



THE  
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*Newsletter*

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**VIRTUAL MEETING JUNE 16**

*For Members Only*

**DROUGHT, DUST AND DISPARITY: ARCHAEOLOGICAL PERSPECTIVES  
ON SOCIAL AND ECOLOGICAL CHANGE IN THE SOUTHWEST, THE  
SOUTHERN HIGH PLAINS, AND SOUTHERN AFRICA**

**Alan J. Osborn and Robert K. Hitchcock**

**7:30 pm Tuesday, June 16, 2020**

*Via Zoom*

*At Your Computer or Smart Phone*

Single- to multiple-year drought episodes, especially megadroughts – those lasting 10 years or more – have posed significant challenges for agrarian communities across the Southwest, southern High Plains, and southern Africa in the past two millennia. Particular problems were faced during the Medieval Climatic Anomaly, AD 900–1400. Dry periods are correlated with high levels of atmospheric dust, which contribute to a lowering of rainfall and to human health and economic problems. Archaeological evidence indicates that social disparities expanded between better-off and poorer segments of the populations living in the Southwest, southern High Plains, and the Kalahari Desert region of Southern Africa during these megadrought periods. Excavations of sites occupied between AD 900 and 1400 in all three areas reveal the presence of large numbers of shell beads that apparently were used as social status indicators, identity markers, and symbols that conveyed social information. These beads were circulated over large areas in elaborate exchange systems. Exchange partners were able to take advantage of social alliances they had established through these systems and move to areas that were not as affected by drought. Livelihoods and human well-being were thus correlated, at least in part, with drought, aridity, dust storms, lowered food availability, and higher rates of migration.

Alan J. Osborn is an Associate Professor of Sociology and Anthropology at the University of Nebraska Omaha. He is also the Curator of Anthropology at the Nebraska State Museum at the University of Nebraska in Lincoln, and he is the Director of the Nebraska Archaeological Survey. He obtained his PhD from the University of New Mexico in Albuquerque in 1977. His archaeological field work has been conducted in Arizona, Colorado, Ecuador, Missouri, Nebraska, New Mexico, North Dakota, Peru, South Dakota, and Texas. He has overseen archaeological projects in Canyonlands and Capital Reef National Monument for the Midwest Archaeological Center and in Amistad Reservoir in the Texas-Mexico borderlands. Dr. Osborn has published extensively on Paleoindians in North America and has been part of the debates about the effects of climate change on Paleoindian adaptations and on poison hunting of mammoths, mastodons, and elephants. (continued, next page)

*A day or so prior to the June meeting, an email message will be sent to members with the URL for the Zoom meeting. If you didn't join us for the May meeting via Zoom, it went really well, and we found Zoom easy to use even for folks new to Zoom meetings. At the May meeting we had over 40 connections and since some of those were from computers where two people were watching we estimate there were about 50 people in all. This month there will be no practice session. If you didn't join us last month and are new to Zoom, plan to join the meeting 5-10 minutes before the 7:30 start time to get familiar with Zoom and say "Hi" to everybody already in the meeting.*

He is the co-editor, with Marcel Kornfeld, of *Islands in the Plains: Ecological, Social, and Ritual Use of Landscapes* (University of Utah Press, 2003). He is currently working on two projects: one examining the impacts of drought, rodents, and ritual burning in the Iron Age of southeastern Africa and the other on bean-cooking in corrugated ware pots in the Southwest.

Robert K. Hitchcock is a professor in the Department of Anthropology at the University of New Mexico and a Board Member of the Kalahari Peoples Fund, a non-profit 501(c)(3) organization that provides funding for education, development, and capacity building training for indigenous and minority peoples in southern Africa. He was a member of the Remote Sensing Division of the Chaco Project of the National Park Service at the University of New Mexico in the early 1970s. He has done archaeological fieldwork in Arizona, Botswana, British Columbia, California, Colorado, Greece, Hawaii, Michigan, Namibia, Nebraska, New Mexico, Pennsylvania, Saudi Arabia, and Zimbabwe. He has done applied work on the impacts of large dams, agricultural projects, protected areas, conservation, and refugee resettlement in ten African countries, Afghanistan, Canada, Guatemala, Peru, and the United States. His current grant-funded projects are in Botswana (National Geographic Society) and Namibia (U.S. Department of State). His most recent book is *People, Parks, and Power: The Ethics of Conservation-related Resettlement of Indigenous People* (with Maria Sapignoli, Springer, 2020). [Ed. note: This presentation was originally scheduled for our cancelled March meeting.]

## **MINUTES OF THE MAY 26 VIRTUAL MEETING**

President Evan Kay called the zoom meeting to order at 7:33 pm and briefly relayed the following reports.

From Treasurer Tom Obenauf: AAS received refunds for the payments to the City of Albuquerque for the March, April, and May meetings, which were canceled in the museum meeting space due to the COVID-19 pandemic. Membership is at 162. A \$200 donation was received.

From Membership Chair Mary Raje: The AAS membership brochures have been printed and are being stored by Ann Braswell. The Membership Directory is ready for distribution.

From the Rock Art Group Chair Dick Harris: The group is inactive due to the pandemic but writing reports. They still have some large sites to record.

From Field Trip Chair Pat Harris: No field trips are scheduled; she hopes to organize something as restrictions ease.

Evan then introduced Larry Loendorf, co-founder of Sacred Sites Research, Inc., a non-profit organization whose goal is to preserve rock art sites across the American West. Loendorf provided the following synopsis of his talk.

Respectfully submitted by Susan King, Secretary

## **THE ARCHAEOLOGY OF ROCK ART**

By Lawrence Loendorf, Sacred Sites Research, Inc.

I had the privilege of delivering the first Zoom lecture to the Albuquerque Archaeological Society. The lecture was one I had already given to the Site Stewards, also via Zoom, as their scheduled meeting was cancelled due to the coronavirus.

Many of the examples used in the lecture were from a recent rock art site recording project in the Carlsbad, New Mexico region. Sacred Sites Research, Inc., worked with Versar, Inc., to record 21 rock art sites. The project – supported by the Permian Basin agreement between the New Mexico State Historic Preservation Office, the Carlsbad Bureau of Land Management, and energy production companies – taught us the importance of recording the whole site and not just the rock art. The resulting redacted publication for this project can be accessed at:

[https://www.academia.edu/41328306/LANDSCAPES\\_OF\\_STONE\\_AND\\_PAINT\\_Documentation\\_and\\_Analysis\\_of\\_21\\_Rock\\_Art\\_Sites\\_in\\_Southeastern\\_New\\_Mexico](https://www.academia.edu/41328306/LANDSCAPES_OF_STONE_AND_PAINT_Documentation_and_Analysis_of_21_Rock_Art_Sites_in_Southeastern_New_Mexico)

Rock art sites are more complex than the images on the rocks. In the past, the individuals who recorded rock art sites would recognize and include information about bedrock metates and mortar holes at the site, but they ignored other aspects. The focus was on the pictographs and petroglyphs and not the site setting. For example, we have

learned that the tools used to peck the petroglyphs may often be found at the base of the panels or the paint brushes used for making the pictographs are found below the panel in dry caves. We have also discovered that rock cairns or other rock features are associated with the rock art.

Working with American Indian consultants who were part of the recording team on the Permian Basin project and with us at the sites daily as they were recorded, we learned that many rock features are related to the site. In some cases, they represent “spirit trails” or connecting nodes to other rock art sites.

The site setting is an especially important component of a rock art site, with auditory, directional, and other traits that can be essential in understanding the images.

The noting of medicinal plants at rock art sites is an example of the approach to the archaeology of rock art. Twenty of the last 25 rock art sites recorded by Sacred Sites Research in the Jornada Mogollon region had tobacco, datura, mountain laurel, marigolds, or morning glories growing at the base of the panels. Desert tobacco, the most common plant, was found at 18 of the 20 sites.

The recognition of memtoliths, or rock features that resemble humans or animals, at rock art sites is another example of the need to observe the entire site setting and not just the rock art. These features can be key to interpreting the rock art.



*Use of a camera on a pole with a flash on a pole. Using a remote shutter release, the flash and camera are synchronized. Mark Willis with camera, Laurie White with flash, and Lawrence Loendorf with remote.*

As it does with all archaeological research, new technology has played a significant role in the archaeology of rock art. Drones, for example, make it much easier to map large sites and to plot features associated with the rock art panels. Mark Willis, a pioneer in aerial photography of archaeological sites, has used cameras on poles, kites, and blimps to record sites at locations where drones are not allowed for security reasons. In fact, cameras on poles are now standard for sites with high panels. Willis has devised a system where a camera on a pole is supported by a flash on another pole. The person holding the flash can move it around the panel to capture images from all angles and create shadows across the petroglyphs. These images can then be combined with computer software to create a composite image with maximum clarity

Without question, however, the development of DStretch software to study faded pictographs is the most important innovation in rock art research in the past century. Jon Harman, who developed the software, has a website where it is possible to download DStretch to your smartphone and use it for examination of rock paintings and associated surfaces in the field.

Plasma Oxidation dating of the paint in pictographs is another extremely significant addition to rock art research. While it does not work on all rock substrate, when it is applicable it is an exceptionally reliable method for dating rock paintings. Marvin Rowe, who developed the method, currently operates a Plasma Oxidation dating laboratory at the New Mexico Office of Archaeological Studies in Santa Fe. Another laboratory for Plasma dating is operated by Karen Steelman, a former student of Rowe, at the Shumla Archaeological Research and Education Center in

Comstock, Texas. An internet search will provide an excellent description of Plasma Oxidation dating at the Shumla Center.

The use of portable x-ray fluorescence (pXRF) is another useful tool for identification of rock art pigments. There are also some current attempts to use pXRF in establishing relative ages for petroglyphs. The research by Meinrat Andreae at the Max Planck Institute for Chemistry is an example.

In addition to the examples from the Permian Basin project, I used sites on Fort Bliss, Texas and New Mexico. Sacred Sites Research appreciates the support of archaeologists Martin Stein, Elia Perez, and Belinda Mollard, who recognize the importance of rock art sites to the overall archaeological record.

## BOOK REVIEW

*The Global Spanish Empire: Five Hundred Years of Place Making and Pluralism*, edited by Christine D. Beaulé and John G. Douglass. Tucson: University of Arizona Press, 2020, 320 pp. \$65 Hardcover (USBN 9780816540846) and \$65 Ebook (USBN 9780816541386).

Reviewed by Matthew J. Barbour

While united by a Spanish-speaking political regime centered in the Iberian Peninsula, the Spanish Empire was incredibly varied in its regional manifestations. It was a pluralistic society in which people of many different ethnicities interacted to form new settlements and organizational systems across the globe. This view of a heterogeneous Spanish Empire is the focus of the book.

*The Global Spanish Empire* examines case studies across Africa, the Americas, Asia, the Caribbean, and the South Pacific to answer questions regarding place making and pluralism. Chapters include: “Introduction: Place Making and Pluralism in the Global Spanish Empire” by Christine D. Beaulé and John G. Douglass; “Contact, Colonialism, and the Fragments of Empire: Portugal, Spain, and the Iberian Moment in West Africa” by Christopher R. DeCorse; “Colonization, Transformation, and Indigenous Cultural Persistence in the Caribbean” by Corinne L. Hofman, Roberto Valcárcel Rojas, and Jorge Ulloa Hung; “Native American Responses to Spanish Contact and Colonialism in the American South” by Christopher B. Rodning, Michelle M. Pigott, and Hannah G. Hoover; “Pluralism and Persistence in the Colonial Sierra Sur of Oaxaca, Mexico” by Stacie M. King; “A Tense *Convivencia*: Place Making, Pluralism, and Violence in Early Spanish Central America” by Laura Matthew and William R. Fowler; “When the Saints Go Marching In: Religious Place Making during the Early Spanish Colonial Period in the Central Andes, 1532-1615” by Kevin Lane; “The People of Solomon: Performance in Cross-Cultural Contacts between the Spanish and Melanesians in the Southwest Pacific, 1568 and 1595” by Martin Gibbs and David Roe; “Places, Landscapes, and Identity: Place Making in the Colonial Period Philippines” by Stephen Acabado and Grace Barretto-Tesoro; “Colonial Surveillance, *Lánchos*, and the Perpetuation of Intangible Cultural Heritage in Guam, Mariana Islands” by James M. Bayman, Boyd M. Dixon, Sandra Montón-Subías, and Natalia Moragas Segura; “Contested Geographies: Place-Making Strategies among the Indigenous Groups of South Texas and Northeastern Mexico” by Steve A. Tomka; and “Importing Ethnicity, Creating Culture: Currents of Opportunity and Ethnogenesis along the Dagua River in Nueva Granada, ca. 1764” by Juliet Wiersema.

The regions covered in the eleven chapters are far from comprehensive. The Spanish Empire was a vast geographic state and many regions, such as Rio de la Plata, are not touched upon in the current publication. However, the editors are to be commended, as the investigations include portions of the Empire not typically mentioned in Western academic studies. Therefore, this collection of case studies is potentially more representative of the broader Spanish Empire than previously published works.

A great example of this inclusivity is “Places, Landscapes, and Identity: Place Making in the Colonial Period Philippines” by Acabado and Barretto-Tesoro. The chapter does an excellent job of examining place making and pluralism in an Asian colonial context. It not only identifies how the Spanish colonial enterprise changed the Philippines, but how various Filipino groups, particularly the Ifugao, responded and defined themselves based upon their experience. This is a concept that remains relevant throughout the Empire and could just as easily be applied to Pueblo peoples in the American Southwest.

However, the best case, hands down, comes from the South Pacific. “The People of Solomon: Performance in Cross-Cultural Contacts between the Spanish and Melanesians in the Southwest Pacific, 1568 and 1595,” by Gibbs and Roe, describes a failed experiment at Spanish place making and pluralism in the Solomon Islands. The narrative utilizes primary sources and the limited archaeological evidence available to craft a story that is unknown to most, including the reviewer. It demonstrates clearly that both the colonists and colonized must be active participants in place making. The failure of both sides to contribute can often lead to disastrous results, as is the case of the abandoned colony on Santa Cruz Island.

Other studies examine more familiar settings such as Mexico and Peru. These are not without stand-alone merit and, in many ways, serve as a preface for more esoteric discussions of topics such as mixed ethnic communities along the Dagua River in present day Columbia.

For those interested in historical archaeology and the colonial period, *The Global Spanish Empire* is a great read. It provides a diverse set of case studies that take a hard look at the varied multi-ethnic societies that develop as a result of Spanish expansion. In compiling and editing this volume, Beale and Douglas challenge archaeologists to look beyond the region in which they work by providing the framework for broader comparison. This is not only an important step forward, but a necessary one if the discipline is going to continue to evolve.

## **MINUTES OF THE ALBUQUERQUE ARCHAEOLOGICAL SOCIETY**

### **BOARD MEETING**

**May 6, 2020, Zoom Meeting**

Present were Evan Kay, Gretchen Obenauf, Ann Braswell, Susan King, Tom Obenauf, John Guth, Cindy Carlson, Mary Raje, Pat and Dick Harris, and Helen Crotty.

A speaker scheduled, pre-COVID, for earlier in the year is willing and able to do the presentation via the Zoom platform. The Board approved that the AAS hold a virtual meeting via the Zoom platform in May.

The Maxwell Museum children’s summer camp for which AAS donated funds will not be held this year, due to the COVID-19 pandemic. The Board voted to tell the Maxwell to apply the donation toward the next year’s camp.

Respectfully submitted by Susan King, Secretary

### **AAS MEMBERSHIP DIRECTORY TO BE DISTRIBUTED ELECTRONICALLY**

The 2020 Membership Directory will be sent electronically to all members for whom we have email addresses. Those who are unable to download and print their own copy may contact Mary Raje at 505-980-0291 or [raje39@icloud.com](mailto:raje39@icloud.com), and she will mail one.

### **NEWS AND NOTES FROM HERE AND THERE**

**New Online Research Tool for Southwesternists.** Jeff Clark, Barbara Mills, Matt Peebles Scott Ortman, and Sudha Ram at the Preservation Archaeology blog announce the launching of cyberSW, a collaborative online software platform with tools for searching, exploring, and analyzing the pre-Hispanic archaeological record of the U.S. Southwest and Northwest Mexico. Stimulating research and dialogue among archaeologists, scholars from other disciplines, tribal members, land managers from various government agencies, and the interested public is the project’s key goal. After a simple registration process, it is available free of charge to any researcher, citizen scientist, tribal member, land manager/owner, or other individual interested in regional archaeology – with the caveat that site locations have been geo-masked to prevent misuse. The effort saved in compiling and standardizing ceramic, obsidian, and public architecture data should revolutionize and stimulate archaeological

research, as well as facilitate interdisciplinary research. [Adapted from *Southwest Archaeology Today*, a service of Archaeology Southwest and <https://bit.ly/2XLfmxr>.]

**The Archaeological Conservancy Celebrates 40 Years.** Rampant looting of Mimbres sites in the 1970s led to the Society for American Archaeology’s engaging Mark Michel, a legislative lobbyist at the time, to address the problem. He played a major role in the passage of the Archaeological Resources Protection Act (ARPA) of 1979. But ARPA only applied to federal and Indian lands, not to private property. The solution, he decided, was to have a preservation organization buy the sites. Michel approached Patrick Noonan, then president of The Nature Conservancy – a nonprofit environmental organization that purchases land in order to preserve it – about also purchasing archaeological sites. “He thought it was a great idea, but he didn’t want to do it,” Michel said. Instead, Noonan showed Michel how to use The Nature Conservancy as a model to start a new preservation organization: The Archaeological Conservancy. Backed by funding from The Rockefeller Brothers Fund and the Ford Foundation, Michel, archaeologist Steven LeBlanc, and physicist and businessman Jay Last founded the Conservancy in 1980 to acquire archaeological sites and preserve and protect them for future research.

In the forty years since it was established, the Conservancy has acquired more than 550 sites in forty-five states. These sites range from Paleo-Indian camps to Ancestral Puebloan villages to ancient mounds to eighteenth-century French and Indian War forts to slave dwellings. The Conservancy is currently seeking donations to purchase the Mimbres site Treasure Hill. The Archaeological Conservancy. <https://bit.ly/3OryhPu>. [Adapted from The Archaeological Conservancy publication *American Archaeology and Southwest Archaeology Today*.].

## CALENDAR CHECK

### *Conferences*

**Pecos Conference 2020.** Postponed to August 5-9, 2021, to be held in Mancos, Colorado.

**ALBUQUERQUE ARCHAEOLOGICAL SOCIETY**  
PO Box 4029, Albuquerque, NM 87196  
[www.abqarchaeology.org](http://www.abqarchaeology.org) and [www.facebook.com/abqarchsoc](https://www.facebook.com/abqarchsoc)

**Annual Dues:** For emailed Newsletter: Student, no charge (provide copy of current ID); Basic Individual \$25; Basic Family \$30. Print Newsletter by First Class Mail: Basic Individual \$30; Basic Family \$35; Institutions/Libraries: \$10 for print Newsletter by First Class Mail, emailed Newsletter at no charge.

### **2020 OFFICERS, DIRECTORS, AND COMMITTEE CHAIRS**

To contact officers or committee chairs, or to change mailing or email address, email [info@abqarchaeology.org](mailto:info@abqarchaeology.org) or consult Membership Directory. Current members can sign up for field trips at meetings or by emailing [trips@abqarchaeology.org](mailto:trips@abqarchaeology.org).

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