

ENGAGED ARCHAEOLOGY *in the*
SOUTHWESTERN UNITED STATES
and NORTHWESTERN MEXICO

edited by

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and Patrick D. Lyons

15TH BIENNIAL SOUTHWEST SYMPOSIUM
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1

Engaged Archaeology Today

SARAH A. HERR,
PATRICK D. LYONS, AND
KELLEY A. HAYS-GILPIN

The 2016 Southwest Symposium explored “engaged archaeology.” The Arizona State Museum and the School of Anthropology at the University of Arizona, the Department of Anthropology at Northern Arizona University, and the Laboratory of Tree-Ring Research at the University of Arizona collaborated to host this fifteenth biennial conference to promote new ideas and directions in the archaeology of the US Southwest and the Mexican Northwest. Past symposia highlighted key research topics such as migration, mobility, demography, technology, identity, social change, ecology, interaction, connectivity, and regional archaeological cultures, to name a few. The 2010 Hermosillo symposium focused on archaeological practice and transnational archaeologies. The resulting volume (Villalpando and McGuire 2014) included papers on cross-border collaborations, public education and outreach, heritage management, and archaeological tourism. 2016 seemed the right time to revisit and expand that theme with special attention to collaboration with descendant communities, anthropologists beyond archaeology, and colleagues in the natural sciences.

In this volume, based on the 2016 symposium, we again take the position that the way we practice archaeology shapes both our research questions and the results. Some archaeologists lament the current lack of unified theory in the discipline, as researchers draw from diverse theoretical and methodological toolkits to implement their projects. The choice to

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pursue a particular theoretical or methodological approach can determine the sources of information to which we give credence and thus structure what we infer and how we make interpretations. As we seek to increase the relevance of anthropology in a world that challenges the utility of social science research, we find that an engaged approach—one type of practice—expands our ability to elicit human stories from the past and make them meaningful in an information-saturated global world (see *Sapiens: Anthropology/Everything Human* at www.sapiens.org). The authors who contributed to the 2016 symposium and this volume show how more meaningful inferences about the past can come from collaborative and participatory work with descendants and local communities, public archaeology, and interdisciplinary work.

ENGAGED ARCHAEOLOGY

Contemporary practice requires archaeologists to understand that, ultimately, we work with humans as our subjects, that we often work with public funds, and that we need to maximize the quality and relevance of our work. Archaeology is a starting point for larger insights within social science frameworks. In a recent article, Stephen Plog and his coauthors (2016, 3) capture these ideas in the term *engaged archaeology*, which they characterize as an approach that “promotes strong linkages between the implications of findings from archaeological research and the needs and concerns of different stakeholders, both Native American groups and society at large.” Primary areas of engagement in current practice include (1) working with Indigenous people to address concerns about archaeological research, traditional knowledge, and the preservation of cultural heritage; (2) understanding the interactions of humans with their physical environments and responses to change; (3) understanding social structures and their resilience; and (4) creating connections between people—including recent or ancient migrants—and places, as in the past, people may have moved more freely than current borders allow (Altschul et al. 2017; IHOPE 2018; iPinch 2016; Kintigh et al. 2014; Klein et al. 2018; Ripanti and Mariotti 2018; Sgouros and Stirn 2016).

Engaged archaeology is an information-maximizing approach with the potential to offer rich, detailed reconstructions of past lives, events, and processes. It requires establishing or rekindling relationships with Indigenous cultural experts and practitioners in other sub-disciplines of anthropology, that is, taking a “four-field” approach—in some ways, going back to the origins of our discipline in the United States. It also entails learning about the past through interdisciplinary studies involving experts working in the natural sciences. By

integrating theories, methods, and data from multiple perspectives, engaged archaeologists use a wide range of insights to make inferences about the unwritten histories of past peoples, with potential consequences for informing public policy and advancing human rights while also inviting people to see and understand the world around them in different ways (<https://www.sapiens.org/about-us/> 2019).

ROAD MAP TO THIS VOLUME

The shared goal of the editors and the authors was that this volume showcase the benefits and point out the challenges of engagement in the archaeology of the southwestern United States and northwestern Mexico. We begin that process here by framing each of the three groups of selected contributions and highlighting key conclusions as well as crosscutting themes. Contributions to parts I and II situate archaeology within the broader potential of a more fully anthropological approach to research. In part I, this work is done in the service of repatriation and demonstrates that meaningful engagement comes through sustained communication and a commitment to mutual understanding. The chapters in part II take as their premise that engagement with ethnographic and linguistic data is indispensable in understanding the archaeological record and modeling the historical trajectories of the region's Indigenous peoples. Chapters in part III demonstrate the value of engagement with the natural sciences, through archaeometry and direct hands-on experience with the raw materials, tools, and methods ancient people mastered. Experimental archaeology, particularly replicating ancient technologies based on the documentary record and archaeological data, provides a deep understanding of the properties of materials and techniques researchers share with people in the past. This understanding then strengthens inferences about specific manufacturing techniques and exchange networks.

In parts I and II, authors highlight the value of incorporating ethnographic and linguistic information in archaeological interpretations, whether through reference to the work of disciplinary elders (e.g., Benedict 1934; Bunzel 1992 [1932]; Eggan 1950; Fewkes 1904; Parsons 1925; Titiev 1944), by collaborating with contemporary ethnographers, or by designing and conducting research in partnership with Indigenous cultural advisers (see also Colwell 2016; Ferguson et al. 2015). In fact, it is critical to employ *all* of these methods. Written ethnographies, despite their abundant historical detail, need to be contextualized within an understanding of both past and present power structures. Demonstrating the value of working together, four chapters in this volume

are written or coauthored by archaeologists, cultural resource managers, or museum specialists who are themselves members of descendant communities.

Engagement with other scientific disciplines is also key to gaining new insights into the past, limited only by the availability of and access to new technologies and instruction. By applying physics, biology, and chemistry within an anthropological framework, we learn about past human knowledge of the environment and its resources, as well as the values that shaped choices about which components of the physical environment were extracted, managed, or accommodated and at what cost. Archaeology's reliance on the natural sciences is implicit and routine as we engage with geophysicists, geomorphologists, petrographers, chemists, and materials scientists who inform and contextualize our work in the field or in the lab, as part III's authors demonstrate. However, as aspects of our collaborative work become increasingly specialized, we must remember to reintegrate our results by sharing them widely and contributing to a comprehensive and anthropological synthesis (Altschul et al. 2017).

Many of the chapters that follow remind us that the study of the past does not have to be oriented solely toward material culture. Words, traditional knowledge, and social structure can also be artifacts if we consider, too, their formation processes. As with artifacts, some are preserved *in situ*, and some are transformed in patterned ways that help us reconstruct time, movement, and relationships. By enhancing our understanding of the intangible relationships represented by archaeological remains, we can talk about kinship between people and kinship with places. DNA, osteological studies, artifacts, songs, and stories all demonstrate the resilience of ancient peoples, elucidating lifeways, movement, alliance, and intermarriage. When archaeologists can embrace both science and traditional histories, the ways we can know the past expand. Diverse interpretations are not mutually exclusive but rather are new layers of knowledge to be integrated, enhancing our understanding. Increased engagement challenges us to ask new kinds of questions, born of worldviews beyond our own and data that we cannot see.

It would be naive, however, not to acknowledge the challenges of the engaged approach. Even as we include some people or some methods, others are excluded as projects prioritize some logistical factors—time, access, proximity, or certain relationships—over others, and these choices have consequences. The legacies of history can also impact our ability to work collaboratively. Attempts by archaeologists to work cooperatively with government representatives, tribal communities, anthropologists, or other scientists can be challenging or fail because of relationships that emerged during the nineteenth-century Indian Wars or twentieth-century land claims trials, for example. The extraction of

DNA from ancient human remains (e.g., Carlyle et al. 2000; Kennett et al. 2017; Snow et al. 2010, 2017), although logical from a natural science perspective, raises significant ethical issues, especially in the context of collaboration with descendant communities in a postcolonial setting.

PART I: RESEARCH IN THE SERVICE OF REPATRIATION

The authors of this set of chapters consider the ramifications of state and federal burial protection and repatriation laws. Despite protests at the time these laws were enacted, they have led to more, not less, bioarchaeological and ethnographic research. A key context of engagement has been determination of cultural affiliation, pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) and state statutes. T. J. Ferguson explains in chapter 2 that according to the NAGPRA regulations (43 CFR 10.2 (e), Code of Federal Regulations 2015), establishing cultural affiliation entails consideration of many lines of evidence, including geography, kinship, biology, archaeology, anthropology, linguistics, folklore, oral tradition, history, and other relevant information or expert opinion. Exploring each of these lines of evidence presents an invaluable opportunity for collaborative research involving tribes (see, e.g., Dongoske 1996; Dongoske et al. 1993, 1997; Ferguson 2003a, 2003b; Ferguson and Loma'omvaya 1999) and other descendant communities.

Research undertaken in the service of repatriation has produced new theoretical perspectives on the transmission of social identity and cultural property over time and space and has altered the practice of archaeology and ethnography. Through the need to assess lineal descent or cultural affiliation, the profession's long-term objectification of the human skeleton is defeated, and modern people are necessarily reconnected with ancient people. We see NAGPRA compliance as engaged archaeology in action, proceeding from the premise that people are not data, emphasizing the need for mutual respect and collaboration between scientists and descendants, and reminding us that the protection of human remains and repatriation are issues of human rights.

In the chapter that follows, Ferguson introduces the seven contributions to the session he organized. He also provides a history and summary of federal and state repatriation laws, including the National Museum of the American Indian Act, NAGPRA, and the state burial protection and repatriation statutes of Arizona and New Mexico.

Peter J. Pilles Jr., Kimberly Spurr, and Leigh J. Kuwanwisiwma (chapter 3) provide a start-to-finish account of NAGPRA work conducted by the Museum of Northern Arizona on behalf of the Coconino National Forest

and in consultation with the Hopi Tribe and the Pueblo of Zuni. Their team of seventy people, including archaeologists, curatorial staff, administrators, bioarchaeologists, and tribal consultants, completed one of the largest repatriation and reburial projects in the US Southwest. Gathering the consistent information required for repatriation meant walking a careful line as the team tried not to exploit the work for its research potential—even as both archaeologists and Hopi collaborators recognized the opportunity to obtain new and interesting information. Pilles and his colleagues describe the clearly delineated areas of authority and the decision-making processes that made the project a success from many perspectives.

In chapter 4, Arleyn W. Simon, Christopher Caseldine, Sarah Striker, Christopher Grivas, Neysa Grider-Potter, and Darsita R. North describe the complexities of working with legacy collections in the context of the NAGPRA-driven repatriation of collections from the sites of Nuvakwewtaqa at Chavez Pass. The challenges of the project included assessing osteological and artifact collections from looted and professionally excavated contexts. The assessment required extensive archival research to understand provenience designations and field methods, consultation regarding respectful treatment and documentation standards, and detailed work with osteological collections and funerary objects.

Debra L. Martin (chapter 5) explains how bioarchaeological research can illuminate adaptation and sustainability in modern communities. Her call to compare prevailing conditions before and after the colonial experience is compelling. She considers the effects of poor health and violence on individuals within broader community and temporal contexts, paleoepidemiology, the long-term consequences of childhood illness, the cumulative effects of violence on female captives, and the rich interpretive context made possible by osteobiographies.

John A. McClelland (chapter 6) describes how working in concert with descendant communities in the context of NAGPRA and state burial protection and repatriation has changed bioarchaeological methods and the priority of research questions. Bioarchaeological documentation has become more standardized. In addition, attention to reconstituting individuals as fully as possible and reuniting each individual with the objects placed with that person at death has increased. McClelland reports that descendant groups prioritize knowledge of the age, sex, health, and cultural affiliation of each individual, as this information may affect the logistics of reburial.

Michael Heilen and Teresita Majewski (chapter 7) showcase the complexities of the Joint Courts Project, the excavation of a large historic period cemetery in an urban setting. Having witnessed the loss of social capital by

New York City as a result of its poorly administered New York African Burial Ground Project, Pima County, Arizona, and its consultant Statistical Research, Inc., planned and executed a project acclaimed for its consultation framework and the significant information it generated. The Joint Courts Project was conducted under the Arizona Antiquities Act, which allows consultation with a range of descendant communities more varied than those required by NAGPRA; thus Native Americans, the Hispanic community, and veterans participated in decision making.

Vernelda Grant and Cécile R. Ganteaume (chapter 8) describe their repatriation work with two different units of the Smithsonian Institution and the very different outcomes of these processes. In both instances, repatriation claims by the Western Apache NAGPRA Working Group were initially denied, though one claim was ultimately successful. Key issues raised include the relative weighting of published and unpublished ethnographic information in the evaluation of claims, the need to better understand how and why tribal members in the past may have shared knowledge with and transferred objects to anthropologists, and the development of institutional policies that have created barriers to instead of opportunities for working together.

Chip Colwell (chapter 9) closes out part I by modeling the history of repatriation in the United States in terms of five stages: recognizing the need to balance the interests of Native Americans and archaeologists, conflict, compromise, the enacting of laws, and the often complicated and sometimes unsettling process of applying laws. He explains how the preceding chapters relate to this framework.

PART II: RESEARCH AT THE INTERSECTION OF ARCHAEOLOGY AND ETHNOLOGY

The 2014 Southwest Symposium explored the kinds of social units of which ancient southwestern societies were composed and the roles they played in social interaction (Harry and Roth 2019). The 2016 conference built on that topic by examining the integration of ethnology and archaeology, revisiting the direct historical approach with an intensive focus on kinship systems. In the session organized by John A. Ware and Peter A. Whiteley, *Research at the Intersection of Archaeology and Ethnography*, contributors characterized the ethnographic cultures of the Southwest as end points on historical trajectories and argued that the trajectories themselves have preserved important information (Ware 2014). In the chapters included here, they take the approach that contemporary cultures must be viewed through a historical lens

and archaeological cultures through an ethnographic lens. The chapters in part II move from the reconstruction of kinship terminologies and kinship systems to making inferences about social and political systems and then addressing contemporary concerns with kin and kin-like relationships in contemporary Native American communities in the southwestern United States.

In chapter 10, Patrick Cruz and Scott Ortman reconstruct Kiowa-Tanoan kin terms and build a model of ancient social organization in early Ancestral Pueblo communities where Kiowa-Tanoan languages, including Tewa, were probably spoken. They conclude that exogamous moieties and matrilineal descent likely structured ancestral Tanoan social organization, which would account for the dual divisions in many Ancestral Pueblo village plans.

John A. Ware makes a persuasive case, in chapter 11, that archaeologists have much to gain by giving comparative ethnology, kinship systems, and the direct historical approach another chance after decades of neglect. In his case study, Ware concludes that Pueblos used pan-tribal ritual sodalities to form regional alliance networks that facilitated the incorporation of immigrants.

Peter M. Whiteley follows, in chapter 12, with an application of comparative ethnology and an examination of kinship systems that reinforces Cruz and Ortman's (chapter 10) evidence for Rio Grande Tanoan exogamous moieties as forerunners of today's ritual dual divisions. Whiteley explains how ancestral Hopi and Zuni Crow matrilineal kinship systems would have deployed marriage rules to build alliance networks among many interacting groups. Whiteley provides a case and a road map for rigorously examining both vertical and horizontal transmission of sociocultural features (including kinship systems, sodalities, and language) in ways that will lead to useful comparative analysis over time and space in any region.

Jane H. Hill, in chapter 13, makes a similar point by considering Yuman kin terminologies in an evolutionary framework. She concludes that the complicated and changing kin terminologies used by the various Arizona Yuman-speaking tribes provide evidence for the importance of building and maintaining alliances in the contexts of long-distance trade systems, large-scale warfare, and the movements of refugees. Understanding kinship is therefore essential to understanding deep history in this region, whether in addressing the much neglected Patayan archaeological complex, the nuances of Hohokam history and regional relationships, Yavapai relationships with Sinagua and other Puebloan patterns, or archaeological evidence of conflict and exchange networks.

The next three chapters explore what archaeology can do for or with contemporary descendant communities, given a mutual understanding

that kinship relationships and responsibilities are foundational to Native American worldviews. In chapter 14, Kelley A. Hays-Gilpin explores Native American commentary on the cultural importance of the Grand Canyon and concludes that most communities see the Grand Canyon as an embodiment of relationships of kin, reciprocity, nurturance, and stewardship responsibility between humans and land. Familiarity with Indigenous ontologies about land/human relationships helps archaeologists and resource managers understand community concerns and informs both sustainable management and research.

In chapter 15, Lisa C. Young and Susan Sekaquaptewa describe their collaborative approach to exploring some unusual legacy collections—plant specimens (including seeds) collected eighty years ago from named Hopi families and curated today at the University of Michigan. Although archaeologists focus attention on artifacts and sites to learn about the past, Native peoples use the same objects and places to create and maintain connections to ancestors. These uses do not conflict and can be mutually supporting. Students at the university and in a Hopi day school used teleconferencing to discuss continuities and changes in Hopi farming and foodways and, in particular, their relationship to seeds. These insights helped the archaeologists understand otherwise mysterious deposits of burned corn in the archaeological record of Chevelon Pueblo, an ancestral Hopi village.

In the final chapter of part II, Kerry F. Thompson explains several ways in which the lived experience of Native people is relevant to engaged archaeology. As a Navajo archaeologist living on the reservation, Thompson explores the facets of identity that challenge both insiders and outsiders, those who find themselves negotiating the complexities of identity and belonging. Thompson argues that if archaeologists really want to do relevant, collaborative, community-engaged archaeology, they need to understand the issues facing Native communities today. For Navajos, traditional teachings and legal and political constructs of identity and relatedness are not congruent; and identity, archaeology, and anthropology are inescapably entangled with the challenges of poverty, health, housing, education, infrastructure, and development.

PART III: INTERDISCIPLINARY APPROACHES TO MESOAMERICAN CONNECTIONS

The contributors to part III showcase interdisciplinary engagement integrating materials science and anthropology—as well as scholarly communication across national and linguistic boundaries. They examine the resource choices

and technological practices of craftspeople engaged in the manufacture of high-value objects and the social organization of producers and consumers.

Emiliano Ricardo Melgar Tísoc (chapter 17) explores the production of turquoise ornaments in the Southwest/Northwest by means of intense engagement with the same raw materials, tools, and techniques used by ancient technicians—in other words, experimental replication. He aims to answer a question that has long interested archaeologists on both sides of the border: whether turquoise was traded from the Southwest/Northwest to Mesoamerica as a raw material or as finished objects. He reviews sourcing studies, economic contexts, and symbolic meanings of turquoise and presents original research on manufacturing to identify materials and techniques used in the production of turquoise objects from thirty-one sites in Mesoamerica, northwestern Mexico, and the southwestern United States. He demonstrates that the identification of different regional manufacturing traditions and lapidary styles, together with provenance analyses and detailed studies of archaeological contexts, can elucidate economic and social relationships across Mesoamerica and neighboring regions.

Guillermo Córdova Tello and Estela Martínez Mora (chapter 18) review previous research on the origins of raw materials and technologies used to produce blue-green stone ornaments, including turquoise, that circulated over long distances in pre-Hispanic times and present the results of original field research in Zacatecas and Durango, Mexico, experimental archaeology, and multidisciplinary laboratory research in collaboration with physical scientists. Their work clarifies the origins of turquoise artifacts from what is now Arizona and New Mexico and chrysocolla and amazonite from the Chalchihuites area of Mexico.

IN CONCLUSION: HOW TO ENGAGE

We opened this chapter with the comment that we see engaged archaeology as a pathway to improving the quality and relevance of contemporary practice by speaking to issues as wide-ranging as heritage and identity, recognizing the importance of anthropogenic landscapes, and understanding societal potential for resilience. But how do we get from archaeology to addressing societal issues when our traditionally collected data are strongly spatial and focused on the material world and our most defensible inferences are often functional, behavioral, and economically rational? Whether those first-order interpretations, in isolation, offer deeply compelling insights into the past is arguable. What they do provide, however, is a starting point for further inquiry. We suggest that engaged archaeology, with its openness to new information, can

help fill in gaps that even the best archaeologist can rarely bridge and offers a path to an enriched archaeology. The chapters presented here show how this can be accomplished.

Chapters in this volume show that when archaeologists are willing to share authority, other ways of knowing and other useful datasets can be incorporated into inferences about the past (Colwell and Ferguson 2010). Although we need to assess the interests of those with whom we engage (as well as knowing our own) when we share authority—placing archaeological constructs side by side with scientific data and traditional knowledge—archaeology can expand to explore identity, place, and heritage for people from any number of backgrounds in a globalizing world. These chapters show what can be gained when tribal members, natural scientists, heritage specialists, government agents, students in college classrooms, and international partners engage in respectful conversations, build trust, and talk about heritage.

These chapters show the value of looking beyond material culture for vestiges of the past. Many contributors to this volume enlist approaches from other fields of anthropology, looking for the “intangible” artifacts of connectedness in kin terms and words that express the enduring relationships among people, objects, and places. Like all interdisciplinary work, which involves embracing whole new classes of data, such efforts also require new methods, novel interpretative frameworks, and intellectual rigor to communicate replicable research.

If, as practitioners in archaeology, we believe in the power of the discipline to influence contemporary experience, we can seek ways to put archaeology to work. Who or what bigger goals can archaeological methods and theory serve? In engaged archaeology, we aren't seeking to understand a static past for the purpose of knowing but to add insight to the lives of modern people.

The values ascribed to archaeological resources (e.g., research, cultural heritage, aesthetic, educational, economic) vary with the social and historical frames of reference of a community and with the nature of the archaeology under consideration (Lipe 1974, 2009, 43). Because archaeology can serve many purposes, in a variety of contexts, archaeological practice necessarily involves negotiated and pragmatic approaches, as its contributions are measured against any number of other interests and issues.

In this volume, a number of authors put archaeology to work in the service of NAGPRA and so serve human rights. These chapters demonstrate how the words we say and those we write have the power to affect the way people are treated now and how they may be treated in the future. When we are entrusted with interpreting and communicating about heritage and identity,

we need to act with accountability and transparency. When we draw on legacy work, as is often the case in assessing cultural affiliation, we must consider how we or our predecessors collected our data and examine the assumptions. We mesh past work with current practice and invite critical assessments from other stakeholders. Even as we hope that each project has a successful outcome, the enduring promise of engagement is in the practice and the potential it creates for the bettering of archaeology in the future.

REFERENCES

- Altschul, Jeffrey H., Keith W. Kintigh, Terry H. Klein, William H. Doelle, Kelley A. Hays-Gilpin, Sarah A. Herr, Timothy A. Kohler, Barbara J. Mills, Lindsay M. Montgomery, Margaret C. Nelson, Scott G. Ortman, John N. Parker, Matthew A. Peeples, and Jeremy A. Sabloff. 2017. "Fostering Synthesis in Archaeology to Advance Science and Benefit Society." *Proceedings of the National Academy of Sciences of the United States of America*, October 17, 114 (42): 10999–11002.
- Benedict, Ruth. 1934. *Patterns of Culture*. New York: Houghton, Mifflin.
- Bunzel, Ruth L. 1992 [1932]. *Zuni Ceremonialism*. Reprint, edited by Nancy Parezo. Albuquerque: University of New Mexico Press.
- Carlyle, Shawn W., Ryan L. Parr, M. Geoffrey Hayes, and Dennis H. O'Rourke. 2000. "Context of Maternal Lineages in the Greater Southwest." *American Journal of Physical Anthropology* 113 (1): 85–101.
- Code of Federal Regulations. 2015. "Title 43: Public Lands: Interior, Part 10—Native American Graves Protection and Repatriation Regulations." https://www.ecfr.gov/cgi-bin/text-idx?SID=913a018b2e6e6b978b0040e805b8e6fe&tpl=/ecfrbrowse/Title43/43cfr10_main_02.tpl.
- Colwell, Chip. 2016. "Collaborative Archaeologies and Descendant Communities." *Annual Review of Anthropology* 45: 113–127.
- Colwell-Chanthaphonh, Chip, and T. J. Ferguson. 2010. "Intersecting Magisteria: Bridging Archaeological Science and Traditional Knowledge." *Journal of Social Archaeology* 10 (3): 325–346.
- Dongoske, Kurt E. 1996. "The Native American Graves Protection and Repatriation Act: A New Beginning, Not the End, for Osteological Analysis—a Hopi Perspective." *American Indian Quarterly* 20 (2): 287–296.
- Dongoske, Kurt, Leigh Jenkins, and T. J. Ferguson. 1993. "Understanding the Past through Hopi Oral History." *Native Peoples* 6 (2): 24–31.
- Dongoske, Kurt E., Michael Yeatts, Roger Anyon, and T. J. Ferguson. 1997. "Archaeological Cultures and Cultural Affiliation: Hopi and Zuni Perspectives in the American Southwest." *American Antiquity* 62 (4): 600–608.

- Eggan, Fred. 1950. *Social Organization of the Western Pueblos*. Chicago: University of Chicago Press.
- Ferguson, T. J. 2003a. "Anthropological Archaeology Conducted by Tribes: Traditional Cultural Properties and Cultural Affiliation." In *Archaeology Is Anthropology*, edited by Susan D. Gillespie and Deborah L. Nichols, 137–144. *Archeological Papers of the American Anthropological Association* 13. Washington, DC: American Anthropological Association.
- Ferguson, T. J., ed. 2003b. *Yep Hisat Hoopog'yaqam Yeesiwa (Hopi Ancestors Were Once Here): Hopi-Hobokam Cultural Affiliation Study*. Kykotsmovi, AZ: Hopi Cultural Preservation Office, the Hopi Tribe.
- Ferguson, T. J., Stewart B. Koyiyumptewa, and Maren P. Hopkins. 2015. "Co-Creation of Knowledge by the Hopi Tribe and Archaeologists." *Advances in Archaeological Practice* 3 (3): 249–262.
- Ferguson, T. J., and Micah Loma'omvaya. 1999. *Hoopog'yaqam niqw Wukoskyavi (Those Who Went to the Northeast and Tonto Basin)*. Kykotsmovi, AZ: Hopi Cultural Preservation Office, the Hopi Tribe.
- Fewkes, Jesse Walter. 1904. "Two Summers' Work in Pueblo Ruins." In *Twenty-second Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution 1900–1901, Part 1*, 1–195. Washington, DC: Government Printing Office.
- Harry, Karen G., and Barbara J. Roth, eds. 2019. *Interaction and Connectivity in the Greater Southwest*. Boulder: University Press of Colorado.
- IHOPE. 2018. "The Integrated History and Future of People on Earth (IHOPE)." <http://ihopenet.org>.
- iPinch. 2016. "Intellectual Property Issues in Cultural Heritage (IPinCH): Theory, Practice, Policy, Ethics." <https://www.sfu.ca/ipinch/>.
- Kennett, Douglas J., Stephen Plog, Richard J. George, Brendan J. Culleton, Adam S. Watson, Pontus Skoglund, Nadin Rohland, Swapan Mallick, Kristin Stewardson, Logan Kistler et al. 2017. "Archaeogenomic Evidence Reveals Prehistoric Matrilineal Dynasty." *Nature Communications* 8. doi:10.1038/ncomms14115.
- Kintigh, Keith W., Jeffrey H. Altschul, Mary C. Beaudry, Robert D. Drennan, Ann P. Kinzig, Timothy Kohler, W. Fredrick Limp, Herbert D.G. Maschner, William K. Michener, Timothy R. Pauketat, Peter Peregrine, Jeremy A. Sabloff, Tony J. Wilkinson, Henry T. Wright, and Melinda A. Zeder. 2014. "Forum: Grand Challenges for Archaeology." *American Antiquity* 79 (1): 5–24.
- Klein, Terry H., Lynne Goldstein, Deborah Gangloff, William B. Lees, Krysta Ryzewski, Bonnie W. Styles, and Alice P. Wright. 2018. "The Future of American Archaeology: Engage the Voting Public or Kiss Your Research Goodbye!" *Advances in Archaeological Practice* 6 (1): 1–18. doi:10.1017/aap.2017.34.

- Lipe, William D. 1974. "A Conservation Model for American Archaeology." *Kiva* 39 (3-4): 213-245.
- Lipe, William D. 2009. "Archaeological Values and Resource Management." In *Archaeology and Cultural Resource Management: Visions for the Future*, edited by Lynne Sebastian and William D. Lipe, 41-64. Santa Fe, NM: School for Advanced Research Press.
- Parsons, Elsie C. 1925. *The Pueblo of Jemez*. New Haven, CT: Yale University Press.
- Plog, Stephen, Paul R. Fish, Donna M. Glowacki, and Suzanne K. Fish. 2016. "Key Issues and Topics in the Archaeology of the American Southwest and Northwestern Mexico." *Kiva* 81 (1-2): 2-30.
- Ripanti, Francesco, and Samanta Mariotti. 2018. "'The God of Time Is Heritage of Mine': An Emotional Approach to Public Outreach in Vignale (Italy)." *Advances in Archaeological Practice* 6 (3): 199-211. doi:10.1017/aap.2018.18.
- Sgouros, Rebecca, and Matt Stirn. 2016. "Community Heritage and Place-Based Learning at the Linn Site, Idaho." *Advances in Archaeological Practice* 4 (4): 479-491. doi:10.7183/2326-3768.4.4.479.
- Snow, Meradeth H., Kathy R. Durand, Martha Gustafson, and David Glenn Smith. 2017. "Additional Analysis of mtDNA from the Tommy and Mine Canyon Sites." *Journal of Archaeological Science: Reports* 13: 229-239.
- Snow, Meradeth H., Kathy R. Durand, and David Glenn Smith. 2010. "Ancestral Puebloan mtDNA in Context of the Greater Southwest." *Journal of Archaeological Science* 37 (7): 1635-1645.
- Titiev, Mischa. 1944. "Old Oraibi: A Study of the Hopi Indians of Third Mesa." *Papers of the Peabody Museum of American Archaeology and Ethnology* 22, no. 1. Cambridge: Harvard University.
- Villalpando, Elisa, and Randall H. McGuire. 2014. *Building Transnational Archaeologies/Construyendo Arqueologías Transnacionales: The 11th Southwest Symposium/El XI Simposio del Suroeste, Hermosillo, Sonora, Mexico*. Arizona State Museum Archaeological Series 209. Tucson: Arizona State Museum, University of Arizona.
- Ware, John A. 2014. *A Pueblo Social History: Kinship, Sodality, and Community in the Northern Southwest*. Santa Fe, NM: School for Advanced Research Press.