

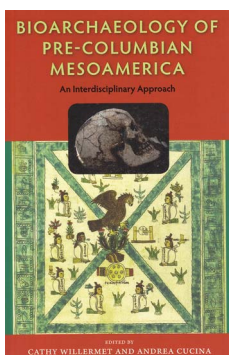
Review article

Interdisciplinary explorations of the Mesoamerican past

John W. Verano*

CATHY WILLERMET & ANDREA CUCINA (ed.). 2018. *Bioarchaeology of pre-Columbian Mesoamerica: an interdisciplinary approach*. Gainesville: University of Florida Press; 978-0-81305-600-5 \$90.

ÉLODIE DUPEY GARCÍA & MARÍA LUISA VÁZQUEZ DE ÁGREDOS PASCUAL (ed.). 2018. *Painting the skin: pigments on bodies and codices in pre-Columbian Mesoamerica*. Tucson: University of Arizona Press; 978-0-8165-3844-7 \$75.



Bioarchaeology of pre-Columbian Mesoamerica: an interdisciplinary approach is the latest volume in a series from the University Press of Florida 'Bioarchaeological Interpretations of the Human Past: Local, Regional, and Global Perspectives', edited by Clark Spencer Larsen. With this contribution the series now comprises 20 published volumes that take a bioarchaeological approach to the study of ancient human remains from various regions and time periods.

Bioarchaeology is a term that was introduced in the USA in the late 1970s by biological anthropologist Jane Buikstra to describe the application of biological anthropology to archaeological research questions. Its use has become increasingly common in recent decades among scholars in the USA, Latin America and Europe, although in the UK the term *Osteoarchaeology* is more commonly used to describe this research. Whichever name one prefers, a common thread is the shift from typological and descriptive osteological monographs towards an emphasis on applying theoretical models and interdisciplinary approaches to reconstructing the life histories, health and population dynamics of past societies from the analysis of human remains.

The chapters in this volume illustrate the application of bioarchaeology to questions of migration and mobility, ethnicity, social identity and mortuary practices among prehistoric populations of central Mexico and the Maya area. The editors and contributing authors emphasise the importance of interdisciplinary approaches in exploring these research questions, as is evident in their individual chapters.

Following two introductory chapters by the volume editors, the first part of the book examines evidence of ancient migration and mobility using measures of biological distance determined from dental morphology (Chapter 3) and by testing for concordance between data from ceramic style distribution and strontium isotope analysis of skeletal remains (Chapter 4). Chapter 5 compares biological data on demography and biodistance with mortuary pattern variation in a series of archaeological sites from northern coastal Yucatán and discusses these results with reference to early Spanish accounts of coastal ports and trading systems in this region.

The three chapters in the second part of the volume are devoted to explorations of ethnicity and social identity in pre-Columbian Mesoamerica. Chapter 6 uses evidence of dental health and early childhood stress to address an ongoing debate over whether Maya skeletons (especially those of children) found in caves and rockshelters of central Belize were human sacrifices (as has been suggested by some scholars and amplified in media reports) or simply members of local groups who were afforded differential mortuary treatment for some reason. The authors reach the latter conclusion based on their analysis of dental health among different burial samples, finding that there was little variation in developmental/dietary stress indicators between the various sites and burial contexts examined, and no consistent evidence of poor health in infants buried in particular caves. In examining teeth for enamel defects, they stress the

* Department of Anthropology, Tulane University, New Orleans, LA 70118, USA (Email: verano@tulane.edu)

importance of using both visual and microscopic techniques for identifying the presence and severity of growth defects.

Chapter 7 will be of particular interest to scholars not familiar with the advances that have been made in recent decades in understanding the ancient Maya. These include breakthroughs in iconographic analysis and epigraphy (deciphering and interpreting Maya texts), as well as data from recent archaeological excavations. Although Chapter 7 is co-authored by two archaeologists (Golden and Houston) and a bioarchaeologist (Scherer), it focuses not on skeletal or dental remains, but on a broad range of evidence drawn from ethnography, linguistics, ethnohistory, archaeology, epigraphy and mortuary practices, as well as from archaeological fieldwork done by the authors. Its principal focus is on how the Maya perceive themselves and 'others' in the present day, in the colonial period, and moving back into pre-Columbian times—exploring how community, identity and morality were defined and contrasted to others considered foreign and distinctive. From linguistic identity to conventions of sitting position, the chapter explores how the Maya self-identified and distinguished themselves from near and distant neighbours.

Chapter 8 focuses on the bioarchaeology of the major Maya centre of Copan, which, as a result of a series of archaeological projects, has produced the largest sample of human skeletal remains from the Maya lowlands. In this chapter, the authors examine migration, mobility and ethnicity at Copan using data from osteological analysis (age and sex, cultural modification of the skull and dentition), mortuary and settlement patterns, and from recent isotopic studies of strontium and oxygen isotopes. Their mortuary analysis reveals differences in the demographic profile of locals (a full range of ages) and outsiders (a few infants or children, mostly adults). Isotopic analysis identifies some individuals as long-distance migrants to Copan, and suggests a much higher percentage of migrants than at other large Maya centres such as Tikal and Xcambó where comparative isotopic data are available. The authors explore several possible reasons for this difference, including differences in the relative number of short- vs long-distance migrants and differences in the local geology of surrounding regions that enable easier identification of outliers. The presence of a variety of distinct forms of cranial and dental modifications provides another source of evidence for migration and cultural practices of body modification

among locals and migrants. In sum, this chapter provides a rich study on migration, mobility and cultural change from an interdisciplinary perspective.

In the final discussion chapter of this book, Frances Berdan provides a very useful overview of the research approaches taken here by the editors and authors, drawing upon her long career in Aztec studies and her interactions with scholars from multiple disciplines and theoretical backgrounds. In discussing bioarchaeology as a tool for understanding the past, she draws an important contrast between Volume 9 of the *Handbook of Middle American Indians* (Wauchope 1970) that provided what was, for its time, an up-to-date survey of the state of physical anthropology's understanding of ancient Middle Americans, and a recent review article on Mesoamerican bioarchaeology by Spence and White (2009) that summarises recent research and how it has evolved from descriptive to theoretical problem-oriented and interdisciplinary approaches. The contributions to this volume certainly reflect these shifts, and Berdan's discussion makes for a very useful review of current research from her own perspective as an art historian working in central Mexico. In sum, this volume has much to offer, not only for specialists in Mesoamerican studies, but for bioarchaeologists and other scholars working on different times and places.

Painting the skin: pigments on bodies and codices in pre-Columbian Mesoamerica also presents an interdisciplinary approach to its chosen topic: the study of pigments and the substrates on which they were applied in pre-Columbian Mesoamerica. While much of its focus is on materials analysis, it takes a novel approach to the subject, not limiting itself to the chemical identification of pigments but examining them in a cultural context, and specifically in terms of their application to different 'skin-like' surfaces (human and animal skin, bark and other plant skins), which functioned as active players in the symbolic and shared meanings of painted surfaces. Advancing the identification of specific pigments and binders, the contributors to this volume highlight the value of non-destructive or minimally destructive techniques for the analysis of inorganic and organic substances and their application to various substrates. Such studies have proven possible only recently with the ability to collect and analyse very small samples without risking visible and permanent damage to valuable documents and archaeological objects housed in museums in various countries.

Mesoamerica is unique among ancient New World cultures in the richness and diversity of painted manuscripts on animal hide, bark and other plant substrates. These provide a rich corpus of documents that include histories, genealogies, maps, religious rituals, divination and other subjects. Although the majority of codices and indigenous maps were destroyed by the Spanish in the early colonial period, a sample of pre-contact and early colonial manuscripts has survived, primarily from central Mexico but also from the Maya region. Traditionally, most research has focused on interpreting painted images and their function, with limited focus on the pigments used and their significance to those who painted them, possessed them and employed these documents in various social contexts. While there was early and continuing interest in the composition of certain pigments such as 'Maya Blue', materials analysis of codices, maps and other documents was limited until recently by issues of sampling and laboratory techniques. This volume reflects the recent work of an international group of laboratory scientists, art historians and archaeologists from Mexico, Italy, France, Spain and the USA, and reflects the true interdisciplinary and collaborative nature of current research on this topic.

The volume is divided into two major parts: the first focusing on the painting of human skin (both of the living and the dead) in various contexts in Mesoamerica, examining aesthetic and ritual body painting, the medicinal use of pigments, the mortuary application of pigments to skin, and the combination of colours and scents (e.g. copal, pine resin, acacia gum and chia oil) as communicators of sensory information. Tattooing, while known to have been practised in Mesoamerica from historic accounts and iconographic data, receives less attention due to the extreme rarity with which tattooed skin has survived archaeologically, particularly in the Maya area. Nevertheless, the

chapters in this section illustrate the richness of available data on pigments and their varied uses on the human body.

The second half of the book focuses on the 'skins' of codices: painted manuscripts on deer hide, bark paper and other plant surfaces. These provide the most diverse and numerous examples of the ways in which information was encoded on various substrates. These chapters provide a useful survey of distinctive forms of manuscripts and pigment use, which is particularly of interest for those not familiar with these documents and their distinct forms and functions. Also included is a chapter on plaster walls and the 'skin' of architectural monuments (Chapter 13), a useful reminder that all surfaces can be considered as 'skins' on which images and pigments can be displayed.

The editors finish with an excellent summary of the scope and achievements of these interdisciplinary studies of ancient 'skins', and the Foreword by Stephen Houston is an enjoyable and informative read. The collaborative nature of this research is highlighted by the fact that the volume is a joint publication by the University of Arizona Press and the Instituto de Investigaciones Históricas of the Universidad Nacional Autónoma de México.

References

- SPENCE, M.W. & C.D. WHITE. 2009. Mesoamerican bioarchaeology: past and future. *Ancient Mesoamerica* 20: 233–40.
<https://doi.org/10.1017/S0956536109990083>
- WAUCHOPE, R. (ed.). 1970. *Handbook of Middle American Indians* (volume 9). Austin: University of Texas Press.