

1

Introduction: A Prologue to Classic Maya Culture and the Problem of Its Collapse¹

T. PATRICK CULBERT

*Department of Anthropology
University of Arizona*

The collapse of Lowland Maya Classic civilization is a very specific problem, narrowly delimited in time and space. We hope, however, that our consideration of the Maya collapse has a meaning in terms of cultural systematics that will be of interest to a wider audience than simply those concerned with Mesoamerican archaeology. It therefore behooves us to define the time and space parameters of our problem and to set the cultural and environmental background of the Maya Classic climax and decline.

The Maya Lowlands is the area of lowland hills and plains that extends from the Guatemalan-Chiapas Highlands northward to the Gulf of Mexico and the Caribbean Sea (see Figs. 1–4). The area is ecologically homogeneous, at least in comparison with the strikingly varied mountainous zones that border it. There was a fundamental base of prehistoric cultural similarity within the area and ties of trade and the sharing of patterns of elite culture, such as the calendric and hiero-

glyphic systems, united the area during the Classic Period, demonstrating continuing intercommunication.

Nevertheless, there is considerable variety within the Maya Lowlands. The major division, generally agreed by Mayanists to relate to significant cultural differences, is between the Northern Lowlands and the Southern Lowlands. In spite of the shared patterns and intercommunication mentioned above, the two sections show differences in architecture and ceramics, and there is enough gradation in ecological conditions to presuppose some variation in subsistence adaptation. The ties between the Northern and Southern Lowlands during the Classic Period are no more than a weak reflection of the intensive system of interaction that connected sites within the southern section at that time. The line between the two sectors in Figure 1 was drawn with no pretense of precision, since there is very little archaeological information from the area through which the suggested boundary passes. It is likely that as more information accumulates, the question of a precise "border" between the Northern Lowlands and Southern Lowlands will become trivial and the actual situation will be better reflected by a series of clines or intergrading zones.

There has been an information imbalance in Maya archaeology in favor of the Southern Lowlands. Most major investigations, both in recent years and in the past, have centered in the south with the result that the total archaeological framework for that sector is far more complete than that for the north. Of the participants at the Maya collapse conference, only E. Wyllys Andrews IV had extensive experience in the Northern Lowlands, and his paper represents the only Northern Lowlands-based viewpoint in this volume. The rest of the papers emphasize the Southern Lowlands and the conclusions are primarily applicable to that sector. Extension of the conclusions to the Northern Lowlands is difficult, both because so many fewer projects have been undertaken in the north and because the correlation of events in the two sectors remains a matter of debate.

Within each sector, still further divisions are necessary for dealing with the detailed problems treated in the rest of the book. All of the authors have operated in terms of a series of zones that both serve as a geographical convenience and relate to some degree of ecological and cultural differentiation within the Maya Lowlands. Because intensive work has been done in only a few sites within each zone and because

Introduction

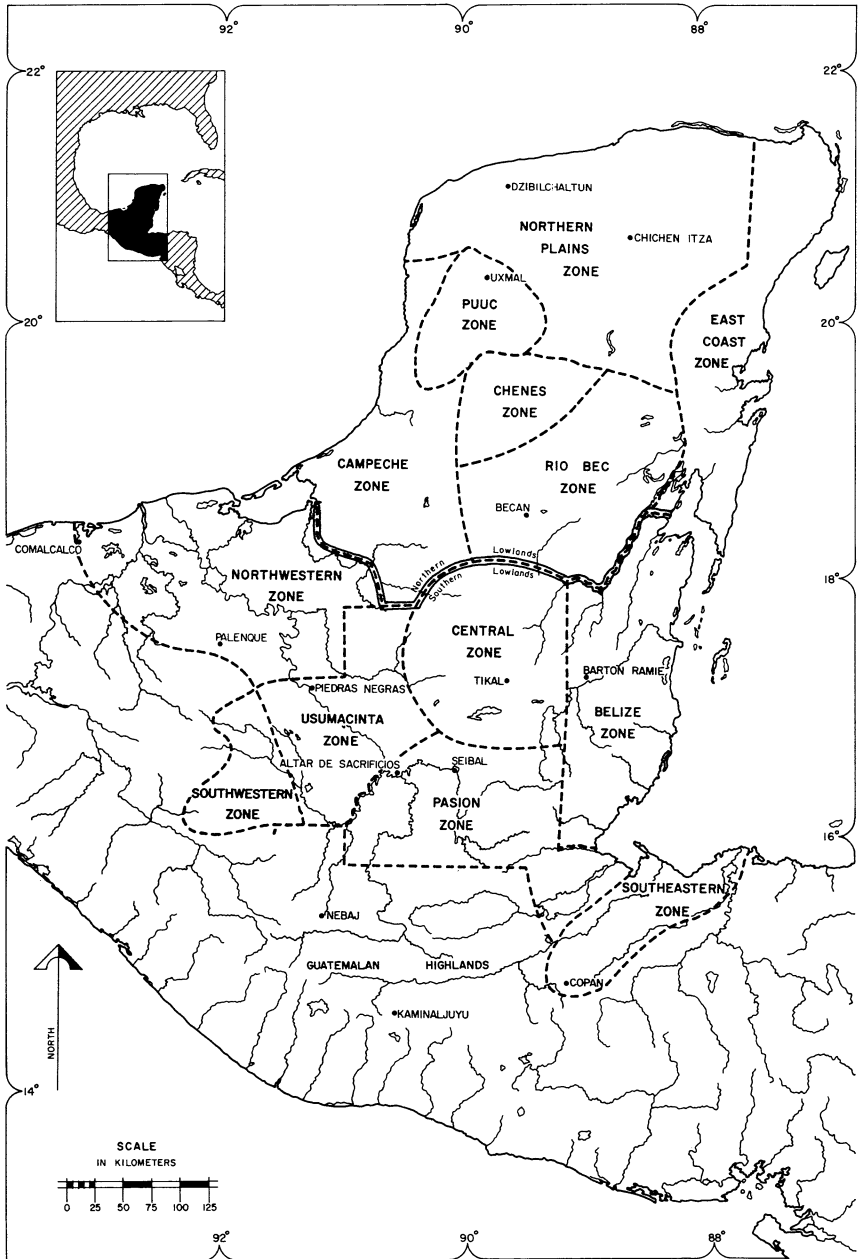


FIGURE 1. THE MAYA LOWLANDS: ARCHAEOLOGICAL ZONES

we lack broad regional surveys and ecological studies, the details of zonation remain unclear. The lines separating zones in Figure 1 and the textual comments that follow should, therefore, be considered suggestive rather than definitive.

At the heart of the Southern Lowlands is a Central Zone located in the north-central part of the Department of Peten in Guatemala. The zone can be delimited by a circle approximately 150 km. in diameter that would include Calakmul at its northern edge, Naranjo to the east, the area of Lake Peten Itza to the south, and a little-explored area with few reported sites to the west. The sites of Tikal (Carr and Hazard 1961; W. R. Coe 1962, 1963, 1965a, 1967) and Uaxactun (Kidder 1947; Ricketson and Ricketson 1937; R. E. Smith 1937, 1955; Wauchope 1934), near the center of the area, have been thoroughly investigated and serve as the basis for most of the conclusions about the character of the zone. The whole zone contains a series of large and very important sites and was characterized by a dense population and a leadership role in a number of kinds of cultural innovation. Topographic features include a series of flat-topped limestone ridges on which the sites are located and lower, seasonally swampy depressions (called *bajos*) which show almost no evidence of prehistoric occupation. Drainage is largely subterranean although there are a few lakes, the largest of which are Lake Peten Itza and Lake Yaxha. As Rathje (1971b) has emphasized, the Central Zone is deficient in natural resources and is the area of the Southern Lowlands farthest removed from access to external commodities.

At the eastern edge of the Southern Lowlands is the Belize Zone, roughly equivalent in extent to the modern political unit of Belize (British Honduras). Bullard (personal communication) feels that there was too much cultural diversity within this region to include within a single zone, but we retain a Belize Zone here as a unit of convenience for contrasting the eastern fringes of the Southern Lowlands with other areas. An unusually large number of sites have been investigated in the area. The most complete modern report is that of Willey, Bullard, et al. (1965) on the strip settlement along the Belize River at Barton Ramie. Pendergast's recent work at Altun Ha (1967a, 1969b), although not yet reported in full, adds important information. Earlier reported excavations include those at Benque Viejo (Thompson 1940); Baking Pot (Ricketson 1931); Caracol (Anderson 1958, 1959); San Jose

Introduction

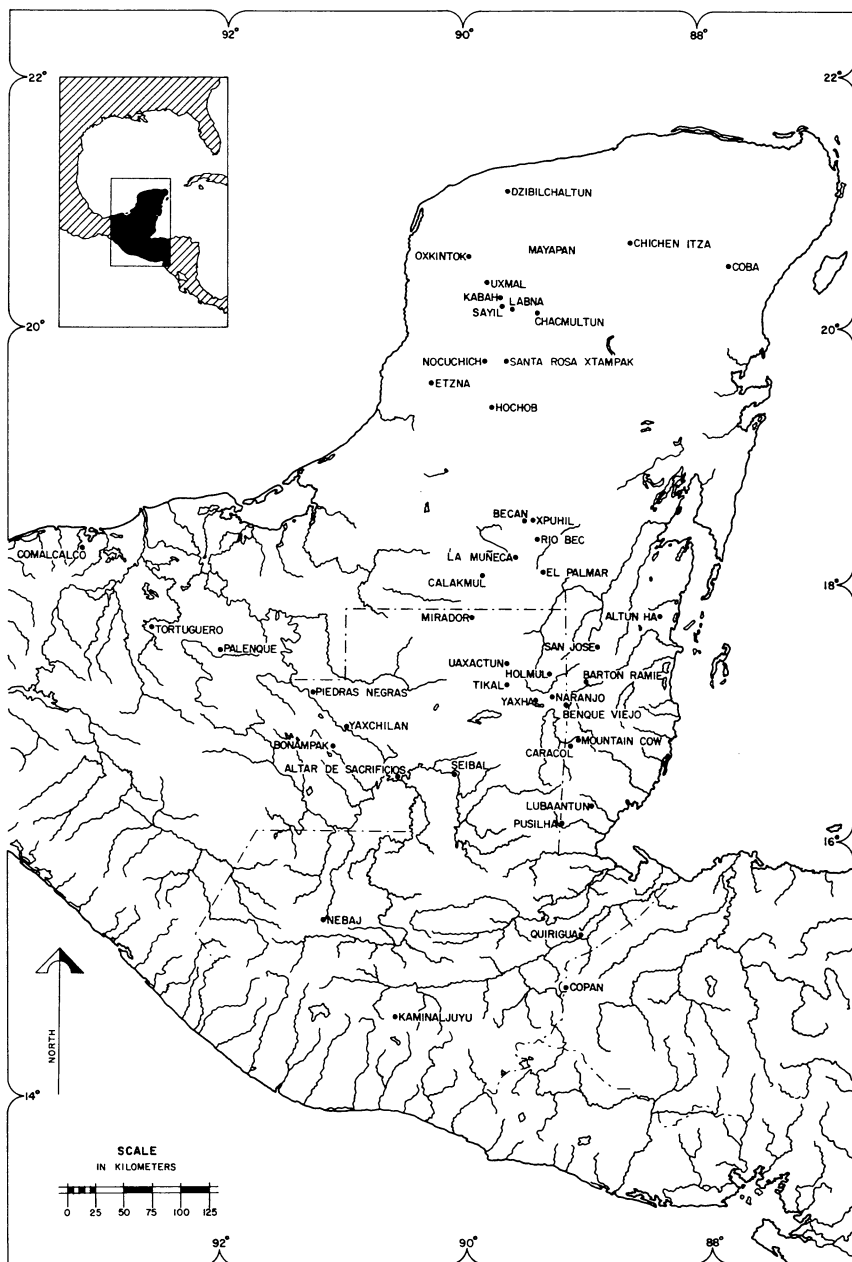


FIGURE 2. THE MAYA LOWLANDS: SITES

(Thompson 1939); Holmul (Merwin and Valliant 1932), just across the border in Guatemala but culturally similar to some Belize sites; and the sites of Lubaantun (Gann 1925; Joyce 1926) and Pusilha (Gann 1930; Gruning 1930), which lie south of the Maya Mountains.

The zone subsumes a relatively high degree of ecological diversity. Riverine environments, the coastal strip, and the Maya Mountains (a small range of volcanic origin) offer contrasting opportunities for exploitation. The area probably served as an important resource zone since both sea products and the volcanic stone from the Maya Mountains must have been in high demand in the interior parts of the lowlands.

The Southeastern Zone includes the extension of the Southern Lowlands necessary to take in the sites of Copan and Quirigua. Unfortunately, neither site has been investigated in recent times, although the Carnegie Institution conducted a large project at Copan in the 1930s and did sporadic work at Quirigua. (For Copan, see Gordon 1896; Morley 1911; Longyear 1952. For Quirigua, see Blackiston 1911; Hewett 1912; Morley 1913.) For both sites, the published information deals largely with the ceremonial precincts and provides little information about resident populations. Both Copan and Quirigua are at a slightly higher elevation than the Peten but still within the rain forest vegetational zone, and both occupy riverine environments. The position of the sites in areas of easy access to the full range of resources of the mountainous highlands and on rivers that provide natural thoroughfares makes them potential centers for commerce.

The Pasion Zone, which comprises the southernmost part of the Maya Lowlands, has been among the most thoroughly investigated areas of the Peten in recent years, thanks to the Harvard University projects at Altar de Sacrificios (Adams 1971; Willey and Smith 1969) and Seibal (Adams 1963a; Smith and Willey 1966a, 1966b, 1970; Sabloff 1970; Touretellot 1970; Willey 1970) and to Ian Graham's reconnaissance in more remote areas away from the river (Graham 1967). With the benefit of modern archaeological interests and techniques, the Harvard projects have provided a full range of data that include settlement pattern studies and housemound testing as well as the more traditional investigations of ceremonial precincts and artifact categories. Although much of the data is still unpublished, several participants at the Maya collapse seminar were thoroughly familiar with it. The Pa-

Introduction

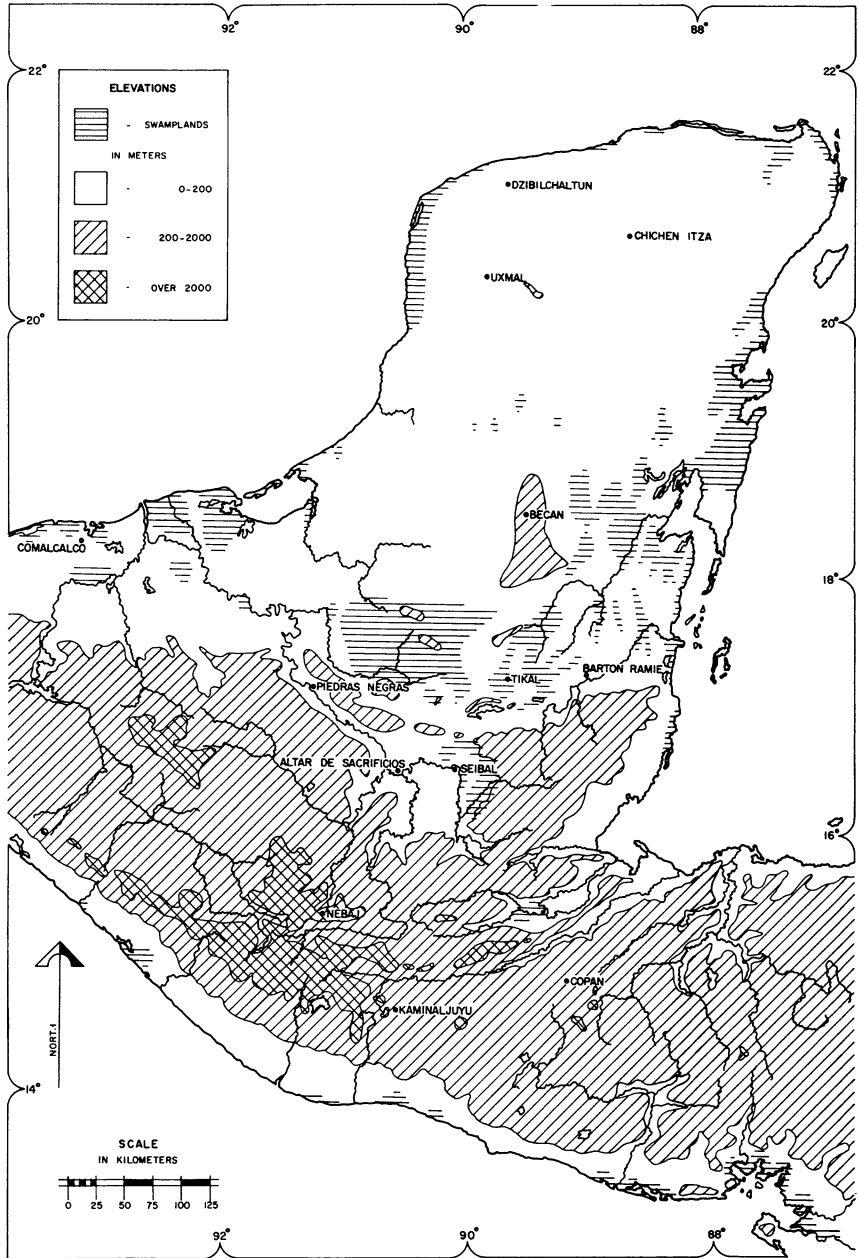


FIGURE 3. THE MAYA LOWLANDS: ELEVATIONS

sion Zone is fully within the lowlands in both climatological and ecological environment, but enjoys the benefits of river resources and the channels of communication that the river offers to the Guatemalan Highlands and Usumacinta Zone.

The Southwestern Zone takes in sites on the Chiapas Plateau in a semiarid area at elevations in excess of 1,000 m. This zone, consequently, is outside of the lowlands environmentally, but it shares cultural features such as carved stone monuments and the corbeled arch with the Southern Lowlands. Unfortunately, no more than exploratory accounts of the Southwestern Zone are available, and the corner of the lowlands that lies closest to it is terra incognita in the archaeological sense.

The Usumacinta Zone includes a number of large and very important sites on or near the Usumacinta River on the western borders of the Maya Lowlands. The zone is fully lowland in all senses, but is within striking distance of the Central Chiapas Highlands. More important, the Usumacinta provides a channel of communication to the Tabasco–Vera Cruz coastal plain and, hence, to non-Maya cultures of considerable importance. Unfortunately, there has been surprisingly little archaeological work in the Usumacinta Zone except for the University of Pennsylvania's project at Piedras Negras in the 1930s (Butler 1935; Satterthwaite 1936, 1943–54).

The Northwestern Zone lies to the northwest of the Maya Lowlands near the juncture of the Central Chiapas Highlands and the Tabasco coastal plain. Rands's (1967a, 1967b) recent investigation provides excellent information on the region as a whole, and the ceremonial precincts of Palenque are well known and reported by Ruz (1952a, 1952b, 1952c, 1952d, 1952e, 1954, 1955, 1958a, 1958b, 1958c, 1958d). Although characterized by a vigorous development of Classic Maya art, hieroglyphics, and architecture, the zone stands outside of the Southern Lowlands region of ceramic interconnections. The Northwestern Zone is within the rain forest, but in an area of heavy rainfall where double cropping is possible. Its location provides easy access to both the Northern and Southern Maya Lowlands and to the Mexican coastal plain as well as making the zone vulnerable to influences, both peaceful and military, from outside the Maya Lowlands.

Although we know less about the Northern Maya Lowlands, there are indications of an equally complex zonation in that sector as well.

Introduction

The Puuc Zone, named after a range of low hills that parallels the central western coast of the Yucatan Peninsula, includes a number of large and important sites (Uxmal, Labna, Sayil, Kabah) that share a characteristic architectural style. Andrews's work at the immense site of Dzibilchaltun (1960, 1962, 1965b, 1968) suggests a Northern Plains Zone. There might also be distinguished a Campeche Zone, an East Coast Zone, a Chenes Zone located in north-central Campeche and including the sites of Hochob and Santa Rosa Xtampak, and a Rio Bec Zone in southern Campeche known for such sites as Rio Bec, Xpuhil, and Becan. Ian Graham's recent report (1967) emphasizing the importance of the immense site of Mirador suggests the possibility of creating a North-Central Zone lying athwart the Guatemalan-Mexican border just to the north of the Central Zone of the Southern Lowlands. This area, badly neglected archaeologically but apparently containing dense remains of prehistoric population, may have served as an important bridge between the Northern and Southern Lowlands.

Throughout the Maya Lowlands, the climate is characterized by seasonal rains that begin in May and continue through November. The dry season offers only sporadic and undependable rains that are insufficient either for agriculture or to conserve drinking water supplies without reservoirs or other artificial means. The amount of annual rainfall varies on a north-south axis (see Fig. 4). At the northern tip of the Yucatan Peninsula only 20 to 30 inches of rain can be expected, but the total increases quite rapidly to the south to reach 40 to 60 inches in the Central Zone of the Southern Lowlands and as much as 120 inches annually in areas along the foothills of the Guatemalan Highlands at the southern border of the lowland region. Frost is unknown in the Maya Lowlands. Yearly temperatures average in excess of 25 degrees C. and show little variation between seasons. The seasonality of rainfall is a primary limiting factor for agriculture and most of the lowlands is a single crop zone, although a second, low-yield crop of fast-growing corn can be obtained in emergencies. In a few areas such as the slopes of the Guatemalan Highlands and the Palenque Zone at the foot of the Central Chiapas Highlands, rainfall patterns permit double cropping. Irrigation is unknown in both modern and Colonial times and is presumed to have been similarly absent prehistorically. Ridged-field systems have been reported along the Candelaria and Usumacinta rivers (Puleston and Puleston 1971), but there is as yet no

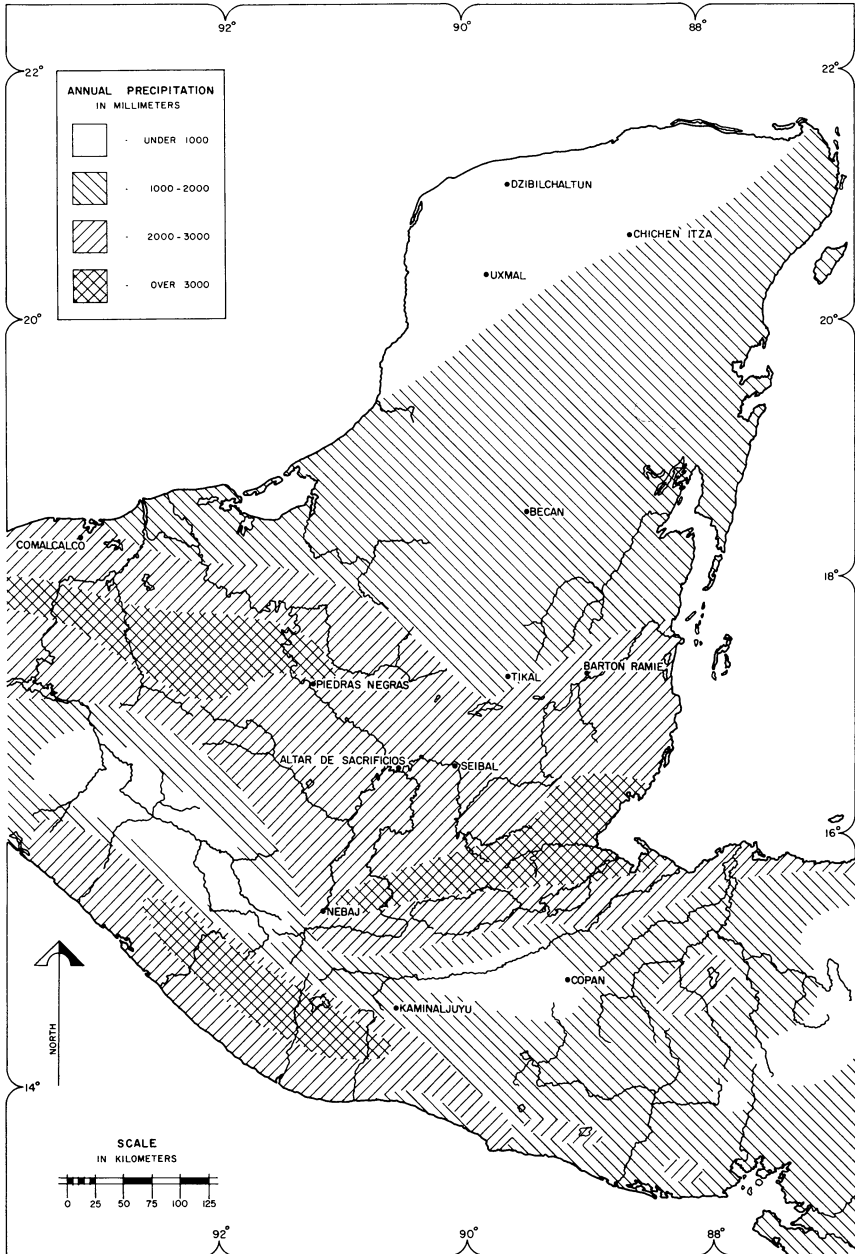


FIGURE 4. THE MAYA LOWLANDS: RAINFALL

Introduction

indication that such systems were widespread. The natural vegetation of most of the Maya Lowlands is tropical rain forest. The exploitative potential for small populations is good since there are numerous edible fruits, roots, and nuts and some large and small game. This potential, however, declines rapidly with increasing population densities. It seems likely that by the peak population of Late Classic times very extensive parts of the rain forest had been destroyed by cultivation, decreasing wild plant and animal foods. The only native food material of high yield and nutritional quality is the nut of the *ramón* (breadnut) tree, a resource that was undoubtedly exploited and possibly cultivated by the ancient Maya (see Puleston 1968; Puleston and Puleston 1971).

A few natural resources are available in abundance in the Maya Lowlands. Limestone from underlying bedrock deposits is easily reached and quarried even without metal tools. Pockets of chert, some of excellent quality, occur within the limestone and provide raw material for tool manufacture. The rain forest supplies a variety of resources ranging from tropical hardwoods for construction or craft production to spices and *copal* incense. Native fauna provide commodities such as jaguar pelts and bird feathers that were prized for elite class costumes throughout Mesoamerica. On the other hand, some kinds of important raw materials are scarce or absent within the lowlands. Salt is available only from seacoast production along the Yucatecan coast or salt springs in the neighboring highlands zones. Volcanic stone for *manos* and *metates* occurs within the lowlands only in the Maya Mountains. Obsidian and semiprecious stones of volcanic origin must be brought in from highland areas.

The foregoing paragraphs outline the background within which the Maya worked out their destiny. This background was, of course, a part of a larger geographic-cultural scene, Mesoamerica. This Mesoamerican area, which comprises the southern two-thirds of Mexico and an adjoining portion of Central America, is a land of diverse topography and climate, ranging from high, temperate mountain valleys to tropical rain forests such as those described for the Maya Lowlands. The diversity of the area offers the possibility for symbiotic exchange of products between inhabitants of different zones, and the various Mesoamerican subareas, of which the Maya Lowlands is one, have had an interlinked cultural history since remote times.

Sedentary farming societies began to appear in southern Mesoamer-

ica at about 2000 B.C., and the Mesoamerican cultural period from about this date to 1200 B.C. is generally referred to as the Early Preclassic Period. The remains of Early Preclassic communities are known from the Guatemalan Highlands and Pacific Coast, from Oaxaca, and from the Veracruz-Tabasco lowlands. To date, however, no evidences of human occupation dating this early have been found in the Maya Lowlands, and it would seem likely that the Maya Lowlands were first settled by village farmers coming from one or more of these other Mesoamerican subareas. This first village settlement did not occur until about 1000 B.C. (in the Northern Lowlands) to 800 B.C. (in the Southern Lowlands). This was well into the Middle Preclassic Period, at which time some of the other Mesoamerican subareas were far along the way to more advanced levels of culture, as evidenced by large ceremonial center constructions, the beginnings of monumental art, and other traits of complex society. In the Maya Lowlands these more complex developments did not occur until somewhat later, in the Late Preclassic Period (c.400 B.C.—A.D. 250). Toward the end of the Late Preclassic, a number of traits appeared in the Southern Maya Lowlands that are considered to mark the inception of Maya Classic culture. Among these traits were the distinctively Lowland Maya corbeled arch, Maya polychrome pottery, distinctive Maya art motifs, and the first hieroglyphic stela inscriptions that include dates in the Maya Long Count system of calendric notation. The origins of all of the traits which together define the beginnings of the Classic Period (A.D. 250–950) are not altogether clear. Some may have been of completely Maya origin, while others probably came from elsewhere in Mesoamerica or Central America. Whatever the origin of individual traits, the Lowland Maya transformed and embellished these earlier traditions in art, writing, and time-counting into highly distinctive forms and systems of their own. In sum, it is suggested that the Maya of the Southern Lowlands, after a relatively late start on the road to civilization as compared to some of their Mesoamerican neighbors, reached creative heights in the early centuries of the Christian era and in the span of a very few centuries evolved one of the most brilliant (from the standpoint of art, architecture, and intellectual attainments) of the pre-Columbian civilizations.

The dates for the Maya Lowland Preclassic occupations are based on radiocarbon determinations, but those for the Classic Period (Early

Introduction

Classic, A.D. 250–600; Late Classic, A.D. 600–950) derive from the Maya stela inscriptions of the Long Count calendar. The correlation of the Maya and Christian calendars is still a matter of debate. Throughout this volume, we use a correlation of the two calendars that is known as the Goodman-Martínez-Thompson (GMT) or 11.16.0.0.0 correlation. This correlation places the year A.D. 1539, which is attested by ethnohistoric sources to be at or near the end of a Maya 20-year period (*katun*), at 11.16.0.0.0 in the Maya calendar. A series of alternate correlations would place the Maya calendric count at 12.9.0.0.0 at this time. Using a 12.9.0.0.0 correlation would move all of our calendrically based dates back about 260 years. Thus, the date A.D. 250 that we suggest for the beginning of the Classic Period would be 10 B.C. with a 12.9.0.0.0 correlation. An 11.16.0.0.0 correlation is considered to be correct by almost all of the archaeologists who have worked in the Southern Maya Lowlands—hence its adoption here. It should be noted, however, that E. W. Andrews IV felt strongly that the correlation question remains unsolved and that the possibility of some earlier correlations, such as a 12.9.0.0.0 correlation, should be left open.

The Early Classic was a period of florescence in the Maya Lowlands. There is ample evidence for the existence of class distinctions and the accumulation of goods and labor in the creation of ceremonial complexes at a variety of centers. Whether the Lowland Maya reached the level of a state society during the Early Classic is a matter of debate, but a number of authorities feel that a chiefdom model is more appropriate (Sanders and Price 1968; Tourtellot and Sabloff 1972; Webb 1964). The Early Classic seems to have been a period of general cultural stability marked by a sphere of internal communication that fostered a high degree of uniformity within the Southern Lowlands and what were probably the closest ties that ever existed between the Southern and Northern Lowlands. The pace of change seems to have been relatively slow; although individual site sequences can usually be subdivided on the basis of minor changes in ceramics, there are no recognized subdivisions that crosscut the whole Lowland Region. Not all of the zones of the Southern Lowlands were equally populated in the Early Classic, since remains of that date have proved hard to locate in excavated sites in the Pasión and Palenque zones, and Early Classic monuments are uncommon in the Usumacinta Zone. During this pe-

riod, the Lowland Maya had contacts with the vast zone controlled or influenced by the city of Teotihuacan in the Valley of Mexico. A few archaeologists feel that there was an actual conquest of all or part of the Maya Lowlands by Teotihuacan, but the majority opinion favors more amicable and less direct forms of economic and diplomatic interaction. There is certainly a strong possibility that contact, whatever its nature, with Teotihuacan stimulated important changes in Maya society.

The transition in the Maya Lowlands between Early Classic and Late Classic may have been marked by some sort of cultural disruption. The primary evidence for such a disruption is a decreased frequency of dated monuments from 9.5.0.0.0 to 9.9.0.0.0 in the Maya calendar (A.D. 504–613). Whether or not such a disruption actually took place, it had no long-range effect on cultural development, because by 9.10.0.0.0 (A.D. 633) the most vigorous interval in the history of Southern Lowland culture was under way.

During the Late Classic, an acceleration of the rate of change makes subdivision of the period both necessary and relatively easy. The subdivisions are based on ceramic sequences, since ceramics are the most common and most thoroughly studied remains of the Classic Maya. At a conference in Guatemala City in 1965 (Willey, Culbert, and Adams 1967), the first centuries of the Late Classic (A.D. 600–830) were designated the Tepeu 1–2 horizon, using the names from the prototype Peten ceramic sequence developed by Robert E. Smith (1955) at Uaxactun. In this volume, Tepeu 1 (A.D. 600–700) and Tepeu 2 (A.D. 700–830) are usually treated as separate intervals of time since the detailed problems discussed need a finer chronological scale. There is general agreement that the Late Classic Period represents the peak of cultural development in the Southern Lowlands. Population, construction, and evidences of sociocultural complexity add up to a cultural climax that is discussed more thoroughly in the following chapters.

The succeeding ceramic horizon, termed the Tepeu 3 horizon, is the period during which the processes of the downfall worked out their course. There are some difficulties in choosing a period term by which to designate the Tepeu 3 horizon. Traditionally, there has been a tendency to include the horizon as the last part of the Late Classic Period because of clear ceramic continuities with earlier horizons. On the other hand, most of the patterns that gave rise to the idea of Classicism

Introduction

had ceased by this time. We have, therefore, adopted the designation "Terminal Classic" in this volume with the hope that it will connote both the continuity and the destruction of previous patterns demonstrated in the archaeological record. Tepeu 3 is generally considered to have begun about A.D. 830 or 10.0.0.0 in the Maya Long Count calendar. Actually, a first sign of impending decline was a marked dropoff of monument and stela dedication after the *katun* ending of 9.18.0.0.0 (A.D. 790), late in the Tepeu 2 phase. By A.D. 830 this cultural arrest was well under way and evidences of it were reflected in nearly all of the Southern Lowlands centers, with the cessation of major architectural activities, the near disappearance of dated stelae, and the end of the elaborate polychrome pottery that had characterized Tepeu 2. The date A.D. 889 or 10.3.0.0.0 saw the last definitely dated monument in the south, although possibly some few stelae were set up as late as 10.4.0.0.0 (A.D. 909). After this, the major centers were largely abandoned. In some places the sustaining village and hamlet populations surrounding the centers disappeared at the same time; in others they seem to have continued in residence for a time, perhaps until about 10.6.0.0.0 (A.D. 948), when they, too, vanished.

The Classic Period is followed by the Postclassic, dated in round figures from A.D. 950 until the Spanish entry of 1520. As discussed by Bullard in this volume, Postclassic remains are but poorly represented in the Southern Lowlands, and the statement that the Maya failed to recover from the Classic collapse is amply justified. In parts of the Northern Lowlands, Maya culture continued to a vigorous Postclassic phase. This, however, leads us into the problems of the differences between the Southern and Northern Lowlands and of the correlation of their respective chronologies.

There is good agreement about the basic outlines of a Northern Lowlands sequence. After a Preclassic Period, there was an early development, represented in buried levels or early sections of a number of Yucatecan sites, that was clearly coeval with some part of the Southern Lowlands Classic. This was followed by a period of florescence during which the Puuc, Chenes, and Rio Bec sites and the architectural style that characterized them predominated. The style disappeared and many of the sites were abandoned at about the beginning of a period marked by a strong Mexican (Toltec) influence centered at the site of Chichen Itza. Finally, a post-Toltec era followed that lasted

until the Spanish Conquest. These broad periods are given different names by different writers. Andrews (1965a), whose nomenclature we will use here, calls them Formative, Early, Pure Florescent, Modified Florescent, and Decadent, while Thompson (1966c) refers to them as Formative, Classic (which combines Andrews's Early and Pure Florescent periods), Mexican, and Mexican Absorption.

The primary problem lies in correlating the Northern Lowlands sequence with that of the Southern Lowlands. The traditional opinion (Thompson 1954, 1966c) has been that the Early Period corresponds with the southern Early Classic, while the Pure Florescent equates to the southern Late Classic. This would make the period of widespread cultural disintegration in the north essentially concurrent with the southern collapse, and E. W. Andrews IV has challenged this (Andrews 1960, this volume), arguing that the Northern Lowland Florescent Period cultures are largely post-Tepeu. The argument is an important one with reference to the problem of the Maya collapse, for if Andrews is correct there were two collapses, first one in the south and then one in the north, the latter being occasioned by the arrival of the Toltecs in northern Yucatan and Chichen Itza. Malcolm Webb (personal communication) offers still a third alternative: that the Pure Florescent in the north was intermediate in time between the possibilities already discussed. That is, he feels that the Pure Florescent began during the southern Late Classic but persisted for a significant time afterward. Unfortunately, the question cannot yet be settled,² but it presents alternatives which must be taken into account in any attempt to extend to Yucatan formulations concerning the collapse in the Southern Lowlands.

This brief introduction has attempted to set before the general reader some of the environmental and archaeological background of Maya Lowland culture. In turning more specifically to the Maya collapse, the presentation of more detailed background material is necessary. Chapters 2 and 3 undertake this task. Richard E. W. Adams reviews the historical background of the collapse problem and discusses the various theories that have previously been advanced toward its solution. Jeremy A. Sabloff then considers the themes that crosscut these explanatory theories. Let us move on, then, to these materials and the main topic of this volume.

Introduction

NOTES

1. A number of my colleagues from the Santa Fe seminar have contributed substantially to the preparation of this paper. I would like to note here my gratitude to Gordon R. Willey, Demitri B. Shimkin, Richard E. W. Adams, William R. Bullard, John A. Graham, and Jeremy A. Sabloff for their helpful suggestions.

2. The untimely death of E. W. Andrews IV on July 2, 1971, is a tragic loss to Maya archaeology. At the time of his death, Andrews was engaged in a study of the Rio Bec ruins of southern Campeche, a project which should throw light upon the problem of the alignment of the southern and northern chronologies. The analytical phases of the project are being carried on under the aegis of Tulane University.