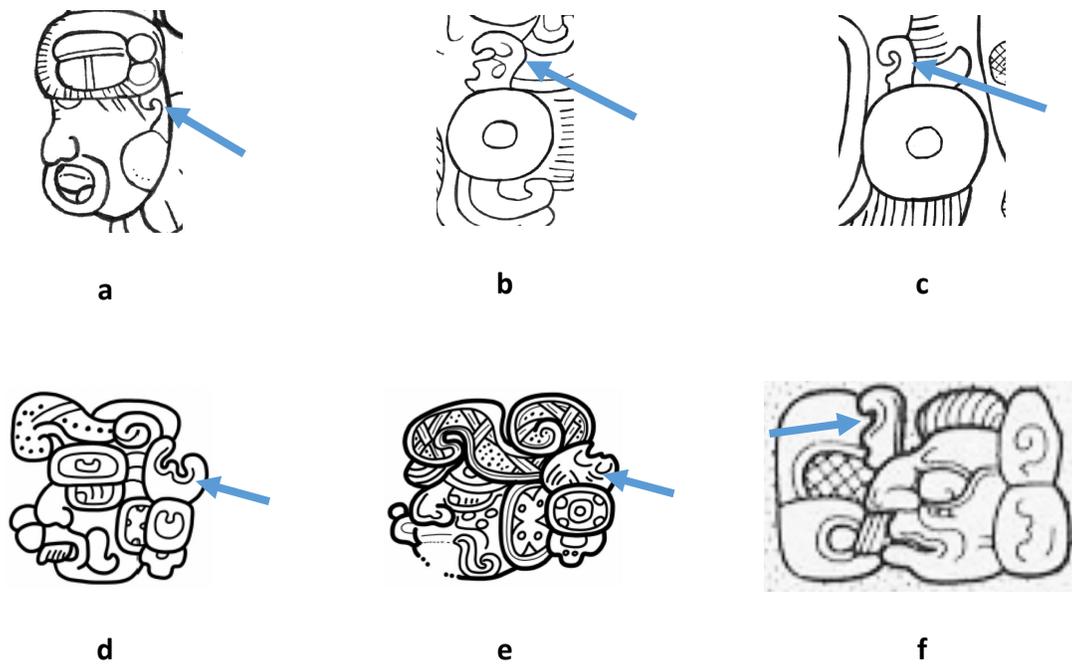
Interestingly, the stone sphere, K6582, and the cache vessel lid, K1369, bear a similar visual formatting of their texts: five glyphic cartouches, one on the top and four arranged around the circumference. The top glyphic cartouche, in both cases, is of a more pictorial nature. The four remaining glyphs may superficially exhibit a similar structure: a glyph that may function as a verb (the MB1/MB3/MB4 sign in the stone sphere, the STEP sign in the cache vessel lid), followed by the Old God glyph, followed by two

glyphs referring to an individual (**Fig. 12**). However, the similarity in this sense could be merely superficial: in the case of the plate, the Old God glyph is more likely to be the verbal GOD.N glyph of dedicatory texts given the presence of the netted hat, as Looper (personal communication, 2021) has observed, which is not associated with the **MAM** reading (cf. Mora-Marín 2007:Table 1). MacLeod (1990:129) had previously commented on this fact—that the STEP and GOD.N glyphs may co-occur, as in the case of K1921. Although that author dismissed the significance of this co-occurrence, Mora-Marín (2001:107) suggested that this could mean that they represent different verbal expressions, and argued that the two co-occur on the inscription of the Dumbarton Oaks quartzite pectoral too. Another observation that highlights the superficial nature of the similarity between the texts pertains to the already stated fact that on the Altar vase the MB1/MB3/MB4-like collocation is immediately followed by the STEP[yi] collocation, suggesting that they are not allograms, but distinct verbal expressions. And of course, the individuals' names are different.



**Fig. 12.** Comparison of (a) text on sphere with (b) Early Classic ceramic plate lid in de Young Museum, San Francisco (2009.1.49). Drawing by Donald & John Hales (1976, revised October 2000, All Rights Reserved)

Finally, an interesting iconographic and stylistic detail, a billhook-shaped element, present on three of the glyphs, as seen in **Figures 13a-c**. This is not a common detail, and is potentially one that could help scholars find a geographic and/or temporal context for this unprovenanced artifact. Similar elements appear also associated with earflares in the version of the head variant **K'INICH** sign used to spell Copan Ruler 2's name on the Xukpi Stone (9.0.2.0.0, CE 437) and Stela 63 (9.0.0.0.0, CE 435, but believed to be retrospective, likely from a few decades later), seen in **Fig. 13d-e**, respectively. Perhaps a much closer graphic parallel is found on glyph L1 from the Dos Pilas Hieroglyphic Stairway 4, Step V, seen in **Fig. 13f**, although this example, which has been suggested to correspond to a deer antler, appears in a different location, above the portrait glyph's nose instead of above the earflare, and thus may have a different function.



**Fig. 13.** a-c. Examples from K6582. Drawings by the author, d. Copan Ruler 2's glyphic name on the Xukpi Stone. Drawing by Christian Prager, e. Copan Ruler 2's glyphic name on Stela 63. Drawing by Christian Prager, f. Glyph L1 from Step V from Dos Pilas Hieroglyphic Stairway 4. Drawing by Stephen Houston (1993:109, fig. 4–11).

## Conclusions

It can be concluded that the sequence of the circumference glyphs shown in Figure 2 is the correct one, and also, that Glyph 4, the **?AJAW** 'lord, ruler' glyph, is most likely the final expression in the text. It seems likely that the cartouche atop the sphere is intended to be more pictorial than textual, and it is clear that it contains two components that make up the entirety of Glyph 3 and part of Glyph 4. Glyph 1 is proposed to be a conflation of a dedicatory verbal expression and a nominal expression ('his stone'), while Glyph 2 is proposed to be a conflation of a possessive proclitic *u-* and the **MAM** logogram. But any definitive attempt at a detailed linguistic analysis will remain hampered by the seeming absence of signs conveying grammatical markers (in part or in whole) at this time; perhaps such signs may yet be shown to be present, perhaps infixed into or conflated with the already described signs. Further comparison with other texts will be required to illuminate this problem, but for now the most likely paraphrase of the is 'The [stone] of the *mäm* (grandfather?) of ?-? Snake Lord was/got/became VERBed'. Here, *mäm* could refer to grandfather, nephew, or grandson, but I favor a reference to someone's grandfather, and therefore, that the stone sphere was an heirloom.



**Acknowledgments:** I am extremely grateful to Matthew Looper and Yuriy Polyukhovych for sharing some of their ideas on the inscription, as well as detailed comments on my draft, comments that have been very influential in the present version. I also thank Justin Kerr for his kind permission to publish his photographs of Maya objects.

## References

Adams, Richard E. W.

1963 A Polychrome Vessel from Altar de Sacrificios. *Archaeology* 16(2): 90–92.

Berlo, Janet Catherine

1983 *Text and Image in Pre-Columbian Art: Essays on the Interrelationship of the Verbal and Visual Arts*. International Series, 180. Oxford: British Archaeological Reports.

Coe, Michael D.

1966 *An Early Stone Pectoral from Southeastern Mexico*. Studies in Pre-Columbian Art and Archaeology, 1. Washington, D. C.: Dumbarton Oaks Research Library and Collection, Trustees for Harvard University.

1982 *Old Gods and Young Heroes: The Pearlman Collection of Maya Ceramics*. Jerusalem: Israel Museum.

Fahsen, Federico

1988 A New Early Classic Text from Tikal. *Research Reports on Ancient Maya Writing* 17. Washington, D. C.: Center for Maya Research.

Fields, Virginia M, and Dorie Reents-Budet

2005 *Lords of Creation: The Origins of Sacred Maya Kingship*. London: Scala.

Grube, Nikolai, Linda Schele, and Federico Fahsen

1991 Odds and Ends from the Inscriptions of Quirigua. *Mexicon* 13(6): 106–112.

Houston, Stephen D.

1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. Austin: University of Texas Press.

Kaufman, Terrence, and William M. Norman

1984 An Outline of Proto-Cholan Phonology, Morphology, and Vocabulary. In *Phoneticism in Mayan Hieroglyphic Writing*. John S. Justeson and Lyle Campbell, eds. Pp. 77–166. Albany: Institute for Mesoamerican Studies, University of New York at Albany.

MacLeod, Barbara

1990 Deciphering the Primary Standard Sequence. Ph.D. dissertation, University of Texas at Austin.

Macri, Martha J., and Matthew G. Looper

2003 *The New Catalog of Maya Hieroglyphs, Volume One: The Classic Period Inscriptions*. Norman: University of Oklahoma Press.



Mora-Marín, David F.

2001 The Grammar, Orthography, and Social Context of Late Preclassic Mayan Texts. Ph.D. dissertation, State University of New York.

2007 A Logographic Value Hu7 (~707) “to Blow” or “Sacred, Moral, Power” for the God N Verbal Glyphs of the Primary Standard Sequence. *Wayeb Notes*, No. 27. <http://wayeb.org/wayebnotes.php>.

Stuart, David

1987 The Paintings of Tomb 12, Rio Azul. In *Rio Azul Reports Number 3: The 1985 Season*. Richard E. W. Adams, ed. Pp. 161–167. San Antonio: University of Texas at San Antonio.

1995 A Study of Maya Inscriptions. Ph.D. dissertation, Vanderbilt University.

1998 “The Fire Enters His House:” Architecture and Ritual in Classic Maya Texts. In *Function and Meaning in Classic Maya Architecture*. Stephen D. Houston, ed. Pp. 373–425. Washington, D. C.: Dumbarton Oaks Research Library and Collection, Trustees for Harvard University.

2005 *Sourcebook for the 29th Maya Hieroglyph Forum, March 11–16, 2005*. Austin: University of Texas at Austin, Department of Art and Art History.

2007 The Mam Glyph. Maya Decipherment: Ideas on Ancient Maya Writing and Iconography: Posted September 29, 2007. <https://mayadecipherment.com/2007/09/29/the-mam-glyph/>.

Stuart, David, Stephen D. Houston, and John Robertson

1999 *Recovering the Past: Classic Maya Language and Classic Maya Gods: Notebook for the XXIIIrd Maya Hieroglyphic Forum at Texas*. Austin: University of Texas at Austin.

Taube, Karl A, William A Saturno, David Stuart, Heather Hurst, and Joel Skidmore

2010 *The Murals of San Bartolo, El Petén, Guatemala. Part 2: The West Wall*. Barnardsville, N.C.: Boundary End Archaeology Research Center.

Zender, Marc

2016 Revisiting a Classic Maya Coronation Ceremony. Presentation for Institute of Maya Studies.

Żrałka, Jarosław, Wiesław Koszkuł, Simon Martin, and Bernard Hermes

2011 In the Path of the Maize God: A Royal Tomb at Nakum, Petén, Guatemala. *Antiquity* 85(329): 890–908.



Glyph Dwellers is an occasional publication of the Maya Hieroglyphic Database Project at California State University, Chico, California. Its purpose is to make available recent discoveries about ancient Maya culture, history, iconography, and Mayan historical linguistics deriving from the project.

Funding for the Maya Hieroglyphic Database Project is provided by the National Endowment for the Humanities, grants #RT21365-92, RT21608-94, PA22844-96, the National Science Foundation, grants #SBR9710961 and IBSS1328928, the Department of Native American Studies, University of California, Davis, and the Department of Art and Art History, California State University, Chico.

© 2021 Matthew G. Loper. All rights reserved. Written material and artwork appearing in these reports may not be republished or duplicated for profit. Citation of more than one paragraph requires written permission of the publisher. No copies of this work may be distributed electronically, in whole or in part, without express written permission from the publisher.

ISSN 1097-3737