

THE STUDY OF CLASSIC MAYA ARCHITECTURE

David Webster
The Pennsylvania State University

YAXCHILAN: THE DESIGN OF A MAYA CEREMONIAL CITY. By Carolyn E. Tate. (Austin: University of Texas Press, 1992. Pp. 306. \$35.00 cloth.)
HOW THE MAYA BUILT THEIR WORLD. By Elliot Abrams. (Austin: University of Texas Press, 1994. Pp. 176. \$30.00 cloth, \$14.95 paper.)

Long before archaeologists could read Maya dates, understand the meaning of Maya inscriptions, or comprehend the complex symbolism of Maya art, there were the buildings. The first European intimations of complex Maya culture were the white "towers" (temples), shrines, and houses that Spanish explorers sighted and briefly visited along the northwest coast of Yucatán in 1517–1518 (Parry and Keith 1984, 134–68). Some of these towns were so impressive that the Spaniards likened them to Cairo and Seville.

Later, Bishop Diego de Landa wrote in the 1560s that the excellence and abundance of Maya buildings "is the most remarkable of all things which up to this point have been discovered in the Indies; for they are so many in number and so many are the parts of the country where they are found, that it fills one with astonishment" (Landa 1941, 171–72). He also left some of the first drawings of temples and palaces. About the same time, the splendor of the ruined buildings and monuments of Copán in Honduras led Diego García de Palacio to conclude, "here was formerly the seat of a great power, and a great population, civilized, and considerably advanced in the arts" (Perry and Keith 1984, 547). John Lloyd Stephens, a later and better-known popularizer of the ancient Maya, echoed the same sentiments in the middle of the nineteenth century, supporting his views with the splendid illustrations by Frederick Catherwood (Stephens 1969).

Architecture or more broadly what architects call "the built environment" (Rapoport 1990) has long provided the principal lens through which we view and try to understand the ancient Maya. This observation remains true today, as recently demonstrated by a major Dumbarton Oaks symposium on Maya architecture in 1994 organized by Stephen

Houston.¹ Maya architecture has been so influential because it is abundant, durable, accessible, and (until recently) comparatively unmarred by large-scale looting or other human destruction. Scores of major Maya centers are known, most dominated by masonry temples, palaces, ball courts, causeways, sweat baths, and other large architectural features. Complex façade sculpture, lintels, and wall panels embellish many buildings, and the great patios around them feature carved stelae and altars. Even today, archaeologists encounter previously unknown large centers during surveys. Lesser architectural complexes, including most of the residences of commoners, also have masonry components that are often visible on the surface. This durable record is supplemented by countless carved, modeled, or painted representations of humans doing things in and around buildings and by perishable components such as nonmasonry superstructures, scaffolding, interior hangings, and other “furniture.”

What follows is a brief review of how scholars have used this architectural legacy to investigate major issues concerning the nature and culture history of Maya civilization. Approaches to these issues are strongly affected by training. The days of the enthusiastic (and sometimes very productive) Maya amateurs are long gone. Maya architectural research today includes professionals trained as anthropologists, archaeologists, art historians, epigraphers, geographers, ethnohistorians, architects, and restorers. Such specialization is necessary and beneficial, but it also occasions misunderstanding and controversy. For the purposes of this essay, I will distinguish two great streams of scholarship—one essentially aesthetic and art historical, and the other overtly scientific and anthropological. Not all research can be forced into these categories, and an increasing number of Mayanists effectively bridge both, but they nevertheless serve conveniently here to focus my comments.

Two recent publications also serve to structure my account of the state and direction of Maya architectural studies: Carolyn Tate’s *Yachilan: The Design of a Maya Ceremonial City* (1992), and Elliot Abrams’s *How the Maya Built Their World* (1994). Both published by the University of Texas Press, these two books handily encompass much of the variation in research on the Maya built environment, the disparate sensibilities of those who carry it out, and the interpretations they have reached.

What Can We Learn from Maya Architecture?

Architecture helped early Maya scholars define the Maya culture area and reconstruct the bare bones of its culture history, including the

1. I am grateful to my fellow participants in this symposium for many of the insights in this review. For a state-of-the-art overview of Maya architecture and what it tells us, readers of this essay should consult the forthcoming Dumbarton Oaks symposium volume edited by Stephen Houston (Houston n.d.).

relationships between the ethnohistorically observed sixteenth-century Maya and their preconquest predecessors. From a purely archaeological point of view, architectural complexes represent sources of stratified artifacts and features that enable scholars to sort out chronology and behavior, and they also serve as containers for inscriptional and iconographic information. Phase-specific distributions of architecture are used to reconstruct demographic and subsistence patterns. Finally and most generally, architecture is used to generate and test hypotheses about the nature of Maya society and to reconstruct elements of Maya cognition.

Tate's *Yaxchilan* heavily emphasizes cognition and worldview, screened through the sensibilities of an art historian. She treats Yaxchilan as a giant cosmogram (a symbolic model of the Maya world), whose patterns of growth and architectural configurations and orientations directly reflect the intentions of its royal builders. They were particularly concerned with orienting their buildings and their effigies toward points on the eastern horizon where the sun rose on important solar anniversaries, especially solstices. Tate is interested in buildings mainly because they function as frames for images and texts, which in turn reveal meaning.

Abrams's *How the Maya Built Their World* is much more anthropological and behavioral in orientation. He is primarily concerned with what the Maya did rather than what they thought, and how scholars can use the architectural record to sort out social, political, and economic relationships by employing broad comparative perspectives. Drawing on data from residential excavation and reconstruction at Copán as well as experimentation and informant interviews, Abrams first develops a complex simulation model of construction and sculptural tasks and their costs in terms of human expenditure of energy. Because residences are less "public" than ball courts or temples and are associated with persons of all ranks, they provide a better measure of the self-serving capacities and motivations of individuals and social subgroups. Construction costs provide insights into the relative investments of labor and skill absorbed by a large sample of buildings, investments that reflect differential access to labor and different management strategies of using it. In his interpretative sections, Abrams draws wide-ranging ethnographic comparisons to suggest how labor might have been mobilized and organized as well as the sociopolitical implications of management strategies.

Both books are fundamentally concerned with social power, but in different ways. For Tate, the questions are how the aesthetic power of public art and architecture reflects or creates meaning and ideological consensus, and how art is manipulated by particular rulers in specific circumstances. For Abrams, energetic investments in construction are measures of different kinds of social power—the ability of some to utilize the energy of others.

What Kinds of Architecture Should We Study?

Maya architectural scholarship from its beginnings has been center-oriented in two senses (see Black 1990). First, most research has focused on the central cores of large sites. Second, resulting reconstructions of Maya society tend to rely heavily on information from particular centers, or categories of them. For example, long-term research projects at Tikal and Copán currently color scholarly perceptions of Maya culture history disproportionately, as does information from centers with abundant and well-preserved art and inscriptions. A pronounced shift toward other components of the built environment occurred in the 1960s, when regional settlement surveys and excavations of low-status architecture proliferated. This shift was partly due to the recognition that small outlying structures were a neglected part of the archaeological record and that knowledge of them was essential to grasping whole sociopolitical systems. More specifically, the abundance of such buildings suggested unexpected population sizes and densities, and systematic recovery and analysis of small buildings presented one key to demographic reconstruction.

Although research on small structures continues, emphasis on major centers has remained strong for two reasons. First, centers are where art and inscriptions are found. Since 1960 and particularly during the last fifteen years, inscriptions and the iconography associated with them have become increasingly intelligible, revolutionizing insights into political, ritual, and ideological aspects of elite Maya culture. Second and more recently, Latin American governments (especially that of Mexico) have recognized the tourist potential of monumental architectural precincts and have been increasingly willing to spend vast sums excavating and restoring them.

Both Tate's and Abrams's projects reflect these trends. Work since 1972 at Yaxchilan has concentrated heavily on the site core. Tate's main concern is with the distribution and original contexts of carved monuments in or around major buildings as well as the evolution of sculptural programs and inscriptions, particularly during the Late Classic Period. She provides an in-depth diachronic study of royal statements and construction projects and a derived culture history of the royal line, including interpretations of royal motives. *Yaxchilan: The Design of a Maya Ceremonial City* is extensively and beautifully illustrated and can be read as a highly organized catalogue of buildings, monuments, and design motifs, including some of the best-known Classic Maya sculptures. Tate's descriptions and interpretations, however, are disembodied from detailed discussions of the archaeology of the site core (such as artifacts, features, burials) and from its wider settlement context. Either these kinds of data were not relevant to her purposes, or they were unavailable to her.

Abrams's *How the Maya Built Their World* is more unconventional in that his energetic approach reveals comparatively little about the Copán

site core, dynastic history, or images and their content. Instead, residential constructions ranging from the remains of tiny rural households to the palaces of kings and nobles are all featured in his analysis. Such a broad systemic approach is possible because many different kinds of research projects have been carried out at Copán since 1975. The staff of the Instituto Hondureño de Antropología e Historia, which sponsored much of this research, was acutely aware that Copán's tourist potential would benefit from full knowledge of the regional polity. Because research focused both on the Copán Main Group itself and on associated outlying settlements, opportunities for contextualization are accordingly much richer than for Yaxchilan, and one learns from Abrams a great deal about the whole regional Copán system, one of the best documented in the Maya Lowlands. Although Abrams presents only limited information on the relationship between architecture and other dimensions of the archaeological record, his study is firmly grounded in a rich and varied database. Whereas one could read Tate as *the* best current (albeit highly individual) overview of Yaxchilan, Abrams is properly read as one piece of a much larger puzzle, with many other pieces explained in other publications. For example, Austrian architect Hasso Hohmann has just published superb detailed reconstructions of many of the Copán structures used by Abrams in his study (see Hohmann 1995). Nonroyal elite residences have been especially well studied (Willey et al. 1994; Webster 1989).

What Was Classic Maya Society Like?

Both Tate and Abrams would agree that architecture and monuments provide important insights into the organization of Classic Maya society. Although Tate is more concerned with cognition, she provides intriguing data and interpretations regarding the royal dynasty, succession, and particularly the roles of elite women, who were well documented at Yaxchilan. Tate's art historical training is especially evident in her analysis of the social positions and identities of individual sculptors, estimates of the numbers of resident sculptors present, and her discussion of the stylistic and symbolic influences among Yaxchilan and other centers.

Abrams's interests strongly converge with Tate's on the issue of numbers of artisans, and their results are mutually supportive. Both posit few resident sculptors during any given reign, but by using very different evidence: in Tate's case, variation in style and workmanship, in contrast with Abrams's direct experimentation. Tate explores more fully the probable elite statuses of sculptors, while Abrams shows that the manual skills necessary for replication of complex patterns in stone can be rapidly acquired. Both would probably agree that it is inappropriate to think in terms of any sort of sizable "class" or other specialized component of sculptors or stoneworkers.

Reconstruction of sociopolitical and socioeconomic organization is the core of Abrams's *How the Maya Built Their World*, and the investment of skilled and unskilled labor in residential architecture forms the currency of evaluation. Abrams shows that investment in most small structures in the Copán region was within the capacity of the nuclear or extended family. By contrast, individual elite residences consumed 250 to 800 times as much labor—investments far greater than occupants themselves could provide and hence valuable indicators of superior social rank and power. Abrams also demonstrates that although his sample of some forty-five residences can be broken down into gross categories according to construction cost, a fairly continuous distribution of labor investment appears if the royal level is excluded. Such continuity supports Abrams's view that the Copán Maya were organized into large lineage groups. Tate believes that lineages were also present at Yaxchilan, as indicated by art, inscriptions, and construction programs.

Tate's is mainly a top-down perspective, and she recognizes the power relations that must have existed among elites and between elites and individuals of lower status. She believes that aesthetic decisions concerning the erection of monuments and construction of buildings were geared toward specific situations of political and ritual significance and were partly calculated to create and nurture psychological cohesion throughout the polity. This communal mindset for the Yaxchilan Maya as a whole motivated them to create a meaningful series of sacred cosmograms reflecting the cultural values of all members of the Yaxchilan polity. Tate characterizes Yaxchilan's inhabitants, from the lowest to the most exalted, as "tradition-directed" (at least until the collapse) and asserts that the site as a whole reflects a collective mindset in which kings' and subjects' interests coincided. Her view updates the idea that shared religious devotion accounts for monumental construction (e.g., Kidder 1950, 8). What is different is that dynastic rulers rather than priest-bureaucrats conceived and motivated their people to carry out these projects.

Abrams envisions greater plurality of organization, self-interest, motives, and potential for competition. His view is more consistent with the emphasis on self-serving individual agents and factions currently fashionable in the anthropological and archaeological literature (such as Brumfiel and Fox 1994). It also concurs with David Stuart's suggestion that the whole Late Classic period was essentially a protracted collapse (Stuart 1993).

What Can We Conclude from the Scale of Maya Constructions?

Generations of scholars have expressed awe at the scale and abundance of Maya monumental structures and the supposed perpetual building activity that produced them. Landa, Palacio, and Stephens were only

some of the first to conclude that the grandeur and size of Maya buildings directly reflected the complex character of Maya civilization, the huge numbers, devotion, and energy of its people, and the organizational abilities of Maya leaders. This view continues to be almost universally held. Yet it remains a curiously impressionistic perspective considering that archaeologists actively dismantle and reconstruct buildings of all kinds, often using materials and forms of manual labor similar to those of the ancient Maya.

Tate and Abrams are poles apart on the issue of scale. Although Tate provides excellent summaries and illustrations of architecture, she makes no quantitative evaluations. Her appreciation of Yaxchilan is highly subjective and heavily influenced by impressions of scale and aesthetic sophistication.

Abrams goes to the other extreme, elaborating on earlier work by David Kaplan (1963) and Charles Erasmus (1965) concerning the quantification of labor invested in monumental architecture. Abrams concludes that skilled and unskilled labor costs at Copán have been greatly overestimated, along with the organizational demands associated with building projects. Although Abrams focuses mainly on residential buildings outside the site core, application of his methods to a major royal building at Copán, the Temple of the Hieroglyphic Stairway, indicates that it could have been built by 130 people (most of them unskilled) working for one-hundred-day periods during each of seven successive dry seasons (Webster and Kirker 1995).

Using Abrams's methods sharpens one's eye for construction details and their energetic implications. As I looked at Tate's illustrations of masonry construction at Yaxchilan, my immediate reaction was that most of the architecture there was extremely cheap to build. If Abrams's general insights for Copán also apply to other centers, then they reveal something intriguing about the Classic Maya: that psychologically imposing structures required much simpler organization and less political cost for elites than scholars formerly believed. In this respect, Abrams's conclusions reinforce Tate's assertion that rulers or other elites could build on a grand scale without seriously damaging the social fabrics of their polities or unreasonably exploiting their people. This conclusion casts serious doubt on the frequent assertions made by many Maya archaeologists that excessive demands for architectural labor played a primary role in the collapse of Classic Maya polities. Another interesting cross-cultural implication is that modern archaeologists are also susceptible to the impression-management strategies of ancient Maya lords.

What Were the Functions of Maya Places?

Many Mayanists (myself included) prefer to view most groupings of Maya structures as sets of residential remains. Differences in scale,

quality, and embellishment enable us to arrange these residences in hierarchical fashion. Yet from the tiny farmsteads of rural commoners to the great royal establishments of kings, all these structures shared domestic functions. This is not to say that all features or facilities were domiciles in the strict sense of the word but rather that variation in structures was consistent with general domestic use. On the commoner level, for example, household groups might include spatially distinct kitchens, store-rooms, and ritual buildings (Gonlin 1993; Sheets 1992). According to this model, the great Classic centers represent the households of dynasties of rulers, with their hypertrophied facilities for royal burial, ritual, display, and performance.

William Sanders and I have called such royal places “regal-ritual cities” (Sanders and Webster 1988), following a comparative model devised by Richard Fox (1977). Specialized components include ancestral temples, ball courts, administrative facilities, young mens’ houses, and sweat baths. Careful excavation sometimes reveals details of the complex political interactions that took place at some of these facilities. For example, James Fox (1994) has argued plausibly that ball courts were loci of elite ritual feasting and political negotiation, judging from the associated artifacts.

The household model is strongly supported by both Tate and Abrams. Tate, who prefers the term *ceremonial city*, characterizes great Maya centers as places where rulers, their relatives, and their retinues lived, places with primarily political and religious functions. Her main concern, however, is with the sculptural programs displayed by Yaxchilan’s rulers, not with specific analyses of the functions of individual structures or groups except insofar as temple, observatories, or other specialized structures served as frames for art, elements of the solar cosmogram, or settings for politico-religious performance. Tate provides no information about places in the Yaxchilan polity outside the royal site core.

For Abrams, the household model is a given. The structures he quantified are parts of groups known to have had residential functions because they were partly or wholly excavated. Knowing their basic shared functions was essential to his method of distinguishing differential social rank. Although functional variation within groups was not a consideration in Abrams’s research, one gets a good sense of the hierarchy of residential sites and the architecture associated with it. Apart from quantifying one royal building in the Copán Main Group, he has little to say about Copán as a regal-ritual center. Tate’s and Abrams’s different perspectives thus complement each other nicely.

What Meanings Can Be Attached to Maya Architecture?

Two kinds of meaning are at issue here: what architecture meant to the ancient Maya, and what it means to us. Archaeologists and other

Mayanists have two unusual assets in trying to comprehend how the Classic Maya thought about their built environments—a corpus consisting of art and a written record. According to Karl Taube (n.d.) and Stephen Houston (n.d.), Maya architecture is rich in metaphor and personification. Powerful house and hearth metaphors were associated with buildings of many kinds. Although iconographic evidence of such metaphors is mainly seen on royal or elite structures, they probably were important on the commoner level as well. The built environment as a whole may well have been a metaphor for order and centrality, as opposed to the “wild” natural landscape.

Apparently, the Maya sometimes regarded individual structures as living things in a sense, especially after they had been “animated” by special burning or censuring rituals. Some buildings had their own names and were further personified by identification with particular lords. Impersonation was an important part of Maya ritual, and buildings themselves seem sometimes to have been impersonated by human actors. Different kinds of buildings had specific associated meanings. Ball courts were identified in the Maya mind with particular creation stories and sacrifice and were liminal places connecting the underworld with the earth’s surface and the heavens.

Tate’s main purpose in *Yaxchilan* is to reconstruct and participate in the worldview of the Yaxchilan Maya: “One senses that the images on the sculptures and the buildings wove a net of information and ideological power that somehow bound the people in a meaningful way. How did the art and the city create a matrix for human experience at Yaxchilan in the eighth century?” (p. 3). For Tate, the challenge is to refine her “ineffable, awesome experiences” of Maya centers into a deeper and more disciplined understanding of the messages inherent in sculptures, inscriptions, and buildings. Much of the first part of the book is replete with descriptions of her own emotional or spiritual responses, and she confidently attributes similar intense feelings to “nearly all” visitors at sites like Palenque.

Abrams is much more prosaic. He begins with an assumption about meaning: that variation in scale and elaboration of residential places signaled to the Maya mind differing levels of social rank, wealth, and prestige.² While scholars can argue about the meanings of many Maya things, Abrams adopts a materialist architectural principle expressed by Price (1982, 720): however else one may choose to conceive of buildings and monuments, they undeniably “are” the energy invested in them. Behind the solid architectural realities of Copán architecture lies the expenditure of human skill, time, energy, and materials, all of which can be reasonably quantified. Scholars attribute meaning to variation in ener-

2. For a more general consideration of this uniformitarian assumption, see Trigger (1990).

getic expenditure and draw the further conclusion that our meanings usefully approximate (although they need not be identical to) those held by the Maya. In any case, they are meaningful from a comparative archaeological perspective.

How Can We Best Study Maya Architecture?

Nowhere are Tate and Abrams further apart than in their methods or modes of judgment. Tate's judgments are quintessentially those of an art historian: systematic examination of architecture, epigraphy, and art as a basis for intense personal appreciation and evaluation of these things and their meanings. Quantification figures in her study only to facilitate appreciation of configuration, as in the solar orientations of buildings. The strongest empirical check on Tate's personal approach to Yaxchilan is her dependence on the epigraphic interpretations of others. Ultimately, however, the judgments she values most are the highly intuitive, aesthetic ones of the informed initiate. In essence, her methods are those of systematic connoisseurship.

Ironically, given Tate's intuitive cognitive approach, she provides more basic data about Yaxchilan than Abrams does for Copán. Most of her judgments are based on images and texts, and she copiously illustrates and organizes both categories of information. Iconographers or epigraphers who question her judgments are thus presented with the means of making their own. Tate's strength is clear presentation of the objects of study, and lucid statement of her conclusions. What remains less clear (except for solar orientations) are the methods by which she came to these conclusions. For example, one either accepts her informed judgments about the number, identities, and products of individual master sculptors or not. One cannot replicate the basis for such judgment, and as Tate herself points out, other art historians have evaluated these matters differently.

Abrams's approach is almost entirely quantitative and objective. He describes the observations and experiments that he and others have carried out, lays out the basic tasks involved in construction, and provides simple formulae for quantifying them. Results are expressed in person-days, which are proxies for expenditure of energy. His goal is not precision but rather reasonable estimates of what buildings cost. Most of the basic data essential to his judgments have been published elsewhere and were too cumbersome to include in his book. One cannot look at the abundant raw data he presents and in armchair fashion evaluate them effectively unless one has spent a lot of time in the field directing manual tasks or participating in them. Nevertheless, Abrams's study is much more objective than Tate's in the sense that anyone who wished to do so could go to Copán, replicate his observations and experiments, and draw

his or her own conclusions. The reader knows how energetic conclusions were derived and can directly experience the process of evaluation if desired. It is this quality of replicability that makes Abrams's work scientific and objective.

More susceptible to subjective evaluation are Abrams's reconstructions of systems of labor recruitment and management. But his comparative models and their sources are clearly specified, and readers can make up their own minds about the reasonability of his interpretations.

Both authors are sensitive to the crucial question of variation. While recognizing that one can speak of a "Great Tradition" of elite Maya culture, Tate repeatedly refers to its idiosyncratic Yaxchilan expressions and some of the possible reasons for them. Abrams cautions that many factors central to construction are site-specific and that the values and assumptions essential to his simulation are in many important respects idiosyncratic to Copán. Neither one falls into the trap of envisioning a monolithic architectural, epigraphic, and artistic Great Tradition of which individual centers and polities are simply regional clones. Abrams also reminds readers of how strongly Great Tradition elements are concentrated in the great elite centers, and what a small proportion of Maya places these represented.

Summary

H. E. D. Pollock asserted in his 1940 historical overview that the study of Maya architecture "in essence summarizes the development of archaeological research in the Maya area" (Pollock 1962, xi). Tate's and Abrams's books demonstrate the continuing accuracy of his comment. What has mainly changed since Pollock's time is that we have a much fuller archaeological record of constructions of all kinds and that Maya epigraphy and iconography are now much more comprehensible. Such progress has resulted from scholars as diverse as Tate and Abrams devoting their skills to reconstructing ancient Maya culture and society.

Which of their approaches (and many others not discussed here) one prefers depends on training and temperament. Informed intuition derived from close scrutiny of objects can be a powerful tool. We should remember that Tatiana Proskouriakoff (1961) developed her insights into the historical meanings of Maya glyphs because of her intense interest in the evolution of Maya art styles, which sensitized her to those parts of inscriptions she could read—dates—and ultimately to the patterned co-occurrence of dates and other glyphs whose meanings were still unknown. But her experience also shows that concentrating on objects can take us only so far. The ultimate payoff for Proskouriakoff came from the rich contextualization of the monuments she studied: their distribution with respect to other aspects of the built environment.

It will come as no surprise that I personally prefer Abrams's approach, which is more generalizing, behavioral, objective, and experimental. What Tate contributes is her intense personal experience of a long-term elite enterprise at a particular Maya center. What Abrams provides is a tool honed at Copán that can now be used by anyone anywhere, not just in the Maya Lowlands. After briefly working with his method, I found myself confidently explaining to a specialist in Near Eastern archaeology that mud-brick Mesopotamian temples must have been extremely cheap to build. Abrams's work has the character of all honorable simulations in that the components and values of his method and the logic that connects them are clearly spelled out, as are potential errors. Skeptics who believe that particular components or values that Abrams assigns to architectural reconstructions are incorrect can substitute their own and thus explore the tolerances of the simulation. They can also recreate his experiments. In short, they can find out if Abrams was wrong or alter his methods to their own purposes.

I personally lack the strongly emotional responses to Maya centers, buildings, and art that Tate seems to experience. For me, all these things are parts of puzzles rather than revelatory experiences, and Abrams's approach is much more in the scientific puzzle-solving tradition than that of aesthetic appreciation. Nevertheless, both kinds of sensibilities are now crucial to the study of the Maya built environment, and both Tate and Abrams have made important contributions in their respective books. Mayanists would greatly benefit from more site-specific overviews of the kind that Tate provides as well as wider applications of models like that devised by Abrams.

John Lloyd Stephens reported that during his exploration of Palenque in the early eighteenth century, "We slept in the ruined palace of their kings; we went up to their desolate temples and fallen altars; we saw evidences of their taste, their skill in arts, their wealth and power" (1969, 365). Stephens made the uniformitarian assumption that the Maya, like the rulers he knew about from his earlier sojourns among the relics of Old World civilizations, had kings who lived in palaces, garnered wealth and power, and commissioned artists to commemorate their accomplishments and assertions of political and ideological centrality. For a long time, our failure to understand ancient Maya architecture and its associated monuments persuaded us that the Maya were unique, not to be compared directly with civilizations elsewhere: their monuments depicted only gods, they lacked dynasties of kings, and their "palaces" were priestly dormitories. Now our more sophisticated insights into their built environment remind us forcefully that the Maya, like all cultures, can be appreciated and studied both for their unique qualities and as variations on larger comparative themes.

REFERENCES

- BLACK, STEPHEN L.**
1990 "Field Methods and Methodologies in Lowland Maya Archaeology." Ph.D. diss., Harvard University.
- BRUMFIEL, ELIZABETH, AND JOHN FOX**
1994 "Factional Competition and Political Development in the New World: An Introduction." In *Factional Competition and Political Development in the New World*, edited by Elizabeth Brumfiel and John Fox, 8–13. Cambridge: Cambridge University Press.
- ERASMUS, CHARLES**
1965 "Monument Building: Some Field Experiments." *Southwestern Journal of Anthropology* 12:444–71.
- FOX, JAMES**
1994 "Putting the Heart Back in the Ballcourt: Ballcourts and Ritual Action in Mesoamerica." Ph.D. diss., Harvard University.
- FOX, RICHARD**
1977 *Urban Anthropology*. Englewood Cliffs, N.J.: Prentice-Hall.
- GONLIN, NANCY**
1993 "Rural Household Archaeology at Copán, Honduras." Ph.D. diss., Pennsylvania State University.
- HOHMANN, HASSO**
1995 *Die Architektur der Sepulturas-Region von Copán in Honduras*. Graz, Austria: Academic Publishers.
- HOUSTON, STEPHEN**
n.d. "Classic Maya Depictions of the Built Environment." In *Function and Meaning in Classic Maya Architecture*, edited by Stephen Houston. Washington, D.C.: Dumbarton Oaks, forthcoming.
- KAPLAN, DAVID**
1963 "Men, Monuments, and Political Systems." *Southwestern Journal of Anthropology* 19:397–410.
- KIDDER, ALFRED V.**
1950 Introduction to *Uaxactun, Guatemala: Excavations of 1931–37*, by A. Ledyard Smith. Washington, D.C.: Carnegie Institution of Washington.
- LANDA, DIEGO DE**
1941 *Relación de las cosas de Yucatán*. Edited and annotated by Alfred. M. Tozzer. Papers of the Peabody Museum of Archaeology and Ethnology no. 18. Cambridge, Mass.: Harvard University (first published in 1566).
- PARRY, JOHN H., AND ROBERT G. KEITH**
1984 *New Iberian World*. Vol. 3. New York: Times Books.
- POLLOCK, HARRY**
1962 "Sources and Methods in the Study of Maya Architecture." In *The Maya and Their Neighbors*, edited by C. Hay, 179–201. New York: D. Appleton-Century.
- PRICE, BARBARA**
1982 "Cultural Materialism: A Theoretical Review." *American Antiquity* 47, no. 4:709–41.
- PROSKOURIAKOFF, TATIANA**
1961 "Lords of the Maya Realm." *Expedition Magazine* 4, no. 1 (Fall):14–21.
- RAPOPORT, AMOS**
1990 *History and Precedence in Environmental Design*. New York: Plenum.
- SANDERS, WILLIAM T., AND DAVID WEBSTER**
1988 "The Mesoamerican Urban Tradition." *American Anthropologist* 90:521–46.
- SHEETS, PAYSON**
1992 *The Ceren Site*. Fort Worth, Tex.: Harcourt Brace Jovanovitch.
- STEPHENS, JOHN LLOYD**
1969 *Incidents of Travel in Central America, Chiapas, and Yucatán*. Vols. 1–2. New York: Dover (originally published in 1841).
- STUART, DAVID**
1993 "Historic Inscriptions and the Maya Collapse." In *Lowland Maya Civilization in the*

Eighth Century A.D., edited by Jeremy Sabloff and John Henderson, 321–54. Washington D.C.: Dumbarton Oaks.

TAUBE, KARL

n.d. "The Classic Maya Temple: Metaphor and Ritual in Maya Ceremonial Architecture." In *Function and Meaning in Classic Maya Architecture*, edited by Stephen Houston. Washington, D.C.: Dumbarton Oaks, forthcoming.

TRIGGER, BRUCE

1990 "Monumental Architecture: A Thermodynamic Explanation of Symbolic Behavior." *World Archaeology* 22, no. 2:199–232.

WEBSTER, DAVID

1989 *The House of the Bacabs*. Studies in Precolumbian Art and Architecture no. 29. Washington, D.C.: Dumbarton Oaks.

WEBSTER, DAVID, AND JENNIFER KIRKER

1995 "Too Many Maya, Too Few Buildings: Investigating Construction Potential at Copán, Honduras." *Journal of Anthropological Research*, no. 51:363–87.

WILLEY, GORDON R., RICHARD M. LEVENTHAL, ARTHUR A. DEMAREST AND WILLIAM. L. FASH JR.

1994 *Ceramics and Artifacts from Excavations in the Copán Residential Zone*. Papers of the Peabody Museum of Archaeology and Ethnology, no. 80. Cambridge, Mass.: Harvard University.