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both rectangular and circular houses were found throughout the area surrounding the mound. Three clusters of isolated monopolar magnetic anomalies are suspected to represent cemeteries. Possible compound fences, perhaps similar to those depicted on the Terán map, also were identified.

McKinnon argues that the Battle Mound site was clearly not a "vacant" ceremonial center, and he discusses the implications of varying approaches toward interpreting spatial scale when using models such as the Terán map. The Battle Mound site likely was occupied for several centuries, but given the nature of the available data, the chronological resolution is poor. Only three radiocarbon dates, all from the mound area, have been obtained, and the limited excavations inhibit conclusions about the sequences and timing of changes in use of space. In the final chapter, McKinnon recommends that future work concentrate on investigating the nature of the geophysical anomalies to verify the hypothesized residential and cemetery areas and on the recovery of datable materials to understand the timing of construction and use of this extensive site.

This report is a superb example of combining previously unpublished field research carried out more than a half century ago with up-to-date geophysical techniques to produce a body of information that will be fundamentally important in future research in the Caddo area and the U.S. Southeast. It is an excellent addition to the high-quality volumes in the Arkansas Archeological Survey's Research Series.

Reclaiming the Hopewellian Ceremonial Sphere: 200 BC to AD 500. A. MARTIN BYERS. 2015. University of Oklahoma Press, Norman. xii + 428 pp. \$65.00 (hardcover), ISBN 978-0-0861-8688-7.

Reviewed by Karen Y. Smith, South Carolina Department of Natural Resources

No single concept is more ubiquitous in the literature on the archaeology of the Eastern Woodlands and the Middle Woodland period (100 BC to AD 500) than the Hopewell Interaction Sphere (HIS) and its variants. Joseph Caldwell ("Interaction Spheres in Prehistory," in *Hopewellian Studies*, 1964) coined the concept to account for two striking Middle Woodland–period patterns in the archaeological record. The first is that a suite of identical, or nearly identical, mortuary artifacts have been found to occur over great distances across the Eastern Woodlands. The second is a complete lack of concomitant similarities within the secular (i.e., non-mortuary) record at widely separated

sites that nevertheless share these mortuary materials. That archaeologists have observed similarities over a vast area at all suggested to Caldwell that some form of interaction took place. The mortuary context in which those similarities were observed, Caldwell reasoned, meant that the interaction was religious in nature, perhaps even along the lines of a religious cult.

In Reclaiming the Hopewellian Ceremonial Sphere, A. Martin Byers ambitiously seeks to reinvent or, as he put it, "reclaim" the HIS model so that it carries more explanatory power. Christopher Carr ("Rethinking Interregional Hopewellian 'Interaction" in Gathering Hopewell: Society, Ritual, and Ritual Interaction, 2005), who also sought to "deconstruct" the HIS model, serves as a foil throughout Chapter 1. Byers's two main issues with the HIS model are that it requires (1) Hopewell communities to be polities, and (2) Hopewell mortuary practices to be exclusively funerary in nature. Instead, according Byers, Hopewell communities were heterarchical, with inclusive rather than exclusive territoriality, and their mortuary practices were world renewal rituals aimed at releasing the living soul. Their "mortuary mounds were not corporate markers for kin-based communities" (p. 18) but were a further part of Hopewell world renewal efforts.

Byers argues that community polities, by virtue of their exclusive territoriality and the related "stranger effect" cannot explain the widely dispersed, transregional practices that are observed in Hopewell. Instead, explaining transregional patterning requires a radical rethinking of the way these societies were organized. In Chapter 2, Byers outlines his ideas about Hopewell community organization, introducing concepts such as autonomy and inclusive territoriality, and more fully elaborating on heterarchical communities. He also introduces another component of his new Hopewell ceremonial sphere model, the cult sodality, which he then expands on in Chapter 3. The cult sodality, which Byers suggests is of the ecclesiastic sort, participated in sacred games and performed complex ritual tasks for the purpose of world renewal.

Chapter 4 covers the sacred bundle and ritual performance, whereas chapters 5 and 6 delve more deeply into the mortuary rituals associated with the Ohio Hopewell, in particular. In chapters 7 through 12, Byers addresses different aspects of other autonomous regional ceremonial spheres, including the Illinois-Havana, the Indiana (Mann), and the Swift Creek-Weeden Island spheres. Byers considers only the latter not to be a regional Hopewellian ceremonial sphere, in that it has a distinctive material assemblage. Chapter 13 closes out the volume by examining the collapse of Hopewell at the end of the Middle Woodland period.

My one issue with the book is not with the ideas presented in it but rather with the verbose way in which they are presented. Excessive length of both sentences and concept terminology significantly limits comprehension for the average reader. One sentence in the first paragraph consists of an astonishing 71 words. Some concepts are five or more words long (e.g., "dispersed third-order world renewal cult sodality heterarchy"). Editing to reduce the lengths of sentences and terms would have helped greatly with the readability of the volume.

Readers should also be aware that this is not a book that they can begin in the middle. Each chapter builds on the preceding one, and each newly introduced concept has a place in the overarching argument. For those interested in pre-Columbian social organization, in Hopewell, or in the Middle Woodland period, I recommend this book, but I advise that they be prepared to invest time in digesting its contents.

I leave the book convinced that Byers is right about the need to rethink the way Hopewellian societies were organized. Although all models are imperfect, the most useful ones are those that explain the most aspects of the patterning observed in the archaeological record. There is the risk, however, that models, in trying to account for more and more, become too complex themselves. When this happens, they can lose their explanatory power altogether. Readers should judge for themselves whether Byers's intricate model adequately explains the material complexities observed across the Hopewellian world—or whether it has become too complex to explain anything well. I suspect many readers will find that the model presented in this volume falls somewhere in between.

The Pueblo Bonito Mounds of Chaco Canyon: Material Culture and Fauna. PATRICIA L. CROWN, editor. 2016. University of New Mexico Press, Albuquerque. xiv + 274 pp. \$85.00 (hardcover), ISBN 978-0-8263-5650-5.

Reviewed by Susan C. Ryan, Crow Canyon Archaeological Center

Archaeological expeditions in the 1890s and 1920s focused on the excavation of Pueblo Bonito—one of several great houses in Chaco Canyon, New Mexico—and the two refuse mounds directly south of its enclosing wall. Trenches were placed in both mounds to locate burials (none were found) to examine geomorphology and to develop a ceramic sequence based on stratigraphy. A limited number of artifacts

was collected during these excavations and are presently housed at the American Museum of Natural History and at the Smithsonian National Museum of Natural History. Neil Judd supervised the last of the trench excavations in 1927, backfilling the units with fill that had been shoveled to the edges during fieldwork.

Fast forward to 2004-2007, when W. H. Wills and the University of New Mexico were granted permission from the National Park Service to conduct the Chaco Stratigraphy Project (CSP) by reopening three of Judd's trenches. The permit allowed for re-excavating and screening the disturbed fill, recording and sampling stratigraphy, and cataloguing and analyzing artifacts. The primary research questions driving the CSP related to the production, exchange, consumption, and discard of artifacts from Pueblo Bonito. Utilizing datasets from Pueblo Alto, small house sites such as 29SJ629, and other sites within and outside of the canyon, materials collected and analyzed from the trenches were compared. This offered an unprecedented opportunity to address issues regarding the production, exchange, consumption, and discard of material culture at Pueblo Bonito, with consideration of both historic and modern excavation results.

Chapter 1 of The Pueblo Bonito Mounds of Chaco Canyon guides us through the historical background of previous research and introduces us to the CSP, methods used, and associated research questions. Chapters 2 through 5 focus on pottery, including grayware (Chapter 2), whiteware (Chapter 3), red/brown ware (Chapter 4), and worked sherds (Chapter 5). Chapters 6, 7, and 8 focus on lithic artifacts, including chipped stone tools (Chapter 6), ground stone tools (Chapter 7), and ornaments/pigment (Chapter 8). Chapter 9 presents the results of faunal analyses. The final chapter (10) summarizes these findings and extends their interpretations with additional comparative analyses focused on production (of pottery, chipped stone tools, ground stone tools, plants and animals, ornaments, and textiles), exchange (of ceramics, chipped stone, macaws and parrots, shell, turquoise and other minerals, and stimulants such as cacao and Ilex), consumption (feasting and ritual drinks), and discard (ritual disposal, discard pathways, and accumulation rates).

CSP results indicate that the mounds formed as household refuse was discarded over the span of approximately 125 years during the Bonito Phase (AD 900–1140). The West Mound was formed slightly earlier than the East Mound, and it fell out of use earlier as well. Materials recovered indicate exchange with regions outside of the canyon, with a