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

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gradual shift in relationships from the Four Corners area to the north, then to areas further south, and finally westward to the Cibola/Mogollon area. A high percentage of materials came from the Chuska area, either through exchange or direct acquisition at the source. Pueblo Bonito residents specialized in and produced a wide variety of artifacts, including ceramics, chipped stone tools, ground stone tools, and ornaments. There is evidence that all artifact classes recovered from the excavations of Pueblo Bonito's rooms and kivas are also present in the mounds. These include items less frequently recovered, such as cylinder jars and macaw remains. Project results also suggest that feasts took place at Pueblo Bonito and that two distinct groups composed of numerous households may have discarded their refuse separately, thereby creating the East and West Mounds, respectively.

After a century of archaeological investigations, numerous questions remain about the residents of Pueblo Bonito. The CSP has advanced our understanding considerably by collecting and analyzing thousands of artifacts to provide modern-day interpretations of issues significant to anthropology. This well-written and well-organized volume is a must-read for any scholar working in the U.S. Southwest and for any archaeologist who is conducting research on a previously excavated (professionally or otherwise) site. *The Pueblo Bonito Mounds of Chaco Canyon* demonstrates the research potential of disturbed contexts, and it highlights what can be learned by reexamining the archaeological record with modern perspectives and techniques. The authors invite further research to broaden our knowledge of Pueblo Bonito's residents and their relationship to other great and small houses throughout the regional system. CSP data from Pueblo Bonito would be valuable for further efforts in examining the mounds as part of the built environment, determining if residents were full-time or seasonal occupants, reconstructing population estimates based on artifact accumulation rates, and reconstructing environmental conditions based on pollen, archaeobotanical, and faunal data.

Standing on the Walls of Time: Ancient Art of Utah's Cliffs and Canyons. KEVIN T. JONES. Photography by LAYNE MILLER. 2019. University of Utah Press, Salt Lake City. vi + 153 pp. $19.95 (paperback), ISBN 978-1-60781-674-4.

Reviewed by Polly Schaafsma, Museum of Indian Arts and Culture, Santa Fe

Standing on the Walls of Time by Kevin Jones, former Utah State Archaeologist, is a personal plea in defense of the rock art of Utah. The book includes 14 short chapters, a map, a glossary, and 152 color photographs by Layne Miller (and one by Jones). A list of references at the end is a guide to further reading. The book is written in a colloquial style to appeal to the general public. The chapters are brief, averaging around two pages or shorter, and are generally accompanied by 10 to 12 photographs. Scenic landscapes and photos of archaeological habitation sites and features are included with the presumed aim of contextualizing the rock art. The rock painting and petroglyph examples range from ancient Archaic hunter-gatherer to historic Ute. Featured are the awe-inspiring Archaic Barrier Canyon style and Fremont anthropomorphs, and some less well-known sites are also included among the photographs.

Bolstered by a plethora of imagery, the volume makes a heartfelt appeal to the reader to engage with the ancient people who created these paintings and carvings on stone "canvases" across the stunning landscapes of Utah's Colorado Plateau. Jones rightfully asserts that the ancient creators of the rock art held the same human complexities as we, the observers, have. Further, he takes the position that these images are really art, and similar to art produced today, it had many functions. This point is important. While this reviewer generally concurs with Jones in maintaining that the medium is not the criteria, there is considerable debate within the rock art research community about whether rock art should be considered art as opposed to something else. In Utah, however, its status as art is commonly undeniable.

Beyond offering a simple and brief guide-book framework of chronology and cultural sequences, there is little regard here for scholarly research. Jones beseeches his reader to emotionally engage with rock art and, through the images, reach out to the humanity of the past. He claims that knowing rock art's meaning is impossible, proposing that a person unfamiliar with the Judeo-Christian tradition would not associate a painting portraying a serpent, an apple, a man, and a woman with the concept of "original sin." This would be impossible, and Jones makes an excellent point. Admittedly, much in the interpretive realm remains inaccessible to archaeologists, but useful approaches to understanding the diverse functions and meaning of rock art in Utah and elsewhere do exist in the archaeological literature.

While the text harbors a few gems of commentary as Jones pleads his case, unfortunately, there are significant problems. Some are factual. Too much credibility is assigned to the possible existence of Paleoindian art in Utah, especially in the case of the Bluff "mammoth," an alleged petroglyph site that has been debunked through geological analysis. In more than a dozen

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