

Archaeology and Epigraphy Revisited

An Archaeological Enigma and the Origins of Maya Writing

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In a previous paper (Sharer, in press), I discussed the question of the origins of Maya civilization and one of its principal hallmarks, Maya writing, as viewed from the perspective of current archaeological evidence. One of the themes touched on involved the fundamental changes occurring within Maya archaeology, as it is being transformed from a prehistoric to a historic discipline, due to the recent progress in the decipherment of Maya hieroglyphs. For the breakthroughs of the past 25 years in Maya epigraphy (see Jones, this issue) have expanded our knowledge of Maya writing from the long-understood calendrical texts to accounts of individual rulers, dynasties, conflicts, and alliances—in short, the stuff of history. This new information has increased our understanding of the ancient Maya far beyond the limits of the rest of New World archaeology. The study of Maya civilization is on the verge of taking its place beside the archaeology of the early civilizations of the Old World, Egypt, Mesopotamia, and China, as a discipline enriched by the combination of archaeological and historical perspectives.

Here I examine some of the reasons why a historical dimension is important to the study of the ancient Maya, by assessing the impact of history on archaeology. The contrast between prehistoric and historic research contexts is highlighted by a brief examination of one line of archaeological evidence

that might possibly hold an important key to the question of the origins of Maya writing.

The recognition of the consequences for Maya archaeology re-



I An archaeological enigma: Feature 15, El Trapiche, Chalchuapa, El Salvador; a series of Preclassic clay-lined troughs within a small substructure platform that remains unexplained, their function unknown.

sulting from the decipherment of an expanding corpus of Classic and Postclassic Maya texts is becoming increasingly commonplace. Not only can extant archaeological data be reinterpreted in light of new information gleaned from inscriptions (cf. Coggins 1975), but archaeological research in the Maya area is becoming increasingly focused on questions posed by the results of epigraphic study (see Sharer 1978).

Ethnohistoric sources, of course, have long been fundamental to reconstructions of the ancient Maya, especially for the Postclassic period

(ca. A.D. 900–1500). These comprise Colonial period Spanish accounts and Maya texts from the era immediately preceding the Spanish Conquest, subsequently transcribed into European script. But the increased distance in time and space to the preceding Classic era (ca. A.D. 250–900), which saw the florescence of civilization in much of the Maya lowlands, made these historical sources far less reliable and useful to the archaeological investigations that have long dominated research on the Classic period. Now the results gained from deciphering portions of the extensive corpus of Classic period hieroglyphic texts, in addition to the few surviving Maya codices from the Postclassic era, have added the perspective of contemporaneous historical information to the archaeological data.

Prehistoric Versus Historic Perspectives

All but the most recent few thousand years of the human past, less than one percent of the known span of human occupation on this planet, precedes the invention of writing and, therefore, is devoid of any kind of historical perspective. Our only direct source of information about this vast era of prehistoric human cultural development is provided by archaeology. Prehistoric archaeology relies solely on the recoverable material residues of human behavior to make inferences about past cultures. The limitations of this inquiry are obvious—some human activity leaves no tangible traces, other material remains do

not survive the ravages of time, and some of the evidence recovered by archaeologists cannot be interpreted with any certainty (Fig. 1). On the other hand, when historical accounts are available, they may well provide information about the very areas of past behavior that are usually invisible in the archaeological record. At the same time, however, history often ignores whole realms of human activity.

Obviously, then, the most complete reconstructions of the past are usually produced by combining archaeological and historical data. In such cases, the results may be greater than simply a summation of the available archaeological and historical information. Each source often complements the other—one discipline's weakness corresponding to the other's strength. For example, Maya archaeology has provided a wealth of evidence about areas seldom documented by history—technology, subsistence, trade, and other everyday activities. Historical data from the Classic period have already allowed significant insights into other areas usually beyond the reach of archaeological evidence—ancient Maya political and ideological realms (Haviland 1977; Marcus 1973). In areas of overlapping coverage, as with reconstructions of socio-political organization, each source can be used to test or refine the findings of the other.

There are numerous instances of newly gained historical information allowing fresh and more complete interpretations of archaeological evidence. At Quirigua, Guatemala, a Late Classic spurt of building activity, detected by excavation, produced a rapid expansion of the site (Jones 1977; Ashmore 1980). But an explanation for the cause and timing of this construction activity was provided by the historical accounts in the Quirigua inscriptions, suggesting that the building boom was a consequence of a successful military encounter in A.D. 737 with the nearby, but much larger, center of Copan (Sharer 1978; Jones and Sharer 1980).

As already mentioned, archaeological research today is increasingly aimed at testing specific propositions generated by historical

data. For example, excavations at Copan, directed by William Fash, are designed to test alternative hypotheses concerning that site's famous hieroglyphic staircase and its role at Copan following the defeat at the hands of Quirigua. One proposition would see this staircase as a monument to Quirigua's victory, built under the latter's aegis. An alternative explanation is that it is a monument to Copan's resurgence in the wake of defeat, asserting Copan's independence (Fash 1985).

Of course the other side of the coin in combining archaeological and historical perspectives is that excavated data often allow new insights in understanding the historical record. For instance, recent archaeological research at Santa Rita, Belize, has added significant new information about the organization of Postclassic Maya society and ritual (Chase 1985), embellishing the descriptions in ethnohistorical accounts such as Bishop Diego de Landa's *Relación de las cosas de Yucatán* (Tozzer 1941).

The Origins of Maya History

The roots of the world's earliest writing systems, cuneiform, Egyptian hieroglyphs, the Indus script, or Chinese characters, are embedded in the dim recesses of prehistory. There are, of course, no historical accounts describing the origins of the first writing systems. Only archaeology, somewhat ironically, can provide the evidence to assist the quest for understanding the genesis of history. The origin of Maya writing is no exception. The Classic Maya script can be traced directly back to Late and Terminal Preclassic (ca. 100 B.C.–A.D. 200) texts on monuments at sites in the southern Maya area—the highlands and Pacific coastal plain. Examples include inscriptions at Kaminaljuyu (Monument 10), Chalchuapa (Monument 1), El Baúl (Stela 1), and Abaj Takalik (Stelae 1, 2, and 5).

More distant antecedents have been proposed for what seem to be even earlier glyphic traditions in the Valley of Oaxaca and on the

Gulf coast, the latter associated with the precocious Olmec civilization (see Marcus 1980). The only glyphic inscription from the Maya area that appears to date from this earlier horizon is El Porton Monument 1 (ca. 400 B.C.), in the Salama Valley of the northern Maya highlands (Sharer and Sedat 1973; in press). The relationship between these earlier Preclassic scripts and the initial inscriptions in the southern Maya area remains unclear. But at least two southern Maya area sites, Abaj Takalik and Chalchuapa, have furnished archaeological evidence of Olmec-related activity (monuments carved in an Olmec style, but devoid of glyphic texts) predating the local appearance of Maya writing (Graham 1979; Sharer 1978).

But assuming these developmental links are justified, as they certainly seem to be, the question about the ultimate origins of this glyphic tradition remains unanswered. One possible answer lies in a series of far simpler, and often cruder, notations found on boulders and rock outcrops throughout much of Mesoamerica. Other writing systems appear to have developed from far older simple notational traditions, for example cuneiform (Schmandt-Besserat 1978). In fact, the world's earliest known notational system dates to the Upper Paleolithic, and consists of simple ticks or similar markings seemingly used to record lunar or solar cycles or tally other events (Marshack 1972). A similar, albeit more recent system composed of dots and bar notations was used in northeastern Mexico in Precolumbian times (Murray 1985).

But the latter system, and analogous notations rendered in stone throughout Mesoamerica, such as on a series of bedrock "altars" at Chalcatzingo (Gay 1971: 73–84), remain largely undated and unexplained. These enigmatic traces of past activity epitomize the difficulty of adequately interpreting prehistoric archaeological evidence in the absence of history. The notations are unusually difficult to date because they are engraved on boulders and rock outcrops that were never moved or incorporated within a cultural context. For the



2 Monument 13, Los Mangales, Salama Valley, Guatemala. A thus far unique example of a notational inscription on a small "stela" dating to ca. 500–200 B.C. (After Sharer and Sedat, in press.)

same reason, and because they present few close historical or ethnographic analogies, their function and meaning are difficult to ascertain.

Several clues to the age of such notations are furnished by the excavations in the Salama Valley, Guatemala. The first of these is a small carved stone excavated under controlled conditions from the mortuary site of Los Mangales, in the northern portion of the Salama Valley. Known as Monument 13 (Fig. 2), it is apparently thus far unique in the annals of Maya archaeology—a small schist "stela" with simple engraved motifs carved on one face, including two columns of dots rendered as small depressions or "cupules." It, along with a companion with an even simpler notation (a "bar" surmounted by two dots), was subsequently reused as a lintel spanning an elite burial crypt ceramically dated to ca. 500–200 B.C.

The second clue is provided by Monument 21 (Fig. 3), a boulder engraved with a complex series of notations located in the Sibabaj drainage along the south side of the Salama Valley. Monument 21 is not entirely devoid of cultural context, however, since excavations at its base recovered a few eroded pottery sherds, the sole evidence for its date. The only two identifiable examples date to the span of ca.



3 Monument 21, Sibabaj, Salama Valley, Guatemala. Notational inscription on a boulder, possibly dating to ca. 500–200 B.C. (After Sharer and Sedat, in press.)

500–200 B.C., which could indicate that this monument is an approximate contemporary of the Los Mangales stones. Monument 21 is engraved on one face (subdivided into three panels) with a series of small cupules or dots, several much larger cupules, and grooved markings. Many of the dots are grouped, and the most common of these clusters is triadic (nine examples), usually oriented with the apex downward. Less common are four-dot and five-dot clusters. Paired dots (including larger cupules), connected by a bar-like groove, also occur. And a unique symbol composed of a grooved cross with a dot at the apex, plus dots in each quarter, is carved in the lower right portion of the monument.

The meaning of such motifs remains a matter of speculation. An obvious interpretation is of the dots as counts of some sort. Alternatively, the prevalent triadic clusters on Monument 21 could be simple representations of the human face, except that not all examples possess the proper orientation ("eyes" uppermost). In fact, a more elaborate motif near the base of the lowermost panel clearly represents a human face, complete with ear ornaments. It is rendered on a more recently exposed rock surface created by an exfoliated area, however, and thus seemingly postdates the remainder of the engravings.



4 Monument 10, Chalchuapa, El Salvador; fragment of a cupulate monument dating to ca. 200 B.C.–A.D. 200. (After Anderson 1978.)

The triadic clusters also recall similar motifs in Olmec art (Motif 153; cf. Joralemon 1971:16) and later Maya iconography (cf. Thompson 1962): the glyphs for Ix (T524), the Ahau (T533), and the "fire fist" (T672).

The cross motif appears comparable to the pecked cross sign, usually seen as representing calendrical calculations, with a wide distribution in Mesoamerica (Aveni, Hartung, and Buckingham 1978). Three of these signs are reported at Tlalancaleca, near Teotihuacan, with a proposed dating of ca. 500–100 B.C. (ibid.: 273). But the most obvious association for the Monument 21 cross motif would be the later Maya Lamat glyph (T510). The deeper cup-like pits on Monument 21 recall the "defacement" markings on several Olmec monuments (Clewlow et al. 1967:70–83). Similar pits occur on stones without indications of defacement, as on Monument 10 at Chalchuapa (Fig. 4), dating from the Late or Terminal Preclassic (ca. 200 B.C.–A.D. 200; Anderson 1978:157) and the undated (Middle Preclassic?) Altar 1 at Chalcatzingo (Fig. 5), the latter including the same kind of connecting grooves as on Monument 21 (see Gay 1971:75).

Further comparisons could certainly be made between the notations on Monuments 13 and 21 from the Salama Valley and various



5 Altar 1, Chalcatzingo, Morelos, Mexico; an undated rock carving similar to Salama Valley Monument 21. (After Gay 1971.)

similar rock art motifs throughout Mesoamerica. The importance of the Salama Valley monuments is that they offer rare archaeological evidence as to the antiquity of such notations—dating to an era (ca. 500–200 B.C.) that almost surely saw the emergence of the earliest Mesoamerican writing systems. Thus they offer a clue and suggest that Maya and related scripts may have originated at least in part from such notational traditions.

But beyond this the available archaeological evidence is so meager that little else can be offered in the way of explanation at the present time. Possible interpretations of the meaning of these notations could be generated, of course, but given the present state of knowledge they would be largely speculative. The fact remains that the full significance of this widespread tradition of notational engraving, quite possibly a crucial clue to the origins of Maya and related Mesoamerican writing systems, remains an enigma—mute testimony to the difficulty of archaeological interpretation in the absence of history. As such, this example should only reinforce the true importance of the progress being made in deciphering Maya writing, as it continues to provide an invaluable historical perspective for archaeologists investigating the ancient civilization of the Maya. **Z**

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