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The Monthly Newsletter of the
Arizona Archaeological and Historical Society

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Next General Meeting:
May 17, 2021
7:00 pm (MST)

AAHS@Home (Zoom webinar)
www.az-arch-and-hist.org

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President's Message

by John D. Hall

Beer! Few things define a Southwestern archaeologist more than beer, Marshalltown trowels, and dirt (Flannery 1982). Ironically, it is because of archaeology that we know so much of the early history of beer brewing. Recent archaeological research at Raqefet Cave in Israel has pushed back the beginning of brewing technology to circa 13,000 years! Excavations within the cave have uncovered bedrock



Beer on the beach (photograph by Rodrigo Menezes).

mortars with evidence of fermented wheat/barley-based beer likely used in feasting rituals, dated to 13,700 BP (Liu et al. 2018). In eastern Asia, chemical analysis of pottery from a Neolithic village in the Henan province of China has revealed early examples of fermented beverages (in this case rice, honey, and fruit) dating back to 7,000 BC (McGovern et al. 2004). The early fermentation process was refined and developed over millennia in China. Based on inscriptions from the late Shang Dynasty circa 1200–1046 BC, at least three beverages were distinguished: *chang* (an herbal wine), *li* (probably a sweet, low alcoholic rice or millet beverage), and *jiu* (a fully fermented and filtered rice or millet beverage (McGovern et al. 2004).

Evidence of beer brewing also has long been established in ancient Egypt, extending back to the predynastic era, circa 5500 BC (Hornsey 2007). In fact, the ancient Egyptian City of Abydos may have had the first microbrewery! A recent excavation has uncovered rooms containing more than 40 vessels thought to have been used to heat a mixture of grains and water, perhaps to supply the royal family with

this frothy beverage. The site is thought to be associated with the Pharaoh Narmer, who ruled around 3100 BC. This ancient brewery is thought to have produced about 5,000 gallons of beer at a time (BBC News 2021).

In the U.S. Southwest, Central America, and South America, pre-contact societies fermented beverages with different ingredients than in Asia and the Middle East, but the importance of these drinks was no less. The Inca Empire is well-known for their *chicha* or corn beer, which played an important role in Incan society and identity (Jennings and Bowser 2009). In Central Mexico, *pulque* is an alcoholic beverage made from the fermented sap of agave, not to be confused with mezcal or tequila, which is distilled from agave. *Pulque* has been an important drink in Mexico for thousands of years.

Although not alcoholic, another important ritual drink in Mesoamerica is chocolate (*Theobroma cacao*), used for its

compounds similar to caffeine. In the U.S. Southwest, recent research has identified residue on pottery indicating people consumed both *cacao* from Mesoamerica and holly (*Ilex vomitoria*) from the Southeastern U.S. for caffeine-like substances (Crown et al. 2015). Major pre-contact sites in the U.S. Southwest with evidence of residue from *cacao* and holly include the Ancestral Puebloan region (Pueblo Bonito, Aztec Ruins, Guadalupe Ruin, and Windy Knobb), northern Rio Grande (Pottery Mound Pueblo), the Mimbres region (Galaz and Lake Roberts sites), Mogollon Highlands (Kinishba), southern Arizona (Snaketown and Upper Santan Village) and northern Chihuahua (Site 315), dating between AD 750–1400 (Crown et al. 2015).



Mayahuel, goddess of the maguey (agave), with a mature agave and a pot of fermented pulque (from the Aztec Codex Cihuatl).

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In southern Arizona, the Tohono O’odham use the fruit of the saguaro (*Cereus giganteus*) to produce a fermented wine for traditional rain ceremonies. The O’odham consider saguaros as humankind, or “that which is human and habitually stands on earth” (Nabhan 1982:26). The O’odham recognize the vulnerability of saguaros, as well as their importance to the desert ecosystem. The saguaro is intrinsically linked to O’odham survival, and saguaros play an important part of the rain ceremony. The fruit of the saguaro is harvested and the syrup is fermented in clay pots. In the scorching heat of summer, the O’odham gather to consume this saguaro wine, sing, dance, and recite traditional stories... then it rains (Nabhan 1982). An important part of the O’odham rain ceremony is associated with purging. Participants consume the wine quickly, and the subsequent purging has been likened to “throwing up the clouds” (Nabhan 1982:36, quoted from Underhill 1946). This is a cleansing ceremony, and the ritual returns the saguaro fruit wine back to the earth to incite the essential summer rains.

So, the next time you sit down with the cold fermented beverage of your choice, remember that you are not alone! People have been participating in the ritual of alcohol for more than 10,000 years!

References:

BBC News

- 2021 Abydos Beer Factory: Ancient Large-scale Brewery Discovered in Egypt. *BBC News*. February 15. Electronic document, <https://www.bbc.com/news/world-middle-east-56067717>, accessed March 2021.

Crown, Patricia L., Jiyang Gu, W. Jeffrey Hurst, Timothy J. Ward, Ardith D. Bravenec, Syed Ali, Laura Kebert, Marlaina Berch, Erin Redman, Patrick D. Lyons, Jamie Merewether, David A. Phillips, Lori S. Reed, and Kyle Woodson

- 2015 Ritual Drinks in the Pre-Hispanic US Southwest and Mexican Northwest. *Proceedings of the National Academy of Sciences* 112(37):11436–11442. Electronic document, www.pnas.org/cgi/doi/10.1073/pnas.1511799112, accessed March 2021.

Flannery, Kent V.

- 1982 The Golden Marshalltown: A Parable for the Archeology of the 1980s. *American Anthropologist* 84:265–278.

2007 *A History of Beer and Brewing*. Royal Society of Chemistry, Cambridge, United Kingdom.

2009 *Drink, Power, and Society in the Andes*. University Press of Florida, Gainesville.

2018 Fermented Beverage and Food Storage in 13,000 y-old Stone Mortars at Raqefet Cave, Israel: Investigating Natufian Ritual Feasting. *Journal of Archaeological Science* 21:783–793. Electronic document, <https://doi.org/10.1016/j.jasrep.2018.08.008>, accessed March 2021.

2004 Fermented Beverages of Pre- and Proto-historic China. *Proceedings of the National Academy of Sciences* 101(51):17593-17598. Electronic document, <https://doi.org/10.1073/pnas.0407921102>, accessed March 2021.

1982 *The Desert Smalls Like Rain: A Naturalist in O'odham Country*. University of Arizona Press, Tucson.

1946 *Papago Indian Religion*. Columbia University Press, New York.



*Brought to you by AAHS@Home through Zoom
until we can meet again in person*

Sept. 20, 2021: Takasi Inomata, *TBA*

May 17: Topic of the General Meeting

Eastern and Western Pueblo Divergence: A Study of Network Structure and Social Transformations

Evan Giomi

Archaeologists and ethnographers have long noted many differences in the social organization of the Western and Eastern Pueblos. Describing these differences and understanding their history and origins has been a perennial topic in Southwest Archaeology. In recent years, the greater availability of large data has opened new avenues for examining this topic, and this lecture will present one such approach. I will explain how we have used social network analysis to understand the historical question of when and how Eastern and Western Pueblo societies began to diverge from each other in the period between AD 1200–1700. I will also explain how our results fit into the larger picture of the many major social transformations that swept the Southwest during this time period.



Speaker Evan Giomi is an archaeology Ph.D. candidate at the University of Arizona. His research focuses on more fully understanding the early Spanish Colonial period in New Mexico through understanding Pueblo history in the centuries immediately prior to Spanish conquest in 1598. Evan incorporates large data sets and ceramic studies into his research, and often uses the method of social network analysis to answer questions about the large-scale organization of Pueblo economies.

Registration for this lecture is open to the public, but you must pre-register at <https://bit.ly/Giomi-May21REG>

Suggested Readings:

Peoples, Matthew (editor)

- 2013 Social Networks in the Distant Past. *Archaeology Southwest Magazine* 27(2).
Electronic document, <https://www.archaeologysouthwest.org/product/asw27-2/>.

Whiteley, Peter

- 2018 From Keresan Bridge to Tewa Flyover: New Clues About Pueblo Social Formations. In *Puebloan Societies: Homology and Heterogeneity in Time and Space*, edited by P. M. Whiteley, pp. 103–132. School for Advanced Research Advanced Seminar Series. University of New Mexico Press, Albuquerque.



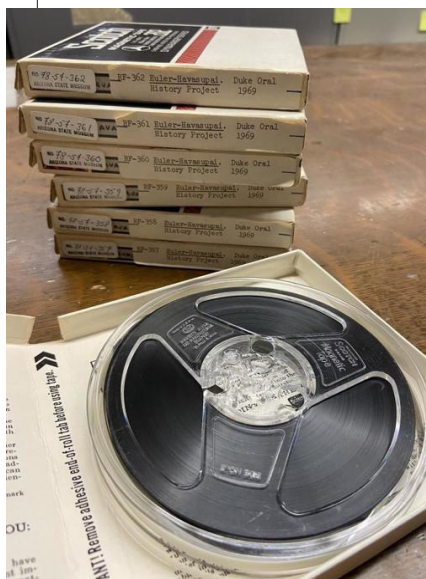
THE DORIS DUKE NATIVE ORAL HISTORY REVITALIZATION PROJECT AT THE ARIZONA STATE MUSEUM

The Arizona State Museum Library and Archives (ASMLA) has a large collection of sound recordings that comprise the American Indian Oral History Collection. Of these recordings, the vast majority were created between 1967 and 1972 with generous funding from philanthropist Doris Duke. The Doris Duke American Indian Oral History Program, conducted at the University of Arizona and seven other universities, was the largest single effort to collect Native American oral history and one of the largest privately funded oral history projects undertaken in the United States. In total, about 6,000 recordings were completed.

In Fall 2020, the Arizona State Museum (ASM) was awarded a \$200,000 grant from the Doris Duke Charitable Foundation (DDCF) to work with the recordings. Because DDCF only grants money to 501(c)(3) nonprofits and the University of Arizona is not technically a non-profit, the Arizona Archaeological and Historical Society (AAHS) graciously agreed to act as financial receiver on behalf of the ASM. AAHS has a long history of helping ASMLA primarily through a biannual book sale they organize to raise funds for ASMLA's annual

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budget. Book sales conducted by AAHS throughout the year provide the ASM Library much needed funding for their operations.

The Duke Program at the University of Arizona was directed by Bernard “Bunny” Fontana, Ethnologist at the ASM at the time. It was created to provide a record of oral traditions by and for the Native American people. The recordings are now turning 50, and their value only increases over time. Many of the interviewees were born at the turn of the century, before Arizona was even a state. The interviews themselves were mostly conducted

by graduate students in the Anthropology Department, but also by faculty and researchers across Arizona.

The collection contains 615 sound cassettes and 219 typed transcripts. In all, 48 researchers conducted 689 interviews from 417 different interviewees. The bulk of the collection documents Apache, Navajo, Akimel O’odham, Tohono O’odham, and Yaqui people. Other tribes from Arizona, California, and Mexico are also represented: including the Mohave, Hopi, Seri, Tarahumara, and Yavapai. The interviewees discuss personal, family, and tribal histories, along with topics such as social culture, education, folklore, health, language, and religion.

Sound recordings are mostly conducted in English, but also Apache, Spanish, Tohono O’odham, and other Native American languages, including endangered languages such as Chemehuevi.

Fortunately, much has been done to preserve the recordings themselves. The original recordings are on 5-inch reel-to-reel ¼-inch magnetic tape. In 1981, a second copy of all originals was made on reel-to-reel tapes and stored in a geographically separate facility from the originals. A grant from the National Science Foundation in

1986 funded the migration of all recordings to audio cassettes. This created access copies to keep pace with modern playback equipment. In 2009, most of the collection was digitized. Continuous migration and curation are needed to keep sound recordings secure for the long term. The Duke funding was not intended to cover the maintenance of materials (or transcription and publication for that matter).

Before the ASMLA can expand access to the Duke oral history recordings or transcripts, the staff must first conduct consultations with individual interviewees or their lineal descendants and consult with the cultural resources officers of specific tribes for guidance and permission. This requires skilled staff to perform consultations, legal advice, and considerable research to identify copyright holders and other documents. Before consultation can occur, expanded surveys and description of the materials is needed. This includes cross referencing inventories, scanning documents, and improving catalog records. The best source of information about the individual oral histories is still a paper catalog made on a typewriter that has not been digitized. If broader access is welcomed, the harder job of transcription, and in some cases, translation will be required.

Alyce Sadongei of the American Indian Language Development program at the University of Arizona will lead the outreach and consultation activities with Native American communities in Arizona. We are also pleased to share that we have filled a part-time professional position as part of this grant. Kate Stewart, former lead archivist at the Arizona Historical Society, serves as the project archivist for this two-year project.

Suggested Reading:

Jasper, Kathryn L.

2005 The Doris Duke Program in Scope and Sequence. *Journal of the Southwest* 47(1).

Penfield, Susan D.

2005 Forty Years On. *Journal of the Southwest* 47(1).

Repp, Dianna

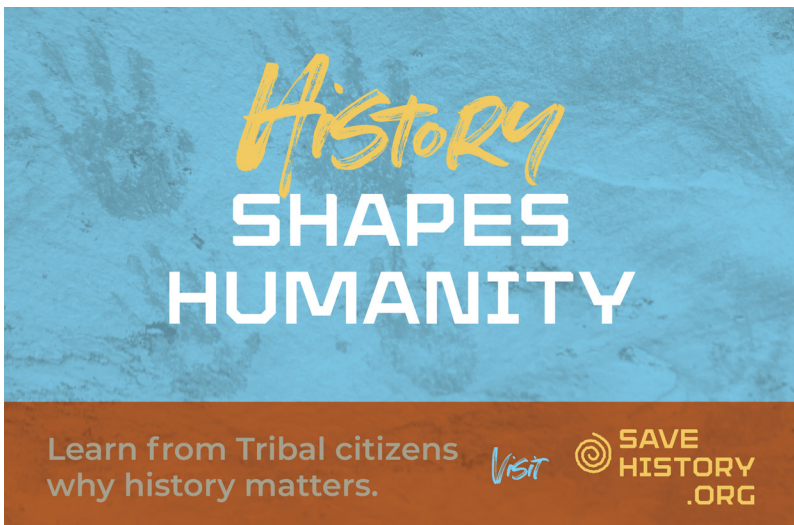
2009 Inscribing the Raw Materials of History: An Analysis of the Doris Duke American Indian Oral History Program. Unpublished Ph.D. dissertation, Arizona State University, Tempe.

THE MOVEMENT TO SAVE HISTORY

We have a problem: archaeological resource crime. Illegal removal and trafficking of artifacts feeds criminal black markets and social pathologies. It thrives because there is significant demand from collectors. Further, due to public misperception, few understand that the crimes of archaeological theft and vandalism cause serious harm to Tribal communities.

SaveHistory.org supports the movement to end looting on Tribal lands and to protect Native American history in the Southwest. The Save History campaign is a culmination of outreach efforts by the Bureau of Indian Affairs and Archaeology Southwest as part of a cooperative agreement to respond to violations of the Archaeological Resources Protection Act, to prevent looting and vandalism through education and Tribal engagement, and to work with Tribes and their historic preservation offices to remediate the impacts of archaeological resource crimes.

Videos, advocacy resources, and blog posts on SaveHistory.org amplify Tribal perspectives about archaeological resource crime, Indigenous stewardship, and living connections between ancestral sites and descendant communities. In an interview with Ben



Nuvamsa (Hopi), a longtime public servant and Tribal leader, readers learn that “...archaeological resource crime is part of a bigger pattern of disrespect to culture and history. It’s social and spiritual at least as much as it’s physical or mechanical.” Check out the full interview at SaveHistory.org/interview-with-benjamin-h-nuvamsa.

Our goals are to promote collective responsibility in protecting ancient sites and to expand roles for archaeologists and law enforcement as allies in fighting archaeological resource crime. We boost confidence and cooperation in people who observe evidence of archaeological resource crimes, encouraging them to submit tips to law enforcement. We offer online reporting at SaveHistory.org/submit-a-tip and a confidential tip line (1-833-ENDLOOT), both routing directly to a U.S. Bureau of Indian Affairs special agent. A financial reward of up to \$10,000 is available to those who provide information leading to a conviction.

- ♦ Visit SaveHistory.org
- ♦ Save History tipline: 1-833-ENDLOOT
- ♦ Follow SaveHistory.org on Facebook: facebook.com/savehistory.2021
- ♦ For media and non-law enforcement inquiries, please email info@savehistory.org



Old Pueblo Archaeology Educational Programs

Old Pueblo Archaeology Center offers speakers to give presentations on various topics for educators and other adults, as well as for children, upon demand. Examples of topics include:

- ♦ Teaching the Fundamentals of Archaeology
- ♦ The Study of Chipped Stone Tools
- ♦ The Study of Prehistoric Ceramics
- ♦ The Peoples of Ancient Arizona

To schedule a speaker on these or other Southwestern archaeology, history, and culture topics your organization might like to hear about, contact Old Pueblo Archaeology Center at 520.798.1201.

CALL FOR NOMINATIONS

The Arizona Archaeological and Historical Society welcomes nominations for three annual awards (see descriptions). Nomination letters and Curriculum Vitae (if appropriate) should be emailed to Ron Towner (rht@email.arizona.edu) no later than May 1, 2021. Awardees will be selected by the Awards Committee and approved by the AAHS Board of Directors. Awards will be presented at the Pecos Conference in August.

Byron Cummings Award

The Byron Cummings Award is given in honor of Byron Cummings, the principal professional founder of AAHS, the first chair of the University of Arizona's Department of Archaeology (later Anthropology), and the first Director of the Arizona State Museum. The Byron Cummings Award is given annually for outstanding research and contributions to knowledge in anthropology, history, or a related field of study or research pertaining to the southwestern United States or northwest Mexico.

Victor R. Stoner Award

The Victor R. Stoner Award is given in honor of Reverend Stoner, a strong avocational historian, supporter of AAHS, and one of the founders of *Kiva*. The Victor R. Stoner Award is given annually for outstanding contributions in leadership or participation in the Society, fostering historic preservation, or bringing anthropology, history, or a related discipline to the public.

Alexander J. Lindsay, Jr. Unsung Heroes Award

The Alexander J. Lindsay, Jr. Award is given in honor of Dr. Lindsay, a long-time southwestern archaeologist, AAHS member, and AAHS Officer. This award is given annually as a lifetime service award to those individuals whose tireless work behind the scenes has often gone unrecognized, but that is often critical to the success of others' research, projects, and publications. These may be field personnel, lab managers, archivists, cooks, analysts, and others.

ARCHAEOLOGY CAFÉ 2020–2021

PRESERVATION ARCHAEOLOGY

The 14th season of Archaeology Café celebrates and shares Archaeology Southwest's current Preservation Archaeology projects with you. Preservation archaeology is holistic, conservation-based, and collaborative. It is an approach to learning about places and heritage through dynamic new tools and low- to no-impact methods to achieve high-impact insights and protections. Our staff members will bring you in on what we're doing right now to learn more about the past and to help protect special places.

We meet just before 6:00 p.m. MST on the first Tuesday of each month from October through May. All of our meetings are via Zoom Webinar. Preregistration is required before each event, but is free.

Presenters speak for 30 minutes, followed by 30 minutes for questions. During the presentation, you can use the question-and-answer tool within Zoom Webinar to ask questions as they come to mind. We monitor the question-and-answer feed during the program and tag questions for the presenter to answer.

For more information, visit <https://www.archaeologysouthwest.org/things-to-do/cafe/>.

Topics include:

May 4, 2021: *Was Sells Red Pottery a Marker of Tohono O'odham Identity in Late Precontact Times? Archaeological and Ethnographic Perspectives*, Bill Doelle and Samuel Fayuant

glyphs: Information and articles to be included in *glyphs* must be received by the first of each month for inclusion in the next month's issue. Contact me, Emilee Mead, at emilee@desert.com.



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*Darlene Lizarraga, Director of Marketing
Arizona State Museum*

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THE MUSEUM STORE IS NOW ONLINE

Although the physical store is permanently closed -- a casualty of budget cuts and COVID-related downsizing -- the inventory is now available online.

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Store purchases allow us to support Native artists.

Special thanks to our colleagues at the University of Arizona BookStores for their partnership in this venture.



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We add new items periodically, so check back regularly.

Want to donate?

To donate estate collections or individual items of Native American art (pottery, jewelry, rugs, baskets, etc.), contact us at (520) 626-8381. Artwork must be of Indigenous creation, but need not be solely from southwestern cultures.



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AAHS Membership Application

Membership is open to anyone interested in the prehistory and history of Arizona and the Southwest and who support the aims of the Society. Membership runs for a full year from the date of receipt, and covers all individuals living in the same household. If you are joining as a household, please list all members of the household. Monthly meetings are free and open to the public. Society field trips require membership.

Membership Categories

- ☐ \$60 **Kiva members** receive four issues of the Society's quarterly journal *Kiva* and 12 issues of *Glyphs*
- ☐ \$45 **Glyphs members** receive *Glyphs*
- ☐ \$35 **Student Kiva members** receive both *Kiva* and *Glyphs*
- ☐ \$100 **Contributing members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$150 **Supporting members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$300 **Sponsoring members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$1,500 **Lifetime members** receive *Kiva*, *Glyphs*, and all current benefits

Note: For memberships outside the U.S., please add \$20. AAHS does not release membership information to other organizations.

I wish to receive *Glyphs* by (circle your choice): Email Mail Both

I am interested in volunteering in AAHS activities: Yes Not at this time

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University libraries, public libraries, museums, and other institutions that wish to subscribe to *Kiva* must do so through the publisher, Taylor & Francis at tandfonline.com. For institutional subscriptions to *Glyphs* (\$100), contact AAHS VP for Membership at the address below.

You can join online at www.az-arch-and-hist.org, or by mailing the form below to:

Rebecca Renteria, VP Membership
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RETURN SERVICE REQUESTED

The objectives of the Arizona Archaeological and Historical Society are to encourage scholarly pursuits in areas of history and anthropology of the southwestern United States and northern Mexico; to encourage the preservation of archaeological and historical sites; to encourage the scientific and legal gathering of cultural information and materials; to publish the results of archaeological, historical, and ethnographic investigations; to aid in the functions and programs of the Arizona State Museum, University of Arizona; and to provide educational opportunities through lectures, field trips, and other activities. See inside back cover for information about the Society's programs and membership and subscription requirements.

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