# Maya Archeology

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Archeological research into the civilization of the ancient Maya has been going on for more than a century. What do we now know about these former inhabitants of southern Mexico and Central America, their origins, their way of life, and the development of their institutions? A review of the status of the field—its solid background findings, its more important recent discoveries, and its intriguing new interpretations—seems in order (*1*).

*Summary.* Maya beginnings go back at least 4000 years in southern Mexico and Central America. The Maya of the tropical lowlands were one of several linguistically distinct groups who occupied pre-Columbian Mesoamerica. Their complex social order and civilization, which arose from early village farming, encompassed remarkable achievements in architecture, the arts, and hieroglyphic writing. Their Classic civilization (A.D. 250 to 1000) was a tightly integrated system in which subsistence, technology, settlement, the arts, and ideology closely intermeshed. Their decline and the subsequent Postclassic Period (A.D. 1000 to 1520), the continuing subjects of debate among Mayanists, are perhaps best understood in the light of more widespread Mesoamerican trends and changes.

The focus of this article is on what archeologists have traditionally referred to as Classic Maya civilization, which is represented by those ruined cities, monuments, and other remains that are found in the low-lying tropical terrain of southern Mexico and adjacent Central America (Figs. 1 and 2). It is here that the famed pre-Columbian stone temples and palaces, monumental sculptures, and mysterious hieroglyphic inscriptions were explored and brought to the attention of an extensive American and European reading public by John Lloyd Stephens and Frederick Catherwood in the 1840's. The ancient Maya who built these lowland cities did not exist in complete isolation. To the south were other peoples, also of Mayan speech, who occupied the region generally referred to as the Maya highlands and who had a well-developed civilization comparable in antiquity to that of the lowland region; the Maya of both regions were also related culturally, in greater or lesser degrees, to other peoples and civilizations of the larger pre-Columbian world, which is referred to as Mesoamerica (Fig. 1). Thus, any attempt to understand the lowland Maya past demands some attention to this larger cultural setting and context (*2*).

Maya archeology, like any other branch of the discipline, is dependent primarily on material remains, on sites, monuments, and artifacts, and on settlement pattern dispositions and the ecological interface between man and his natural environment; at the same time a traditional direction of Maya studies, that dealing with hieroglyphic inscriptions and their decipherment, has continued to be vigorously pursued (*3*). Thus, unlike any other branch of American prehistory, Maya archeology is "text-aided." For example, specific individuals and events can be identified from contemporary written texts as far back as the 4th and 5th centuries A.D., or a thousand years before Columbus made his New World landfalls. Maya archeological studies are further enriched by an ethnohistorical literature dating to the time of the Spanish Conquest (*4*), and interpretation of the Maya past is, in addition, expedited by modern ethnological studies among the living Maya descendants (*5*). Finally, students of modern and historically known Mayan languages have made significant contributions to the archeologist's understanding of the Maya past through their reconstructions of migrations of peoples and the content and nature of the cultures and societies involved (*6*).

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## Beginnings

Until recently the archeological record in the Maya lowlands began with evidences of pottery-making village farmers (*7*). Other regions of Mesoamerica were known to have sites and remains of preceramic hunters and food collectors, but these had not been disclosed in the tropical lowlands. Now, however, evidence has been brought forward from Belize that indicates the presence of such preagricultural populations, perhaps as early as 9000 B.C. (*8*). The stone artifacts found in these Belizean sites imply a development generally consistent with that known in other parts of Mesoamerica and the New World: an early shift from Pleistocene hunting to hunting, fishing, and gathering followed by a steadily increasing sedentariness and a selection of living sites suitable for plant cultivation. Apparently the lithic implements of the latest preceramic Belizean complexes are similar or identical to those of the earliest pottery and farming sites of the same region, suggesting a degree of cultural and, perhaps, population continuity.

The earliest Belizean pottery phase, designated as the Swasey and discovered at the site of Cuello, is dated by radiocarbon to a time range of 2000 to 1000 B.C., which is the full span of what archeologists call the Early Preclassic or Early Formative period (*9*). This early Swasey pottery from Belize raises some interesting questions about its relation to other early pottery complexes in Mesoamerica and to other early pottery styles in the Americas at large. In Mesoamerica only the Purron (*10*) ceramics of the Tehuacan Valley and the Pox (*11*) pottery of the Guerrero coast are earlier (~ 2400 B.C.), but neither of these styles closely resembles Swasey. The same is true of the earliest known New World pottery complexes, those of northern Colombia and coastal Ecuador, which date back to about 3000 B.C. (*12*). Provisionally, at least, the Swasey pottery would seem to pertain to a southern Mesoamerican ceramic tradition, also represented by the early pottery groups of the Chiapas Pacific Coast (*13*), the Veracruz-Tabasco Gulf Coast (*14*), and, perhaps, the Valley of Oaxaca (*15*), all of which date in the range 1600 to 1400 B.C. This tradition continues in these regions for several centuries as it does in the Maya lowlands.

This preoccupation with early pottery and the relationships among its several styles is explained by the archeologist's concern with origins. When did the earliest Mayan-speaking peoples come to the


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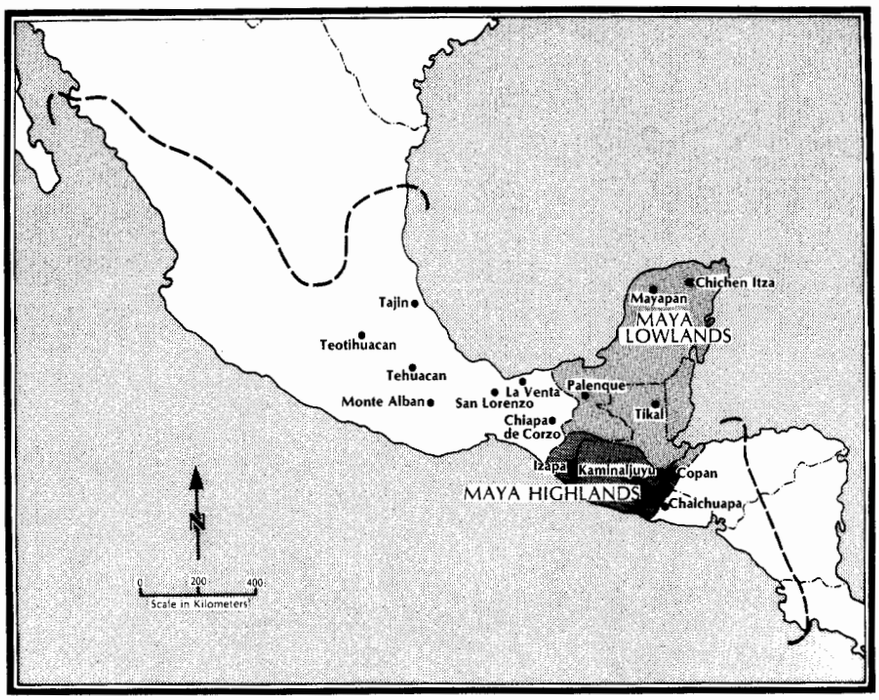


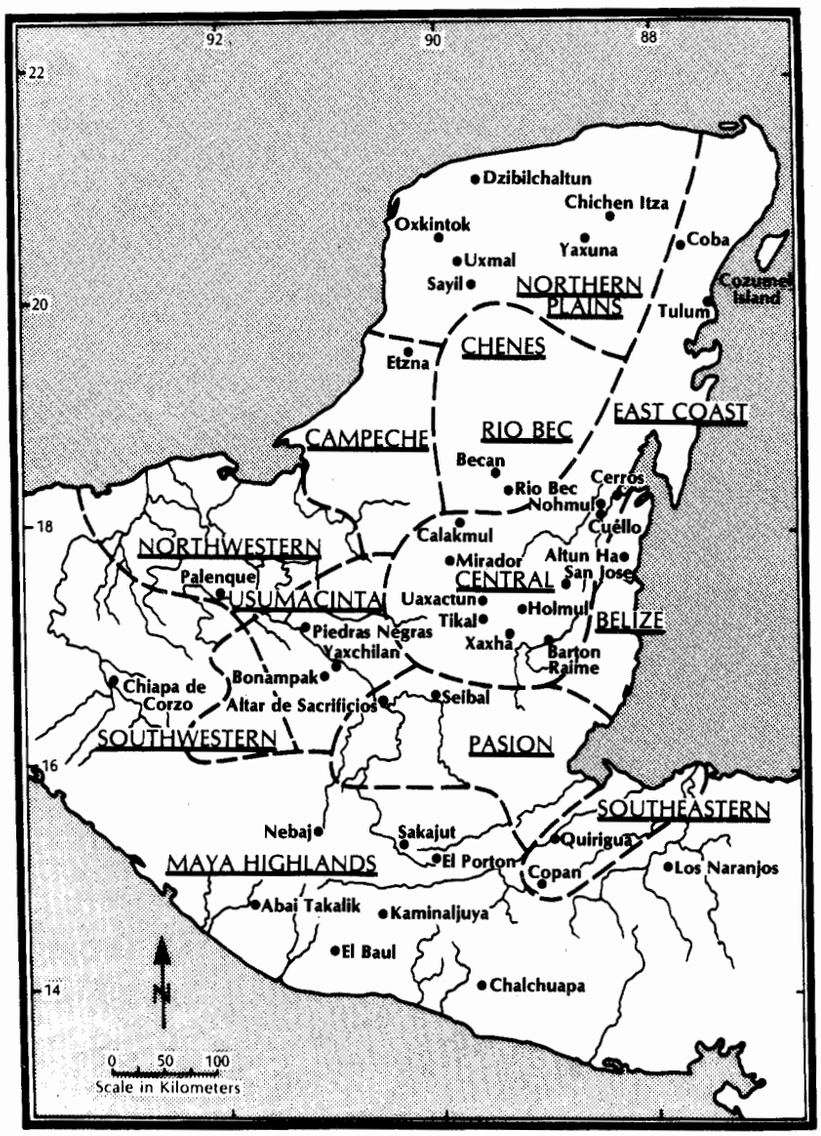


Fig. 1 (top). Mesoamerica and the Maya lowland and highland regions with important archeological sites indicated. Fig. 2 (bottom). The major Maya regions, subregional or zonal divisions of the lowlands (*25*), and important archeological sites.

lowlands and where did they come from? A few years back two explanations of the origins of these people were posited: one, a movement of pottery-making farmers from the Guatemalan highland region into lowlands, or, alternatively, a movement of similar ceramic-agriculturalists from the Olmec Veracruz-Tabasco Gulf Coast eastward into what was to become Maya country. Historical linguists seemed to favor the first possibility. In their view a proto-Mayan language, from which all later known Mayan languages were derived, had its formation in the Guatemalan highlands at about 2200 B.C. From this region Mayan speakers began to descend into the lowlands at some time between 1400 and 1000 B.C. (*6, 16*). But the recent evidence from Belize of preceramic occupations in the lowlands, as well as that of the early Swasey pottery, throw some doubts on this reconstruction. If there was a preceramic-to-ceramic cultural continuity in Belize, might there not also have been some population continuity and linguistic continuity? In any event, pursued this far the question of Maya lowland origins dissolves into tenuousness and speculation. In brief, the "beginnings" in any archeological reconstruction are those of the sites, ceramics, and artifacts of the Early Preclassic (2000 to 1000 B.C.) and Middle Preclassic (1000 to 400 B.C.) occupation of the lowlands.

The villages of the Swasey (*9*), Xe (*17*), Mamom (*18*), and related early Maya lowland settlements represent small communities of 200 to 300 persons at most. They were sustained by maize farming; manioc may have been grown; and hunting, fishing, and forest plant-collecting were important subsistence adjuncts. The competently made pottery of these villagers can be divided into rough-surfaced storage and cooking vessels and more carefully finished and polished wares with simple incision and two-color decoration. There are few, if any, pieces that could be designated as luxury wares. Small human figurines of clay are of the handmade styles similar to those manufactured elsewhere in Mesoamerica at this same time. The presence of obsidian cores and bladelets (small prismatic flint or obsidian blades) in some sites reveals trade contacts with the Guatemalan highlands to the south.

Fig. 3. Pyramid of temple E-VII-Sub at Uaxactun, Guatemala. This Late Preclassic–Protoclassic structure, with its jaguar-like stucco masks, is representative of the architectural and artistic elaborations of the then emerging lowland Maya Classic civilization. [Courtesy Peabody Museum, Harvard University, Cambridge, Massachusetts]

As early as the Swasey phase the villagers were constructing houses of wood and thatch with lime-plaster floors. These buildings were placed on low earth mounds or earth-rock platforms, and there was a tradition of constructing one platform over another so that in time some platforms took on the aspect of a most important, central, or public building. At the Cuello site (*19*) and at Altar de Sacrificios (*17*) in the Petén of Guatemala these more imposing platforms, especially toward the end of the Middle Preclassic, were associated with more finely furnished burials that are indicative of the higher status of the persons interred. There can be little dispute about the rise of ceremonialism and sociopolitical authority in this gradual lowland Maya cultural development of the Middle Preclassic, and it can be easily argued that this development flows on into the architecturally imposing precincts of the subsequent Classic Maya civilization. At some point in this Middle Preclassic evolution Maya society changed from an essentially egalitarian to a more complex, nonegalitarian order.

### The Rise of Complex Society

In examining the rise of nonegalitarian or complex society in the Maya lowlands it is well to view this in the perspective of what was happening in other parts of Mesoamerica. Large platform constructions, presumably of a public or politicoreligious nature, appeared in the Olmec region of the Gulf Coast by 1250 to 1150 B.C. (*20*). These constructions were also associated with a monumental art style, that of the well-known Olmec stone sculptures. Such archeological manifestations strongly imply a ranked society with authority vested in permanent leaders. In the Valley of Oaxaca sizable platform constructions and a settlement hierarchy of principal centers and satellite communities also suggest an increasing complexity in the social order at about the same time (*21*); there is some evidence of similar developments from Pacific Guatemala-Chiapas and adjoining highland regions by the beginning of the Middle Preclassic (*22*). Thus, the lowland Maya may have been influenced by neighbors who were somewhat more advanced socially and politically. With known trading contacts with these neighbors, some ideological borrowing on the part of the lowland Maya would not be surprising. At the same time, in situ processes of social and cultural growth were at work in the Maya lowlands, and the rise of complex society cannot be explained as the result of diffusion alone. The entire Preclassic was a time of population growth, and the social and economic conditions of the lowlands were such as to ready them for the acceptance of the social inventions that constitute a complex sociopolitical structure.

An examination of the archeological records at a number of lowland Maya sites, such as Altar de Sacrificios (*17*), Uaxactun (*18, 23*), and Tikal (*24*), reveals a similar story of the development of sociopolitical complexity. At Altar de Sacrificios the earliest central residential patio group from the beginning of the Middle Preclassic was a simple arrangement of small houses. By the end of that period, several hundred years later, this same residential complex had been greatly enlarged, and the largest mound was some 4 meters high. In the succeeding Late Preclassic and Protoclassic periods, or from about 400 B.C. to A.D. 250, this group included a pyramid mound that was stone-faced, terraced, and had an impressive stairway. The height of this temple pyramid was 13 m, and its terraces were adorned with stucco reliefs and carved stone censer-altars (stone altars with basins in which a substance, probably copal gum, had been burned as incense). Uaxactun shows a similar Late Preclassic–Protoclassic architectural florescence (Fig. 3); and at Tikal, destined to be the greatest lowland Classic center, earlier and simpler Middle Preclassic occupation levels are succeeded by corbeled vault tomb construction, great pyramids and platforms, elaborate mortuary furnishings, and eventually hieroglyphic texts.

We know that these were not separate, isolated evolutions. For example, large-scale settlement pattern studies (*25*) show other major or primary centers, somewhat smaller secondary centers, and centers of tertiary size. Clustered around these centers, and also found throughout the landscape between centers, are numerous residential mounds or house mounds. In effect, there was a vast system that was interlinked in many ways. Political control radiating out of the major centers was undoubtedly one linking mechanism, although it is unlikely that there was ever a single territorial state in the Maya lowlands, at least in Late Preclassic times. The centers and their satellites were also linked by trade in commodities such as food products, raw materials, and manufactured goods. Craft specialization appeared as early as the Late Preclassic. For instance, at Colha (*26*), in northern Belize, there are huge deposits of chert wastage from workshops where thousands of bifaces and other tools and weapons were manufactured and then transported to a series of other centers, all several kilometers from Colha. Trade over even greater distances is also reflected in the increase in foreign and exotic items in lowland Maya Late Preclassic elite graves. Foreign imports such as obsidian were found in earlier Preclassic lowland sites, but now the volume of such trade must have

been much greater. Marine shells from both the Caribbean and Pacific coasts were a frequent item of trade. Highland jade, pyrites, and other stones or minerals were also imported, both in their raw states and as manufactured pieces. What the lowland Maya exchanged in return is still the subject of speculation, although it has been suggested that such things as jaguar pelts, tropical bird feathers, oils, spices, cacao, and drugs, all of which are foreign to highland environments, might have been the exports that served as an important source of wealth to the rising cities of the lowland Late Preclassic (*27*).

As already mentioned, ideas as well as goods were disseminated through trading contacts, and this suggests further consideration of the origins of some of the more specific elements of lowland Maya elite, hierarchical, and ideological culture. The regions of Pacific Guatemala–Chiapas and the bordering highlands appear to have been somewhat in advance of the lowland Maya in the development of complex society. This is true, for example, of the sites of Izapa (*28*), Abaj Takalik (*29*), and Kaminaljuyu (*30*). Artistic and iconographic analyses of the monumental sculptures from these centers suggest that they have earlier derivations in Olmec art and that, in turn, they bear certain resemblances to Late Preclassic, Protoclassic, and Early Classic sculptures of the Maya lowlands. The evolution of monumental art in Preclassic southern Mesoamerica is a complex question, and there are differences among authorities on its interpretation (*29, 31*); however, all agree that early major art of the Maya lowlands (Fig. 4) has its prototypes in these Pacific and highland regions.

Hieroglyphic writing is associated with some of the Abaj Takalik and Kaminaljuyu monuments, and these hieroglyphs are clearly related to those that developed so elaborately in the later lowland Maya Classic civilization. Again, the question of origins arises: Was Classic Maya elite or aristocratic culture, as exemplified in its great arts and hieroglyphic system, imported to the lowlands from the highland and Pacific Coast regions? But this question seems to be much too simplified, because there can be no simple answer (*32*). A mass transference of a Pacific-highland elite culture, presumably by a migration of peoples, seems unlikely, even though there is evidence of some migration (*33*). The many individual evolutions of sites in the Maya lowlands from the Late Preclassic to the Classic tend to preclude this. Furthermore, Pacific-highland Preclassic art and hieroglyphs undergo radical transformations and reworkings in the lowlands almost from their introduction. A borrowing of ideas—and especially ideas that could be integrated into the growing political, social, and commercial world of the Maya lowland cultures, which were evolving on a course somewhat similar to those of their neighbors—was the essential process by which the foundations of Maya Classic civilization were laid down. Studies of Maya civilization have shown that there is no single-source origin for any of its complex institutions. They were synthesized, instead, from many diverse sources, both foreign and local.

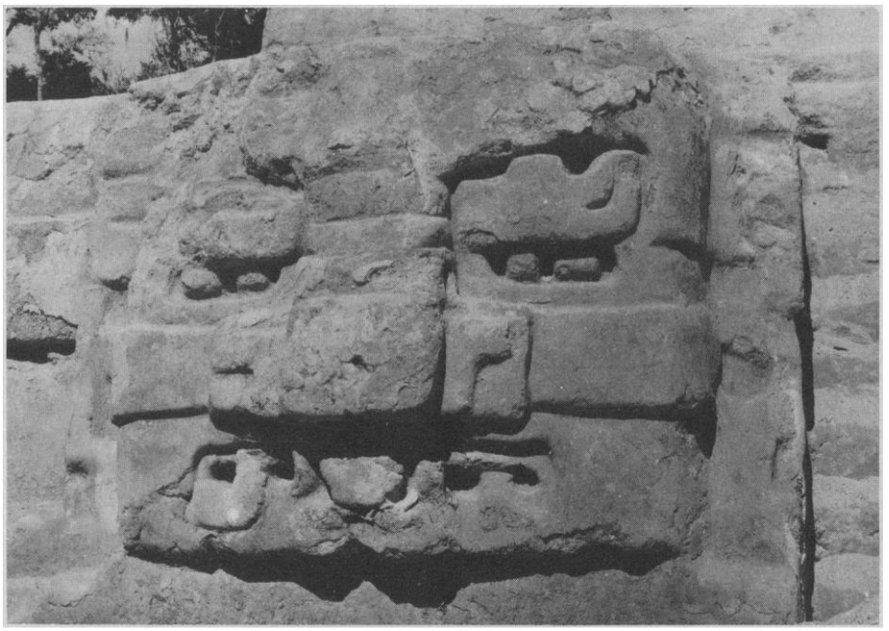

Fig. 4. Close-up of jaguar-like deity mask from Temple E-VII-Sub pyramid at Uaxactun (Fig. 3). [Courtesy Peabody Museum, Harvard University]

### The Classic Civilization

The Classic Period of lowland Maya civilization is dated from A.D. 250. This is an arbitrary date, set at a few years before the dates of the earliest known Maya initial series stelae. At one time it was thought that these early initial series or long count (*34*) dates of the Maya calendar were synchronous with the first large temple and palace constructions, the first use of the corbeled vault, most Maya sculpture, hieroglyphic texts, and polychrome pottery, all of which appeared at about the same time. Now it is clear that these hallmarks of Maya Classic civilization were being developed and assembled throughout the Late Preclassic and Protoclassic. Thus, the A.D. 250 date signifies the full crystallization of Maya civilization. The Classic Period has been subdivided into an Early Classic (A.D. 250 to 550) first florescence, a brief interim known as the hiatus (A.D. 550 to 600), a Late Classic (A.D. 600 to 800) second florescence, and a Terminal Classic (A.D. 800 to 1000) dissolution. Some of this chronology, which will be referred to as the Classic Maya cultural system, is presented through a set of subsystems or themes: subsistence, settlement patterns, sociopolitical organization, trade, warfare, and ideology. I will show how these subsystems interlock in an attempt to reproduce a holistic view of Classic Maya civilization (*35*).

Maize farming was the basis of Early Preclassic village life in the Maya lowlands, and it continued to be throughout Maya history. A long-fallow swidden method of clearing and planting was observed by the Spaniards in the 16th century, and it is probable that this method was very ancient in these tropical lowlands; however, more intensive farming methods were also used and, apparently, on a very large scale (*36*). Extensive terracing or "silt-trapping" has been reported in the Rio Bec region (*37*), and artificially raised fields were constructed in swampy regions or along sluggish stream beds (*37*). These raised fields, which are comparable to the *chinampas* or floating gardens of the Valley of Mexico and similar constructions in other parts of the Americas, are constructed to provide both drainage and irrigation, and their agricultural productiveness far exceeds that of comparable acreages cultivated under a swidden system. Construction of the raised field system is far more costly in labor input than swidden

farming, and this and its productiveness imply an association with large concentrated populations. Present evidence suggests that the raised field technology first came into use in the Maya lowlands in the Preclassic and was at its height in the Late Classic, which was also the time of population maximum for the area as a whole. Throughout the pre-Columbian Maya past there are also indications that their outfield farming, whether swidden, raised field, or terraced, was supplemented with infield or kitchen-garden cropping of foods such as breadnuts, avocados, palm-nuts, probably manioc, and various fruits (*38*). Site debris indicates that hunting of animals, such as deer and peccary, and fishing supplemented the agricultural diet (*39*). In fact, by the Late Classic the Maya appear to have been using every available subsistence resource, suggesting population pressure on resources.

Maya settlement pattern studies are closely linked with those of subsistence. Indeed, it was the great numbers of residential mounds, which implied that populations were too large to be supported by long-fallow swidden farming, that made archeologists search for evidences of more intensive cultivation methods and led eventually to the discoveries of the raised field and terrace systems. Maya ordinary residences are seen archeologically as small earth and stone mounds, 1 to 2 m high on the average. These are the ubiquitous house mounds referred to in the archeological literature. They once supported pole and thatch houses similar to those built today by the modern Maya. A standard residential pattern is a grouping of two, three, four, or sometimes more mounds built around a small open patio; these patio groups probably housed extended family units (*40*). The patio group residential pattern dates back to the Early Preclassic and has continued throughout Maya history. As noted, house mounds are found both near to and between the temple-palace centers.

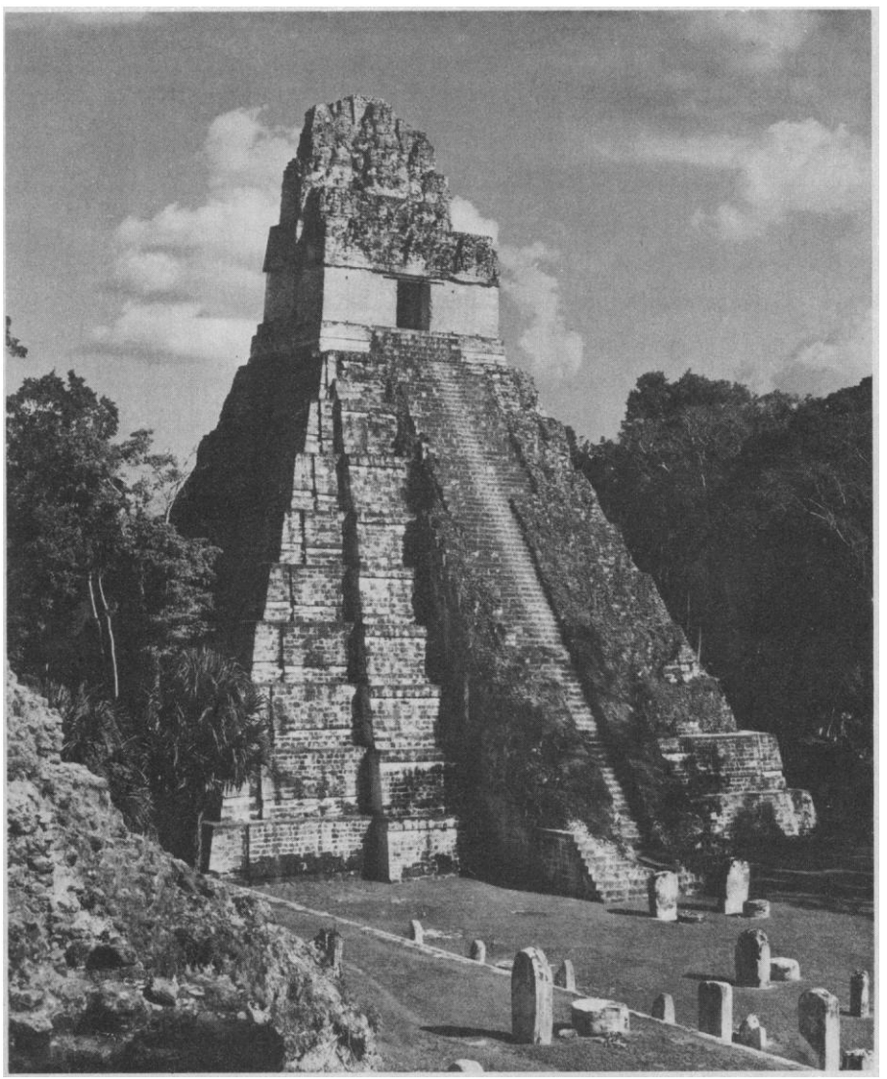

Fig. 5. Temple I at Tikal, Guatemala, was built between A.D. 710 and 730 in the Late Classic as the funerary temple of a royal personage designated by archeologists as Ruler A. His reign initiated Tikal's last great century of wealth and influence. [Courtesy University of Pennsylvania, University Museum, Philadelphia]

One of the major recent debates in Maya archeology concerns the nature of lowland Maya urbanism (*41*). Were the great centers true cities with concentrated populations and functions usually associated with an urban setting? Or were they politicoreligious precincts, occupied permanently only by an elite governing class and visited but occasionally by the supporting mass of an outlying peasantry? The question has not been answered to the satisfaction of all Maya archeologists, at least in an either-or fashion; however, residential surveys in and around some principal centers indicate significant population concentrations that certainly approach or attain an urban mode (*42*). Thus, at Tikal (Fig. 5) it is estimated that 50,000 to 70,000 persons lived within a radius of 6 kilometers of the main center, or within an area of about 120 $km^2$ (*40, 43*). Although this is a more dispersed settlement than that of the estimated 100,000 or 200,000 people who lived within the 20-$km^2$ zone of the contemporaneous pre-Columbian Mexican highland city of Teotihuacan (*44*), it would qualify as urban by most standards. Moreover, the urban designation for Tikal seems appropriate in view of the functions of manufacturing and trade that were carried out in this center in addition to those of administration and religion (*45*).

What were the relationships among the Maya lowland centers or cities and what was the political structure of ancient Maya society? In the northeastern Petén, for example, Tikal, although the largest city, was not the only one. Uaxactun, 18 km to the north and smaller than Tikal, was still an impressive center with a sizable circumambient residential population. At short distances from both cities were others of a smaller urban order. The impression is that of a hierarchically organized settlement and political order, with great capitals, subcapitals, and so on down the line. As mentioned, this kind of a macrosettlement pattern was already evident in the Late Preclassic, with the rise of complex society, and in the Classic Period, as the population grew and spread throughout the lowlands, it became even more pronounced.

Archeologists have been trying to plot out ancient domains or polities in these larger patterns through the application of central-place theory and polygonal representations of settlement hierarchies

(*46*). This work has been supplemented by comparisons of site sizes and by hieroglyphic research whereby emblem glyphs or badges of the various major cities have been used to trace out inferred political allegiances among presumed secondary or tributary centers (*47*). One possible sociopolitical model is that of a feudal type of organization, where the largest centers may have been the seats of kings, secondary and tertiary ones the domains of lesser nobles, and the whole supported by an agrarian peasantry (*48*). Advances in hieroglyphic research, such as the identification of emblem glyphs, offer substantiations of such a system; texts have been deciphered that describe wars, alliances, intermarriages, and king lists that are reminiscent of the relationships among the royal houses and nobles of medieval Europe (*49*). Trade and manufacturing also had roles in the Maya system (*50*). The population of Tikal and other urban-like concentrations suggest the rise of a middle class of artisans, traders, and minor bureaucrats. It is not known, however, whether trade was of an open market type or was of a redistributive nature.

Foreign or external influences (*32*) continued to affect Maya lowland society during the Classic. Some of the most interesting evidence for this comes from hieroglyphic texts and associated art at Tikal. One 4th-century A.D. text describes a "foreigner," one "Curl-Snout," whose accoutrements and attendants suggest a close relation with the central Mexican city of Teotihuacan and who married into the local royal family and founded a new lineage (*51*). This bit of historical information fits nicely with Teotihuacan influences, as represented in imported pottery styles and the appearance of central Mexican obsidian throughout the Maya lowlands in the Early Classic. Taken together, such evidences begin to outline some of the processes involved in lowland Maya state development.

During the Early Classic it seems probable (at least from evidence of stylistic similarities and hieroglyphic texts) that Tikal maintained a leadership, a hegemony over much of the Maya lowlands, or at least the southern portions, founding dynasties at Quirigua (Fig. 6) and Copan (*52*) and marrying its royal daughters to the rulers of other cities (*47*). The latter part of the 6th century was the time of the hiatus, a curious slackening of elite activities in most southern Maya lowland cities (*53*). Few dates were inscribed on the stelae, few rulers were commemorated, and there was little temple and palace construction. Then shortly after A.D. 600 there was a resurgence of stelae dedication, of building, and of the founding of new cities and the renovating of old ones. Tikal (Fig. 7) revived as did many other

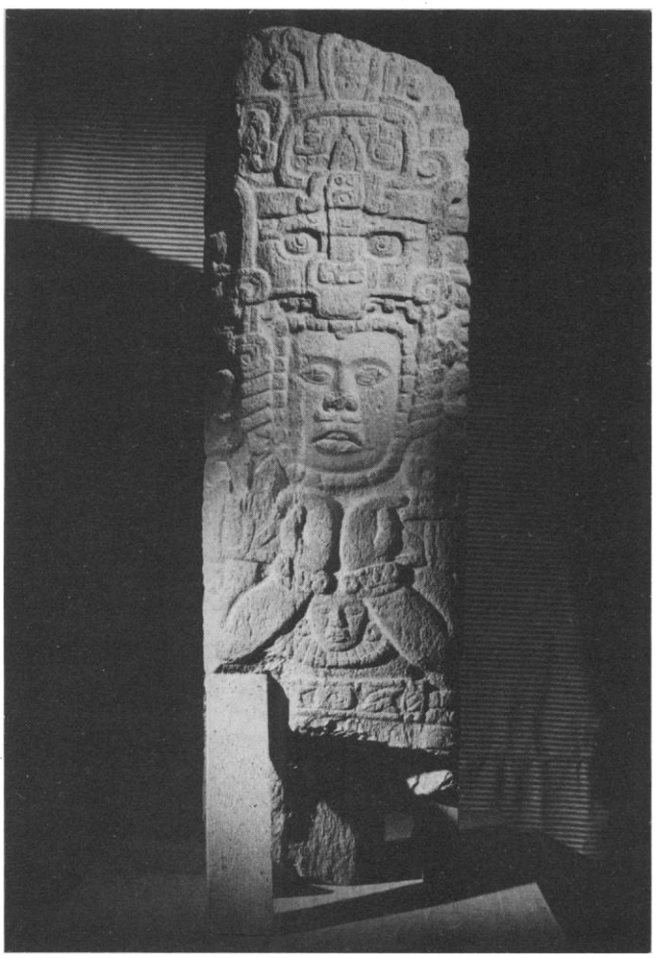

Fig. 6 (left). Stelae 26 from Quirigua, Guatemala, depicts an early ruler of that site, and on the back of the monument there is an initial series date of 9.2.18.0.0 or A.D. 493. It was discovered in the 1970's under deep silt deposits to the north of the well-known main center that dates some centuries later. The import of this monument is that it verifies Quirigua's establishment in the Early Classic and that it links stylistically with Early Classic monuments at Uaxactun and Tikal, thus suggesting dynastic ties with these sites, most probably the latter. [Courtesy University of Pennsylvania, University Museum, Philadelphia] Fig. 7 (right). A Tikal stela dedicated to a later ruler, Yax Chitan, whose reign lasted only a little over 2 years (A.D. 768 to 771). The intricacy of the rendering of the costume, in contrast to that of the Early Classic monument from Quirigua (Fig. 6), is characteristic of Late Classic Maya sculpture. [Courtesy University of Pennsylvania, University Museum, Philadelphia]

cities, including Copán, Quirigua, Palenque, and Piedras Negras. It is difficult to say what city had preeminence in the Late Classic. Quite probably it was a time of intense intercity competition, but it also marked an apogee in the Maya achievement.

In attempting to understand Maya civilization we may view it as an integrated system (*35*). Agriculture and land use clearly link to demography. Insights into both are provided from settlement pattern information; settlement data, in turn, throw some light on Maya political and social structures, which are further elaborated by interpretations of hieroglyphic texts (*51, 54*) and of art and iconography (*55*). The texts and art open up a small window on the ideological world of the Maya. The Classic period spans more than seven centuries, and the conditions and institutions that archeologists are trying to understand were undoubtedly changing ones. Research advances of the future will be addressed to these changes in Maya culture and the processes that brought them about.

The most dramatic change, or set of changes, resulting in the disintegration of classic Maya civilization, began in the 9th-century A.D. and continued for 200 years or over the period called the Terminal Classic. The cause of this dissolution or collapse has been the topic of much speculation; natual disasters, disease, crop failures, overpopulation, peasant revolt, foreign wars, and trade failures have been proposed, but no single explanation seems satisfactory (*56*). The facts of the collapse can be set down quite simply. Evidences of the decline appear first in the southern lowlands at the close of the 8th century and accelerate rapidly through the 9th century. They are manifest in the cessation of the recording of commemorative dates and stelae dedications and in the slowdown or stoppage of center constructions. Indeed, the phenomena of the collapse are reminiscent of those of the hiatus, but this time there was no recovery. This withering of the elite aspects of the culture was accompanied by the marked depopulation of the once great cities and of much of the surrounding countryside. The processes of disintegration, whatever they may have been, appear to have drifted gradually north, through central Yucatan and eventually into the northern part of that peninsula.

Although there is little consensus about the cause or causes of the Maya collapse, there is one thing about which there is general agreement. This is that the Terminal Classic was a time of radical political and social change throughout much of civilized Mesoamerica. Old Classic period centers of power, in Oaxaca, in central Mexico, and elsewhere, were overthrown and abandoned. New political formations, some of them, like that of the Toltecs, of imperial dimensions, were in the making. Military competition increased. Old trading routes and alliances were rearranged. And whatever the specific causes and events, as these may have occurred from place to place, it seems certain that the Classic Maya civilization of the lowlands was affected by this general unrest.

## The Postclassic Period

At about A.D. 1000 a group that is often identified as Toltec settled at and rebuilt an earlier Classic Maya center in northern Yucatan and renamed it Chichen Itza (*57*). The Toltec identification may not be strictly correct; these invaders may have been peoples of Maya speech, the Putun Maya, who had lived along the extreme western margins of Classic Maya civilization in the Gulf Coast country of Tabasco (*58*). The Putun Maya, who came under Toltec and central Mexican influences earlier than the lowland Maya, were acculturated to Toltec ways and ideologies by the end of the 8th century. From later ethnohistoric accounts these Putun Maya were known as warriors and riverine and coastal canoe traders, and it is possible that their military and commercial incursions were instrumental in setting the Maya decline in motion some 200 years before they actually implanted a city at Chichen Itza.

The establishment of Toltec or Putun Chichen Itza marks the beginning of the Postclassic period in the Maya lowlands. Except for this one great site, the early part of the period is poorly known. In the north some towns and cities of the Terminal Classic continued to be occupied, but populations were reduced, and there was little notable construction. The entire south appears to have been virtually abandoned. Only in the east, in northern Belize, are there former Classic sites that show substantial activity (*59*). This locality is the part of the Maya lowlands that was most remote from the Putun homeland.

Chichen Itza's great days were over by the beginning of the 13th century. In the Late Postclassic, the period that is sometimes referred to as that of Maya resurgence, the leading city was the walled center of Mayapan in northern Yucatan (*60*). The principal religious pyramid of Mayapan appears as a poor and reduced replica of the great Castillo at Chichen Itza; otherwise, the center retains little of the Toltec or Putun tradition. The urban zone within the walls, which measures 2 by 3 km, is estimated to have contained about 12,000 persons, a fraction of the population of the great Classic period cities. It gives the impression of a relatively close-packed arrangement of the standard Maya patio-group residences, as though these had been gathered up and confined within the perimeter of the city's defense wall.

Some archeologists suggest that the Late Postclassic was an era of active long-distance trade along the coast and that the Maya of Yucatan played an important part in that trade (*61*). Archeological evidences from coastal Tulum and from the island of Cozumel, both Late Postclassic centers, support this, as do 16th-century Spanish accounts. It has also been argued that to conceive of a Classic period collapse and a reduced Postclassic civilization is a mistake (*62*). As an alternative the concept of an "upward collapse" has been offered; the explanation of the archeological record is a progressive evolution marked by radical sociopolitical changes, including the abandonment of the values of the Classic period aristocratic elite in favor of an order that laid more stress on extended commerce, the mass distribution of goods, and a greater participation in many spheres of life by larger numbers of people.

Although it is true that there was cultural activity in the northern lowlands during the Postclassic, and especially trading activity in the Late Postclassic, I do not feel that a full review of the archeological evidence gives much support to this fulsome picture of the last pre-Columbian centuries of lowland Maya life. Whatever the nature of activities—at least insofar as these can be measured in material archeological remains—the present data indicate a definite lack of Late Postclassic population numbers comparable to those of Classic times. If there was, indeed, a greater participation in many spheres of life by larger numbers of people, there were not as many people around to observe this or to have the opportunity to partake in the participation. If a wider view is taken and the field of action expanded beyond the lowland Maya area to Mesoamerica as a whole, there is, perhaps, something to the concept of an upward collapse. Certainly the Postclassic, as has been observed, marked the rise of new state and imperial polities. These, however, radiated out of central Mexico, that ancient locus of early Mesoamerican urbanism and state formation dominated

successively by Teotihuacan, the Toltecs, and the Aztecs. This was the region that was in the vanguard of Mesoamerican social, political, and commercial evolution. The lowland Maya were caught up in the processes of this evolution, at a geographic remove and always in a somewhat delayed way; and the trials of their Classic dissolution and their not altogether successful attempts at a Postclassic reintegration reflect their difficulties in attempting to adapt to these processes.

### References and Notes


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