

Bellicose Rulers and Climatological Peril?

Retrofitting Twenty-First-Century Woes on Eighth-Century Maya Society

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In 2007, movie producer/director Mel Gibson “treated” audiences to a spectacularly inaccurate portrayal of ancient Maya civilization. Called *Apocalypse*, the movie depicted Maya rulers and priests as blood-thirsty savages and Maya farmers as hunters and gatherers; a Spanish galleon drifting somewhere off the coast of the Yucatán Peninsula seemed the only salvation available to the Comanche and Yaqui actor Rudy Youngblood and his brave young wife and two children.¹ Why does it matter that ancestral Maya society was depicted in such an unflattering fashion? Who cares that the killing fields through which Youngblood stumbled are hauntingly similar to the places where Maya men, women, and children were exhumed from mass graves created during the Guatemalan Maya genocide of the 1980s?² Gibson makes movies that are entertaining and action packed; he does not claim that his movies are historically accurate, only that they portray the universality of human emotions – in this case fear of apocalypse or the total destruction of society. While he is correct that humans are fascinated by the cyclic nature of what historians and archaeologists call *civilization* – the extreme centralization of power and people into cities, the construction of colossal monumental architecture, and the invention and spread of a written script – inevitably cities contract, power is loosened, monumental architecture falls into disrepair, and written languages die. Does this mean that the leaders behind these impressive achievements failed, or did they just change in response to a changing world? This is not an easy question for historians and

archaeologists. Many different opinions exist regarding the meaning and significance of societal change.

The dramatic and visible changes that occurred in ancestral Maya society during the eighth and ninth centuries invite social theorists (and lately Hollywood movie producers) to speculate about the causes of profound societal transformation. Political and environmental concerns that exist in our world today, and leaders who are unresponsive to pressing social and economic issues as well as impending climatic change, often assume a prominent place in our interpretations of the past. But how can we know if such speculation hits close to or falls short of the mark? Archaeologists try to know the past by examining various different lines of evidence. If ideas about why or how a society changed are correct, then we should be able to collect pertinent evidence from more than one source. For instance, if a society collapsed because of a drought, then we should find not only abandoned settlements but also evidence of both malnourishment in human remains and land desertification, which might be detected in deep core samples of lakes. If multiple lines of evidence don't point in the same direction, then it is likely that the conclusion is not correct.

For instance, according to Jared Diamond's popular book *Collapse: How Societies Choose to Fail or Succeed*,³ the root causes behind the alleged eighth-to-ninth-century Maya “collapse” can be found with rulers – divine kings – who subjected their constituents to ceaseless cycles of warfare while ignoring signs of societal distress and climatological trends that compromised the livelihood of food producers. Does this explanation, which seems to be an apt description of U.S. society during the first decade of the twenty-first century, indicate an uncanny similarity between the past and present, or an attempt to retrofit the past on to the present? As archaeologists who have studied the remains of ancestral Maya society collectively for over four decades, we hope that knowledge of past societies will resonate in the present and inform the future, but the intersection of our knowledge of the past with our current societal problems is a critical and delicate juncture that requires careful navigation. Popular as well as academic accounts provided by Gibson, Diamond, and others can sensationalize and *decontextualize* the past. Based on a narrow range of sources, they develop simplistic historical narratives that – while



FIGURE 6.1 Maya region showing archaeological sites mentioned in text and prominent descendant populations (name of Mayan language groups indicated in capital letters). (Illustration by Josh Feola)

quite easily digested – overlook the extraordinary resilience of past societies. By glossing over significant evidence that contradicts the scenario of eighth-century Maya doom and by imputing personality traits such as passivity to Maya rulers, popular writers tell a story that

is problematic scientifically and a dangerous narrative that labels the ancestors of contemporary Maya people as those who chose to craft a failed state. We challenge the accuracy of this reading of the political and demographic transformations that swept across the Maya region in the 125 years between 800 and 925 C.E. We present here an alternative perspective on Classic Maya social change by critically reviewing the lines of evidence upon which many collapse scenarios are based:

- 1) Escalating warfare
- 2) Out-of-control population growth
- 3) Environmental degradation
- 4) Drought
- 5) Effectiveness of divine rulership and
- 6) Changes in spheres of trade and influence.

Often considered the archetypal example of societal collapse and environmental catastrophe, ancestral Maya society provides a mirror for our contemporary gaze into the past. In light of this high profile, we believe that it is critically important to examine the data carefully. In every respect the ancestors of seven million contemporary Mayan-speaking people of southern México and Central America were a phenomenal American success story, and their deep history deserves to be examined with great concern for consistency and the goodness-of-fit between our ideas about the past and trends displayed by the evidence that we systematically collect from the field.

ESCALATING WARFARE?

Since the 1980s Maya epigraphers have made great strides in deciphering the hieroglyphic script of ancestral Maya society.⁴ One of the most prolific literate peoples of pre-Columbian America, Maya scribes of the first millennium C.E. carved and painted hundreds, if not thousands, of texts in stone, plaster, and fan-fold codices, and on pottery and wall murals. Most were dedicatory in intent.⁵ Maya script is called logo-syllabic rather than alphabetic because some glyphs stood for whole words while others represented consonant-vowel syllables, such as *la*, *ba*, or *ka*. The syllabic elements were compounded and drawn calligraphically to form beautiful hieroglyphic strings that were read left-to-right, often as two-column text. The names of some of the

Maya rulers introduced in this discussion are phonetic translations of sequences of Maya glyphs. The earliest known Maya hieroglyphs were painted and inscribed during the Preclassic period, around 300 B.C.E., and Maya literacy continued through the sixteenth-century Spanish incursions, at which point conquistadors and missionaries report on the confiscation and burning of countless Maya fan-fold codex-style books. Currently only four codices are known to exist. The bulk of known hieroglyphic texts – carved in stone and painted on pottery – date to a 250-year period from 600 to 850 C.E., otherwise known to archaeologists as the Late Classic period.

Late Classic Maya hieroglyphic texts contain many references to martial events and captive taking, such as the extraordinary account of a ruler of Quirigua (an ancestral Maya capital located on the Motagua River in Guatemala) called K'ahk' Tiliw Chan Yoaat (Sky Smoking Tapir), who in 738 C.E. captured and beheaded the ruler of nearby Copán (in Honduras), who bore the regal name of Waxaklajuun Ub'aah K'awiil (He of the Eighteen God Images).⁶ This account is unusual for two reasons: (1) Quirigua had been a vassal polity of Copán but clearly was forcibly making a bid for autonomy and (2) as the illustrated glyphic inscription indicates, the captured ruler was executed. Increasingly, it appears that rulers captured during martial conflict were held for tribute ransom, and some eventually were returned to their home kingdom.⁷ Such strategies of martial conflict are analogous to later medieval European warfare and rarely were conclusive militarily, although they could be devastating economically for the polity from whom a ruler had been captured. Unlike modern warfare in which political leaders as well as military generals rarely participate in actual combat, Maya rulers participated in martial combat, took captives, and were taken captive in what was essentially hand-to-hand combat. Later, Spanish accounts of military conflicts with indigenous peoples of the Maya and Aztec worlds describe the intimate nature of conflict and the emphasis on captive taking, rather than killing, among non-Spanish warriors. One can imagine that Maya rulers did not initiate martial conflict against another kingdom unless victory seemed probable since there was great personal investment in the conflict on the part of the ruler. Of course, at any point in time a ruler could be forced into a defensive military engagement by a martial attack.

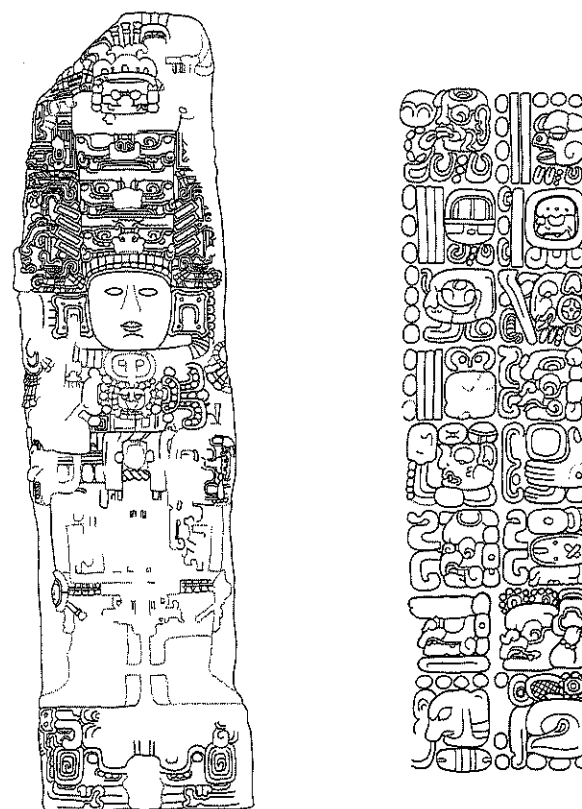


FIGURE 6.2 Stela J, showing K'ahk' Tiliw Chan Yoaat (Sky Smoking Tapir), ruler of a political capital now called Quirigua (located in Guatemala). As described in the two-column hieroglyphic text of Stela J (on right), in 738 C.E. the Quirigua ruler captured and beheaded the ruler of the nearby kingdom of Copán. (AfterLooper 2000: 103–104; courtesy of Matthew G. Looper)

Did this type of conflict spiral out of control and bring down the congeries of participating Maya kingdoms? Many point to a purported increase in martial accounts within Late Classic hieroglyphic texts as evidence to support an ignoble end to bellicose Maya rulers and their constituents. But, in all honesty, the Late Classic corpus is simply more extensive and more completely deciphered than Early Classic texts or the more recent Postclassic script. True, there are more accounts of warfare in Late Classic texts, but they exist alongside more accounts of every category of royal activity. For instance,



FIGURE 6.3 Stela 24 from Naranjo, Guatemala, showing Lady Wak Chanil Ajaw (Lady Six Sky). (Adapted by Josh Feola)

many more statements of royal marriages are found in Late Classic texts, including an account of the daughter of a ruler of a dynastic center called Dos Pilas who in 682 C.E. married into the enervated royal line of a site called Naranjo. Her name is not fully deciphered; she is known as Lady Wak Chanil Ajaw (Lady Six Sky). We hear no one suggesting that an increase in arranged marriages brought down Maya society. But, in fact, warfare and marriage are two related strategies for territorial expansion and strategic alliance.

Certainly, we need a long-term index of the frequency and impact of Late Classic warfare in relation to what came before and after before we can invoke it as cause for the end of the Classic period. Unlike the warrior aristocracy that emerged in Bronze Age northern

Europe – attested in the weaponry buried with warriors – very few Late Classic Maya rulers were buried with weapons, even though we know that they did participate in battles. Instead, they might be shown holding a spear as on Stela 2 from Aguateca, Guatemala, or described hieroglyphically as “he of the many captives,” as on Piedras Negras Stela 12; but these depictions are political statements. In 2003 George W. Bush posed for photographs wearing a military flight suit on the deck of an aircraft carrier after U.S. and allied troops captured Baghdad. The tragically apocryphal text banner that accompanied President Bush dressed as a warrior proclaimed “Mission Accomplished.” But we would never suggest that George Bush was an air force fighter pilot; rather, he was a political leader who represented the triumph of U.S. military might over a despotic ruler. The message of symbolic representation is not always transparent.

If warfare during Late Classic Maya times was as frequent as it was during Medieval European times, then one might expect to find the ruins of fortifications and moat-and-ditch systems and the remains of houses clustered inside such defensive fortifications. There is some evidence of such features, including a moat around the central core of monumental architecture at Becan, a low ditch-and-berm feature defining the border of parts of the venerable old capital of Tikal, and evidence for the dismantling of the core architecture of Dos Pilas in an attempt to build a defensive wall that clearly postdated the primary use of the site.⁸ Also, archaeologists have found human bone of elite and possibly royal individuals unceremoniously deposited – that is, not in tomb interments – at sites such as Yaxuná, Cancuen, Colha, and Hershey.⁹ Frankly, it is not clear whether these human remains can be attributed to the killing of royal families – just as the ruling Romanov family was executed during the Russian revolution – or whether the bones came from despoiled ancestor shrines. Often stone stelae of rulers are found smashed or literally defaced, such as at Dzibilchaltún, which suggests violent change in local ruling dynasties. Within societies in which bones and imagery of ancestors carry a potent political charge, ancestor tombs and images can become targets of martial conquest. Either execution of a royal family or despoiling a royal ancestor shrine would have been rooted in hostilities. The main point is that martial conflict indeed did exist in Late Classic Maya society, and humans were

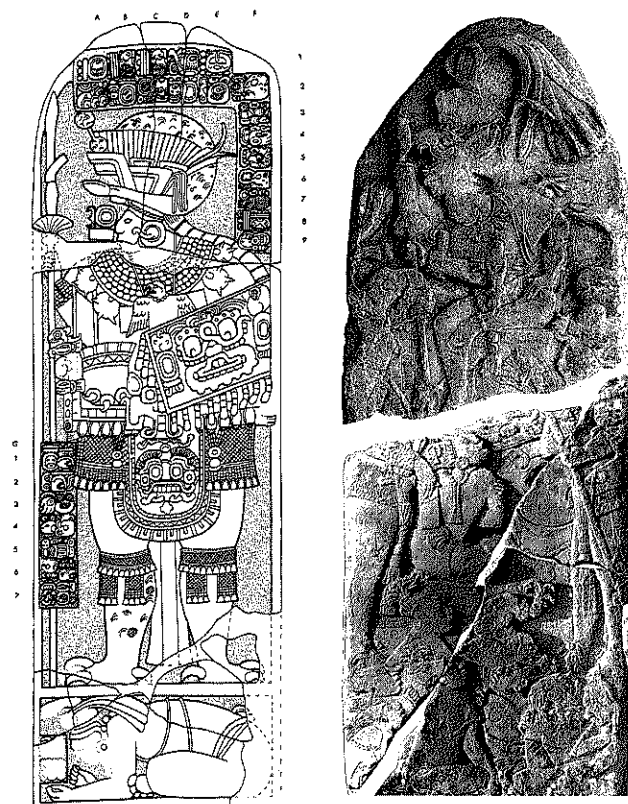


FIGURE 6.4 Martial aspects of rulers: (left) Stela 2 from Aguateca, Guatemala, showing a ruler holding a spear; (right) Stela 12, Piedras Negras, showing a ruler seated above a sea of captives and containing a hieroglyphic text that describes him as “he of the many captives.” (Stela 2 after Graham 1967; Stela 12 after Maler 1970–1976, both courtesy of Peabody Museum, Harvard University)

treated in ways that today we would characterize as a human rights abuse. In this respect ancestral Maya were no different from ancestral Europeans or Asians. Throughout the Late Classic, however, the bulk of the population of Maya farmers lived dispersed throughout the countryside and only occasionally congregated into the large cities. The extent to which the lives of rural Classic Maya farming families were imperiled by interdynastic conflict remains an unanswered question.

OUT-OF-CONTROL POPULATION GROWTH AND ENVIRONMENTAL DEGRADATION?

While a graduate student at the University of New Mexico, the senior author participated in her first Maya archaeology project at a place called Pulltrouser Swamp in Belize. Her assignment was to walk the terrain on the southeastern side of the swamp and to map all the mounds that she encountered. Small earthen mounds (around a meter in height) were considered “house mounds” – actually, low platforms upon which perishable structures of pole and thatch had been constructed long ago (knowing just how long ago required excavation, which came after survey and mapping). Higher and longer mounds might be the remains of a palace complex, which often were composed of stone houses with vaulted roofs also built of stone. Conical mounds, often quite tall, with small apices were considered shrines or pyramids, depending on their height. Not surprisingly, wherever there was high ground around the perimeter of Pulltrouser Swamp, there were house mounds with a few shrines built on tall pyramidal platforms as well. When tested with an excavation unit, most mounds revealed evidence of Late Classic construction and occupation, often with underlying and earlier construction units as well. The swamp itself had undergone significant modification in the form of island fields that had been created by digging canals and building up land surfaces to create a suitable surface for planting crops.¹⁰ Suddenly it became apparent that both high, dry lands as well as wetlands had been profoundly modified during the 2,000 years that Maya people had lived and farmed around this site that we came to call K’axob (fallowed fields).¹¹ Because K’axob is not part of a large city or dynastic center but rather a hinterland or rural settlement with almost 2,000 years of occupation,¹² it provides an excellent example of the fact that, by Late Classic times, there was extensive – if dispersed – settlement throughout the Maya Lowlands.

Archaeologists have generated population estimates for the Maya Lowlands by counting the number of structures per square kilometer and multiplying that count by an assumed population size per mound (generally about five persons) and then subtracting a fraction of the total for noncontemporary occupancy and nonresidential use. Since, upon excavation, many mounds are found to contain a final Late



FIGURE 6.5 Large Classic period house platform at the Sibun valley site of Cedar Bank, Belize. (Photo by P. A. McAnany)



FIGURE 6.6 Canal and adjacent planting surfaces from landscape modification of wetlands 1,000–2,000 years ago at Maya site of K'axob, Belize. (Photo by P. A. McAnany)

Classic construction unit, this procedure for estimating population size – although only an estimate with many sources of error – is fairly straightforward for the Late Classic but becomes increasingly difficult for earlier time periods, especially at places in which little excavation (which allows ground-truthing of estimates) has been conducted. Nonetheless, this procedure has yielded population estimates as high as 150 persons per square kilometer.¹³ In 1998 the U.S. Census Bureau reported a population density of 2,858 persons per square kilometer (7,400 per square mile) for Los Angeles, California, considerably higher than in the Late Classic Maya lowlands. Industrial-era urban population densities are much higher than those that existed in the political capitals of nonindustrial states; the term *high population growth* must be considered within its historical context.

Some students of Maya archaeology have written of this expansive settlement as indicative of runaway population growth that resulted in severe and irrevocable environmental degradation.¹⁴ Often said to have supported the highest populations on record for a nonindustrial tropical environment, the Maya Lowlands produced food at peak productivity during Late Classic times, and that undoubtedly entailed significant landscape modification, such as the reclaimed wetlands described above. But recent studies of landscape modification, soils, and pollen cores by physical geographers Nicholas Dunning and Timothy Beach indicate that the predominant agricultural features of the Late Classic are those of conservation – terrace walls to control soil erosion, check dams to funnel water across dry slopes, and so forth.¹⁵ In other words, Maya farmers of the Late Classic seem to have been doing all that they could to prevent land degradation and promote soil retention and fertility. So population growth does not necessarily lead to land degradation, although a large population of farmers inevitably will make a profound impact on their environment even under a sustainable regime of land use such as appeared to exist for 2,000 years in the Maya region.

Although tropical studies of pollen are hampered by the fact that tropical tree species tend to produce very little pollen (tropical trees are pollinated by insects rather than wind), the pollen found in lake and wetland cores does indicate that Late Classic forest cover was much diminished.¹⁶ Just as the first pilgrims to the United States deforested New England for firewood and timber and to create fields

and pastures, so Maya farmers diminished the forests of southern Mexico and upper Central America, beginning around 2,000 years before the Common Era. And like New England, where certain tree stands were preserved for construction materials and firewood, so the Late Classic Maya Lowlands appears to have been composed of a mosaic of forest, fields, and wetlands, so that some refer to the contemporary tropical forests of the Maya region as a "feral forest" that has been altered in favor of economic species such as mahogany, cacao (chocolate), and many fruit trees.¹⁷

Consider that the United States is a bit over 200 years of age, yet we have transformed and often desecrated a landscape that stretches "from sea to shining sea." For ancestral Maya society, archaeologists have documented a 2,000-year history of management of a complex environmental mosaic.¹⁸ We would refer to that as "how a society chose to succeed" rather than the reverse. In fact, recent landscape analyses indicate that if Maya farmers in fact responded to an environmental crisis, it happened much earlier, around 100–200 C.E., when massive changes in land use resulted in the transformation of interior lakes into wetlands. By the Late Classic period, there seems to have been in place a resilient conservation ethic regarding soil and water management in this heterogeneous tropical landscape.

DID DROUGHT CAUSE THE ABANDONMENT OF MAYA CITIES?

In the documentary film *An Inconvenient Truth*, Al Gore – with the assistance of many charts and diagrams – drove home the message that societies of the twentieth and twenty-first centuries have achieved the ability to create global climatic change that may not be reversible. The key question here, as with all societies, is whether or not our global "village" is sufficiently resilient to adapt to a changing climate or to adopt changes that will halt or reverse permanent climatic change. Because climatic change – especially torrential rain or not enough rain – can be devastating to sedentary societies dependent on agriculture and/or stock raising for their food (which includes virtually all civilizations past and present), it provides a convenient and all-encompassing prime mover that can be invoked to explain social and political change. Without sufficient stores of food and the

United Nations to distribute food flown in from the other side of the world, societies might not have the resilience to survive a sustained drought of several years.

So, when all else fails to explain why societal change occurred, historians and archaeologists often turn to climatic change.¹⁹ Droughts, as the ultimate *deus ex machina*, can be devastating events, as we know from recent droughts in Africa and from eighteenth-century accounts of the Chilam Balam – Yucatec historical and mythic accounts written in Mayan prose using a European alphabet. Immediately before the sixteenth-century arrival of Spaniards, the highland Aztecs faced several devastating droughts, but a drought never caused the collapse of the Aztec empire: it took ambitious Spanish warriors allied with disgruntled and coerced members of the Triple Alliance to do that. Based on deep lake cores from the Caribbean region, researchers have documented a shift to a regionally drier climate induced by changes in the El Niño–Southern Oscillation (ENSO) tropical air mass during the eighth century. Cores drilled into lakes in the Maya lowlands by paleo-ecologists D. Hodell, J. Curtis, and M. Brenner have yielded evidence of a drying trend in limited parts of the Maya region but the evidence is not widespread; nevertheless, the idea remains popular among physical scientists.²⁰ Analysis of the Usumacinta watershed by J. Gunn and W. Folan concluded that this drainage (located in the western part of the Maya region) was not affected by the ENSO oscillation.²¹ Logically, if an alleged drought occurred at 760 C.E. and destabilized the Lowland Maya world, then its effects should have been global across the lowlands – with massive starvation and the downfall of divine rulers in quick succession. Instead, the large political capitals on the edges of the Maya world that sat astride a permanent water source – Copán, Quirigua, Piedras Negras, and Yaxchilan – were some of the earliest to stop constructing new buildings and carving sculpture with hieroglyphs and long-count dates. Archaeologists interpret this cessation as a weakening of dynastic power and an inability to command a large labor force or to sponsor sculptors and calligraphers. In contrast, dynastic seats such as Tikal, Calakmul, and Caracol that are located in the interior of the Lowlands – where there are no rivers and water is seasonally in short supply – survived longer.²² In the northern Puuc hills – where there is no water source

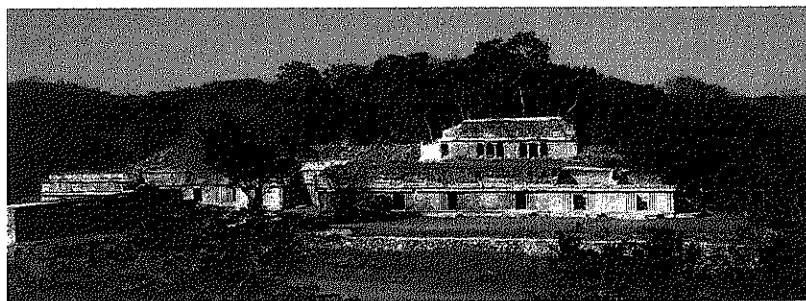


FIGURE 6.7 Palace of Labna constructed during the Late-Terminal Classic period when a drought supposedly plagued the Maya Lowlands. (Photo by T. Gallareta N.)

other than rainwater stored in cisterns and *aguadas* – an ambitious phase of monumental construction, requiring huge amounts of water for mixing plaster and mortar, was undertaken around 760 C.E., and there is no evidence of drought.²³ So the pattern is complex and abandonment of dynastic centers protracted over 125 years. Change occurred and dynasties fell, but the cities most vulnerable to drought exhibit a pattern of resilience – at least for a while. It is thus unlikely that drought was a prime mover of societal change.

ARE DIVINE RULERS TO BLAME?

In most of today's world, political leaders are elected. They may come from an elite class, but they are chosen through a system of popular vote and generally hold office for a prescribed period of time. Maya rulers, on the other hand, were born to a class of royalty and, once enthroned, generally ruled until their death. Often, but not always, the eldest son might rule after the death of his father. Well before the Late Classic period, scribes began to refer to Maya rulers as *kuh'ul ajaw* (holy or divine lord), and so it seems that Maya rulers invoked a divine and sacred charter that underwrote and legitimized their right to rule. Certainly there are many stelae (stone monoliths with sculpture and hieroglyphic texts) that depict rulers dressed in the guise of a Maya god and performing a public ritual. Anthropologist Clifford Geertz among others has characterized kings who take on the trappings of divinity as well as elaborate and symbol-laden costuming as

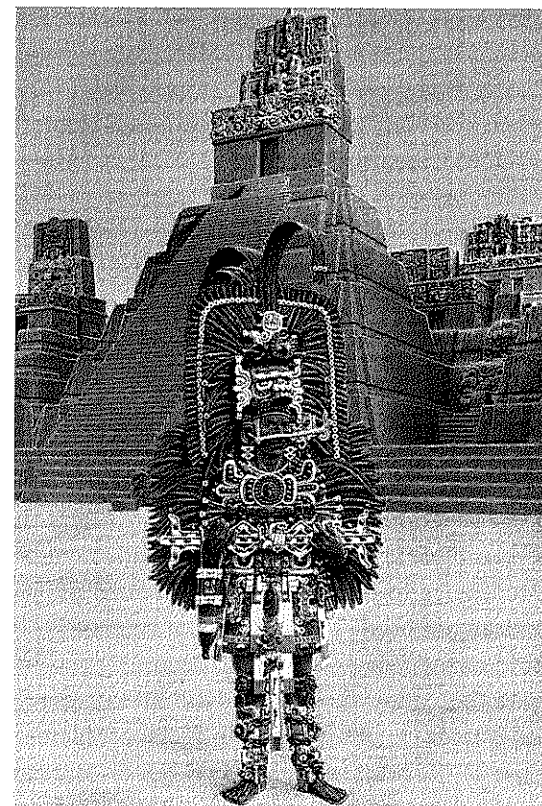


FIGURE 6.8 Jasaw Chan K'awiil I, divine ruler of Tikal from 682 to 734 C.E. (Courtesy of Terry Rutledge)

human ideograms of society.²⁴ This type of iconic kingship draws heavily on the poetics of cosmic structures, and the well-being of a realm is indicated by the elaboration of kingly ritual performance and the monumentality within which such performance is situated. This compares well with Maya divine rulership, the ritual dress worn by Maya rulers, and the soaring temples and ornate palace structures that formed the backdrop for their kingly performances.

As many have written, divine kingship is a double-edged sword: it carries great privilege and unlimited power but also demands that a ruler deliver munificence to their people as would a god. A string of military defeats or seasonal droughts can do much to damage the credibility of a divine ruler, who must shoulder the blame for such

misfortune. Just as there are good and bad elected leaders, there would have been good and not-so-good Maya rulers. From all indications, Late Classic times – with a large population to feed, possible cyclical droughts, and conflictive martial activity – would have been a challenging time in which to rule. Did Late Classic Maya rulers govern sagely, or did they bury their heads in sands of passivity as society collapsed around them? In *Collapse*, Diamond draws a direct parallel between Late Classic rulers and twenty-first-century CEOs and asserts that both were and are far too preoccupied with short-term personal gain. Perhaps this point of comparison is not too far off the mark, but how do we know? Just because rulers were heavily vested in ritual performance and participated in martial conflict with neighboring kingdoms does not mean that they were ineffectual rulers who were not concerned with the fertility of the lands within their kingdom and the well-being of their people. The green *quetzal* feathers that adorned the headdresses and backracks worn by Maya rulers symbolized fertility – a direct reference to the vitality of fresh corn plants. Statecraft by divine rule does not predict an inability of rulers to respond to crises. Some would argue this point, which seems a specious argument predicated upon the notion that democratic structures of governance are the only ones truly capable of solving social problems. Immediate and effective use of the Spanish judicial system during early Colonial times by Maya people suggests that some type of preexisting representational governance existed in the Maya region.²⁵ If divine rulership is to be blamed for the changes that occurred at the end of the Classic period, then surely we must also point a finger at the English monarchy as a primary cause for the sun setting over the British empire. Perhaps, like the British example, larger social processes need to be addressed in order to properly contextualize change within the microcosm that was Late Classic Maya society.

Although the English monarchy figuratively still rules Britain, the great dynasties that ruled over the ancestral cities of the southern Maya Lowlands appear to have dissolved at the end of the Classic period. The type of statecraft practiced during the Postclassic period (and described by Spaniards) indeed was extremely hierarchical with a sector of ruling nobility and the principle of inherited rule still widely practiced. But monumental construction projects had been scaled back (Tulum and Mayapan are perfect examples of reduced

investment in colossal architecture), hieroglyphic script appears to have been restricted to paper bark codices rather than sculpted on large stelae that contained naturalistic images of rulers, and rulers did not carry the *kuh'ul ajaw* (holy or divine lord) title. In Yucatec Mayan, rulers were called *halach winik* (true men). There is no denying that a political crisis of some sort was responsible for the demise of divine rulers and the abandonment of their dynastic centers that once housed tens of thousands of people.²⁶ They were rendered irrelevant, became a flashpoint of resistance, or the basis of their moral authority undermined by a combination of natural and cultural factors. In summary, divine rulers proved not to be resilient to the changing milieu in which they found themselves. Some of these changing circumstances have already been discussed, but there is one final arena – that of economic change – that has yet to be considered.

SHIFTS IN SPHERES OF TRADE AND INFLUENCE?

During the nineteenth century, U.S. towns located astride railroad lines boomed as tracks were laid across the continent. Now, as passenger travel and cargo shipment via rails recede in importance, towns are abandoned or struggle to remain vital to commercial activity. Strategic positioning along trade and transportation routes provides opportunities and so always has been appealing to people, just as businesses today tend to cluster around airline hubs. How is this relevant to the past?

Over three decades ago, archaeologists such as Wyllys Andrews, Jeremy Sabloff, and William Rathje suggested that the term “Maya collapse” might be a matter of perspective.²⁷ Although Maya rulers of the Postclassic period clearly scaled back on investment in monumental architecture and there was a draw down of population in the southern part of the lowlands, Postclassic society was vibrant, particularly in reference to mercantile activity.²⁸ Postclassic sites, such as coastal Tulum, tended to be located strategically, near the coast or a major waterway in order to take advantage of canoe navigation, which allowed faster travel and the transport of larger cargo loads. Obviously canoe travel also was important during the Classic period, but many of the major dynastic seats – such as Tikal and Calakmul – were landlocked and supplied via trains of porters carrying goods in backracks or tumplines.

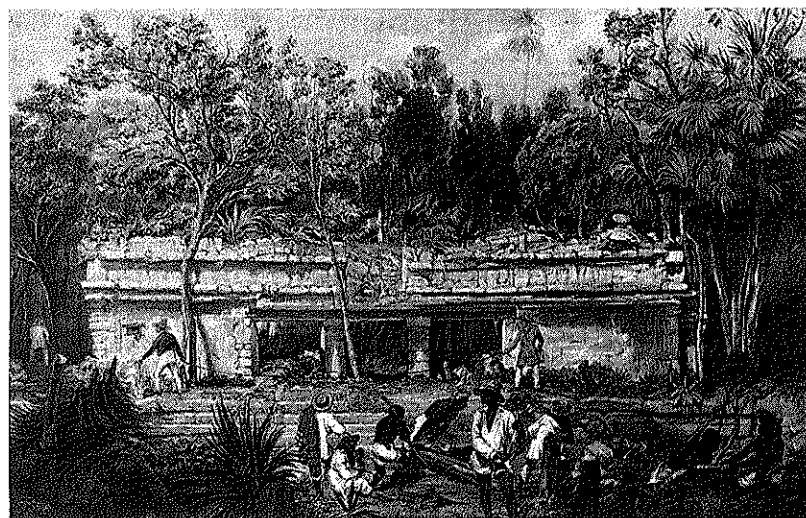


FIGURE 6.9 Tulum, scaled-back Late Postclassic monumental architecture rediscovered in the nineteenth century by Stephens and Catherwood. (After nineteenth-century watercolor by Frederick Catherwood)

As population levels decreased in the southern Lowlands, there was a corresponding rise in the number of people residing in the northern part of the Yucatán Peninsula, which is more coastal in orientation as it is bounded on the west and north by the Gulf of Mexico and on the east by the Caribbean Sea.

The engagement of elites with commercial activities is more apparent during the Postclassic period than during the preceding Classic period; clearly, priorities had shifted and new opportunities appeared. What Sabloff and Rathje did not realize decades ago is that the shift actually occurred earlier and was well underway by the ninth century.²⁹ Arguably this transformation can be seen at Late-Terminal Classic sites in which the entanglement of ritual practice with mercantile activities was materialized in circular shrine architecture. New architectural forms often accompany new economic arrangements. Just think of the rise of “ATM architecture” – those small, stand-alone buildings from which cash is dispensed – that signaled the transformational computerization of the banking industry. In the Sibun River valley of Belize where the senior author and her research team have been conducting archaeological fieldwork, a series of circular



FIGURE 6.10 Portion of an excavated circular shrine, Late to Terminal Classic period, Sibun Valley, Belize. (Photo by Kimberly Berry, courtesy of Xibun Archaeological Research Project)



FIGURE 6.11 Fruiting cacao trees growing in the Sibun Valley of Belize. (Photo by P. A. McAnany)

shrines dating to the ninth century have been found along the course of the river in a valley that today contains cacao groves, the essential ingredient of chocolate.³⁰ Why are these shrines significant, and why do archaeologists link them with mercantile activities?

Most Late Classic architecture is rectangular in plan, but in northern Yucatán at the Late-Terminal Classic capitals of both Chichén Itzá and Uxmal, large circular shrines were built during the Late Classic period. Thought by many to be linked to the highland Mexican wind deity, Ehecatl, or the highland feathered serpent, Quetzalcoatl,³¹ the circular form seems to represent a hybrid of older Maya ritual practices with those from farther afield. The presence of more than a dozen diminutive circular shrines located on strategic waterways as well as coastal locations (such as Ambergris Cay, Belize) along the Caribbean seaboard hints at the mercantile activities that likely were associated with ritual practices performed at these shrines. Chichén Itzá, in particular, is argued to have controlled an imperial realm with a seaport at Isla Cerritos amid the northern Yucatec salt beds. The large scale of its sphere of influence may be suggested by the architectural mimicry of circular shrines that occurred in the far hinterlands. This new hybrid form of religious architecture and the ritual and economic practices that were associated with it were contemporary with the time of troubles for the venerable old dynasties and were spatially adjacent to dynastic centers. Such economic and religious innovation could not have strengthened and likely directly challenged dynastic rule and established modes for acquiring items that were iconic of dynastic authority. Late Classic pictorial art on pottery and walls indicates that rulers were closely involved with acquiring goods such as cacao, cotton cloth, jadeite, *Spondylus* shell, and quetzal feathers that often were imported from long distances.

As we learn more about Late-Terminal Classic Maya society and try to understand the changes that took place, we are finding that political factors cannot be divorced from economic change. Climatic stress could have heightened the impact of these transformations, but many aspects of ancestral Maya society – agricultural and ritual practices, traditions, and languages – exhibited a robustness that defies the term collapse. During the Postclassic period, rulers reinvented themselves in a manner that afforded the best advantage in the context of an increasingly commercialized, pan-Mesoamerican world

(from north-central Mexico to western Honduras) knit together by shared ritual practices.³² Divine rulership gave way to new forms of statecraft that explicitly included mercantilism and participation in polyethnic spheres of activity. Significantly, a monolingual hieroglyphic text was considerably less effective in this newly invented pan-Mesoamerican world.

A CONCLUDING QUERY: DO SOCIETIES FAIL OR JUST CHANGE?

Bruce Springsteen, bard and songwriter, is famous for writing lyrics about the social and economic changes that have transpired in his home state of New Jersey. In one particularly haunting riff of *My Hometown*, he sings of the closed factories and his unemployed friends and relatives and adds that “they [the manufacturing plants] ain’t coming back.” In fact, the eastern half of the United States increasingly is a landscape of abandoned or transformed factories, and U.S. society is poised in the middle of a profound social and economic upheaval as well-paid manufacturing jobs for a middle-class populace with rudimentary education disappear overseas. Will the United States exhibit the necessary resilience to change – in this case, toward greater investment in education to equip a populace with more sophisticated skills to stay competitive in the fields of science, technology, and medicine – or will the United States become a nation that exports nothing but entertainment (an industry that enriches only a small percentage of the population)? The jury is still out on this question, but for now, at least, the U.S. political system seems stable and capable of weathering such profound change. Will this continue to be the case, even if the effects of global warming intensify and our relationship with our material world also changes dramatically?

In hindsight, it is clear that the challenges posed to Late Classic Maya rulers could not be weathered without significant political and economic change. It is doubtful that the challenges were strictly climatic, although a role for cycles of drought as a destabilizing factor in times of political and economic stress should not be dismissed. Equally clear is the fact that Maya society – politically, economically, and socially – survived and thrived during Postclassic times, albeit in

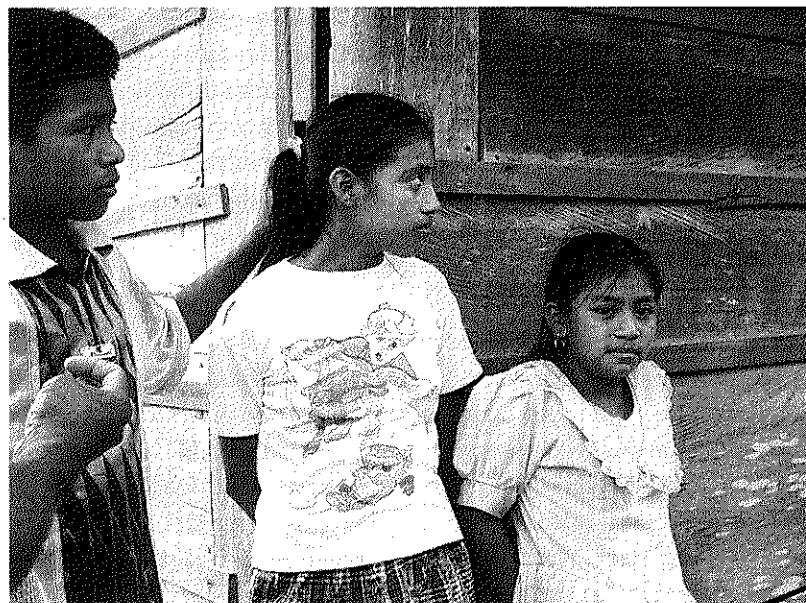


FIGURE 6.12 Q'eqchi' and Mopan Maya schoolchildren, Toledo District, Belize. (Photo by P. A. McAnany)

a transformed state. Does this change represent success or failure? Neither really, although the seven million Maya descendants who are alive today speak directly to the resilience of Maya societies.

Finally, why is Western society so intrigued by the ancestors of contemporary Maya people and so willing to label one of their societal transformations a "failure"? Is it the presence of colossal ruins and remnants of carved-stone hieroglyphic texts that stand amid tropical forests, the romantic notion of failure amid splendor? Perhaps Classic Maya royalty invite the gaze of contemporary people by virtue of the fact that they left behind so many engaging images of themselves. One literally can gaze into the face of the past and, in doing so, connect – or *seem* to connect – in a way that is more difficult with ancient societies that were not so vested in naturalistic representation of the human body. But before we begin to compare eighth-century Maya rulers to twenty-first-century CEOs, we should consider whether the transformations that marked the end of divine rulership qualify as the apocalyptic collapse that some writers and

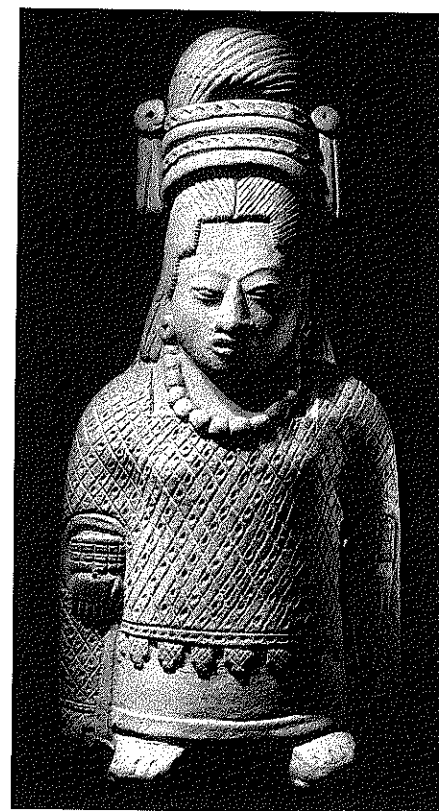


FIGURE 6.13 Classic Maya royal female figurine housed in the Museo Nacional de Antropología, Mexico City. (After Schele 1997; photo courtesy of Jorge Pérez de Lara)

movie producers want to suggest. Certainly, total systemic failure makes for a more dramatic plot-line, but with a descendent community of several million people, it is hardly an accurate assessment and is even denigrating to descendants who read that their ancestors supposedly "died out" by the tenth century and that they are not related to the Classic Maya who built the cities – now in ruins – on which a mega-million dollar tourist industry has been built. The past can inform us and often guide us toward a better future, but the mirror of ancient Maya society should not be refracted in hopes of inducing change in the contemporary world, no matter how badly change might be needed.



FIGURE 6.14 Cristina Coc, Director, Julian Cho Society, Toledo District, Belize. (Photo by Shoshaunna Parks)

CRISTINA COC: LIFE AND STRUGGLES OF AN INDIGENOUS MAYA LEADER

"I, Cristina Coc, am a Q'eqchi' Maya from Punta Gorda, Toledo District, Belize.

I am co-spokesperson of the Maya Leaders Alliance and currently Executive Director of the Julian Cho Society, a Maya advocacy group formed in 2005. I hold a Bachelor of Science degree in Chemistry and Biology from the University of Minnesota, Duluth, in the United States of America." So began an affidavit filed in the Supreme Court of Belize in 2007 by a consortium of indigenous Maya peoples of southern Belize who sought legal recourse to defend Maya traditional land rights and to force the government of Belize to recognize Maya land rights and to stop granting leases to international logging and oil-exploration companies who damage lands, don't consult with local residents, and don't offer compensation for damage to property (http://www.law.arizona.edu/Depts/IPLP/advocacy/maya_belize). On

October 18, 2007, indigenous people throughout the world whose land rights often are under siege won a major victory. The Supreme Court of Belize decided in favor of the rights of Toledo Maya people.

As a Q'eqchi' Maya child growing up in the Toledo District of Belize – which is 80 percent Mayan – Cristina Coc was influenced by her brother-in-law, Julian Cho, who fought for land rights, social justice, and dignity for Maya people. After his untimely death, Cristina left Belize to complete her college education in the United States, but she carried with her memories of his struggles and ultimate sacrifice. In 2005 she founded an indigenous rights organization named in honor of her brother-in-law, the Julian Cho Society. As current director of the society and one of a small number of female indigenous leaders, Cristina Coc works to promote not only indigenous land rights but also the physical and cultural survival of Maya people, who can teach all of us important lessons in societal resilience.

Notes

* Patricia A. McNany: One day about thirty years ago in the dolphin lab at Kewalo Basin, Hawai'i, Sam Gon asked me if I would like to join a group of student scientists who were submitting a grant proposal to the National Science Foundation. I was an anthropology undergraduate, spending a year at the University of Hawai'i. I would be responsible for conducting an archaeological survey of the chosen study area. I had been drawn to anthropology because of its broad perspective on religious practice, and this was an invitation I could not refuse. I prepped for our field season by doing archival research on native Hawai'ian land claims and still remember the excitement I felt as I discovered new things about traditional farming and fishing before the nineteenth-century Euro-American land grab.

In the following years I discovered Maya archaeology and have pursued a career of research and teaching at Boston University and the University of North Carolina, Chapel Hill. My book *Living with the Ancestors: Kinship and Kingship in Ancient Maya Society* (1995) resumed my early interests in religion, and my edited volume, *K'axob: Ritual, Work, and Family in an Ancient Maya Village* (2004), reflects my interests in land use and everyday life.

I have come to appreciate that interpreting the past – evaluating and writing a narrative about archaeological evidence, whether from Polynesia, Yucatán, or elsewhere – holds great challenges and daunting responsibilities, the latter particularly in respect to descendant communities. My career has been one of continual engagement with the evolving challenges and responsibilities of archaeology.

Tomás Gallareta Negrón: I am an archaeologist with the Centro Yucatán del Instituto Nacional de Antropología y Historia in Mexico. Born in Yucatán, I developed a curiosity about Maya ruins and pursued my Licenciatura at Universidad Autónoma de Yucatán and postgraduate education in archaeology at Tulane University.

I have conducted archaeological research in the northern Maya Lowlands at over fifty sites and collaborated on the archaeological atlas of the sites of Yucatán. I have provided both university-based classroom instruction and field training for international and Yucatecan students.

I am especially interested in the archaeology of residential units from small houses to palaces and in landscape utilization in the past and its implications for present sustainability. I helped establish a 1,650 hectare archaeological and environmental preserve surrounding the Late Classic Puuc Maya site of Kiuic. In conjunction with the preserve, I work to promote the conservation of archaeological and biological resources and innovative educational and economic projects with the communities surrounding the preserve. I have been instrumental in the development of an educational cultural heritage puppet film for Yucatecan children, working with the Maya Area Cultural Heritage Initiative. Currently, I am co-director of the Bolonchen Region Archaeological Project, surveying a strip of nine square kilometers between the sites of Labna and Kiuic in Yucatán, México.

1. For further information regarding inaccuracies and deleterious cultural impact of *Apocalypto*, see Callahan 2007; Freidel 2007; Lohse 2007.
2. Maya genocide of the 1980s was implemented by the Guatemalan state in response to a perceived threat of the spread of communism and guerrilla insurgencies among the majority and impoverished Maya ethnic population. For in-depth accounts and personal narratives, see Carmack 1988; Manz 2004; Menchú 1984; Sanford 2003.
3. See Diamond 2005.
4. Popular and scholarly accounts of the decipherment of Maya hieroglyphic texts include Coe 1992; Coe and Van Stone 2001; Houston et al. 2001.
5. Stuart 1998: 374 discusses the primacy of dedication texts in Maya inscriptions.
6. Martin and Grube 2008 provide the most recent synthesis of hieroglyphic evidence bearing on the political and social lives of Classic Maya royalty. For an in-depth view of Classic Maya royal courts, see Miller and Martin 2004.
7. More information on tribute ransom can be found in Houston et al. 2006; McAnany 2009.

8. For a review of evidence of defensive features at Classic Maya capitals, see Webster 2002.
9. Nonfunerary deposits of human bone bearing signature features of Classic period eliteness are reported for Yaxuná in Freidel and Suhler 1998; Cancuen in Gugliotta 2007; Hershey site in Harrison-Buck et al. 2007; and Colha in Massey and Steele 1997.
10. The extensive literature on the transformation of Maya wetlands includes Turner and Harrison 1983 on Pulltrouser Swamp; Dunning et al. 2002; Pohl 1990; Pohl et al. 1996.
11. Profound and early management of wetland landscapes at K'axob is discussed in Berry and McAnany 2007.
12. The Formative or Preclassic settlement of K'axob is presented in McAnany 2004.
13. Population estimates for Late Classic society are presented and discussed in detail in Culbert and Rice 1990.
14. The agricultural degradation/deforestation model is presented by Wingard 1996 and Rue 1987 and advocated particularly by Webster 2002: 251–259, all in reference to Copán, Honduras.
15. Beach et al. 2006; Dunning and Beach 2000.
16. Jones 1994 presents pollen evidence for a trend of diminished forest cover beginning 2000 B.C.E. Several archaeologists point out that the Late Classic landscape could not have been completely denuded of forest because high-canopy faunal species – such as tapir – occur in Late Classic archaeological midden contexts (Emery 2004: 94; White et al. 2004: 158; Wright 2006: 200).
17. Evidence of the “manmade tropical forest” of the Maya lowlands is presented by Campbell et al. 2006; Gomez-Pompa et al. 1987; Nations and Nigh 1980.
18. For more information on the mosaic concept of ancestral Maya land use, see Fedick 1996; Dunning and Beach 2000: 191.
19. Gill 2000 and Gill et al. 2007 attempt to link eighth- and ninth-century Lowland Maya societal changes to recurrent cycles of drought.
20. Climate change, core data, and Maya political cycles are causally linked in Haug et al. 2003 and Hodell et al. 1995, 2000, 2001.
21. Gunn and Folan 2000.
22. Scarborough 2003 finds evidence of ingenious water reservoir systems at some interior capitals, while Lucero 2006 emphasizes the centripetal pull of water-storage systems during the dry season.
23. See Gallareta N. 2000 on the lack of evidence for drought in the Puuc region.
24. See Geertz 1980 on Balinese kingship, and earlier Kantorowicz 1957 on Christian-based medieval kingship in Europe.
25. Restall 1997 documents Maya use of the Spanish legal system during early Colonial times.
26. For detailed discussion of the nature of this 150-year political crisis, see Freidel and Shaw 2000; Marcus 1993; Webster 2002; Yoffee 1991.

27. Andrews 1973; Sabloff and Rathje 1975.
28. Vibrant Postclassic populations are documented in the southeastern Maya Lowlands (Feldman 2000), around Laguna Petén Itzá (Rice and Rice 2005), in Belize (Chase 1986; Chase and Chase 2006; Graham et al. 1989; Masson 2000, 2003; Pendergast 1993), and in northern Yucatán (Kepecs 2005; Masson et al. 2006 among others).
29. Ringle et al. 1998 present a strong case for placing the onset of this new ideology in the Late-Terminal Classic period.
30. For more on cacao and the Sibun Valley project, see Harrison-Buck et al. 2007; McAnany and Murata 2006, 2007; McAnany et al. 2002.
31. Taube 2000 explores the symbolism of wind, feathered serpent deities, and circular architecture in Mesoamerica and the American Southwest; see also McAnany 2007.
32. Smith and Berdan 2003 provide a comprehensive overview of Postclassic society.

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