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CHANGING PERSPECTIVES ON MAYA CIVILIZATION

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INTRODUCTION

The Maya world stands on a threshold between past and future scholarship, and more importantly, between an indigenous people hailed widely as the most advanced in the New World and other cultural traditions not necessarily interested in the survival or prosperity of Maya civilization. In this age of information explosion, electronic wizardry, and the sound bite, it is becoming harder for the complexities of the ancient and diverse Maya cultural tradition to be fathomed by the scholars who attempt to describe and understand it, let alone by the millions of people who set forth on pilgrimages to its holy sites, or who see it represented with varying degrees of inaccuracy on their television screens each day. Although the popularization of Maya civilization has made household words of Tikal, Lord Pacal, and sting-ray spines, it also has made for a great deal of misinformation in the mass media, undue politicization and occasional distortions of scholarship, and the commercialization of Maya culture and its homeland to an at times frightening degree. This review attempts to strike a balance between the often polarized views of Maya civilization held by various researchers in the past and present, and to highlight the need for scholars to think more carefully about the implications of their research and writings for living Maya peoples and the remarkable land they inhabit.

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EARLIER VIEWS OF MAYA CIVILIZATION

No culture of the pre-Columbian Americas left a richer legacy of native history and world-view carved in stone than did the Maya, the name used by some natives of the Yucatán Peninsula to describe themselves to the sixteenth century Spanish explorers, conquistadores, and chroniclers (288:7). Occupying an area of roughly 325,000 sq km in southern Mexico and northern Central America that ranges from tropical lowlands to volcanic highlands, the Maya created a cultural tradition that is daunting in its diversity and intoxicating in its creativity. During the final centuries of the Formative or Preclassic period (2,000 B.C.–A.D. 250), throughout the Classic period (A.D. 250–900), and at the beginning of the Postclassic period (A.D. 900–1519), thousands of stone monuments and buildings were carved with hieroglyphic inscriptions, in addition to countless other texts and images painted or carved on more perishable media (e.g. cloth, wood, stucco, or bark-paper books).

Although the Classic period was the heyday of the Maya writing system and its creative scribes, the Maya of previous and subsequent periods were no less resourceful in their architectural achievements and their adornment of sacred objects with carved and painted decoration. Moreover, the passing on of oral history, religious lore, and prognostications both presaged and outlived the Classic period. The combination of pictorial imagery, hieroglyphic writing, and oral tradition allows for a truly remarkable understanding of Maya conceptions of themselves, the world, and their relationship to it. Indeed, recent efforts have shown that controlled historical analysis of imagery and writing from Classic Period stone monuments, Postclassic bark-paper books, and Colonial Spanish accounts can explain rituals and behaviors among the living Maya for which traditional ethnographic methods cannot account (34). Conversely, analogy with adaptations and lifeways of living Maya peoples provides the archaeologist with insights that no amount of digging or surveying could ever provide (14, 239, 266, 299, 311, 312).

In the early nineteenth century, a series of publications sparked interest in ancient Maya culture. Fray Diego de Landa's *Relación de las Cosas de Yucatán* (30), three Maya bark-paper books, and a series of superb photographs and drawings of inscriptions on stone monuments (198) spurred a great deal of interest in the decipherment of the Maya script (63, 275). What resulted was a flurry of readings of Maya calendric and astronomical hieroglyphs during the late nineteenth and early twentieth century, including the correlation of the Maya and Christian calendars (127). Scholars began to speculate about the nature of ancient Maya society, based on information available at that time: decipherable aspects of Maya writings, some preliminary surveys of the centers of a handful of archaeological sites, and some spotty knowledge of the peasant lifeways that characterized Maya villages at the turn of the century.

Eventually, the view became established that ancient Maya society was a theocracy, run by devoted calendar priests who resided in the temples at the heart of each "vacant ceremonial center," supported by maize-farming peasants, scattered in villages about the countryside, who came to the center only for important calendric and other religious rituals. Respected and important scholars like S. Morley and J.E.S. Thompson viewed the ancient Maya as so obsessed with marking the passage of time and the movements of the stars, that they never would have stooped so low as to go to war or record the doings of vainglorious kings. This myth of the Classic Maya became so pervasive that the civilization came to be thought of as unique in the annals of human history: flourishing in the jungle, with intelligentsia devoted to the arts and sciences (including fantastically accurate calculations of astronomical cycles and the passage of time), all the while removed from the plights of war, over-crowded cities, and despotic rulers, as the common people devoted themselves to the cult of their rain gods and peacefully tilled their fields (*milpa*) with corn, beans, and squash.

Revisionism and Realism in Recent Research

This misguided, albeit well-meaning, vision of the ancient Maya began to be dismantled in the middle of this century. When the Lacandón Maya of Chiapas took photographer G. Healy to see the painted murals, including an explicit battle scene, at the ruins of Bonampak in 1946, the view that the Classic Maya did not engage in warfare was shattered forever. Subsequent discoveries of defensive features associated with the major Classic period centers of Tikal (224), Becan (301, 302), Muralla de León (229), and in Yucatán (175, 303) provided independent evidence for Proskouriakoff's (218, 219) decipherments that rulers of Yaxchilán named the captives they had taken in war and even boasted of the number of captives secured.

One of the greatest contributions ever made to Maya studies was Proskouriakoff's discovery that the stone monuments were not devoid of historical information, as was previously thought. Quite the contrary, they recorded the important events in the lives of Maya rulers, such as their birth, inauguration, conquests, and death (216–220). Berlin's equally illuminating decipherments showed that each Classic Maya kingdom had its own name or emblem glyph, and that the royal houses were concerned with couching their achievements in mythological terms (25–27). It is now possible to decipher dynastic histories and royal genealogies from most of the major cities of the Classic Period.

Equally revolutionary developments in field archaeology produced data refuting many of the earlier ideas about ancient Maya culture. Inspired by Steward's (267a) and White's (308a) cultural ecological and evolutionary models, and by Willey's (313a) breakthrough in settlement pattern methodol-

ogy, several generations of archaeologists engaged in important field research that also provided illuminating information about the structure of ancient Maya societies and their change through time and space. Beginning in the 1950s in the Belize River Valley (318), and continuing at Altar de Sacrificios (315), Seibal (321, 287), and the Copán Valley (319, 320), Willey opened new vistas onto the size, structure, and growth of ancient Maya rural and urban communities, through the application of the settlement analysis that he had pioneered in the Viruac Valley of Peru (313a). In this type of research, the archaeologist documents the size and distribution of human settlements and other landscape modifications as a springboard for inferring land-use, societal complexity and organization, defensive features and measures, and in larger terms the relations of people to their regional physical and cultural environment.

Settlement densities around the major Maya centers were demonstrated to be quite high—they were hardly vacant—and showed considerable evidence for social differentiation beyond the simple two tiers (priests and peasantry) previously envisioned (53, 111, 112, 145, 174, 223, 277, 285, 319). Excavations of the urban sectors of these centers confirmed the existence of social ranking if not stratification (11, 55, 111, 137, 144, 173, 246, 248, 320). Studies of drained marshes and swamps, and of agricultural relics such as raised fields, terraces, and other related features showed that the ancient Maya had practiced agricultural intensification on a significant scale (109, 142, 191, 195, 222, 264, 289–291). Ecological studies also showed there was more variability within the different environmental zones than was previously thought (244), and that the Maya exploited a variety of tree crops and other cultigens besides maize, beans, and squash (36, 221, 322).

Long-term excavation programs throughout the Maya area showed that the simplistic picture of sociopolitical development adumbrated by earlier researchers (humble Preclassic origins, Classic apogee, and Postclassic decline) needed drastic revision. Archaeologists proved that the Preclassic period was much more significant than was previously thought, with some of the largest construction projects ever undertaken in Mesoamerica carried out at such huge centers as El Mirador (193–196) and Nakbe (141) during the latter part of the Middle Preclassic and throughout the Late Preclassic. A fascinating development has been the demonstration of ancient and diverse occupations (138) in different parts of the Maya world, a subject so controversial and important that it merits a review of its own. Regarding the origins of Maya civilization and statehood, abundant evidence of religious, artistic, and architectural sophistication at El Mirador and Nakbe is bolstered by similar if less grandiose examples of the same at lowland sites such as Tikal (64, 65), Cerros (118, 120), Becán (20), Lamanai (210, 211), Komchen (233), Edzná (194), Uaxactun (293, 294), and in areas outside the lowlands, as well (61, 84:153, 130, 132, 143, 261, 262).

Studies of the origins of Maya civilization have also debated the importance of Olmec culture, and Teotihuacan, in the genesis and development of complex culture and the state. The presence of scattered finds of caches, jades, and ceramics with strong similarities to those of Gulf Coast Olmec sites originally was perceived as indicating a central role for the latter as a donor to incipient complex societies in the Maya area. This view has been revised, as archaeologists have become aware that such finds, nearly always in elite contexts, signal status-reinforcing strategies by local elites to enhance their prestige by showing their understanding of pan-Mesoamerican religious ideology and their participation in long-distance exchange networks (84, 133, 258; cf. 106). Comparative studies from the entire Maya area have shown that there is no direct evidence for Teotihuacan populations, or for direct political and economic control, in any of the Maya sites where such phenomena had previously been posited (84). Instead, these phenomena are now viewed as the result of local emulations of foreign elites (84, 253). Archaeological evidence demonstrating that the Maya developed large, complex polities that fit most criteria for statehood (194) long before Teotihuacan rose to prominence has disproven the idea that Maya civilization represented a secondary state formed as a result of political control or influence exerted from Central Mexico.

Likewise, the Postclassic period, far from being viewed as a time of universal decline or decadence, has emerged as a vigorous time of cultural change in which robust highland and lowland Maya societies responded to the failure of the Classic Maya sociopolitical order in the southern Maya lowlands (8, 9, 56, 116, 242).

The variability in timing of the development of the major Maya centers (316) led to the realization that the rise and fall of a particular kingdom was related to the fortunes of its neighbors, with the ascension of one polity often corresponding to the decline of one of its rivals (55, 76, 82, 253, 256). Thus, the records of captures of rival rulers and conquests of sites are of more than passing historical interest; they can be engaged in the anthropological analysis of the rise and fall of Maya kingdoms.

Other advances in archaeological method and theory allowed for the elucidation of stone age economics, Maya style. Theories about the origins and transformation of Maya civilization based on trade and sea-faring merchants, and the control of raw materials and finished products, were elaborated and tested (7, 8, 10, 29, 124, 125, 135, 136, 149, 199, 225, 232, 255, 286), resulting in useful data on resource acquisition, specialized production, and trade networks. A consensus is emerging that the control of exotic goods and their exchange was an important tool of power among the aristocratic elites of ancient Maya society, but that the majority of trade took the form of local exchange of utilitarian products and food resources among the commoners (82, 140).

Enormous strides have been made in ethnography and ethnohistory during the past 30 years. In addition to a number of classic ethnographies (45, 68, 97, 134, 205, 226, 297, 300), studies of a more specialized nature have been undertaken with great success. Bricker (31, 34) and Hunt (161) demonstrated the benefits of a historical approach to the analysis of living Maya ritual and belief systems. Invaluable analyses of social and economic change during the past century have been made in a number of Maya communities (13, 35, 46, 47, 70, 71, 152, 227). There has been an increasing interest in documenting the non-Maya context in which the Maya live (47). As in archaeology, there also has been a change from a characterization of communities/cultures as relatively homogeneous whole, to a focus on internal differences. Vogt (298) and Freidel (122, 123) contributed structuralist approaches to the understanding of Maya ritual, while Tedlock (282) and Colby & Colby (69) provided excellent studies of living Maya time-reckoning and concepts. A number of outstanding ethnohistoric studies have been made of the remarkable tenacity and resilience of Maya culture during the Colonial and post-Colonial periods (59, 98, 150, 151, 164, 165, 265).

Gossen provided compelling analyses of oral tradition and its use in shaping culture (128, 129), with important implications for the understanding of Maya texts in general. Such textual studies have been offered as an independent exercise (114), as part of historical and other analyses of Maya oral tradition (31, 34), and as part of the complex task of translating native Maya texts, of which a number of important new efforts have appeared (73, 92, 94, 95, 284). The publication of several outstanding dictionaries (22, 93, 177, 178) and grammars (96) also represents a tremendous advancement of knowledge. Linguistic studies have flourished, with important implications for historical studies (38, 39, 41, 42, 44, 170, 171, 323), for the decipherment of the Maya writing system (32, 43, 166, 167, 169; NA Hopkins, unpublished data), and for the decipherment of an even older script, now believed to have been developed by the neighboring Mixe-Zoque (168).

A remarkable development is the beginning of Maya anthropology, carried out and written by the Maya themselves (208, 283:168). As a result of recent confrontations in Guatemala, it is estimated that 50,000–70,000 Guatemalans were killed (most of them Maya), 500,000 became internal refugees, 150,000 escaped to Mexico, and over 200,000 fled to other nation-states (50, 185, 283). Insurgent takeovers of rural communities triggered massive attacks by the state, and both outside observers and Maya leaders have accused the Guatemalan government of those bleak days of using its counterinsurgency campaign as a pretext for genocide. Tedlock speculated that this violent uprooting and dispersion could lead to "a cultural and political regrouping into an ethnic nation that transcends the boundaries of established nation-states" (283:168). The Maya have developed their own alphabets for recording their languages

(6); they are encouraging the use of the Maya calendar, dress, art forms and lifeways; and they are writing down their biographies, thoughts, and folk tales (200, 204; see 283:168–169). Thus, the living Maya are now active players in the anthropological study of past and present aspects of their own culture. Equally important, they are taking Maya civilization into the future.

As a result of the efforts of both Western scholars and the Maya, many old notions have been discredited, and many productive new ones developed and criticized. One often problematic by-product of the revision of the older models of Maya civilization has been the effort by some North American scholars to compete for the attentions of the popular press (283:156). Earlier Western academics had put the Maya on a cultural pedestal; some publicity seekers seem to delight in knocking them from it. Sensationalist accounts of gory blood sacrifices, sexual mutilation, and the fall of the Maya based on their "bloodlust" and "penchant for warfare" have been common in the mass media. This reviewer had to vehemently insist that these very words be struck from a popular book he was sent for pre-publication review last year.

Granted, if an educator is presented with the chance to share the insights of years of thoughtful, hard work with millions of people rather than a few hundred, one would in a sense be untrue to his/her calling not to do so. A serious problem arises, however, when scholars are reduced to playing the game according to the needs of the media and the tastes of Western consumers. Sadly, the quest for public recognition on the part of some researchers has resulted in further polarization of entrenched positions, and considerable irritation about those publications where traditional standards of hypothesis testing, proof, and scholarship are conspicuously absent. Worse, some of the sensationalist popular treatments can provide certain sectors of the Ladino elite—who have been the dominant political force in the Maya world since the Spanish conquest—with the perfect excuse for further repression of the living Maya. After all, if the information comes from such a prestigious source, and is known around the world, it must be true that the Maya have a "bloodlust" and "penchant for warfare." Let us hope that the popularization of Maya culture does not continue to flourish at the expense of the living Maya, adding to a shameful legacy of Western exploitation that we as scholars should be working to redress, not contribute to.

CURRENT VIEWS ON THE NATURE OF MAYA CIVILIZATION

Settlement Patterns, Household Archaeology, and Ethnoarchaeology

Maya anthropology was forever changed for the better by the advent of settlement pattern research. Willey's lead was followed quickly by major research

into settlement patterns throughout the Maya region. Over the years, studies have extended beyond Willey's original emphasis on rural settlement, to more holistic treatments of entire communities (e.g. 23, 55, 101, 243, 246, 248, 255), to even more inclusive regional settlement studies (85–88, 113, 180, 181, 296, 307), and to a single, amazing example of a macro-regional survey (126). Insights into many questions and problems have resulted. The critical use of ethnohistoric and ethnographic analogy (311) for the interpretation of these archaeological remains, and the recognition of the importance of analyzing variation in settlement patterns through time and space, have greatly strengthened the field.

Among the more important findings was the discovery that not all Maya settlements are archaeologically visible. Some did not endure the ravages of the tropics well after their abandonment, thus, leaving no surface traces in the jungle. Initial work on defining invisible structures (37) and the invisible universe (a term that elicited many jokes) was viewed with great skepticism, but further archaeological research confirmed that some remains of human settlements of varying densities are not visible on the modern landscape (16, 57, 101, 163, 309). Jones has shown that major Colonial period lowland Maya settlements—which are recent, in relative terms—are archaeologically invisible in the jungle (165). The important implication of Jones' findings for the so-called collapse at the end of the Classic period is that very large, relatively well-organized populations could have continued to thrive in the forest, and yet are not readily visible with present archaeological technology.

The most significant force in strengthening the study of settlement patterns and human adaptation has been the field of household archaeology, brought to the forefront in Mesoamerica by Flannery (108) and gaining increasing momentum in the Maya area (312, 313). This approach represents the opposite end of the spectrum from regional studies, and for a variety of reasons has become a growing concern throughout the Maya area. As Wilk has pointed out, "The household unit has become recognized as the most important and informative level of analysis for understanding how individual and group action does lead to structural transformation on a larger scale" (310:91). An exciting corollary development is ethnoarchaeology (147, 148, 266, 310, 312), with its unique potential for developing middle-range theory that can be applied to archaeological sites. Household archaeology may help resolve how to date residential sites, a key question in the ongoing debate about how to calculate pre-Columbian population size in the Maya area (78).

Demography and Agricultural Intensification

Population pressure is regarded by many anthropologists as a prime mover in the development of larger, more complex societies. The evidence for the growth of individual sites and human populations throughout the Maya area

during the Preclassic period (1) was taken to mean that population growth, together with circumscription (whether ecological or social; 52, 302), was the driving force behind the nucleation of large numbers of peoples into urban organizational centers (316). The increasing evidence for agricultural intensification techniques was thought to represent either a response to increasing population, or even the impetus behind the development of large urban centers. This population curve was thought to have peaked at the end of the Classic period, with the resultant over-crowding creating huge problems for the lowland Maya, including the proliferation of communicable diseases (251, 263, 268), depletion of natural resources (particularly soil loss through erosion and insufficient fallow cycles), and other systemic stresses, resulting in the catastrophic demographic and ecological disaster referred to as the Classic Maya collapse (74, 75).

No one questions that human populations and social pressures did grow to unmanageable sizes by the end of the Classic period, but many researchers have reservations about just how overcrowded things really were, and whether the agricultural works by themselves could have supported some of the numbers that are being bandied about. In Santley's words, "it is difficult to have any confidence in theories of state development employing population pressure as a causal agent, because there is no theoretical calculus specifying the conditions that select for complexity given agricultural intensification, the dynamic linkages between variables assigned explanatory import, and the form emergent complex systems take" (250:339). The whole question of the Classic collapse is also being rethought (81, 236, 242, 257, 271, 306, 307), with most researchers seeing the process as much more protracted, complex, and full of regional variation than was previously believed. In the case of Lamanai, there apparently was no collapse (212).

The field of subsistence studies has seen enormous advances, both in theoretical formulations and in the quality and quantity of fieldwork (109, 142, 213, 214, 267, 291). Investigations have produced evidence for draining of swamps and raised fields (191, 214, 222, 264, 289, 291), hillside terracing (290), and other agricultural intensification strategies. Clearly, Maya kingdoms were directing the construction and maintenance of agricultural works, including hydraulic engineering projects, in some parts of the lowlands. Such direct control was often attributed to large polities in the heartland or core area of the Petén, based on initial reports of extensive raised fields and other agricultural works seen via satellite imagery (2, 3, 79). However, more recent on-the-ground checks have shown that most of these latter features were not cultural in origin (80, 215, 237), and the setting in which they were found was inappropriate for extensive raised field agriculture. Although there was a degree of capital investment in some areas that indicates short-fallow (rather than swidden) systems, most specialists now consider such artificial econiches as

complementary to, rather than a substitution for, milpa farming. Most scholars agree that, in general, agricultural management was weakly developed among the indigenous city-states of the Maya. Comparative data corroborate the thesis that agricultural works began as local, small-scale operations that were only later, if at all, incorporated into larger, state-managed systems (4, 40, 54, 82).

The picture that is emerging is one of a series of localized adaptations and agricultural strategies, varying in scope and complexity based on the ecological setting and the degree of population pressure. This set of systems probably included an infield-outfield type (207), using garden plots near the houselot, including root crops as well as other cultigens, and arboriculture, in tandem with more distant plots dedicated to swidden agriculture, all (theoretically) in harmony with the potential of the local ecosystems into which they were implanted. Above all, an appreciation of the diversity of the rainforest, and of a conscious attempt by the Maya to mimic that bio-diversity under optimal conditions, is setting in (206, 237, 238, 322). This finding is of enormous importance for attempts to determine what is wrong with modern-day Mesoamerican agriculture and agronomy (230; NP Dunning, E Secaira, AA Demarest, & unpublished data), and how to correct those problems.

Sociopolitical Evolution

Archaeological excavations have shown that socioeconomic elites and elite interaction began before the start of the Classic period and continued into the Postclassic (139). Sabloff (240) proposed a radical departure from previous periodization schemes by defining the entire span from 300 B.C. to A.D. 1250 as a single, Middle Phase of pre-Columbian Maya civilization. Although significant variations in localized material culture and sociopolitical evolution are well appreciated, a strong degree of unity and interdependence by the elites who rose to power in each of the lowland Maya polities continues to be a fundamental tenet of studies of Maya culture change (139). As archaeologists have become broader in their anthropological perspectives, they have begun to see that the interaction (including intense competition) between elites and the centers they built up is a key to ancient Maya politics and is a fruitful basis for model-building and comparison with other societies at similar levels of sociopolitical complexity (81, 92, 120, 140, 228, 241).

Analogies are being made with patron-client systems in sub-Saharan Africa (89, 245, 247); theater states or "galactic polities" of Southeast Asia (60, 81, 82, 140, 263); and poleis (city-states) and nomes (departments) of ancient Greece and Egypt (140), third millenium Mesopotamia (325), and Zhou China (72, 140). The theater states of Southeast Asia seem particularly relevant, since Tambiah (279:86) posits that the resources to underwrite independent action on the part of a ruler came not from the pyramid of politico-economic relations

within the polity, but from control of the supply of nonsubsistence goods from outside the system. Farriss reached such a conclusion in her compelling analysis of the Colonial Maya (98:178). The integration of communities into states depends on elite relations of trade as well as alliance and warfare, all made without reference to the mass of the population. These alliances, and the limits of the area that they could effectively control, created a highly fluid political landscape.

Thus, polities of numerous sizes and degrees of complexity, from large and powerful states such as Tikal and Calakmul, through smaller yet still powerful urban entities, down to minor centers and towns, existed side by side in complementary and often conflicting ways, from the Late Preclassic onward. Marcus has developed this view the most thoroughly (189, 190). Her dynamic model was inspired by analysis of ethnohistoric, archaeological, and epigraphic materials. Marcus follows Roys' (235) division of Maya sociopolitical entities into three types and encourages us to look at the kinds of interaction and degrees of inclusivity of the parties involved, through both time and space. Her insistence on the importance of secondary centers in Maya political evolution is a major contribution that will be pursued with vigor in ongoing and future studies.

Substantial progress has been achieved in discerning the degree of ranking or stratification in ancient Maya polities. The Chases have argued that there is evidence for a middle class in Caracol, (personal communication). Settlement pattern studies have shown rank-ordering in the size of site centers (292), of secondary and tertiary centers, and of the populations making up the urban wards of a single center (246, 248, 319, 320). In the hieroglyphic inscriptions, names of people and/or the offices they occupied or professions they held are being deciphered with increasing rapidity and specificity (157, 252, 253, 269, 270, 304), giving us clear indications of the level of complexity of the upper tier. Recent work at a Classic Maya council house (100) shows that it is possible to identify the buildings where ruling councils were held, and the names and locations of the lineage compounds or wards that were represented in those deliberations (12, 99). Farriss (98) has shown that in colonial Yucatán there were two tiers of elites and the offices they occupied, and that Colonial Maya society was an effective oligarchy.

As Marcus (189, 190) noted, a vital area for future research is to see if archaeological investigations can determine the shifting allegiances of the secondary elites and supporting populations that were pulled this way and that as the fortunes of individual kingdoms and their rulers rose and fell. Developing middle-range theory and methodologies to do so will be an exciting challenge for archaeologists and will give them much to discuss with their ethnologist colleagues. Such a conjoined approach has already been applied successfully to the analysis of the evolution of the Quiché capital (48, 49, 51,

115–117), with significant contributions to our understanding of the mechanics of segmentary lineage fission (cf. 89) and the on-the-ground architectural manifestations of successful unification strategies. Likewise, research at Ek Balam is also following an ethnohistorically enlightened approach to settlement dynamics, council houses, social structure, and political evolution (233).

Both the theater states and dynamic models of ancient Maya society enable researchers to focus on specific aspects of the archaeological and historical records that will illuminate the direction, duration, and results of elite interaction, and its impact, if any, on the supporting populations, through time and space. In the Petexbatún region of Guatemala, a multidisciplinary project is tackling the problem of the origins, development, and decline of a series of interrelated kingdoms during the closing centuries of the Classic period (82, 85–88, 296). Ecological investigations of carrying capacity and land use (179, 237) serve as the baseline for evaluating the density and distribution of settlement on a regional level (172), and at the larger centers (162, 209, 324). The political trajectories of the centers are measured by architectural energetics and complexity (209) and relevant historical records (157, 158), and their economic policies and trading patterns are traced through neutron activation studies of ceramics (110) and trace element analysis of other nonperishable trade goods. All of this work is being carried out within a comparative model of sociopolitical evolution that seeks to explain the Maya collapse through a critical manipulation of the role of warfare in the late eighth century A.D.

Causes and Consequences of Warfare in Ancient Maya Society

Opinions vary widely as to the origins and consequences of warfare in ancient times among the Maya, a nonissue for the old model of the Maya but literally a burning issue for modern investigators and the living Maya themselves. Webster's original path-breaking work led to the development of a robust materialist model (301, 302) that saw population pressure and elite competition driving the ancient Maya to warfare and to the evolution of still more complex forms of societal organization. Demarest (81) hypothesized two patterns of Maya warfare: 1. an open or unlimited type that is highly destructive and in which the participants do not hold to conventions and rules, and 2. a situational ethics type of warfare in which the participants agree on the conventions of ritual bellicose encounters designed primarily with political purposes in mind. This second, conventionalized type of warfare provided the opportunity for captive-taking by the ruler, who would then haul off the captive(s) to his own center for subsequent exploitation (in the case of sculptors or craftsmen), or humiliation and sacrifice (in the case of high-status captives, such as nobles or rival rulers). Similarly, Freidel (121:107) views Maya warfare as "a prerogative of the elite and fought primarily by the elite, (and) the bulk of the population was neither affected by, nor participated in, violent conflict."

Mathews (197) sees Classic Maya warfare as the raiding of marginal territory. But there are a few very well-publicized exceptions such as the purported defeat of Tikal, twice, by Caracol (55, 58, 154; for other examples see 24, 102, 104, 146, 157, 186, 256, 269). The variation in cause and effect seen in these cases means that we cannot presently say which one of the most recently proposed models of Maya warfare is most generally applicable. Demarest (83:101) posits that Rulers 2 and 3 of Dos Pilas changed the rules of Classic Maya warfare (from ritualized wars to conquest warfare) in A.D. 771 in the Petexbatuacn. Yet Schele & Freidel (253:145–149) make the same claim for Tikal, which they believe conquered and absorbed Uaxactun in A.D. 326 (cf 196), emulating costumes and concepts of Tlaloc-Venus conquest war from Teotihuacan. (For an alternative view on the Tikal-Uaxactun encounter, see 156, 220:7–9, 270). Obviously, much remains to be done before this important issue is resolved, and the problem will surely be much more complex than we realize currently. Webster's recent review (305) underscores the need to investigate and discriminate between ten separate issues in our attempts at understanding and building models about Maya warfare, and emphasizes the need to examine multiple lines of evidence in doing so.

Literacy and Its Critics

The hieroglyphic decipherments and iconographic analyses that have rocked Maya studies for the past 30 years have revolutionized our understanding of elite history, political structure, royal symbolism, emic terminology (e.g. 160, 273), ritual behaviors, and worldview. The historical and phonetic approaches to decipherment have combined to make it possible for epigraphers to understand in broad outline—and occasionally, in glyph-by-glyph decipherment—virtually every Classic Maya text that has been discovered (63). Many archaeologists have aided and abetted the cause by discovering significant new texts, and carefully documenting their archaeological contexts (12, 15, 55, 100, 105, 158, 211, 132, 261, 274, 276). Special recognition should go to Graham (131), whose Corpus of Maya Hieroglyphic Writing Project is of fundamental importance to all epigraphers, and whose courageous efforts to that end often go unheralded.

Sadly, the epigraphic revolution also has strengthened the divide between the ideationists and the materialists, despite Flannery's (107) pleas that the two camps see their perspectives and data as complementary rather than in conflict. Many important critiques have been made by archaeologists of both the processualist and post-processualist persuasions. The processualists rightly point out that the hieroglyphs can only tell the history of a tiny segment of the population in Classic Maya times. Further, they contend (as do many other social scientists) that social change came from below, not from above, and that

the emphasis on elite culture history is severely biased at best. It is also important to remember Hammond's observation that "we must not ignore the sobering reality that they [the epigraphers] have brought the Maya from the margins of prehistory into merely liminal history. A dozen royal marriages, a score of battles or royal visits, and the genealogies of a handful of dynasties do not give us a broad historical foundation on which to build, in the absence of economic information or any documentation of Maya society below the uppermost elite" (140:256). The post-processualists, meanwhile, believe that these texts are not objective sources of information, and that what is presently being published is as much an attempt at reinforcing the social position of the writer as it is a detached evaluation of events that purportedly took place in the past.

The lack of extant economic records is used by many scholars to minimize the achievements not only of the Maya scribes and their writing system, but of the civilization itself (249). However, Stuart recently (271) deciphered a glyph for *tribute* and showed that Late Classic inscriptions at Naranjo cite not only this glyph, but the goods given in tribute to that kingdom after its successful conquest of a neighboring polity. This decipherment means that booty was, in some cases, obtained from war (which Stuart notes is recorded as involving the burning of structures; 271, manuscript submitted for publication; cf. 12, 203), and that such accounts of tribute were sometimes important enough to be recorded on stone monuments. The latter datum is in striking contrast to the situation in Mesopotamia, for example, where economic transactions were always recorded on portable clay tablets and never displayed publicly. We should now reconsider why no economic codices have survived. Only four ancient Maya books remain of the hundreds that still existed in Postclassic times (versus the thousands that probably existed earlier). These four were devoted to religious and astronomical data, and are considered in more than one case to have been copies of earlier, Classic Period originals. Why would later Maya scribes and rulers want to recopy codices containing royal genealogies, or tribute records, of kingdoms that had long since perished? Such records may well have gone up in smoke with the fires that consumed the very cities they chronicled. Alas, unlike at Ebla, the Maya royal archives were made of paper, not clay.

Another major critique leveled at Maya inscriptions is that they were used as political propaganda and, therefore, are unreliable. Indeed, some scholars have taken an extreme postmodern/deconstructionist view that these texts are not only untrustworthy, but intrinsically deceptive, and unlikely to yield data that might be archaeologically demonstrable. Marcus has a more enlightened approach (188), noting that the Maya did not distinguish between history, myth, and propaganda. Indeed, Bricker (31) showed that there is no dividing line between history and myth in the oral traditions and rituals of the living Maya. However, Marcus does not go to the extreme of claiming "that Meso-

american inscriptions are 'all lies' or 'pure propaganda,'" nor does she "embrace the deconstructionist view that history does not exist" (188:8). Instead, Marcus rightly cautions Mayanists not to take the claims of the Classic Maya kings and other Mesoamerican rulers at face value, given their intertwining of propaganda, myth, and history, particularly with respect to the lengths of their reigns and the conquests they claim to have made.

All good social scientists know that one needs more than one source for any text to be considered valid, in a historiographic sense. Many of the most important events in the lifetimes of rulers and in the history of their kingdoms were doubtless ephemeral affairs, difficult if not impossible to determine in the archaeological record alone. But others were of a nature and a magnitude that they can either be corroborated, or fail to be corroborated, by archaeological evidence and/or by other written records from independent sources. When texts at both Copán and Quiriguá refer to the death of the thirteenth Copán king in A.D. 738 (at the hands of his Quiriguá rival), we can take that as evidence that the historical veracity of this event and its perceived importance to the dynasties of both centers are corroborated. When the archaeological record shows that this event did not result in the absorption of the Copán kingdom into that of Quiriguá, we can adjudge the socioeconomic consequences of Copán's loss to have been less than devastating. The Petexbatuacn region has provided quite compelling, independent archaeological data verifying the presence and importance of fortification features and weaponry, in association with sites whose hieroglyphic records insist on the frequency and importance of bellicose encounters. Epigraphic data regarding rulers' ages and actions can be used to archaeologically cross-check the dates of construction of buildings, the placement and reentry of tombs, and the ages of their occupants (e.g. 5).

Such a "cross-cutting, self-corrective strategy," as Sharer calls it, for the evaluation of the evolution, degree, and forms of sociopolitical complexity—whether or not one cares to call it a conjunctive approach—has been applied productively throughout the Maya lowlands (12, 15, 55, 77, 83, 99, 100, 103, 105, 155, 176, 182, 210, 212, 253, 256, 259, 260, 269, 295). Obviously, when independent archaeological lines of evidence fail to corroborate a particular text or set of texts, we are faced with a challenge both to the official history of their commissioner and to our own interpretive abilities and limitations. To cavalierly dismiss the records as completely untrustworthy, or worse, unworthy of attention or unusable in the interpretation of the archaeological record, is to bury one's head in the sand. Rather, the richness and complementarity of the data sets available to the Maya archaeologist (187) is an inviting challenge that we most certainly can and should live up to.

Ideology as a Causal Force in Maya Civilization

At the same time that Proskouriakoff and Berlin were opening the road to historiography for the ancient Maya, Willey (314) was trying to convince New World archaeologists to address ideology in their attempts at explaining the past. Given the rising tide of evolutionism in American archaeology, processualists preferred to follow Willey's lead on the utility of settlement pattern work and Steward's call for ecological research; some even dismissed historical studies outright (28). The lead in studying ideology and its political uses was instead taken up by epigraphers, linguists, art historians, ethnologists, and a handful of archaeologists who risked the wrath of their more doctrinaire processualist colleagues by daring to suggest that ideas had a primary role in the evolution of Maya civilization. Today, this is one of the most dynamic and productive areas of research in the field.

One of the more interesting pendulum swings in the study of the ancient Maya is that the original model of the star-gazing calendar-priests is making a strong comeback, although it is still challenged and belittled by materialists to this day. But there is now a broader anthropological perspective on the role and significance of ideology (62, 82, 119, 122), a better grasp of the underlying cosmology (21, 67, 123, 201, 202, 253, 254, 280, 281), phonetic and other irrefutable translations of critical glyphs and concepts (32, 33, 123, 183), meticulous documentation of living Maya concepts of time and astrology (69, 282), and active participation by professional astronomers in the study of calendric and astronomical phenomena recorded in Maya codices, inscriptions, and buildings (17–19, 123, 183, 184).

A finding of tremendous anthropological significance is the discovery that the Classic Maya had a glyph for, and an all-pervasive concept of, spiritual co-essences (159; see also 63:256). Houston & Stuart (159) note that the concept of animal spirit companions had been documented for the Mexica at the time of the Spanish conquest and among modern-day cultures of Mesoamerica, but that among the Maya, a co-essence could assume virtually any form and was an integral part of the person in whose honor the text was written. This key decipherment shows an underlying role for shamanism in Maya culture, and Classic Maya kingship, which is now being explored in depth (122, 123).

Another significant contribution to anthropology is Demarest's model for ideology and statecraft, based on analogy with the galactic polities or theater states of Southeast Asia. Demarest sees religious ideology as the main focus of power for the Maya kings of the Classic period. Given Sabloff's (240) view that the apogee of Maya civilization lasted from 300 B.C. to A.D. 1250, Demarest's model could apply to earlier and later periods as well. The Petexbatuacn Project has provided archaeological data in support of the thesis that

control over land, labor, and produce was weakly developed among the lowland Maya kingdoms, and that the ruler's chief source of power was his control over nonsubsistence elite goods and, especially, ritual, public displays of his charismatic leadership and religious authority. These data support Farriss' findings (98) for the Colonial Maya, as well as studies of trade in the Maya area. Besides being firmly grounded in comparative anthropology, this elegant model accounts for the interrelated rises and falls of rival kingdoms. It also shows the value of documenting and analyzing historical records (which clarify who was in alliance against whom, when), and why the study of religious and political ideology is vitally important for model-building and analysis of the cultural evolution of civilization in the Maya world.

Many archaeologists worry that with the growing emphasis on segmentary lineages and theater states, the pendulum is swinging too far back in the direction of the old model of Maya civilization: theocratic elites with no economic or coercive powers drawing corn-farming peasants to their centers for ceremonies that highlighted astrological knowledge and the dispatching of captives taken in occasional raids. Indeed, even the term ceremonial center is making a comeback. But a shift to a theater states or dynamic model does not imply that we are merely reverting to the schema used decades ago. The truly amazing advances seen during the last three decades in the realms reviewed here are not going to be dispensed with. The greatest strength of current studies of Maya civilization rests precisely in the fact that all of these realms and many more are under intense scrutiny and subject to lively debate by dedicated scholars, and that the lifeways and concerns of all segments of the ancient, colonial, and modern Maya people are being illuminated as a result.

PROSPECTS FOR THE FUTURE

Obviously, Maya studies are stronger than ever, with a greater time depth and anthropological breadth than even an optimist like Willey (317) could have hoped for, only a decade and a half ago. The prospects for multidisciplinary studies of Maya civilization are better than ever, given our increasing theoretical, methodological, and technological sophistication, and our burgeoning data base. In Willey's words, "there is a progression in this coordination of data that is almost geometric" (personal communication). Particularly encouraging is the manner in which the ethnohistoric, ethnographic, and ethnoarchaeological materials are enlightening our vistas of modern, colonial, and ancient Maya cultural ecology, economic structures, household organization, settlement and land-use patterns, power relations, religion, myth, and ritual. Indeed, the need is ever greater for archaeologists and ethnologists to engage in active exchange, so that both can proceed on a stronger footing.

I think the greatest need for change in the anthropological study of Maya civilization is in the ethical, rather than the theoretical realm. At this point, Maya studies should be pursued from an enlightened anthropological perspective, dedicated above all to the conservation of the human, cultural, and biotic resources of the Maya world. Rather than just talking to each other, Maya archaeologists should emulate the participant observer example provided by our ethnographer colleagues. All of us should be talking with, and listening to, the people in the Maya world: fellow researchers, educators, students, conservation specialists, leaders, and just plain folk (278, 310:92). Researchers interested in making a contribution to fieldwork in the Maya area should cease to think of what they do as merely an intellectual exercise and start to regard it as a way of contributing to the preservation of a priceless cultural and biological legacy. Archaeologists interested in stopping the wanton destruction caused by the looting of archaeological sites should view this not simply as a way of saving the archaeological remains for scientific purposes, but more importantly as a way of securing the cultural heritage of the Maya people for the future.

With the signing of the Declaration of Copán in May 1993, the governments of the five countries with Maya archaeological sites have committed themselves to ecological conservation and cultural resource management in their plans for the economic development of the Mundo Maya. This is a significant, positive step in the right direction, but scholars need to be sure that the terms of this historic accord are respected in all five nations, and they must engage themselves, and the governments of those countries, in an active dialogue with the Maya people who will take their civilization into the future.

After the Crusades, Western civilization flowered during the Rennaissance, aided by archaeological, historical, and religious studies. Could it be that with the end of the Colonial, Independent, and Cold War periods—together forming the Dark Ages of the Maya world—Maya civilization will now undergo a similar rebirth, aided by the same kinds of studies? Or do recent events in the highlands of Chiapas presage continuing cycles of ethnic conflict, with significant roles played by foreign peoples and ideologies, as so often chronicled/prophesied in Maya history, myth, and ritual? The ancient Maya prophesied that at the time of the completion of the 13th *baktun* or "Great Cycle" of their Long Count calendar (falling in our year A.D. 2012), this world would come to an end, and another would presumably take its place. Perhaps by then we will have an answer to these questions.

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