sis of these shows that the teeth of early farmers in the Mascota Valley were in appalling condition at the time of death, often riddled with caries and even abscesses. There must have been much suffering in their lives. As for life spans, most of these individuals died in what we would consider young adulthood.

Accompanying these burials were lavish offerings of pottery vessels, clay figurines, and stone artifacts. The figurines are astonishingly simple, even crude, compared to what one finds in Middle Formative sites farther south-east in Mesoamerica. In fact, while lively and forceful, they are completely outside any Mesoamerican tradition, and if they had not been found in context, most art historians would label them as fakes! They have been modeled to show both male and female nude figures standing, squatting on the ground, or seated pensively on four-legged stools.

The pottery vessels, on the other hand, are highly sophisticated and innovative, in particular the amazing variety of bottle shapes. The necks of some of these bottles have been modeled to represent another small, restricted-mouth jar perched on top and, in one case, even a vertical penis. There are a few animal-effigy vessels. Perhaps most of interest to diffusion-minded archaeologists (like myself) are the rare stirrup-spout vessels, strikingly similar to Initial-period Cupisnique bottles from the North Coast of Peru.

The non-ceramic artifacts in burial offerings show that these Mascota people were far from simple. From the well-known source at Ixtlá del Río, Nayarit, they imported obsidian for the manufacture of scrapers and finely chipped stemmed dart points (these in a shape that would be called “Marcos” if they had been found in Texas). There were cruciform ornaments of iron pyrites and obsidian, finely worked rock crystal, and even jade beads; according to the author, these latter were fashioned from the jade green known for the Motagua Valley in Guatemala.

In a final chapter, Mountjoy convincingly relates this Mascota funerary culture to the site of Capacha, Colima, excavated in 1939 by Isabel T. Kelly. As he has noted before, the type site is poorly dated, but it may well be coeval with, or slightly earlier than, the Mascota sites. Yet there can be no doubt that its exuberant pottery tradition, which included double and triple spouts connected to several vessel shapes at once and even stirrup spouts, is part of a more widespread shaft-and-chamber tomb culture extending along much of the Pacific-facing coastal zone of western Mexico. There are also links with the shaft tomb culture of El Opeño, Michoacán, which in turn is linked to Tlatilco in the Valley of Mexico. Unfortunately, unlike the case for dazing Mascota, both Capacha and El Opeño suffer from a lack of reliable radiocarbon dates As for Tlatilco, it is almost certain on the same time level as San Lorenzo.

Mountjoy also ranges more widely in seeking out relationships and long-distance connections, as have other archaeologists before him. The possible connection with Formative cultures in the Guayas Basin of Ecuador is the most frequently cited, in particular Machalilla. Ironically, at one time more than a few archaeologists had proposed that Machalilla and the subsequent Chorrería culture had originated in Mesoamerica, rather than the other way around. Mountjoy examines the possibility of early maritime voyages between the two areas. To an archaeologist mainly concerned with the peoples of central and southeastern Mesoamerica, the Formative culture discovered here by Mountjoy barely qualifies, if at all, to be labeled “Mesoamerican.” Did it originate in South America? In my opinion, the question still remains open.

I have said that this is a handsome book. Every single page (burial pit) and all of the associated artifacts are shown in excellent color photographs, beautifully printed on coated paper. In the present day, when the illustrations in most North American excavation reports appear only in smudgy black and white, this publication is a pleasure to see and read. However, having said this, I regret the nearly total lack of line drawings to illustrate the many burials and the artifacts. While descriptions of these are given in fine detail, the reader needs visual scales. As it stands, there is seldom any indication of the dimensions of whole vessels, figurines, or non-pottery artifacts.


Reviewed by Thomas G. Garrison, University of Southern California

Drought has been at the forefront of arguments regarding the so-called Maya "collapse" for about two decades and has been incredibly popular in public conceptions of the Maya since the publication of Richard Gill's The Great Maya Droughts (2000). At the 2009 SAA meetings in Atlanta, Gyles Iannone assembled a group of scholars with transdisciplinary backgrounds to assess the true impact of droughts on the ancient Maya, not only during the Terminal Classic period, but also during other critical periods for which Gill proposed that drought had shaped the trajectory of civilizational development. Iannone's edited volume is a welcome critical response to a theory that has become entrenched in the scholarly and public imagination.

The book is structured so that the first four chapters lay out issues, concepts, and definitions related not only
to droughts, but also to ideas like sustainability, resilience, and adaptability. The chapters by Jannone (Chapter 1) and Aimers and Jannone (Chapter 2) advocate the use of Adaptive Cycle Theory as a heuristic device to consider droughts within their cultural context. The theory, borrowed from ecosystems research, examines cultures in four stages of a generally looping cycle: r-phase for when people begin exploiting an uninhibited landscape; K-phase for when a culture matures and becomes more stable, interconnected, and conservative; Omega-phase for the inevitable collapse of this stability; and Alpha-phase for periods of innovation and rapid restructuring that can lead to the start of a new cycle. They also use the concept of panarchy—which suggests that adaptive cycles of varying size are interconnected to varying degrees—to look at collapse as a multiscalar process that affects societies from households all the way up to empires (p. 30).

These concepts are interesting, but in practice the case studies did not implement the language proposed in the introductory chapters (with the notable exception of Jannone et al.’s study of the Yucatan Plateau (Chapter 13)). In fact, David Webster’s insightful final chapter (Chapter 15) actively challenges the utility of concepts like sustainability and resilience (p. 353).

The contribution by Jannone, Yeager, and Hobeld (Chapter 3) presents some of the critical issues for assessing drought in the Maya lowlands. Perhaps their most important point is that to move forward in the study of human-environmental relationships we must work together across disciplines and not oversimplify the work of our colleagues in different fields (pp. 67–68). The edited volume as a whole crosses disciplinary boundaries, with contributors from a number of different scholarly fields. However, there are very few individual chapters that reflect a transdisciplinary approach. To really move forward, we need more collaboration between archaeologists and environmental scientists working in the same sub-regions and sites. Archaeologists cannot cherry-pick only the paleoenvironmental data that fit their models, and environmental scientists need to be more aware of the nuances of culture history. The first case study by Ford and Nigh (Chapter 5) seems to go against the spirit of transdisciplinarity, as the authors question the validity of the interpretations made by colleagues in environmental studies, notably denying the presence of large-scale deforestation (p. 89) argued by an academically diverse set of scholars led by Robert Griffin in the previous chapter (Chapter 4).

Many of the case studies emphasize that when we talk about the Maya “collapse,” what we are really referring to is the collapse of the institution of kingship. These ideas are notably brought up in three consecutive chapters by O’Mansky (Chapter 8), Demarest (Chapter 9), and Scherer and Golden (Chapter 10), who all work in the western Maya area, which is decidedly wet and has yielded no clear evidence of Gill’s droughts. Although Scherer and Golden’s chapter does not actually contain much real paleoenvironmental data, they refute Gill’s assertion that the Usumacinta may have run dry for a portion of the Terminal Classic (p. 215). They see political instability as being the key to collapse in the western Maya lowlands. O’Mansky summarizes a number of datasets generated by subprojects of the Petexbatun research carried out in the 1990s and emphasizes the role of violence, more so than any environmental disturbance, in disrupting that region. Demarest looks at the role of the ancient economy, as well as conflict, in his analysis of the area around Caracol. Demarest, perhaps better than any other contributor to this volume, clearly articulates the problem of searching for “global solutions” to complex problems (pp. 181–182). He highlights the need for more regional studies, an issue that is addressed by a number of other case studies in the book.

Dunning et al. (Chapter 6) examine the role of drought in changes that occurred during the Late Preclassic to Early Classic transition in the Mirador Basin and the Three Rivers Region. They note the difficulty in separating human from natural impacts on ancient environments and highlight the fact that both processes were surely in play during times of transition. Jannone et al.’s study of the Yucatan Plateau (Chapter 13) presents a nice sociocultural synthesis of that region and suggests that climate change influenced, but did not determine, the cultural responses noted archaeologically. The chapter by Dahlin and Chase (Chapter 7) looks at the responses of Tikal, Calakmul, and Caracol to a global drying event in A.D. 536. They argue that Caracol’s superior settlement and economic integration allowed that polity to weather this drought, especially compared to Tikal, which seems to have been totally unprepared. Valdez and Scarborough’s chapter (Chapter 12) is the only contribution that fully accepts Gill’s drought data, but the authors also acknowledge that processes that played out in the Terminal Classic in northern Belize were the result of a combination of factors.

Two zooarchaeology chapters, by Repoussé and colleagues (Chapter 11) and Emery and Thornton (Chapter 14), look at different ways that animal remains from archaeological sites could be used as paleoenvironmental proxies for drought. The former study looks at oxygen isotope signatures in deer bones, while the latter uses faunal assemblages to create a habitat fidelity index that can be used as a proxy for local dryness or wetness. It seems that these chapters should have been grouped apart, along with the contribution by Griffin and colleagues, in a separate section on technical approaches. Overall, the book’s structure is not formally defined in the Table of Contents, but given some of the common threads among certain chapters, this may have been a useful formatting tactic.
Webster’s closing chapter rightfully questions the issue of scale in reconciling paleoenvironmental and cultural histories. He goes on to challenge what he sees as overinflated population estimates in the Maya lowlands and concludes that we should consider the Maya as a civilization that was able to “cope” with their environment for thousands of years (p. 355). I was left feeling that the volume could have used a final synthesizing chapter by the editor to bring together all of the issues brought up in the 15 contributed chapters. On the whole, however, this book is a strong contribution to Maya archaeology because it challenges reductionist interpretations and celebrates the complexity of the past. Moreover, the volume provides a necessary academic response to the public and scholarly fascination with the issue of Maya droughts that has been held over for the last two decades.


Reviewed by Jasper Nielsen, University of Copenhagen.

It is a rare thing when a new publication appears concerning the different kinds of visual communication of the Classic Teotihuacan culture of central Mexico. The scholarly literature on Teotihuacan iconography and writing remains limited. For this reason, Joanne Michel Guerrero’s study of the script of the ancient metropolis naturally merits attention, but also a critical review. The slim volume is composed of 17 brief sections or chapters that cover topics ranging from the debate over the possible language(s) of Teotihuacan to thoughts on decipherment and methodology, but the main part centers on her comparative analysis of the glyphs from two different contexts at Teotihuacan. However, what is immediately striking about Guerrero’s text, somewhat misleadingly called a sign catalog, is the surprising ignorance of several recent contributions on the topic, all of them published in major journals or in easily accessible volumes (e.g., J. Nielsen and C. Helmke, Reinterpreting the Plaza de los Gifos, La Ventilla, Teotihuacan, Ancient Mesoamerica 19:345–370; K. Taube, Teotihuacan and the Development of Writing in Early Classic Central Mexico, in Their Way of Writing: Scripts, Signs, and Pictographies, ed. E. H. Boone and G. Urrutia, pp. 77–109, 2011). Except for a few minor changes, the book is identical to Guerrero’s book from 2005, entitled Is there Pre-Columbian Writing at Teotihuacan? and released by the self-publishing company IUniverse (absent from the bibliogra-