Archaeology in the Maya Heartland

by ARLEN F. CHASE

The northernmost district of Guatemala, the Peten, is pivotal to any discussion concerning the rise of Maya civilization. Geographically located in the central part of the southern Maya Lowlands, the Peten district—and the lake from which the area derives its name—was inhabited throughout Maya prehistory, at least from the end of the Middle Preclassic period (900–300 B.C.) through the Late Postclassic period (A.D. 1400–1700).

The Peten is most noted for its massive structural ruins of Preclassic (1200 B.C.–A.D. 300) and Classic (A.D. 300–900) period Maya sites. Somewhat naturally, the study of Maya civilization has focused on these major sites. Tikal, Seibal, Piedras Negras, Altar de Sacrificios—such names as these may not be general household words, but they are certainly familiar to every student of archaeology as the major urban centers in the heart of the Maya lowlands from which so much of our knowledge of Maya civilization comes. Now another major site has been added to the list, the massive Preclassic site of El Mirador (see ARCHAEOLOGY, September/October 1984) in the Guatemalan jungle.

Lost, however, among these more ambitious undertakings are a series of smaller projects generally focusing on less impressive Maya sites. Because of their very emphasis, these investigations both complement and supplement the large bodies of data garnered from the more intensively researched centers, especially in terms of architectural trends and patterns of cultural development. This is particularly true during the reformulations of Maya society that occurred at either end of the Early Classic period.

Of specific interest here is the Tayasal-Paxcaman Zone of the Peten region. Lake Peten (or Peten-Itza) wraps itself around a large peninsular body of land, the spine of which is dotted with ruins which form an almost continuous site for 15 kilometers. This area is referred to as the Tayasal-Paxcaman Zone because the two sites of Tayasal and Paxcaman form the sizeable western and eastern nodal centers for this zone. Interestingly, the ecological conditions along the peninsular spine are quite desiccated; in fact, many of the Classic period centers in the zone are located in modern-day savanna areas, which may have resulted from either natural or cultural factors. Extensive savanna areas, largely unoccupied in prehistoric times, exist to the south of Lake Peten-Itza (see ARCHAEOLOGY, November/December 1979). At least for the Lake Peten area, this much is clear: the savanna areas coincide with poor soils, and—unlike the areas farther to the south—were extensively used for Maya settlements. Major portions of the sites of Tayasal, Yachul, Chaltun Grande, Cenote, and Paxcaman all lie within savanna.

Ironically, the objective which led to the study of this region has not been realized. At the turn of this century, the site of Tayasal—which stands on the tip of the peninsula and has been a focus of significant interest almost since the inception of Maya studies—was widely believed to have been the location of the legendary Itza capital known as Tayasal in the ethnohistoric literature. The Itza were supposed to have been an independent Maya group who, according to legend, migrated to the Peten from the northern Lowlands after the downfall of Mayapan, the Late Postclassic capital. As legend has it, once they had settled near Lake Peten, they continued their way of life without significant interruption until their forcible conquest by the Spaniards in A.D. 1697 (see ARCHAEOLOGY, March/April 1984).

The lure of finding these “lost” Maya proved to be very strong, even 60 years ago. In 1921–22, investigations were undertaken in the Tayasal “Main Group,” an interlocking network of larger structures and plazas in the western portion of the site, at the instigation of Sylvanus G. Morley, a pioneer in Maya studies and head of Maya research for the Carnegie Institution of Washington. What was sought was not found; instead of the Postclassic remains (A.D. 900–1700) presumed to occupy epicentral Tayasal, the excavator, Carl Guthe, encountered earlier Classic remains dating to A.D. 300–900. Guthe also discovered a rather spectacular Late Classic period crypt burial.

In all, Guthe completely investigated three
An interesting and ironic ecological footnote ends the story of the millrace. During the years when the mills were in operation and the race was flowing, its deep canal served to gather in the natural ground run-off, with the result that the nearby inhabitants had cellars free of groundwater. Once the millrace was broken up and obliterated in spots, however, the now unchanneled and fairly heavy run-off seeped into the previously dry stone-lined cellars of the houses located on the Quakertown slopes. Our excavations revealed that one homeowner tried to correct this problem by means of a makeshift drainage system on the downslope sides of his cellar floor, and by laying a floor of bricks atop the original dirt floor. It is hard to assess the success of his efforts; but the cellar floor in one of the nearby houses we have excavated has been consistently covered by a foot of standing water for more than four years!

Over the course of the 140 years that it remained a viable community, Quakertown saw a variety of changes and adaptive strategies. Research above-ground as well as underground has allowed us to separate the occupation of the town into three periods. The first of these, called the Quaker period (1799-1855), saw the newly settled land set aside for agricultural purposes and the establishment of small cottage industries. There was a fulling mill on the brow of the hill adjacent to the millrace; a linseed oil mill farther south on the same race; two grist mills, one at the top of the hill and the other built by Septimus Cadwallader not far from his house at the confluence of Falling Spring Run and the Mahoning River; and finally, a sawmill at the base of the hill. Two tanneries were also erected—one about 1805, the other in 1830.

By the middle 1830’s, the second period had begun. It was an influx of non-Quaker settlers from Scotland and Wales who changed the complexion of the community in distinct ways. This was the town’s vital Agricultural period (1855-1905), during which the population reached its maximum, and farming became the town’s principal economic base. By the end of this period at the turn of the century, most of the mills established a hundred years earlier had ceased to operate, and the inhabitants of the town went elsewhere for their supplies. Just after the Civil War a general store was built to serve the growing community, and a one-room schoolhouse was erected. This phase of the town’s history has also been reduced to purely archaeological evidence.

The third or Modern period (1905-1935) began with the burgeoning of the iron and steel industries in nearby Youngstown and Lowellville. As the promise of steady wages lured men and their families from the farms, Quakertown went into eclipse. Homes were abandoned, the general store and school closed, and secondary forests began reclaiming the once-tended fields. During this period, Quakertown lost its character as a resident community and became, until its demise, an industrial area exploited by quarriers and black powder manufacturers. These were dangerous industries, and they helped to drive the last and most persistent inhabitants away. Today the overgrown remains of the powder company are still visible during certain seasons of the year, and huge rectangular pits and clefts bear mute testimony to the disruptive noise and impact of the quarryman’s drill.

Quakertown, like any other archaeological site, is destined to ultimately decay whether or not its ruins are excavated and recorded. But hopefully, when the project has been completed, we will have established a common denominator of early rural sites like Quakertown, and in the process added to the store of knowledge about the dynamics of cultural change. Last, though by no means least, we hope to have assured yet unborn generations that at least some portion of their cultural heritage has been preserved.

This early photograph dating from the 1900s depicts the front of the Cadwallader House, which was one hundred years old at the time. The east chimney (on the right end of the house) does not show up.
This miniature polychrome figure vase from Tayasal dates to the Terminal Classic period. The vase is 10.8 centimeters in height and presents three figures grouped about a ceramic vessel containing materials associated with a blood-letting ceremony.
In any event, in early 1971 an aerial survey was made of the Tayasal Peninsula and Lake Peten, and several sites within the region—Cenote, Tayasal and Nima—were selected for excavation as part of the University Museum program during the summer of 1971; this season saw the excavation of approximately 150 locales in the zone. Then in 1977 and 1979 further research resulted in the reconnaissance and mapping of most of the 21 defined sites within the Tayasal-Paxcaman Zone. It turned out that the islands in Lake Peten had also been intensively inhabited during the Early and Middle Postclassic periods; and one of these, Flores, the present-day capital of Peten, may have served as a very important center during this later era.

But the events following the Middle Postclassic period remain hazy, all this recent work notwithstanding, and the original objective of finding the Protohistoric Itza remains unfulfilled. Happily, however, the recent work has fleshed out our understanding of Maya cultural developments, especially as it pertains to two characteristic monumental assemblages: the so-called “E Group,” first formally defined by Carnegie Institution archaeologist Oliver Ricketson for Uaxactun in 1928 and by Karl Ruppert, also of the Carnegie Institution, for a host of other sites in 1934; and the “Plaza Plan 2” group, first formally defined by Marshall Becker of West Chester University in Pennsylvania at Tikal and later noted elsewhere in the wider Maya area. The recent work done under the aegis of the University Museum has altered the perspective on these two types of assemblage, in the process modifying some of the prevailing views on Maya social organization,
that period are very common in test operations from a wide range of locales, especially in the Tayasal area. It is during the transition from the Late Preclassic (300 B.C.–A.D. 300) to the Early Classic (A.D. 300–600) that a major cultural shift appears to have occurred, one largely responsible for the reformulation of Maya society into its pervasive Classic form. Although occurring relatively rapidly, this shift was neither temporally nor spatially uniform, affecting different sites at different times and in different ways. This early variability within the Peten heartland has largely gone unnoticed by archaeologists, but proves useful in examining the rise of Maya civilization and the associated changes in the structuring of Maya society. This is the period that witnessed the emergence of the E Group, and with it a host of related cultural practices, most particularly the appearance of the “stela cult” in the Peten region. Minimally consisting of a western pyramidal structure and an eastern elevated platform supporting three structures, the group was assigned astronomical implications by Frans Blom, first head of Tulane’s Middle American Research Institute, back in 1924. This interpretation was further pursued by Karl Ruppert for a number of other sites where possible E Groups have been identified—some 19 in all. Ruppert’s interpretation rests on the angles of the various buildings when they are viewed from the western pyramid of the group, especially as defined by the arc of the sun relative to the yearly solstices and equinoxes. If Ruppert is right, the architectural complex as a whole would form a simple observatory and calendric device for calibrating the Maya year. Clemency Coggins of Harvard University has argued that the Group E at Uxactun represented an indigenous celebration of time in the context of a solar observatory. The introduction of the celebration of Mexican 20-year periods of time, known as katuns, also first appeared with this architectural grouping at the onset of the Early Classic period.

As we shall see, however, recent work in the Peten region has both augmented the predominantly astronomical interpretations of these groups and related the emergence of these complexes to a variety of important changes in Maya culture. Indeed, for all the speculation which the E Group has generated, only a single example of the assemblage had ever been excavated—that being the original one found at Uaxactun by the Ricketsons—prior to the work
reported on here. This present work has also discovered that J.E.S. Thompson, perhaps the best known Maya archaeologist, had unknowingly tested two E Groups in the 1920s at Cahal Pech and Hatcab Ceel in the Mountain Cow region of Belize.

Two E Groups, in fact, and possibly a third, are known in the Tayasal-Paxcama Zone. The two that are definitely known occur at the sites of Cenote and Paxcama in the eastern part of the zone; the third possible one occurs at Tayasal itself, but the western structure of this group was partially dismantled by later building activity. If this construction does indeed prove to be another E Group, it would indicate that the population at Tayasal eventually joined their eastern neighbors in the acquisition of such an assemblage; for the E Groups at Cenote and Paxcama stylistically predate the one at Tayasal, and the E Group at Cenote has proved upon excavation to be even earlier than the one found at Uaxactun (which is similar to the one at Tayasal).

The E Group at Cenote, then, is the only one excavated in the Tayasal-Paxcama Zone to date, and it becomes the only available and intensively excavated example in the Maya area other than the original one at Uaxactun. Significantly, it also constitutes a variant on the chronologically later one at Uaxactun inasmuch as it has a high central structure flanked by wings which are tipped with two other smaller structures, and the whole of the eastern construction is 98 meters long. In contrast, the eastern building in the E Group at Uaxactun is 70 meters long, and supports three buildings of roughly equal size atop a single platform surface.

Perhaps even more significantly, the appearance of the E Groups at Cenote and Paxcama correspond to the florescence of both of these sites during the Early Classic period. In contrast, Tayasal experienced a marked depression in civic-ceremonial construction at this time. But the various material changes occurring in the southern Lowlands during this epoch very strongly suggest that the E Group must have had more than astronomical significance for the Early Classic Maya; indeed, its large-scale and open form as well as its important central positioning at sites where it occurs indicate that whatever activities were performed here were public and may have involved much of the local population. The excavations at the Cenote E Group produced burials in the main building of the eastern construction as well as caches containing tetrapod vessels, markers of a poorly understood ceramic subcomplex dating to the transition between the Preclassic and Classic periods. At one point, such distinctive ceramics were interpreted as representing an influx of foreign people into the Maya area; the sequence recovered from the Tayasal-Paxcama Zone, however, indicates that such items developed from earlier Late Preclassic antecedents and were of strictly ritual importance. The indigenous nature of both the architectural complex and the specialized ceramics suggested by the Cenote data contrasts greatly with those who would see the development of the Maya heartland as due to influxes of people from the southeastern Maya periphery. Finally, the appearance of the stela cult in the zone was also contemporary with the development of E Groups and the distinctive vessels just mentioned. In the earliest phases of this cult, plain monuments were mounted on the summits of small platforms. This conjunction of specialized architectural groups, stone monuments, and particular ceramics does not occur uniformly throughout the Maya heartland; where it does occur, however, it represents a crystallization of a new Maya society. This reformulation soon transformed the Southern Lowlands into what is recognized archaeologically as the Early Classic period.

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It was also supposed earlier that the presence of an E Group was a prime indicator of major site status—especially for the Late Classic period. The more recent research, however, has demonstrated that, contrary to this assumption, E Groups are generally much earlier in date and associated with the onset of the Early Classic period; it would also appear that the E Group fell into disuse during the Late Classic period, being replaced by a different constellation of Maya architecture, predominant among which was the acropolis and the Plaza Plan 2. This more recent work has also shown that E Groups were more widespread than was previously believed. Both the distribution of E Groups in the Central Peten and their association with sites lacking carved stelae and vaulted architecture contradict the assumption that only sites very high in the Maya social hierarchy would have had E Groups.

While the presence of an E Group is indeed significant, what it may really reflect is a developmental trend experienced by many southern Lowland sites during the Late Preclassic through Early Classic periods. That the assemblage is limited in distribution to the Maya heartland, in fact, may be a useful indicator for defining spatial boundaries of Early Classic Maya civilization. The non-appearance of this grouping in the northern Maya lowlands is

**Composite photograph of Late Classic polychrome bowls, the central one illustrating a bird motif, from several Late Classic burials in the Tayasal-Paxcama Zone. Height of central bowl, 6.7 centimeters.**
probably representative of the partitioning of a formerly homogeneous Maya society. The distribution of E Groups within the southern lowlands also allows the identification of different patterns of development within the Maya heartland—some sites clung to the old Preclassic pattern, while others adopted the new patterns implied by the E Group, either initially, as in the case of Cenote, or slightly later, as in the case of Uaxactun.

Not all those sites associated with E Groups made the jump to the next restructuring of Maya society, which can be recognized by archaeologists as the Late Classic period. The general reformulation which seems to have occurred in Maya society during the Late Preclassic–Early Classic transition lasted until the onset of the Late Classic period. While the great art styles of the Maya, their hieroglyphic writing, and their temple constructions continued into the Late Classic, other aspects of their society did not—specifically the E Groups. The disuse of E Groups appears to be correlated with the simultaneous emergence of a new architectural assemblage—the Plaza Plan 2 arrangement—and new forms of artifacts. This significant change occurred toward the end of the Early Classic period and perhaps signals a structural reorientation of Maya society from group-oriented rituals to family or ancestor-oriented rituals. It is perhaps also significant that immediately prior to the florescence of both the Early and Late Classic periods conjoined architectural and ceramic changes occur. These short-term, seemingly dynamic shifts are precursors for major long-term—and largely uniform—eras of Maya civilization.

In the artifact record, hematite mirrors and ceramics reminiscent of Teotihuacan slab foot cylinder tripods and elaborate model-carving in blackware suddenly appear in burials and other ritual contexts where once plainwares had dominated. The appearance of these artifacts accompanies the emergence of the Plaza Plan 2 Group, which consists of three buildings arranged around a plaza. The most important of these buildings is the one to the east, which is usually constructed over an elaborate tomb or crypt containing the remains of an adult male. After defining this arrangement for Tikal, Marshall Becker noted its existence as far south as Quirigua in the Motagua Valley of Guatemala; so the assemblage appears to be widely spread over the southern Maya Lowlands and proliferates during Late Classic times.

In the Tayasal-Paxcaman Zone, the important Plaza Plan 2 Groups are located at Tayasal, a site which reached its apex in civic-ceremonial construction during the Late Classic period (A.D. 600–900) and supplanted Cenote in importance. Indeed, a succession of formal Plaza Plan 2 assemblages dominated the eastern portion of Tayasal. This striking development is coincident with the construction of the central acropolis in the Main Group at Tayasal. This combination of an acropolis and associated Plaza Plan 2 groupings clearly supplants the E Group in importance at Tayasal. With the acropolis defining the center of the Tayasal Main Group dur-

ing Late Classic times, the development of the site center spread in a preorganized fashion to the east and west over time. To the east were a temporal succession of Plaza Plan 2 groups, each slightly later in time according to its distance from the acropolis; to the west there was a temporal succession of another structural assemblage.

While the eastern structures in all the Plaza Plan 2 groups at Tayasal were characteristically built over the tomb or crypt of an important male, we are not to infer that women enjoyed no social significance during Tayasal's florescence. In fact, in the western sector of the Tayasal Main Group there are indications that women were just as important as men. This is especially evident in the wealth of burial goods which accompany female interments in the western part of epicentral Tayasal. Painted portrayals on certain burial vases also indicate that women significantly participated in blood-letting ceremonies. This accords well with portrayals of women on stone lintels at Yaxchilan to the west engaged in similar rituals, and is indicative of their specialized role in elite ritual of the Late Classic period.

While the Tayasal Main Group was apparently prospering and being consolidated during the Late Classic period, only scattered occupation occurred in the eastern part of the Tayasal-Paxcaman Zone. Moreover, unlike the majority of other Peten sites, Tayasal appears to have weathered the Classic Maya collapse—at least initially—which is postulated to have occurred around A.D. 900. The Early Postclassic period (A.D. 900–1150) still sees large-scale construction occurring in the Tayasal Main Group as well as along the southern periphery of the site. As in previous transition periods, new ceramic types—specifically hard-glazed Plumbate ware and effigy-footed Augustine plates—were introduced into the area; and these new ceramic forms appear to have coexisted with locally made ceramics of the Classic tradition. It is possible, given this infusion

Prior to a photo session, archaeologists look over pottery from Tayasal, Cenote and Punta Nima at the base camp, an abandoned hotel.
of new forms, that Tayasal served at this time as a refuge center for an uprooted Classic population—a surprise supported, or at least encouraged, by Tayasal's location in the virtual center of Lake Peten. This possibility is also supported by the fact that the Tayasal-Paxcman Zone appears to have lain outside the Terminal Classic trade networks, networks participated in by Uaxactun and Tikal to the north and Seibal and Altar de Sacrificios to the south. This near exclusion seems to be the case because the fine-paste wares which make their appearance at these latter sites—especially the southern ones—are extremely rare in the Lake Peten area.

By the Middle Postclassic period (A.D. 1150–1400), most of the uplands region of the peninsula was uninhabited, and the majority of the populations in the Tayasal-Paxcman Zone lived along the lakeshore, much as they do today. It is during the Early and Middle Postclassic periods that the islands in Lake Peten also came to be heavily occupied. Mixtec incensarios occur on the island of Flores, the present-day capital of the Peten district, and a stela portraying a diving god with Chichen Itza-style glyphs has also been recovered in excavations on the island. The cumulative evidence from Flores reinforces the connections which existed between the eastern Maya region and Lake Peten at this time, and lend credence to the notion that Flores may have been a very important center in the trading of exotic goods. In fact, the population of the zone was sizeable during the Middle Postclassic period, particularly on Flores and in the mainland lake area.

To summarize, then, we can say that the heaviest evidence for occupation and construction activity occurs at Tayasal between the Early and Late Classic periods, and from the Late Preclassic to Early Classic periods at Cenote. Again, lakeshore and island occupation was heaviest during the Middle Postclassic. And while the Preclassic and Classic period occupation peaks can be found at many other Peten sites, the heavy Early and Middle Postclassic populations are not found. The data obtained from the Tayasal-Paxcman Zone also contrast with much of the previously gathered Peten data in being able to illustrate the shifting nature of a permanent population among several sites within a single larger locale. The regional approach used in the Tayasal-Paxcman Zone has successfully allowed for an understanding of societal development and population dynamics extending from the Middle Preclassic through Middle Postclassic periods.

But the events that follow the Middle Postclassic period remain hazy; while some remains have been recovered for this period, there appears to have been a significant decrease in population. Such a decrease may correlate with the introduction of new architectural and ceramic types outside of the Tayasal-Paxcman Zone in the eastern Peten lakes. In general, however, the prosperous populations characteristic of the Middle Postclassic are simply not present. Nor, for that matter, does the zone appear to have zealously participated in the elaborate effigy censer cults which characterize the northern Lowlands at this later time (see ARCHAEOLOGY, January/February 1981)—a fact which may indicate that the Lake Peten region had retained some of its earlier heritage, and had not accommodated itself to the cultural changes of its neighbors.

While the Protohistoric populations of the Lake Peten region continue to be elusive, the combined Carnegie Institution and University of Pennsylvania excavations have nonetheless yielded valuable data for the Preclassic and Classic times, and even the Postclassic period. The result has been that the development of Maya civilization may no longer be seen only in terms of its paramount sites, in spite of the fact that publicity naturally tends to favor the famous. Maya history must now be viewed as comprising a series of rapid changes and innovations followed by periods of substantial consistency. These breaks and plateaus, however, are not so uniform as to be rigid. As in all things human, diversity and variety typify the developments of culture in the Maya heartland. □

Architectural assemblages which have been referred to as "E Groups" in the Maya area have been postulated to have served as astronomical markers. Two different versions of these groupings may be defined, the Cenote example being temporally earlier than the Uaxactun example. The Cenote variant of an E Group was excavated in 1971 and revealed a high central structure flanked by wings which are tipped with two smaller structures. An altar was set in front of this eastern platform on axis to the central building; beneath it was a cache of two tetrapod bowls. The western structure at Cenote was a pyramidal construction similar to the one found at Uaxactun. Unlike Uaxactun, where no interments were associated with its E Group, burials were encountered in the heart of the western Cenote construction as well as in the core of the main building on the eastern platform. Skull caches occur at both Uaxactun and Cenote in association with the central building on the eastern platform.