

BOOK REVIEW



Leaving Mesa Verde: Peril and Change in the Thirteenth-Century Southwest, edited by Timothy A. Kohler, Mark D. Varien, and Aaron M. Wright. 480 pp., 42 illustrations, 27 tables, foreword, preface, index, references cited. Amerind Studies in Archaeology, University of Arizona Press, 2010. \$65.00 (cloth) ISBN 978-0-8165-2885-1.

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This important book brings together new data and a variety of analytic techniques for a better understanding of the prehispanic depopulation of the Mesa Verde region and the migrations of its inhabitants to other parts of the Southwest. Research on this topic has a venerable history in American archaeology, but this book began in 2007 as a Society for American Archaeology symposium. Participants were then invited to the Amerind Foundation for additional discussion, and this volume is the result of these endeavors.

Brief prefatory remarks by John Ware and Timothy Kohler are followed by a valuable, clear—though densely-written—introductory chapter by Mark Varien (chapter 1). The succeeding chapters then focus on different perspectives on the problems of Mesa Verde depopulation and subsequent migrations. Chapters by Brett Hill et al. (chapter 2), Michael Berry and Larry Benson (chapter 3), Aaron Wright (chapter 4), Timothy Kohler (chapter 5), and Andrew Duff et al. (chapter 7) emphasize new population estimates, provide refined paleoclimate reconstructions, and present innovative data on resource use and resource depletion. Different scales at which population decline and migration may be seen are a focus of several chapters. The macroregional perspective provided by Hill and his colleagues (chapter 2) is nearly pan-southwestern because it compares the northern San Juan, the Zuni and Hopi areas, and the Hohokam regions of the Lower Salt and Gila river drainages. James Allison (chapter 6) further expands the geographic scale of observation to include the Fremont of Utah, and Jeffrey Dean (chapter 13) augments his concluding observations on climate and environment with a case study of depopulation of the Kayenta region.

Four chapters then shift the focus away from factors related to environment and demography toward an emphasis on social and cultural features of depopulation and migration. Kristin Kuckelman (chapter 8) looks at warfare and inter-

personal violence. Donna Glowacki (chapter 9) explores social networks within the larger Mesa Verde region. Scott Ortman (chapter 10) and Bill Lipe (chapter 11) each offer a different perspective on relationships between the Mesa Verde and the Northern Rio Grande. Ortman emphasizes specific continuities between Northern Rio Grande Tewa-speaking villages and Mesa Verde archaeological sites while Lipe's fascinating discussion details archaeological features known from the Mesa Verde that are absent in the Northern Rio Grande—features that he notes were "lost in transit" (p. 262). Boyer and others (chapter 12) elaborate a position that denies a Rio Grande destination for Mesa Verde immigrants. Finally, informative discussions that highlight environmental, especially climatic, considerations (Dean, chapter 13) and the important institutional history of research on southwestern depopulations and migrations (Catherine Cameron, chapter 14) conclude the volume.

The volume is well suited as a resource for professionals and advanced students of archaeology and allied disciplines. All of the chapters are well written and make good use of tables, maps, and site plans, as appropriate. The book is less accessible for a popular audience or undergraduates for two reasons. First, there is a good deal of technical vocabulary. Second, contributors sometimes contradict one another, and it is difficult for non-experts to evaluate why different conclusions were reached. Are differences a result of using different tools of measurement and analysis or because one argument is likely wrong and another correct? One example concerns archaeological reconstructions of past populations, especially estimating "momentary" (i.e., contemporaneous) population. This is a problem for archaeology in general, and many archaeologists envy those working in the Southwest because tree-ring dating enhances the precision with which sites can be dated and thus enables a relatively clear picture of how many were occupied at the same time. Yet even within the Mesa Verde area different contributors develop population estimates from different data sets.

In addition, comparative data sets include central and southern Arizona (Hill and others, chapter 2), the southern Colorado Plateau and Rio Grande (Berry and Benson, chapter 3), and the Northern Rio Grande (Boyer et al., chapter 12). Among all of these, the effects of differences in data resolution and analytic techniques cannot be underestimated. For example, Varien (chapter 1) and others (Wright, chapter 2; Kohler, chapter 5) use the Village Ecodynamics Project (VEP) database—specifically stem and leaf diagrams—to analyze tree-ring dates. Hill and others use the Coalescent Communities Project (CCP) database, the chronology for which is largely dependent on refined ceramic seriation. Berry and Benson use data from the Laboratory for Tree-ring Research but not stem and leaf diagrams. Boyer and others (chapter 12) use the New Mexico Cultural Resources Inventory System (NMCRIS), which uses entirely different measures of occupation spans and site sizes (area rather than room counts), and so on. These approaches lead to entirely different conclusions that are not thoroughly explained.

For example, using VEP study area data, Varien estimates that the population declined from 10,622 to zero in about 25 years between AD 1260 and 1286 (p. 16). If one considers a larger Mesa Verde region, as Glowacki does (chapter 9), depopulation is far more gradual, occurring over about 140 years (pp. 206–207). Varien reasonably attributes this difference to observations made at different regional scales. However, Boyer and his colleagues (chapter 12) conclude that there was no immigration from Mesa Verde into the northern Rio Grande region, largely because they exclude data from the Rio Chama drainage with its many, very large, post-1300 sites from their population estimates. These differences are a potential minefield for casual readers.

Two chapters are especially noteworthy because they will likely lead to new paths of inquiry. Kohler's (chapter 5) presentation of VEP population estimates, new measures of agricultural productivity, and reduction in wild resources (diverse game and fuel) by people living in large aggregated settlements raises many questions for long-term research. Also, Lipe's (chapter 11) list of items "lost in transit" contributes directly to a growing body of literature on cultural memory—why and how some things are remembered and others forgotten (Mills and Walker 2008; Van Dyke and Alcock 2003). As a whole, the book is a welcome, data-rich compendium of current research and thinking about the contexts, timing, and possible meanings of the loss of prehispanic population at Mesa Verde.

REFERENCES

- Mills, Barbara J., and William H. Walker (editors)
2008 *Memory Work: Archaeologies of Material Practices*. School for Advanced Research, Advanced Seminar Series. Santa Fe.
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