

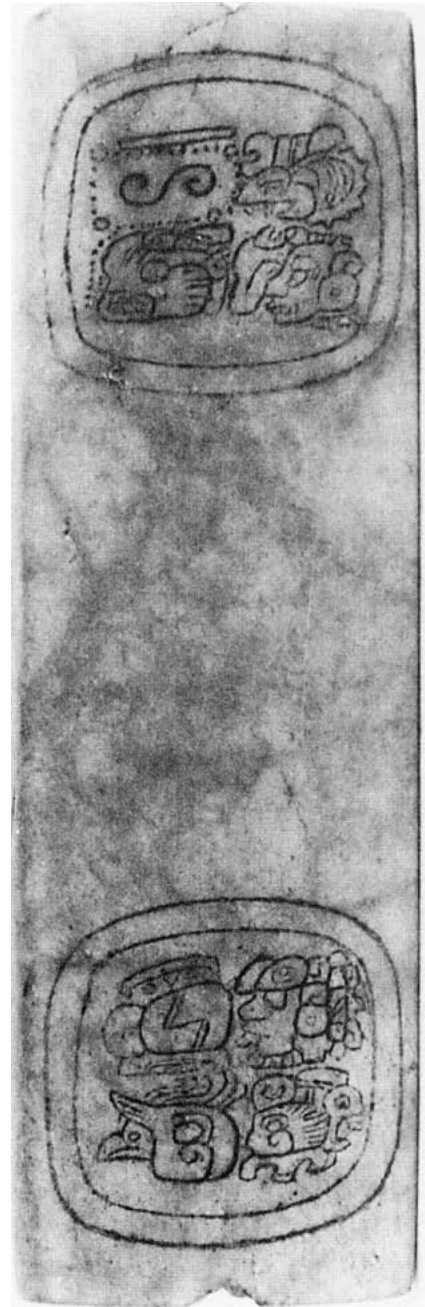
# The Cleveland Plaque: Cloudy Places of the Maya Realm

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The Cleveland Museum of Art houses a beautiful example of Maya handiwork in jade, referred to here as the Cleveland Plaque (fig. 1). Carved from light green mottled jade, the Cleveland Plaque measures 14.4 cm. in length and 1.4 cm. in maximum width and weighs 253.5 grams.<sup>1</sup> The rectangular plaque has slightly rounded sides and bears an incised text that today is heightened with an unidentified black paint. A photograph published by Keleman (1943:v. 2, pl. 235b) reveals that the plaque was repainted sometime before the Cleveland Museum of Art purchased it in 1950.

Drilled through the center of the plaque is a large, straight hole, about a half a centimeter in diameter, which flares out into conical cavities (fig. 2). These crudely worked cavities have left the edges of the plaque very thin, and consequently they are chipped. The damage supports Keleman's (1943:v.2, p. 289) suggestion that the plaque was originally worn as a bar pectoral. Maya bar pectorals are usually flanked by other jade ornaments, which are precisely what may have chipped the thinner edges of the plaque from repeated impact. However, no holes were noted on the long, narrow edge of the plaque, so it is not clear how it was suspended from the neck. In any case, the damage provides concrete evidence that the Cleveland Plaque was used in some active fashion, probably on many occasions.

If worn as a bar pectoral the Cleveland Plaque would present the inscription on its side (and this is precisely how Keleman illustrated it—sideways). Although this may seem odd, it is not at variance with Maya practices. In fact, one type of bar pectoral depicted in the art of a number of Central Lowland sites (e.g., Tikal, Naranjo, Dos Pilas, Caracol, and Xultun) represents a laterally oriented skull. Furthermore, Proskouriakoff (1974:pl. 45) identifies several long jade objects dredged from the sacred cenote of Chichen Itza as bar pectorals, and they, too, would have had their imagery and glyphs appearing sideways on the wearer. However, a third, and more likely, explanation for the lateral orientation of the text is that the Cleveland Plaque was originally worn as a plain



*Fig. 1 The Cleveland Plaque. The Cleveland Museum of Art. Purchase from the John L. Severance Fund, CMA 50.377.*

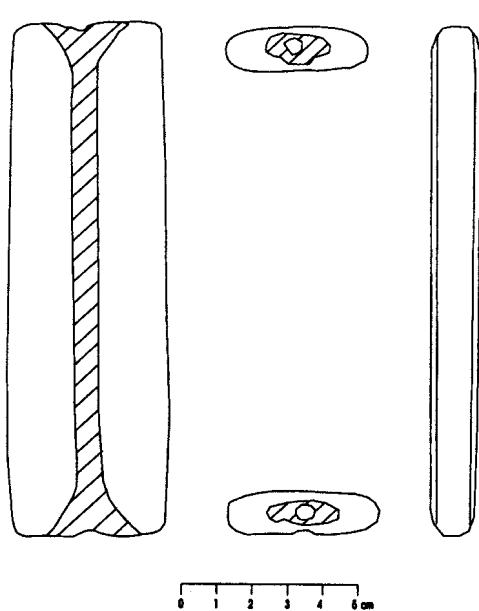


Fig. 2 The Cleveland Plaque, profile, ends, and side.

bar pectoral and that the inscription was added to it when the plaque went into the owner's tomb. This idea is expanded upon below.

### Commentary on the Inscription

The Cleveland Plaque bears an Early Classic inscription which, on stylistic grounds, should date no later than early Cycle 9, probably somewhere between 400-500 A.D (fig. 3). Two cartouches with double outlines frame the text which consists of eight glyph blocks. This kind of format is known from other Early Classic carved stone plaques found in lower Central America (Houston and Amaroli 1988:fig. 4; Reents-Budet and Fields nd.), although the provenience of the Cleveland Plaque is unknown.

Each cartouche of the Cleveland Plaque mentions the name of a single royal personage. The text opens at A1 with TV:632. The decipherment of this collocation is quite involved and is treated separately in a lengthy discussion below. For the moment we will continue on to the first protagonist's name at B1: a bone compounded with an eyeless zoomorphic head with four teeth. The head is framed by a jagged border and bears parallel lines often seen on Maya depictions of vultures. Based on these diagnostic traits, I call this individual "Bone-Jagged-head-Vulture."

Following the name is an Emblem Glyph (at A2) with a T168 ahaw superfix and a dotted *k'ul/ch'ul* prefix (Ringle 1988). Unfortunately,

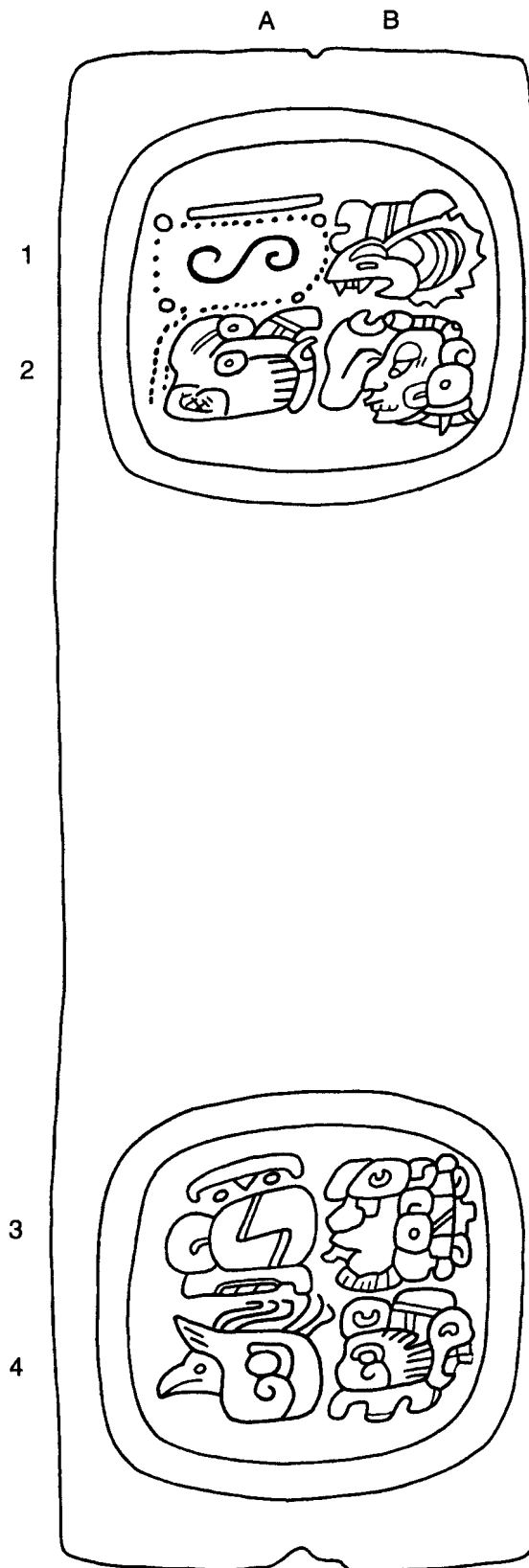


Fig. 3 The Cleveland Plaque.

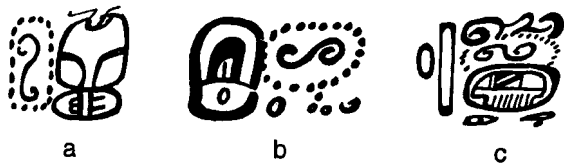


Fig. 4 Various *muyal* compounds: a. *muyal chak*, Naj Tunich Drawing 34, B2, b. *ek' muyal*, Dresden 38 (after Lee 1985), c. *wak-kaan-muyal-nal*, Rio Azul, Tomb 12 (redrawn after drawing by David Stuart in Graham 1986:456).

part of the Emblem Glyph is not clearly carved. Specifically, the circle at lower left contains crude lines, and near the upper right edge the jade is damaged. Nonetheless, the Emblem Glyph main sign can be identified as a “*ka*-fish” (T738) based on the circular eye and fish fins above the “mouth” and along the righthand border. In addition, this glyph should be analogous to the Emblem Glyph main sign at 134 which clearly is a “*ka*-fish.” The postfix might be a T130 *wa* phonetic complement to *ahaw*, though this is not entirely clear.

The lord named in Cartouche 1 carries a post-Emblem Glyph title at B2. The prefix admittedly is baffling, though it bears some resemblance to T568c *lu*; unfortunately, little more can be said about it at the moment. Adjacent to it is a fleshed death god head trimmed by “death eyes” and

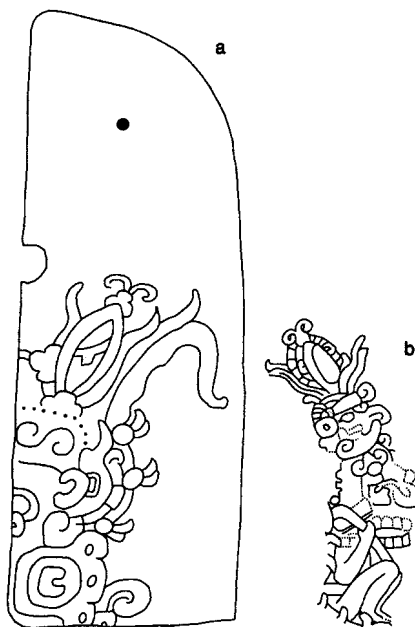


Fig. 5 a. Early Classic Maya jade found in Costa Rica. (drawing by Dorie Reents-Budet). b. Stela 2, Tikal, detail. (redrawn after Jones and Satterthwaite 1982:fig. 84a).

“death hair.” Skeletalization is also suggested by lines lightly incised on the cheek, mouth, corners of the eye, and brow. I am of the opinion, as will be discussed below, that this death god signals the moribund state of Bone-Jagged-head-Vulture.

In Cartouche 2 the second protagonist is introduced by a “successor of” compound (Riese 1984), here T19.1:573:88 (at A3). As the syntax is “Lord 1 is the successor of Lord 2,” Bone-Jagged-head-Vulture must have succeeded the second individual in the dynastic sequence of some presently unidentified Early Classic site. Introduced by a personified *ma k'ina* title (at B3), the protagonist’s name (at A4) is represented by the head of a quetzal bird, *k'uk'*. This appellative is interesting in light of the fact that other Early Classic rulers are also called *K'uk'*, several of whom are lineage founders. For instance, the lineage founder of Copan is Yax K'uk' Mo' (Schele 1992) and the lineage founder of Palenque is *K'uk' Balam* (Schele and Mathews 1993). Lincoln (1990: 119) has pointed out a definition of *k'uk'* in the Motul Dictionary,



Fig. 6 Copan Stela D, west. (redrawn after Maudslay 1889-1902: vol. 2, pl. 46).

“*renewo, tallo o pimpollo de árbol o bretón de berza, de aquí se toma por los hijos y descendientes que uno deja,*” which suggests associations with, in Lincoln’s words, “vegetative regeneration, and by analogy, human reproduction seen from the perspective of lineage.” As *k’uk’* subsumes ideas revolving around plant growth and human fecundity (Barrera Vásquez 1980:420), this name may have been somehow considered appropriate for Classic Maya lineage founders.

K’uk’s name is followed at B4 by an Emblem Glyph with a T168 superfix, but lacking the *k’ul/ch’ul* prefix. The “ha-fish” main sign, with its circular eye, cheek scroll, and fin-like appendages, is affixed with T23 and T229.

As Bone-Jagged-head-Vulture is the successor of K’uk’, it is virtually certain that both protagonists would carry the same Emblem Glyph, and, indeed, the Emblem Glyphs at A2 and B4 do look similar, if not identical. The example at A2 lacks the T23 and T229 affixes seen at B4; their absence in one case suggests that they are optional elements compounded with the Emblem Glyph. I would propose that the T23 subfix represents the word *na* ‘house’. While *na* (or alternately *nah*), the word for ‘house’ in many Mayan languages, principally denotes ‘house’ in the sense of a physical structure, certain dictionary entries show that *na* also extends to kin relations, just as we refer

to “the house of Windsor”: for instance, modern Tzotzil *na* ‘one or more localized patronyms’ (Laughlin 1975:265) and Colonial Tzotzil *nail* (*na* plus a relational suffix) ‘family’ (Laughlin 1988:265), and Yucatec *ba’al nail*, one meaning of which is ‘family’ (Barrera Vásquez 1980:36). *Ahaw na* is defined in Yucatec as *casa grande o casa real* (Barrera Vásquez 1980:545), here referring to a real building, a royal palace. An *ahaw na* reading can also be derived from the T168 and T23 affixes of the Cleveland Plaque’s second Emblem Glyph, but the sense here might be one of a royal lineage. This unusual Emblem Glyph “*na*-construction” might be linked with the fact that K’uk’ was the lineage founder after all. Moreover, Schele (1992:142) has read the lineage founder collocation as ‘sprout tree house’ (the house component supplied by T4 *na*), which is curiously suggestive of the *k’uk’* ‘sprout’ reading noted earlier.

The Emblem Glyph’s “*ka*-fish” main sign might be construed as *kah*, ‘town’ in Yucatec. This reading is supported by the T229 postfix which, when added to the main sign, yields *ka-ah*, *kah*<sup>2</sup>. Another possible “*ka*-fish” Emblem Glyph occurs at Nimli Punit (Mathews 1991:fig. 2.2, see Stela 1, C4 and Stela 2, B3); however, it is not certain that the main sign really is a fish head (Barbara MacLeod, personal communication 1993). But if the Nimli Punit Emblem Glyph were a refer-

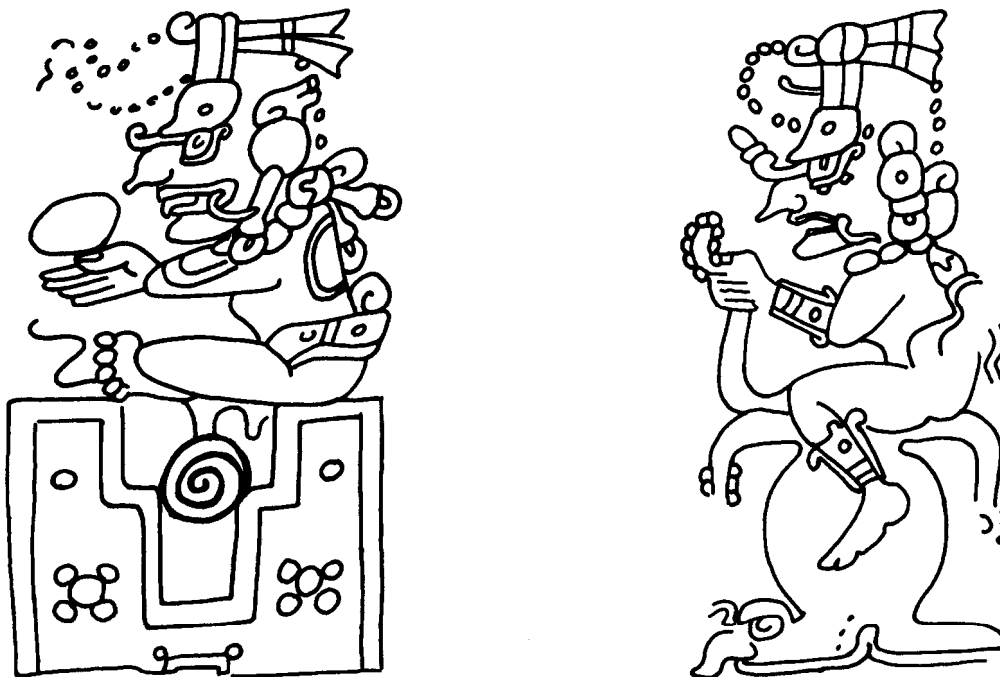


Fig. 7 Chac with dotted scrolls on head. a. Dresden 41a (redrawn after Lee 1985). b. Dresden 40a (redrawn after Lee 1985).

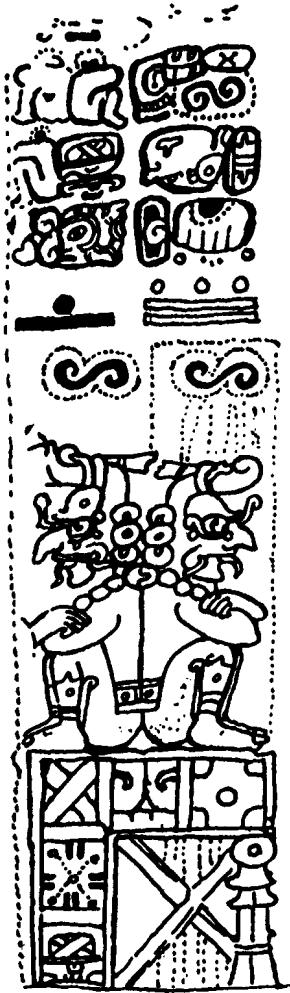


Fig. 8 Page 68a, left scene, from the Dresden Codex (after Villacorta and Villacorta 1976:146).

ence to a “holy lord of the town,” does this mean that the Cleveland Plaque comes from Nimli Punit or a neighboring polity using the same Emblem Glyph? Certainly, one factor that argues against a Nimli Punit provenance is that the site has no inscriptions dating before 700 A.D., well after the Cleveland Plaque was created.

### The Moyal Logograph

We can now return to the first glyph in the text: TV:632. Houston and Stuart (1990) recently proposed a reading of *moyal*, ‘cloud’ for T632. The present author reached the same conclusion independently (personal communication to Barbara MacLeod, 1990). The affix patterns on T632 support this reading, as it sometimes takes a T126 *-ya* suffix (e.g., Naranjo Stela 13, G9) or T126.128, *-yal* (e.g., Naranjo Stela 2, D18). In addition,

Houston and Stuart note a *mu-* prefix on a pottery text (Coe 1973:no. 53). In another pottery text T632 with a *-yal* affix has a water band cascading down from it, as though the *cloud* is issuing water (Kerr 1990:214). These epigraphic contexts, along with frequent sky and other meteorological associations, make *moyal* a plausible reading for T632.

### Moyal and Chak

T632 *moyal* occurs in conjunction with glyphs that can be read *chak*. For instance, Naj Tunich Drawing 34, B2 records a phrase T632.520:102 (fig. 4a). The second segment of the compound, T520:102, has been found by Grube (personal communication to Barbara MacLeod 1990) to substitute for a zoomorphic head form of Chac in the texts of Naranjo. Hence, the Naj Tunich compound can be read *moyal chak* (MacLeod and Stone in press).

T632 is twice associated with Chac in the context of what I call a “cloud diadem.” One example is found on a fragmentary Early Classic carved jade plaque discovered in Costa Rica (fig. 5a). Though only part of the figure survives, it is clear that T632 forms part of the headdress and that the figure sports a shell earplug, now a widely recognized attribute of Chac’s “GI” costuming. Rising above T632 is a blade-like form supporting a “smoking *ahaw*,” the whole surrounded by leaves. This headdress may be specific to Chac, as something quite similar is worn by a figure on Stela 2 from Tikal who is clearly a variant of Chac (fig. 5b); he carries an axe, may have a shell earplug, and possibly has a serpent emerging from his mouth, the latter also constituting one of Chac’s attributes (Taube 1992:19). The “cloud diadem” also crowns the head of a small figure depicted on the west side of Copan Stela D (fig. 6). He has a spiral eye, a zoomorphic snout, and a maize plant sprouting from behind the ear, attributes consistent with Chac imagery. Although the “cloud diadem” is a rare attribute of Classic versions of Chac, it may be antecedent to the dotted volutes occasionally adorning Chac’s head in the Postclassic Dresden Codex (fig. 7a-b).

T632 *moyal* has other persistent associations with Chac (or their quadripartite form, the Chacs), as well as with rain and lightning. For instance, as Houston and Stuart (1990) note, Dresden 68a shows two Chacs sitting back to back; above each is a T632 ‘cloud’ (fig. 8). The raining cloud is represented by a horizontally positioned T632 trickling streams of water. This recalls a common motif on Trickle Ware water jars from Yucatan

which can now be understood as a rain and cloud design (fig. 9).

On Dresden 38a and 41b, T632 (with a *la* suffix) is prefixed by the glyph for black, yielding *ek' muyal* (fig. 4b). Black has a special association with clouds in that black clouds portend rain storms. The Lacandonese believe that a god called Mensabak, "Maker of Powder," gives a black powder (symbolized by the soot residue of burnt copal) to his assistants who sprinkle it on clouds in order to turn them into black storm clouds (Tozzer 1907:71). It is interesting that black lightning, like black clouds, also holds special status among some Maya, as well as other Mesoamerican, groups. Among the Tzeltal of Pinola, for instance, lightning is classified as either black, red, or white, and black lightning (*rayo*) is considered the most powerful (Hermitte 1970, cited in Spero 1987). Similarly, the Sierra Popoluca see black lightning (*yuk tzo'ka*) as the most powerful (Spero 1987:111). This points to the shared semantic domains of clouds and lightning, something which is to be expected given their shared atmospheric references. For instance, in Yucatan not only is lightning a manifestation of the Chacs, but clouds are as well. It is believed that the movement of clouds is indicative of the activities of the Chacs and that the Chacs ride through the heavens on clouds (Redfield and Villa Rojas 1934:116).

The reading of T632 as *muyal* 'cloud' has important iconographic implications since it suggests that other dotted scrolls and volutes in Maya art may also be understood as clouds. For instance Houston and Stuart (1990), citing earlier work by Coggins (1988), identify the dotted scrolls wafting at the top of Terminal Classic stelae, usually enveloping small figures, as clouds, based on their reading of T632 as *muyal*. At the same time, Taube (1986) has argued that the morass of dotted scrolls enveloping a depiction of Chac on the Altar of Zoomorph O, Quirigua, represents lightning. His proposal is not necessarily at variance with an identification of dotted scrolls as clouds, for as stated earlier, the semantic domain of clouds and lightning overlaps. It may be that dotted scrolls, seen for instance in Chac's headdress (fig. 5a and 6) allude to meteorological forces more generally, including both clouds and lightning (although Chac on the Quirigua altar looks as though he really is riding on a cloud).

One question is whether or not S-scrolls need to be framed in dots to qualify as variants of T632 *muyal*. For instance, Houston and Stuart (1990) identify the undotted S-scrolls over the

doorway of Structure 22 at Copan as clouds. As a plain S-scroll, this motif also occurs in Maya art on thrones (Kerr 1992:378), on women's costumes (Kerr 1990:285), as women's body paint (Kerr 1989:20), and in segments of astronomical bands, as seen for instance, on the Vase of the Seven Gods (Coe 1973:49). The occurrence of T632 *muyal* in the backrack of a royal woman on Dos Pilas Panel 10 (Houston 1992:fig. 3.1) is interesting in light of the presence of S-scrolls on women's clothing and as painted decoration on women's bodies. The *muyal* 'cloud' motif also prominently covers the facade of Structure 10L-29 from Copan (Andrews and Fash 1992:fig. 10). This is interesting in light of other ancestor-related iconography on the facade. As will be seen below, *muyal* is associated with ancestors.

### Numbered *muyal* expressions

The *muyal* 'cloud' symbol also seems to bear some special relationship with the Paddler Gods. The Paddler Gods, first identified by Mathews (1977) and fleshed out in greater detail by Stuart (1988), are closely tied, on the one hand, to blood-letting and period-ending celebrations by living rulers and on the other, to the canoe journey rulers take to the realm of ancestors at death. As gatekeepers to the portal of the afterworld, the Paddler Gods are part of an ancestor complex. Barbara MacLeod (1992) has recently proposed that the Paddler Gods are creator sky gods, akin to the Popol Vuh's Maker and Modeler; hence, they may also have been construed as primordial ancestors, accounting for their aged status. The Paddler Gods also seem related to Chac. For instance, on Jimbal Stela 1 (Jones and Satterthwaite 1982:fig. 78), their name phrases include the sequence *na-ho-chan chak*. Here they ride on the dotted scrolls, now identified as elaborate pictorial versions of T632 *muyal*, recalling the Yucatecan notion of the Chacs riding on clouds.

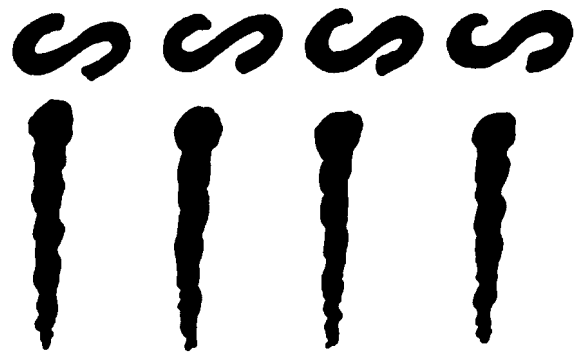


Fig. 9 Cloud-rain design on Trickle Ware water jar from Yucatan.

The Paddlers are also enveloped in these scrolls on Ixlu Stelae 1 and 2 (Jones and Satterthwaite 1982: figs. 80 and 81).

The Paddler Gods and T632 *muyal* converge again in a clause on the east side of Zoomorph G from Quirigua (fig. 10). The clause follows an Initial Series marking the period-ending 9.17.10.0.0. The verb includes a *lah* ‘completion hand’ holding an unidentified head with T181 verbal affixing (at M2); this compound most likely refers to the completion of the *tun*. The subject of the clause consists of a pair of heads (at O1-P1). Unfortunately, the features of the first are eroded, but the hooked nose, recessed mouth, and prominent chin are indicative of an aged being. The second head has a spiral ear and a scroll emerging from the jaw. This pair of gods seems related, if not identical, to the Paddler Gods.<sup>3</sup> Intervening between the verb and the proposed Paddler subject is a collocation consisting of the head variant of the number six<sup>4</sup>, a personified form of T632, and a T24 *li* suffix (this providing the final *l* of *muyal*). The collocation appears to read *wak-muyal*.

A related collocation occurs in a painted text from Tomb 12 at Rio Azul. The event is the burial of a ruler and the collocation (fig. 4c), read *wak-kaan-muyal-nal* by Stuart and Houston (1994), intervenes between the verb and the subject; hence, the syntax is identical to the Quirigua clause. Stuart and Houston propose that *wak-kaan-muyal-nal* is a toponym and may name the place at Rio Azul where the protagonist was buried.<sup>5</sup>

However, it is obvious that on Zoomorph G something far more esoteric is afoot, as the agents of the event are the Paddler Gods. Why should the Paddlers be the subject of the period-ending verb rather than the ruler Cauac Sky? The answer lies in the fact that Zoomorph G is Cauac Sky’s death monument. As the Paddlers are associated with ancestors and period-endings, it is not surprising to find them “filling in” for the deceased Cauac Sky on the occasion of a period-ending. Moreover, using the Rio Azul text as a model, we can surmise that the Paddlers “celebrated” the period-ending at the place *wak-muyal*. Given the Paddlers as agents, this place seems less like a real location at the site than some sort of cosmic realm. Furthermore, I would emphasize the association *wak-muyal* has with deceased kings at both Quirigua and Rio Azul.

In Maya writing, celestial toponyms, which often include a *chan/kaan* ‘sky’ glyph, occur in con-

junction with numerical prefixes. One of these is the aforementioned *na-ho-chan*, possibly ‘first five sky’ and another, as just discussed, is *wak-muyal*, or the Rio Azul variant, *wak-chan/kaan-muyal*, ‘six-heaven-cloud’. These numbered celestial toponyms have strong associations with the Paddler Gods, Chac, and with “cloud” volutes found on stelae.

One semantic context for cloud that might make sense of the Maya’s metaphorical use of clouds as a heavenly realm associated with ancestors, the recently deceased, and meteorological forces can be found in contemporary Yucatecan thought where *muyal* also subsumes the meaning of one of seven celestial layers between the earth and the sun. Hanks (1990:306) refers to these layers as “atmospheres.” The *muyal* ‘atmospheres’ have an association with rainmaking (Hanks 1990:373), which provides a bridge to rain, lightning, and Chac.

This view of a heavenly dome comprised of multiple layers is best documented for the Maya in post-contact sources from Yucatan and Chiapas (Sosa 1986). For instance, Tozzer (1907:154) notes a belief in Yucatan in seven heavens each accessed by a hole in the center. A ceiba tree rises through these holes, and the souls of the dead ascend the ceiba to reach the seventh heaven, occupied by Dios. While the idea of human souls ascending to heaven very likely derives from Christianity, the idea of a multi-layered heaven does not, and furthermore, according to Tozzer, the sixth heaven is inhabited by Chacs (called *nukuchyumchakob*) who obey the commands of the high god in the seventh heaven. Hence, in one recorded instance Chacs are seen to reside in a level of the celestial layered dome. These numbered heavens, documented ethnographically, form an intriguing model in which to consider the numbered celestial toponyms in Maya writing.

## Conclusion

The opening glyph in the Cleveland Plaque’s text is one of these numbered *muyal* expressions,

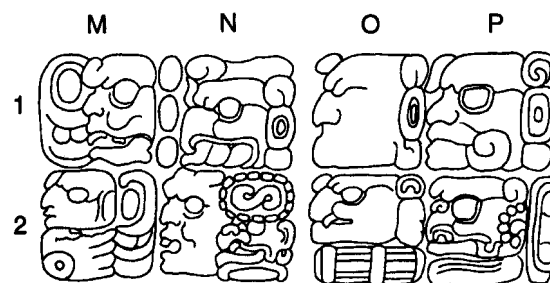


Fig. 10 Zoomorph G, east (redrawn and modified after Maudslay 1889-1902: vol. 2, p1. 44).

although it is the only known version using five rather than the expected six.<sup>6</sup> Presumably, the glyph reads *ho muyal* and it is likely a toponym, based on the pattern noted for *wak muyal* and *na ho chan*. Yet, it is not inconceivable that *ho muyal* functions as a title on the Cleveland Plaque. Toponym constructions, as outlined by Stuart and Houston (1994), do not necessarily have grammatical markers, and it seems perfectly feasible that a toponym could also serve as a title. Indeed, *muyal* functions as a title in a standard name phrase of the Naranjo ruler Smoking Squirrel; interestingly, this name phrase also includes references to sky and Chac, further illustrating that these elements form a recurrent semantic unit. Versions of this name phrase occur on Naranjo Stela 2, A18-A20; Stela 21, A6-A10; and Stela 13, G9-G11; as well as on the pottery text mentioned earlier (Kerr 1990:214). However, in the Naranjo texts this clearly nominal use of *muyal* never occurs with a numerical coefficient. Hence, the Cleveland Plaque's *ho-muyal* is best understood as a toponym based on current evidence.

In conclusion, I would interpret the Cleveland Plaque's text as stating that at the celestial realm *ho muyal*, which I understand as a place associated with ancestors, Chac, and the Paddler Gods, resides or exists (this is to be understood) Bone-Jagged-head-Vulture. He is a holy lord of a place or lineage called *kah* 'town'. He carries a death god title which I propose marks him as deceased. As a precedent for this functional interpretation of a death god head, I would point out that another death god head, God A', also a fleshed death god, represents deceased human protagonists on some Primary Standard Sequence inscriptions (Barbara MacLeod personal communication, 1993). Moreover, the idea that the death god on the Cleveland Plaque marks Bone-Jagged-head-Vulture as deceased fits my understanding of numbered *muyal* expressions as a celestial layer associated with ancestors, and clearly *wak muyal* is affiliated with deceased rulers at Quirigua and Rio Azul. Bone-Jagged-head-Vulture is the successor of Mak'ina K'uk' of the royal house *kah*. If K'uk' is the lineage founder, Bone Jagged-head-Vulture is the second ruler in the dynastic sequence.

I would further suggest that the Cleveland Plaque was inscribed with this text after Bone-Jagged-head-Vulture had died, much as the Tikal bones were inscribed to commemorate the death of Ruler A and subsequently were placed in his tomb. But in the case of the Cleveland Plaque the text was an addition to a much used, treasured possession, probably a bar pectoral that Bone-Jagged-

head-Vulture had worn in life and that eventually memorialized his death.

## REFERENCES

- Andrews, E. Wyllys V and Barbara W. Fash  
1992 Continuity and Change in a Royal Maya Residential Complex at Copan. *Ancient Mesoamerica* 3(1):63-88.
- Barrera Vásquez, Alfredo  
1980 *Diccionario Maya Cordemex: Maya-Español, Español-Maya*. Mérida: Ediciones Cordemex.
- Bricker, Victoria R. and Harvey M. Bricker  
1988 The Seasonal Table in the Dresden Codex and Related Almanacs. *Archaeoastronomy* 12, *Journal for the History of Astronomy* 19:S1-S62.
- Coe, Michael D.  
1973 *The Maya Scribe and His World*. New York: The Grolier Club.
- Coggins, Clemency  
1988 The Manikin Scepter: Emblem of Lineage. *Estudios de Cultura Maya* 17:123-158.
- Graham, Ian  
1986 Looters Rob Graves and History. *National Geographic* 169(4):453-461.
- Hanks, William F.  
1990 *Referential Practice: Language and Lived Space among the Maya*. Chicago: University of Chicago Press.
- Hermitte, Esther  
1970 El concepto del nahual entre los Mayas de Pinola. In *Ensayos de Antropología en la Zona Central*, edited by Norman A. McQuown and Julian Pitt-Rivers. Instituto Nacional Indigenista, Mexico.
- Houston, Stephen D.  
1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. Austin: University of Texas Press.
- Houston, Stephen D. and Paul Amaroli  
1988 The Lake Guija Plaque. *Research Reports on Ancient Maya Writing* 15. Washington, D.C.: Center for Maya Research
- Houston, Stephen D. and David Stuart  
1990 T632 as *Muyal*, "Cloud." *Central Tennessean Notes in Maya Epigraphy* 1. Nashville.



- Jones, Christopher and Linton Satterthwaite  
1982 *The Monuments and Inscriptions of Tikal: The Carved Monuments*. Tikal Report No. 33, Part A. Philadelphia: The University Museum, University of Pennsylvania.
- Keleman, Pal  
1943-44 *Medieval American Art*. 2 vols. New York: MacMillan Co.
- Kerr, Justin (editor)  
1989 *The Maya Vase Book, Volume 1*. Kerr Associates, New York.  
1990 *The Maya Vase Book, Volume 2*. Kerr Associates, New York.  
1992 *The Maya Vase Book, Volume 3*. Kerr Associates, New York.
- Laughlin, Robert M.  
1975 *The Great Tzotzil Dictionary of San Lorenzo Zinacantán*. Smithsonian Contributions to Anthropology 19. Washington D.C.: Smithsonian Institution Press.  
1988 *The Great Tzotzil Dictionary of Santo Domingo Zinacantán*. vol. 1, Smithsonian Contributions to Anthropology 31. Washington, D.C.: Smithsonian Institution Press.
- Lee, Thomas A., Jr.  
1985 *Los Códices Mayas*. Tuxtla Gutiérrez: Universidad Autónoma de Chiapas.
- Lincoln, Charles E.  
1990 *Ethnicity and Social Organization of Chichen Itza, Yucatan, Mexico*. Ph.D. dissertation, Harvard University. Ann Arbor: University Microfilms.
- MacLeod, Barbara  
1992 *Maker, Modeler, Bearer, Begetter: The Paddlers as chan its'at*. Unpublished manuscript.
- MacLeod, Barbara and Andrea Stone  
In press *The Hieroglyphic Inscriptions of Naj Tunich*. Chapter 7 in *Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting* by Andrea Stone. Austin: University of Texas Press.
- Mathews, Peter  
1977 *The Inscription on the Back of Dos Pilas Stela 8, Guatemala*. Unpublished manuscript.  
1991 *Classic Maya Emblem Glyphs*. In *Classic Maya Political History*, edited by T. Patrick Culbert, pp. 19-29. Cambridge: Cambridge University Press.
- Maudslay, Alfred P.  
1889-1902 *Biologia-Centrali Americana*. 5 vols. London: Porter and Dulau.
- Proskouriakoff, Tatiana  
1974 *Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan*. Cambridge: Memoirs of the Peabody Museum of Archaeology and Ethnography, Harvard University vol. 10, no. 1.
- Redfield, Robert and Alfonso Villa Rojas  
1934 *Chan Kom: A Maya Village*. Carnegie Institution of Washington Pub. 448. Washington, D.C.: Carnegie Institution of Washington.
- Reents-Budet, Done and Virginia Fields  
n.d. *Incised Classic Maya Jades and Slate Disks from Costa Rica*. Unpublished manuscript.
- Riese, Berthold  
1984 *Hel Hieroglyphs*. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John Justeson and Lyle Campbell, pp. 263-286, Institute for Mesoamerican Studies, State University of New York at Albany Pub. 9. Albany: Institute for Mesoamerican Studies.
- Ringle, William M.  
1988 *Of Mice and Monkeys: The Value and Meaning of T1016, the God C Hieroglyph*. *Research Reports on Ancient Maya Writing* 18. Washington, D.C.: Center for Maya Research.
- Schele, Linda  
1986 *The Founders of Lineages at Copan and Other Maya Sites*. *Ancient Mesoamerica* 3(1):135-144.
- Schele, Linda and Peter Mathews  
1993 *Notebook for the XVIIth Hieroglyphic Workshop at Texas*. Austin: Department of Art, The University of Texas at Austin.
- Sosa, John  
1986 *Maya Concepts of Astronomical Order*. In *Symbol and Meaning Behind the Closed Community*, edited by Gary H. Gossen, pp. 185- 186. Albany: Institute of Mesoamerican Studies, State University of New York at Albany.
- Spero, Joanne M.  
1987 *Lightning Men and Water Serpents: A Comparison of Mayan and Mixe-Zoquean Beliefs*. Unpublished M.A. thesis, University of Texas at Austin.

- Stuart, David  
 1988 Blood Symbolism in Maya Iconography. In *Maya Iconography*, edited by Elizabeth Benson and Gillett Griffin, pp. 175-221. Princeton: Princeton University Press.
- Stuart, David and Stephen Houston  
 1994 *Classic Maya Place Names*. Dumbarton Oaks Studies in Pre-Columbian Art and Archaeology 33. Washington, D.C.: Dumbarton Oaks
- Taube, Karl A.  
 1986 The Teotihuacan Cave of Origin. *Res* 12:51- 82.  
 1992 *The Major Gods of Yucatan*. Studies in Pre-Columbian Art and Archaeology 32. Washington, D.C.: Dumbarton Oaks.
- Tozzer, Alfred P.  
 1907 *A Comparative Study of the Mayas and Lacandonese*. New York: MacMillan Press.
- Villacorta, J. Antonio and Carlos A. Villacorta  
 1976 *Codices mayas*. Guatemala City: Sociedad de Geografía e Historia de Guatemala.

5 An alternative view of this collocation is offered by Bricker and Bricker (1988:S15-S16). Based on earlier work by Spinden, they view T632 (both dotted and undotted versions) as a reversal of seasons sign associated with the vernal equinox. Their ideas are supported by the first illustration and text of Dresden 68a (see fig. 8). Here, the second run of a 91-day cycle places the date (using a proposed 3 Cib entry date and a 584,283 correlation constant) on March 20, 950 A.D., the exact date of the vernal equinox. Interestingly, the Rio Azul Calendar Round date (8 Ben 16 Kayab) yields in their calculations the Gregorian date March 18, 450 A.D. They speculate that the buried ruler actually died 4 days earlier, that is, 6 days before the vernal equinox. Hence, the number six preceding T632 is, in their view, part of a title referring to the number of days he died prior to the vernal equinox. This interpretation, however, does not accord with the *6-muyal* expression on Zoomorph G from Quirigua which has no relationship with the vernal equinox. I suspect that the rainy season associations of T632 in the codices are pertinent to its meaning as “cloud” and not to any “reversal of seasons.” In fact, the Brickers (1988:516) also note an association of T632 with a summer solstice date on Dresden 52, which is inconsistent with their hypothesized seasonal reversal.

6 A careful examination of the jade did not reveal evidence of a weathered dot preceding the bar.

## NOTES

1 My thanks to Margaret Young-Sanchez, Associate Curator of the Art of the Americas, Africa, and Oceania at the Cleveland Museum of Art, for providing the weight of the plaque and for her generous assistance with my research.

2 Grube and Martin (personal communication, 1993) argue that T229 represents the phoneme *a'* rather than *ah*, suggesting a *ka'* reading for the Cleveland Plaque's Emblem Glyph.

3 Note that on Quirigua Stela C the Stingray Spine Paddler has scrolls emanating from the lower jaw, a forehead curl, and a scroll above the ear (Maudslay 1889-1902:v. 2, p1. 19). These traits are comparable to the second head in the Zoomorph G text at P1, though the latter lacks the stingray spine through the nose.

4 That this head represents the axe eye god can be determined from two lines of evidence. First, an axe eyed god is depicted on the back of Stela A, Quirigua (Maudslay 1889-1902:v. 2, pl. 8), and it has the same Roman nose and projecting teeth as the Zoomorph G glyph in question. The second line of evidence comes from a comparison with the Rio Azul Tomb 12 inscription where the number six precedes *muyal* (fig. 4c). Hence, *6-muyal* is a conventional form and would be expected here.