

## ARCHEOLOGICAL RESEARCH 3: MESOAMERICA

*MESOAMERICAN ARCHAEOLOGY: NEW APPROACHES*. Edited by NORMAN HAMMOND. (Austin: University of Texas Press, 1974. Pp. 474. \$15.00.)

This is a collection of twenty-five papers by twenty-nine British and American authors presented at a symposium on Mesoamerican archeology held by the University of Cambridge Centre of Latin American Studies in August 1972, and also includes an introduction by G. R. Willey. In spite of the title, the volume is a collection of miscellaneous studies most of which deal with archeology but some of which focus on ethnohistory and ethnology. The papers lack a unifying theme, although three-fifths are concerned with Maya studies. What the book most clearly reflects is the richness of anthropological data on Mesoamerica and the varied approaches used to study them. The editor makes no claim for comprehensiveness in terms of areal coverage or research orientation, so the papers are not necessarily fully representative of recent or current Mesoamerican archeology. Nevertheless, most Mesoamerican archeologists will find something of interest in the book.

Five papers deal with regional chronological sequences and, to a greater or lesser extent, with inter-areal comparison. These include papers by T. A. Lee, Jr. on the Middle Grijalva area, Chiapas; R. A. Grennes-Ravitz on the Early Formative occupation of the site of Iglesia Vieja, Morelos; D. C. Grove on Early and Middle Formative highland Olmec traits, primarily in Morelos and the Basin of Mexico, and their relation to Gulf Coast Olmec culture; R. L. Rands on the ceramic sequence at Palenque; and G. Williams's study of surface materials from the upper Rio Verde along the Zacatecas-Jalisco border in West Mexico.

An important contribution is G. L. Cowgill's paper on the quantitative methods that he has developed and used for analyzing the quantities of ceramic, artifactual, and architectural data collected by participants in the Teotihuacan Mapping Project. R. Millon's paper on the study of urbanism at Teotihuacan is a condensed version of volume 1, part one of the *Teotihuacan Mapping Project*, published in 1973 by the University of Texas Press.

Papers by P. R. Furst and A. G. Miller treat the interpretation of symbols and motifs in pre-Columbian mural paintings. Furst draws on ethnographic, ethnohistorical, and ethnobotanical data to show that the central figure in the Tepantitla mural at Teotihuacan represents a mother goddess depicted in association with the halucinogenic-seed producing morning glory plant. Miller argues that twisted cords depicted in a mural in the Temple of the Diving God at Tulum are an example of umbilical cord symbolism.

Several papers deal specifically with ethnographic and ethnohistorical data. G. Brotherson discusses the origin and significance of the Aztec god

Huitzilopochtli. G. H. Gossen describes the function of a Chamula calendar board; his paper is complemented by A. Marschack's technical study of the board. J. E. S. Thompson, employing historical accounts and ethnographic data, argues that the pre-Hispanic "canals" of the Rio Candelaria basin, Campeche, functioned as fish stockpounds rather than waterways for canoe traffic. H. B. Nicholson discusses the historical context of the town of Tepepolco where Sahagún first began systematically to compile ethnographic data on the peoples of the Basin of Mexico.

A. Digby describes his experiments with an instrument formed by two crossed trapezes that, by casting shadows, can be used to calculate the passage of days during the year. His argument that this type of instrument was used by Mesoamerican astronomers is supported by examples of representations of the instrument in pre-Columbian art.

Three papers deal with population and demography in the Maya area. R. E. W. Adams derives estimates of the elite population at Uaxactun based on variation in palace rooms. D. E. Puleston is concerned with estimating whole site populations and discusses problems of variation in density of residential structures in and between Tikal and Uaxactun. N. Hammond uses nearest neighbor analysis to study the distribution of Late Classic ceremonial centers in the Petén and its immediate vicinity.

The remaining papers also examine the Maya area. L. H. Feldman presents data on species of Pacific Coast marine shells found at some Maya sites. J. A. Sabloff, W. L. Rathje, D. A. Friedl, J. G. Connor, and P. L. W. Sabloff summarize the research design and preliminary results of the Cozumel Project with emphasis on Cozumel as a possible Postclassic port-of-trade and its relation to Mayapan. J. P. Molloy and W. L. Rathje present evidence in support of their hypothesis that political alliances were formed among the Classic Maya by exchange of women from core zone centers to buffer zone centers, which may have functioned to assure consistent supplies of economic goods to the core area. G. R. Willey suggests that the Classic Maya hiatus—a period of marked decline in stela erection and ceremonial center construction during the latter half of the sixth century—can be seen as a prelude to the Maya collapse, and that both were caused by disruptions in symbiotic relations with contemporaneous groups elsewhere in Mesoamerica. D. H. Kelley presents a brief history of Asian traits, which seem to occur in the Mesoamerican calendar and which he thinks could be useful in establishing a correct correlation of the Maya calendar. J. Gifford summarizes his thoughts and impressions on Maya prehistory including the origins of the Maya, the relation of Maya art to Classic period society, and factors related to the collapse. Finally, in a paper specifically concerned with archeological methods in an ecological-processual framework, B. J. Price discusses the possible application of an ethnographically derived model of the cargo system to studying the Classic Maya.

The meaning of the phrase "new approaches" could be argued, but to anyone familiar with recent developments in American archeology it would hardly seem appropriate as a title for this book. Are we to consider presentation

of new data, occasional use of statistics, and rare mention of systems theory as equivalent to new approaches? Some papers reveal sophistication in methods and techniques, but there is a general lack of concern with what Kluckhohn called theory and methodology ("The Conceptual Structure in Middle American Studies", in *The Maya and Their Neighbors*, A. M. Tozzer, ed. [D. Appleton-Century Co.: New York and London, 1940]), which would include questioning of premises and consideration of what kinds of explanations are to be sought in archeology and how. The word hypothesis is mentioned frequently, but few attempts are made to outline carefully implications to be tested in the archeological record. Culture process is also mentioned but there is little discussion of how the study of culture process might proceed.

Taken as a group, the papers reveal a lack of concern among investigators for trying to articulate and pursue a common problem orientation. One possible exception involves a hypothesis proposed previously by W. L. Rathje and discussed to some extent in the papers by Hammond, Molloy and Rathje, Price, and Willey. In general form it states that "complex sociopolitical organization rises in response to the need for procurement and allocation of critical resources or services" (*American Antiquity* 36, no. 3 [1971]:278). Rathje has shown elsewhere how this can be applied to the development of early Classic Maya civilization. Whether or not one agrees with the specifics, such models, which integrate economic, sociopolitical, and ideological aspects of culture, can provide direction for theoretical studies as well as yield specific implications that can be tested archeologically. It remains to be seen whether the authors represented in this volume and Mesoamericanists in general will pursue this type of research orientation.

MARCUS C. WINTER

*Instituto Nacional de Antropología e Historia,  
México*