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Conferencia Intercontinental
En la ciudad de Panamá, Panamá
13-15 de enero de 2012

¡La SAA viene a América Latina! Presenta la primera Conferencia Intercontinental de la SAA, una conferencia única diseñada para unir a la SAA y los Latinoamericanos. La Conferencia abrirá con una sesión especial por la tarde del viernes, seguida de un día completo de sesiones plenarias el sábado y terminando con medio día de sesiones plenarias el domingo. La capacidad máxima para la Conferencia es 235 asistentes.

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Errata

Please accept our apologies for the following errors that occurred in the May Issue:

Dee Ann Story’s name was misspelled in the table of contents.

In the article ‘An Etching, Not a Painting or a Medal: The Obscure A.V. Kidder Award by Linda Cordell, the figure was paired with the incorrect caption and should have read: “Catherine M. Cameron; and Stephen H. Lekson with the other Kidder Award at the 2010 Pecos Conference, Silverton Colorado, August 13, 2010.”
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EDITOR’S CORNER

Jane Eva Baxter

In this issue of The SAA Archaeological Record, we mark the passing of two prominent and influential members of our discipline: Dr. Lewis Binford and Dr. Robert Dunnell. Both of these scholars entered into archaeology at a time when the relationship between archaeology and anthropology was mostly taken for granted, and their contributions are among the works that are often considered foundational to “anthropological archaeology.”

Coincidentally, the relationship between archaeology and anthropology is the focus of a special forum in this issue as well. Conversations about the relationship between archaeology and anthropology have been ongoing in the discipline for many years. Nine years ago in the May 2002 issue of The SAA Archaeological Record (Volume 2[3]) there was a point/counterpoint on this very topic, and there have been several opinion pieces and articles that have followed. Recent debates on the World Archaeological Congress Listserv have highlighted the passionate stances that individuals have concerning this relationship. Michael Smith’s blog “Publishing Archaeology” (http://publishingarchaeology.blogspot.com) has evaluated new magazines such as Anthropology Now, the very popular anthropology blog “Savage Minds,” and the recent forum on disciplinary futures in the December 2010 issue of American Anthropologist. His writings have revealed a trend where the word “Anthropology” has come to mean “cultural anthropology” to the exclusion of the other traditional subfields.

This forum offers what I hope will be a different perspective on the current relationship between archaeology and anthropology, and add another dimension to these conversations. While those of us reading this magazine are all members of the SAA, most of us also choose to belong to other organizations whether those be local or regional societies, organizations for professional practice (ACRA, AAUP for example), or other national and international organizations where we believe our work finds an audience. For this forum, I asked Anna Agbe-Davies, the program chair for the Archaeology Division of the American Anthropological Association (AAA), to put together a series of papers based on presentations made by archaeologists at the most recent AAA annual meeting (New Orleans 2010). The forum is intended not only to provide a snapshot of the types of works being presented by archaeologists at the AAA, but also potentially consumed (even if simply as titles and abstracts) by non-archaeologists who attend the meetings. Such a snapshot offers an opportunity to contemplate how archaeologists are actively situating their work in the broader discipline of anthropology, and how non-archaeologists interested in maintaining a relationship among the subfields would understand current archaeological research based on the work being offered at this traditionally four-field conference. While an imperfect vehicle, this snapshot of work presented at the AAA meetings is an interesting way to consider many aspects of a rich, passionate, and ongoing conversation.

Finally, I’d like to extend a special thanks to Peter Bleed for his assistance with the Matsui article and to Anna Agbe-Davies for her work as guest editor on the “Archaeology and Anthropology” forum. And, as always, I encourage you to contact me with ideas for articles and forums as well as comments you may have about the magazine.
Get Involved....

One of the things that seems to be a universal among archaeologists is the passion we bring for the resource and its study and the excitement that we share in simply getting to do our jobs. One outlet for that passion is service on committees and task forces in the Society. If you think that “passion” and “committee” don’t seem like two words that go in the same sentence, I would like to change your mind. SAA committees and task forces play a key role in the Society and are open to every member. Starting in 2010 under then-President Meg Conkey, SAA initiated an open and transparent method to structure its Committees. Members of a committee may serve a maximum of two concurrent two-year terms and then must rotate off. Awards committees members are generally not re-appointed to a second term and typically rotate off after one full term. To identify new candidates for the committees, there is an annual, open call for all members to submit an application. The Committee Chair and Board Liaison then select new members from this group—there is no old girl/old boy, usual suspects system! So I urge each of you to submit an application. Remember, the Committees are where the action is on many areas of significance to all of us. I’d like to illustrate that point with a report on a few key actions that have been underway just this summer.

NAGPRA

Over the past months the U.S. Department of Interior published final rules on culturally unaffiliated human remains, the Senate Indian Affairs Committee had a hearing on NAGPRA, and the National NAGPRA program requested comments on the entire NAGPRA process/regulations. SAA responded to each, and in each case it was SAA committees that played the key role. Comments for each case were developed by a combination of four committees: the Committee on Repatriation, the Committee on Museums, Collections and Curation, the Committee on Native American Relations, and the Government Affairs Committee, all led by the Committee on Repatriation. Members of all these committees provided input, content, and editorial suggestions to a final document forwarded by the Committee on Repatriation to the Board. The Board provided additional input and the results were forwarded to the respective agency/committee. You can read the SAA’s comments on the SAA Web site under the “News” heading at (http://saa.org/ForthePress/SAANews/tabid/139/Default.aspx)

State Program Cuts and Governmental Affairs

The Government Affairs Committee (GAC) has been particularly active. In addition to its assistance on the NAGPRA documents, it has quickly responded to a number of state-level issues. As the states deal with the end of the federal stimulus funds and the poor economy, archaeology and heritage preservation programs are seeing major impacts—and in both Utah and New York major parts of the state’s archaeological staff were fired. In Alabama a proposed amendment to state law was made that would have had the effect of removing underwater resources from the protection of antiquities legislation. In addition to preparing SAA responses on each of these, the GAC prepared a letter complimenting the Interagency Fire Center for their work to preserve archaeological resources and sacred sites in the midst of fire suppression. And these are only a few of its efforts in the last few months. For more see the website.

Tang Shipwreck

In early summer the Smithsonian Institution (SI) announced plans to have a major exhibit that would be based on the artifacts recovered from the Tang Shipwreck. The ship was a ninth-century CE Arab dhow carrying Chinese objects that sank near Java. The Society, along with large number of professional organizations and individuals, requested that the SI not sponsor the exhibit since it has been reported that the recovery of the artifacts were not done in a professional manner and that they were then sold by the salvage company. The Chair of the SAA
Memphis in 2012!

The 77th Annual Meeting of the Society for American Archaeology will be held in Memphis, Tennessee April 18–22, 2012. The headquarters hotel is the Marriott Memphis Downtown, which is located directly across the street from the Memphis Cook Convention Center. The convention center, along with the headquarters hotel (Marriott Memphis Downtown), will be the hub of all meeting activity. In addition to the headquarters hotel, there are several overflows: Courtyard by Marriott Downtown, Crowne Plaza Memphis Downtown, Doubletree Hotel Memphis Downtown, SpringHill Suites Court Square. There are two properties exclusively for students (current valid student ID’s will be required upon check-in): Sleep Inn and Suites, Court Square and Comfort Inn Downtown.

Complete reservation information, including cut-off dates and rates as well as links for reservations, is available on SAAweb and will, of course, be included in the Preliminary Program available in December. Click on the “2012 Meeting Hotel Information” link on SAA’s homepage (www.saa.org) to see this information now. Updated information on hotel availability will always be posted on SAAweb on the meeting hotel page.

We hope to see you in Memphis!

How Do I Get a Free Year’s Membership in SAA?

It is as simple as registering at any one of the seven official SAA meeting hotels in Memphis by January 15, 2012, and your name will be entered into a drawing for the free year’s membership. There will be one drawing for the headquarters hotel, one drawing for the overflow properties, and one drawing for the student properties. Reserve early and give it a try! There will be three recipients.

Staff Transitions...

Over the course of the summer SAA said goodbye to a few staffers and welcomed a new group to the staff team. Cheng Zhang arrived on May 9, 2011 to fill the vacancy in the manager, Information Services position since the departure of the previous manager in November 2010. Cheng is up-to-speed and is making great progress in a number of information arenas. He joined the Society immediately after graduating from James Madison University.

Shelley Adams, a recent Howard University graduate, joined the staff on July 5 to replace Keisan Griffith-Roberts, the coordinator, Financial and Administrative Services. Keisan was with the Society for four years before he moved to expand his experience in the financial services arena.

Also on July 5, Lorenzo Cabrera came on board as coordinator, Membership and Marketing, replacing a coordinator who moved out of the not-for-profit world. Lorenzo is a recent grad from Skidmore College.

SAA is fully staffed now with seven full-time positions and one part-time position. Our staff team is committed to helping you. Feel free to contact the staff whenever you may need assistance. Also please know that you may always contact the executive director as well (tobi_brimsek@saa.org).

Serving on SAA Committees

Starting last year (in November), SAA has made the process for volunteering for committee service an open one. Again in early November 2011, SAA will put out an open call to the membership to solicit volunteers interested in serving. Open committee slots will be posted and filled through this call. Appointments will be made for slots available as of the close of the Annual Business Meeting in Memphis. Committee appointments are generally for two years.

Those members currently serving on a committee and who wish to be reappointed must also apply through the open call.

Last year, for some committees, there were more volunteers than there were open slots. Please be aware that the Society is very grateful for the high level of volunteerism among SAA members and regrets that there are generally fewer slots than volunteers. If you were not selected last year, please apply again.
Please also be aware that the statement you write is the way in which you introduce yourself to the committee and share what you can bring to the work of the committee. The statements are key to the decision-making process.

Please also be reminded that this is a terrific way for students to become more active within the Society. Most committees are structured in such a way that they are required to have at least two student members.

All committee charges and memberships are listed on SAAweb. We encourage you to check them out. Please think about becoming involved!

**2011 Needs Assessment**

Thank you to everyone who contributed to the 2011 Member Needs Assessment! The Board of Directors is currently reviewing the data, and the survey results will be posted on SAAweb once that review has been completed. In the interim staff have also gone through the data. As a result staff came up with a number of activities that are not well known to our members. For example, did you know

- that The SAA Archaeological Record is available in a digital version on SAAweb even before it is available in print? To read the current issue, please click on the image of the magazine on SAA’s homepage.

- that as an SAA member you can purchase your own annual access to back issues of *American Antiquity* and *Latin American Antiquity* through JSTOR?

- that you can follow SAA on Facebook and Twitter?

- that as an SAA member you can subscribe for no additional charge to a monthly electronic government affairs update? You can do this through your member profile on the web or simply drop an email to the manager, Government Affairs to sign you up!

- that the Archaeology for the Public section of SAAweb has over 375 pages of original content, including a wide variety of resources for professional and avocational archaeologists? Check out our materials on public outreach, the history and scholarship of public archaeology, archaeology education, our archaeology month poster archives, and more at www.saa.org/public.

Feel free to contact the office should you have any questions about what may be available to you as an SAA member! (info@saa.org or membership@saa.org)

**FROM THE PRESIDENT**

Ethics Committee, Joe Watkins, was present at a meeting that the SI hosted to acquire board input from the professional community. As of this writing the SI has indefinitely postponed the exhibition.

**The Committees**

The Committee on Repatriation is composed of John W. Norder (Chair), Patricia Capone, J Andrew Darling, Dorothy T. Lippert, George R. Milner, Jennifer R. Richman and Hilary A. Soderland. The Committee on Museums, Collections and Curation is composed of Patrick D. Lyons (Chair), Claire S. Barker, Timothy E. Baumann, John Beaver, Danielle M. Benden, S. Terry Childs, Julia E. Clifton, Jacob L. Fisher, Michael R. Hilton, Vanessa Muros, Jeffrey T. Rasic, HB Thakar, and Christopher White. The Committee on Native American Relations is composed of Kerry F. Thompson (Chair), Patricia A. Garcia-Tuck, Sandra Gaskell, Sara Gonzalez, Edward A., Jolie, Matt Liebmann, Ora V. Marek-Martinez, Randall H. McGuire, Darren Modzelewski, James Potter, John J. Rose, and Kisha Supernant. The Government Affairs Committee is composed of TJ Ferguson, Roger Anyon, Kristina L. Barger, James Cleland, Duane Quates, Lee Rains Claus, Christina B. Rieth, Marcy Rockman, and Alan C. Tonetti.

Kelley Hays-Gilpin is the Board Liaison for both Repatriations and Native American Relations. Alston Thoms is the liaison for Museums, and Karen Hartgen is liaison to Government Affairs.

Contact information for ALL committee members and their Board liaisons are on the SAA web at https://ecommerce.saa.org/saa/staticcontent/staticpages/adminDir/committees.cfm.

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Though perhaps most famous for the excesses of one of its favorite sons, Memphis is more than just Elvis impersonators and peanut butter, banana, and bacon sandwiches. Beyond being a BBQ and blues mecca, Memphis is a major transportation, logistics, and communications hub, and chances are that the majority of your express packages and train, truck, and barge freight have spent some time here. So hop on a steamer, jump a freight train, drive your pink cadillac, pole your raft, or FedEx yourself (or use the international airport if you must), since all routes lead to Memphis.

The “Bluff City” is located on a natural rise above the Mississippi River, and its strategic location has been the site of long-term habitation—and intermittent conflict over control of territory and river transit. The C.H. Nash Museum and Chucalissa Archaeological Site, just a few miles south of downtown, documents the Mississippian period and more recent past in the region. A number of Woodlands and Mississippian sites are a short drive from Memphis, including Pinson Mounds, Parkin Archeological State Park, and the Hampson Archeological Museum, which features interpretations and collections from the Nodena site. Hernando de Soto is believed to have encountered the Mississippi River and its inhabitants in 1541 in the vicinity of Memphis. From initial European contact to the founding of the city in 1819, the fourth Chicasaw Bluff has been claimed by the Chickasaw Nation, France, Spain, England, and the United States.

The development of Memphis was largely shaped by its key position in and dependence on the cotton trade and slavery. After voting to secede in 1861, the city was retaken by Union forces a year later; but once again capitalized on its strategic position as a permeable boundary for the movement of contraband to the Confederacy. The post-Civil-War era was marked first by an influx of freed slaves, and then by a series of yellow fever epidemics that decimated the city. It wasn’t until a second cotton boom in the 1880s that the development of the city exploded, establishing Memphis as a river and rail hub in the cotton and lumber trade (three interstates and a FedEx headquarters later, its position as a national crossroads has been cemented).

The complex legacies of slavery and ongoing struggles of race relations in the city continued to shape its culture and politics, and the unique sights, tastes, and sounds of Memphis are steeped in its African-American roots. Famous for its BBQ and Mississippi Delta blues, jazz, and rock n’ roll, Memphis’s legacy as a musical birthplace is palpable, from the active nightlife of Beale Street, to the Center for Southern Folklore, the Memphis Rock ‘n’ Soul Museum, Sun Studios, the Stax Museum, and, of course, Graceland. Memphis was both a center of activism in the Civil Rights movement and a flashpoint, erupting in riots after Martin Luther King was assassinated on the balcony the Lorraine Hotel in 1968. A short trolley ride from the conference center, the remarkable National Civil Rights Museum breathtakingly preserves the iconic façade of the hotel while richly documenting African-American history and the Civil Rights movement.

Outside of downtown, the patchwork of historic neighborhoods provide attractions and excellent restaurants, from the highly regarded Memphis Zoo and Brooks Museum in Overton Park, to the culinary delights of Midtown, to the Pink Palace Museum (built by the founder of the Piggly Wiggly, which is credited as being America’s first grocery story). In addition to forthcoming information about organized trips, we will provide a guide of off-the-beaten-track destinations for those who want to further explore the city.

So in between your conference activities, you might consider listening to some music on Beale Street, grabbing a drink at Ernestine & Hazel’s (amongst the alleged ghosts of its colorful past), and feasting on BBQ or Gus’s Fried Chicken or sweet potato pancakes or fried pickles or peanut butter, banana, and bacon sandwiches. Or you just might decide to paste on your sideburns and dust off your sequined jumpsuit...
My first SAA meeting was in San Francisco, in 1973. I was in my second semester of graduate school at the University of Arizona. Thinking back to my mindset, the terms that come to mind are “disengaged” and “overwhelmed.” But there were some lasting impressions. For example, I met Bill Longacre, a young deity in the New Archaeology pantheon, and saw some of the elders of our profession. All in all, the seeds of an initial sense of belonging were sown.

In immediately ensuing years, I saw the role of other senior archaeologists like Charles McGimsey and Raymond Thompson, in developing the laws and performance expectations for Cultural Resources Management, or CRM—a world I was starting to work in even as a grad student. Dr. Thompson (it was long after I received my Ph.D. that I gradually became comfortable calling him Ray) was President of the SAA during my early grad student years, and I was aware of how much time he spent away from the department on SAA-related business. It was a time of great change in the archaeological discipline, and it was clear that it was the vision of these elders that was driving that change. Their service to the SAA and the profession was voluntary within an academic environment—and it was laying the groundwork to transform the profession on a scale that no one imagined at the time.

With passage of more time and my movement into full-time employment in the CRM world, I better perceived how the work of professionals in the SAA was bringing me direct benefits. I really hadn’t earned them; they were passed forward by those who had given their time to help implement a greater vision. In short, they were a gift. I hope that graduate programs still read Marcel Mauss’s essay “The Gift”—for I often return to his premise that a gift brings with it an obligation, a need for reciprocity.

An obligation need not be a burden. I suspect that nearly all who volunteer in order to give back will tell you that the time invested as a volunteer pays dividends at many levels. It is a way to learn from others, to build friendships, to achieve goals. We are all short on time, but the investment of your time really does pay back in many tangible and intangible ways.

My biggest volunteer investment with the SAA has been my service as Chair of the Fundraising Committee for the recent Campaign to “Give the SAA a Gift on its 75th.” Most of my friends and colleagues suggested that I must be insane to take on such a task. “I could never ask anyone for money” was spoken by many.

I agree that it isn’t an easy task. But, the Fundraising Committee and the SAA Board made SAA members the primary target of the campaign. The members are the 7,000-plus individuals who receive direct benefits from the SAA. Many donors that I talked with perceived that they had received a gift from the SAA and giving to the campaign was an opportunity to close that obligation of reciprocity—and they felt good about their gift.

The fundraising campaign is over, but I hope that the SAA will continue to build a culture of giving. There are two options available to each of us: giving of our time as a volunteer or giving financially through an annual contribution—according to our means. Either choice (or both!) comes highly recommended. Thus the simple phrase: give ‘til it feels good.
In preparation for a 2010 Society for American Archaeology Forum organized by Christine Hastorf, “Quantification and Presentation: Effective Means of Presenting Plant Evidence in Archaeology,” I devised a questionnaire about archaeobotany methodology. In the autumn of 2009, I posted a link to the survey on “www.surveymonkey.com.” I alerted archaeobotanists through the Archaeobotany listserv (www.jiscmail.ac.uk/archaeobotany) and my own website. Since my network is primarily Old World, I also sent a notice to about ten North American archaeobotanists of my acquaintance. Therefore, the sample of survey respondents is not in any way random or representative, and each “case” is not truly independent, as university training and experience in different world areas influence practitioners. At least 138 people started the questionnaire, and 120 finished it. I would like to thank all who took the time to answer the survey. Although the survey did not directly address the topic of the SAA forum, the forum was one solution to a common problem: lack of communication among archaeobotanists.

In the mid-1980s, I distributed a methodology questionnaire at the SAA annual meeting; about 25 archaeobotanists responded. The questions were open-ended, but many answers could be grouped. Those responses allowed me to construct multiple-choice questions for this survey. Times change, so I added questions about the Internet and other digital matters. The survey was organized in six main sections: field, laboratory, recording, reporting and analysis, suggestions and comments, and demography.

The complete survey results are posted online: www.sas.upenn.edu/~nmiller0/AbotQ.pdf

Field

Responses revealed that archaeobotanists are a practical lot. Both manual and flowing-water systems are used (Figure 1). Although most prefer that excavators provide systematically collected samples, we acknowledge financial constraints and give advice about sampling priorities. Nearly everyone needs to know the sediment sample volume, but most do not require that all samples be the same size. Most respondents will remove small artifacts from heavy fractions, along with bird and fish remains; zooarchaeologists, excavators, and others interested in small items might consider helping the archaeobotanist go through the heavy fractions.

Laboratory

The vast majority of respondents will split large samples and sieve by size to facilitate sorting. They usually quantify seeds and charcoal. This surprised me; at least for west Asia, wood charcoal amounts are not commonly published. I was particularly interested in issues of identification. Most reported that they use their personal comparative collection, or have access to one at their institution, but nearly 10% do not have adequate access and must rely on images (Figure 2).

Recording

Nearly everyone counts the various plant parts (seeds, nutshell, identifiable plants parts, tubers). Wood charcoal may be counted, weighed, or both. Other fragmentary material is difficult to deal with; some form of MNI (“minimum number of individuals”) or conversion factor by weight or volume maybe be used. One person commented, “Counting of cereal grain fragments remains very problematic—MNI grossly underestimates numbers, and weight conversion assumes that proportions in fragmented grain are the same as in whole grain—not the case either. No easy answer but no one ever discusses the problem!”

Reporting and Analysis

Answers to the question, “Which of the following do you like to see in published reports?” can be grouped as “botanical” (e.g., seed illustrations, descriptions) and “archaeological” (e.g., context information for the samples, field and laboratory procedures). Respondents find that the botanical information provided by others is most useful for interpreting their own material, but for assessing a report’s reliability and for comparing sites,
the archaeological information about the samples is most important. As digital photography becomes more prevalent, it is getting much easier to get expert opinion not only from people you know, but from other colleagues, too (e.g., via the Archaeobotany listserv and paleobot.org). The biggest complaints about archaeological reporting are inadequate discussion of the archaeological contexts of the samples and accessibility of reports. This section also included a question about fees: most of the respondents charge by the job, though the price might be informally based on estimated number of hours or samples. But it should be noted, as one person commented, “I’ve never been paid to do work. Ha!” and many do more work than they officially charge for.

**Suggestions and Comments: Challenges**

I asked, “What do you think are the major challenges, both practical and intellectual, faced by archaeobotanists who study plant macroremains working in your area?” Answers fall into several broad, interrelated categories. The methodological focus of the survey undoubtedly affected the responses. Aside from the importance of integrating archaeobotanical data with the archaeological study, and a few mentions that there should be more synthetic studies, most of the challenges mentioned concern practice, not theory or results.

Funding and respect are key issues. There are not enough jobs, which leads to too few people to do the work and feelings of intellectual isolation. Challenges included “getting the dirt archaeologists to understand the value of our studies and stop them from sticking us into appendices”; “to convinc[ing] the archaeologists that if they would like to have such research done, they should create also positions for archaeobotanists.” Inadequate laboratory facilities and/or time to do the work are common problems. Many are concerned that archaeobotanists are not part of the planning, execution, and analysis stages of projects, from sampling strategies to integration of our research in the final publication or report. Several people, especially those who work in poorly known regions, feel there is a need for more/better training, and better access to comparative material (in collections or online). A few people specifically mentioned their own or others’ inadequate knowledge of statistical methods appropriate to the research design.

People living and working in the US/Canada and Latin America feel most undervalued; those in the UK seem most concerned about sampling and statistical issues. For those working in Latin America basic plant identification is also an issue. For the Europeans, the challenges concern co-operation and funding. Those working in the Mediterranean seem more concerned about sampling and identification, and those working in the tropics have funding and identification issues.

**Suggestions and Comments: Solutions**

Answers to the open-ended question, “What would facilitate or enhance your own archaeobotanical research in a practical or intellectual way?” can be grouped, with the most pressing need being improved resources aiding identification (on-line and
published reference material and databases) and training opportunities. For those living in North America, continuing education and databases for seed and plant part identification seem to be most important. For those in the UK, online report databases would be particularly helpful. Overall, additional workshops and training, online publication and seed and plant part identification databases were mentioned most on people’s wish lists (Figure 3).

To be really useful, databases need to be institutionally and/or communally maintained, and should be set up so that content could be added by individuals. Only a few people mentioned databases containing data from site reports; those would be hard to set up since there are no agreed-upon standards, and no one format would be appropriate for all projects. But even imperfect ones (like www.cuminum.de/archaeobotany/) are useful.

Many of the suggestions for improving archaeobotany are actually within our control as a community of practitioners. Even where floras are reasonably well known (Europe and North America), a number of people would like to see higher standards for identification of seeds and plant parts, and access to adequate references collections, descriptions, and images. “Continuing education” workshops and training (seeds, charcoal, statistics), online access to reports, and seed and plant part identification databases were mentioned most on people’s wish lists.

Underlying many of the concerns expressed by the respondents is the lack of institutional support for archaeobotany. To this day, many archaeologists do not think of plants (and archaeobotany) as being essential for understanding ancient societies, and that is reflected in the way the field is treated in institutional settings. The desire for databases of reports and identification tools is being addressed by a few individuals who maintain websites, but what we really need are databases that can be contributed to collectively by practitioners and that will outlive their creators. Communication within the field is also necessary for it to advance. Personally, I do not advocate standardizing reports, as sites are all different, but agreement on identifications, statistical methods, and reporting standards requires that we help each other, since students and professionals have very varied backgrounds and skills.

Demographic

Most of the respondents are practicing archaeobotanists with Ph.D.s who have published three or more botanical reports. Most live in North America (42) and Europe (63). Most people work in the general region in which they live, although North Americans and Europeans tend to get around more, presumably due to economic conditions and historical circumstances. About half of 117 listed archaeology as their highest degree, and about 30% listed anthropology. The remainder studied botany, ecology, and earth sciences. Anthropologists and archaeologists are most likely to live in North America or Europe; botanists are most likely to live in the UK, ecologists in Europe. Those living in Europe, Latin America, and North America are most likely to be anthropologists or archaeologists; those living in the UK are more likely to have archaeology or botany backgrounds. The sociocultural interests of most archaeobotanists focus on small-scale agricultural societies rather than foragers, the early civilizations, or historic periods. Of the topics offered, agriculture itself, along with cuisine/foodways and environment were the primary topical concerns; ethnoarchaeology, climate and gender trailed.
HERITAGE RESCUE IN THE WAKE OF THE GREAT EASTERN JAPAN EARTHQUAKE

Akira Matsui

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Like people around the world, my first reaction following the Tohoku earthquake and tsunami of March 11, 2011 was to worry about the victims of the disaster. As an archaeologist familiar with the sites and museums of the devastated region, I also feared for the cultural heritage in the Tohoku district. That said, all I could do immediately after the disaster was to helplessly follow newspaper, television, radio, and Internet news about the catastrophe unleashed by the tsunami—the search for the missing, the recovery of the dead, and dire events occurring at the Fukushima Nuclear Power Plants.

Finally, on April 15, at the request of the Agency for Cultural Affairs, I joined representatives of 18 cultural properties-related authorities and organizations nationwide at a meeting at the Tokyo National Research Institute for Cultural Properties. There we decided to launch a rescue of cultural properties, but as reported by the Agency for Cultural Affairs the situation was not good. At the northern end of the impacted area, Aomori Prefecture is able to handle the damage to local cultural properties itself. By contrast, Iwate Prefecture, where cities, towns, and villages along the Pacific coastline were heavily damaged by tsunami, has few resources to spare for the rescue of cultural heritage. Miyagi Prefecture reported extensive damage to museums, cultural heritage sites, and cultural property storage facilities. Fukushima Prefecture is heavily involved in addressing problems associated with the nuclear accident and damage to the prefectural office building. It is barely able to spare resources for the rescue of cultural heritage. At the southern end of impacted area, Ibaraki and Chiba Prefectures are capable of undertaking the rescue of cultural heritage damaged by the earthquake and tsunami.

According to Japanese law, the board of education of each city, town, and village is responsible for the care of cultural heritage. In areas heavily swept by the tsunami, however, staff members of the boards of education must address many issues involving schools and the support for disaster evacuees. They cannot devote resources to rescuing cultural materials or surveying damage. The problems are immediate. Historical documents and museum collections of folk tools that were swept up by the tsunami and immersed in saltwater need shelter and treatment before the coming rainy season and summer when molds and microorganisms will accelerate deterioration. Dealing with the damaged and threatened cultural resources will have to require participation of organizations and academic associations nationwide.

At the request of Miyagi Prefecture, I joined a rescue team that commenced its activities on April 20 in the once beautiful area of Matsushima Bay. We began at the Ishinomaki Cultural Center (Figure1a). This modern seaside center was a large, modern facility that includes a multipurpose hall, storage rooms, and exhibition facilities for archaeological collections, folkloric materials, and fine art. Of particular note, the Ishinomaki Center holds the enormous Mōri Collection comprising fine art, historical documents, folkloric materials, and archaeological relics including several “Important Cultural Assets” from the Numazu shell mound. The Center’s outer walls were destroyed by a direct hit of the tsunami. Part of its stored articles were seemingly swept away so immediate action was obviously required.

On entering the Ishinomaki Cultural Center, we saw the high water-level mark close to the ceilings of the first floor. In addition, a massive volume of pulp sludge from a large neighboring paper factory washed into the storage rooms, offices, library, and document sorting room of the Center. The wave displaced panels, steel furniture, and exhibition articles. Since there was no place to step inside, the first action of the rescue team was to remove the large and small items of debris by hand (Figure 1b). Fortunately, although we were deeply concerned about damage to the Mōri Collection, the robust construction of the storeroom where it is held allowed only very slight inflow of water. We were able to relocate articles of the collection to a safe storage place. By the middle of June we were able to rescue almost all the other articles in storage, including archaeological articles, folkloric tools, and fine art. Paralleling our activities in Ishinomaki, rescue activities for cultural heritage in other parts of Miyagi Prefecture have also made progress. Statues, documents, votive plaques, and other materials associated with Shriners and Temples and many individuals are being assembled and preserved.
In May rescue activities were extended into Iwate Prefecture, but in Fukushima Prefecture even the tsunami disaster situation in the northern part of the prefecture is not yet clear. Victims are still being recovered. Cultural Affairs Agency staff and local colleagues visited Sukagawa city in Fukushima, where a flood caused by the collapse of an artificial bank on Lake Fujinuma killed at least eight and destroyed a storage facility where excavated materials and archives were preserved. On June 28, 2011 a rescue operation of these collections was begun. Archaeologists from Fukushima Prefecture are essentially re-excavating archaeological collections.

At Tōhoku University, a nonprofit organization, the “Historical Materials Network” has been established to support heritage management efforts in the disaster region. In particular, it provides a framework for preservation of historical documents, records, and historical paper materials. Rescue teams are being encouraged to relocate materials from devastated research facilities, temples, Shinto shrines, and private houses, to temporary storage in the network’s freezing chamber in Sendai. After treatment, universities, museums, and research institutes with conservation science facilities, including vacuum freeze dryers, will work on the conservation and treatment of specific artifacts. With its modern freeze-drying chamber the Nara National Research Institute for Cultural Properties is playing a central role in rescuing paper records, site files, and cultural properties. Independent cultural properties rescue is also moving ahead. In Iwate Prefecture, at the Rikuzen-takata City Museum (Figure 2), at which all six members of staff including museum attendants and office workers were killed and missing, rescue teams from the Iwate Prefectural Museum, Iwate University, and other Japanese natural science museums have embarked on rescue activities (Figures 3a and 3b).
So far, preservation efforts have focused on “movable” cultural properties and excavated materials. Rescue of archaeological sites and other buried materials has barely been addressed, but in the devastated region, “rescue” issues are not simple. In this case “rescue” means “rescue excavation” since Japanese law requires total excavation of sites to be developed. An article dated June 11 in the Tokai Shimpo, a local paper in Iwate Prefecture, carried a story with the headline “Mass relocation to shell mounds.” It reported that the residents of the community in which the Takonoura Shell Mounds (a designated national historical site) are located, and which was badly affected by the tsunami, have petitioned the Mayor of Ofunato City to terminate the designation of the shell mound as a historical site and to allow for mass relocation of the community to a low hill that escaped the tsunami disaster.

Many large and small Jōmon age shell mounds exist along the Iwate and Miyagi coasts. Most of these are historical sites formally recognized by national, prefectural, city, town, or village governments. Generally, such sites remain on low hills overlooking present-day lowland settlements, thus escaping tsunami damage. As a student and graduate student of Tohoku University, I participated in excavations of shell mounds in this district and always wondered why Jōmon people bothered to carry shellfish they harvested to hilltops for processing, rather than to closer lowland areas. It has taken all this time, but important insights came about after seeing the impacts of the tsunami on shell mounds like the Satohama Shell Mound in tsunami-ravaged Miyato-jima, Higashi-matsushima City, Nakazawahama Shell Middens in Rikuzen-takata City, and the great National Historical Sites including of Shimofunato, Ohora, and Takonoura in Ofunato City. Jōmon people must have been aware of the tsunami threat. After all, even though tsunami waves reached to the foot of the hills, almost all the shell middens remained undamaged. Apparently, ancient people knew the tsunami threat and built their settlements on hilltops, sparing no effort in carrying shellfish to safe heights for processing (Figure 4).

Jōmon shell middens are only one example of archaeological properties impacted by the tsunami. Many post-Jōmon occupation sites and coastal middens are located on the tops of gentle hills overlooking the Pacific coastline. These sites document the Yayoi and early historic periods of eastern Japan. Indeed, it seems that only in archaeologically recent years have people begun to live on seaside lowlands of this coast. We cannot blame the tsunami evacuees for hoping to relocate to hilltop flatlands, but these hills preserve important cultural materials. As recon-
struction housing plans are made following the tsunami, it will be critically important to also plan data recovery and rescue excavations. Archaeologists will have to prepare for major research projects. This will have to be a national effort since most of the Sanriku coast is sparsely populated. Few municipalities have archaeological experts. Professional experts will have to complete site surveys and make detailed recovery plans with attention to microartifacts and environmental archaeology.

Archaeologists will definitely be required to excavate sites quickly and accurately, but with sensitivity so that evacuees can build reconstruction housing without delay. Japanese law specifically prescribes excavation of sites being developed. Usually the developer supports this research. In the case of individual housing construction, however, there is a general consensus that excavation costs should be paid at public expense. Accordingly, when disaster evacuees relocate to a hilltop tableland safe from inundation by tsunami waves, boards of education of cities, towns, and villages will be obliged to implement the necessary excavations. Finding resources for this effort will be a great challenge. Excavations required for post-disaster reconstruction will increase rapidly in the months ahead. On many sites, excavation teams will unavoidably confront shell middens and or wetland sites that definitely require excavation and a broad range of environmental archaeological analyses. At that time, researchers and communities will have to balance people’s needs with the protection of archaeological sites. This is, of course, a biting question.
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Those who have excavated in caves and rockshelters know that large boulders are always in the way of one’s work. These obstructions occur in several ways: boulders are on top of the area that needs to be excavated, they are hanging over the area where people will be standing to excavate, or they are blocking access to an area or cave chamber. In every case, the boulders need to be removed; however, they usually are too large to be transported by hand. In other instances, there is not enough space to break the boulder by hand or to bring in a backhoe to take care of the (large and heavy) problem. Frequently, the boulder ends up being removed by incredible human effort either by hammering the rock with a large and heavy (3 to 5 kg) hammer and a chisel or, if available, with an electric jackhammer. For those who have worked with a jackhammer, they know how inconvenient and painful they are to use due to the noise (added to the permanent racket of the electric generator) and vibration. In either case, a great amount of time and patience is needed.

The other less common solution is to bring an explosives expert to dynamite the boulder. This is not easy, at least in Portugal and generally in Western Europe, as there are not that many experts who will take on such small jobs, and there are very restrictive laws related to the storage, carrying, handling, and use of explosives. Also, special permits are needed, and frequently the police need to be involved to move the explosives around. Finally, explosives tend to be expensive.

Facing a two-meter thick compact boulder layer in the Paleolithic rockshelter of Vale Boi, Southern Portugal, we have recently developed a new removal method that did not include the need to bring an explosives expert or to have special permits. It was also safe, cheap, highly controlled, and easy to work with.

The site of Vale Boi

Vale Boi is a very large site of over 10,000 sq. meters (Bicho et al. 2010). It is located on the eastern slope of a small river with the same name. The site has three areas: the Terrace, the Slope, and the Rockshelter. The Terrace is located on the lower section of the slope, and is characterized by a long sequence dated to at least between 28 and 6,000 B.P., with Mousterian, Gravettian, Proto-Solutrean, Solutrean, and early Neolithic occupations (Bicho et al. 2011). The Slope is marked by the presence of natural depressions on the limestone bedrock, which were used as places to dump the daily garbage, forming middens dated to the Gravettian, Proto-Solutrean, Solutrean, and Magdalenian. Finally, the Rockshelter is located on the high ground at the top of the fairly steep slope near a limestone face with some 10 to 15 meters of exposure. The Rockshelter includes Gravettian, Solutrean, and Late Magdalenian occupations. The shelter collapsed after the last Solutrean occupation, some 17,000 years ago. Very large boulders mark the collapse, with some boulders measuring as large as 2 meters in diameter and weighing a few tons. Also, below the Gravettian layer, dated to c. 22,000 B.P., there is a 3-meter sequence with no archaeological remains. This sequence is also composed of large boulders at certain intervals, although not as large as those from the collapse. These boulders also needed to be removed so we could reach the lower section of the shelter sequence.

Due to the incline of the slope and the presence of legally protected tree and bush species on the slope face, we could not take a backhoe up to the rockshelter. The first year of cleaning and boulder removal required the use of hammers, a big, steel, pointed bar (1.5 meter long) and a jackhammer. The work was painful and very slow, sometimes with just one person working, while the rest of the team had to wait. During the excavation, we used the same method to remove additional large boulders.

At the end of the 2009 field season, it was clear that we had a large amount of removal to do since the whole area of excavation was at the base of layer D, dated to c. 22 kyr B.P. (Figure 1), marked by the presence of large limestone blocks. To be able to reach deeper and check for the presence of more cultural layers (and specifically for Mousterian, which we ended up finding at a different loci, the ‘Terrace, in 2010), we could not go back to the jackhammer. One of us (FT), with lots of experience in cave exploration and research, mentioned that people were recently using a new method to open up cave entrances that we could...
possibly try in Vale Boi—it was easy, cheap, and fast. We then prepared to attack the large blocks for a full week in April and another week in September. The team was composed of 6 people, who worked full time during a 12-day period, and removed somewhere around 30 cubic meters of limestone using the controlled charges or cartridges of a powder-actuated tool.

**Powder-Actuated Tools and the Cartridges**

A powder-actuated tool, sometimes also called a “Hilti gun” or a “Ramset gun” after the companies that manufacture them, is a gun for fastening steel nails to hard substrates such as steel or concrete. This method is frequently known as direct fastening and relies on a controlled explosion created by a chemical propellant charge. There are low velocity and high velocity powder-actuated tools. In the latter ones, the chemical-based propellant acts directly on the fastener, very much like a firearm. Construction tools, at least those made by Hilti, are slow velocity, which means that there is a piston in the chamber and thus they are indirect-acting. This system makes these tools safer for the user. In any case, one has to have special training and licensing to be able to use these tools in many places such as Australia or the U.S. (regulations are supervised by the OSHA—Occupational, Safety and Health Administration). However, this is not a problem for archaeology, since we do not use these tools—only the cartridges!

In the U.S., the Powder-Actuated Tool Manufacturers Institute, Inc. (PATMI) governs the sensitivity of the primer, the cartridge dimensions, and the amount of powder inside. PATMI defines the power level by the velocity measured in a standard test in which a standardized 350-grain (22.7 g) cylindrical slug is fired from a standardized apparatus. There are, thus, for public sale cartridges available in standard sizes, 6.8/11 (cal .27 short—6.8 mm in diameter and 11 in length) and 6.8/18 (cal .27 long 6.8 mm in diameter and 18 in length) and different strengths that are color-coded. In the case of the short version there are six colors: grey, brown, green, yellow, red, and black/purple. The long version has 5 colors: green, yellow, blue, red, and black/purple, and these correspond, respectively, to speeds of 550, 630, 725, 770, and 870 ft/second. The chemical composition includes nitrocellulose (that includes nitroglycerine in powder) as the propellant and sinioxid for the ignition. Both substances are sealed inside the cartridge and therefore are safe as the ignition can happen only by force and perforation of the capsule. Cartridges are usually sold in sets of ten in colored plastic strips in 100 charges boxes. Each box, at least in Portugal, cost around $25.00 U.S. dollars.

![Figure 1. Vale Boi Rockshelter (Southern Portugal). East geological profile showing the large boulders present in the sequence.](image1)

![Figure 2. View of the cartridge.](image2)
Figure 3. Different phases of the demolition method: a) drilling; b) cleaning the hole with the straw; c) inserting the charge; d) charge in the hole just before is pushed down to the bottom; e) the whole system is not in place with the top inner tube fragment on top of the plastic (the under laid inner tube fragment is not visible since it is covered by the plastic), and the steel rod inserted; f) preparing to hammer; g) moment of the blasting with the a block flying and white dust under the plastic; h) block after the blasting, with close to a third broken off.
The Demolition Method in Archaeology

For demolition in karstic archaeological contexts it is not necessary to use the powder-actuated tools—just the cartridges. The cartridges used at Vale Boi are the more powerful black ones from Hilti (Figure 2). Additional tools required include a generator or other electric power source, an electric drill with bits (8 mm in diameter and at least 20 mm in length), a blanket or a large thick plastic sheet at least one square meter in size, a rubber inner tube, pointed and threaded steel rods (8 mm in diameter and at least 25 cm in length), a heavy hammer (2 kg), and a thin straw or hose (less than 6 mm in diameter and at least 40 cm in length).

The first step to demolish a large limestone block is to drill into it at about 20 to 30 cm from the edge (Figure 3a). The perforation should be about 15 cm in depth. The drilling should be done with some care in order to avoid fracturing the area around the hole. Due to the nature of the work, drills overheat frequently and bits will break every so often. In our experience a bit can last between a half a day and five days. Thus, it is best to buy better-quality tools, which will last longer. We also recommend having at least one spare.

After the hole is made, one needs to insert the straw and remove all the accumulated dust inside the hole by blowing hard through the straw. Since the dust is very fine and spreads fast through the air, safety glasses should be used for protection (Figure 3b). Once the hole is clean, the cartridge is inserted all the way to the bottom. Sometimes the charge does not reach the end of the perforation. In this case, it needs to be pushed down by carefully inserting one of the steel rods, with a flat end to the charge, and pushed down by hand (Figure 3c and 3d). Never do this by hammering the rod or with its pointed end, since there is a chance that will trigger the charge! As a safety procedure, always keep these two different types of rods apart.

After the charge is set, the pointed end needs to go down. The rod should go through a piece of the rubber inner tube (at least 20 x 20 cm), and then the plastic and then another rubber inner tube piece (Figure 3e). The plastic is a safety measure used to stop airborne limestone fragments from injuring workers, while the rubber fragments stop possible splinters from both the rock as well as from the charges. Once the rod is set against the cartridge, it needs to be hammered down: first carefully (Figure 3f), so the cartridge sets well against the bottom of the hole and then with hard percussion (Figure 3g). If it does not explode with the first hit, the rod can be struck repeatedly until it does. Though it is very rare, sometimes the rod is pushed out with the blasting creating a dangerous scenario, and one needs to be careful to never be in the direct exit line of the rod.

Occasionally, the cartridge does not explode. In this situation, a new hole must be drilled about 15 to 20 cm from the previous one (and the new hole should not reach the first one), charged with another cartridge and exploded. The unexploded cartridge should then be extracted from the debris and emptied for safety. Experience has also shown us that the slightly off-centered, pointed rods work better than the ones with the perfect pencil like point.

It is very common for the explosion to break the area between the perforation and the edge of the block into 2 to 10 kg fragments, usually in a spider-web like shape. These blocks can be removed and the procedure repeated. Sometimes, however, the

Figure 4. Close view of one the smaller broken boulders with the blackened area from the blasting of the charge. Note that the cartridge still in place and the negative of the drilling.

Figure 5. Close view of one the smaller broken boulders with the blackened area from the blasting of the charge. Note that the cartridge still in place and the negative of the drilling.

Figure 5. Example of a boulder that did not explode, being fractured with the use of a chisel and a 2kg hammer.
charge explodes but there are no visible marks on the bolder. In this case, do not despair. The shockwave passed through the bolder mass, creating weak points that will help subsequent charges to create large fractures. Other times the block only cracks rather than breaking entirely. Rather than repeating the procedure, we found faster and easier just to insert a pointed chisel into the hole and hammer it to open the crack created by the charge. This can take some time but if the chisel is well fixed it will eventually crack the boulder open (Figure 5).

If the boulder is very round it is difficult to obtain good results. Like flint knapping this procedure follows the same physics meaning, an angle of less than 90º is essential to produce the best results. Sometimes, to reach that edge angle, one needs to blow up smaller fragments of the boulder to prepare a better surface.

Final words

This short note describes an easy, rapid, safe, and cheap method for demolition in karstic environments used in Vale Boi and more recently used in Picareiro cave (Bicho et al. 2006) by Jonathan Haws. We found it extremely useful in our research and we wanted to share this knowledge with colleagues that might have experienced the same problems we have had during the last 20 years working in caves and rockshelters (a short video is publicly available at http://youtu.be/kFr12xv3Ldw).

This technique provides a simple, fast, and very cheap form of resolving large problems while working in limestone environments. It is a method that provides complete autonomy to whoever works in caves and rock-shelters and radically decreases the amount of work and effort (and person/hours) when boulders and large blocks are encountered. A final note is to remind everybody that while the use of these cartridges is simple and safe, it still involves a certain level of danger. Thus, the whole procedure needs to be undertaken with great care. One should always be aware that stone fragments could be projected with considerable energy. The use of protective gloves and boots is highly recommended.

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ARCHAEOLOGY AND ANTHROPOLOGY
TANGO, PAS DE DEUX, OR DANCE DANCE REVOLUTION?

Anna S. Agbe-Davies

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“Archaeology is anthropology, or it is nothing.” How often do you run across that time-honored assertion? What about the comment “There’s not really that much for archaeologists in the AAA [American Anthropological Association]?” Regardless of which point of view you subscribe to, I hope that this special forum with highlights from the 2010 AAA meeting in New Orleans will cause you to think differently about archaeology and its relationship to anthropology.

Michael Brian Schiffer’s essay is a version of the Distinguished Lecture he gave in conjunction with the reception and business meeting of the AAA’s Archaeology Division (AD). In it, he reflects upon archaeology’s traditional reliance on theories and concepts more suited to a synchronic ethnographic anthropology than a diachronic archaeological anthropology. Using the example of transformations in steamship technology, he presents a behavioral framework for understanding technological change—an endeavor that plays to archaeology’s strengths: among them, an emphasis on the material and the analysis of trends over long time spans.

Echoes of Schiffer’s key points about the unique qualities of archaeological data and the need for archaeological autonomy in the realm of theory reverberate in the two pieces adapted from conference papers. R. Alan Covey, in his examination of changing land use practices prior to and during Inca hegemony, uses survey data regarding landscape modifications and settlement patterns to explain changes in social organization and the social meaning of landscape features. These insights give new significance to descriptions of Inca society in early Spanish colonial texts, interpretations of which have in other studies been projected into the pre-colonial past. Similarly, Megan C. Kassabaum, David J. Cranford, and Erin Stevens Nelson observe the influence that ethnographic notions about social complexity and hierarchy, along with ethnohistorical accounts of mound use, have had on interpretations of mounds in the North American southeast. They argue that consciously conceptualizing these features as palimpsests—both short and long term—encourages specific, rather than generic, interpretations of their function and meaning for the people who built and used them.

The remaining two contributions summarize sessions organized by AD members. Kathryn E. Sampeck identifies the themes that united contributions to “The Architecture of Identity” in which authors analyzed the relationship between the built environment and social solidarity. The breadth of this session, spanning the western hemisphere from the Midwestern US to El Salvador, and taking in the sixteenth through the twenty-first centuries, shows archaeologists taking anthropology’s comparative tradition to heart. The analyses indicate that while we share concepts like ethogenesis and class with other anthropologists, the subdisciplinary attention to landscape and change over time yields understandings that are missing from many ethnographic analyses of similar phenomena. For “Not the Usual Suspects: New Directions in Community Archaeology,” Morag M. Kersel and Meredith Chesson brought together archaeologists whose projects represent the growing diversification of community archaeology. Community engagement in archaeology is one arena in which the interpenetration of archaeological anthropology and ethnographic anthropology is clearly on display. Examples illustrate how practices and strategies once associated with particular individuals and archaeological subspecialties have become more prevalent in “unusual” places, like the Bronze Age Middle East, or have led to unorthodox outcomes.

What all of these contributions have in common is they demonstrate both the influence of anthropology on archaeological practice, and how badly anthropology needs an archaeological perspective. This need is both prosaic—

@AGBE-DAVIES, continued on page 47
ARCHAEOLOGY AS ANTHROPOLOGY
WHERE DID WE GO WRONG?

Michael Brian Schiffer

Michael Brian Schiffer is a Professor in the School of Anthropology, University of Arizona and a Research Associate at the Lemelson Center, National Museum of American History, Smithsonian Institution.

With the exception of classicists, archaeologists in the United States are trained mainly in departments of anthropology. As a result, we bring to the field and laboratory the social theories promoted by cultural anthropologists, and we attempt to map their constructs onto archaeological data. Take, for example, Lewis R. Binford’s (1962) seminal paper, “Archaeology as anthropology,” written when many cultural anthropologists were still obsessed with kinship systems and marital residence patterns. Binford reasoned that if archaeologists were to become anthropologists in more than name, we would have to infer the social phenomena that cultural anthropologists believed were important. To promote this agenda, Binford argued that the archaeological record has social content. His major proposition was that some artifacts—he called them “socio-technic”—functioned in the social subsystem.

But how could these social functions and larger organizational patterns actually be inferred? A simple but flawed syllogism was the key, as follows: Human behavior and material culture are patterned. The archaeological record—a product of human behavior—is also patterned. Therefore, archaeological patterns (as might be revealed by statistical analysis) can be interpreted directly in behavioral and organizational terms. The first generation of processualists applied this strategy literally, inferring everything from matrilocality to patrilateral cross-cousin marriage on the basis of potsherd distributions. We now know that these studies were defective owing to statistical blunders and the neglect of patterning introduced by formation processes.

Having learned much about analytical protocols and formation processes, we have moved beyond these early studies, but many anthropological archaeologists still believe that we must infer social organization as cultural anthropologists constrain it. Thus we continue to follow their theoretical fads. And we hope in vain that cultural anthropologists might actually notice—perhaps even cite—our work (when pigs fly).

Marvin Harris was one of the few cultural anthropologists who had some familiarity with, and respect for, archaeology. In his comments at the end of Binford and Binford’s New Perspectives in Archeology, he issued a strong caveat against the mechanical application of ethnographic constructs to the archaeological record. He urged us to “shrive yourselves of the notion that the units which you seek to reconstruct must match the units in social organization which contemporary ethnographers...tell you exist” (Harris 1968:360). Although suggesting that archaeologists abandon the quest for prehistoric descent systems, Harris also offered constructive advice. Archaeologists, he argued, can address significant anthropological questions because they deal with the material remains of groups that actually came together to conduct concrete activities. By chasing after emically contaminated ethnographic units, archaeologists were squandering the unique strength of their database. Regrettably, few archaeologists heeded his advice.

Indeed, many anthropological archaeologists continue to accept the theoretical hegemony of cultural anthropology. This is curious because cultural anthropology is no longer a distinctive discipline. Indeed, wherever one looks in the academy, mainstream humanists and social scientists all seem to be studying the same kinds of phenomena using similar social theories. The goal is particularistic: to discern—in any society or subgroup—how people construct and employ social identities based on gender, age, social class, race, ethnicity, religion, and so on. From study to study, the only major difference is the subject groups. Moreover, the concept of culture—as learned behavior (or the cognitive basis of learned behavior)—now thoroughly permeates the academy and the media. And so for decades cultural anthropology, having lost its monopoly on the concept of culture and on studies of the exotic other, has been in the grips of its own identity crisis, moving the discipline every which way but forward as it wallows in varieties of vulgar idealism.
There is no doubt that cultural anthropology has made important contributions to our discipline and to modern society. The concept of culture undermined racism and environmental determinism and helped to make intelligible the folkways of non-Western peoples. Cultural anthropology’s influence throughout the humanities and social sciences is everywhere manifest, if seldom acknowledged. And the applied anthropology of today can boast many successes.

However, regarding our discipline’s central goal, that of explaining behavioral diversity and change, cultural anthropology’s cumulative contributions are too minuscule to measure. To explain differences in the behavior of groups, cultural anthropologists have recourse only to differences in learned behavior. And, on the rare occasions when they attempt to explain appreciable behavioral change, they cite historical contingencies. Explaining differences in learned behavior by invoking differences in learning is tautological. And without relevant scientific generalizations—that is, theories, models, and laws—historical contingencies lack explanatory relevance. In short, behavioral diversity and change remain unexplained.

In the end, few cultural anthropologists are interested in artifacts, the natural environment, or long-term behavioral change, and fewer still care to craft scientific generalizations. So why should archaeologists adopt their theories du jour, research questions, and constructs, which are tailored to short-term—essentially synchronic—mentalist phenomena?

Among the traditional anthropological subdisciplines, only archaeologists are well situated to craft scientific generalizations about behavioral change. Let me tell you why that is so. First of all, most archaeologists routinely ponder changes in the manufacture and use of innumerable technologies, from pottery to bone tools to architecture; and we also investigate changes in ritual, exchange patterns, subsistence, land use, and numerous other behavioral phenomena. Second, we can study changes that transpired over decades, centuries, even millennia. To paraphrase the Rolling Stones, “Time is on our side.” Third, we are not restricted to studying prehistoric remains. Over the past half century, archaeological research has expanded to include ethnoarchaeological and historical evidence. In effect, we can now exploit any line of evidence, from any society and time period, that is pertinent to a research project.

And fourth, prodded by behavioral archaeologists, we recognize that human life consists of ceaseless interactions among people and diverse kinds of technologies, which are manifest in specific activities. Extending Binford’s insights, we insist that technologies take part in virtually every activity in every realm of society. Thus, there are technologies of religion and recreation, medicine and magic, social interaction and socialization, communication and economy, foodways and trade, politics and travel, and science and art—to name but a few. When activities change, the constituent technologies also change—and vice versa. And so we maintain that research on behavioral change can be nothing less than the study of technological change. Clearly, behavioral research requires that our formulations all explicitly entail artifacts.

Although we archaeologists study behavioral change and may draw on varied lines of evidence, there are obstacles beyond our acceptance of cultural anthropology’s theoretical hegemony. As in cultural anthropology, our explanations are most often particularistic. Tied to regions and time periods, we seldom ask general questions or appreciate how our regional expertise might contribute to evaluating scientific generalizations. Moreover, on the rare occasions when we employ explicit generalizations, we massage our data to conform to them instead of employing rigorous tests. This is not the way to build a science of behavioral change.

We must no longer allow cultural anthropology—or any other discipline—to uniquely provide generalizations. But this does not mean that we should ignore what they do. After all, some borrowed generalizations may prove to be useful, so long as they are judged relevant by archaeological criteria and are recast in behavioral terms. And we must learn to ask our own general questions, craft our own constructs, propose new scientific generalizations, and undertake appropriate research projects that draw on all relevant lines of evidence. That is how we may contribute more consistently to achieving anthropology’s major scientific goals.

In my own research, I have prioritized the creation of conceptual tools for studying technological changes that took place over decades, even centuries. My rationale is that the archaeological and historical records’ greatest anthropological potential is in illuminating long-term change processes that can be studied rigorously in no other way. Indeed, research on long-term behavioral change using only data from the present is an act of self-delusion.

That is because observations on contemporary behavior have severe shortcomings. For example, we may not be able to distinguish between cyclical and structural changes. Also, a trend in a specific performance characteristic of a technology may appear linear, whereas over a long period it might form an exponential or logistic curve. But wait, there’s more.
By confining research to the present, we are likely to be distracted by the peoples’ discourses as they take part in power struggles that may surround the development or adoption of a new technology. For these reasons and many others, it is preferable to study technological changes that have played out over long periods. Archaeological and historical evidence allow us to trace such patterns of change and to offer multi-level explanations of performance trends, as I now hope to show with a case study.

Let me begin by remodeling some useful ideas of Edward Constant, a historian of technology who discussed what he called the “turbojet revolution” in aircraft (Constant 1973). Constant called attention to a well-known performance trend, the vast increase in the maximum speed of aircraft during the twentieth century, from less than 50 mph to more than mach 1. He showed that people conversant with aircraft technology before the Second World War had foreseen that propeller planes driven by piston engines would soon reach a top speed far short of mach 1. In response to this constraint, there was a move in several nations to develop a generation of faster planes. In prioritizing speed, people experimented with alternative technologies and developed turbojet engines.

The turbojet allowed aircraft to surpass the performance of piston-driven planes and to exceed the sound barrier. For present purposes, then, we may say that the decades-long increase in maximum speed was enabled by a somewhat abrupt technological change in a component technology. Constant described such changes as “technological revolutions,” drawing inspiration from Thomas Kuhn’s (1962) work on scientific revolutions. In Constant’s scheme, a revolutionary change brings about the replacement of one “technological paradigm” (i.e., propellers and piston engines) by another (i.e., turbojet engines).

We can generalize this process and label it with a term less value-laden than “revolution.” With a nod to biological evolution, let us apply the term saltation to any abrupt change. Here, then, is a simple saltation model: when a component of a complex technology reaches a developmental limit, another must take its place if the technology’s performance trend is to continue. Saltations may follow one upon the other at varying intervals, with each new technological paradigm generating a host of subsidiary development projects, as long as people can acquire the necessary resources. Although some performance trends may have persisted for long periods without requiring any saltations, this model nonetheless gives us a starting point for research. We begin by discerning a long-term performance trend in a technology. Next we seek the saltations in component technologies that may have enabled the trend. Assuming that we find one or more saltations, we may then invoke them in constructing a proximate explanation of the performance trend. However, as anthropologists, we are not satisfied with immediate causes. And so we have to explain the saltations; that is, pinpoint the societal factors that spurred people to develop and adopt the new component technologies. By implication, we also want to explain when a performance trend halts or reverses. I’ll introduce other levels of explanation as we go along.

Let me illustrate the process of multilevel explanation through a case study, that of passenger steamships plying the north Atlantic between Europe and America from 1838 to 1952. Constructed in Britain, France, Germany, Italy, and the United States, passenger liners on this treacherous route were on the cutting edge of steamship technology. One oft-noted temporal trend that crosscuts countries of origin is an increase in speed of the swiftest liners. A plot of these speeds exhibits a roughly linear rise until the early 1950s, from 9.5 knots to 34.5 knots (Figure 1). After 1952, which I haven’t plotted, the curve heads downward.

After identifying this performance trend, we move to the next level of research: identifying the saltations in component technologies. Although incremental tweaking of existing components contributed to the performance trend, new engine designs and new propulsion systems were the decisive saltations. Following Arnold Kludas (2000), I divide this sequence into three periods, each marked by consistent adoptions of particular engine and propulsion technologies on the part of steamship lines for their fastest ships.
During Period 1, from 1838–1872, ships had a single 2-cylinder, side-lever steam engine and side paddle wheels (Figure 2).

In Period 2, from 1872–1907, the ships had compound engines fitted with screw drives using one or two propellers. A compound engine, by the way, feeds the steam sequentially through several cylinders, usually three or four.

During Period 3, which extended from 1907 to 1952, steam turbines replaced reciprocating steam engines, and four propellers were adopted (Figure 3).

Some researchers might be tempted to explain these salutations by invoking a sequence of significant inventions, namely side-lever engines, compound engines, screw propellers, and turbine engines. This kind of explanation fails both empirically and theoretically. Empirically, both compound engines and screw propellers, for example, had been envisioned many decades before the first steamship crossed the Atlantic in 1838. Moreover, some inventors had made promising prototypes of these components and demonstrated them in boats (Preble 1883; Seaton 1909).

The invention explanation fails theoretically because it does not address the processes by which promising ideas or prototypes become consumer-ready technologies. Indeed, successful technologies pass through a series of stages. A simple model consists of four stages: invention, development, manufacture, and adoption.

Invention is the creation of an idea or vision for a technology that has performance characteristics differing from those of other technologies.

Development results in a manufacture-ready design that ostensibly meets the technology’s performance requirements in post-manufacture activities.

Manufacture is the technology's production or replication.

Adoption is the acquisition and use of the new technology by consumers.

Because different generalizations apply to different stages, we have to determine which stages are implicated in a technological change. Are we trying to explain a spurt of inventive activities, or the willingness or unwillingness of people to take up and develop a promising invention, or the ability or inability of a manufacturer to produce a technology, or the response of consumers? This part of the research process is critical: after all, models of invention do not explain adoption patterns or vice versa; and development and manufacture require their own models. In the steamship case, the post-invention stages are patently relevant, and so we focus on these in seeking the societal factors that impelled the salutations and enabled the performance trend to continue.

The major processes at work appear to have been: (1) competitions among steamship companies, (2) competitions among several countries, and (3) consumers eager for rapid transatlantic passage.

Steamship companies were of course profit-seeking enterprises, and faster ships meant more round trips per year, and thus potentially more profit. These firms commissioned faster liners—and also larger ones to accommodate more passengers. In addition, they one-upped each other in pro-
viding creature comforts and social amenities, from hot and cold running water in cabins to lavishly appointed dining halls. Profit and amenities aside, having the fastest ship gave a company bragging rights, enhanced its prestige, and demonstrated its technical competence.

Countries had ample incentives to support their domestic steamship lines because large ships could serve as troop carriers during wartime. Thus, governments subsidized their construction and operation in several ways, such as generous mail contracts, sometimes loans, and occasionally annual payments. Some countries even partly financed the building of specific ships. A notable example is the SS United States, completed in 1952. This was the all-time fastest liner, whose construction at Newport News, Virginia, was surrounded in secrecy. It cost $77 million, of which the Pentagon contributed $45 million (Kludas 2000:134). These ships were also a source of national pride and prestige that captivated government officials and ordinary citizens. Large crowds often turned out dockside to watch the great liners arrive and depart, events that newspapers covered lavishly.

A swift crossing of the north Atlantic appealed to passengers because a shorter trip decreased exposure to icebergs, punishing storms, and monster waves. In industrial nations, people in the growing ranks of the elite and upper-middle classes could validate their status and demonstrate social competence to their peers by crossing the Atlantic and talking about it for years afterward. The faster and larger ships accommodated passengers of several social classes; steerage was filled with poor immigrants, sharing cramped quarters, who also would have preferred a speedy voyage.

The trend of faster passenger liners ended in the 1950s, owing to major changes in transportation industries and travel patterns. The great transatlantic migrations had ceased, and air travel began to attract affluent travelers. As flying became more affordable in the 1960s and 1970s, even people of modest means no longer aspired to sail across the pond. Their market greatly diminished, the surviving steamship companies became cargo or cruise lines, in the latter case commissioning more lavishly appointed ships but no longer competing on the basis of speed. And, to remain competitive internationally, governments subsidized the development, not of cruise ships, but of giant transport planes.

The steamship case is especially interesting because the trend of increasing speed does end. In fact, large cruise ships are no faster today than were the elegant liners of the 1930s such as the RMS Queen Mary (Figure 4). That is because the societal processes favoring faster liners had abated, and so steamship companies, when commissioning ships, no longer prioritized speed. This occurred despite the fact that new technologies, such as jet propulsion employed in a few ferries and naval vessels, could have enabled an additional saltation, making possible a generation of faster ocean liners.

This kind of explanation provides us with the major societal factors that impelled the trend toward higher speeds. And, while it does identify the pivotal saltations that contributed to the trend, it doesn’t delve into the development of these component technologies. Thus, we may envision a third level of explanation that illuminates the interrelationships among the many other technologies—parts and associated technologies—that enabled the saltations. A few brief examples can illustrate this level of explanation.

The steam engines that were making an impact in mines, factories, and pumping stations during the early part of the nineteenth century were not well suited to ships plying the high seas. Very tall, these engines could not easily fit below deck, and so would have been hard to operate and maintain—and it would have been difficult to protect them and their operators from high winds and waves. And, on deck, these heavy machines also would have reduced a ship’s stability. Thus, to make possible ocean travel, the steam engine had to be redesigned. The result was the development of the side-lever engine, which required many new parts of cast and wrought iron.

Next came the compound engine. A compound engine usually had several cylinders of increasing size. High-pressure steam entered the smallest cylinder and forced the piston to move; after this stroke, the steam was still hot and under fairly high pressure, and so it was piped to the second, and somewhat larger, cylinder. And so on, sometimes up to four
cylinders. Making high-pressure steam required the development of very strong boilers and robust piping, large furnaces to heat the water, and an assortment of controls, governors, and gauges. These technologies—and many others—had to be invented, developed, made compatible with each other, and adapted to work in the bowels of a ship. Only then could the compound engine become an effective saltation.

The screw propeller required, at a minimum, a very strong shaft to transfer power to the screw, gearing so that the screw could revolve faster than the reciprocating engine, special means to seal the shaft where it passed through the stern, and redesign of the rudder.

The last engine was the turbine, which required a considerable amount of engine and gearbox development because turbines operate at very high speeds, greater by orders of magnitude that the screws. Turbines also used even higher steam pressure, necessitating new boiler designs. And the screws had to be modified.

Ideas for many of the technologies needed to make side-lever engines, compound engines, screw propellers, and turbines had been kicking around for years, but required much development and new manufacturing capabilities, which in turn required the investment of resources of many kinds. Thus, in the fourth and final level of explanation, we identify the people, companies, and polities that deployed the resources for producing, eventually, the integrated suite of parts and associated technologies that made each saltation possible. These people, companies, and polities were responding to the societal factors pushing the trend.

Thus, our multilevel explanation comes full circle. Societal processes such as peer competitions motivate people to deploy various resources to develop the necessary parts and associated technologies that make possible the new component technologies for continuing the technological trend.

Obviously, this multilevel type of explanation is not for scholars, such as cultural anthropologists, who are unwilling to engage the full materiality of human behavior. Archaeologists, on the other hand, are not reticent to learn how technologies are made and used.

Seeking technological trends and developing multilevel explanations is but one kind of research that aims to explain technological change. I have chosen this example because it is easily simplified for a talk—and I like ships. But I want to emphasize that there are many other ways to frame behavioral questions about technological change, whose answers can be sought by judiciously interpreting evidence from the archaeological and historical records. We are not limited to studying performance trends, but they are fun to research.

I began this paper by rejecting the theoretical hegemony of cultural anthropology. I don’t want to end it by leaving the impression that I am hostile to social inference, per se, or to a concern with social processes. Indeed, social processes promoted—and still promote—many a technological change. In the steamship case, I noted that competitions among steamship companies as well among countries were major factors pushing greater speed. And the trend was also affected by consumer travel preferences. Archaeologists do need to be concerned with social processes, but not as ends in themselves. Rather, social processes help us to explain technological change.

Indeed, we should follow Marvin Harris’s advice by devising new social constructs or remodeling old ones in behavioral terms. Happily, some progress has been made. For example, a *cadena* consists of all social groups that take part in an artifact’s entire life history, from the groups that acquire and process raw materials, to those involved in manufacture, use, reuse, and deposition (Schiffer 2007). The *cadena* construct arose in the wake of creating a behavioral theory of artifact design (Schiffer and Skibo 1997). Another example is the *techno-community*, which is any group whose members carry out one or more activities employing variants of a particular technology. Transfers of technology among *techno-communities* are a fundamental premise of a behavioral model for studying technological differentiation (Schiffer 2002). Clearly, if we want to infer social phenomena or include social processes in our models, we can invent appropriate behavioral constructs.

Beyond that, we should look to the theories developed in archaeology. Not surprisingly, I favor those generated by behavioral archaeologists. At the very least, behavioral theories encourage our creativity, force us to engage all dimensions of materiality, and require the use of relevant databases from the past and present. And, I hasten to add, behavioral theories are somewhat compatible with those of evolutionary archaeology and behavioral ecology.

To learn more about behavioral archaeology, I invite you to consult three recent books: *People and Things: A Behavioral Approach to Material Culture* (Skibo and Schiffer 2008), *Behavioral Archaeology: Principles and Practice* (Schiffer 2010), and *Studying Technological Change: A Behavioral Approach* (Schiffer 2011). The latter stresses that only by asking gener-
al questions that pertain to artifacts and that exploit the time-depth afforded by the historical and archaeological records can we achieve the anthropological goal of explaining diversity and change in human behavior.

A final thought. I am not advocating a disciplinary divorce from anthropology or even an institutional divorce from cultural anthropology. Rather, if archaeology is to realize its full potential as the science of behavioral change—what Fred Plog (1973) called “diachronic anthropology”—then a trial separation from cultural-anthropological theories is overdue. We must shake off the conceptual shackles of a fad-obsessed subdiscipline that seems incapable of achieving anthropology’s highest goals.

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Deadline: December 15, 2011
LANDSCAPES AND LANGUAGES OF POWER IN THE INCA IMPERIAL HEARTLAND (CUZCO, PERU)

R. Alan Covey

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In Inca times, daybreak ushered new creation into the Andean highlands. Emerging from their homes with the sun’s first light, men and women dispersed onto a landscape suffused with sacred forces and full of cultural potential, which they labored together to tame and civilize as their ancestors had since the dawning of humanity. The sun’s transit and the day’s agricultural toils replicated cyclic rhythms considered essential to the progression of human life and other patterns of development and decline. Inevitably, midday heat weakened into lengthening shadows and physical exhaustion; day drew to a close with darkness and the return to the safety of home.

Colonial-era documents (c. 1532–1630) once served as the primary evidence for approaching local worldviews and assessing the impact of the expansion of the Inca Empire, the largest native state in the Americas. The documentary record has been particularly influential in the Cuzco region, the Inca imperial heartland, although many early studies have lacked a rigorous historiographic consideration. As ethnohistorians and linguists work toward more robust documentary analyses (e.g., Mannheim 1991; Pease 1995), recent systematic regional archaeological surveys have begun to contextualize ethnohistoric assertions, fill in important lacunae, and serve as databases that can correct, modify, and validate inferences made from using only documents. In the late 1980s, Brian Bauer introduced a time-tested survey methodology to the Cuzco region (Bauer 1992). Subsequent projects directed by Bauer, the author, and our Peruvian colleagues have employed a compatible field methodology across a region of approximately 2500 km² (e.g., Bauer 2004; Covey 2006; Covey et al. 2008). With several thousand sites and other archaeological features systematically registered, the Cuzco region presents us with unparalleled opportunities for reconstructing archaeological landscapes, developing more meaningful documentary interpretations, and pursuing problem-oriented excavations.

The Cuzco data reveal settlement patterns prior to Inca imperial expansion (A.D. 1000–1400, called the Late Intermediate Period [LIP]), as well as local transformations wrought as the Incas conquered the Andean region over a century or so (Figure 1). Two salient patterns are evident in local LIP settlement hierarchies: (1) small and medium ridgetop villages located well above the elevation limits for maize cultivation, and (2) large villages and towns located near valley bottom areas where maize and other crops could be cultivated. The first pattern, discussed here as *upland villages*, is consistent with LIP settlement patterns across much of the Andean highlands, while the second, *valley-bottom towns*, constitutes a pattern that contrasts with most archaeologically known highland regions (Covey 2008). The Inca state emerged as a society of valley-bottom farming towns succeeded in extending intensive land practices into territories of upland villages, transforming local landscapes and preexisting patterns of social and economic organization. By the imperial period (A.D. 1400–1530s), settlement across the Cuzco region focused on valley-bottom farming, with the most productive resources controlled by royal lineages through a system of private estates.

Upland Village Ecology and Landscape

The ethnographic literature helps to identify important features of Andean subsistence ecology. Farmers in upland communities today have to cope with short- and long-term temperature and precipitation fluctuations, and their effect on strategies for successfully cultivating a suite of cultigens across different microclimates and soil conditions. Risk management in contemporary upland villages of Cuzco emphasizes rainfall-fed polycropping in multiple plots, with the implementation of a crop rotation and fallow system to maintain soil quality (Covey 2006:47–50). Communities and kin networks are critical for scheduling land use and coordinating the labor needed to maintain plot and crop diversity.
Diversity-oriented risk management regimes are conservative, focusing on spreading risk across resources and social networks rather than increasing production output and relying on surpluses.

Many aspects of this productive system appear to have been employed in upland villages at the time of the Spanish conquest, and early Colonial sources—including the dictionaries and grammars of Domingo de Santo Tomás (1951[1560]) and Diego González Holguín (1989[1608])—approach subsistence work through the interplay between creation, civilization, and life cycle. Indigenous chroniclers describe multiple phases of human action: (1) emergence (paqarina) of the first humans in a wild or natural state onto an unmarked landscape, (2) transformation through human agency to civilize “wild” (purum) people and lands, and (3) imposition of order over people (kamachikuna) and lands (patachana) (e.g., Guaman Poma de Ayala 1980[1615]; Pachacuti Ymqui de Salcamaygua 1993 [17th c.]). In upland areas, the human capacity to reclaim and order nature is temporary—over time, human vigor fades, agricultural fields are exhausted, and settled locations are abandoned. Things fall apart, revert to a wild state, and await a new order or transformation.

Upland communities recognized landmarks of creation, transformation, and abandonment. Caves, springs, and other natural features marked locations of human emergence, while rock outcrops (qaqa) provided mnemonics for recounting mythical ancestral actions. Relict irregular terraces, abandoned settlements, and mortuary features offered more proximate evidence of the short-lived triumphs of human transformation, helping to explain local coresidential (ayllu) organization and justify the rights of contemporary kin networks to carry out generative subsistence actions. For example, the early seventeenth-century Huarochiri manuscript (Salomon and Urioste 1992:43–44) recounts that when the first humans “filled the land, they lived really miserably, scratching and digging the rock faces and ledges to make terraced fields. These fields, some small, others large, are still visible today on all the rocky heights.”

Upland populations in LIP Cuzco lived in small and medium villages. Above the Apurimac River, small villages are scattered in side valley locations with easy access to mixed farming resources (Bauer 1992). The largest settlements near the Vilcanota-Urubamba Valley are situated on ridges and mountain tops close to tuber lands and pastures (Covey 2006), many found close to clusters of aboveground mortuary monuments and surrounded by irregular rainfall-fed terracing skirting the slopes below (Figure 2). Along the Vilcanota-Urubamba River, LIP villages are associated with inaccessible site locations, often with modest defensive works that could protect people, herd animals, and domestic food stores.

Valley-Bottom Town Ecology and Landscape

While upland villages in LIP Cuzco appear to have managed diversity through cyclical actions on natural landscapes, valley-bottom towns addressed climatic uncertainty through intensive land use, cultivating high-yield crops, and storing surpluses to average out resource availability. Intensive agri-
culture would have been much more likely to involve continuous land tenure (even if a fallow system maintained soil quality). The Malthusian effects of such strategies would encourage continued growth in areas where new lands and water sources could be transformed.

Valley-bottom farming towns in LIP Cuzco probably invoked similar themes of human emergence, transformation, and civilization, but with a contrasting sense of what was “wild” (purum) and what was “civilized” (kamachisqa). Where natural rock outcrops (qaña) and abandoned irregular terraces provided prompts for recounting genealogy in upland villages, features constructed from quarried, worked stone (rumi) dominated the landscape of the valley bottom. High lakes and streams helped upland communities tell stories of origin and migration, while the construction and maintenance of reservoirs and irrigation canals contributed to valley-bottom explanations of civic membership and hierarchy. Note the distinction in the Huarochiri manuscript: while the first humans lived in the uplands among the rocks, village life and irrigation farming were introduced by a creator named Cuni Raya Vira Cocha: “[He] fashioned all the villages. Just by speaking he made the fields, and finished the terraces with walls of fine masonry. As for the irrigation canals, he channeled them out from their sources...” (Salomon and Urioste 1992:46). The creation of agricultural infrastructure generated new power for leaders who organized them, and periodic maintenance activities promoted a sense of community identity and obligation.

Agricultural terraces reshaped the physical surroundings of valley-bottom towns and the social significance of local landscapes. The Quechua verb patachay (“to build terraces”) is found in Colonial dictionary entries for bringing spatial order and reducing a population to a single rule. Leveling land in terrace construction is linked to the concept of fair administration, of evening things out. (Unfair dealings involve the verb chakuy, associated with high elevation hunting.) Canal and terrace projects altered the significance of local water sources and rock outcrops, with the most significant works—the construction of royal Inca estates—capable of changing river courses and effacing landmarks essential to local narratives of origins and social organization.

In LIP Cuzco, valley-bottom farming towns are found along an axis that includes the Cuzco Basin and areas to the northwest and southeast. In their stories of Inca ancestral origins, indigenous chroniclers associate these regions with the kings’ title qhapus, used to describe the first Inca ruler (Manco Capac) and his most powerful counterparts (Garcilaso de la Vega 1965[1609]; Guaman Poma de Ayala 1980[1615]).

Royal Inca Estates

The Incas extended dominion over the Cuzco region during the thirteenth and fourteenth centuries (Bauer and Covy 2002), and regional settlement patterns indicate significant disruptions in many areas. Vilcanota-Urubamba Valley settlements shifted from upland villages on ridges and moutaintops, with new small villages settled around royal estates near the valley bottom (Covy 2006). Some areas of concentrated valley-bottom occupation show evidence of widespread abandonment, most notably the Maras area, where a hierarchical system of over 100 hectares of LIP settlement lacks evidence of significant Inca period occupation. Colonial documents describe how the Incas conquered and resettled their most powerful rivals and broke up local settlement and land tenure systems (e.g., Espinoza Soriano 1974; Rostworowski 1970).

In addition to conquest of valley-bottom rivals, Colonial Inca nobles narrating the exploits of their ancestors described the creation of new resources that comprised a regional system of royal estates. The first estate project was the construction of new canals by the sixth Inca and his wife (Cieza de León 1988[c. 1550]; Cobo 1964[1653]). While the confluence of streams and rivers uses the same term (tinku) as the ambivalent complementarity between a village’s moieties, this divergence of artificial water channels accompanied the designation of a new moiety of Inca lineages (the Hanan, or Upper, Cuzco lines) that grew as royal couples mobilized labor tribute to transform wild space into estate resources that were passed on to a new kindred (panaqa). In the late sixteenth
century, all known Hanan Cuzco *panaqa* groups claimed ownership of one or more areas of improved farmland created by their founding ancestors.

Estate construction targeted valley-bottom areas not occupied intensively, especially in the Vilcanota-Urubamba Valley, where the largest communities were upland villages located high in the side valleys. Inca rulers and their wives initiated the transformative acts of creation and migration that they attributed to their ancestors, identifying “wild” places and using labor tribute to level them out and channel irrigation water to them. As rock outcrops were quarried to build walls and low spaces were filled in, monumental terracing and fine cut-stone masonry reshaped the landscape visually and symbolically (Figure 3). Newly constructed lands were renamed and allocated, claimed permanently by the new *panaqa* and those who served it. Royal Inca estate construction cited a creation trope that would have been familiar to the communities whose labor effaced their own landmarks; at the same time, estate production practices departed significantly from established principles of cyclicality and community participation (Table 1). Estate lands did not revert to a natural state and were worked by provincial labor colonists (*mitmaq*) and retainers who served the nobility directly (*yana*). These populations were compelled to migrate to Cuzco to work on the royal landscape. As the social and economic focus of the Cuzco region shifted toward valley-bottom estates, it recast upland areas as less cultured—as places not leveled out and reduced to Inca dominance.

When used in careful consultation with Colonial dictionaries and chronicles, archaeological survey data reveal key contrasts in LIP subsistence ideology, settlement ecology, and regional hierarchy. Imperial settlement patterns and documentary descriptions of royal estates demonstrate how Inca elites adapted these to their own purposes, performing acts of creation and transformation that had long-term effects on the symbolic and social landscape. Archaeology will continue to play an active role in understanding these processes, contributing new data to such perspectives—for example, with house to house data from upland villages, valley-bottom towns, and rural imperial settlements to test the subsistence assumptions drawn from ethnography and ethnohistory. Archaeology is uniquely positioned to provide (1) data on time spans not covered by the documents, (2) data on topics and villages and towns not mentioned in the documents, and (3) data that serve as fascinating correctives to assertions and claims made in documents.

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Table 1. LIP and Inca Landscapes in Cuzco, Peru

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<td>Permanent, surplus-oriented</td>
<td>Permanently transformed, privately maintained, referencing origin myths</td>
<td>Family-based (panaqa membership)</td>
<td>Tributary</td>
</tr>
</tbody>
</table>

© COVEY, continued on page 47
The practice of building earthen mounds has tremendous time depth in the American South, and the variation in these mounds across time and space continues to spark debates regarding their functions and social significance. That said, it is commonly argued that a shift from construction of conical burial mounds to large platform mounds marks a parallel shift from an egalitarian social structure to a hierarchical one dominated by chiefly lineages (e.g., Hudson 1976; Kidder 2004; Steponaitis 1986). This interpretation is based on sixteenth- and eighteenth-century European accounts that connect chiefly status with platform mounds by describing powerful leaders presiding over their subjects from mound-top residences. Some authors have highlighted the complexities and inherent biases underlying these interpretations (e.g., Lindauer and Blitz 1997; Pauketat 2007), but many have applied them uncritically and they continue to color our notions about prehistoric American Indian groups. We suggest that while this ethnographically derived model is an appropriate explanatory tool in some instances, it cannot be relied upon without an evaluation of its applicability to the given case, particularly with increased temporal distance from the ethnographic example. While platform mounds were undoubtedly powerful and explicit symbols of collective action, we argue that the ideas these symbols communicated were not static or universal.

We use the notions of time perspectives and palimpsests of meaning as discussed by Bailey (2007) to explore why certain understandings of platform mounds have been perpetuated in the literature while others have been largely omitted. We then focus on case studies from our own research to provide possible new directions for conceptualizing mounds as locations of communal identity construction, commemoration, and political contestation.

Bailey draws attention to the challenge of working with great time depth by focusing on the idea that archaeology is riddled with palimpsests—things that bear visible traces of earlier forms despite reuse or alteration (Figure 1). Archaeologists typically view palimpsests as a handicap when taphonomic processes distort or compromise the clarity of archaeological deposits, and Bailey (2007:203) outlines two approaches for dealing with them: (1) archaeologists may attempt “to reconstitute the individual episodes of activity” or (2) they may “focus on the best preserved and most highly resolved exemplars.”

We contend that ethnographic case studies have had an overwhelming effect on our understanding of prehistoric mound building because archaeologists have relied heavily on the latter strategy to obtain thick descriptions not commonly afforded by archaeological data. In particular, we recognize two distinct ways in which the nature of mounds as palimpsests has undermined our current interpretations. The first way concerns the long history of platform mound building in the Southeast. Though mound uses and meanings undoubtedly changed through time, the most recent and best-understood uses—derived from ethnographic analogies—dominate our interpretations. The second way concerns the use of a given site over a relatively short period of time. In this case, the palimpsest nature of the record obscures the recognition that any given place may have been used and interpreted differently by the various groups and individuals who interacted with it. We suggest that refocusing the scale of our investigations to look for evidence of individual actions and events—Bailey’s first strategy—will allow us to address such palimpsests and significantly improve our understanding of platform mounds in the American South.

Long-Term Palimpsests

We begin our analysis of the first type of palimpsest with an example from the central Mississippi Valley. Carson Mounds (22Co505) is a Mississippi period site located in a region now dominated by intensive agricultural production. Interesting-
ly, the prehistoric site has been claimed and repurposed by its current landowners, who have superimposed a “traditional” southern plantation landscape onto a “traditional” Mississippian mound-and-plaza landscape. A pecan grove now resides in the plaza, while a grand staircase leads from the plaza up to the “big house” on top of Mound A (Figure 2). While we can generalize about the power dynamics asserted by each arrangement, it would be absurd to interpret Mississippian ideas about mound building based on our understanding of the southern planter landscape. Is it not then equally absurd to project our ethnographic understanding of the Mississippian case into the past to interpret the functions and meanings of mounds for earlier people?

Such a projection has often been applied to Coles Creek landscapes in the Lower Mississippi Valley. Because of its position immediately before the transition to Mississippian societies, the Coles Creek period (A.D. 750-1200) is thought to contain the incipient stages of Mississippian social organization (see chapters in Barker and Pauketat 1992; Kidder 2002, 2004; Steponaitis 1986). For example, the early presence of large platform mounds at locations such as the Fel-

Figure 1. Example of a modern palimpsest.

tus site (22Je500) has led some to claim that the earliest indications of profound sociopolitical change can be recognized in the Coles Creek tradition. However, these Coles Creek mound sites lack other characteristics commonly used to support arguments for institutionalized hierarchy, such as burial practices indicating differences in status (Kassabaum 2011).

To minimize the distorting effects of this long-term palimpsest, we focus on mound building and related practices at Feltus. At its abandonment, the site consisted of four mounds surrounding a plaza, an arrangement that resembles later Mississippian site plans. However, excavations from 2006 to 2010 showed that the heaviest use of the site took place before mound building began. Excavations uncovered a substantial premound midden containing large amounts of pottery and food remains that we interpret as communal feasting debris. This preliminary interpretation is based on the “everyday” nature of faunal and botanical samples as well as the exceptional size of ceramic vessels.1 These characteristics, combined with a paucity of evidence for competition such as rare or exotic materials, elaborate
burials, and other prestige goods, suggest that these feasting events were not competitive, and therefore do not suggest chiefly sponsorship. Further, the feasting debris was capped almost immediately by the first construction stage of Mound A, and there is little accumulation of debris on or off the mounds after their construction. We interpret the above characteristics as indicating that the Feltus mounds’ underlying purpose may have been to promote group solidarity while marking and commemorating these important communal feasting events.

This interpretation suggests that earlier mound-building cultures may provide more useful analogs for Feltus than those from later periods. Though much of it remains unpublished, recent research on other Woodland platform mound building traditions such as Marksville, Troyville, Swift Creek, Plum Bayou, and Weeden Island also favor interpretations focusing on the integrative functions of platform mound sites (e.g., Boudreaux 2010; Downs and Blitz 2011; Thompson and Pluckhahn 2010). These traditions have striking similarities with Coles Creek, yet communal interpretations are being more readily accepted in these cases. This may in part be because many of these traditions do not immediately precede a Mississippian culture, thus illustrating one of the ways time perspective clouds our interpretation of platform mound building practices.

**Short-Term Palimpsests**

As Bailey (2007) mentions, it is not only our uncritical application of the best-understood cases to less-well-understood ones that can skew our perspective of the past; rather, material objects, even those on monumental scales, can be manipulated and altered throughout their use-lives, potentially transforming their form, function, and meaning. Though we acknowledge that tools are often repurposed (Figure 3), we rarely recognize the changing function of mounds even though mound building is an accretional process, allowing early stages of construction to be both preserved and directly observable. Detailed stratigraphic analysis of mound deposits at Parchman Place (22Co511), our next case study, illustrate the utility of focusing on fine-grained chronological scales for understanding the multiple meanings and uses of Late Mississippian (A.D. 1350–1600) mounds.

Excavations at Parchman from 2003 to 2006 revealed a repeated sequence of building, using, cleaning, burning, burying, and rebuilding structures associated with mound surfaces. Although aspects of this sequence seem to indicate that mound construction progressed in a highly uniform manner, other features suggest that, in fact, mound building proceeded according to different rules and goals at different times in Parchman’s history. The first is a series of thin, rapidly repeated mound surface deposits of pure white clay that may represent a community renewal or purification ritual (Stevens 2006). This interpretation is based on the increased periodicity of the surface’s construction and use as well as ethnographic evidence of the color white’s symbolic association with purification and renewal for many historic Southern Indian groups (Hudson 1976:226; Knight 1986:678; Pursell 2004:147). Secondly, the stratigraphic sequence shows that one of the smaller mounds was truncated in a single destructive event, after which mound building resumed. Sometime after this destructive event, the small mound was incorporated into the construction of the largest mound. Johnson (2005) has suggested that the small
mounds were affiliated with particular clans or groups. At some point, one of these factions was able to gain political advantage over the others, and as a symbol of that new power, reduced the height of the rival group’s mound, then built another, much bigger mound to symbolize their elevated status. Taken together, this evidence suggests that mound building traditions at Parchman were malleable and that individuals or groups were able to manipulate or adapt their construction practices to suit their changing social goals (Stevens 2006). In this case, understanding the early stages of mound use is essential to understanding changing social relationships within the community because merely considering the mounds in their final form suggests a hierarchical social organization that almost certainly did not exist at an earlier period.

The northern Caddoan area provides yet another example of the dynamic potential that existed within platform mound-building cultures. The regional Mississippian variant (A.D. 1000–1450) centered on the Arkansas River of eastern Oklahoma is best known for the unique array of ceremonial and funerary objects unearthed at Spiro. This anomalous site has overshadowed other Caddoan platform mound sites in the area. Interpretations of the principal mounds at Norman (34Wg2) and Harlan (34Ck6), two large, closely spaced, and contemporaneous mound sites, suggest that these monuments were used differently from many Mississippian mounds (Cranford 2007). While the remains of superimposed submound structures were found at both sites, little to no evidence exists for mound-top buildings. What is evident from excavations is that mounds from both sites show complex depositional histories that include multiple construction stages, repair and capping episodes, interior berms and pits, and contrasting mound fills (Bauxar 1950; Bell 1972; Vogel et al. 2005). When considered within the context of recent research from mortuary facilities at both Norman and Harlan, it appears that social divisions within these communities, probably clans or kin groups, played an active role in the use and management of these monuments (Cranford 2009). Platform mound architecture in this case was neither a location for elite residences nor ceremonial temples, but rather a stage where factional competition or cooperation could be performed.

Conclusion

Earthen mounds have long represented a dynamic medium through which a variety of social relations could be negotiated, manipulated, and enacted. Platform mound architecture in particular varies widely across time and space, suggesting that the motives and meanings behind these structures were similarly varied. Unfortunately, we feel that much of this variation has been unrecognized or overlooked in favor of explanations that focus on mounds as tools to legitimize chiefly status.

As paradigms within archaeological theory have waxed and waned, so too have the ways that mounds have been envisioned by archaeologists. We are not the first to emphasize community-building rituals associated with platform mounds (e.g., Knight 1986). However, this point of view was generally overshadowed as archaeological thought first emphasized a processual approach focused on chieftdoms, and then an agency-based one that favors the actions of individuals over large groups. We believe that this preoccupation with chiefs and chieftdoms has significantly limited our interpretations. While categories such as “hierarchical,” “egalitarian,” and “chieftdom” can be useful heuristic devices, they also have the potential to become “obstacles to understanding what really happened in the ancient world” (Pauketat 2007:3). By looking at the evidence provided by each archaeological case rather than trying to fit it into predefined and potentially inappropriate categories, we contend that one will be struck by the variety of functions mounds have had, many of which are strikingly deemphasized in the current literature.

If, as we have argued here, some platform mounds provided locations for communal ritual activities such as feasts, acts of commemoration, and the performance of social roles, perhaps their purpose was also to stimulate group cohesion and a sense of identity and equality with participating community members. With this paper, we emphasize that it is critically important to use the material record to determ ine if, rather than assume that, monumental landscapes were the products of elite strategies. The case studies presented here show that platform mounds were locations of community identity construction, commemoration, and political contestation.

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**Notes**

1. Numerous pots have rim diameters greater than 40 cm.
2. In this case, we believe the ethnographic analogy is appropriate because of the late date of mound building and corroborating archaeological evidence.
The 2010 AAA meetings provided a fruitful theme—circulation—for exploring archaeological understandings of identity, a key emphasis of archaeological research for the past decade or so. AAA session participants examined the topic of social and cultural identity from the viewpoint of different colonial encounters and their legacies in the North American continent and Caribbean. Colonization created a new circulation of peoples, ideas, materials, and practices that had both complementary and contradictory currents for colonizers as well as native residents. Historical and anthropological works have underscored the importance of the colonial period as a testing ground for cultural identity (for example, Ethridge 2010; Wolf 1996) and that identity is enacted and expressed through material culture. Few publications, however, have brought together data from different colonial contexts (English, French, Spanish, etc.) in a broad swath of North America (including Central America, Mexico, and the Caribbean). Session participants took as a starting point the idea that social space, including landscapes and built environments, is the arena for the negotiation of identity and that material culture provides the building blocks from which social identity is constructed. Although the papers discussed a wide array of contexts and historical time periods, a few key themes were persistent elements in the papers: (1) creolization or ethnogenesis; (2) generational change (over short or long spans of time); (3) alignment or orientation; and (4) labor regimes. These themes, which I will discuss in more detail below, underscore the general emphasis on identity existing within and resulting from a network of social relations (including class, race, and gender) and as a means to create solidarity and mobilize groups (see McGuire and Wurst 2002).

Creolization and Ethnogenesis
An important issue in anthropological understanding of identity is the maintenance of groups despite changes in membership and practices over time. The often harsh world of colonial interactions—uprooted peoples and oppressive practices—transformed the lives of all of the involved parties. In some cases, such as French settlements in the upper Mississippi, people maintained their Frenchness in their use of long lot farming, town organization, and house construction methods and floorplan well into the 1830s, long after colonial power passed from the French to the British and finally to the independent United States (Scott 2010). Maintaining Frenchness within a shifting social and political context was done by re-creating French spaces as much as by continuing language and religious practices (Scott 2010).

Jay Edwards (2010) proposed that a detailed sequence of stages in French creolization is shown in the development of what he termed the “linear cottage.” He persuasively argued that current creolization theory is too generic to greatly aid understanding; a nuanced approach to the development of creole identity requires sensitivity to the details of historical developments. Vlach (1975) and Edwards (2008) have shown that the “shotgun” or linear cottage has clear African roots in the West African ti-kay cottage. Even though this linear house plan is relatively awkward because of a lack of a hallway, the form spread rapidly in New Orleans after the great influx of refugees from St. Domingue in the early nineteenth century. By the 1840s, the linear cottage was a common house type, embellished with stylish details that melded popular aesthetics with the refugee house plan. Later in the nineteenth century, linear cottages were built well beyond New Orleans and the French creole world. No simple evolutionary scheme accounts for the development of the linear cottage, but rather each period has a constellation of economic and social factors that encouraged the reproduction of this distinctive social space.

Extreme conditions of colonialism spurred the development of new identities, or ethnogenesis. Card (2007) has argued that the at times violent and coerced dislocation of people from diverse backgrounds together into single communities...
as part of the establishment of Spanish towns created the necessary environment for ethnogenesis. Pedro de Alvarado founded San Salvador as a capital city in the province of Guatemala, in what is today El Salvador. San Salvador did not last long in its initial incarnation in central El Salvador—a little over 20 years—before the capital was moved to its current location. This early San Salvador displayed all of the elements of a Spanish villa, including regularly spaced trazas (town grids), a church, and a central plaza. Like most Spanish colonial towns, it also brought together people from near and far, such as local Nahua-speaking Pipil as well as native auxiliaries from Tlaxcala, Mexico. The second generation was the first to grow up in the colonial town, and the material culture expressed and enacted a new colonial identity rather than holding tightly to traditions from before contact.

Generational Change

While archaeologists tend to emphasize incremental change over long periods of time, colonial examples provide a view of rapid adjustments to new social, political and economic conditions as well as their long-term repercussions. Delle (2010) persuasively showed that enslaved laborers in Jamaica experienced dramatic reorganization of their living environment at the hands of governing authorities with the full emancipation of the workforce in 1838. Likewise, changes over very short periods of time can be seen in the ceramics of the short-lived town of Ciudad Vieja (San Salvador). Even though the ceramics of this Spanish colonial town largely looked like Pipil tradition ceramics in form, paste, and surface treatment, ceramic forms offered a notable exception: brimmed plates. Majolica produced in Europe in the sixteenth century has a well-dated sequence of forms of plates, and Card (2007, 2010) was able to tie the plate forms at Ciudad Vieja into a seriation of majolica plates (Figure 1). On the basis of this fine-grained seriation, Card examined the change in ceramic manufacturing techniques after just one generation. While the first generation of potters and consumers at Ciudad Vieja had a range of pastes and surface treatments, the second generation had a much more consistent style that incorporated a characteristically Spanish and stylishly current form into the dominant wares from the site.

Much like the short-term changes in central El Salvador, in what is today’s western El Salvador identity was fluid during the entire span of the colonial period. In the sixteenth century, this region stood at perhaps the political and social margins of the Spanish Atlantic, yet was a central component of the early colonial economy because of the region’s unsurpassed production of cacao. The potential for rapid, immense wealth in cacao trade encouraged what Spanish officials saw as overmuch circulation among Spaniards and local residents, emigration of wage laborers, and intercolonial maritime trade. Colonial officials repeatedly attempted to define the extent and nature of social and economic exchanges through conceptual and material frameworks such as laws, regulations, and the organization of the built environment. Throughout the colonial period, indigenous Nahua-speaking Pipil maintained a distinct identity despite unrelenting efforts by political authorities to recast colonial subjects as either indios or later, as citizens of the state. The Izalcos Pipil were clearly related in many different ways to the literate cultures of the Nahua of Mexico, including the Aztecs. Both archaeological and documentary evidence support the idea that before Spanish contact the Pipil were operating according to Nahua social, political, and economic concepts and that the Izalcos region was an important component of the southern portion of the Nahua world (Fowler 1989; Sampeck 2007, 2010a). By the nineteenth century, political and economic efforts in the name of “progress” focused on creating a rationalized social order, with autonomous individuals as self-regulating members of the newly independent nation (Delle 2009). The material expressions of Pipil identity during these centuries was not static, but instead was reformulated and negotiated within the confines of pueblos, haciendas, and villas, so that people individualized mass culture through everyday practice, altering everything from utilitarian objects to street plans to rituals, laws, and language to make them their own. This activity of re-use provides opportunities for ordinary people to subvert the rituals and representations that institutions seek to impose upon them.
In Europe around 1500, a new concept of urban planning emphasized regulated geometries of grids and long, straight streets, carefully positioned public buildings, and planned vistas as a civilizing force. The *villa* (Spanish town) was the seat of royal Spanish power and the supposed home of all Spaniards in the region, while the *pueblo* (Indian village) was to be the residence of indios. In the Izalcos, these ordinances were hardly observed. Spaniards scandalously lived in the principal Izalcos pueblos even though they were nominally *vecinos* (official residents) of Santiago de Guatemala. The enclosure of the *solar* (private household lot) in town as well as larger enclosures that defined the private property of the hacienda contrasted with communal land and Nahua ethics of free circulation and symmetrical access.

To see whether these tenets of spatial relations were archaeologically visible, I assessed 165 Irrarraga through Shupan phase sites for nucleation by basic criteria of the distance between structures or activity areas (Figure 2; Sampek 2010b). In the Postclassic Irrarraga phase, more dispersed forms make up the majority of the built environment. In the conquest and early colonial period López phase, a strong preference for nucleated settlement emerged, indicating a dramatic contraction. The strategic re-organization in part seems to be an immediate reaction to the threat of the Spanish (a flight to the hills) as well as the successful implementation of the policy of *congregación* (forced resettlement into pueblos), which established the Spanish model of urban power. Another dramatic re-orientation occurred in the subsequent Marroquin phase. Less aggregated settlement forms make a resurgence, nearly returning to pre-conquest levels. This settlement change might indicate a return of Nahua modes of organization due to rebounding population after the initial shock of conquest, coupled with the strategy of the Spanish to permit some degree of indigenous self-determination. The pre-contact pattern is not completely recreated, suggesting a balancing act between following the ordinances for *congregación* and meeting the need and desire for dispersed settlement.

In the subsequent late eighteenth and early nineteenth century Shupan and Tensun phases, isolated structures became most common. It appears that the Shupan phase witnessed the dominance of the individual farmsteads, perhaps in response to the rise of haciendas and increasing emphasis on private land ownership. The trend toward increasing social and political emphasis of the self-regulating individual citizen embedded within a mode of individual accumulation seems to have on-the-ground correlates. Eliminating communal holdings was increasingly the focus of policy dictates and legislation in the shift to independence. The message here is that the citizen was no longer to pursue traditional ways of operating, yet the ways that people used these spaces, shown by portable material culture such as ceramics, suggests Pipiles maintained their social groups (Sampek 2010b). By the end of the nineteenth century, the Pipil of this region still exercised power that was not fully countered until the *matanza* (massacre) of 1932.

Alignment

Part of the framing of identity during the colonial period through the nineteenth century occurred through orientation of physical space to create and/or inhibit social interaction. Several examples of physical orientation directly challenged the institutional power that underlay them. The town plan of eighteenth-century Nuestra Señora de los Morenos de Amapa (Amapa), a maroon (escaped slave) community under the jurisdiction of Spanish colonial Vera Cruz, Mexico, showed the discursive relationship of marginalized peoples and centers of power through display of civility in architectural regularity, order, and taste (Amaral Lugo 2010). Re-figuring of the landscape through new alignments such as *trazas* or other orthogonally-oriented plans was an important tool for creating new social orders that particularly altered class relationships (Delle 2010; Kyle 2010; Sampeck 2010a). In other cases, the material expressions of self and group alignment were less in the form of architecture than in portable material culture, such as British ceramics (Mayfield 2010) or German-language newspapers and foods (Dretske 2010).

Alignment helped create a center or axis for belonging and had a larger structuring effect in material and social relations. One particularly powerful example of alignment was the case of the Cherokee townhouse in the early historic period. Chris Rodning (2010) demonstrated that the townhouse was the pre-eminent public space for the Cherokee of the eighteenth century. Not only was this a place for important decisions to be made by clan members, but also served as the place to negotiate with colonial traders. Once the townhouse...
was erected at the site of Cowee Creek, the alignment to that structure was maintained in subsequent new constructions throughout the town (Figure 3). Furthermore, a series of burials in and near the townhouse were aligned according to the townhouse plan, indicating that the social memory of the burials reinforced the townhouse orientation and each burial’s orientation to previous interments.

**Labor Regimes**

The creation and maintenance of identity occurs in part through work. Many session papers highlighted the nature of labor, its organization, and the ways material culture was used for work and was a product of labor. Many facets of identity had a role in the organization and action of work, and labor was a way to organize groups. For example, the managers of Marshall’s Pen in Jamaica used a ranked ethnic taxonomy to determine the occupations of the various members of the community and their overall value to the estate (Delle 2009, 2010). This racial hierarchy was shown in the valuation list, which identified people by name, age, “colour,” whether African or creole, occupation, and gender. Much like the Spanish colonial policy of reducción (to make orderly), missionaries and planters in Jamaica cooperated in the design and construction of post-emancipation townships as part of the concerted effort to re-enculturate the newly freed laboring population simultaneously to the demands of wage labor and ethical living (Delle 2009). Earlier, pre-emancipation settlement consisted of a clustered series of houses, while the later village was rationally organized into rows of houses lining either side of a central road.

A focus on work also encourages us to think about the use of space and the networks of relationships emanating from work. Edwards noted that one use of the linear cottage was for rent. These domestic spaces were important sources of revenue for free women of color who rented out apartments to the rush of northern males flooding into the Crescent City to seek their fortunes from 1810–1840. The economic context of the linear cottage fostered the popularity of the architectural form.

During the early Republican era (mid nineteenth-century) in the Izalcos region of El Salvador, different labor environments were tied to vastly different daily lives and expressions of self and group membership. In the highly hierarchical, centralized setting of indigo production, laborers lived on isolated hilltops and used mostly local earthenwares and lead-glazed redwares. The settlement around the casco (big house) of a coffee hacienda also had centralized locales for labor to which worker domestic space was intimately tied. While the casco regions had a large variety and quantity of costly imported English tablewares, laborers appeared to have made use of these wares, too. The region with the greatest variety and costliest imported wares was in the region affiliated with communal cacao production. Here, the residents, who did not have impressive domestic constructions, used English wares in conjunction with local, traditional earthenwares as well as European style lead-glazed redwares. Brookens’s (2010) data show that there is no easy correlation of class, ethnicity, and occupation with material culture, but that laborers dealt with the pressures of the modernizing state work environments in part through making elements of popular culture their own.

**Final Comments**

This session brought together material culture studies on British, French, and Spanish colonial contexts in today’s United States, Mexico, Central America, and the Caribbean to show how new American identities emerged from the interplay of traditions and innovations within the crucible of colonialism. While much of this interplay involved native peoples’ relationships to their ancestral homelands, the shared experience of everyday life created group identities that crosscut other, at times conflicting, identities such as race, class, and gender (Conkey and Gero 1991; McGuire and Wurst 2002; Sluyter 2002). The ordinary objects and routines of daily life, including concepts of landscape (how they were
represented and by whom), and how it was lived, provided ways to mediate between individuals, groups, and institutions (Spiers 2002:222). The key concepts of creolization, generational change, alignment, and labor encourage us to think about identity in specific, substantive ways that emphasize the dynamism and complexity of past lives.

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NOT THE USUAL SUSPECTS
NEW DIRECTIONS IN COMMUNITY ARCHAEOLOGY

Morag M. Kersel and Meredith S. Chesson

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In a discussion that we had regarding our Follow the Pots Project (more on that to follow), we came to the realization that we were: (a) doing an unusual form of community archaeology, and (b) not whom most people would think of first as typical community archaeologists. First, we are prehistorians/Early Bronze Age specialists, and second, we work in the Middle East—not always the first people or the first place that pops into your mind when you think of community archaeology. We are not the usual suspects and our brand of community archaeology was atypical—a double whammy. In deciding on a name for our AAA session on community archaeology we meant and mean no disrespect by the term usual suspects. In fact, we intended to highlight and honor the scholars who paved the way in collaborative processes and community archaeology, and to whom we are indebted in our own research. The very term “community archaeology” conjures up visions of Carol McDavid, Paul Shackel, Nick Shepherd, Chip Chanthaphonh, T.J. Ferguson, Patti Jeppson, Linda Derry, Christopher Matthews, Cheryl LaRoche, Anne Pyburn, Sonja Atalay, Michael Blakely, and places like the African Burial Ground, Harper’s Ferry, Levi Jordan Plantation, and Çatal Höyük (apologies to anyone who has been omitted from the list but there are more usuals than space permits!). Historical archaeologists have been practicing community archaeology since the inception of historical archaeology as a discipline without having to self-identify—it is embedded within their practice, and it is the rare North American historic project that does not involve communities. This framework for practice is not the norm for prehistory in the Middle East, and in our desire to approach our new project on the Dead Sea Plain in a holistic way we started by studying the work of the usual suspects—their projects, their publications, and their practices. This investigation led us to think about other nontraditional community archaeologists and projects, which allowed us to consider colleagues and fellow unusuals who were practicing community archaeology.

We decided that the best way to get usuals and unusuals in the same room to talk, argue, agree, better understand and perhaps even to better define community archaeology was to organize a session at the AAAs. We invited a number of people we knew and some we didn’t but all of whom are practitioners of collaborative archaeology as it has been variously defined but most adroitly by Colwell-Chanthaphonh and Ferguson (2008:1): “not one uniform idea or practice, but a range of strategies that seek to link the archaeological enterprise with different publics by WORKING TOGETHER.” We gathered together researchers who actively involve communities with their archaeological projects with differing degrees of togetherness and success. In a flash of brilliance we also asked two (Carol McDavid and Anne Pyburn) of the usual subjects to act as discussants, hoping that we would learn from their wisdom and insights and in return they might be energized by the breadth and scope of community archaeology being practiced by unusuals.

Over the last decade, many archaeologists have forged diverse pathways and methodologies under the rubric of community archaeology. But what is community archaeology? How do we define it? Can we define it? How do we practice it? Is there a template, a guide to best practice, and a standard set of principles? Are there as many types of community archaeology as there are archaeologists? As prehistorians who work in the Middle East we feel that we can speak for the majority of “our people” when we say that we often conceptualize community archaeology as giving the odd tour to interested individuals, schools groups, and colleagues. We prehistorians rarely incorporate collaboration and interaction with communities into our research designs and we rarely consult with local partners in the initial planning stages of our projects. In putting together this session we started thinking about the idea of community and what we actually mean by the interchangeable terms of community archaeology, public archaeology, indigenous archaeology,
outreach, community-based, collaborative archaeology, participatory archaeology, and the current favorite, postcolonial archaeology. Effective community involvement in archaeological research can take on a variety of practices, often following traditional educational models but sometimes employing creative initiatives, with unexpected audiences. In her fascinating critique of community collaboration, Marina La Salle (2010) suggests that while there is a broad spectrum of approaches to collaboration, often discrepancies exist between conceptualization and actual practice. The majority of archaeologists want to collaborate in meaningful ways: perhaps to atone for past imbalances in treatment of locals, and to share and gain knowledge. But as La Salle (2010:405) warns we must be mindful of a legacy of exploitation rather than true collaboration.

Our intent in organizing this session was not only to gather participants together for an oyster and hurricane fest at the home of Meredith’s parents in New Orleans, but to bring together researchers actively involved in community archaeology projects that expand the traditional approaches and scopes outlined by Tully (2007); ones which—warts and all—attempt to be truly collaborative. The projects highlighted in this session share a common theme: they all have pushed researchers to address issues and challenges that they never dreamed would be involved in archaeological practice, forcing them to think “outside the box” when engaging with their communities. If one of the underlying principles of community archaeology rests in the belief that forging partnerships in communities makes for better archaeology, then all of these projects have found themselves cultivating and encouraging partnerships with unlikely groups of stakeholders, battling the pressures of politics and natural disaster, embracing the involvement of varying skilled and aged workers, and striving to negotiate worldviews and belief systems that attribute negative consequences to the very practice of archaeology. Participants in this session explored the diversity of what community archaeology means in as wide a variety as possible in order to offer new insights and new voices into this dynamic and increasingly integral part of archaeology.

The Unusuals

In the “traumascape” of the volcanic landscape of Montserrat, Krysta Ryzewski, John Cherry, Thomas Leppard, and Elizabeth Murphy vividly depicted the issue of engaging a community with archaeology when their very homes, livelihoods, and lives are under threat. Through images of the encroaching volcanic exclusion zone we were made aware of the challenges of not having a site with which to engage locals. In her comments usual suspect Carol McDavid suggested that while devastating for the local population, the creeping volcanic flow and the lack of pristine sites forced the team to move beyond traditional excavation performance (site tours) to engagement on a local level—in schools, with local service organizations, and in the newspaper (Figure 1). At the UNESCO World Heritage Site of Songo Mnara in Tanzania, Jeff Fleischer and Stephanie Wynne-Jones became the de facto mediators between the local and the global in the negotiations between UNESCO, the local antiquities authority, and local residents, all of whom had differing notions of how a graveyard retaining wall at the site should be reconstructed, protected, and preserved. In working with the local community, Fleischer and Wynne-Jones came to the realization that community engagement was more than just good practice, it was vital to the ongoing conservation of the site and ultimately to their research.

The usefulness of community archaeology to local citizens and vice versa was again highlighted in the work of both Lynn Rainville and Bryn Williams. Rainville’s outreach to the various communities with an interest in African American cemeteries in Virginia took on a multitude of forms in order to reach the greatest number of people. As part of the project Rainville is committed to publishing in non-academic, publicly accessible formats (websites, podcasts, brochures, and a “gravestone of the week” blog), and in doing so has included local voices, insights, and perspectives into the analysis of historic burial grounds. At the Chinese fishing village at Point Alones in Pacific Grove, CA, Bryn Williams’s original conceptions of happy collaborations through school tours, media interviews and a general raising of awareness were
challenged when the interpretations and findings from the excavation were used to further social agendas and advocate for policy changes with which Williams did not always agree. The intersection of policy and archaeology and community, which include governmental representatives, is often overlooked in community archaeology, but as William Doelle and Douglas Gann illustrated in their work in Tucson—politics and politicians should not be underestimated in discussions of heritage. Termed an “apple pie issue” by Doelle and Gann—heritage is something everyone can love, that is, until a project goes awry. The Rio Nuevo project, handsomely funded in a revitalization ballot issue, became the object of scorn when the issues of long-term sustainability measures arose. What happens to the community when the archaeological excavations stop? Archaeologists enter an area, engage and collaborate with local communities, and then leave when the project ends. Does the collaborative community aspect have to end at the same time? In her reaction to this paper McDavid asked, “should we devise ethical exit strategies as part of our engagement?” How do we stop collaborating? Should we?

Diana Dyste Anzures presented qualitative data gathered during oral interviews with Salinan Tribal Members and people of color that document the ways in which race and gender intersect with the practice of archaeology in central California. In producing a collaborative Ph.D. dissertation, Anzures makes use of the contributions of the Salinan tribal groups to what she refers to as “the tedious process of constructing past and present social identities in what we so fondly call ‘archaeology.’” Anzures’s contribution to community archaeology reminds us that people are not just data to be mined or work forces to be employed as manual labor, but can and are active collaborators in understanding our collective past. At Collier Lodge, a historic hunting lodge on the Kankakee River in Indiana, Mark Schurr directs the ongoing collaborative project between the Kankakee Valley Historical Society and the University of Notre Dame. Students from Notre Dame and local archaeological enthusiasts work together to uncover the past and raise public awareness about this archaeological site. As part of his AAA presentation, Schurr screened a short video, which depicted talking heads from both communities (professional and avocational archaeologists) presenting their different but often complementary views on the almost ten-year-old ongoing project. This idea of community partnerships and successful collaboration was echoed in the InisAirc, Co. Galway project presented by Ian Kuijt. Interested in documenting the island of InisAirc, now abandoned after locals were forced to move to the mainland by the Irish government in 1960, the project includes taking former residents back to the island to help archaeologists reconstruct the past. Collaboration of the locals and University of Notre Dame students in the oral histories has resulted in a rich compendium of information, which includes local narratives, archival research, and archaeological investigation. The result is a successful melding of young and old, local, and global—an excellent example of community archaeology in action.

Our own project in the Dead Sea Plain, Jordan cannot claim such success, but we persevere. In conceptualizing our Follow the Pots project as community archaeology we began by consulting the usual suspects for help with definitions and scenarios into which we could slot our research. Working in the Middle East led us to seek models and definitions that included that area of the world. We first turned to the groundbreaking working of Stephanie Moser and her colleagues (Moser et al. 2002) working at the site of Quseir, Egypt. We used this as a guide for a working definition of community and best practice for engaging with local communities in the Middle East. What we found most helpful was their assertion that collaborative practice is inevitably fraught with tension, disagreement, and conflict—aspects that often pervade our relationships with the various communities with which we engage. This aptly describes our work at the looted Early Bronze Age site of Fifa in Jordan. In January–March of 2011 we embarked on our Wenner-Gren supported project, which embodied a two-part approach to recording the landscape: archaeological and ethnographic. The project reified La Salle’s warning—there was a disconnect between concept and practice. We had no problem at all carrying out the archaeological ground truthing and mapping of the looted cemetery at Fifa—we produced detailed maps and successfully tested a theory about the uses of Google Earth in monitoring looting (Figure 2). In addition to the ground truthing we also wanted to interview the various communities who have an interest in the looting of this Early Bronze Age site. Through a series of town hall meetings, input from locals, government employees, archaeologists, museum professionals, and other interested communities, who may be directly or indirectly associated with the looting of the area, we hoped to move beyond a privileging of archaeological knowledge (typically produced by foreign archaeologists) over local constructions of the past.

Ah, the naïveté of the archaeologist. While we scheduled our field season to work with Morag’s academic schedule and our surveyor’s work schedule, it was tomato season: no one had any time to talk to us about their “perceptions of landscape” or the “effects of looting.” In the area of Ghor es-Safi we were spectacularly unsuccessful at engaging with local communities—we couldn’t even get people to come by for
tea to chat: they were all busy harvesting tomatoes (Figure 3), something we had not factored into our collaboration. Had we consulted with the locals at the initial planning stages of this research we would have known that the winter was tomato season. Further complicating the situation, we arrived just after another researcher, investigating the nature of looting in the Four Corners region of the U.S. and on the Dead Sea Plain in Jordan, had just left the town of Safi. He stayed two weeks in the area, paying local community members to speak with him about looting in the region. We were placed in the uncomfortable position of following in his wake: our project’s IRB protocol prevented us from paying for information, and yet the precedent had been set. We decided to hold off on the ethnographic portion of our fieldwork and return in the future, at a time better situated in the yearly seasonal calendar, to follow up on the whys, wheres, whens, and hows of looting in the region. We now know that full collaboration is essential in the future success of the project. Meredith’s father often says “It’s better to be lucky than good.” In the case of Follow the Pots, we clearly have to learn how to be both lucky and good.

We are sure that both usuals and unusuals would agree that every day is an adventure in community archaeology. Our take-home message from this session is that community engagement is situational, context dependent, and a negotiated process between equal partners. Perhaps a secret to community archaeology is similar to a best-known secret in archaeology—flexibility is key. In her comments on the session, usual Anne Pyburn suggested that she approached being the respondent with some trepidation, thinking that the projects might be the “same old, same old,” but she was invigorated by the variety of practice, projects, and practitioners thinking outside the box. Successes and failures are common to all of these collaborative projects, but challenging circumstances, situations, and even communities has resulted in a more robust, fulfilling, and meaningful practice of archaeology.

References Cited
Colwell-Chanthaphonh, Chip, and T.J. Ferguson
La Salle, Marina J.
Tully, Gemma
archaeological data and perspectives improve interpretations of specific cultural contexts—as well as existential. The reports of anthropology’s demise are greatly exaggerated, but recent discussions about the place of “science” in anthropology have highlighted the intellectual balance that the different subfields bring to the overall discipline.

The articles assembled here can only hint at the richness that the AAAs “had for archaeologists” last year, with over 200 archaeological presentations, not counting those reviewed by other sections, such as the Biological Anthropology Section, the Evolutionary Anthropology Society, or the Council for Museum Anthropology. For the upcoming 2011 meeting in Montréal, the Archaeology Division of the AAA has had the opportunity to review over a dozen volunteered sessions as well as scores of individually submitted papers and posters. The number of hours that these presentations represent well exceeds what any one archaeologist could take in over the five days of the meeting (16–20 November). The theme, “Traces, Tidemarks, and Legacies,” seems tailor-made for archaeology. Many of the contributions examine the intersection of the present and the past by focusing on topics such as heritage and preservation, as well as the kinds of traces left for archaeologists to discover on the landscape, on the surfaces of artifacts, and within human bodies. It promises to be another stimulating experience, whereby we can consider anew what archaeology and anthropology mean to each other.
CALL FOR AWARDS NOMINATIONS

The Society for American Archaeology calls for nominations for its awards to be presented at the 2012 Annual Meeting in Memphis, Tennessee. SAA’s awards are presented for important contributions in many areas of archaeology. If you wish to nominate someone for one of the awards, please send a letter of nomination to the contact person for the award. The letter of nomination should describe in detail the contributions of the nominee. In some cases, a curriculum vita of the nominee or copies of the nominee’s work also are required. Please check the descriptions, requirements, and deadlines for nomination for individual awards. Award winners will receive a certificate. An award citation will be read by the SAA president during the annual business meeting, and an announcement will be published in The SAA Archaeological Record.

Award for Excellence in Archaeological Analysis

Award Description: This award recognizes the excellence of an archaeologist whose innovative and enduring research has made a significant impact on the discipline. This award now subsumes within it three themes presented on a cyclical basis: (1) an Unrestricted or General category (first awarded in 2001); (2) Lithic Analysis; and (3) Ceramic Analysis. The 2012 award will be presented for Excellence in Ceramic Analysis.

Who Is Eligible to Submit Nominations or Apply for Award: Any SAA member may nominate an individual for this award. Awardees must be members of the SAA.

Nomination/Submission Materials Required: Nominators must submit a letter that describes the nature, scope, and significance of the nominee’s research and analytical contributions, as well as the nominee’s curriculum vita. Support letters from other scholars are welcome, as are any other relevant documents. Please send submissions to the committee chair.

Nomination/Submission Deadline: January 4, 2012

Committee Chair Contact Information: Karen Harry, University of Nevada-Las Vegas, 4505 Maryland Parkway, Box 45503, Las Vegas, NV 89154-9901, p: (702) 895-2534, fax: (702) 895-4823, email: karen.harry@unlv.edu

Book Award

Award Description: The Society for American Archaeology annually awards two prizes to honor recently published books. One prize is for a book that has had, or is expected to have, a major impact on the direction and character of archaeological research. The other prize is for a book that is written for the general public and presents the results of archaeological research to a broader audience. The Book Award committee solicits your nominations for these prizes, which will be awarded at the 2012 Annual Meeting of the SAA. Books published in 2009 or more recently are eligible.

Who Is Eligible to Submit Nominations or Apply for the Award: The Book Award committee solicits nominations for these prizes. Books published in 2009 or more recently are eligible. In the Scholarly Book Award category, the first author must be a member of the SAA, and all members receive the award. In the Popular Book Award category, all authors may be members or non-members of the SAA and all authors receive the award.

Nomination/Submission Materials Required: One copy of the nominated book must be sent to each member of the committee. Please contact the chair of the committee, Brad Lepper, for an updated list of the committee members.

Nomination/Submission Deadline: December 2, 2011

Committee Chair Contact Information: Bradley T. Lepper; Ohio Historical Society, 1982 Velma Ave.; Columbus, OH 43211-2453; tel: (614) 298-2064; fax: (614) 297-2546; e-mail: blepper@ohiohistory.org

Crabtree Award

Award Description: The SAA presents the Crabtree Award annually to an outstanding avocational archaeologist in remembrance of the singular contributions of Don Crabtree. Nominees should have made significant contributions to advance understandings of local, regional, or national archaeology through excavation, research, publication, site or collections preservation, collaboration with the professional community, and/or public outreach.

Who Is Eligible to Submit Nominations or Apply for the Award: Anyone may submit a nomination. The committee does not accept self-nominations. Awardees may be members or non-members of the SAA.

Nomination/Submission Materials Required: Nominators should submit a current curriculum vita, a letter of nomination, and letters of support.

Nomination/Submission Deadline: January 4, 2012

Committee Chair Contact Information: Patricia Gilman, Department of Anthropology, University of Oklahoma, Norman, OK 73019; ph: (405) 325-2490; e-mail: pgilman@ou.edu
Award for Excellence in Cultural Resource Management

Award Description: This award will be presented to an individual or a group to recognize lifetime contributions and special achievements in the categories of program administration/management, site preservation, and research in cultural resource management. It is intended that at least one award will be made each year and the category will rotate annually. The 2012 award will recognize important contributions to site preservation. The candidates may include individuals employed by federal, state, or local government agencies. This category is intended to recognize long-term, sustained research efforts and may encompass more than one site.

Who Is Eligible to Submit Nominations or Apply for the Award: Any professional archaeologist may submit a nomination for this award. Awardees may be members or non-members of the SAA.

Nomination/Submission Materials Required: Nominators must submit a curriculum vita along with any relevant supporting documents. All nomination materials are to be submitted electronically.

Nomination/Submission Deadline: January 10, 2012

Committee Chair Contact Information: William G. Reed, USDA Forest Service Intermountain Region, 324 25th St., Ogden, UT, 84401 ph: (801) 625-5786; email: wgreed@fs.fed.us

Dissertation Award

Award Description: Members (other than student members) of SAA may nominate a recent graduate whose dissertation they consider to be original, well written, and outstanding.

Who Is Eligible to Submit Nominations or Apply for the Award: Nominations must be made by non-student SAA members and must be in the form of a nomination letter that makes a case for the dissertation. Self-nominations cannot be accepted. Awardees must be members of the SAA.

Nomination/Submission Materials Required: Nomination letters should include a description of the special contributions of the dissertation and the nominee’s current address. Nominees must have defended their dissertations and received their Ph.D. degree within three years prior to September 1, 2011. Nominees are informed at the time of nomination by the nominator and are asked to submit FOUR COPIES of the dissertation IN PDF FORMAT ON CD-ROM to the committee by October 15, 2011 (to be mailed to the committee chair, Marc Bermann). IF THIS FORMAT IS NOT POSSIBLE, PLEASE CONTACT THE CHAIR.

Nomination/Submission Deadline: October 15, 2011

Committee Chair Contact Information: Marc Bermann, Dept. of Anthropology; 3302 WWPH; Univ. of Pittsburgh; Pittsburgh, PA 15260; ph: (412) 648-7515; fax: (412) 648-7535; e-mail: bermarc@pitt.edu

Fryxell Award for 2013

Award Description: The Fryxell Award is presented in recognition for interdisciplinary excellence of a scientist who need not be an archaeologist, but whose research has contributed significantly to American archaeology. The award is made possible through the generosity of the family of the late Roald Fryxell, a geologist whose career exemplified the crucial role of multidisciplinary cooperation in archaeology. The award cycles through zoological sciences, botanical sciences, earth sciences, physical sciences, and general interdisciplinary studies. The 2013 Fryxell Award will be in the area of earth sciences. The award consists of an engraved medal, a certificate, an award citation read by the SAA president during the annual business meeting, and a half-day symposium at the Annual Meeting held in honor of the awardee.

Who Is Eligible to Submit Nominations or Apply for Award: Any professional archaeologist may submit nominations for this award. Nominees must be SAA members by the time of their nomination.

Nomination/Submission Materials Required: Nominators must submit a letter that describes the nature, scope, and significance of the nominee’s contributions to American archaeology, as well as the nominee’s curriculum vita. Support letters from other scholars are helpful. Four to six are suggested. Please email submissions in pdf format to the committee chair.

Nomination/Submission Deadline: February 4, 2012

Committee Chair Contact Information: Paul Goldberg, MicroStratigraphy Laboratory, Department of Archaeology, Boston University, 675 Commonwealth Avenue, Boston, MA, 02215, p: (617) 358-1666, fax: (617) 353-6800, email: paulberg@bu.edu

Dienje Kenyon Fellowship

Award Description: In honor of the late Dienje M. E. Kenyon, a fellowship is offered to support the research of women archaeologists in the early stages of their graduate training. An award of $500 will be made to a student pursuing research in zooarchaeology, which was Kenyon’s specialty. To qualify for the award, applicants must be in the early years of an M.A. or Ph.D. graduate degree program focusing on archaeology. Strong preference will be given to students in the first two years of their graduate program working with faculty members with zooarchaeological expertise.

Who Is Eligible to Submit Nominations or Apply for the Award: Female graduate students in archaeology are eligible to apply, with preference for students in first two years of training working with faculty members with zooarchaeological experience.

Nomination/Submission Materials Required: An submission for the Dienje Kenyon Fellowship is required to have (1) a statement of proposed research related to zooarchaeology, toward the conduct of which the award would be applied, of
no more than 1,500 words, including a brief statement indicating how the award would be spent in support of that research, (2) a curriculum vita, and (3) two letters of support from individuals familiar with the applicant's work and research potential are required. One of these letters must be from the student's primary advisor, and must indicate the year in which the applicant began graduate studies. The statement of proposed research and curriculum vita should be sent as an email attachment in Microsoft Word to the committee chair. Letters of support should be e-mailed separately by the people providing them.

**Nomination/Submission Deadline:** The statement and curriculum vita should be sent as an email attachment in Microsoft Word. Letters of support should be e-mailed separately by the people providing them. Applications are due no later than December 15, 2011.

**Committee Chair Contact Information:** Renee B. Walker, SUNY College at Oneonta, 312 Fitzelle Hall, SUNY College At Oneonta, Oneonta, NY 13820; ph: 607-436-3346, fax: 607-436-2653; e-mail: walker@oneonta.edu

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**Douglas C. Kellogg Fund for Geoarchaeological Research**

**Award Description:** The Douglas C. Kellogg Award provides support for thesis or dissertation research, with emphasis on the field and/or laboratory aspects of this research, for graduate students in the earth sciences and archaeology. Under the auspices of the SAA's Geoarchaeology Interest Group, family, friends, and close associates of Douglas C. Kellogg formed a memorial in his honor.

**Who Is Eligible to Submit Nominations or Apply for the Award:** Recipients of the Kellogg Award will be students who have an interest in (1) achieving the M.S., M.A. or Ph.D. degree in earth sciences or archaeology; (2) applying earth science methods to archaeological research and (3) pursuing a career in geoarchaeology.

**Nomination/Submission Materials Required:** The application should consist of a research proposal no more than three pages long that describes the research and its potential contributions to American archaeology, a curriculum vita, and two letters of support, including one from the dissertation chair that indicates the expected date of completion of the dissertation. Electronic submissions as pdfs sent to the committee chair are preferred.

**Nomination/Submission Deadline:** November 29, 2011

**Committee Chair Contact Information:** Tristram R. Kidder; Washington University in St. Louis; Dept. of Anthropology; Washington University St. Louis, CB1114; St. Louis, MO 63130; ph: 314-935-5242; fax: (314) 935-8535; e-mail: trkidd er@wustl.edu

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**Excellence in Latin American and Caribbean Archaeology Award**

**Award Description:** The Award for Excellence in Latin American and Caribbean Archaeology will be presented annually to an individual who has made a lasting and significant contribution to the practice of archaeology and/or to the construction of archaeological knowledge in Latin America or the Caribbean. In selecting the recipient of this award, the committee will pay particular attention to the cultural context in which the nominee works and to the different pathways to creating and promoting excellence in Latin American and Caribbean archaeology. The award is open to individuals at any point in their careers.

**Who Is Eligible to Submit Nominations or Apply for Award:** Any SAA member may nominate an individual for this award. Awardees must be members of the SAA.

**Nomination/Submission Materials Required:** Nominators are required to submit (1) a nomination letter, (2) a detailed curriculum vita of the nominee that includes a complete bibliography of local and international research publications, (3) a brief description of the academic and/or cultural impact of research, publications and other relevant activities and (4) at least two supporting letters; one supporting letter should be from a Latin American or Caribbean archaeologists and one supporting letter should be from a Latin Americanist/Caribbeanist. All nominations and supporting documents are requested in PDF format to be sent via email to the committee chair.

**Nomination/Submission Deadline:** January 4, 2012

**Committee Chair Contact Information:** Emily McClung de Tapia, Instituto de Investigaciones Antropológicas, UNAM Circuitito Exterior S/N, Ciudad Universitaria, Copilco-Coyoacan, Mexico DF, DIF 04510, Mexico, p: (52) 55-5622-9503, fax: (52) 55-5622-9651, email: emily.mculungdetapia@gmail.com

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**Excellence in Public Education Award**

**Award Description:** This award acknowledges excellence in the sharing of archaeological information with the public. The award is conferred on a rotating, 3-year cycle of categories. The category for 2012 is the Community Category.

**Who Is Eligible to Submit Nominations or Apply for the Award:** Any member of SAA may submit a nomination file, although awardees are not required to be members of the SAA.

**Nomination/Submission Materials Required:** Nominators will work with the Chair to assemble a nomination file that will include (1) the nomination form and (2) a formal letter of nomination that identifies the nominee and summarizes their accomplishments. These accomplishments should be contextualized by addressing the following types of questions: How does it fit within the practice of public education and archaeology? What is the impact on relevant publics beyond the discipline of archaeology (general public, special
interest groups, pre-collegiate or non-traditional students, others)? In addition, the nomination file should include a copy (or samples) of the specific achievement and supporting materials that document results. This material should clearly demonstrate the case being in the nomination letter. For example, supporting evidence might document the impact of a specific program in terms of the numbers of the public involved, personnel qualifications and deployment, the frequency or longevity of programs offered, formal evaluation results, and/or feedback from the audience. Endorsement from secondary nominators are welcomed (please, no more than three). Prior nomination does not exclude consideration of a nominee in subsequent years. Designers of programs or products may nominate their own work. Electronic submissions are encouraged. If a nomination package is mailed, six (6) copies of the nomination package (including supporting materials) must be submitted.

**Nomination/Submission Deadline:** January 10, 2012

**Committee Chair Contact Information:** Jeanne Moe, National Project Archaeology Lead, 2-128 Wilson Hall, Montana State University, Bozeman, MT, 59717, ph: 406-994-7582, email: jmoemontana.edu

**Fred Plog Fellowship**

**Award Description:** An award of $1,000 is presented in memory of the late Fred Plog to support the research of a graduate student with ABD who is writing a dissertation on the North American Southwest or northern Mexico or on a topic, such as culture change or regional interactions, on which Fred Plog did research.

**Who Is Eligible to Submit Nominations or Apply for the Award:** All student members of SAA in good standing who are ABD by the time the award is made at the Annual Meeting of the SAA are eligible to apply for the award.

**Nomination/Submission Materials Required:** The application consists of (1) a research proposal no more than three pages long that describes the research and its potential contributions to American archaeology, (2) a curriculum vita, and (3) two letters of support, including one from the dissertation chair that indicates the expected date of completion of the dissertation.

**Nomination/Submission Deadline:** December 9, 2011

**Committee Chair Contact Information:** Wesley Bernardini, Department of Anthropology and Sociology, 1200 East Colton Avenue, University of Redlands, Redlands CA 17604; ph: (909) 793-2121; fax: (909) 793-2029; e-mail: Wesley_Bernardini@redlands.edu

**Gene S. Stuart Award**

**Award Description:** An award of $2,000 is made to honor outstanding efforts to enhance public understanding of archaeology, in memory of Gene S. Stuart (1930-1993), a writer and managing editor of National Geographic Society books. The award is given to the author of the most interesting and responsible original story or series about any archaeological topic published in a newspaper or magazine.

**Who Is Eligible to Apply or Submit Nominations:** The award is given to single or multiple authored articles, stories, or series of stories published in newspapers or magazines. The emphasis is on publications available to the general public (rather than limited distribution newsletters), and online publications are not excluded. The award honors good writing that brings awareness of archaeology to the public eye. Nominations can be submitted by authors themselves, by magazine/newspaper editors, or by readers. Authors or newspaper editors will work with the committee chair to assemble and submit a nomination file. Awardees may be members or non-members of the SAA.

**Nomination/Submission Materials Required:** Nominators will work with the committee chair to assemble a nomination file that will include the nominated article, which should have been published within the calendar year of 2011. An author/newspaper editor may submit no more than five stories or five articles from a series. Nomination packets may be submitted electronically as PDFs via email to the committee chair. If submitting hard copies, six copies of each entry must be submitted by the author or an editor of the newspaper.

**Nomination/Submission Deadline:** January 10, 2012

**Committee Chair Contact Information:** Kirk D. French, Department of Anthropology, 120 Carpenter Building, The Pennsylvania State University, University Park, PA 16802, ph: 814-863-1112, fax: 814-863-1474, email: kirkdfrench@psu.edu

**Lifetime Achievement Award**

**Award Description:** The Lifetime Achievement Award is presented annually to an archaeologist for specific accomplishments that are truly extraordinary, widely recognized as such, and of positive and lasting quality. Recognition can be granted to an archaeologist of any nationality for activities within any theoretical framework, for work in any part of the world, and for a wide range of areas relating to archaeology, including but not limited to research or service. Given as the Distinguished Service Award between 1975 and 2000, it became the Lifetime Achievement Award and was awarded as such for the first time in 2001.

**Who Is Eligible to Submit Nominations or Apply for the Award:** Any professional archaeologist may submit nominations for this award. Nominees must be SAA members by the time of their nomination, and the strongest nominees will have made significant contributions to both the organization and to the range of archaeological practice that in which SAA members participate.

**Nomination/Submission Materials Required:** Nomination letters should include a letter of nomination, outlining the nominee's lifetime accomplishments, as well as a curriculum vita of the nominee. Additional letters of support are not
required, but the strongest nominations, historically, have included a minimum of five (5) letters of support; some have had more than fifteen (15) letters of support. Nominators are required to collate all nomination materials into one single Adobe Acrobat pdf document to be emailed to the committee chair, Miriam Stark.

Nomination/Submission Deadline: January 4, 2012

Committee Chair Contact Information: Miriam T. Stark; Dept. of Anthropology, University of Hawai‘i; 2424 Maile Way, Saunders 346; Honolulu, HI 96822-2229; ph: (808) 956-7552; fax: (808) 956-9541; e-mail: miriams@hawaii.edu

Student Paper Award

Award Description: This award recognizes an outstanding student conference paper based on original research.

Who Is Eligible to Submit Nominations or Apply for the Award: All student members of SAA in good standing whose paper abstract has been accepted by the SAA for the upcoming annual meeting are eligible to participate. All co-authors must be students, and the first author must be a member of the SAA. All co-authors receive the award.

Nomination/Submission Materials Required: The paper abstract must be accepted by SAA for the upcoming annual meeting. All co-authors must be students, and the first author must be a member of the SAA. The paper must be double-spaced, with 1-inch margins and 12-pt font. Please do not submit raw data unless they are to be presented as part of the paper itself. An average 15-minute paper is approximately 8 pages long (double-spaced, not including references cited). Any paper longer than this will be docked points. The student must submit electronic copies of (1) a separate title page with name and full contact information; (2) the conference paper containing slide call outs and references; and (3) pdfs of all PowerPoint slides, with numbered captions, to be used in the oral presentation. Please DO NOT put your name anywhere besides the cover sheet so that your paper may be reviewed anonymously by the committee. Please send submissions to the committee chair. The student must have a faculty or supervisory sponsor review the paper before the student submits it to the Student Paper Award Committee. The faculty/supervisory sponsor must send an email to the submission address at the time of paper submission saying that he/she has read and approved the paper being submitted.

Nomination/Submission Deadline: January 12, 2012

Committee Chair Contact Information: Mary Ann Levine; Dept. of Anthropology, Franklin and Marshall College; Lancaster PA 17604; ph: (717) 291-4193; fax: (717) 358-4500; e-mail: maryann.levine@fandm.edu

Student Poster Award

Award Description: This award acknowledges the best student presentation of archaeological research in poster sessions. Student posters will be evaluated as electronic submissions made directly to the Student Poster Award committee.

Who Is Eligible to Apply or Submit Nominations: All student members of SAA in good standing whose poster abstract has been accepted by the SAA for the upcoming annual meeting are eligible to participate. All co-authors must be students, and the first author must be a member of the SAA. All co-authors receive the award.

Nomination/Submission Materials Required: The poster abstract must be accepted by SAA for the upcoming annual meeting. A student must be the primary author of the poster. The poster must be submitted to the Poster Award Committee Chair as an electronic entry.

Nomination/Submission Deadline: January 11, 2012

Committee Chair Contact Information: M. Kathryn Brown, University of Texas at San Antonio, Department of Anthropology, San Antonio, TX, email: kathryn.brown@utsa.edu
LEWIS R. BINFORD
1931-2011

Lewis Roberts Binford passed away on April 11, 2011 in Kirksville, Missouri at the age of 79. Lew is survived by his wife Amber Johnson, his daughter Martha Binford, and a multitude of friends, students, and fellow archaeologists and anthropologists. He lived an amazingly rich life and his impact upon many of us was, and is, profound. He masterfully reoriented and reshaped the discipline of archaeology.

His educational experiences included Virginia Polytechnic Institute, the U. S. Army, the University of North Carolina (B.A. 1957), and the University of Michigan (M.A. 1958 and PhD. 1964). His own mentors and intellectual influences included, in part, archaeologists Joffre L. Coe, Fay-Cooper Cole, James B. Griffin, Albert C. Spaulding; anthropologists John Gillin, John Honnigmann, Richard K. Beardsley, Julian Steward, Leslie A. White, and Elman R. Service; sociologist Guy Johnson; and, ecologists Eugene Odum, Ramon Margalef, and Robert MacArthur.

He taught at the University of Michigan (1960-61), the University of Chicago (1961-1965), University of California-Santa Barbara (1965-1966), University of California-Los Angeles (1966-68), University of New Mexico (1968-1991) and Southern Methodist University (1991-2003). He also held visiting professorships at UCLA and in Great Britain, South Africa, China, India, and Yugoslavia.

Lew received many honors including Honorary Doctor of Letters at the University of Southampton, England (1983), the Huxley Memorial Medal from the Royal Anthropological Institute of Britain (1986), membership in the National Academy of Sciences (2001), and the Society for American Archaeology Lifetime Achievement Award (2008).

Lew provided us with more than 160 “waypoints” or publications including 23 books and monographs, as well as 141 articles, book chapters, reviews, and comments. These works demarcate the research path(s) that he followed and they also have guided, and will continue to guide, his students and peers along an incredible journey.

During this journey, Lew pointed out to us that the scientific potential of the archaeological record had yet to be realized. “New archaeology” emerged as Lew’s students at Michigan, Chicago, UCLA, New Mexico, and SMU set out to challenge traditional archaeology’s self-limiting views and interpretations of the material record. Reactions to processual archaeology were, and continue to be, quite harsh. Some even spoke of this new perspective in messianic terms. Kent Flannery proclaimed that he was with Lew when he fed 5,000 undergraduates with a few loaves of bread and a newspaper of fish (it was actually three loaves and five fishes)!

Lew soon realized that the answers to archaeological questions were not derived simply by amassing more artifacts, fine-tuning our descriptive classification systems, or conducting heavy-duty quantitative analyses. As anthropological archaeologists, we were to look for generalizations about past human behavior that could be evaluated via the archaeological record. Lew adopted a cultural evolutionary perspective that emphasized ecology, human adaptability, and cultural systems. Such a view of culture provided an organizational framework that identified the dynamic linkages between technology, food-getting, diet, raw material procurement, landuse, mobility patterns, social group formation, mortuary rituals, and so forth. Such linkages enabled archaeologists to explore all aspects of past cultural systems via multiple pathways.

His students also learned that it was human behavior, as well as other formation processes, that created patterns in the archaeological record and not human thoughts. And, human behavior was then seen ultimately as responses to external environmental factors. His seminal work Constructing Frames of Reference: An Analytical Method for Archaeological Theory Building Using Ethnographic and Environmental Data Sets (2001) was designed to identify covariant relationships between the biophysical environment (i.e., habitat variability) and human behavior (expressed as ethnographic data). This long-term research program is a gift to us all for it lays out a means by which we can make use for ethnographic data regarding hunter-gatherers, cultivators, pastoralists, and complex societies to serve archaeology.

Now, Lew has slipped away from our seminar room but the class is not over. His passing has brought many of us back together once again. We more fully appreciate the impact that he has had upon our lives, our thoughts, our careers, and our research. He set the “fires in our minds” and instilled within us a passion for anthropological archaeology. And, now, several generations of his students and colleagues will renew their efforts to build upon Lew’s exciting and powerful research, to develop additional frames of reference, and to continue to construct reliable knowledge about the past.

Alan Osborn is a Research Associate Professor and Curator at the Nebraska State Museum.
Robert C. Dunnell, 68, professor emeritus of anthropology at the University of Washington, died December 13, 2010, in Natchez, MS. Dunnell was born in Wheeling, WV, December 4, 1942, and by age 13 was classifying artifacts he’d found near the Grave Creek Mound. The Wheeling Intelligencer described this precocious teen as being more interested in archaeology than “rock and roll,” which the newspaper apparently considered a good thing.

Looking to escape life in the coalfields following high school, Dunnell landed a construction job on the Barkley Reservoir project in Tennessee. After hearing the University of Kentucky was hiring archaeological workers for excavations in advance of the reservoir, he enrolled at UK. Studying at Kentucky led to a variety of archaeological experiences statewide, a stint on a Plains Paleoindian site (see Figure 1.9 in Frison [1982] The Agate Basin site), and a BA in 1964.

Dunnell went to Yale for graduate school but continued fieldwork in Kentucky in Fishtrap Reservoir, which provided the data for his dissertation, The Prehistory of Fishtrap, Kentucky: Archaeological Interpretation in Marginal Areas. His Ph.D. completed in just three years (1967), he received multiple job offers. He accepted a position at the University of Washington, and moved there with his wife Mary, a Yale-trained anthropologist (who survives him). He rose from assistant to full professor and department chair in half a dozen years and remained at Washington until taking early retirement in 1997.

A prolific author, Dunnell’s earliest publications were in classification and seriation—odd topics, given that the New Archaeology was then cresting in popularity. But Dunnell was never interested in being fashionable. Rather, he had a vision for a scientific archaeology, and essential to it was reliably conceptualizing data. The result was Systematics in Prehistory (1971), a book-length treatment of classification that is hard to read and digest, but also highly original and one of the most important conceptual treatises on the topic. Yet, even while tending to such “traditional” matters, Dunnell was embarking on a more radical path. This emerged in the late 1970s from his thinking about seriation and the behavior of style over time and his exposure to the work of evolutionary biologists. He began to advocate a strictly Darwinian view of cultural evolution. Whether or not one agrees with his approach, Dunnell’s contributions significantly changed the discipline-wide conversation about evolution in archaeology and will, perhaps, be his enduring legacy.

These efforts in formal and explanatory theory (as Dunnell phrased it) were end members of the rigorously scientific approach he sought to craft. They were complemented in the 1980s and 1990s by publications that probed the epistemology of an archaeological science, which were informed by a deep understanding of the history of the field and a thoughtful skepticism about the role of the philosophy of science. The efforts were accompanied as well by methodological contributions on subjects such as siteless survey and the application of photogrammetry and material sciences to archaeology. Dunnell also spearheaded the construction of the first NSF-sponsored archaeologically dedicated luminescence-dating laboratory in this country.

None of this was done independent of an abiding interest in prehistory, and throughout his career Dunnell maintained a research program in the Late Prehistoric period of eastern North America. That research involved several of the 29 Ph.D. students he advised, though in testimony to his broad interests and deep insights, the majority of his students worked elsewhere across a wide range of times and places. Dunnell’s willingness to meet regularly with his students—even during the dozen years he served as department chair—made him a highly effective, albeit demanding and gruff advisor, but one who took tremendous pride in his students.

David J. Meltzer1 and Michael J. O’Brien2

1. Department of Anthropology, Southern Methodist University, Dallas, TX.
2. Department of Anthropology, University of Missouri, Columbia, MO.
POSITIONS OPEN

POSITION: SENIOR TENURED FACULTY POSITION
LOCATION: DALLAS, TEXAS
The Department of Anthropology at Southern Methodist University invites applications for a tenured, senior faculty position in anthropological archaeology with that individual to serve as Department Chair, beginning August 2012. We seek a scholar with ongoing research that complements strengths of our faculty. We are open to candidates with research expertise and field experience in North America, Europe, Africa, or far eastern Asia, but also to excellent candidates who work in other regions. Applicants must have a Ph.D., an established field and laboratory research program, a strong record of obtaining external funding, excellent scholarly credentials, and administrative experience and vision. Applicants should be at the advanced Associate or Full Professor rank at their home institution. Preference will be given to scholars who will best help us forge links and provide opportunities in teaching and research between the primary research themes of our program in health, migration, environmental impacts, and integrating our existing strengths in archaeology and cultural/medical anthropology. Applications may be submitted electronically (pdf format preferred) or by letter, and should include a statement of research and teaching interests, curriculum vitae, and contact information for three references. We request that applicants let us know if they plan to attend the 2011 American Anthropological Association meeting. To insure full consideration, the application must be received by November 1, 2011, but the committee will continue to accept applications until the position is filled. Applications should be sent to Professor David J. Meltzer, Chair, Department of Anthropology, Southern Methodist University, PO Box 750336, Dallas, TX 75275 or to dmland@smu.edu. SMU will not discriminate on the basis of race, color, religion, national origin, sex, age, disability or veteran status. SMU is also committed to the principle of nondiscrimination on the basis of sexual orientation. Hiring is contingent upon the satisfactory completion of a background check. Position No. 00053241.

POSITIONS: CONTINUING AND VISITING FACULTY
LOCATION: PROVO, UTAH
The Department of Anthropology, Brigham Young University, seeks applications for continuing faculty status and visiting faculty positions from well-qualified candidates with a completed Ph.D. by August 2012. Successful candidates will demonstrate skill in undergraduate teaching and strong research skills with an established or promising record of research productivity. There is a preference for the archaeology of the Great Basin/Southwest, but other geographic areas will be considered. The ability to lead a summer field school is an advantage. BYU, an equal opportunity employer, requires all faculty to observe the university's honor code and dress and grooming standards. Preference is given to qualified candidates who are members in good standing of the affiliated church, The Church of Jesus Christ of Latter-day Saints. Potential applicants can visit the University's web page at http://www.byu.edu (employment). Applicants must apply on-line https://byjobs.byu.edu and attach current curriculum. In addition, please send three letters of recommendation and samples of scholarly work to: Professor Charles W. Nuckolls, Chair, Department of Anthropology, Brigham Young University, 894SWKT, Provo, UT 84602. Review of applicants will begin October 17, 2011.

NATIVE AMERICAN SCHOLARSHIPS
Since 1998, the Society for American Archaeology has awarded the annual Arthur C. Parker Scholarship (up to $4,000) in support of archaeological training for Native Americans who are students or employees of tribal, Alaska Native, or Native Hawaiian cultural preservation programs. The SAA also each year awards three National Science Foundation Scholarships for Archaeological Training for Native Americans and Native Hawaiians (up to $4,000).

Since 2010, the SAA has presented two additional awards for undergraduate and graduate archaeology education. These awards (up to $5,000 for undergraduate students and up to $10,000 for graduate students) provide flexible financial support for Native American students, including but not limited to tuition, travel, food, housing, books, supplies, equipment, and childcare. These scholarships are open to all Native peoples from anywhere in the Americas, Alaska Natives, Native Hawaiians, and Indigenous Pacific Islanders.

The deadline is December 15, 2011. Application materials and more information may be found online at www.saa.org/scholarships.
ECOLOGY. The conference is hosted by the University of New Mexico and the Bureau of Land Management. For more information and to register, please visit http://www.unm.edu/~swsympos/.

APRIL 9–13

APRIL 18–22

JANUARY 9–12
The Society for Historical Archaeology’s annual Conference on Historical and Underwater Archaeology; Ramada Leicester Hotel and University of Leicester, Leicester, England, UK. Abstract submission deadline – July 9, 2012. Contact: Dr. Sarah Tarlow, School of Archaeology and Ancient History, University of Leicester, Leicester LE1 7RH, Leicester, England, UK; email sat12@le.ac.uk; fax +44 (0)116 252 5005

JANUARY 14–15
The 13th biennial Southwest Symposium will be held at the University of New Mexico, January 14-15, 2012. Four sessions will focus around the conference theme Causation and Explanation: Demography, Movement, Historical

JANUARY 13–15
Conferencia Intercontinental. SAA is launching the first-ever Conferencia Intercontinental in Panama City, Panama. The official language of the 2012 Conferencia is Spanish, the language of our host country. All information regarding the Conferencia will appear in Spanish. See http://bit.ly/SAAConferencia

CALENDAR

2012

2013
NEW! Northwest Coast: Archaeology as Deep History

By Madonna Moss

$24.95 Regular Price
$19.95 SAA Member Discount Price

California's Ancient Past: From the Pacific to the Range of Light

By Jeanne E. Arnold and Michael R. Walsh

Regular Price $24.95, SAA Member Discount Price: $19.95
WE WANT YOU!

VOLUNTEERS NEEDED FOR THE ANNUAL MEETING!

For the 77th annual meeting in Memphis, Tennessee, SAA is seeking enthusiastic volunteers who are not only interested in archaeology but also looking to save money and have fun.

In order for volunteers to have more meeting flexibility, SAA will again only require 8 hours of volunteers’ time! The complimentary meeting registration is the exclusive benefit for your time.

Training for the April 18-22 meeting will be provided from detailed manuals sent to you electronically prior to the meeting along with on-the-job training. As always, SAA staff will be on hand to assist you with any questions or problems that may arise.

For additional information and a volunteer application, please go to SAAweb (www.saa.org) or contact Lorenzo Cabrera at SAA: 1111 14th Street, Suite 800, Washington, DC 20005, Phone +1 (202) 559-7382, Fax +1 (202) 789-0284, or e-mail lorenzo_cabrera@saa.org.

Applications will be accepted on a first-come, first-served basis. The deadline for applications is February 1, 2012, so contact us as soon as possible to take advantage of this wonderful opportunity!

See you in Memphis!