

fulfillment. Though a minority, they cannot be safely ignored, for they have attacked the sexual division of labor in the labor force and upset the ideal of woman as home-maker.

The book has other, minor faults. At times its argument is disorganized and vague, and the statistics presented confuse rather than enlighten the reader. Though the distinctiveness of the black family is mentioned, it is not explained or integrated into the argument. Never-

theless, Wandersee has unearthed an impressive collection of primary sources to back up a convincing new interpretation of married women's entrance into the labor force. And her book will provide new insight for those seeking to understand the present transformations of family life.

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A Mesoamerican Culture

In the Land of the Olmec. MICHAEL D. COE and RICHARD A. DIEHL. University of Texas Press, Austin, 1980. Two volumes + maps, in slipcase. Vol. 1, *The Archaeology of San Lorenzo Tenochtitlán*. viii, 416 pp., illus. Vol. 2, *The People of the River*. vi, 198 pp., illus. \$100. Dan Danciger Publication Series.

Mesoamerica's first great art style, major ceremonial centers, and intricate engineering feats can be attributed to the Olmec culture of the Gulf Coast. However, the origin of this complex culture has remained an enigma to archeologists since its discovery. One reason may be that, although countless books and articles have been published on the Olmec, very little archeology has actually been carried out.

Olmec research was initiated by Matthew Stirling in the late 1930's. With the assistance of Philip Drucker, Stirling carried out excavations at Tres Zapotes, La

Venta, and San Lorenzo. Many splendid monuments were uncovered, but the nature of Olmec culture was unclear, and its dating became controversial. It wasn't until 1955 with the excavations of Drucker, Heizer, and Squier at La Venta that radiocarbon assays clearly placed the Olmec as pre-Maya (800 to 400 B.C.; reanalyzed recently as 1000 to 600 B.C.). The problem of origins was unsolved, for no stratigraphic antecedents were found to the ceramics or carvings uncovered at La Venta.

Together with the lack of antecedents at La Venta, there has been a bias among archeologists toward fertile highland valleys as areas favorable for the development of complex culture. This gave rise to common speculation that Olmec origins lay elsewhere, outside the Gulf Coast. Until recently, few scholars have come to the defense of a possible indigenous Gulf Coast development in an eco-

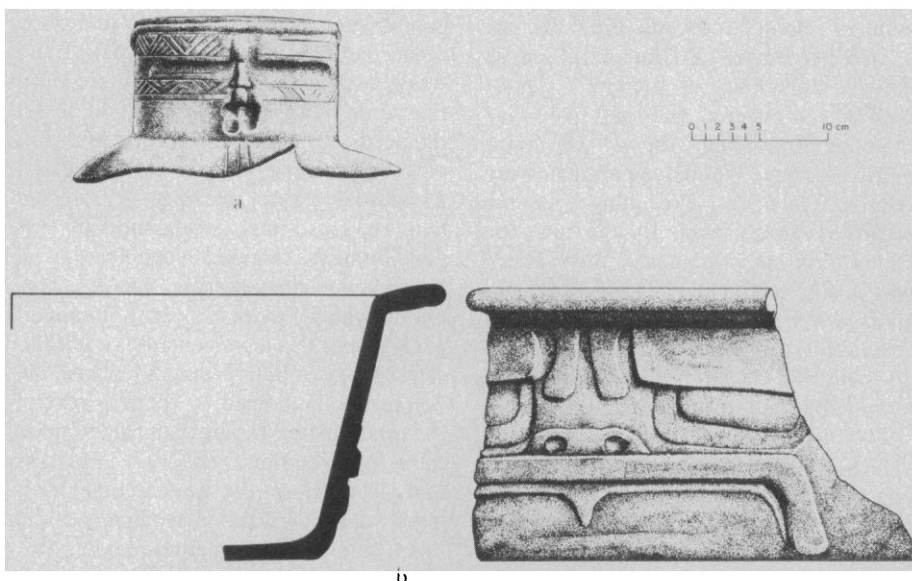
logical setting viewed by most as a tropical "pesthole."

Credit for a turnaround in thinking must go to Michael Coe, whose research project at the site of San Lorenzo from 1966 to 1968 is documented in this book. The site is built on an artificially leveled hilltop plateau overlooking the Rio Chiquito, and it rivals La Venta in its elaborately carved monuments, colossal heads, bentonite-lined *lagunas*, stone drain systems, and mound constructions. Coe, assisted by Richard Diehl, the book's co-author, found the antecedents lacking in the La Venta data and expanded the time span of Olmec culture back to at least 1150 B.C. But the research involved much more than just "dirt archeology." A considerable amount of time and effort were successfully spent investigating the area's human ecology through a combination of aerial photography, photogrammetric mapping, and interviews with local farmers.

Volume 1, "The Archaeology of San Lorenzo Tenochtitlán," treats the excavations and artifacts. The second and smaller volume, "The People of the River," deals with human ecology and provides models to explain the development of complex culture at San Lorenzo. The two volumes are complemented by four large separate maps detailing topography, archeology, vegetation and land use, and soils.

Following a description of the geography and geology, volume 1 contains a lengthy discussion of the excavations at San Lorenzo. Because much of Stirling's early work at the site was never published, Coe and Diehl have taken the trouble to discuss those excavations as well and to analyze all of the ceramics they could locate from that research. This alone is an important contribution to the field. The volume continues with chapters on the ceramics, other artifacts, monuments, and faunal remains and an all too brief discussion of Olmec life and culture at San Lorenzo. Because ceramics constitute the major artifacts dealt with by Mesoamerican archeologists and thus frequently form the basis for cultural sequencing and interpretations, this review concentrates on that chapter.

The chapter begins with an apology by the authors, for, in spite of their desire to document ceramic change through time, they faced two major problems. Most of the strata encountered in their excavations were artificial fill from construction activities and not natural deposits. This means that the ceramics within the fill could relate to a period different from the time of deposition and thus were of no



Yagua Orange vessels of the San Lorenzo B phase. [From *In the Land of the Olmec*; drawing by Felipe Dávalos]

value toward fulfillment of the authors' goals. Second, much of the ceramic material recovered was heavily eroded, and the defining of ceramic types on the basis of surface color and finish was frequently impossible. No apologies were needed for the ceramic illustrations, however, for the excellent drawings by Felipe Dávalos bring new life to these otherwise eroded potsherds.

The discussion of cultural development at San Lorenzo begins in the ceramics chapter, where pottery is discussed in terms of the phases the authors have delimited. The earliest evidence of occupation at the site is the Ojochi phase (1500 to 1350 B.C.), which is quite rare in the archeological sample. The phase is dated through its similarity to the Ocós phase of the Pacific Coast of Guatemala. Unlike those representing Ojochi, the deposits from the succeeding Bajío phase (1350 to 1250 B.C.) were found "just about everywhere" (p. 143) on the plateau. During this phase the authors believe that "substantial ceremonial mound construction" (p. 143) took place. In a previous report, "The Archaeological Sequence at San Lorenzo Tenochtitlán, Veracruz, Mexico" (*Contributions of the University of California Archaeological Research Facility*, No. 8, 1970), Coe credits the beginning of construction of the large artificial plateau to this phase as well. The authors see continuity in many ceramic types between Ojochi and Bajío and mention that some Bajío types "cannot be matched elsewhere in Mesoamerica" (p. 143).

With the Chicharras phase (1250 to 1150 B.C.), new types again appear in the ceramic repertoire, and Coe and Diehl believe that "the bearers of Chicharras culture were in large part immigrants, ethnically identical to the San Lorenzo Olmec" (p. 150) of the following San Lorenzo phase. The ethnic connection is presumably made because Chicharras ceramics differ from the "Olmec" pottery of the San Lorenzo phase mainly in the absence of one decorated type, Calzadas Carved. The pottery is otherwise very similar. However, the Chicharras ceramics present a puzzle to Coe and Diehl, for they have not been able to find counterparts (for some types) elsewhere in Mesoamerica but feel that if they had they "might have been able to solve some of the mystery of Olmec origins" (p. 151).

The San Lorenzo phase (1150 to 900 B.C.) represents the "apogee of Olmec civilization at San Lorenzo" (p. 159). The ceramic markers for this important phase are Calzadas Carved and Limón Carved-Incised. These are "added sud-



San Lorenzo, Monument 2, during excavation in 1946. [From *In the Land of the Olmec*; photograph courtesy of the National Geographic Society]

denly to a ceramic repertoire inherited from Chicharras," suggesting that "they were elaborated elsewhere" (p. 159). The San Lorenzo phase ends with a "great destruction" (p. 188) or "cataclysm" (p. 298), and the site's many monuments are destroyed and buried. By implication, the ceremonial center is destroyed as well. This destruction is attributed to the people of the Nacaste phase (900 to 700 B.C.), who again bring new ceramic types to the site.

A 100-year hiatus occurs between the Nacaste and the Palangana (600 to 400 B.C.) phases. Much of the ceremonial architecture visible at San Lorenzo is attributable to this latter, late Olmec phase which is contemporaneous with much of the major activity at La Venta. There are occupations from later periods at San Lorenzo, but by the end of Palangana the Olmec culture has essentially "died out" here and elsewhere.

The authors' interpretations of cultural sequence based on ceramic types epitomize a general problem faced by archeologists: What is change in the artifact record really telling us? When do new ceramic types represent the appearance of immigrant populations, when do they represent sampling biases, and when do they reflect indigenous innovation due to growing cultural complexity? Can ethnicity be determined by potsherds? The very thoughtful and lucid arguments in volume 2 of this book for the indigenous development of complex culture in the San Lorenzo region seem strangely contradicted in the authors'

interpretation of the ceramic record, where responsibility for ceramic change is attributed to intrusive populations.

Because so many of the San Lorenzo strata excavated were clearly construction fill, the authors had to base their ceramic sequence on the relatively few excavation units containing natural deposits. The excavations of the project sampled less than 1 percent of the total site area, and the excavation units selected for the ceramic sequence are a minor fraction of that. Though these excavations can certainly provide basic information on ceramics, it seems unwise to use such limited data as the basis for explicit statements regarding cultural developments at San Lorenzo. Why must the authors continually look outside of the Gulf Coast for pottery antecedents? If certain ceramic types "cannot be matched elsewhere in Mesoamerica" (p. 143), then perhaps they are local innovations. Even if matches are made, which area has priority and what does that imply?

Continuity in the ceramic sequence at San Lorenzo can be inferred just as easily as change. Figure 97 in volume 1 illustrates the changes in ceramic types through time. The most common and abundant type at the site is *always* Camano Coarse, a utilitarian ware presumably used by both commoners and elite. It shows remarkably little variation. The "changes" appear in more minor types, many of which are probably ritual wares. In a society with increasing cultural complexity, particularly in its religious as-



Dugout canoes on the banks of the Rio Chiquito, Tenochtitlán. [From *In the Land of the Olmec*]

pects (for example, Bajío phase ceremonial mound construction), elaboration and innovation in artifacts should be expected. We should be puzzled if they did not occur. Beginning with the Bajío phase, I see a pattern of increasing complexity and continuity that culminates in the elaborate Olmec culture at San Lorenzo; the authors see discontinuity and imply that because they can find no counterparts for some Chicharras phase ceramics the mystery of Olmec origins remains. Again, this seems to contradict the position taken in volume 2.

Phases are merely subdivisions created by the archeologist, usually on the basis of perceived changes in the stratigraphic record. Whether they have cultural reality is always a matter of debate, but they provide convenient units within which artifacts can be discussed and compared. However, changes are always in danger of being overemphasized. The San Lorenzo phase markers, Calzadas Carved and Limón Carved-Incised, are said to appear suddenly at the site. Yet since these markers are used to distinguish the San Lorenzo phase from the Chicharras phase there can never be an identified transition.

In the same way, I do not see the end of the San Lorenzo phase as "sudden," the result of a great destruction. No evidence of any "cataclysm" at the site is presented other than the mutilation of the monuments. However, the authors point out (p. 298) that some monuments were mutilated earlier. Evidence from La Venta suggests that later monuments at that site received mutilation as well.

Thus monument mutilation was a recurring act. Most monuments were probably portraits of rulers and were destroyed at their death (Grove, "Olmec monuments: mutilation as a clue to meaning," in *The Olmec and their Neighbors*, Dumbarton Oaks Research Library and Collections, 1981). The careful burial of the monuments was certainly not an act of iconoclasts or a cataclysm that destroyed the ceremonial center. Admittedly, the ceramic change around 900 B.C. at San Lorenzo was significant, but, as the authors note (p. 188), it was essentially a pan-Mesoamerican change, a change I would hesitate to ascribe to new populations everywhere.

I have spent a great deal of time in this review discussing the interpretations of Coe and Diehl because such interpretations in a book of this caliber tend to become orthodoxy. On the basis of the archeological data, alternatives are equally justifiable; all must await further testing. In spite of my reservations, volume 1 is a very valuable and worthwhile documentation of San Lorenzo Olmec material culture. The monument illustrations by artist Felipe Dávalos are superb, and one almost wishes they were in a separate portfolio so that they could be framed and displayed. The volume demonstrates the beauty and rich culture that were Olmec.

Volume 2 is enjoyable reading. Beginning with an entertaining introduction and history of the area, it provides an interesting ethnographic study of the area's modern human ecology. Human adaptation is stressed, and the region's rich

potential is demonstrated. Several models are thoughtfully discussed in the final chapter. The authors conclude that the high productivity of the abundant river levee lands and the richness of the fish resources were prime factors in the growth of indigenous complex culture here, an argument preferable to the intrusions hypothesized in volume 1. Control of the river levees and crop surpluses paved the way for a bifurcation of society into elite and commoners. This particular model is derived by analogy to recent developments of political power in the village today.

The archeologist Robert Wauchop once lamented that recent archeological reports had become dry technical monographs. Were he alive today, he would find that, though parts of this book are dry and technical (it is difficult to make stratigraphic descriptions anything other than dull), much of the writing is anecdotal and enjoyable, with honest and often humorous admissions of problems encountered, portraying both the project and the archeologists more realistically.

The scholarship and production of these volumes are both excellent. With the oil boom on the Gulf Coast having all but obliterated the site of La Venta, with skyrocketing inflation and modernization there, and with dwindling research budgets here, *In the Land of the Olmec* may unfortunately be the final major documentation of Gulf Coast Olmec culture.

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