

# The Origins of Maya Writing: The Case for Portable Objects

by David Mora-Marín

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## Abstract

The question of the origin of the Mayan script is addressed through the study of portable objects incised with hieroglyphic texts. A detailed inspection of a set of stylistically and thematically related Late Preclassic and Early Classic Mayan texts serves to demonstrate early phonetic spelling conventions and diachronic change in sign morphology, as well as the predominant themes. In addition, the social context of incised portable objects during the Late Preclassic Period is suggested to have had a direct effect on the diffusion of ideas among the polities of the time, explaining the rapid spread and development of writing in the Maya area. The dominant themes of the texts seem to reflect the process of increasing social complexity for they tell of the concerns for prestige and legitimation of power by chiefs and chiefly lineages. This concern for legitimation also explains the transfer from one generation to the next of these historical and artistic objects.

*El problema del origen de la escritura maya es confrontado por medio del estudio de la información textual incisa en objetos portables. Una inspección detallada de un conjunto de textos del Preclásico Tardío y Clásico Temprano estilística y temáticamente relacionados e incisos principalmente sobre jade y concha sirve para entender las convenciones ortográficas tempranas y el cambio diacrónico en la morfología de los signos, así como los temas predominantes. Además, el contexto social en el que estos objetos fueron utilizados es postulado como un factor*

*importante en el proceso de difusión intelectual entre las ciudades de la época, explicando la rápida propagación y desarrollo de la escritura en la zona maya. Se sugiere, además, que las temas dominantes de los textos reflejan el proceso de un creciente complejidad social ya que nos hablan sobre la preocupación por prestigio y legitimación del poder de los jefes y sus linajes, explicando la herencia de objetos artísticos y a su vez documentos históricos como los que aquí se describen.*

## Acknowledgments

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## Introduction

The Maya of Mesoamerica developed one of the two most complex writing traditions of the New World, and one which has only in the past few decades become accessible to scholars. Past studies have concentrated on the reconstruction of political territories and interdynastic alliances (e.g. Berlin 1958; Marcus 1973 and 1976; Matthews 1985 and 1991; Stuart and Houston 1994; Martin and Grube 1995), the syllabic chart (e.g. Knorosov

1952 and Stuart 1987), and of the royal dynastic history of the Classic Lowland Maya (e.g. Proskouriakoff 1960; Houston 1988). However, other areas of research have received less attention, for example, the question of the origins of the script. In this paper I will address this subject by presenting a "cultural and linguistic background" (Justeson 1989:28) followed by examination of an early scribal tradition that can be discerned from portable objects of Middle and Late Preclassic period styles incised with Mayan texts.

As will become evident, and as has been fairly well established already (Coe 1976; Justeson 1986 and 1989; Marcus 1975, 1991 and 1992; Schele and Freidel 1990), the Mayan script arose in the context of chiefly competition, and developed further with the process of state formation in Mesoamerica as a response to the political, social, and religious need for legitimizing the continuity of the ruling elites and their lineages as well as the importance of the lineage's origins, both to the non-elites (so-called "vertical propaganda") and within the elites ("horizontal propaganda") (Marcus 1992). Evidence from some of the earliest inscribed portable objects of the Maya area will be analyzed with the purpose of understanding (1) the characteristics of the early writing system preserved in the small corpus of Preclassic texts, (2) whether such objects corroborate the hypothesis of the origins of writing in the context of chiefly competition, and (3) the process implied for the diffusion of writing.

This analysis will attempt, therefore, to trace the origin and evolution of the Mayan writing system. It will point to some of the main features of the script at its inception and observe how the script

changes diachronically in reflection of processes that writing systems of a similar nature have undergone in other areas of the world (Justeson 1986 and 1989; Sampson 1985). A classification of hieroglyphic signs used by the Late Preclassic scribes, organized according to salient morphological features, is in progress, and preliminary interpretations of semantic and phonetic values are presented here. A consideration of calligraphic variations will also be undertaken.

Although this study will not be exhaustive enough to provide definite comparative data with the Isthmian or preproto-Zoquean script, some very limited analysis along these lines will be offered. Finally, an explanation of the role of portable inscribed objects in the development of increasing social complexity will be offered; such artifacts are argued to be key in the legitimation of power of chiefly lineages and in the establishment of social, political, ideological, and economic alliances.

#### Historical-linguistic considerations

As proposed by numerous scholars<sup>1</sup> writing in Mesoamerica most likely came into use during the Middle Preclassic Period, sometime around 1100-600 B.C.E., as a result of the convergence of (at least) two main notational systems, one iconographic and the other numerical<sup>2</sup>, in "a pre-State evolutionary context, among societies with intensive agriculture and hereditary social ranking, but prior to true

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<sup>1</sup> See Coe 1976, Freidel & Schele 1988a and 1988b, Justeson 1986 and 1989b, Justeson *et al* 1985, Marcus 1976, 1991, and 1992, and Schele & Freidel 1990.

<sup>2</sup> I refer here to Olmec iconography and numeration, neither of which is writing *per se*.

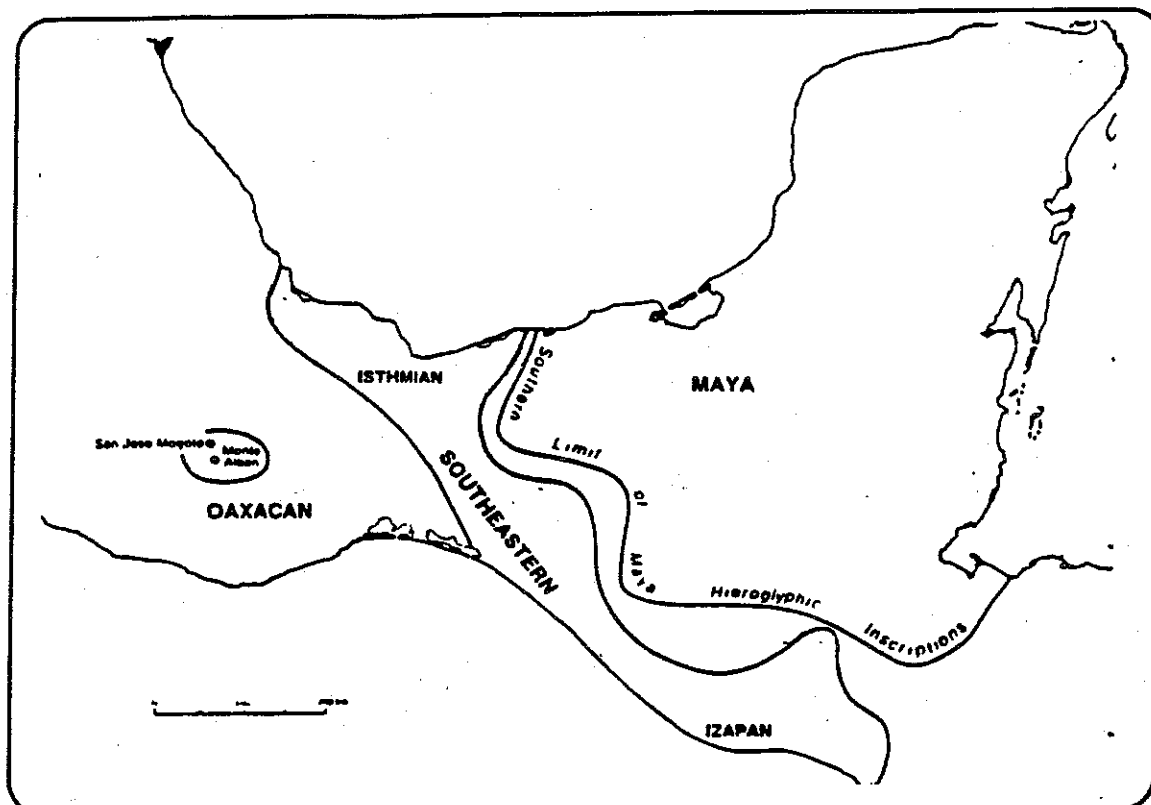


Fig.1 - Preclassic and Early Classic writing systems of Mesoamerica.

social stratification or political centralization” (Marcus 1976:37). Olmec iconography and ritual became the focus of elite prestige among non-Olmec groups throughout Mesoamerica (Justeson 1986). Coe (1976:110) cites four examples of Olmec motifs<sup>3</sup> used in Maya calendrical-astronomical contexts, including: (1) the ubiquitous U-sign, which he surmises to represent the moon, (2) the k’in sign for the sun, (3) the Lamat “star, Venus” sign, and (4) the cross-bands celestial or sky band element. Throughout its long history, Mesoamerican writing remained highly depictive or pictorial even while developing into distinction scripts:<sup>4</sup> (Fig.1):

<sup>3</sup>Note that these are described as “motifs” and not as “glyphs” or “graphemes”.

<sup>4</sup>This classification has been used by Justeson *et al.* 1985, Justeson 1986 and 1989b, and Mathews 1985.

(1) Oaxacan Branch: beginning with Zapotec as early as the Middle Preclassic (ca. 600 B.C.E.) and “devolving” with time (becoming more reliant upon, and later subordinate to, a “richer iconographic system for recording information pertaining to elite activities and prerogatives” (Justeson 1989; Wittaker 1977) and leading to Central Mexican (Aztec, but also Mixtec) scripts.

(2) Southeastern Branch: subdivided into two main groups, including Isthmian or Zoquean (used during the Terminal or Late Preclassic and Early Classic in Southern Veracruz, Tabasco, and Chiapa de Corzo and representing Zoquean languages [Justeson 1986 and 1989b; Justeson and Kaufman 1993]), and Mayan (representing, first, Cholan-Tzeltalan languages, and, sometime before C.E. 100. Yucatecan, as well [Campbell and Kaufman 1993]) and other scripts such as

the one represented by Kaminaljuyu Stela 10, as well as those known from portable objects such as the El Sitio Celt (probably representing both Mixean and Mayan languages [Justeson 1989b; Justeson et al. 1985; Justeson and Kaufman 1993; Kaufman 1976]), "if the two were in fact distinct" (Justeson 1989b:28). In any case, the sharing of the same or similar script would have indicated "cultural, not linguistic affinities" (Justeson 1989b:28). Justeson (1986) has advocated the hypothetical existence of an "ancestral Mesoamerican script," based on characteristics such as spelling conventions, reading order, and calendrical information that are shared by the Oaxacan and Southeastern branches. Furthermore, Coe (1976) and Justeson (1986) have been able to deduce probable traits of the prototypical Southeastern script based upon features shared by both the Isthmian and Greater Izapan scripts. Further discussion will be offered below.

Fox and Justeson (1984) and Justeson (1989b:28) have suggested the possibility of interlingual literacy between Cholan and Yucatecan speakers, a feature that they suggest "reflects intense social interaction between these distantly related Maya subgroups." An example that I will mention below, the Bagaces Slate Mirrorback Disc (Fig. 12), serves to illustrate this. In its text, at A6, there is a spelling that according to Fox and Justeson (1984) could be read as either **ka-ko BALAM** or **cha-ko BALAM**. This expression makes better sense if interpreted in the latter way (the non-traditional), for **cha-k(o) BALAM** gives us Cholan's **chak bahlum** "puma." Such probability had been previously set forth supported by linguistic data alone (Kaufman 1976) and with both

comparative linguistic and epigraphic evidence, which proposed that Cholan and Yucatecan subgroups were participants in the Lowland Maya society of ca. 400 B.C.E.—C.E. 1500 (Justeson *et al.* 1985). It is evident that some texts have definite linguistic markers that specify which language was inscribed. These markers include phonetic complements that support only one lexical-phonological system as a possibility, grammatical particles (as in the use of specific cognates, such as the preposition **ti/ta** "in, at, to"), and affixes (such as **-wan** for positional Cholan verbs).<sup>5</sup> It is also possible that phoneticism in the script increased through time, and with it a stronger dialectal distinction in the texts (Justeson *et al.* 1988, Justeson 1989b and Mora 1994).

This same group of scholars has acknowledged the effects of social interaction not just between Cholan and Yucatecan speakers, but also between the Lowland Maya and other Mesoamerican cultures, including the Zapotec, the Olmec, the Epi-Olmec, the Izapans, and the Teotihuacanos. Justeson and Kaufman (1993) and Justeson *et al.* (1985:147) provide, in the words of the latter, evidence for the "existence of earlier social interaction as well as for the nature of that interaction." Lexical diffusion data of different types are presented in support of an absolute chronology of such interactions which agrees with the archaeological and epigraphic evidence (Justeson *et al.* 1985). This chronology is in agreement, as well, with Kaufman's (1976) glottochronological dates.

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<sup>5</sup>Such features have been noted by Bricker (1986), Campbell (1984), Campbell and Kaufman (1985), Fox and Justeson (1986), Schele (1982), and several others.

The most significant findings of Justeson *et al.* (1985) are: (1) a lack of evidence for significant impact of Zapotec(an) writing on Mayan or *vice versa*; (2) a considerable impact of Mixe-Zoquean loan-words on the Greater Lowland Mayan languages (Yucatec and Cholan-Tzeltalan) during Late Preclassic-Early Classic Periods (400 B.C.E.- C.E. 600); (3) the possibility that the breakup of Cholan into its Western and Eastern branches is a result of a hiatus or "cultural implosion" at the end of the Early Classic; and (4) evidence for modest lexical diffusion, accounting for 2% of the innovated vocabulary, of Totonacan<sup>6</sup> into Greater Lowland Mayan languages, some loans probably entering the Mayan languages after the Cholan-Tzeltalan subgroup diversified, and before the Cholan group broke into its Ch'ol, Ch'orti, and Chontal subgroups near the end of the Early Classic Period.

These authors also suggest that during the Late Preclassic and Early Classic Periods, Mixe-Zoquean loans accounted for 6% of the vocabulary innovated in the Greater Lowland Mayan languages. They propose the Izapan civilization as the likely source of such loans, although with the partial decipherment of the Isthmian script as pre-proto-Zoquean, Justeson and Kaufman felt it necessary to also include this culture in the equation. In fact, they provide two examples that may support the hypothesis of scribal interaction resulting in grapheme diffusion. They suggest that some Isthmian and Mayan signs that correspond iconically have different phonetic values that "locally developed in

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<sup>6</sup>Totonacan is thought by Kaufman (1976) to be the most likely candidate for the language of Teotihuacan's inhabitants and elite.

the basis of Mixe-Zoquean and Mayan vocabulary for the same depicted entity or logographic value" (Justeson & Kaufman 1993:1710). Some, nevertheless, seem to "share values as well as forms with Mayan signs," such as the case of Isthmian 46 **mu** and Mayan T74 **ma**, as well as Isthmian **wu** and Mayan T1 'u. The latter two instances of probable iconic and phonetic correspondence reinforce and are partly supported as well by the sound shifts summarized below (see also the complete correspondence sets given in Fig.2):

- (1) **u** > /a or u/
- (2) ' > l
- (3) w > '
- (4) **J** > '

These examples are all indicative of what Justeson and Kaufman term a "more intimate historical connection". They reinforce one another, for some of them show more than one kind of sound change, with each change reinforced by other examples. One example is the relationship between Isthmian 125 'u and some of the Mayan allographs of syllabic la. In this case we find the **u** > a change in group (1), with at least three instances of this sound shift. The change **u** > /a or u/, visible in the two examples provided by Justeson and Kaufman, may provide an explanation for the apparent syllabic polyvalence of T528 as **ku/ka**. Even the proposed change **j** > ' is supported because it seems to depict an ornament with beads (**uj**, **ujal**, or **uyal** in Yucatecan and Cholan), providing a likely rebus for the value of the T1 **u** sign, and perhaps also for an allograph of the T61/62 **yu** syllabogram (cf. Fig.30). This latter value suggests a Maya to Isthmian direction of borrowing, for it is more likely that the word was originally Mayan due to its basic form and



















<u>Group (1) ʃ &gt; /a or u/</u>	
 46 mʃ	 74 ma
 98 yʃ	 126 ya
 125 'ʃ	 la
 124 kʃ	 528 ka or ku
 20 wʃ	 1 'u
<u>Group (2) ' &gt; l</u>	
 49 'a	 534 la
 125 'ʃ	 la
<u>Group (3) w &gt; '</u>	
 20 wʃ	 1 'u
<u>Group (4) j &gt; '</u>	
 82 ju	 1 'u

Fig.2 - Correspondence sets for Isthmian and Mayan (based upon the work of Justeson and Kaufman). Isthmian appears on the left, Mayan on the right.

its wider semantic domain in Cholan and Yucatecan languages. Evidence of its relation to beads or jade ornaments may be demonstrated by the fact that in La Mojarra Stela 1, one of the supernatural heads adorning the main human figure's headdress has a *yu* sign marking where its ear ornament would typically be shown. When could such diffusion have taken place? Given the early dates of La Mojarra Stela 1 and the Tuxtla Statuette, one can only say that such interaction occurred sometime before the middle of the second century C.E.

Finally, combining epigraphic and linguistic evidence, Justeson and Mathews (1983) support the likelihood that the so-called stela-altar complex was associated, by Terminal Preclassic times, with the celebration of the ending of the *tun*, the 360-day year, and that this "cult" represents influence from the direction of Lowland Maya speakers towards Pacific and Gulf coasts cultures, rather than the reverse, as many authors contend (e.g. Sharer 1994). For Graham (1972), Polol Altar 1, which Pahl (1982) has interpreted as containing a Cycle 7 Initial Series date, represents potential evidence for such early development or even origin of Mayan writing in the Lowland Maya region rather than in the Pacific or Gulf coastal regions.

Hansen's (1991b) description and interpretation of El Mirador Stela 2 only adds support to this possibility, even if dates of 400 B.C.E. are considered likely for El Portón Monument 1 by Sharer and Sedat (1973), or for that matter, for Nakbé Stela 1 as well (Hansen 1991a), which has stylistic attributes identical to the "Constructive Stage 6" (late Late Preclassic) sculptures from Group H (Structure Sub-10, and the South Plaza,

Palace Sub-2), at Uaxactún, according to Valdés (1987:608-9).

I think it more likely that the writing system developed almost simultaneously in both regions and as a result of direct contact and diffusion between them, for the very earliest evidence of Mayan incipient and full writing appears at nearly the same time over a widespread geographical region. What means would have facilitated such rapid diffusion? As I will propose below, portable inscribed objects such as jade and greenstone celts and plaques, pottery vessels and figurines, and other types of portable media (such as paper books), probably provided the means.

#### Origins of writing in Mesoamerica: Some possibilities

A number of scholars have provided syntheses and descriptions with regard to the origins of writing in Mesoamerica and the earliest examples of written texts (eg. Coe 1957 & 1976, Justeson 1986, Marcus 1976b & 1992). Drawing from these sources, the main characteristics of the ancestral script can be summarized as follows:

- (1) Columnar format;
- (2) Reading order from top-to-bottom, and left-to-right;
- (3) Use of depictive (pictorial) signs, some of which are basic to the main Mesoamerican scripts;
- (4) Use of semantic determinatives, logographs, and syllabographs in a mixed system;
- (5) A bar-and-dot numeral system of 1-19;
- (6) Days in the ritual 260-day calendar;
- (7) Use of personal and place names, the former preceding the latter;

(8) Common themes of "sacrificial rites, accession to power, and the ritual prerogatives of chieftain-/rulership";

(9) Common orthographic rules used for "referential lexemes" only, not for grammatical particles or affixes, or phonetic signs;

(10) An absence of grammatical representation that "may reflect the linguistic diversity of the elites who share the iconography from which...writing emerged."

It is only fair to suggest the possibility that such features did not belong to a particular ancestral script, but that they may have been features shared by several incipient script traditions that evolved into full writing systems at nearly the same time and in the context of the same elite interaction that has been proposed (Justeson 1986, Justeson *et al.* 1985). In other words, rather than explaining the origins of writing in Mesoamerica with one script that diversified into two groups, the Oaxacan and the Southeastern branches, which in turn diversified into several subgroups themselves, I think it is reasonable to suggest that no one ancestral script existed but that instead different script traditions evolved simultaneously through the use of common iconographic and numeric systems that were very rapidly and effectively diffused and counter-diffused from region to region, from elite to elite.

Marcus (1992:34) suggests three alternatives for understanding the development of, as well as the similarities and differences between, Zapotec and Mayan writing: (1) parallel development; (2) common origin and subsequent independent development; and (3) initial development by one group and borrowing

of script by the other group. A fourth possibility, similar to the one proposed by Davies for the origins of Egyptian hieroglyphic writing and its relation to the Sumerian script, is offered here. Davies notes that Sumerian writing preceded Egyptian writing by "a century or more". Despite evidence of contact between Egypt and Mesopotamia during the late Predynastic Period, and of the possibility that the borrowing of writing could have been just part of the overall process of cultural diffusion, he notes that "there is little, if any, discernible overlap between the two sets of signs" (198). The Egyptian signary, though pictographic in character like archaic Sumerian, is clearly derived from indigenous sources. More importantly, although both are mixed systems, their structures are not the same; in the earliest known Sumerian writing logography is predominant; phonography is present only to a very limited extent, and takes several centuries to become fully developed. By comparison, the earliest known Egyptian writing presents a system that already contains a substantial, if not complete, phonographic component, in this respect being considerably more advanced than the contemporary Sumerian. In the second place, the basic phonetic unit of the system is different in each case. Sumerian is syllabic while Egyptian is consonantal. These differences are rooted in the structures of the languages that the two scripts represent. They are so fundamental as to be decisive against the theory that one system was simply borrowed from the other.

If Sumerian indeed was influential in the invention of Egyptian writing, Davies, proposes, "then the influence was imparted through a process of what has been called 'stimulus diffusion'; in other words,

Sumerian provided the example or the idea of writing, together with some of its operating principles, not the system itself" (198). Such may be the relation between the Zapotec and Mayan scripts, in which case the operating principles are similar, but there are differences not just corresponding to the differences in the linguistic structures involved, but also in the sources for the signs used, as observed by Marcus (1992:34). This kind of relation may explain, consequently, the lack of evidence for "significant impact of Zapotec(an) writing on Mayan or *vice versa*" (Justeson *et al.* 1985:150; Marcus 1992).

Instead of a cladistic model of Mesoamerican writing, perhaps one could suggest a more interactive model, analogous to the Wave Theory<sup>7</sup> that explains language change, so that the origin and evolution of the Mesoamerican writing systems would be seen as reflections of the languages that are explained in terms of the Wave Theory. Such a model may be defended with greater success when addressing the development of writing systems in the so-called Southeastern Branch (e.g. Isthmian, Kaminalijuyú, and Mayan), as pointed out to me by Marcus (*pers. comm.*). Diffusion is contrasted with borrowing in such a scenario; the former treats the origin and development of writing in the Southeastern region as the result of interaction, suggesting multi-directional influence, while the latter implies more a uni-directional process of influence. This

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<sup>7</sup>In allusion to the concentric ripple patterns developed when a rock falls onto the surface of a pond, and to the crossing of such ripples in the event of more than one rock being thrown onto the pond and creating a situation of several centers of radiating waves.



problem or possibility may be worthy of future studies, when much more is known about the historical relation among scripts, but already one can suggest that the apparently very small amount of phonetic correspondences between Isthmian and Mayan is evidence for a greater importance of diffusion over borrowing.

A Late Preclassic scribal school:  
three inscribed portable objects

Though it has grown in the past two decades, the inventory of Preclassic and related Early Classic texts is not large and the majority of such texts are unprovenienced.<sup>8</sup> I will discuss here a group of incised portable objects that contain Preclassic Mayan writing and some, possibly related, Early Classic texts. A more comprehensive discussion of the earliest monumental inscriptions is given in Mora (1994).

The texts to be studied will be considered as part of a specific Maya scribal subtradition or school. In fact, due to the closeness of their internal structure and calligraphic style, similarities first noticed by Coe (1976:115), the following objects will be discussed together: (1) the Dumbarton Oaks quartzite pectoral (DO q-pct)(Fig.3); (2) the Edward H. Merrin Gallery Izapan steatite were-jaguar (MG s-wj)(Fig.4); and (3) the Jade Museum "Olmec" blue-green jadeite spoon (JM j-spj)(Fig.5). It is important to emphasize

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<sup>8</sup>To facilitate discussion of these items, a nomenclature has been devised which can be defined in the following manner:

[provenance/collection or unprovenienced]  
+ [material/medium of manufacture]  
+ [type/function of object].  
Abbreviations for these categories are shown in Addendum 1.

that all three of these objects were robbed of their cultural and temporal context by looters, and any discussion of such matters can only be speculation. It is also possible that these objects, as important heirlooms, were found in relation with burials or structures which may have been far removed, temporally and perhaps even geographically, from their original time and place of carving (in the Middle Preclassic?) and incising (in the Late Preclassic).

Although Coe assigns a date to the DO q-pct of the first century B.C.E. based on similarities to the Cauac Phase murals at Tikal (50-25 B.C.E.)(1966:17), the "Lord of the Mirrors" Panel from the Mundo Perdido Complex at the same site is also close in style and dates to somewhat later. For this reason I will assign these artifacts to a range of 100 B.C.E.-C.E. 100, which is the range that Schele and Miller (1986:119) also prefer. These texts (except the MG s-wj), along with two others that will be mentioned below, share the feature of having been incised on the backs of "Olmec" objects. The general assumption is that they represent Middle and Late Preclassic artifacts retained as heirlooms through generations and incised with Late Preclassic Maya texts.

The Dumbarton Oaks quartzite pectoral

Coe mentions as a probable provenance for the DO q-pct the site of Quintana Roo (1966). He also discusses some of the features of the text such as its delicate incisions, noncalendrical content, paired columns, and presence of affixing. These features are generally typical of the three objects here discussed (except for the pairing of columns in JM j-spj and the inclusion of probable calendrical data on

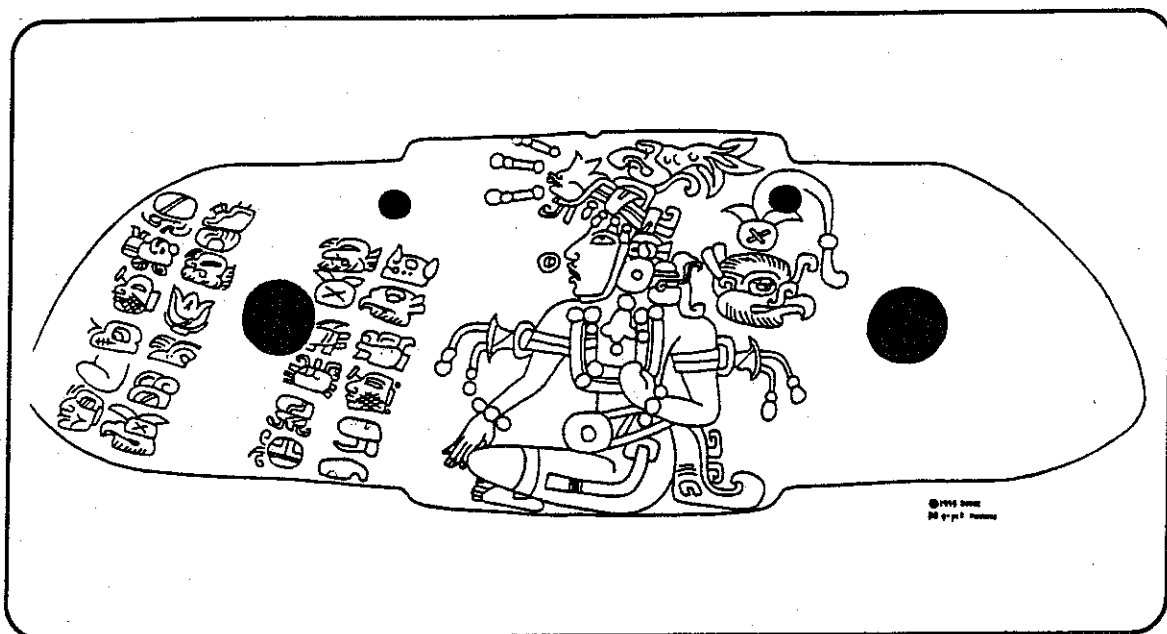


Fig.3 - Dumbarton Oaks quartzite pectoral (DO q-pct) [Drawing by David Mora Marín]

MG s-wj). However, one can see how the hieroglyphs of the DO q-pct are somewhat more “abbreviated” in terms of iconic detail than those in the two other texts. For instance, the glyph of a bearded god at B2 and C1 in the DO q-pct lacks the eyebrows that the same glyph shows in the MG s-wj at A1 and in the JM j-spñ at A4. The glyph at DO q-pct:B5 appears to be a simplified form of the T168:518 AHAW logograph. One can contrast this with the possible Emblem Glyph in the JM j-spñ:A3 and A8, which shows much more detail, as does the title in the DO j-plq:A6.

Coe (1976:114) suggests that due to the iconic correspondence between glyphs B6 and C2-D2 with the images of a Muwan bird “topped by a crossed-bands sign with two earlike projections” found behind the personage portrayed, such signs represent the person’s glyphic name. Based on a comparison with the so-called Shook Altar (Shook & Heizer 1976), I have previously suggested (Mora 1994, 1995) that the crossed-bands motif and sign shown in the DO q-pct are iconic

representations of a crown motif worn by the figure portrayed in the Shook Altar. Thus, the glyphs at B6 and C2 may be interpreted as a CROWN logograph (Fig.6), used as a title, perhaps, on syntactic grounds.

What about its reading? The word for “crown in Proto-Cholan was \*met (Kaufman & Norman 1984). Is there any evidence that supports such a reading for the crossed-bands glyph discussed here? Both at B6 and C2 the glyph in question appears as part of the nominal phrase of its respective clause (Fig.7). If one looks at both the MG s-wj and the Pearlman Collection shell trumpet (PL s-trp) one finds that in two instances of an occurrence of clauses beginning with the bearded god and God N, respectively, the third glyph in the clause has a superfix with two hook-like projections and the main sign is a rounded glyph. The superfix is, in my opinion, equivalent to the “ear-like projections” described by Coe for the crossed-bands glyph in the DO q-pct. The main sign in the case of the PL s-trp

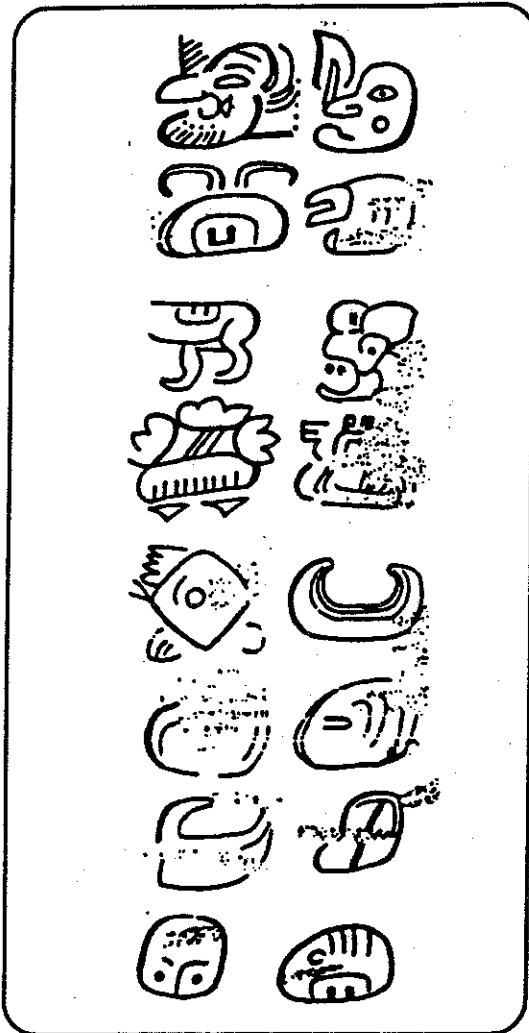


Fig. 4 - Merrin Gallery Izapan steatite were-jaguar (MG s-wj), text. [Drawing by David Mora Marín].

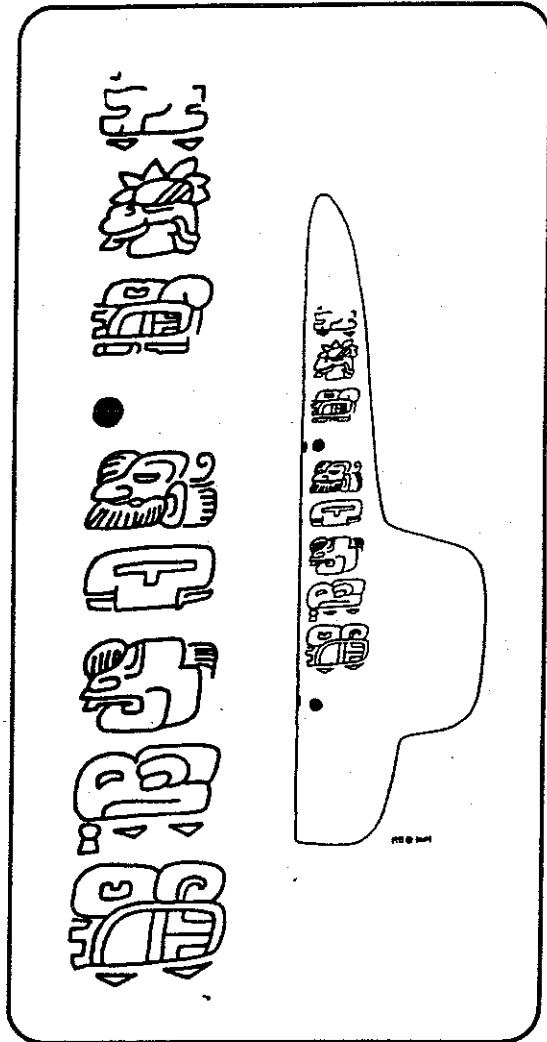


Fig. 5 - Jade Museum "Olmec" blue-green jadeite spoon (JM j-spn) [Drawing by David Mora Marín].

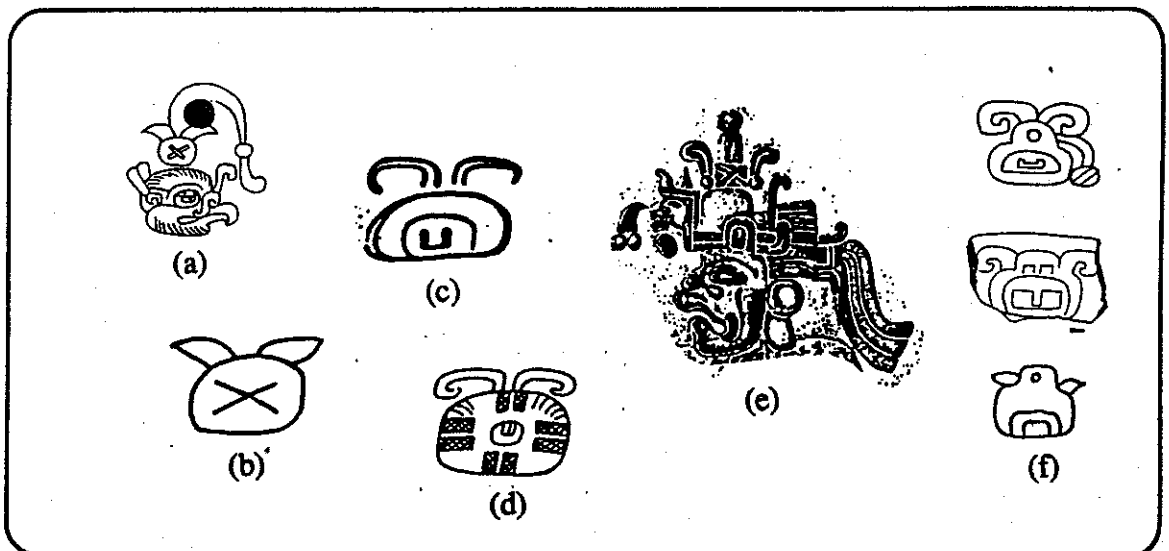


Fig. 6 - Possible CROWN logograph: (a) DO q-pct, behind seated figure; (b) DO q-pct, C2; (c) MG s-wjA2; (d) PL s-trp; (e) Shook Altar; (f) three other early examples.

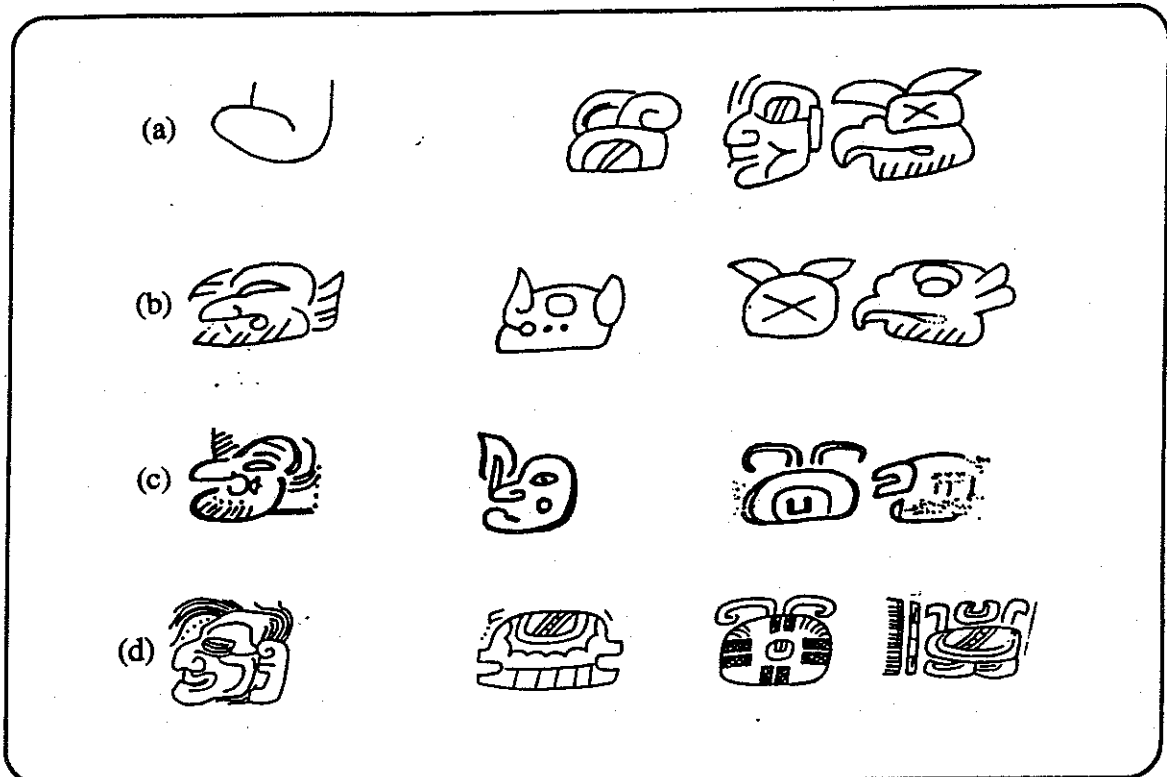


Fig.7 - Clauses containing the possible CROWN logograph: (a) DO q-pct,A5-B6; (b) DO q-pct, C1-D2); (c) MG s-wj, A1-B2; (d) PL s-trp.

corresponds to Landa's "t," and may thus read *te*. This syllabogram supports a possible reading of *met*. But what about the superfix?

Below I will mention the expression T712 (Fig.8). This expression has logographic values of CH'AB/CH'AM (Houston, MacLeod, Schele & Stuart in Freidel *et al.* 1993:447, note 66) and a possible additional syllabic and/or logographic value of *te*//TE based on Proto-Cholan \*ti "mouth" (see, for example Yax L.10:F6; Kaufman& Norman 1984; Schele 1994a:114). When it is used as *ch'am* it is often subfixed by a variant of T74 *ma*. In other cases when a reading of *ch'am* is more likely, also, a hook-like subfix may appear that resembles greatly T126 *ya*. If it were *ya*, it would possibly serve as the prevocalic possessive third person pronominal prefix that accom-

panies the word T504/841 AK'AB//AK' which is often infixed in T712, rendering either u-CH'AM y(a)-AK or u-CH'AB y(a)-AK'AB. However, in many cases the subfix that resembles T126 appears without T841 being infixed inside T712 (as in the case of T822 from Xcoha). Was it expressed in such occasions out of pure habit? Or did it serve a different function? It is possible, maybe, that in such occurrences what we see is a possible *ma* or *me* syllabogram, the latter derived from the points of the crown icon and used, just like T74 *ma*, as phonetic complement: u-CH'Am-(*me*). Thus the glyphs in the PL s-trp would read *me-t(e)* "crown," used as a noble title. In the DO q-pct it may be used logographically, delivering MET.

Coe also noticed the presence at B2 (Fig.9a) and C1 of a "bearded god" head, which may be equivalent—iconically—to

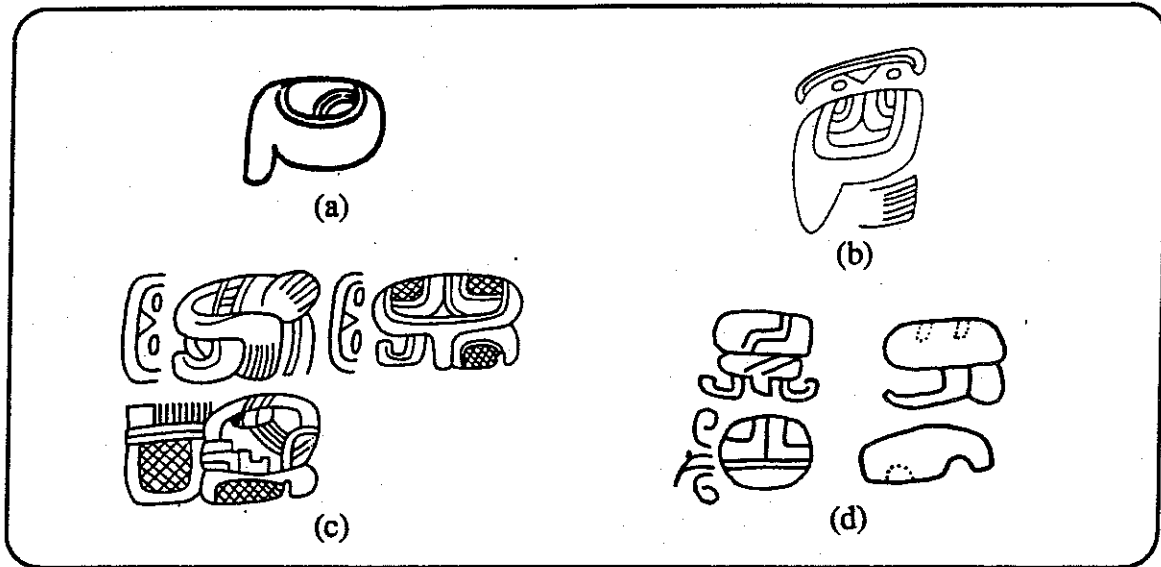


Fig.8 - (a) T712 after Thompson; (b)with ma suffix; (c) JM sl-mrr, A4-A5; (d) DO q-pct, C5-D6.

the bearded god glyph present in the Tuxtla Statuette, and which Fahsen (1988) and Taube (1992:92-4) suggested to be an early, bearded, form of God N, *pawahtun*. The God N head may also read as *huy/hoy*, a variant of the Step T843 dedicatory expression, as interpreted by MacLeod (1990). This same glyph appears on the JM *j-spñ* (Fig.9b), the MG *s-wj* (Fig.9c) and in numerous other early texts (Figs.9d-i). In most instances, it seems to appear clause-initially, perhaps in support of a pronominal use, or, more likely, as a dedicatory verbal expression.

A contraindication to the suggestion of a pronominal use is the fact that in the three texts in question (DO *q-pct*, MG *s-wj*, and the JM *j-spñ*, Fig.9a-c), in expressions where a third person preconsonantal prefix, *u-*, would usually be expected, it is simply omitted (Fig.10). The prevocalic one(s) does occur, nonetheless, as will be explained below. On the other hand, in the Early Classic texts mentioned above, the beardless God N occurs most frequently at the beginning of a clause (as it does in the monumental inscriptions and in the

pottery vessels when it is used as a dedicatory expression), and other expressions in the text that are inflected for the third person ergative (as the subject of transitive verbs or the possessor of nouns) show a recognizable *+u-* sign. Consequently, I feel that Fahsen and Taube are correct in their identification of the bearded god as God N. In addition, Lloyd Anderson (1993:112-3) apparently also considers this bearded god glyph to be a verbal expression.

In the DO *q-pct*, the bearded god at B2 seems to begin a clause that stretches from B2-A4. At A3 is an anthropomorphic glyph with cross-hatching and a T-like projection on its forehead, a rectangular "earplug assembly" or "smokestack" with two circular elements (perhaps beads?), and as described by Anderson (1993:112). This glyph also occurs at D4. If B3 (the bearded God N) is a dedicatory verb, then it is probable that A3 (at least) is the dedicated object of the clause, following the verb-object-subject word order. It is interesting to note that this is exactly the pattern seen in the "Mayan Celt" described

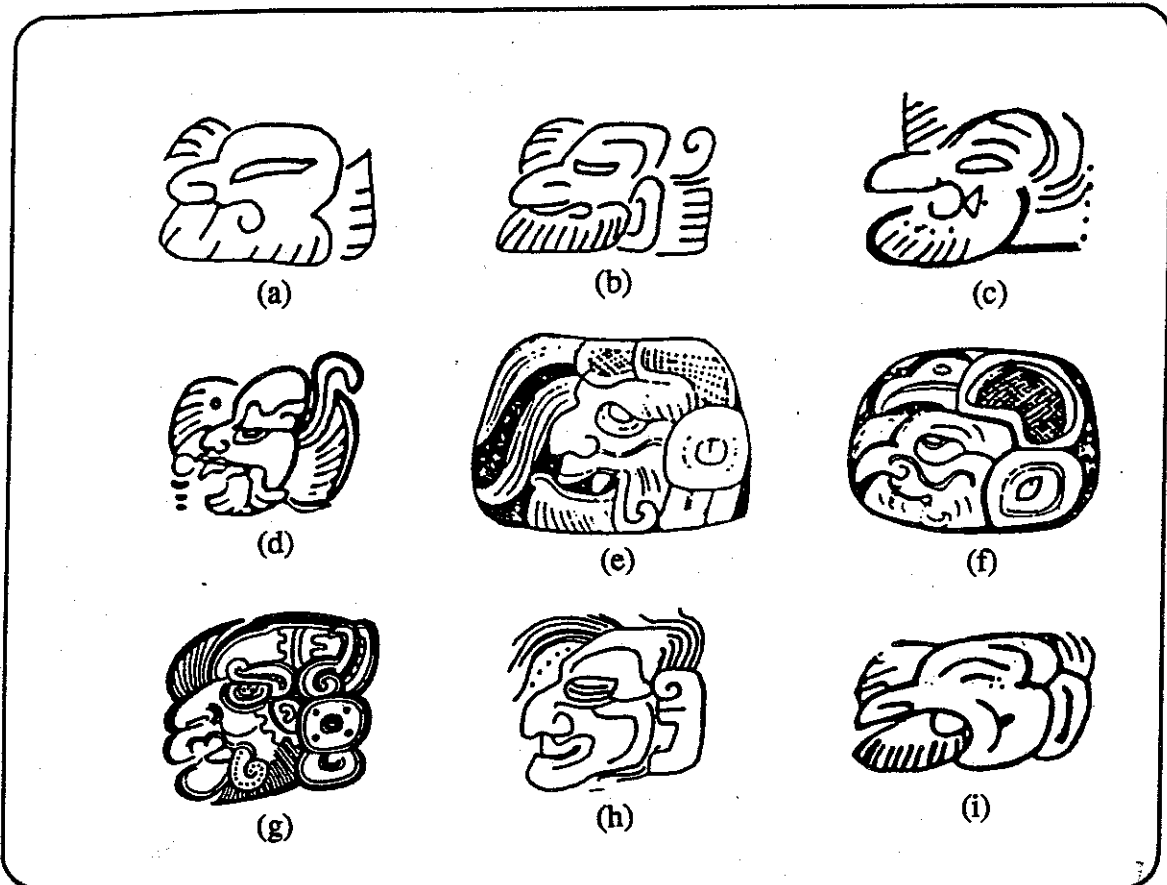


Fig.9 - God N glyphs: (a) DO q-pct, B2; (b) JM j-spñ,A4; (c) MG s-wj, A1; (d) jadeite shell effigy earflare from Kendal, Belize (KD-j-sll) (e-f) two carved and incised ceremonial plates illustrated in Berjonneau and Sonnery (1985:351, 355); (g) El Bellote pot (EB p-bwl) glyph F; (h) PL s-trp, D2; (i) Maya "celt" (after Anderson 1993:113). [Drawings a-c by David Mora Marín, d & h by Linda Schele.]

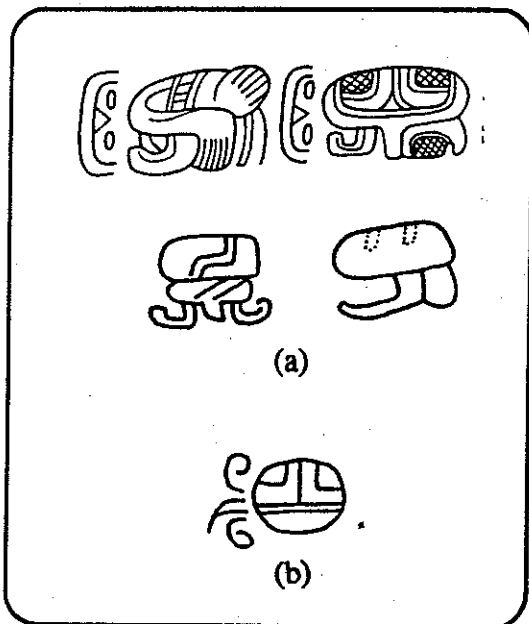


Fig.10 - Omission of the 3rd-person preconsonantal u-: (a) U BAH U-CH'AMYAK'il; (b) y-AK'il.

by Anderson (1993:113), supporting the function of A3/D4 in the DO q-pct as an object of some sort, perhaps even the pectoral itself. The bearded God N glyph at C1 begins a clause that ends, probably, at D2. The sign at D1, resembling a bat's head, is probably also an object dedicated. As will be explained, it is followed by the same personal name present at the end of the clause which begins at A5 and ends at B6. Further support for the verbal function of this glyph will be offered below.

Some of the affixes in the DO q-pct text seem to represent syllabic signs as well as verbal and nominal inflectional morphemes. For instance, at B1 is a variant of the so-called Step T843 which,

as mentioned above, is a dedicatory expression interpreted by MacLeod (1990:338) as *hoy* “whose meaning may have been (as an intransitive root)” something like “to bless, to inaugurate.” Freidel and Schele (1989:236) were the first to point its occurrence in the DO q-pct. In this text, T843 is subfixed by a hand-variant of syllabic T17/18 *yi* (Fig. 11a), suggesting a function as a phonetic complement to logographic T843 HOY/HUY or, as a completive suffix -i, and thus rendering H(U/O)Y-(yi) *huy* “to bless,” or H(O/U)Y-i(y) *hoy-i* “was blessed.” It is important to note that the earliest occurrences of this *yi* syllabogram<sup>9</sup> show it clearly to be a hand icon (Fig. 11b), though this detail is often lost later on. Some scholars, however, are not convinced of a common reading for both the GOD N and the STEP signs. While the GOD N sign is in fact most likely read HOY/HUY, as discussed by MacLeod and Reents-Budet (1994: 161), a more convincing reading for the STEP sign may, according to David Stuart, be “stepping on or climbing a pyramid (Schele *et al.* 1994:117). In fact, the latter has been tentatively suggested by Elizabeth Wagner to read T’AB. T’ab is “to anoint, burnish, polish,” in 16th century Tzotzil and Tzeltal, and t’ap’ is “ascent, climbing, going up” in Chorti (Schele *et al.* 1994:117 and Schele & Grube 1995:197). (One should also keep in mind that in the Early Classic painted plate MS0040 it is superfixed by T74 ma) If the STEP sign is indeed read as T’AB, then B1 might read T’AB-i(y) t’ab-i “the carving was finished.”

<sup>9</sup>Dating to the Late Preclassic and Early Classic and including A3d on the incised conch shell trumpet [KB s-trp] in the Kimbell Art Museum (illustrated in Schele and Miller 1986:83-4, Plate 27) and C20 on Tikal Stela 31.

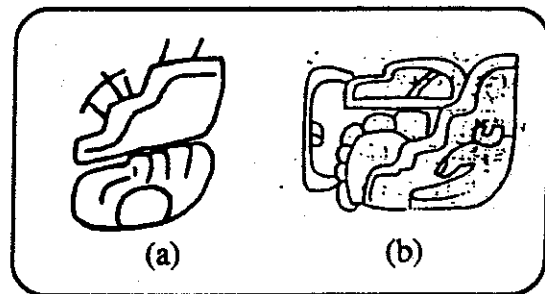


Fig. 11 - T843: (a) DO q-pct; (b) stone bowl from Coe 1973.

Other possible syllabograms present in the DO q-pct appear at A1, A2, A3, and D4, C4, C5, and D6. In the case of A1, we may be looking at an early form of the Primary Standard Sequence Initial Glyph (Stuart 1989:153, Freidel & Schele 1989:236), common on painted pottery vessels as well as in the monumental inscriptions (e.g. Tikal Stela 31). More recently, MacLeod and Reents-Budet (Reents-Budet 1994:124) offer examples of its phonetic spelling as a-(h)a-ya in the Nebaj vases (e.g. MS 1118, also K764, K1392 and K3649), and have read it as ay-a “existed; came to pass/exist” in Cholan, perhaps related to Proto-Cholan \*ayan “there is/are” (Kaufman & Norman 1984). In the DO q-pct we find the so-called “mirror” sign<sup>10</sup> subfixed by an allograph of T126 ya.

The subfixes on glyph A2 may be identifiable: A2c is similar to T24 li, while A2d bears some resemblance to T130 wa. A3 and D4, as suggested to me by Houston (pers.comm. 1994), might be variants of T1023, syllabic pa, due to the cross-hatching pattern. However, this same anthropomorphic sign lacking the cross-hatching appears in a similar syntactic position (following a probable GOD N verb) in the “Mayan Celt” illustrated in Anderson (1993:113).

<sup>10</sup>Which appears to be polyvalent (see Grube and Schele 1991; Reents-Budet 1994:162, note 22).

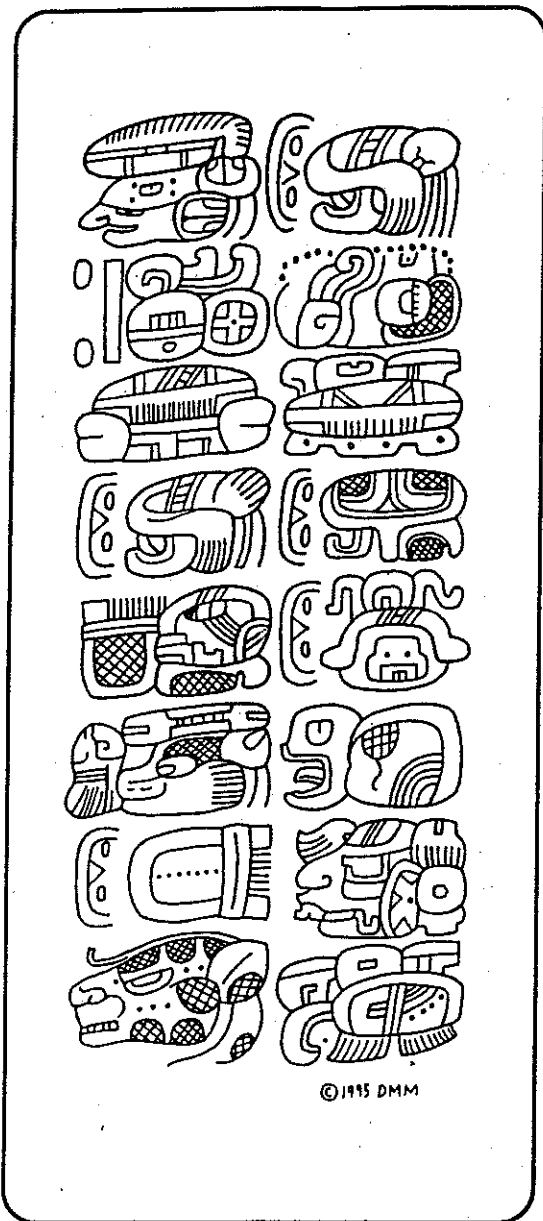


Fig.12 - Bagaces, Costa Rica, slate disk [drawing by David Mora Marín].

In the case of pronominal inflectional morphemes, we can look at C6-D6. There, we find the expression T126-841 y(a)-AK'AB/AK'-il giving y-ak'ab-il "its/his darkness/night," or y-ak'-il "his tongue," with li at D6. However, because of the possible association of jadeite/greenstone artifacts with maize agriculture and, by extension, with ritual bloodletting of the penis (c.f. Freidel et al 1993), the reading u-ch'am y-ak'-il is preferred here. The

T126 syllabic ya seems to function as the prevocalic third person pronominal ergative prefix, y-. The expression at C5-D6 resembles greatly that found at A4-B4 on the mirrorback slate disk from Bagaces, Costa Rica (JM sl-mrr) (Fig.12). There, a lot of information is densely packed: u-BAH u-CH'AM-?me \*y(a)-AK'-il, rendering u-bah u-ch'am y-ak'il "he was harvesting his tongue." In the DO q-pct, the expression appears to have an early variant of T712, the bloodletter sign, viewed frontally as it is shown in the JM sl-mrr: at B4 and on the "Wray Mask" (UNP w-msk) at B7 (Berjonneau and Sonnery 1985:Plate X). Another example appears at A9 on the so-called "Floor Marker" from the Motmot structure at Copan, which has T712[841]:74(?) CH'AB//CH'AM-?(ma) AK'AB//AK'-\*il, reading either u-ch'am y-ak'il or u-ch'ab y-ak'ab (Schele *et al.* 1994). Such a frontal view was perhaps the most common early form of the T712 bloodletter glyph.

In the DO q-pct one finds the same cluster of glyphs but arranged differently: (1) at C5, x-CH'AM-?me, the u-ch'am expression; (2) at D5, \*u-BAH or BAH-\*ha, an early variant of the u-bah expression (albeit greatly abbreviated), or -BA(H), a reflexive; and (3) at C6-D6, the y-ak'il expression, with an allogram of the T24 syllabogram li as a possible nominal suffix, rendering y(a)-AK'-il. In the case of (1), we find a sign that looks just like the PSSIG yet with a broken rather than straight band superfixing what I suggest is the frontal view T712 bloodletter sign (CH'AM//CH'AB). The suffix seems to have two hook-like projections that make it resemble T126 ya. It is possible, though, that in this and other contexts this suffix has a different value



CROWN expression below. It is interesting to note that, just as it happened at A5 with the SEATING glyph, no verbal affixes precede or follow the proposed allograph of T757 BAH/-BA(H).

Although it is not possible to know whether an incompletive (**u-bah**) or completive (**bah-ah**) was intended, the positioning of D5 after the suggested verb would support a function as a reflexive particle (Bricker 1986:112-3). If it is the latter interpretation that is correct, then D5 could be related to proto-Cholan \*b'ä or Tzeltalan \*bah, as a reflexive "self," as has been pointed out by several authors (e.g. Stuart & Houston in Grube 1991:205; Bricker 1986:42, 112). If C5 is indeed HARVEST or PIERCE, then C5-D5 might read "he pierced himself." The absence of a T1 **u-** and/or of T89/92 **tu**, or allographs of these, may be important, for the former would be indicative of a direct object reflexive construction, while the latter would raise the possibility of an indirect object reflexive construction. The absence of either one, or of both (sometimes the indirect object construction shows both T89/92.1, as Bricker also notes), as well as the absence of T1 **u-** also in the case of C5, are worth noting. An example of the use of a reflexive in the Classical Yucatec *Book of Chilam Balam of Chumayel* is provided by Bricker (1986:37):

ti-ixu-hok-s-ic-xu-ba  
loc.-and3sg.-leave-caus.-impf.-3sg.3sg.-self  
"And there he was manifesting himself..."

The C5-D5 expression would therefore read "he was harvesting/piercing himself." The fact that C6 may be read as **y(a)-AK'-li**, rendering **y-ak'il** "his tongue," and thus functioning as a possible object of the verb at C5, strengthens the probable function of D5 as a reflexive, for as Aissen points

out in the case of Tzotzil, reflexive clauses are "finally transitive" (1987:78). Aissen also remarks that "the reflexive nominal form... immediately follows the verb" and that, at least in Modern Tzotzil, it may not be fronted for focusing or any other reasons (1987:114). I therefore believe that both the iconic resemblance and the placement of the sign at D5 after the probable verb at C5, in the context of a direct object collocation (with the DO at C6-D6), are strong evidence for the value **-BA(H)**. The mystery, of course, lies in why neither D5, nor C5, shows the expected pronominal inflection.

This expression (C5-D6) may not be only a narration of a bloodletting event, but in addition, a reference to the quartzite pectoral itself,<sup>11</sup> which, as for other jade and greenstone artifacts, may have been conceived by the Maya as the embodiment of the earth's nurturing power which results from the ritual bloodletting of the sacred crops of the king. Blood harvested from the tongue and/or penis is sacredly symbolic of corn.

It would therefore appear, then, that this early text can be understood as more logo-syllabic in character than might have been expected for its age. Furthermore, the absence of (1) allographs of the pronominal prefix **u-** in expressions where in later texts it is very common (the **ch'am** and **-ba(h)** expressions) and of (2) pronominal prefixes and tense-aspect affixes with verbal expressions such as the SEATING or CHUM glyph, suggests that, at least to the scribes who incised this text (and those of the other early texts under primary consideration here), such forms

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<sup>11</sup>Or even a name-tag of a sort, as suggested to me by Stephen Houston.

primary consideration here), such forms had not come into use by this time—it was information provided by the reader, not by the writer. A contradiction to this is, of course, the likely occurrence at B1b of the intransitive verb completive aspect marker. This marker, however, is not present with the proposed GOD N dedicatory expression, even though it commonly (but by no means always) appears with it in later texts.

For instance, if glyph C1 on the DO q-pct is a form of the God N dedicatory verb, following it at D1 we might expect to find a possessed object that was dedicated, and at C2-D2 the owner of the dedicated object. In such a construction one would expect C1 to show the completive marker -i for a derived transitive stem (MacLeod 1990:338) and D1 to show inflection for possession (e.g. u...-il). As Stuart (1987:7) observed for the Primary Standard Sequence: 'When the "God N" glyph (or an equivalent) precedes ts'ib [the object of the sentence], then ts'ib customarily takes the u prefix... When God N is absent, so, in most cases, is the u.' The same can be argued for B2. If it is also God N, then A3 (at least) would have to be the object dedicated, and the rest would be the name of the owner of the object. A3 would then require an u-/y- prefix, but it shows no inflection of the sort (neither does D4, where it occurs again).

The prevocalic prefix y-, however, might have been regarded as a necessary marker, contrary, perhaps, to the expected order of importance. Indeed, various authors have commented on the vast frequency of the u- prefix over any other grammatical particle or affix in colonial Yucatecan texts. For example, the *Books of Chilam Balam* contain 2398 instances

of u- while the second most frequent grammatical particle is -il, a nominal suffix, with 974 occurrences (Bricker 1986:92). In terms of the third person ergative prefix itself, the preconsonantal form is much more frequent than the prevocalic one because of the common CVC root form of Mayan languages.

Equally important may be the inverse word order of the C5-D5 expression, if it were to be understood as u-bah u-ch'am, rather than u-ch'am u-bah. In later texts the possible reflexive or auxiliary u-bah expression precedes the verbal or equational phrase it modifies, unless it is used as an indirect object reflexive collocation, in which case we would read t-u-bah, or as a direct object one, which is the preferred interpretation here.

Finally, the DO q-pct text lacks, despite the use of several probable syllabograms, evidence of fully syllabic spellings. This text does show the VOS and VS syntax of Mayan languages, suggesting that, at least when this text was incised, the grammatical neutrality proposed for the Mesoamerican proto-script no longer applied (Justeson 1986).

Other logographic signs in the DO q-pct text that can be interpreted with some confidence include: A5, B5, A6 and D3. As noted by Schele and Miller (1986:120), A5 corresponds iconically to a seating posture of a person, quite possibly an early variant of the CHUM SEATING (in rulership) glyph, but showing no inflectional affixes. It is followed by an early form, as well, of the T168:518 ahaw. Although the main sign T518 is located at B5b, the entire expression is an AHAW/AHPO logograph. Thus, the T168 component (Lounsbury 1973) which in

later texts occurs either alone or with T518, is probably just part of T518 itself. One of the elements of the possible T168 variant shows a curl-motif. In the JM j-spñ, at A3 and A8 (both Emblem Glyphs), T168 also has this curl-motif, which Taube (1989) has demonstrated to read AH, thus supporting the AHPO/AHAW reading.

The glyph at A6 also occurs on an Olmec pectoral discussed by Schele & Miller (1986:107,118). It is a variant of T1008 which can be read AHAW "king, lord." The title ahaw would thus occur at least twice in the text: at B5 and at A6. D3 resembles the last two glyphs on each column of Abaj Takalik Stela 5 (from C.E. 126), which may record the coming to power of two different rulers, one perhaps succeeding the other, as explained by Sharer (1994:106) and this author (Mora 1994). It perhaps corresponds to a title (ahaw?).

Other iconic identifications can be made. At B3 we find the icon for "reed," which in Proto-Cholan would have been \*jaläl (Kaufman & Norman 1984). This same glyph appears on a looted turtle shell shown in Grube & Schele (Schele 1994:89). At A4, I believe, is a possible zoomorphic sign that also appears in the JM j-spñ and will be discussed below.

Syntactically, the text appears to contain 6 clauses: A1-A2, B2-B4, A5-B6, C1-D2, C3-D4, C5-D6. A possible paraphrase is:

It came into existence and was blessed, at [place name]/it was blessed, the [object1] of Reed-Mountain/He was seated as king, Crown-Falcon/It was blessed, the [object2] of Crown-Falcon/?-[object1]/He harvested his tongue.

### The Edward H. Merrin Gallery steatite "were-jaguar" figurine

The MG s-wj (Fig.4) has been published and/or discussed by Coe (1973;1976), Fahsen (1987;1988), and Hansen (1991) The object is 17.1cm in height and carved of steatite in the form of an "Izapan" jaguar or were-jaguar figurine with a "horn-like feature (or sprouting maize?) on the top of its head" (Coe 1973:25). It is similar in style to figurines such as the Late Preclassic (330-100 B.C.E.) "bench figure" from Poapil (Guatemala) published by Berjonneau and Sonnery [1985:plate 314].

The DO q-pct and the Pearlman Collection conch trumpet (PL s-trp) texts are quite useful for comparison to the first three glyphs of the were jaguar text. In each case the God N glyph (bearded or not) begins a clause, and is followed by the name of the object dedicated and by a nominal phrase denoting the dedicator. In the MG s-wj text, A1 corresponds to the God N dedicatory verbal expression, B1 to the object dedicated, and what follows B1 is the nominal phrase of the dedicator. The glyph at B1 can be described as an anthropomorphic head with a leaf or sprout in front of its face, which in my opinion, is a human version of the jaguar figurine itself; that is, the leaf or sprout in B1 parallels the sprout or horn-like feature that tops the jaguar figurine's head. The figurine itself is the object that was dedicated.

Continuing through the text, at A2 is a variant of the CROWN expression visible in the DO q-pct, corresponding to what Schele and Miller (1986:309) suggest to read NIKTE "flower" in the PL s-trp. It may read instead MET "crown," as

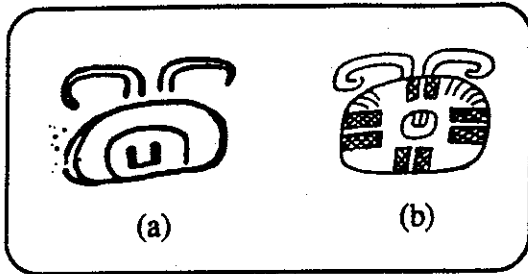


Fig.13 - (a) MG s-wj, A2; (b) PL s-trp.

explained above, the superfix a possible syllabogram for me. In the case of the MG s-wj, the Kendal axe (KDL g-ax; Schele and Miller 1986:227), and the El Mirador Chicanel Phase pot sherd (EM p-shd; Demarest 1984), the main sign shows the ubiquitous U-sign (Fig.13), but it is premature to suggest a reading of te for this sign. Signs with the U-element are too numerous and appear in widely different contexts, many times in contexts that suppose different phonetic or even semantic values. Even though this sign may have evolved in later times into an alternative grapheme for ahaw and/or evolved into a form of the sak hunal glyph (in which case some morphologic evolution took place), it is suggested that its original semantic and phonetic value was met "crown." A similar sign may even occur at A2 in an earplug ornament from Kaminaljuyu (Kidder et al. 1946:106, figs. 44,146), where it occurs at the beginning of a clause (after a possible date) with the verb (possibly the step sign?) apparently occurring in the penultimate position.<sup>12</sup>

B2 in the MG s-wj may be an early form of the "penis" title, which Lounsbury (1989) has read logographically as AT and whose fullest expression Jones (1991b) has interpreted as T115.761[114] yo-x(a) AT, reading yox at "scarred penis," in relation

<sup>12</sup>This would reflect an SVO word order if the proposed CROWN glyph and the two following glyphs comprise the nominal phrase or subject.

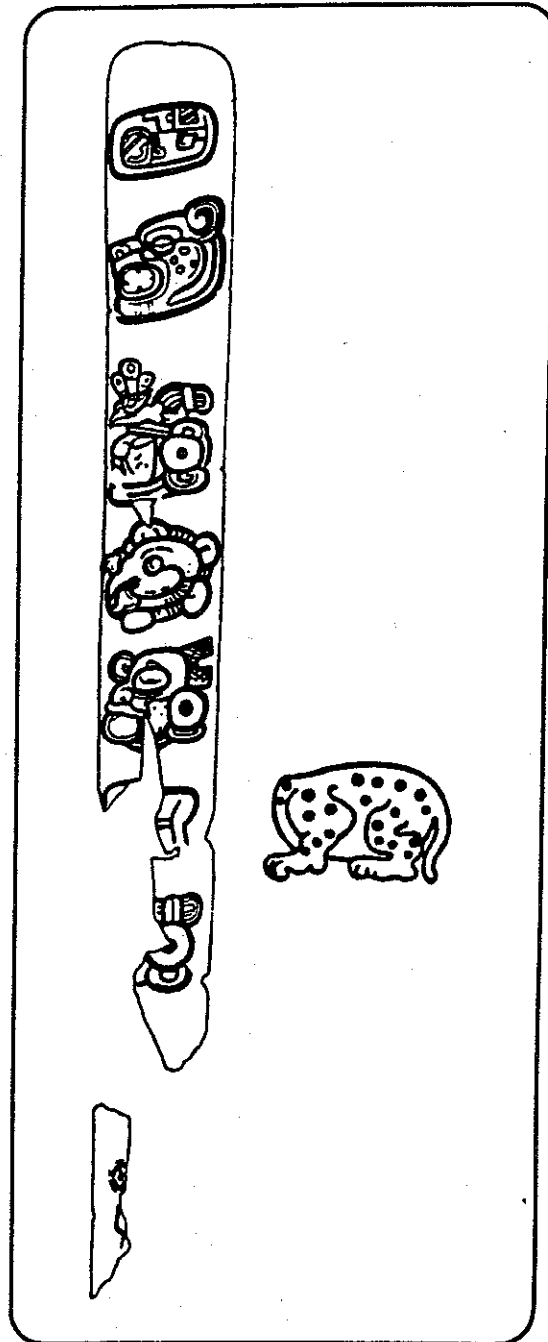


Fig.14 - Carved bone bloodletter from Kichpanha, Belize [drawing by David Mora Marín].

to the ritual bloodletting of the penis. Schele (1995:2-3) has interpreted this expression as reading yo-(a)-AT, or y-oat "his erection" and/or as TOH AT, which in conjunction with the CHAN expression, read something like "tall or heavenly erect penis." It will be seen and discussed below for the Dumbarton Oaks jadeite plaque.

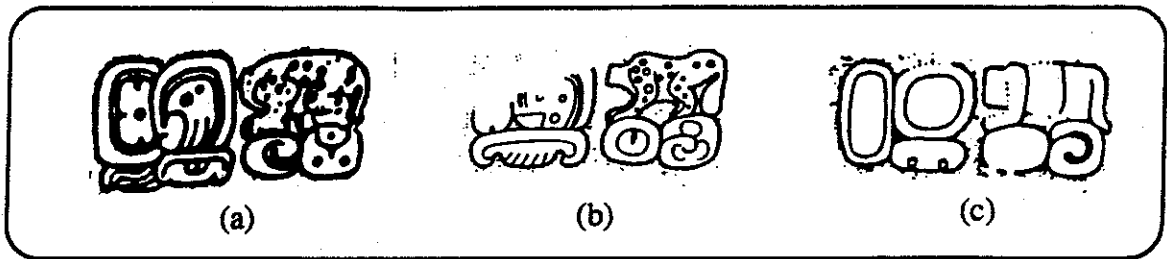


Fig.15 - T832, the "beheaded jaguar" glyph: (a) Palenque T. Sun; (b) Yaxchilan L.47, C3-D3; (c) Tikal St.3, C3-D3. [Drawings by (a) Linda Schele; (b) Ian Graham; and (c) William Coe.]

At A3 is T832 "beheaded jaguar." It also appears at A6 on a carved bone bloodletter from Kichpanha, Belize (KCH b-bld)(Fig.14). The KCH b-bld shows at A5 a possible logographic variant of the WAY glyph seen elsewhere, for instance, on Palenque's Tablet of the 96 glyphs, and which is comparable as well with the figure of "Scroll-Ahaw-Jaguar" of Tikal Stela 29, where that ruler wears headgear "marking him as shaman" (Schele & Freidel 1990:141-2).

Whether or not A5 is a WAY sign, the glyph at A6 of KCH b-bld is indeed the name of a particular type of way. Grube and Nahm (1994:687-8) propose a reading of *k'intanal bolay* or "sun-stomach jaguar" for one of the recurrent wayob appearing on Maya pottery vessels and monumental inscriptions. As they observe, this beheaded jaguar glyph appears on the Tablet of the Sun in Palenque, Yaxchilan Lintel 47, Tikal Stela 3, and Xunantunich Stela 1 (Fig.15). In these various contexts, T832 is preceded by (1) the inverted vase glyph (which Grube and Nahm read *K'IN* based upon its substitution by T544 in one occurrence), and (2) the T606:23 *ta-n(a)* "stomach" expression, and is subfixed by *bu*, *yu*, and *la* syllabograms, suggesting the reading *K'IN-ta-na-\*(a) bu-la-y(u) k'intanal b'olay* "sun-stomach spotted jaguar." Grube and Nahm also note that its "occurrence as one of the epithets of GIII confirms that this jaguar is an aspect

of the night sun", something suggested already by the *k'in* sign that spans the jaguar's belly in its ceramic representation. They do not mention, however, its occurrence on the KCH b-bld and on MG s-wj, where can be found the same beheaded jaguar, with the only important difference being the presence on the latter of an H-motif (unless it is a curious scratch mark) where the jaguar's tail would be.

Returning to the MG s-wj, A3 is followed by what may be a jaguar head glyph, and could perhaps be the glyph denoting way, since such glyph often (but not always) follows the specific name of the animal spirit on pottery vessels.

A4 is perhaps a variant of A2 on the JM j-spñ (compare Figs. 4 & 5), where it appears as a personified or zoomorphic head, and could very well be a name or title of a person. It has two small triangular subfixes that appear only once in the MG s-wj but 3 times in the JM j-spñ in an identical form, and a fourth time in a different form. In the latter, as explained by this author (Mora1995), the possible values for this subfix are *la* (as a phonetic complement to *AK'BAL*), *ba* (as a phonetic complement to *AK'AB*), and *wa* (as a phonetic complement to T168 *AHAW*). One can suggest that it corresponds to *la*, however, due to the overall shape and positioning of *la* syllabograms in later texts such as the PL

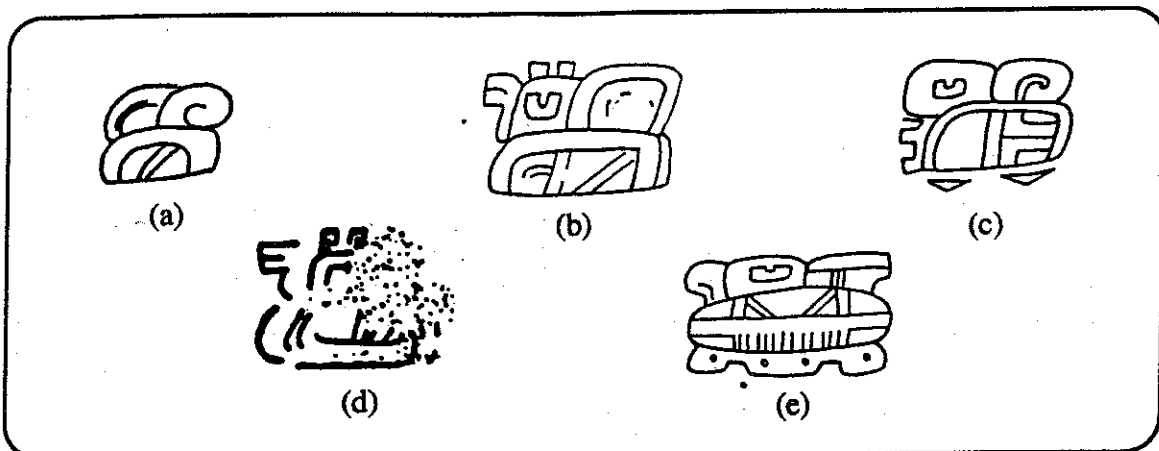


Fig.16 - (a) DO q-pct, B5; (b) ; (c) JM j-spñ, glyph 8; (d) MG s-wj, B4; (e) JM sl-mrr B3a, emblem glyph of Waxaktun.

s-trp (at A1c and D1b), and Tikal Stela 31 (G19, G24, E11). This could also be an example of morphologic modification through time, such as what took place in the case of Cuneiform writing (Green 1989:44; Sampson 1985:51-3), although in that case the change was due mainly to a change in the writing tool used by the ancient Mesopotamian scribes (the replacement of the pointed stylus, used at first, with a narrow reed blunt stylus that resulted in the typical wedge-shaped lines).

Glyph B4, as suggested by Fahsen (1987), may be an honorific title. Contrary to Hansen's (1991:30) identification of the first element of this glyph as a variant of syllabic T117 wi, deciphered by Stuart (1987:13), B4a appears to be instead a variant of a sign that may have the value of *ch'u//CHU* or *CH'UL*, and would therefore be equivalent to T33 and T35. It occurs in several other early texts (Fig.16), where it prefixes emblem glyphs (EGs). An emblem glyph is a title typically composed of three elements: (1) a "water-group" prefix, with the value *CH'U//CH'UL* and commonly composed of T35-39, (2) a T168 superfix, with the value *AHAW*, and (3) a variable main sign (Berlin 1958; Marcus 1973,1976a;

Mathews 1985, 1991; Stuart & Houston 1994). Since the element at B4a is placed in its three other occurrences as a prefix to such EGs, I interpret it here as an allograph for *CH'U//CH'UL*. It may be of relevance that the example with the closest similarities in style and form with that in the MG s-wj is that found in the DO j-plq, which dates to C.E. 120 (see below). It remains open to question whether these early EGs have a politico-territorial implication as expressed in the Early and Late Classic texts or were simply "divine lord" titles from which EGs would later evolve.

The remainder of the text is obscure due to its damaged condition. However, B5 may be the glyph for "moon," B6 is an allograph of T188 le, similar in style to the example from a Maya jade found in Costa Rica and previously discussed by this author (Mora 1995:18). A7 appears to be a glyphic hand, most likely a verbal



Fig.17 - KDL g-ax, A3.

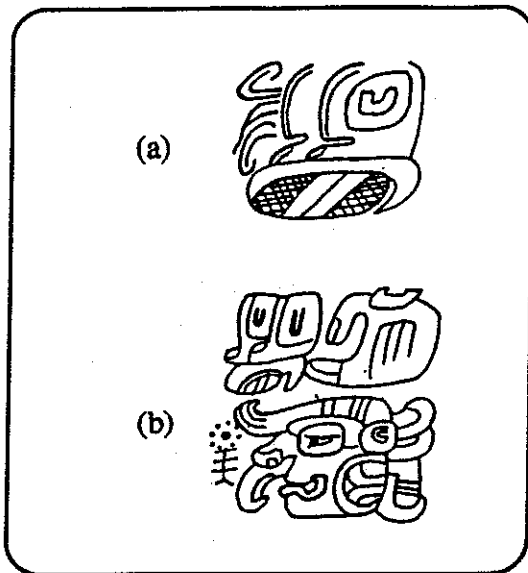


Fig. 18 - (a) Jade Museum plaque INS 2006; (b) Pomona flare.

expression of some sort and lacking any affixation at first sight, supporting the suggestion, made above in the discussion of DO q-pct, that such information was at first provided by the reader, as seems to occur at A3 in the KDL g-ax (Fig. 17). B7 appears to correspond to B5b of the DO q-pct, that is, to T518, phonetic *ki* by itself but logographic AHAW/AHPO when used as a title with T168. A8 is very hard to identify, but may correspond to the “inverted ahaw face,” like syllabic T534 *la*. Finally, B8 seems to correspond to an allograph of T17, syllabic *yi*, as in DO q-pct:B1b. These last few interpretations are far from conclusive though.

#### The Olmec-Maya Jade Museum jadeite “spoon”

The “Olmec” blue-green jadeite spoon with an incised text of 8 glyphs on its back also belongs to the above mentioned scribal school (Fig.5). Published in a *Musées Royaux d’Art et d’Histoire* catalog (1992:150, figure 73), JM j-spn has a height of 18 cm and a width of 5.2 cm. Its first glyph (A1) is incomplete, but its

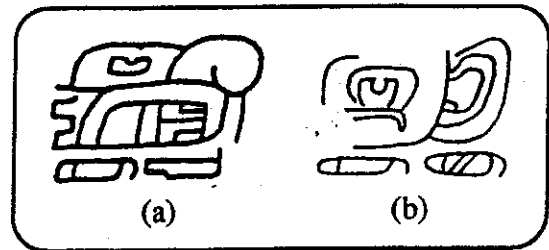


Fig.19 - (a) JM j-sp; (b) Leiden Plaque.

subfix is visible as the inverted triangles discussed above and suggested to be an allograph of *la*. A1 probably corresponded to a verbal expression or to a possessed noun. If the latter is the correct, it may have been the name of this object. However, Federico Fahsen (1995, pers. comm.) considers that it might be T840, which appears in the Pomona jadeite earflare (PM j-efl; Justeson et al. 1988), where it is subfixed by T24 II (the “hooked” allograph), and in one of the jade plaques in the Jade Museum in Costa Rica (JM j-plq, INS 2006), where it is expressed as *ya-T840-li*, suggesting an initial vowel /*a*/ for T840 (Fig.18).

A2 was interpreted above as a possible title or nominal glyph, which at A4 in MG s-wj was subfixed by the triangular elements. A3 is an EG or title and may read CH’UL AK’BAL-(IV) AHAW “divine lord of the night,” or “divine lord of darkness”. A3 appears to carry two rectangular subfixes similar to the subfixes found at B9c in the Leiden Plaque (where they participate in the reading of CHUM-la-h(a) “was seated” as the syllabogram *la*)(Fig.19) and for which a consonant /*l*/ is likely. The free substitution of A3d with the inverted triangle subfix of A8 (for which a value of *la* was suggested previously) is further evidence of an IV value. The phrase A1-A3 probably reads: “the (object) [of] he (name/title), divine lord of darkness,” or “he (verbed), (title), divine lord of darkness.”

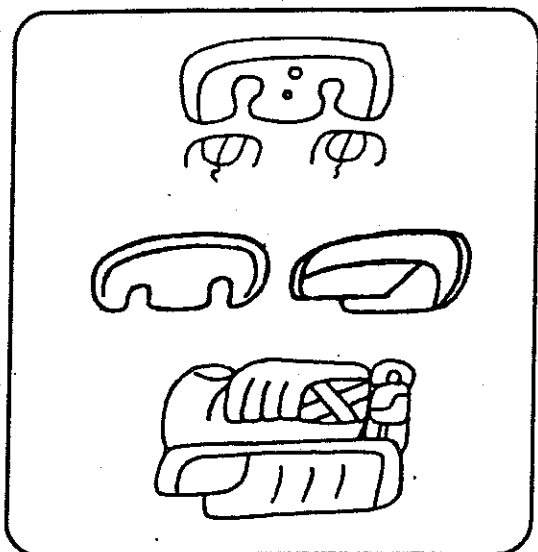


Fig.20 - Nal expressions.

A4, given its association with God N as discussed above, may read HUY "to bless." It is followed by a T254/503 and a sign not present in Thompson's Catalog (1962) except as part of T254. It also occurs in Waxaktun Structure B-XIII murals where it probably reads (na)-NAL-(IV) (Smith 1950:Fig.47), giving a reading of NAL-(IV) at A5. The nal expression is common on portable objects, appearing, for instance(Fig.20), at B10b on one of the Maya jades found in Costa Rica as (na)-NAL-(la)<sup>13</sup> (Mora 1995:Fig.25), as well as in the Covarrubias text<sup>14</sup> where it is spelled syllabically at A1-B1 as na-l(e)<sup>15</sup> (Covarrubias 1957:Fig.94), and in the Early Classic UNP p-trd at A2 as na-l(a), where it must refer to maize and is followed by \*ka-ka-w(a). Why is the word

<sup>13</sup>The la syllabogram being, in this case, a duo of rectangular signs each divided into three smaller rectangles as seen also at A2c of the jadeite tubular bead from the Cenoteat Chichen Itza and at Tikal Stela 31:A16.

<sup>14</sup>Abbreviated here as CV text for lack of more information on what kind of object it is incised on and where it is located at present.

<sup>15</sup>B1 is an allograph of T188 le, similar to the example seen on the Pomona Flare at A1, PM j-efl.

nal used here? In both Yucatecan and Cholan languages nal means "corn ear," *mazorca de maíz*. Karl Taube has provided iconographic evidence that objects such as jade plaques and, in the case of JM j-spñ, jade spoons, were conceived by the Maya as "ears of corn," a suggestion made by Reents-Budet, Fields and Mora (n.d.) based in part upon the epigraphic evidence presented here.

A6 is a glyphic head, which Fahsen suggests may be an allograph of T1000 AHAW (1995, pers.comm.). A7 may be the zoomorphic (bird?) glyph that appears at A4 in the DO q-pct as well, but in the spoon it is subfixed by a medallion-ribbon-like motif and the inverted triangles. This ribbon-like motif is most likely one of the headdress beads worn by the seated figure in the DO q-pct, and should be described for now as BEAD. Finally, at A8, we find the same EG-like sign mentioned at A3, with the only difference being its use of the inverted triangles as a suffix. Consequently, A4-A8 probably reads something like: "was blessed, the corn ear of (deity/ruler head + zoomorphic head), the divine lord of darkness."

#### Other important late Preclassic texts

Another object of great interest (not taken to be part of the scribal school of the texts discussed above, even though it might have been) is the unprovenienced Dumbarton Oaks jadeite plaque (DO j-plq; Fig.21), first discussed by Coe (1976) and later by Schele and Miller (1986), who reconstructed the date as 8.4.0.0.0, falling in the Gregorian Year C.E. 120.

The front of the celt portrays a ruler wearing three belt plaques containing the T503 NAL sign, seen also on Caracol Stela



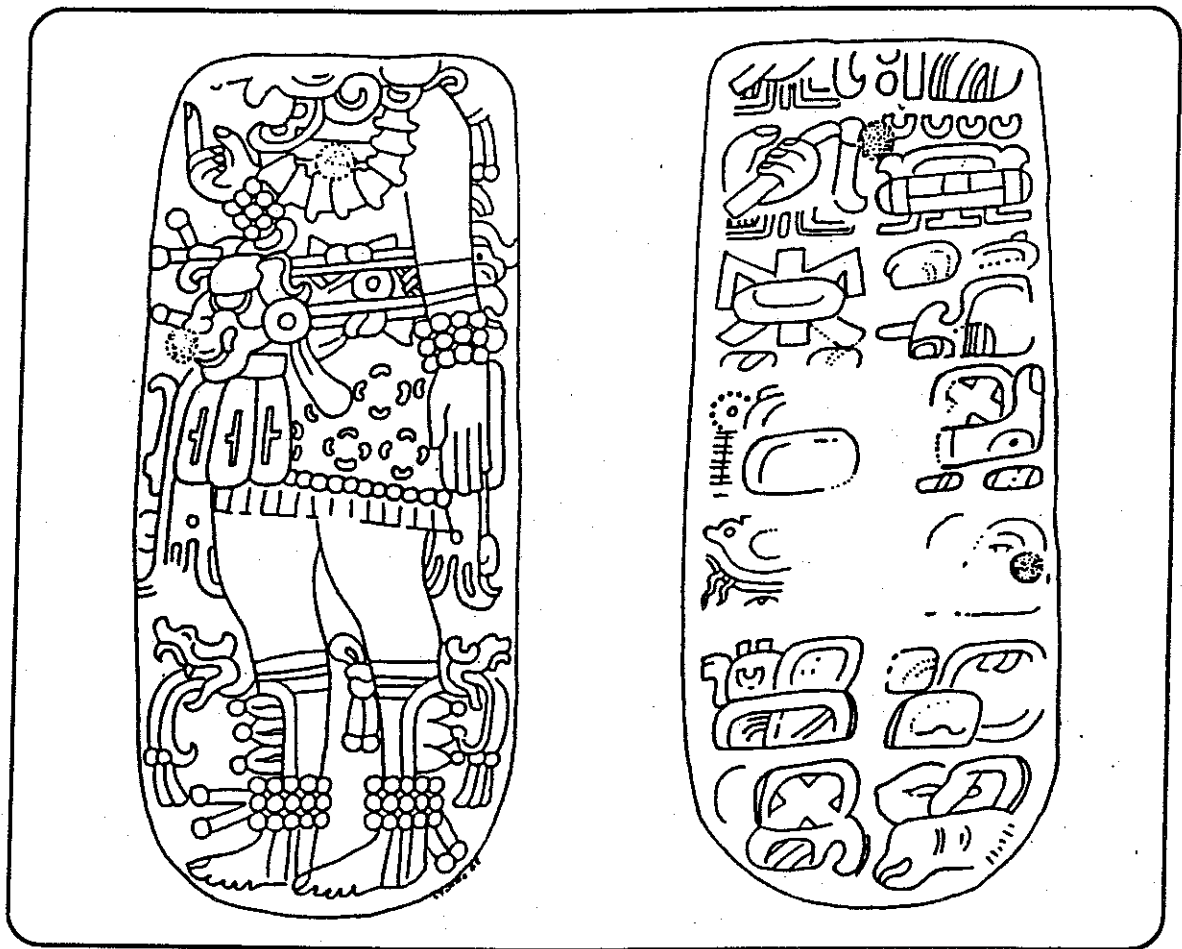


Fig. 21 - Dumbarton Oaks jadeite plaque [drawing by Linda Schele].

6 (Fig. 22), supporting the interpretation of these plaques as “ears of corn.” Thus, one of their denominations was *nal*.

The verb at glyphs A1 and A2 is *hul* “to arrive,” interpreted by Grube and MacLeod (in Schele 1994). As an intransitive verb, it takes the completive aspect suffix *-i*, serving as “past tense.” This implies that the suffix should be read as *Ci*, where *C* may correspond to one of a variety of probable values: /h, j, ‘, s/. This sign is identical to the Isthmian syllabogram 101 *si*, as used in the nearly contemporaneous La Mojarra Stela 1 and the Tuxtla Statuette (Justeson & Kaufman 1993), and even in the text of Kaminaljuyu Stela 10 (Mora 1994). In my opinion this may be an indication of diffusion. The sign

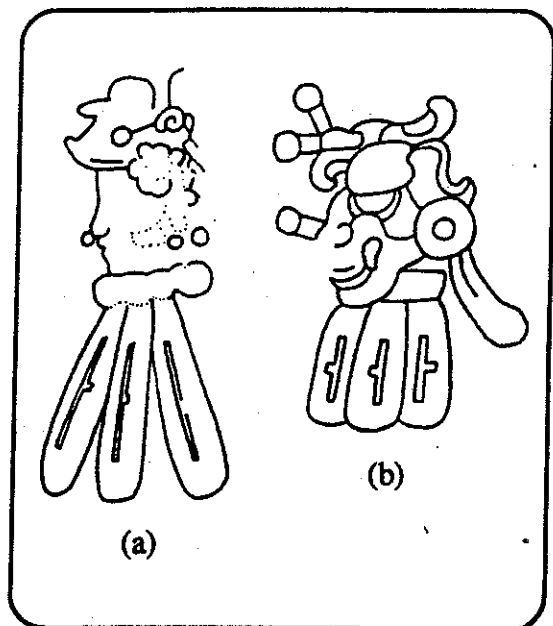


Fig. 22 - Comparison of the belt celts on two monuments: (a) Caracol St. 6 [drawing by Carl Beetz] and (b) DO j-plq [drawing by Linda Schele].

at A3c appears in some **u-ch'ul-k'aba** expressions, whereas the sign at A3d probably corresponds to syllabic **la**.

Several of the glyphs are too worn or eroded to read with certainty. For example B3 has a possible T526 or T528 **HAB//TUN//KAWAK//ku//ka** sign and a probable T1 **u**, along with other unidentifiable elements. A4 might be an expression like **ta AHAW-le(l)** "in rulership" (though the is far from clear) in which case one would expect A3-B3 to be some sort of verbal expression of accession to rulership.

The **k'in-in-hand** glyph at B4 is a collocation which Schele and Miller (1986:82) correctly remark "appears repeatedly in Protoclassic texts" though they incorrectly assert that it does not appear later. While it appears in such Preclassic texts as the San Diego Cliff Carving (**ya-K'IN-IN-HAND-?**) and a carved stone bowl illustrated in Coe (1973:26), it also appears in Early Classic texts from Yaxchilan and Copan. Indeed, Yaxchilan Lintels 22 (at A4) and 47 (at C4) and Copan Stela F (at A10) show this expression. The first two read **ya-K'IN-IN-HAND-la**. On the DO j-plq, the expression reads **K'IN-IN-HAND-la** and is effaced in the space where one would expect the T126 **ya**. Because of its clause initial position in this text and the Yaxchilan texts at least, it could represent either a verbal expression or a possessed noun introducing an equational sentence. If the latter, a good possibility could be a parentage expression such as **y(a)-AL-(la)**, as suggested by Reents-Budet, Fields, and Mora (n.d.) and Steve Houston (Escobedo, pers. comm. 1995). If it is a parentage "child-of-mother" statement, then A5-B5 may be nominal glyphs naming the mother

of the protagonist, with A5 showing a possible iguana subfixed with an alloglyph of **la**, while B5 shows only enough detail to say that the second glyph is probably an anthropomorphic head. The titles of the person named at A5-B5, however, may appear at A6-B6. A6, as noted earlier by Schele and Miller (1986:83), "is also a very early form of the ahau title." But as already discussed for the early texts under discussion here (specifically, glyph B5 in the DO q-pct, B4 in the MG s-wj, A3 and A8 in the JM j-spñ, and B3 in the JM s-mrr), this title has what may be an early form of the "water group" prefix, thus reading **CH'U//CH'ULAHAW**. B6 is too eroded to read.

The glyph at A7 is particularly interesting. Reading **u-K'IN-hi/li**, it may be either a derived transitive verb in completive aspect (**u-...-i** inflection) as in Classical and Modern Chontal (Bricker 1986:33), or a possessed noun (**u-...il**). For the former possibility, the Modern Yucatec terms **k'in** and **k'inanhal** meaning *reinar k'inankil* meaning *reinar y mandar*, and **k'inil**, defined as *estar propero y reinar y mandar* (Barrera Vasquez 1980), may be relevant. All of these terms deal with rulership and reign. B7 is the title interpreted by Jones (1991b) as **yox** at "scarred penis." Here it may read **yo-\*x(a) AT-(te)**, with the "penis" logograph deciphered as **AT** by Lounsbury (1989), although, as mentioned above for the MG s-wj figurine, it might read instead **y(o)-OAT-(te) y-oat** "his erect penis," if Schele (1995) is correct. If A7 is a verbal expression or possessed noun introducing an equational or stative sentence, then B7 might be the subject of such sentence.

The presence of cycle (**bak'tun** at B1 and **k'atun** at B2) glyphs on the DO j-plq

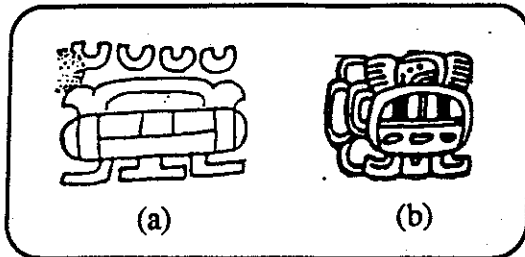


Fig.23 - Comparison of k'atun glyphs: (a) DO j-plq, B2 and (b) Tikal Stela 31, G11.

may be the earliest known use of these collocations. Interestingly, the k'atun glyph on the plaque is comparable in terms of its component elements to that on Tikal Stela 31 (Fig.23). The style of the coefficient is identical to that on a tubular bead from the Cenote at Chichen Itza (CN j-tbd, Fig. 24). This item appears to be transitional (Late Preclassic-Early Classic) in style, perhaps from around C.E. 150-250. At A1 is the expression **CHAN-TUN//HAB** "four tuns (years)," supporting Justeson and Mathews's (1983) suggestion that the use of the word **tu-n** with the dual meanings of "year" and "stone," and based upon the use of the hollow drum (\***tu-n:**) icon as a rebus, was in fact established at least by the Early Classic Period, and, given this evidence, by ca. C.E. 200. It is worth noting as well the similarity of the **TUN//HAB** glyph in the DO j-plq with that at A1 in the CN j-tbd.

At A2 is an expression consisting of a prevocalic third person pronominal prefix **y-**, expressed with the syllabogram **yu**, suggesting that the glyph at A1b begins with the vowel **u**. There is a sign at A2c which seems to correspond with the **IV** pair that appears commonly as a phonetic complement for the **nal** sign discussed above, with **V** an unspecified vowel. Iconographically, A2b seems to depict two types of objects: an earflare and a tubular bead. Indeed, as seen in Fig.25, this icon appears in the PM j-efl and Kaminaljuyu

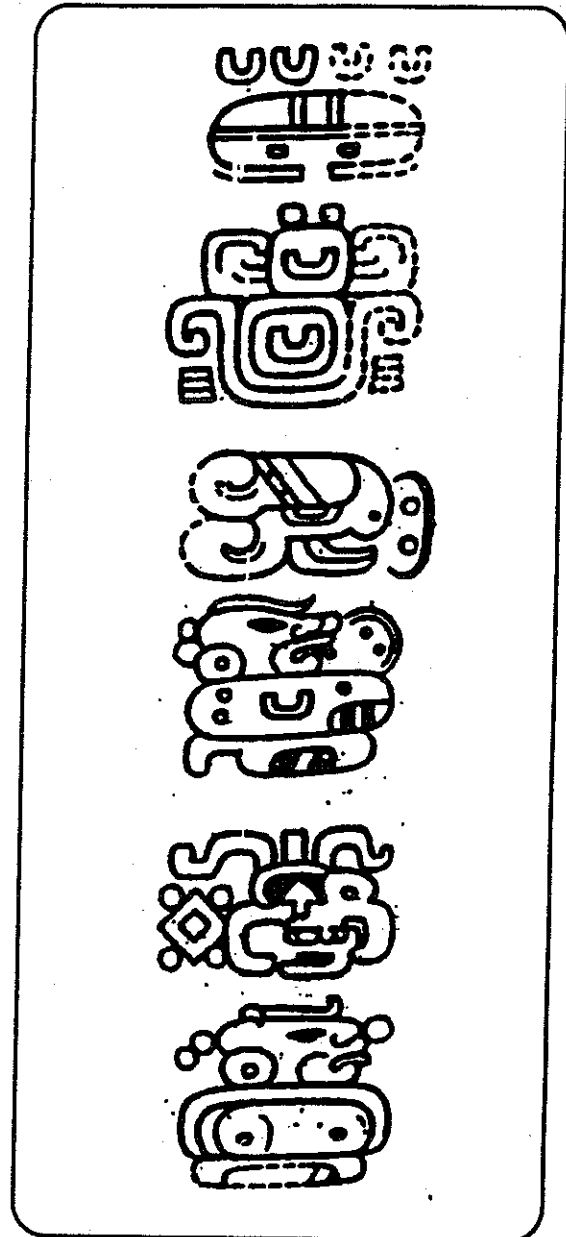


Fig.24 - Text from a tubular jade bead found in the Chichen Itza Cenote, CN j-tbd (drawing after Proskouriakoff 1974).

Stela 10 in place of a deity's earflare, while on Tikal Stela 31 and Uolantun Stela 10 the same icon is used as a tubular bead. According to Stuart and Houston (1994:45-46), in several ornaments from Chichen Itza there are "name tags" that read **yu-UH-il**, for **y-uh-il**, in which the word **uh** "collar ornament, necklace" is possessed. They also note that all objects with such tags were drilled for suspension.

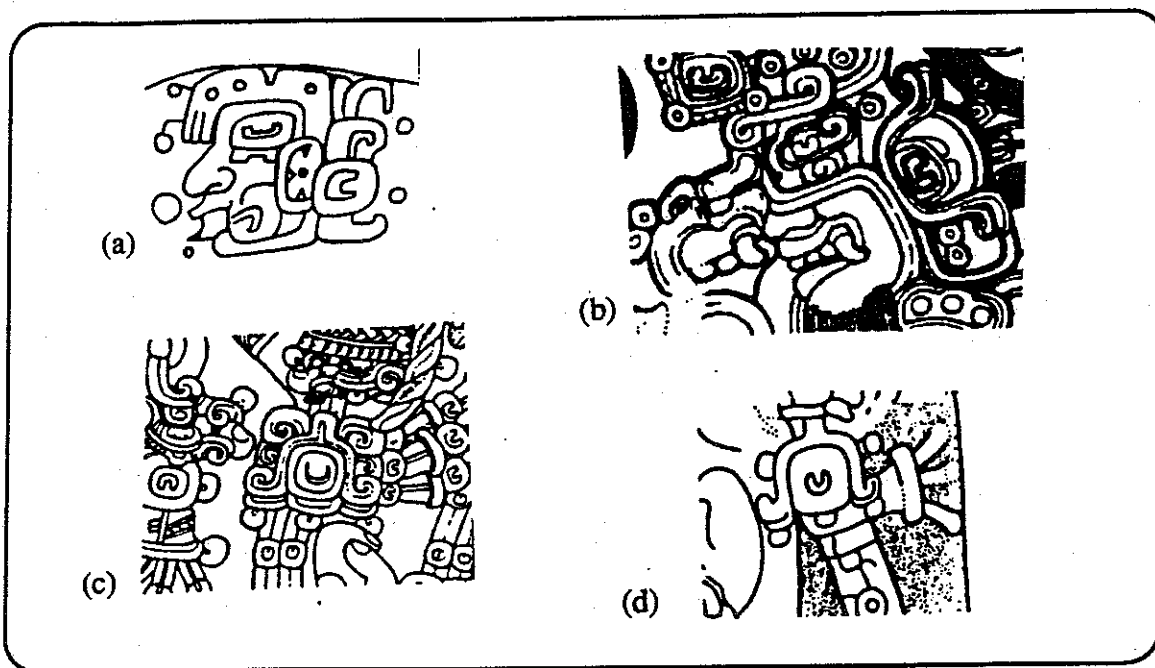


Fig.25 - (a) PM j-efl; (b) Kaminaljuyu Stela 10; (c) Tikal Stela 31; and (d) Uolantun Stela 10.

Modern Ch'ol has several apparently related terms including *ujan* and *ujal* meaning *gargantillas* (a type of ornament for necklaces), and *uya'* meaning *arete* (earring) (Aulie and Aulie 1978). Modern Yucatec includes the term *u* (collar) (Barrera Vasquez 1980). It appears that *uh* can be interpreted as either "collar ornament" or as "earring," and therefore a possible logographic reading as U(Y/H) would explain the resemblance of A2b with A2a, syllabic *yu*. Likewise, A2c taken before to represent an IV combination, might—by analogy to Stuart and Houston's examples—be syllabic *li*, though this is only conjectural. It may well be that A2c identifies the intended word as *ujal gargantillas*, as follows: *y(u)-UHAL-(la)*, in which case A2c works as a phonetic complement to the final alveolar lateral approximant *l* of the word. I think it is also possible that the vowel harmony principle is at work here. The remainder of the text probably refers to the type of "collar ornament" this bead was (at A3?) and names its owner.

Gift-giving and the origins and discussion of Mayan writing

The importance of portable objects in the origins and perhaps even adoption of writing systems in Mesoamerica has been previously outlined by Justeson (1986). His hypothesis is further complemented with concepts discussed by Houston and Taube (1987), Houston *et al.* (1989), Mathews (1979), and Reents-Budet (1994). These authors comment on the importance of portable objects as: (1) a means for diffusion of ideas (such as writing), (2) a source of insight into the typological description of such objects by the Maya themselves, and as (3) social currency, which allowed the establishment and maintenance of relationships between intra- and interside elites. The epigraphic analyses presented above of a small section of early portable objects with incised texts offer many clues to the role that such materials play in the development of both the Mayan script and of the Maya religious and political institution of rulership.

The practicality of small objects with incised texts over monumental inscriptions is evident: the former can be easily transported and, consequently, serve as gift offerings. Among the types of portable objects, paper books should be assumed to have been highly important, but they have not survived. What remain are only those portable objects made of durable materials such as jadeite and other greenstones, shells, slate, clay, etc. Justeson (1986:444) sees the social context of the emergence of writing in Mesoamerica as one in which the diffusion of ideas (e.g. iconography and writing) is conducted primarily and with the greatest efficiency by means of portable objects, such as the Olmec jade figurines and celts with what he terms "incipient writing" and what Coe (1976:111) calls "*pars pro toto* writing." As I mentioned earlier in this paper, incipient and full writing appear nearly simultaneously over a wide geographic range, including, in fact, the entire Maya area from Loltun Cave in Yucatan, to El Polol and the San Diego Cliff Carving in the Central Lowlands, to El Porton in the Salama Valley and Abaj Takalik on the Pacific coast of Guatemala. Writing originated and spread rapidly throughout the Maya area.

Portable elite objects passed as heirlooms from generation to generation, and carried as gifts from elites of one city to their peers in other cities could very well have been responsible for such a rapid rate of diffusion. This is where Marcus's (1992:11-12) discussion of the basic types of propaganda can prove very useful. Though she defines four types, I will refer here to only two: (1) vertical propaganda, created by the elite and "aimed at influencing the attitudes of the commoners below them," and (2) horizontal

propaganda, which occurs within a group in which all are at the same or nearly the same level, that is, propaganda that elite members create and direct towards other elites. In this basic distinction of propaganda types lies an important difference between the texts on monumental sculptures and those on portable objects.

Monumental inscriptions, such as those that appear on stelae, altars, hieroglyphic stairways, etc., and which often display bound and humiliated captives, were aimed at the masses, to impress the majority of local inhabitants and visitors, both friend and foe. Jadeite pectorals, celts and plaques, earflares and tubular beads, stone figurines, conch shell trumpets, pyrite mirrorback slate discs, and other types of portable objects with incised hieroglyphic texts were only partly meant to be seen by the masses. Their main propagandistic purpose was horizontal, aimed at the elite itself. Only a member of the elite would get the chance to stand next to his king and see the sacred writing incised on the jade plaques hanging from his belt, and to know that these texts related the dedicatory rituals of these objects, themselves made of powerful materials like jade and pyrite; only a member of the elite would know about the bloodletting rituals performed by owners of sacred objects with those objects, and about the mythology and history of a ruling lineage—the kings' ancestors and gods. These objects, and other elite goods, were both proof of the king's status and right to rule and the means by which the king could safely transmit this right and prestige to his heir, as surmised by Fahsen (1988:298). Finally, portable objects provided an effective medium of social inter-site interaction, just like Classic Period painted

pottery vessels did later on (Reents-Budet 1994:50). As a result of increasing social complexity and competition for resources, diplomacy may have been achieved through the giving of gifts in order to secure trading partners. It is known that trade was already intense when writing was in its infancy, as evidenced by the obsidian trade between the Guatemala highlands and El Mirador in the lowlands (Fowler et al. 1989; Hammond 1972). Furthermore, the depiction of a flint axe (a resource of the lowlands) held by a human god-impersonator on Kaminaljuyu Stela 11 and, conversely, the presence of an obsidian-blade-encrusted staff (obsidian being a highland resource) in the hand of a noble person in the Loltun Cave Carving of Yucatan suggest (Hoopes, pers. comm. 1995), that this trade provided opportunities for diffusion of ideas and thus for the spread of writing.

### Conclusions

It is evident that Maya ritual was linked from its very beginning with chiefly inauguration and chiefly rites. In the earliest known texts, the Maya narrated the coming to power of the ahawob, and the dedicatory rituals performed with objects and in structures, thus hinting at persisting beliefs, literary traditions and techniques. Many early texts include "name tags" for the objects on which they appear, while others hint at very early rites including the conjuring of and transformation into co-essences.

By looking at portable objects incised with early texts, we can learn a great deal about the evolution of Mayan writing. The DO q-pct, for instance, presents the early use of syllabograms, and leads us to ponder the possibility that the ubiquitous T1 u-

prefix was not, amazingly, one of the first grammatical affixes to become phonographized (or "rebusized"). Other early texts provide us with the earliest use of the names for the periods of twenty sacred years and the periods of four hundred sacred years, the first possible Emblem Glyphs, the first titles of the ch'ul ahawob, and the first signs of polities that would organize the society of the ancient Maya.

### References

- Aissen 1987. Anderson 1993. Aulie & Aulie 1978. Barrera Vásquez 1980. Berjonneau & Sonnery 1985. Berlin 1958. Bricker 1986. Campbell 1984. Campbell & Kaufman 1985. Coe 1957, 1966, 1973, 1976, 1982. Covarrubias 1957. Demarest 1984. Digby 1964. Easby & Scott 1971. Fahsen 1987, 1988. Fowler *et al.* 1989. Fox & Justeson 1984, 1986. Freidel & Schele 1988a, 1988b, 1989. Freidel *et al.* 1993. Graham 1972, 1979. Graham & Porter 1989. Green 1989. Grube 1991. Grube & Nahm 1994. Grube & Schele 1991. Hammond 1972. Hansen 1991a, 1991b. Hellmuth 1988. Houston 1988, 1995. Houston & Taube 1987. Houston *et al.* 1989. Jones 1991. Justeson 1986, 1989b. Justeson & Kaufman 1993, nd. Justeson & Mathews 1983. Justeson *et al.* 1985, 1988. Kaufman 1976. Kaufman & Norman 1984. Kidder *et al.* 1946. Knorosov 1952, 1971. Lounsbury 1973, 1974, 1989. MacLeod 1990. Marcus 1973. Marcus 1975, 1976a, 1976b, 1991, 1992. Mathews 1979, 1983, 1985, 1991. Mathews & Pendergast 1979. Martin & Grube 1995. Mora 1994, 1995. Musées Royaux 1992. Pahl 1982. Proskouriakoff 1960, 1974. Reents-Budet 1994. Reents-Budet, Fields & Mora nd. Sampson 1985. Schele 1982, 1994a, 1995. Schele & Freidel 1990. Schele & Grube 1995. Schele & Miller 1986. Schele *et al.* 1994. Sharer 1994. Sharer & Sedat 1973. Shook & Heizer 1976. Smith 1950. Stone 1977. Stuart 1987, 1989. Stuart & Houston 1994. Taube 1989, 1992. Thompson 1962. Valdés 1987. Whittaker 1977.

## Addendum 1

The following is a partial list of portable objects with hieroglyphic texts, including those discussed in the text, with a key to the abbreviations used to refer to them:

### Abbreviation/Publication (s)

AH j-plq	Mathews and Pendergast (1979)
CN j-tbd	Proskouriakoff (1974:Pl. 45-1)
DO j-plq	Coe (1976); Schele & Miller (1986:Pl. 22)
DO p-vss	Coe (1975:Fig. 2)
DO q-pct	Coe (1966); Schele & Miller (1986:Pl.32)
JM j-spñ	Musees Royaux d'Art et d'Histoire (1992)
JM s-mrr	Stone (1977:64-5)
KB s-trp	Schele & Miller (1986:Pl. 27)
KCH b-bld	Sharer (1994:Fig.3.32)
MG s-wj	Coe (1973:Fig.2; 1966)
PM j-efl	Digby (1964); Justeson et al. (1988)
PL p-bwl	Coe (1982)
PL p-vss	Coe (1982)
PL s-trp	Coe (1982); Schele & Miller (1986)
UNP p-trd	Berjonneau & Sonnery (1985:Pl. 328)

AH= Altun Ha, b= bone, bld=bloodletter,  
bwl= bowl, CN= Cenote of Chich'en Itza,  
clt= celt, DO= Dumbarton Oaks, erf= earflare,  
j= jade, JM= Jade Museum of Costa Rica,  
KB= Kimbel Art Museum, KCH= Kichpanha,  
MG= Edward H. Merring Gallery,  
mrr=mirrorback, p=pottery,  
PL= Pearlman Collection, plq= plaque,  
PM= Pomona, q= quartzite,  
s=shell, steatite slate, tbd=tubular bead,  
trp=trumpet, trd=tripod,  
UNP=unprovenienced, vss=vessel.

## Addendum 2

Because of my previous discussion of Preclassic monumental texts (Mora 1994) I did not include Abaj Takalik Monument 11, though, I will say a few things about it here.

Abaj Takalik Monument 11 (Fig.26a) is a 1.35m high andesite "pear-shape boulder" that is located near other monumnets that have received little study, and was reset in Pre-Columbian times, around C.E. 1000, from a previous location within the site, as explained by Graham and Porter

(1989:47). These authors also mention that Abaj Takalik is known for its "remarkably diverse variety of styles," presenting a gradation from Olmec, to Izapan and to Maya, as has been posited by Graham (1979). Monument 11, they continue, has a text consisting of a five-glyph column (A1-5) showing what they consider to be personified Long Count signs, and a one-glyph notation (B1) to the left of column A that has a bar-and-dot coefficient, and which they consider as subsidiary because of its irregular placement with respect to column A. Graham and Porter consider that M.11 and Stela 50 are the earliest of the site, and that a considerable time span separates them from later monuments such as Stela 5. These conclusions are based upon: (1) the unmodified nature of the boulders on which the texts of St.50 (with k'in and winal coefficients) and M.11 were carved, contrasted with the highly finished monuments of later Abaj Takalik art, such as St.2, dating anywhere between 18-235 B.C.E. (Marcus 1976b:55; Sharer 1994:99), (2) the less complex thematic and stylistic developments that can be seen in M.11 contrasted, again, with later monumnets such as St.2 (first century B.C.E.?) and St.5 (C.E. 126), and (3) the freedom of glyphic outlines in M.11 contrasted with the encasement into a grid of the glyphs in later monuments such as St.5.

Although the comparative analysis offered by Graham and Porter is valid, period glyphs (as used in the Initial Series or Long Count) do not enter the Maya script until much later (Coe 1976:118; Justeson 1986) than the proposed date of Abaj Takalik M.11. The Long Count, which is first securely documented on Chiapa de Corzo Stela 2 from Chiapas, with a reconstructible date of (7.16.)3.2.13 corresponding to 37 B.C.E., was probably an innovation of the Southeastern Branch that took place before its diversification into the Isthmian and Greater Izapan (later Izapan and Maya) subgroups around 250 B.C.E. In its earliest occurrences the Initial Series did not show cycle glyph-names (the names of the bak'tun, ka'tun, etc.) and, in fact, such cycle names do not appear even in the later Abaj Takalik St.2 or St.5. Glyphic names for these periods will not accompany their respective coefficients until Tikal Stela 29 (C.E. 292), as noted by Coe (1976:118).

But what might these five glyphs (corresponding to the number of periods in the conventional LC) represent instead? I do not think that the IS interpretation can be yet discounted (or

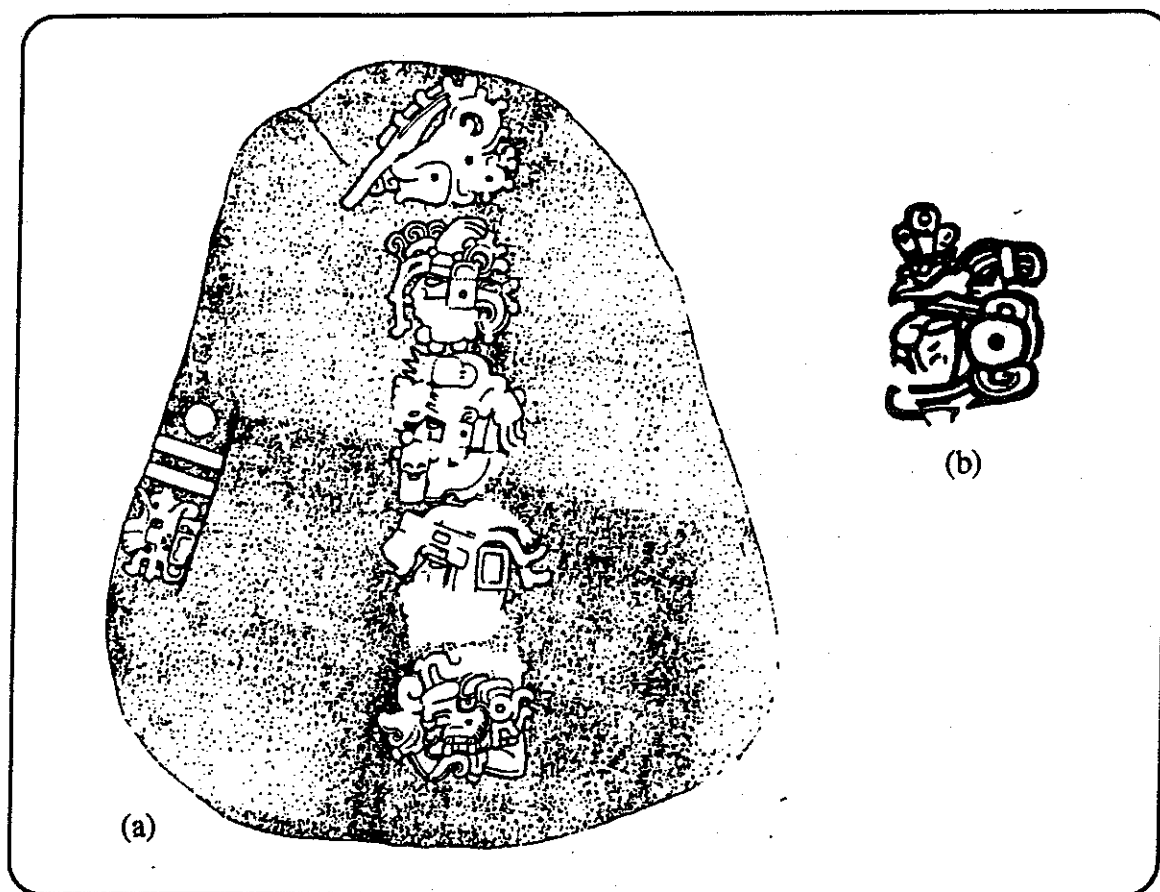


Fig.26 - (a) Abaj Takalik Monument 11; (b) KCH b-bld, A3.

supported), but the question of why such period names would have been in use as early as M.11 is claimed to be, and why they would have been avoided for a period of time—perhaps even for several centuries—before being used again (supposing for a moment that the sample that survives and that we know of is representative), must be kept in mind.

A carved bone bloodletter from Kichpanha, Belize (KCH b-bld) appears to have a Late Preclassic text with a glyph corresponding to the one at A2 on the text of Abaj Takalik M.11 (Fig.26b), which Graham and Porter (1989:48) describe as a person with an “avian headdress...with the left wing of the bird above and the bird’s head before the main sign’s forehead. Above the bird is T44 while pendent from the bird’s beak is perhaps a fish or bone.” From the drawing of this glyph on M.11, it does appear that the bird head is superfixed with the T44 to syllabogram, perhaps used as a phonetic complement. In the KCH b-bld, the glyph at A3 also shows what may be a possible allograph or variant of T44 and the general form of the glyph

shows a striking resemblance to the Abaj Takalik example.

Nevertheless, A3, and perhaps A4 (though I have little support for this), are the only possible calendric glyphs in the bloodletter text. If Graham and Porter are correct in interpreting column A of Abaj Takalik M. 11 as an Initial Series, then A3-A4 in the bloodletter text could be interpreted as the signs for k’atun and tun, respectively and therefore A3-A4 would be calendric signs. I am not convinced of this, however, for the bloodletter text is in a style corresponding to the last part of the Late Preclassic period, perhaps even between C.E. 100-200. By this time recognizable glyphs for the Initial Series periods (comparable to clear Early Classic examples) were already in use in portable objects. Based upon the similarity in style between the bloodletter text from Belize (See Fig.14) and that of M.11 from Abaj Takalik in the Southern Maya area, I would posit that they are perhaps roughly coeval, suggesting that M.1 from Abaj Takalik is not as early as Graham and Porter consider it to be.