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On the cover: Procuring OSL dating sample from a wadi terrace profile, wadi Hasa, Jordan, 2008 (photo reproduced by permission of Joseph Schuldenrein).
EDITOR’S CORNER

Anna Marie Prentiss

Anna Marie Prentiss is Professor of Anthropology at The University of Montana.

These are challenging times in American politics. As Jeffrey Altschul makes clear in his “From the President” column, archaeology is in many ways deeply affected by developments in Washington, D.C. Consequently, it has never been more important for archaeologists to communicate our findings and thoughts to the wider public. After all, we are the only discipline truly capable of addressing the long-term impacts of human decision making by running and perhaps re-running the ancient “tapes.” As SAA President Altschul points out, public education is the best way to overcome a deep anti-science ideology increasingly pervasive in some government halls.

One of the greatest challenges comes in communicating our often technically complex findings to an interested public. I recall showing a 1980s issue of American Antiquity to a primary school teacher friend some years ago. Her response after thumbing a few pages was a blank expression and . . . “This is really dry.” What did she expect, I later grumbled, instant drama of Upper Paleolithic mammoth hunting or Mayan pyramid construction to leap out from every page of our journal? But perhaps if she had just sought an opportunity to step back and see what it was like to live in the past, maybe even she would have wondered if we could pass on some wisdom from our encounters with the material remnants of those long gone societies.

This special issue of the SAA Archaeological Record, titled, “The Archaeology of the Human Experience,” guest-edited by Michelle Hegmon, introduces an emerging paradigm that seeks to address this very problem. The archaeology of the human experience (AHE) promises to offer not only a pathway to addressing those nagging questions of “what was it like?” but also a new approach to understanding vexing problems in human adaptation and sociality. Contributors address a wide range of AHE issues spanning standard archaeological concerns such as culture change and migration to broader concerns of global significance, including food security, sustainability, and human happiness (and sadness). Research contexts include West African societies (Logan), island dwellers of Polynesia (Swantek and Freeman) and the Faroes (Brewington), city-folk past and present (Dennely), and pueblo peoples of the American Southwest (Ortmann). I hope you will find these articles as stimulating as I did!

Meanwhile, this issue offers insight into career paths, research, and the trials and tribulations of volunteering as shared with us in our Volunteer Profile and Careers in Archaeology column. Please also take note of our growing excitement over the 2014 SAA Annual Meeting as reflected in the contributions from Program Chair Christopher Rodning and Local Advisory Committee Chair Pat Mercado-Allinger. Finally, we remain on the lookout for cover photos and article-length contributions. As always, please do not hesitate to drop me a line if you have an inspiration!
As I write this column, the United States government is entering the second week of a government shutdown, with no end in sight. Many archaeologists who work for federal agencies are out of work. CRM firms, heavily dependent on government contracts, are struggling and will soon be facing difficult choices. Many will run out of work, forcing employee furloughs. If the shutdown lingers, many firms will have to tap reserves or secure bank loans to survive. Some may not make it. The shutdown, if not ended soon, will have serious consequences for U.S. archaeology. And, if that was not enough, the Republican majority in the House of Representatives has taken aim at National Science Foundation (NSF) funding of social science research.

In an op-ed in USA Today, Representatives Eric Cantor (R-Virginia), the majority leader of the House of Representatives, and Lamar Smith (R-Texas), the chairman of the House Science, Space, and Technology Committee, question whether NSF funds should be used to support grants in the social, behavioral, and economic (SBE) sciences. In particular, they single out nine grants, five of which are on archaeological topics: the history of Chiapas, Mexico (350 BC–1350 AD); Mayan architecture and the salt industry; Metallurgy in Russia (2100–1500 BC); the Bronze Age in Cyprus; and the eco consequences of early human-set fires in New Zealand. Smith and Cantor argue that in an era of limited funding, NSF needs to prioritize the research it supports and that the .1 percent of NSF’s budget spent on archaeology (about 7 million out of a 7-billion-dollar NSF annual budget) would be better spent on something that improves Americans’ quality of life, such as medical research.

Smith and Cantor make the point that little information is available to the public about SBE grants. They want to know how these grants are in the national interest and worthy of taxpayer funds. I agree these are important issues. Anyone taking public funds should be accountable to that public. Archaeologists have a long history of taking our responsibility to descendant communities and the public at large very seriously. Indeed, public education is one of the central pillars of the SAA. I have no doubt that in an open discussion, we could persuasively argue that archaeology and cultural heritage are central to our national interest and the quality of life of the many publics that make up the United States as well as to the communities that we affect across the globe.

But I’m not sure these congressmen want an honest debate on these issues. Instead, I believe they are driven by a strong anti-social science belief that has prevailed among their core constituency for decades. How do we counter these attacks? First, we go straight to the public. The last eight past presidents of the SAA joined me in an op-ed, speaking directly to the concerns of Smith and Cantor (see sidebar). Second, all of us in our work need to demonstrate that the Congressmen are just dead wrong. It is time to renew our commitment to giving the public what it wants: knowledge and understanding of our common past as a means of defining a better future.

Not everything in the past few months has been doom and gloom. SAA has been moving forward on numerous fronts, two of which I will highlight here. Advances in Archaeological Practice (AAP), SAA’s new journal, hit the digital airwaves in August. The inaugural issue featured articles on everything from Section 106 Memorandum of Agreements to fingerprints on ceramic figurines. The range of topics parallels the current practice of archaeology that includes not only traditional subjects such as our approaches to the archaeological record, the techniques we use, and our methods and the underlying methodology, but also the ethical and theoretical underpinnings of these activities. Practice is not simply restricted to the field and the lab, but includes compliance processes; the business of archaeology; training; and collaborations with other scientists, Native peoples, and the general public. The second issue of AAP will come out in November. It, too, is free to all. After the second issue, the future of the journal will be up to you. Please invite your colleagues to join SAA and subscribe to AAP, consider adding AAP to your journal subscriptions, and, by all means, consider writing an article or two.
A statement from current and former SAA presidents concerning the importance of National Science Foundation-supported social science research:

In a recent op-ed piece (http://www.usatoday.com/story/opinion/2013/09/30/cantor-gop-budget-science-spending-column/2896333/), Representatives Eric Cantor and Lamar Smith question the National Science Foundation’s support for social science research, and argue that such funding should be redirected toward “improving Americans’ quality of life.” Why they ask, should the government support research on Mayan architecture and Mongolian herding?

We have three simple answers.

First, look to our recent past. The US has spent more than a trillion dollars and thousands of Americans have lost their lives engaging with tribal societies. The military’s new counterinsurgency doctrine stresses the importance of understanding local cultures and histories—exactly the kinds of things that we learn from social science research. Beyond the potential military significance of social science research, our increasingly globalized economy and the delicate nature of diplomacy in an era when non-Western countries are becoming major players in the balance of world power make the social sciences critical to our national interest.

Second, the social sciences have a huge impact on our quality of life. Research in archaeology, for example, fuels local pride and contributes to the multibillion dollar heritage tourism industry all across the US. Individuals and communities value the places of our past and the knowledge about those places that social science research provides because they give us a sense of who we are and where we’ve come from as Americans. For many Native American communities, these places and the knowledge about them are not simply of interest, they are vital to their very survival as a people. It is no coincidence that one of the most visible and anger-inducing impacts of the current government shutdown is the closing of our national parks, monuments, and museums, many of which are centered on themes of history, anthropology, and archaeology. Dwight Eisenhower famously ordered the protection of cultural monuments prior to D-Day, because “they symbolize to the world all that we are fighting to preserve.” He was right then, and he is right now.

Third, of course medical research should be one of our highest nation priorities, and it already is. The archaeology program at NSF currently represents 0.1% of NSF’s budget; the entire archaeology budget would barely be sufficient to fund even a single major research grant in medicine. Yet this same 0.1% of NSF’s budget sponsors large numbers of grants for research into myriad aspects of the past that enrich our lives in the present and are critical to our future in this increasingly interconnected and diverse world.

Jeff Altschul, President, Society for American Archaeology
Fred Limp, Past President, Society for American Archaeology
Margaret Conkey, Past President, Society for American Archaeology
Dean Snow, Past President, Society for American Archaeology
Ken Ames, Past President, Society for American Archaeology
Lynne Sebastian, Past President, Society for American Archaeology
Robert Kelley, Past President, Society for American Archaeology
Keith Kintigh, Past President, Society for American Archaeology
Vin Steponaitis, Past President, Society for American Archaeology

One of the most important functions of the SAA is to bring archaeologists together to discuss their current research, plan future collaborations, and generally talk archaeology. Our annual meeting now attracts more archaeologists to a single venue than any other similar event. More than 3,100 submissions have been proposed for the SAA 2014 Annual Meeting, and we expect that archaeologists representing all subdisciplines and geographic areas will be in Austin. We realize, however, that large meetings are not the only method of bringing like-minded archaeologists together. In 2012, SAA convened the first Conferencia Intercontinental in Panama City, Panama. The relatively small conference, held in Spanish, was designed to facilitate exchanges among Latin American archaeologists. Its success has led to convening a second Conferencia in Lima, Peru, in August 8–10, 2013, the call for which is posted on SAAs website (http://www.saa.org).
While you were in the field... This past summer there was a flurry of activity, and SAA rolled out an incredible number of new products and services—

Advances in Archaeological Practice, A Journal of the Society for American Archaeology—This new, exclusively digital, peer-reviewed quarterly journal rolled out with its first issue online in August. If you have not yet seen it, please go to www.saa.org to begin your exploration with both the August and November issues. As of 2014, SAA members may choose this journal as their primary, second, or third journal with their membership. Check it out and share this new journal with your colleagues.

Current Research Online—This is current research submitted by SAA members, viewable by all. Haven't seen it yet? Access Current Research Online from the SAAweb homepage under publications. Consider making a contribution to this growing database!

Online Seminar Series—Launched in September with the first two-hour seminar, Archaeological Applications in Airborne Laser Scanning. The series will be offering a broad range of topics in two-hour, fee-based seminars, along with a set of one-hour seminars free to SAA members! To see the schedule as it develops, please go to SAAweb (www.saa.org) and click on the Online Seminar Series logo. All SAA online seminars are RPA certified!

For student members—A new tDAR benefit! SAA and the Center for Digital Antiquity share a commitment to the long-term preservation of digital records and to make these records broadly discoverable and accessible. A new collaborative program gives student members the opportunity to curate digital materials through the Center for Digital Antiquity. Student members can upload three files of up to 30MB per year to tDAR free of charge—a $150 value.

SAA Is Returning to Latin America!
Mark your calendars—August 8–10, 2014 are the dates of the second Conferencia Intercontinental, a unique conference designed to bring SAA and Latin Americans together, this time in Lima, Peru. As with the first Conferencia that was held in Panama City, Panama, in 2012, the materials developed about the Conferencia are all in Spanish, as the sole language of the Conferencia is Spanish. Submissions are now being accepted. The Call for Submissions is posted on SAAweb’s homepage. The deadline for submissions is February 15, 2014. The Call lists the three themes for the Conferencia as well as complete information on the number of slots and how to submit. Questions? Contact the Chair of the Program Committee for the Conferencia Intercontinental, Barbara Arroyo, arroyobarbara2012@gmail.com.

Committee Service—Open Call
This marks the third November during which the Society has put out a web-based call for volunteers for committee service. The call put out this November is for vacancies beginning at the close of the 2014 Annual Business Meeting in Austin. Committee terms are now generally three years, rather than the previous two years. You may submit up to two separate interest forms each November. If you are seeking a re-appointment to a committee, you also need to submit an interest form. You may serve only two consecutive terms on the same committee. The exceptions are the awards committees, where no member is eligible for a second term.

The statements given in response to the questions asked are very important determinants in the selection process. Please be aware that likely, there will be more volunteers than there are slots on some committees. Decisions on committee composition are made with input from the chair through the Board liaison to that committee. We truly appreciate the willingness of everyone to serve. Please check for an email with the open call announcement in early November.
Austin 2014!
We are going back to Austin for SAA’s 79th Annual Meeting, April 23–27, 2014. From what we can determine, this is shaping up to be a memorable meeting! The headquarters hotel for the meeting is the Hilton Austin, which is located approximately 32 steps from the entrance to the Austin Convention Center. The headquarters hotel and the Austin Convention Center will be the center of the activity; however, we also have an overflow property (Radisson) with some student rooms, as well as an additional, exclusively student property (La Quinta). Please note that all government-rate rooms are now sold out.

Complete reservation information, including cut-off dates and rates as well as links for reservations, is available on SAAweb, and will, of course, be published in the Preliminary Program, available in December. Click on the “Austin 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.

Register by January 21, 2014 at one of the meeting hotels to be entered into a drawing for a free year’s membership in SAA!

I am also pleased to announce that SAA and the European Association of Archaeologists (EAA) have agreed to convene what we hope will be the first of many joint thematic conferences. The initial conference, Archaeological Perspectives on Slavery and Colonialism, will be held on Curacao in November 5–7, 2015. Slavery and colonialism are topics of great interest to American and European archaeologists. Because archaeologists tend to work within the theoretical and methodological confines in which they were trained, these topics are treated quite differently in Europe and in the Americas. Our objective is to break down these barriers by inviting leading scholars to present, debate, and discuss various theoretical perspectives and methodological approaches to these topics using examples from throughout the world. By using plenary sessions in which all meeting registrants participate (i.e., no simultaneous sessions), we will provide the time required by leading scholars to fully articulate their views as well as the time needed by the entire congress to debate and discuss the various points of view. We also have left time for meeting participants to present the results of their current research, thereby ensuring that those attending this meeting will leave with the most up-to-date findings in the field of slavery and colonialism. By targeting the meeting to between 200 and 250 participants, we will supply the intimate atmosphere needed to exchange views and network with colleagues in the same field. Professor Willem Willems of the University of Leiden, Netherlands, has agreed to serve as the scientific program chair, and you will hear more from Willem as the meeting time approaches.

Washington, D.C. may be a mess, but SAA is moving forward. New meetings, new journals, and a variety of new initiatives give the SAA a sense of purpose and an energy that is truly refreshing.
Whenever I receive the preliminary program for an upcoming SAA conference, I find myself excited about and impressed by what everybody is doing, eager to learn more about it all, and hopeful that my own papers contribute positively to the myriad ongoing conversations in archaeology and related fields of study. Getting an SAA program is a bit like having a tasty appetizer; receiving the raw database of SAA submissions as the SAA Program Chair is a bit more like a feast, with a lot of interesting material to taste, as well as a lot to cook. Of course, some of you will be talking about feasting and drinking at SAA 2014 in Austin, and, hopefully, all of us shall eat and drink and be merry while we are there. I also do recall going outside during SAA 2007 to watch the bats fly out at dusk from under the bridge crossing Lady Bird Lake, and I recommend we all do that again while we are in Austin. Meanwhile, the site of the original Whole Foods Market is located in Austin, and what began as a patch for optimal neighborhood foraging has become a monument of sorts, with similar monumental spaces found at sites scattered across the country.

It is fitting, perhaps, that SAA 2014 will take place in Texas, as it promises to be the largest SAA conference yet, with close to 3,000 people already registered. The online SAA submission system lassoed more than 3,000 submissions, including one electronic symposium, more than 2,000 papers in 175 organized paper sessions, more than 80 posters in 13 organized poster sessions, 634 general paper abstracts, 439 general poster abstracts, and 21 forums. Meanwhile, we also have one of the larger SAA program committees in recent years (can we call it the SAA Program Posse?), and I am grateful to the 35 excellent people who agreed to help me review submissions and compose the conference schedule, as well as staff from the SAA office in Washington, D.C. Program committee members are currently reviewing abstracts and drafting the schedule of events. It is good to read widely about the diverse and interesting activities of the SAA community, including fieldwork, artifact analyses, heritage management, public outreach, historic preservation, cultural resource management and consultation, development of digital publications and archives, policy development and implementation, and teaching. Program committee members and I have contacted some submitters to ask for revisions to some abstracts in an effort to correct mistakes and to improve the quality and clarity of (your) abstracts and the SAA program overall; thank you for your responses and responsiveness to our inquiries.

Some sessions for SAA 2014 have been sponsored by organizations such as the Committee on the Status of Women in Archaeology (COSWA) and the Society for Africanist Archaeologists, and as in years past, the Amerind Foundation will choose one SAA symposium for its Amerind Seminar program. The careers and contributions of several of our senior colleagues will be honored through symposia at SAA 2014, including sessions in honor of Linda Cordell, Dan Healan, Michael Jochim, Geoffrey Clark, Deborah Pearsall, James Brady, Norman Hammond, James Neely, Tom Green, Karl Butzer, Grete Lillemo, Leslie Shaw, and Joseph Cramer. Meanwhile, SAA 2014 will also include the Fryxell Symposium in honor of Marvin Rowe, focusing on archaeological geochemistry. The biennial Gordon Willey Symposium on the history of archaeology, organized by Bernard Means and Patrick Trader, includes papers about the practice of archaeology between the New Deal and the National Historic Preservation Act, and a symposium by Frances McManamon considers the impact of cultural resource management on developments in archaeology method and theory 40 years after the passage of the NHPA in 1974. One “double” symposium of note here are those by Robert Tykot and Jeffrey Ferguson in honor of the golden anniversary of obsidian studies in archaeology—50 years since the 1964 publication of an important paper in the Proceedings of the Prehistoric Society by Johnson Cann and Colin Renfrew, both of whom will participate in the symposium in Austin. The Frison Institute Symposium, organized by Robert Kelly, will focus on the relationship between climate change and culture change. Environment and climate are important topics on tap for SAA 2014, including sessions and presentations about the methodological challenges of relating trends in paleoenvironmental evidence to patterns of culture change, human adaptations to extreme environments and envi-
Environmental extremes, historical ecology, settlement ecology, cases of site and regional abandonments, foraging strategies in estuarine and riverine environments, adaptations to coastal environments, the cultural landscapes of forests, urban landscapes of the ancient world, and the landscape impacts of colonialism and cultural practices during the historic period.

As is often the case for SAA conferences, there are many papers and posters about Mesoamerica, Central America, and southwestern North America. Several sessions and papers concentrate on other areas of North America and South America. Although there are more papers about archaeology in the Americas than elsewhere, other world areas are well represented, including papers and sessions about the archaeology of Arabia, Mongolia, China, India, east and southeast Asia, southwest and central Asia, the South Pacific, the North Atlantic, and Africa. Papers focusing on one or more of these world areas explore diverse topics, including monumentality and public architecture, ideology, iconography, identity politics at local and regional scales, gender, mortuary practices, craft production and specialization, trade and exchange, abundance and surplus, conquest and colonialism, borders and frontiers, mobility and migration, foraging and farming, alternative pathways to complexity and inequality in past societies, regional social and political integration and disintegration, household archaeology, water management, warfare and weaponry, paths and movement, rock art, placemaking, toolmaking, subsistence practices and foodways, kinship, disability and charity in past societies, violence, human evolution, human colonization of new continents, cultural developments in islands and archipelagoes, and maritime archaeology.

Some papers and sessions will concentrate on broad theoretical and methodological issues, and some forums will bring together panelists and participants for discussions of contemporary issues and concerns in diverse areas of archaeological practice. The SAA Presidential Forum, which will take place on the Wednesday evening of the conference, will focus on current trends in publishing in archaeology. The SAA Ethics Bowl will take place on Thursday afternoon.

Other events at SAA 2014 will concentrate on best practices in CRM and other domains of archaeology and historic preservation, heritage management and community empowerment, indigenous landscapes, public outreach and education, digital applications in archaeology, the stewardship of archaeological and museum collections, the role of descendant communities and other stakeholders in archaeology, and careers and professional development.

Thanks for your interesting and insightful contributions to the SAA 2014 program, and I am excited about our upcoming annual conference. If you see me in Austin in April, please say howdy. I know some of you but would like to meet more of you. I have a beard and a tweed blazer, which means, of course, that I am easy to spot at an archaeology conference. Because it is Texas, I may just have to put on my cowboy boots, as well, because, well, why not, and as Lyle Lovett puts it, “That’s right, you’re not from Texas, but Texas wants you anyway.”

The Harry Ransom Center is one of the world’s finest cultural archives (credit: Pete Smith; photo courtesy of the Austin Convention & Visitors Bureau).
The month of April is a great time to visit and enjoy all that Austin has to offer. Plan for pleasant temperatures, with 80ºF (26.67ºC) the average high and 59ºF (15ºC) the average low. In other words, take advantage of the opportunity to enjoy the outdoors! A short walk from the conference hotel is the Ann Richards Congress Avenue Bridge, spanning Lady Bird Lake in the heart of the city. The largest urban bat colony in North America roosts in the crevices beneath the bridge, and from April through October, the bats emerge daily at about twilight to feed on tens of thousands of pounds of insects. It’s quite a sight to observe more than 1 million Mexican free-tailed bats spiraling into the evening sky. For detailed information, including emergence times and special bat-watching riverboat cruises, visit the Bat Conservation International website at http://www.batcon.org/index.php/get-involved/visit-a-bat-location/congress-avenue-bridge/subcategory/intro.html.

If you want to actively enjoy the outdoors, you have many choices. For example, Kayaks, canoes, and even paddleboards are available for rent along the 10-mile Lady Bird Hike and Bike Trail that encircles a portion of Lady Bird Lake, a dammed portion of the Colorado River. If swimming is your sport of choice, the spring-fed Barton Springs Pool, with its constant 68ºF (20ºC) waters, is a brisk option.

With regard to the history of Texas’s capital city, Austin was once a village known as “Waterloo,” when the north bank of the Colorado River was settled by European immigrants in the early 1800s. More than 7,700 acres were purchased by the Republic of Texas in 1839, encompassing Waterloo and surrounding lands, to establish a permanent capital. The current Capitol, a National Historic Landmark, is actually the fourth building to serve as the seat of state government. It is the largest of all state capitols.
in terms of square footage and is nearly 15 feet taller than the
U.S. Capitol in Washington, D.C. Completed in 1888, the build-
ing is Renaissance Revival style, constructed of Texas “pink
granite” from a central Texas quarry. The park-like grounds of
the Texas Capitol encompass approximately 22 acres, where an
array of historical monuments may be found, including the
Tejano Monument erected in 2012. Guides, maps, and other
details may be found at http://www.tspb.state.tx.us/spb/capi-
tol/texcap.htm.

Another historical attraction is the LBJ Presidential Library
(http://www.lbjlibrary.org/) on the campus of The University of
Texas at Austin. SAA visitors are in luck because the facility,
which houses historical documents, photos, recordings, and
objects relating to Lyndon B. Johnson, the 36th president of
the United States, completed exhibit renovations in 2012.

The best place to obtain an overview of Texas history is the Bul-
lock Texas State History Museum (http://www.thehistoryof-
texas.com/). Located north of the Texas Capitol, the museum
features three floors of exhibits, where the compelling stories of
Texas’s past are presented and tied to the themes “Land,” “Iden-
tity,” and “Opportunity.” For a special introduction to the “Story
of Texas” you should definitely sign up for the special guided
tour of the Belle shipwreck exhibit on April 25. For additional
tour details, please refer to the September 2013 issue of The
SAA Archaeological Record (http://onlinedigeditions.com/publi-
cation/?i=175171).

Just north of the Bullock Texas State History Museum is the cam-
pus of The University of Texas at Austin (UT), where an array of
museums, libraries, and archives are located. Worthy of note are
the Blanton Museum of Art (http://www.blantonmuseum.org/),
featuring European, American, Contemporary, and Latin Amer-
ican art, and the Texas Memorial Museum, where natural histo-
ry is explored (http://www.utexas.edu/tmm/visit-tmm/). UT also
has significant research collections at the Harry Ransom Center
(http://www.hrc.utexas.edu/), where a rare copy of the Guten-
berg Bible and the first photograph by Joseph Nicéphore Niéce
in 1826 may be viewed; the Briscoe Center for American History
(http://www.cah.utexas.edu/index.php); and the Benson Latin
American Collection (http://www.lib.utexas.edu/ benson).

To be sure, Austin is very proud of being the “Live Music Cap-
tal of the World.” You may even be greeted by live music at the
terminal when you deplane at the Austin Bergstrom Interna-
tional Airport! Don’t be surprised if you encounter live music
performances at coffeehouses, restaurants, nightclubs, parks,
even some of our grocery stores and bookstores. Music festivals
abound in the city, and there are venues for the performing arts
in the downtown area, including Austin City Limits Live at The
Moody Theater (http://acl-live.com/), the historic Paramount
and Stateside at the Paramount Theaters (http://www.austinthe-
aatre.org/site/PageServer?pagename=Home), and Long Center
(http://thelongcenter.org/).

There simply isn’t enough space in this article to fully acquaint
SAA members with the diversity of dining options that are avail-
able near the conference center and hotel. Suffice it to say that
in addition to excellent Tex-Mex and barbecue, there are terrific
ethnic, American, fine dining, and food trailer “mash up” expe-
tiences to savor in the 6th Street, Rainey Street, South Congress
and Warehouse districts, and beyond. To better plan your Austin
culinary journey, check out http://www.austintexas.org/
visit/eat/.

If you haven’t registered for the meeting and you haven’t yet
made your travel arrangements, what are you waiting for?
Austin awaits you!
Between academic degrees at West Texas State (B.A., 1970), Texas Tech (M.A., 1978, following service as a Peace Corps volunteer in Brazil), and Washington State universities (Ph.D., 1989), I conducted fieldwork, wrote CRM monographs, published several papers, and presented my research at SAA and regional and local meetings. These endeavors continued throughout my first few years at Texas A&M University as a research center director and lecturer at the Department of Anthropology (1990–1996). Then, as now, I truly enjoyed doing archaeology and teaching it. What remains unsaid about my first 20 years or so as a professional archaeologist is that I was not very involved in related volunteer work.

With an established career in hand, however, I began to think more about my obligations to give something back to the profession. I became active in the governance of the Council of Texas Archeologists (1997–2001) as an elected president and appointed chair of the Multi-Cultural Relations Committee. I also served as an invited member of SAA’s Committee on Consulting Archaeology (1999–2004). My first opportunity to participate in NAGPRA (Native American Graves Protection and Repatriation Act) discussions among federal agencies and professional and avocational archaeology organizations was as SAA’s appointed Texas representative to the Government Affairs Network (2001–2008). Volunteering was not without headaches, but it significantly broadened my perspectives and my professional network, and it contributed to my gaining academic tenure. These experiences were followed by an invitation to serve on the Society’s Committee for Repatriation (2008–2010). That appointment led to participation in a 2010 retreat with fellow committee members and members of the Committee on Native American Relations to discuss NAGPRA issues. (The 2010 retreat was organized by then SAA president Margaret W. Conkey and held at the Amerind Foundation in Arizona.) Increased interaction with diverse members of our Society further expanded my professional network.

In 2009, I received a call from Kenneth Ames, past-president and then chair of SAA’s Nominating Committee; he asked me to run for one of the open positions on the Society’s Board of Directors. I agreed, was elected, and served the 2010–2013 term. What an experience it was, engaging in Society business with extraordinary camaraderie as we confronted important issues during semi-annual board meetings, annual committee meetings, conference calls, and hundreds of e-mails. I should note that Executive Director Tobi A. Brimsek invariably ensured that such endeavors were orderly and, on appropriate occasions, accompanied by fine quarters and great meals.

Public service/outreach is an important component of volunteering in which many of us participate via lectures, demonstrations, and governance of non-profit organizations. I’ve done so since my days as an M.A. student. I now give 6 to 10 presentations about my research every year, at the request of heritage-oriented groups or through public programs. For me, these talks are opportunities to spread the word to land-owning, taxpaying, and voting citizens about the relevance of archaeologically generated knowledge. After all, they pay our salaries, enact preservation laws, and control important sites. I consistently receive positive feedback, which makes me feel good, but more important, I meet an array of informative people who share my research interests.

Rewards from volunteering are significant: they include networking with the profession’s leadership and fellow practitioners, personal career-building, and opportunities to involve one’s students and colleagues in these processes. As professionals, we need to encourage our students, employees, and colleagues to share their garnered expertise as volunteers. In my experience, motivating folks to volunteer is not nearly as difficult as getting them interested in fire-crack rocks and cook-stone technology. One need not postpone volunteering until she or he completes professional training, gains national stature, or is in the midst of a decades-long career. At one time or another, we should all step up and give something of our diverse experiences to enhance SAA’s mission and to other good causes. Recall that SAA’s door to active volunteering and access to resulting benefits is now wide open to all society members via the annual call for committee volunteers.
I broke into archaeology in the early 1970s. Back then, one either taught and did research at an institution of higher learning or worked at a museum. A newly evolving regulatory environment was just beginning to address cultural resource issues. Preservation was more of a concept than a reality. The private sector was barely in its infancy.

I had no particular interest in archaeology as a child—as an immigrant, this was not a career track encouraged by my parents. The doctor/lawyer route was more what they had in mind. I came to it in my last undergraduate year (1971) at Stony Brook University. I found myself with the choice of finishing college in four years as an anthropology major or in five with any other major. Since I wanted out, the former option was the clear choice.

That year, I was drawn to archaeology classes on Mesoamerica and Near Eastern civilizations. My professor, the late Phil Weigand, recommended that I participate in a “dig” in the Midwest. He arranged a stint at Cahokia under the tutelage of Mike Fowler (Figure 1). It was an overwhelming experience. I was captivated by the magnificence of the earthen mounds, the burial complexes, and the ability of researchers to reconstruct the ancient city through sophisticated science and impressive detective work. I was hooked.

In 1973, I volunteered on a prehistoric excavation in the Sinai, led by Ofer Bar-Yosef, then at the Hebrew University. That was my first exposure to environmental archaeology. The human ecological synthesis seemed a natural fit. I applied to graduate school at the University of Chicago (U. of C.).

My graduate experience at the U. of C. was extremely challenging. The archaeology program had an exclusive Old World orientation with a focus on Binfordian processual archaeology. The “New Archaeology” was all the rage, and I found the split between theory and method hard to digest. The professors, all brilliant, were deeply engaged in high-level research and incorporated student involvement in only a limited capacity. The lack of a field-based approach was frustrating for me.

More of a practical, hands-on, methods person, I launched directly into geo-archaeology and worked with Karl Butzer. Butzer became the single, most influential force in my professional career; but at the time, I had trouble meeting his expectations. One of his students, Bruce Gladfelter, was a geoarchaeologist at the University of Illinois (Chicago), where he collaborated with Robert L. Hall on the Illinois River stream bank survey, one of the first large-scale cultural resources projects in the Midwest.

Gladfelter took me on as his field assistant. There, I got down and dirty, and learned the science behind geomorphology, soils, sediment-stratigraphy, and sedimentology. Between Butzer and Gladfelter, I was able to develop models of stream history and settlement geography in the Illinois Valley for my M.A. I got a Fulbright grant for my Ph.D. at the Hebrew University and did a study of prehistoric human ecology in the Jordan Valley under Butzer’s supervision. I was able to incorporate method and theory more fluidly, having mastered the science, and integrated landscape change with the theoretical frameworks of settlement distributions. It was a dynamic and challenging time. I got my Ph.D. in 1983, yet remained ambivalent about my graduate school experience. I was in my early 30s, and I questioned my career choice.

I won’t lie. It was only when I joined the working world that I could step back and begin to appreciate my Chicago graduate school experience. It took more than two decades for me to digest its three simple and abiding benefits.

First, my unique exposure to both Old World and New World methods and theories provided a broad-based archaeological perspective that would have been impossible to obtain from almost any other institution. I worked in places as diverse as New Jersey and Albania; at sites ranging from North American urban historic settlements to the Paleolithic of India. This global perspective peeled away any insecurities I had about working in new and different places. Flexibility is absolutely imperative in twenty-first century archaeology, in which one’s research is
increasingly a product of circumstance imposed by non-scientific concerns (through development interests) and not personal preference. Second, I learned from Butzer that a geo-archaeologist’s skill-set is powerful, practical, and enabling. Third, I developed collaborative relationships with and through my colleagues at the U. of C. that I have maintained to this day. The significance of such networking cannot be emphasized enough.

These lessons paid immediate dividends when I joined the work world in 1980. I was hired at the firm of Gilbert-Commonwealth. One of my U. of C. colleagues, Curt Larsen, had established geo-archaeology’s utility for sorting out changing occupations and landscapes at stratified alluvial sites in the Southeast. During the 1980s, I was part of a cadre of newly minted geo-archaeologists who demonstrated both the cost-effectiveness and scientific utility of the approach that planners and regulators could use for prioritizing archaeological concerns and preservation. Geo-archaeology was now an integral component of most large-scale development projects. At Gilbert, I had the unique opportunity of working with some of the most capable young archaeologists in North America, and I was exposed to nearly all regions of the continental United States. Collaboration with more classically trained “pure” archaeologists resulted in enduring partnerships.

I stayed at Gilbert until 1987. In addition to either structuring or collaborating on projects with other Principal Investigators, I was able to maintain long-term Old World research associations, most prominently on the wadi Hasa Project in Jordan with G. A. Clark (Arizona State University). I published extensively, both on Old World and New World archaeology. At the same time, I found that keeping my feet in both the academic and CRM spheres was precisely my calling. Again, my ticket to opportunities was geo-archaeology as an investigative and interpretive tool.

I became a project manager at Gilbert, and I am forever indebted to that company for affording me the opportunity to learn the business end of CRM, from soup to nuts. It was a stark lesson for someone who had always considered archaeology an esoteric, albeit productive, pursuit. In addition to designing research programs, I learned to structure contracts and budgets and to be accountable for projects that had to have a beginning, middle, and END. To me, finite performance became a mantra that persists to this day.

My tenure at Gilbert ended in 1989 when I started my own geo-archaeological consulting firm, Geoarchaeology Research Associates (GRA), in New York City. It was the most pivotal professional decision I ever made.

Getting there was complicated. A short-lived experiment involving merging with a larger, full-service CRM firm ended when I decided that I wanted to focus almost exclusively on geo-archaeology. That company felt that a broader service base was preferable. I held fast, and we parted ways. While I felt strongly about the decision, as luck would have it, I missed out on a huge opportunity in New York City that might have transformed and accelerated the growth of my fledgling operation. But that was not where I wanted to go and I am at peace with my decision and the many more that were to follow. Such is the maturation of the entrepreneur.

GRA grew, and it developed a loyal customer base, chiefly among other CRM firms. We were hired because our service was unique in the Northeast. Our original projects were intertwined with Phase III and data recovery ventures in stratified floodplains and terraces. Our project venues ranged from pipeline corridors to highway expansions, levee construction, and municipal building improvements.

As the 1990s progressed, geo-archaeology assumed an increasingly commonplace position. Although this was certainly welcome, there was a downside for GRA. Regionally based geo-archaeological practitioners began to hang out shingles, and university-based professors sought to increase their incomes. GRA’s project territory began to shrink. Between 1995–2005, we essentially became a Middle Atlantic and New York City operation.

Past performance history and networking paid off: GRA was invited to work on larger and more complex sites elsewhere in
the continental United States. But there was no mistaking that the market for our services tightened. Adjustments had to be made. We began promoting the need for deep testing in urban areas and the use of a geoprobe, a hydraulically based boring machine that produces a “snapshot” of buried stratigraphy and, by extension, archaeological potential. To direct and enhance the utility of this subsurface probing strategy, we developed statistically based sampling protocols using project footprints and related design elements.

GRA has grown and become entrenched on local and regional levels. My involvement is geared to mentoring geo-archaeologists and developing new investigative methodologies. I continue to pursue academic and research interests in the Old World. Geo-archaeological opportunities presented themselves through old networks. In 1996, I began an enduring research partnership with Rita Wright (New York University [NYU]) that applied geomorphic investigative strategies to explore the nexus of Holocene landscape change and settlement geography during the Harappan period in Pakistan. At this writing, we have completed six seasons in the Punjab and our work is ongoing.

As a Research Scholar at the Institute of Human Origins at NYU, I have offered internships and employment opportunities to numerous students, at least four of whom have developed Ph.D. dissertations from various GRA projects. Several NYU students have launched their professional careers as GRA employees. My work and interaction with students has become one of the most satisfying components of my professional career.

In 2005, GRA’s direction changed again, this time in response to expanding international opportunities. Dr. Sonny Trimble of the U.S. Army Corps of Engineers, in charge of Mass Graves detection and recovery efforts for the U.S. government, invited GRA to manage and help implement a high profile forensic archaeology project in Iraq. Trimble’s invitation put us at the
nexus of international politics and archaeology. This was a situation that posed ethical conflicts and required team members to determine whether participation in the U.S. occupation was in any way justifiable. In the end, the GRA team concluded that unearthing incontrovertible evidence of genocide was justified even though the pretext for going to war was questionable, if not unwarranted. Our caveat was that, as anthropologists, we would lay out conditions that not only exposed the evidence for mass killings but also resulted in the return of its victims to the oppressed Kurdish minority. Consensus was that the Kurds, as a people without a homeland, should not be pawns in the conflict but should receive the closure that they were promised in exchange for their cooperation with the allied forces in the first Gulf War (1990–1991). Using geo-archaeology, we were able to determine why some trenches became mass graves while others did not. Trimble laid out the evidence we assembled at the Hussein genocide trials. His and GRA’s efforts resulted in the repatriation of the murdered Kurds to their homelands and offered fresh meaning to the concept of “archaeological relevance.” GRA’s participation in that project was perhaps the most compelling exercise in archaeology that we (and I) have ever undertaken. GRA continues to pursue applied opportunities on the international front, most recently with the State Department and in Afghanistan.

My most recent venture is Internet Radio. I was approached by the VoiceAmerica Internet Radio Network to launch a radio talk show on the topic of archaeology. I thought this was a unique opportunity to expand the positive message of archaeology to the broader public. We archaeologists are so often entrapped in our worlds and particular research venues that we fail to communicate the excitement and, yes, the relevance of archaeology to the public. The program is broadcast weekly and has a growing listenership (in excess of 30,000 per month). It is readily accessible on I-tunes (http://www.voiceamerica.com/show/1975/indiana-jones-myth-reality-and-21st-century-archaeology). In a world of shifting opportunities and social networking, public outreach is emerging as perhaps the most critical vehicle we have to secure the continuity of our profession to new generations of consumers.

In closing, I have to say that this grizzled veteran’s career in archaeology has been a spectacular journey, and it is far from over (hopefully). My archaeological odyssey has taken me to places (Figures 2 and 3) that I could not have anticipated I would be. Going forward, my contention is that applied archaeology will chart the destinies of most future professionals. Along the same lines, I propose that methodology is and will be a driving force toward future employment potential. Thus, advancing in the profession is contingent on developing practical skills (GIS, geo-archaeology, paleo-ethnobotany).

I cannot emphasize more strongly the need for understanding the business of archaeology as contemporary students find their professional niches in the twenty-first century. All archaeologists, irrespective of the sector in which they perform, must realize that our profession’s profile is being raised to the level of other commercial industries. That lesson applies across the board and is inclusive of academia. The archaeologist’s position in the business of archaeology may be “indirect” (i.e., university-based) or “direct” (CRM firm owner), but we all have a vested interest in promoting our field’s profile in the commercial world. All archaeological sectors benefit when the profession stands on an equal footing with other industries. We are not there yet.

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How often have students or visitors asked you simple questions you can’t answer? What was it like to live in this pueblo? What did people do all day? Were they safe? Did they have enough to eat and drink? Didn’t that trash heap smell? Do you think they were happy?

The archaeology of the human experience (AHE) is an emerging paradigm that tries to answer such questions and more. It asks what it was actually like to live in the past that archaeologists study. AHE was the basis of a symposium at the 2013 SAA Annual Meeting in Honolulu, sponsored by the Archaeology Division of the American Anthropological Association and by the Global Human Ecdynamics Alliance (http://www.gheahome.org/), and we are revising those papers for publication in a volume I am honored to edit.

Consideration of the human experience is important for many reasons:

- We care about these things—food, shelter, safety—in our own lives, and we should extend that care to the people we study. It humanizes our research (without making it less rigorous, as I’ll explain below).
- It resonates with the public, giving people a realistic understanding of what it was like to live in the past. It is also one of the ways that archaeology can contribute to the broader social sciences (Smith et al. 2012).
- It directs attention to differences, across genders, ages, classes, etc., making us aware of how conditions that privilege some may disadvantage others. As Cathy Cameron showed in her paper at the SAA session (see also Cameron 2011), captives—who often live in wretched conditions—may be sources of wealth and prestige for the people who own or control them.

Many archaeologists believe that our findings are relevant to contemporary policy and decision-making. If we draw from our knowledge of the past to contribute to the future, we should have a solid understanding of what it was actually like to live in that past. Brewington, in his contribution, shows that strategies that contributed to long-term sustainability made life very difficult for the poorest members of society.

Understanding the human experience can help us answer questions we are already asking: People lived through plenty of droughts, why did they move or reorganize at this particular time? Perhaps because they were aware that their lives had become more difficult than those of their grandparents, or those of people in other areas.

AHE leads us to ask new questions. As Ortmann notes in his contribution, it even pushes us to ask whether there are better (and worse) ways of living together, and how people learn to create better ways of life.

How Did I Get Here?

The road that led me to AHE keeps coming back to southwest Colorado. As a graduate student and young Ph.D. I was lucky to work at Crow Canyon Archaeological Center (CCAC) in Cortez. The staff was invited to see the excavations at Cowboy Wash, including a horrific kiva filled with “processed” human bones. About the same time, CCAC researchers—including bioarchaeologist Deb Martin—were discovering incontrovertible proof of terrible violence in the past. The occupation of Castle Rock Pueblo ended with the massacre of at least 41 people, whose bodies were left to be gnawed by animals. I wasn’t directly involved in the research, but I remember the researchers struggling with their interpretations, often in consultation with CCAC’s Native American Advisory Committee. Their goal was not to sensationalize the violence but to understand it.

A few years later I heard Scott Ortmann present a paper on the final years in Castle Rock Pueblo. Hunkered down, people moved huge boulders to create a wall around their village and surrounded themselves with shrines—but to no avail. Listening to him, I could feel what it might have been like to experience those last years. The published version (Ortmann...
2008) is a fascinating and rigorous analysis, but it didn’t affect me in the same visceral way. There needs to be a place—even in academic journals—for accounts that are both rigorous and moving.

I am privileged to live part of the year in southwest Colorado where we are now (summer 2013) in what the National Weather Service calls an “extreme drought.” Most of the dry-land crops have failed, and Montezuma County has been given a “disaster” designation, providing the farmers some economic relief. Everyone feels the drought, even those of us buffered—at least for now—with enough money to buy food from well-stocked stores. The clouds move in, spit a few drops, and evaporate. It finally rained in September (Figure 1), enough to help the natural vegetation, but too late for most of the crops (this rain was brought by the same monsoonal flow that caused disastrous floods in Boulder). What would it have been like to be a pueblo farmer living in times of drought?

The Need for Methods

The answer is not just to add emotion and stir. In order to make a real contribution, we need to create well-supported understandings based on rigorous research. Fortunately, archaeologists, and bioarchaeologists, already have many relevant methods. We can estimate population-resource (im)balances, environmental impacts, and morbidity/mortality rates. We know about technology and how much labor was needed for certain construction projects. We know a lot about violence and social inequalities.

But . . . we also know all too well that this kind of information can lead to sensationalist accounts. The archaeology of the human experience is about using this information in a way that fosters understanding rather than sensationalism. It’s a tricky continuum (Figure 2), because both extremes can become emotionally charged and can easily come full circle. One goal of AHE, especially in its early stages, is to develop methods that will both enhance our standard practice of dispassionate description and allow us to move from description to understanding.

Bioarchaeology is an important part of this endeavor. In her contribution to the SAA symposium on AHE—entitled “Can We Feel (Measure) Pain from the Bones?”—Deb Martin (2013) focused on methods, many derived from clinical studies, for discerning the actual effects of trauma: Would the trauma have caused long term pain, suffering, disability, and mental problems? She has approached violence in the same way, including The Bioarchaeology of Violence (Martin et al. 2012), parts of which were summarized in the SAA Archaeological Record in 2012 (volume 12, numbers 2 and 3).

Bioarchaeologists have also developed an enormous comparative database as part of the Global History of Health Project (http://global.sbs.ohio-state.edu/). It uses fairly standardized measures to gather skeletal (and some archaeological) data that can be used to assess changes in human health across time (the last 10,000 years) and space (the Western Hemisphere and Europe) (see Steckel and Rose 2002).

I hope that AHE and bioarchaeology will work in tandem, with bioarchaeologists providing insights into bodily lived experiences and archaeologists providing context. Together, we might be able to explain why many skeletons have a particular kind of injury, and we might even be able to add insights into how and why experiences differed across time and space. As we move ahead, we can consider whether a large comparative database would be feasible and helpful for the archaeological questions. With all of this information, we can address big questions. We can say something about the history of violence, and the history of peace.

When I began thinking about AHE, I realized the importance of developing systematic methods for moving along the red line in Figure 2, using solid data to support interpretations of the human experience. This led me to the enormous and complicated development literature. Seeking an approach that could be operationalized archaeologically, I
drew upon the dimensions of human security developed by the United Nations Development Programme (Hegmon et al. 2013). Many of the contributions in this issue use this method, so I summarize it in some detail in the next section.

There are many other methods, concepts, and indices that would be useful for AHE. Quality of Life measures (e.g., Phillips 2011 provides a useful review) include issues such as education/literacy and access to resources (the latter is explored by Dennehy in this issue of The SAA Archaeological Record). However, these measures are often all-encompassing (some versions combine subjective expectations with objective measures), thus I’ve found them to be difficult to operationalize archaeologically. Nelson et al. (2013) used a vulnerability framework to assess the likelihood that people would experience food insecurity (the broader picture is developed in Nelson 2010). Amartya Sen’s concept of freedoms—political freedoms, economic facilities, social opportunities, transparency guarantee, and productive securities (1999)—also should be used by archaeologists. I hope that researchers pursue these and many other methods of gaining insights into the human experience. This will likely mean working with people familiar with the development literature, which I am just beginning to do.

**One (of Many) Methods:**
**The Human Securities Approach**

Many of us have found the United Nations Development Programme’s (UNDP) approach to human security to be useful in our archaeology. Developed in 1994, it focuses on what people actually experience, in contrast to national security (http://hdr.undp.org/en/reports/global/hdr1994/). I list the UNDP’s seven dimensions of human security below, though I hope that specific applications will reorganize and refine them, as Swantek and Freeman do in their contribution. It’s obviously difficult to use these to compare vastly different cases, or past and present, but we have found them to be very useful to assess change over time or similar processes in proximate cases.

**Economic security** requires an assured basic income, and may be reduced by income inequality. Archaeologists who work with non-monetary societies can assess economic security more generally by considering inequality, dependence on others, and control over the means of production. The Gini index might also prove useful archaeologically.

**Food security** has to do with both physical and economic access to basic food, and is relevant in probably all societies past and present.

**Health security** primarily has to do with disease.

**Environmental security** concerns threats to resources, which have long been studied in environmental archaeology.

**Personal security** has to do with physical violence, such as warfare or domestic abuse, as well as dangerous activities.

**Community security** is based on the idea that most people derive security from their membership in a group. However, the UNDP notes that communities can also be oppressive and limit autonomy. These two factors perhaps could be separated in archaeological analysis.

**Political security** has to do with basic human rights.

**Theory?**

I believe we always think and write from a theoretical perspective, and to ignore theory is to ignore our perspective and ultimately our humanity. At the same time, theoretical jargon—while it may lend us a sense of career-enhancing distinction—can obfuscate the human experience and the goals of anthropology. This is well said in a post from Paul Stoller on Occupy Anthropology’s Facebook page:

Anthropology will continue to get a bad rap as long as we anthropologists think and write about the human condition in obtuse ways. When I talk about my life in anthropology and the people I have come to know and love over the years, I find people in the audience moved—not because what I had to say was particularly brilliant, but because I opened my experience—my joy and pain and that of my Nigerian friends—to them and such an opening established a connection. At my last several talks, I have seen people shed a tear to two when I talk about the depth of my ethnographic experience and the depth of the humanity of my Nigerian friends. That kind of connect is usually missing in anthropological accounts. In my view of things, this connect should be the centerpiece of what we do.

Friedrich Engels’ horrific description of the experiences of the “working class in England in 1844” was an inspiration for what became Marxist theory. More recently, a vast body of theoretical and empirical work in political ecology and envi-
The Archaeology of the Human Experience

Widening the Experience

So far, much of our focus has been on the negative—pain and suffering, inequality and captivity—in part because these issues haven’t received enough archaeological attention. I hope that the focus can be broadened, and that we can cover a wider range of the human experience. Just as the study of conflict broadened to include the study of peace, the study of human experience should explore and understand conditions that contribute to well-being.

References Cited

Cameron, Catherine M.

Farmer, Paul

Michelle Hegmon, Jette Arneborg, Andrew J. Dugmore, George Hambrecht, Scott Ingram, Keith Kintigh, Thomas H. McGovern, Margaret C. Nelson, Matthew A. Peeples, Ian Simpson, Katherine Spielmann, Richard Streeter, Orri Vésteinsson

Martin, Debra

Martin, Debra L., Ryan P. Harrod, and Ventura R. Pérez, editors

Nelson, Margaret, Scott Ingram, Matthew Peeples, Andrew Dugmore, and Seth Brewington

Nelson, Margaret C., Keith Kintigh, David R. Abbott, and John M. Anderegg

Ortman, Scott G.

Phillips, David

Smith, Michael E., Gary M. Feinman, Robert D. Drennan, Timothy Earle, Ian Morris

Steckel, Richard H. and Jerome C. Rose, editors
As an Africanist, it is difficult to go into the field and keep your eyes closed to the experiences of the communities around you. Let’s face it—you aren’t much of an anthropologist if you do. For a long time I found myself wondering: Why do these communities have to struggle so much to meet their basic needs? Has it always been that way? So many of the interesting archaeological sites at which I’ve had the privilege of working—from those associated with the finery of high civilization to the fields of ordinary folks—are often out “in the middle of nowhere.” Is this a sustainability issue? Did past societies overuse finite resources and thus destine their descendants to a life of poverty? Or is it because the majority of the world is covered in so-called nowheres, places on the “periphery” that lack the amenities of First World living? As students of the past, why can’t we answer these questions?

Archaeology, as a discipline, has not focused on these avenues of inquiry, but emerging attention to sustainability means that these issues are now on the radar. In an era in which funding for projects increasingly needs to be justified to a discerning Congress, and indigenous communities accuse some archaeologists of extracting their histories as if it is a resource to be tapped, we can do better—a lot better, as Shannon Dawdy (2009) recently argued. To do so, we need to find meaningful questions to ask that link distant and recent pasts with the present and reach across multiple stakeholder groups.

I’ll admit, as an archaeologist trained in paleoethnobotany, my research questions were initially what you would expect—interesting to archaeologists and even to Science readers, but not really to the communities in which I worked. In the course of conducting various ethnoarchaeological studies in Africa (Figure 1), I began to feel as if we were forcing archaeological questions onto modern-day people, questions which had little bearing on their everyday lives. And in Africa especially this is hard to justify. Some-thing had to change. Fortunately the communities in which I worked had plenty of questions of their own.

What was on the minds of most of the African women I interviewed was how they were going to feed the family that night, that week, and that year. Were things ever going to get better? Why, despite how hard they worked, did they experience food insecurity? Would they always be stuck in a cycle of uncertainty? All I had to do was take this a step further. Why didn’t we ask questions like this about the past? How did Africa, or more accurately, parts of it, become food insecure? Has it always been that way? Why or why not?

While archaeologists have long acknowledged the important role of food in the past—so much so that “evolutionary” stages were defined by how societies acquire food—recently we’ve tended to focus on the rich and on extravagant luxury foods and feasts rather than on situating present-day scarcities. Yet archaeology is a tool that is remarkably well-suited to studying scarcity and food security. We rely on material remains that literally tell a story from the hearth up—where decisions like those that consume my informants on a day-to-day basis are enacted and recorded. In a world where food security is on the minds of us all, rich and poor alike, archaeology can provide a compelling narrative of who suffered in the past, who survived, and how.

But food security is also about a lot more than the terrible suffering we see on the news. Conceptually it is all inclusive—extending from foie-gras-eating gourmands to those wracked by starvation. Food security is a positive thing, whereas food insecurity is negative. Between the two extremes, however, there is clearly a large range in which one might have enough to eat but not particularly enjoy it. Food security is fundamentally about how people experience food today and in the past, both in the biological sense of needing nourishment to survive and in the sense of enjoying new tastes and exotic luxuries. A focus on food security in the
past is critical; it highlights wide-ranging human experiences and resonates with us today because we too feel pangs of hunger and shivers of gustatory delight.

How can we operationalize the study of food security in the past? The most oft-cited definition of food security, drawn from a 1996 summit of the World Health Organization (WHO), describes it as a state in which “all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.” Typically, the concept includes both physical and economic access to food that meets people’s basic dietary requirements and food preferences. According to WHO (2013), food security is built on three pillars, which anthropologists would expand to four:

- **Food availability**: sufficient quantities of food available on a consistent basis.
- **Food access**: having sufficient resources to obtain appropriate foods for a nutritious diet.
- **Food use**: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.
- **Food preference**: the ability to exercise choice in what foods are eaten.

**Availability** is essentially a function of production—how much of a certain crop can be produced given environmental conditions. Archaeologists have been modeling this relationship for years. The amount of a certain crop that is produced varies from region to region, based on both prevailing environmental conditions and methods of food production. What is key—and my case study below illustrates this—is that such estimates are framed as empirical questions rather than taken as actual production levels. Did society X produce the estimated amount of food in period X, or are there any indications that food supplies were stressed? Violence, migration, and social inequality can have a major impact on how much food is produced, even in the best of environmental conditions, and evaluating the impacts of such pressures is central to understanding human experience.

**Access** is defined by predominantly social and economic parameters and can vary tremendously across different segments of the population, as is evident in contemporary societies. Such individual-level consumption habits may be accessed by bioarchaeological markers. Access to food can also be evaluated using the comparative method, by comparing food remains across space (i.e., between houses and villages) and through time (a region may have variable access to foods over time, whether on a short time frame, such as throughout the year, or over the long time spans available to archaeologists). Access of course is not just about quantity, but about quality, which is culturally defined.

Food **use** is defined a little differently by the WHO than by archaeologists. To the WHO, it means “proper” use, use that meets basic nutritional and sanitary standards. As anthropologists we know that concepts of proper nutrition and sanitation are culturally defined and situated. Concepts of sanitation might be recognized by attention to how people dispose of their refuse. Recognizing shifts in long-held practices of refuse discard might clue us into socioeconomic shifts or periods of stress and violence. In some situations we can trace whether or not ancient people consumed balanced diets, such as the Mesozoic corn, beans, and squash triad, which provides complementary nutritional values. In that case, unavailability of one or more of these foods for a protracted period may suggest nutritional stress. Bioarchaeological markers such as enamel hypoplasia may indicate when some members of society are not receiving what they need nutritionally.

Food **preference** forms the final pillar of food security. People exhibit a strong preference for eating that which they consider food, and abhor that which they do not. Most people choose to eat foods they recognize and prefer, and only move on to unrecognizable or lower-ranked foods in times of extreme scarcity. This interplay is critical for recognizing times of food plenty or stress. While there has been increasing attention to food preference in archaeology (i.e., Smith 2006), much of the archaeological literature has focused on elite or luxury foods at the expense of commoner cuisines. Comparison across multiple social and temporal axes allows us to address which foods were preferred and accessible, and how this varied across social boundaries and through time, in concert with political, economic, and environmental change.

In short, there is considerable potential to address past human experience through an archaeology of food security. Using the broad definition of this concept aids in investigating how human experiences shift over time, rather than simply addressing how basic needs were met. We can begin to address the full spectrum from food security to insecurity, from the rare, exotic, and plentiful foods consumed at feasts to the foods of last resort consumed by those in need. Such a comparative perspective between the “haves” and “have-nots” helps us to define the range of past human experiences more fully and to ask timely questions, such as when and how food insecurities emerged across different parts of the globe.
This is an enormous task, and one to which I hope others will contribute. My aim in writing this piece is that others will take a less circuitous route than I did. I’m fortunate to have collaborated on Ann Stahl’s long-term project based in Banda, Ghana, which has taken a direct historical approach that has now connected the last 1,000 years of history right up to the present day (Stahl 2001). This rich dataset enabled me to look at continuity and change in foodways over some of the most tumultuous and dynamic times in world history, when, for better or worse, our modern global food system took root.

While full details will be relayed in forthcoming publications, including a volume based on the Archaeology of the Human Experience session at the 2013 SAA Annual Meeting, edited by Michelle Hegmon, our basic findings merit mention. The first is that people in the Banda region seem to have weathered a severe, two-century-long drought from AD 1450–1650 remarkably well. There are no indications of food insecurity—in fact, quite the contrary. During that time, people exercised considerable choice over what they ate, including new and exotic foods, suggesting a high level of access to preferred foods. Second, it was only much later in the nineteenth century, as instability and violence associated with shifts in the global economy wracked the region, that people began to experience sustained food insecurity. Placing the development of food insecurity within a historical framework challenges the views that Africa has always been food insecure or that food insecurity is a pervasive feature of...
African environments. It helps create an alternate narrative that the communities with whom I work will hopefully be interested in hearing.

My point here is to demonstrate that an archaeology of food security brings to the fore one of the most basic of human experiences—eating well, eating just enough, or not eating at all. It’s a topic that translates from the past to the present, from academic archaeology to the communities in which we work and the public on whose funds we rely. We are uniquely qualified to tell stories of a rich and very different past, just out of the reach of conscious memory, particularly in places where life is not so kind, at least in the present. Reaching this goal depends on asking questions of the past that are of interest to people beyond the academy. Although we cannot predict the future, our long-term gaze can at least demonstrate that other alternatives are possible. While my Banda case study reveals a sad story—one of the development of food insecurity—it also exposes an alternate one, of a resilient, connected, and food secure Africa. One can only hope that that past plays a part in imagining Africa’s future.

References Cited

Dawdy, Shannon L.

Stahl, Ann B.

Smith, Monica L.

World Health Organization (WHO)

great many archaeologists—probably most of us—are interested in understanding the everyday lives of the people we study. For good practical reasons, we tend to focus our research on large-scale issues, such as domestic economies, settlement patterns, and changes in material culture. While these certainly provide proxy evidence for how people lived day-to-day (they help comprise the cultural and physical environments people live in, after all), such system-level analyses often do not explicitly address human experience. In many cases, this is simply because our data lack the necessary level of detail for such analysis. What I hope to show here, however, is that even coarse-grained system-level data can be useful for investigating human experience and that such studies can add important dimensions to our understanding of cultural processes.

To do so, I’ll focus on the early Medieval period in the Faroe Islands, a small archipelago situated roughly halfway between Scotland and Iceland. This was a time of profound social, political, and economic changes, each of which had real impacts on the lives of the Faroese people. During my very first trip to the Faroes, for the start of my dissertation research, I was immediately struck not only by the beauty of the rugged green islands (Figure 1), but also by the strong sense of community I found there. The islands felt somehow familiar, and I realized that aside from the very different language (Faroese is directly related to Old Norse), the people I met and worked with reminded me a good deal of the people I had known growing up in rural eastern Washington state: friendly, down-to-earth, witty, hard-working people who are proud of their cultural heritage. An important part of the Faroese heritage has involved the long-term, careful management of the landscape and wild resources; historically, sheep herding, fowling, fishing, and whaling have been critically important to the resilience of this island community, and they continue to play important roles today. My research has involved looking at the Faroes as a “social-ecological system” (a concept developed in the Resilience literature), and this has led me to appreciate that maintaining resilience in these islands has at times required significant tradeoffs, some of which have had profound impacts on people’s lives.

Landnám and the Development of a Resilient Social-Ecological System

I begin (in this and the following sections) with an overview of Faroese history that simultaneously considers both society as a whole—which managed to achieve ecological sustainability over the long term—and the experiences of the people who lived in that strictly organized society. You’ll see that sustainability came at considerable costs, many of which were borne by the poorest members of society. I then use the UNDP dimensions of human security to systematically assess how life changed through the centuries.

Home to just under 50,000 inhabitants, the Faroes are today a self-governing nation within the Danish Realm. The Faroese people, however, are direct descendants of the Viking and Hiberno-Norse settlers of the islands, traditionally believed to have first arrived in the early ninth century A.D. during the early stages of the Viking Age colonization of the North Atlantic. A growing body of paleobotanical and archaeological evidence points to human settlement in the islands as many as three to five centuries earlier than the first Viking settlement (landnám), though it is still too soon to say where these earliest settlers came from or what the nature of their relationship with the later Norse population might have been.

Norse society was hierarchical, and the colonizers of the islands probably included slaves, farmers, and chieftains. These people would have encountered a landscape that was limited in ideal or even suitable settlement locations: the islands are mountainous and relatively small (no point is more than 5 km from the sea), and much of the approximately 1290 km of coastline is very steep, with imposing sea
cliffs limiting safe landing to only a relatively few shallow bays. Consequently, from the very start, peopled settled in the relatively few locations offering flat, arable land and ready access to a sheltered bay—the same primary settlement locations one finds in the islands today. Access to the sea would have been critical, not only for transportation and trade, but also for accessing important marine resources. Though primarily agro-pastoralists, the Viking-Age settlers relied heavily on wild resources such as seabirds and their eggs, fish, sea mammals, seaweed, and driftwood. While primary settlements were generally located on the coast, small seasonal settlements called shielings (Faroese: ærgi) were distributed throughout the highland commons pastures and were used as bases for summertime management of grazing animals and for other activities such as peat cutting.

Within a fairly short period of time, the early settlers were occupying, managing, and using essentially every part of the landscape. Such intensive use of natural resources is unsurprising in a small island environment like the Faroes. What is noteworthy, however, is that we have no real indication of any significant landscape degradation or resource overexploitation. The available zooarchaeological evidence (an outcome of my dissertation research) suggests heavy but sustained exploitation of seabird colonies from settlement onward. Moreover, there is very little indication of grazing-induced erosion or biomass depletion, and there is good evidence that homefield productivity was being maintained, if not improved. I believe that one key to the successful management of the landscape and wild resources was the maintenance of strong social ties. The Faroese relied on kinship and community connections not only for collaboration on subsistence activities such as fowling and whaling, but also for effective management of communally held resources such as the upland pastures. By controlling access and enforcing limits on usage, local communities appear to have been able to largely avoid overuse of the more vulnerable parts of the landscape, such as the fowling cliffs and upland grazing pastures. Strong social cohesion is one aspect of the United Nations Development Programme’s definition of community security, though the UNDP also notes that traditional communities can also perpetuate oppressive practices, an issue I’ll address in more detail below.
Challenges and Adaptations

By the twelfth and thirteenth centuries, a series of significant social, political, and economic transformations began to threaten the sustainability of natural resource use in the Faroes. These changes were brought on by a combination of factors, including the increasing influence of the Norwegian Crown and the Church and the potentially significant population growth in the islands. The ownership and organization of the landscape changed fundamentally during this period. This is best exemplified by the gradual phasing out of the shielding system and, concurrently, the use of upland commons pastures; the “outfield” system that followed divided much of the landscape into privately owned plots, many of which were owned by the Church. Land ownership—always important in the Faroes—was emphasized even more as medieval-period economic developments brought about a greater emphasis on wool production for export. The outfield system appears to have been aimed at controlling valuable grazing lands as part of this intensification. Some of the social developments had implications for landscape use during this period as well. For example, after slavery was abolished ca. A.D. 1200, some of the newly freed ex-slaves began setting up farms in the grazing pastures of the commons, causing tensions with landholders.

In the latter half of the thirteenth century, the Norwegian Crown began replacing indigenous law in its North Atlantic tributary holdings (which included Iceland and Greenland, in addition to the Faroes) with the standardized legislation of the Realm. Faroese landholders complained that Norwegian agricultural law failed to address the unique challenges faced by Faroese farmers, and, in response, a royal decree known as the Sheep Letter (Seyðabræ við) was drafted in 1298 specifically for the Faroes. The Letter likely incorporated several elements of earlier local common law, and though the document’s primary purpose was the regulation of sheep-farming activities (hence the name), it also dealt with several other aspects of land ownership and use. It put a stop to the establishment of new settlements in the former commons areas and made marriage illegal for anyone who did not own a minimum level of property, effectively barring the poor from marrying. These measures not only kept control of the outfield in the hands of the pre-existing landowners, but also ensured that a viable pool of servant labor would remain. Like most historic documents, the Sheep Letter can be interpreted in various ways. While it may have been prompted by a perceived need to address resource overuse by a growing population, a more likely (if cynical) view is that it was aimed at preserving the rights of the landowners and others in positions of socioeconomic power. Whatever the intent, the legislation was instrumental in helping to preserve the sustainable use of natural resources and, with it, the overall resilience of the Faroese way of life.

These changes to landscape organization and management coincided with the beginnings of a period of regional cooling and increased storminess in the North Atlantic. Even relatively small amounts of climatic variation could have significantly increased the danger of overgrazing, due to a combination of shortened growing seasons and increased interannual climate variability; the expansion of sheep farming at the time would have only increased the risk. And yet, despite all of the challenges of the twelfth and thirteenth centuries, there does not appear to have been any significant landscape degradation, nor is there any indication of seabird overexploitation or habitat destruction. The resiliency of the system was due to a number of factors, but one of the most critical was undoubtedly the ability for communities (or, more accurately, a certain subset of those communities) to control and restrict access to natural resources.

Analysis: From Social-Ecological Systems to the Human Experience

The archaeological, paleoenvironmental, and historical evidence allows us to paint the broad strokes of the economic and environmental impacts of the twelfth-to-thirteenth-century transitions in the Faroe Islands. Ecologically, the impacts appear to have been minimal; the Faroese continued to sustainably exploit natural resources and, in fact, even amplified their demand on grazing pastures. I have also hinted, however, that I think the costs of this sustainability were unevenly distributed. For some people, particularly those unable to own land or marry, life would have been very difficult. At the same time, however, it is not reasonable to judge medieval life by our current standards. The challenge is to think about past conditions of human life in a way that is contextually appropriate and analytically useful. I suggest that, for the Faroese case, the key variable is the degree to which individuals had access to fundamental resources, both natural and social. To analyze this, I focused on four of the UNDP’s dimensions of human security: economic, environmental, political, and food security. The data used in my analysis were derived from a combination of historical records and archaeological, paleoenvironmental, and environmental modeling studies.

It seems reasonable to conclude that, for many people in the Faroes, life became harder in the centuries after landnám. However, the results of my analysis suggest that, on the whole, human security was not negatively affected by the transitions. In brief:

• Environmental impacts, as already noted, appear to have been minimal.
• Access to adequate food likely remained reasonably secure, due in large part to the heavy but sustainable exploitation of wild resources such as seabirds.
Economic security was maintained, and probably in some respects actually improved, due to greater inclusion of the Faroes into the larger Norwegian politico-economic system.

Political security, likewise, was largely preserved, despite the loss of much autonomy to the Crown (the Sheep Letter being one important exception).

The reason there is a mismatch between my perception of the human experience and the results of the human-security analysis is that this generalized, system-level assessment doesn’t take into account the significant social-class differences involved. Individual rights were based on one’s social class, which itself was largely contingent on property ownership. Even after slavery was abolished, hierarchical practices such as tenantry, servant labor, and marriage restrictions continued to play key roles in the socioeconomic system. Though the rights of access to natural resources (e.g., fowling cliffs, shorelines, and grazing pastures) were undoubtedly tied to land ownership prior to the twelfth and thirteenth centuries, the socioeconomic changes that occurred during this period placed these resources ever more fully into the hands of the elites, which now included the Crown and Church. The overall effects of this hierarchical organization were complex, however, and not all negative. Practices such as class-based restrictions on marriage (which acted to limit population growth) and restricted access to natural resources effectively acted as conservation measures, preserving these resources. Such restrictions were essentially tradeoffs, the costs of maintaining sustainable natural resource exploitation. The very limited land and fragile natural resources have required careful management ever since, of course. And while the costs of these tradeoffs were unequally distributed in medieval times, as social-class distinctions have been lessened over the centuries, the burden has come to be shared more evenly.

Summary

The Faroese successfully met the challenges of the twelfth and thirteenth centuries. On the whole, the social-ecological system remained intact and proved remarkably resilient. Analysis of the system as a whole, however, can mask important intra-society differences. In the case of the Faroes, maintaining resilience involved significant tradeoffs, and the costs of these were unequally distributed across this hierarchical society. The Sheep Letter is a perfect example: by restricting access to limited land and other natural resources, the Letter promoted long-term conservation, a very good outcome for the population as a whole (as well as the social-ecological system). At the same time, many of these restrictions (such as linking rights of access to land ownership and prohibiting the poor from marrying or establishing their own farms) disproportionately affected the least powerful members of society.

The Faroe Islands today are a magical place—beautiful, wild, and populated by people who care for one another. One of the reasons these islands are so beautiful today is that difficult conservation measures were enacted over seven centuries ago. The last thing I want to do is to criticize this history. The Faroese people faced significant challenges in sustaining their way of life on these tiny islands, and stark social inequalities—including slavery and marriage restrictions—were common features of the Norse world and beyond. My purpose is rather to focus on the human experience of these conservation measures. Doing so can provide us with a more complete understanding of what was really involved in maintaining social-ecological resilience.
I was first introduced to the concept of human securities far from the ivory tower of academia. To be sure, I learned the United Nations Development Programme (UNDP) definitions of these concepts in a sustainability and archaeology class in 2012. But my real education had begun more than 10 years before, when I worked at a small soup kitchen in the Bronx. That’s where I heard an explanation of human security that, to me, captures the spirit of the concept even better than the UN did.

“People can’t get off the streets—they can’t look for work or continue their education—if they don’t have a place to stay and a meal in their bellies.” If I’d heard Sister Mary Alice say it once, I’d heard her say it a thousand times—to her staff, to donors, to school groups coming to volunteer at our soup kitchen. It spoke of her decades of experience working with homeless and hungry people in the Bronx; it encapsulated her own motivation to keep at it; and it also nicely summarized our organization’s mission. Part of the Solution (POTS) is a soup kitchen, men’s shelter, and social service agency providing a sense of security in the Bronx since the 1980s. In 2002, I was its newest staff member, in charge of both managing the kitchen and recruiting the volunteers who helped us serve lunches and dinners seven days a week, 365 days a year. For the people we served, human securities were concrete things: a place to grab a warm meal and use the facilities; a haircut and a change of clothes for a job interview; an address to receive mail. Their human experience, we hoped, was marginally improved by our offering these services; our open-door policy made us one place they could count on time and again.

Despite the positive feeling of being “part of the solution,” my time spent with POTS, and with the Jesuit Volunteer Corp (JVC) who placed me there for a year, left me with more questions than answers. Why is unemployment so persistent? How can families go hungry in a city with food to spare? Why does poverty plague certain sectors of a city, while neighboring areas experience abundance? The answer provided by JVC was two-fold: not only are there too few services for those in need, there are also institutions that keep unjust systems in place. Only a systemic approach to social justice, paired with a charitable approach to social ills, would begin to address the root of the problem—sentiments that are echoed time and again in the UNDP’s report on human securities.

But how can you change an unjust system if you don’t understand it? This question above all others ultimately led me to seek a deeper understanding of social inequality and human security, inspiring me to pursue a Master’s in Anthropology at CUNY Hunter College. More recently, it has led me to Arizona State University, where I joined the Urbanization through the Ages project to investigate social inequality in an urban setting. Led by a multidisciplinary team including archaeologists Michael E. Smith, Barbara Stark, and George Cowgill, political scientist Abigail York, geographer Christopher Boone, and sociologist Sharon Harlon, we’ve put together a pilot study that examines equity of access to important urban services in six premodern cities. The preliminary results were recently featured in an exhibit at ASU’s Museum of Anthropology, where we invited visitors to ask themselves, “Who built your neighborhood?” Likewise, the project’s major questions concern the role of elites in providing urban services: Do they provide them to non-elites? Do elites benefit from their own better access? This is no small problem, since the population density of urban settings creates unique challenges in meeting all aspects of human securities.

Food security encompasses both the production and distribution of food resources; it “requires that people have ready access to food—that they have an ‘entitlement’ to food, by growing it for themselves, by buying it or by taking advantage of a public food distribution system” (UNDP 1994:27). In an urban setting, obtaining food through any of these means can be difficult. Depending on the size and density of the city, household self-sufficiency may be nigh impossible for reasons of geography and geometry. Low-density cities, including Maya sites such as Tikal and Caracol, had room for large household gardens between residences. But in Teoti-
huacan, people lived in a vast network of walled apartment compounds with very little space between. Those unable to grow their own food would have to buy or trade for it, or obtain it through some kind of public food distribution system. Urban craft specialists would have needed a way to exchange craft goods for basic staples likely grown outside the city. Urban markets are almost ubiquitous in historical and ethnographic records and have been identified in archaeological cases (Cowgill 2008). Markets would have provided opportunities for people to transform their labor into food, thus contributing to their economic security, “an assured basic income” (UNDP 1994:25). Thus, in some cities at least, the threat of food insecurity may have been balanced by the promise of economic security. At the same time, restricted, periodic markets may have offered elites yet another chance to manage the flow of wealth in their community. Our project seeks to untangle the relationships among these variables by mapping the location and density of market facilities and by examining their distribution throughout neighborhoods and their proximity to the homes of elites and non-elites alike.

Neighborhoods themselves provide another venue for the tension between security and insecurity. An investigation of processes driving neighborhood creation (York et al. 2011) indicates that “bottom-up” processes such as ethnic self-segregation can strengthen ties between neighbors and give new migrants a secure foothold in a new city, a process described by the UNDP’s term “community security.” These ethnic, familial, or even “neighborly” ties may constitute a type of relational wealth unique to cities with stable, long-lived residential districts. Archaeologically, these relationships can be seen in differing patterns of ceramic creation, use, and discard between districts (Robertson 2001). The creation of this type of community security may, to some extent, counter food or economic insecurities that might have been ubiquitous in some situations. However, as the UNDP report rightly points out, “ethnic groups can come under direct attack—from each other” (1994:32). Examples of such intergroup violence within the same city are known from historical and contemporary cases, though archaeological evidence is lacking.

Urbanites would also have faced threats to their political security, defined by the UNDP in terms of the degree to which a society honors basic human rights. Thus, the community security of ethnic or socioeconomic enclaves could become threatened if the rest of the society, and particularly those in power, see neighborhood members as second-class citizens. Evidence of this process is startlingly clear from our historic cases. In the Nepalese city of Bhaktapur, members of one of the ritually unpure Untouchable castes were forced to live outside the city gates. In the Islamic-dominated city of Lamu, Kenya, only the wealthiest members of society were allowed to construct stone houses in the northern ward, while foreigners and slaves weren’t allowed even to spend the night there. Our study is addressing these issues by charting the locations of religious and public gathering facilities throughout residential districts. Because these large-scale buildings and spaces might serve as important loci of integrative rituals for a large proportion of the city’s population, their distribution throughout a city might shed light on how well integrated various districts were.

The relative importance of these services and institutions varies, but one thing seems clear: once service facilities were placed in a certain area of the city, they shaped the placement of residences and neighborhoods for generations to come. Who decided on these locations? Who benefitted from locating a major temple in an elite district, or conversely, from locating elite residences near a major temple? What price did residents of far-flung peripheral neighborhoods have to pay in order to access these sites of important services?

To begin answering this question, we’ve created or obtained ArcGIS shapefiles for six cities, known archaeologically and/or historically. Two of the archaeological cases are Mesoamerican: the large Mayan city-state of Tikal in modern-day Guatemala and the huge Central Mexican site of Teotihuacan. The Greco-Roman colony of Empuries, Spain, crosses disciplinary boundaries: historical Roman-period writings supplement the efforts of archaeologists mapping the ruins. Our historical cases include the Nepalese city Bhaktapur; the Islamic city of Lamu in modern-day Kenya; and medieval Chester, England. Our small sample was designed in part to explore methods of spatial analysis across as many different settings as possible: large and small cities, dense and dispersed urban forms, colonies and capitals.

Our project focuses on three aspects of urban life ubiquitous in cities past and present: neighborhoods, services, and elites. For example, the residential zones in all known cities are divided into smaller social-spatial units called neighborhoods (Smith 2010; York et al. 2011). In a simple sense, such organization is the inevitable result of many individuals setting up permanent residences at the same location; in a deeper sense, neighborhoods play an important role in structuring the urban experience. Practically speaking, our use of neighborhoods as an analytical unit allows us to compare these disparate cases systematically. In the historic cases, we found and digitized city maps that delineated clear geographic and even social boundaries between groups of urban
dwellers. For the archaeological cases, which lacked such maps, we used spatial statistics, artifact analyses, and analogy with similar cases to create analytical districts. This mix of methods, we hope, allowed us to map analytical districts that not only make sense spatially, but also reflect the social realities of those who inhabited them.

We also identified urban services, and digitized the locations where they were provided. A service is an activity performed by one social or economic unit for the benefit of another (Hill 1997:318), and an urban service is one provided to urban residents. Our study focused on religious, commercial, and open space services and their associated facilities. For example, religious services might include large-scale rituals involving or observed by a major segment of the population; such services might be crucial to obtaining community or political security. For this same reason, open spaces are another important service, and they would also contribute to recreation or socializing. Finally, commercial or market services allow the exchange of produce or goods among households, a service vital to urban residents’ successful obtaining of food and economic security.

For each city, we identified and digitized the facilities where the population accessed urban services. These facilities varied in form and size, and further work is needed to clarify the relationship between scale of service, size of served population, and whether the facility was public, private, or something in between. The map of Teotihuacan (Figure 1) shows,
in green, the Great Compound, which has been identified as a large marketplace; in purple, the Feathered Serpent Pyramid, a site of religious activity; and, separating the two, the Street of the Dead, shown in yellow, which was a type of assembly or formal public space (Millon et al. 1973). These large, unique structures and spaces would all be considered “higher order” or “top-tier” facilities, able to serve the greatest proportion of the population at a single time; smaller, more numerous facilities also existed in most cities and likely serviced smaller groups.

Once neighborhoods and urban services were mapped, we used ArcGIS tools to give each neighborhood polygon a centroid, from which we measured the straight-line Euclidean distance to its nearest service facility. In contemporary urban studies literature, such absolute distances between neighborhoods and facilities are the simplest way to determine service access, regardless of the frequency of facility use. In broad terms, our analysis found that neighborhoods in small cities had good access to service facilities, with a mean distance of 256 m—well below the low-end 400-m “walkability threshold” often used by urban planners today. In contrast, residents of far-flung neighborhoods in large cities like Tikal often had much greater distances to travel, with 44 percent of neighborhoods in that city more than 800 m distant from services.

We ranked each neighborhood according to its absolute distance to services using a figure we termed a Relative Access Score (RAS). The RAS is intended to capture each neighborhood’s level of access relative to its neighbors, and it allows us to compare cities of very different sizes. We also created composite RAS’s by averaging each neighborhood’s score across services. Outlying neighborhoods have relatively poor access, since services are often clustered in the central part of the city. This is especially true of the “high-end” or large-scale services that make such cities famous, such as the monumental pyramids of Teotihuacan.

Finally, our project also studied the location and distribution of urban elites. Only three of our cases—Teotihuacan, Tikal, and Bhaktapur—provided household-level data that allowed us to divide the population into “elite” and commoner social classes. For the historical case (Bhaktapur), we used written documentation of elites as well as caste-level maps to not only identify but also map the placement of elite households. For our archaeological cases (Teotihuacan and Tikal), we identified and mapped the largest, most elaborate residences to locate elite residences. While such a simple division of social class is problematic, it facilitates cross-city comparison and also allows us to ask whether social status was correlated with better access to services.

The household-level data enabled us to plot the locations of elites and commoners and thus calculate the average distance to services for each class of resident. Service access was measured using straight-line Euclidean distance to nearest service facility. This method avoided complications relating to street networks and vagaries of topography, but also created a somewhat simplified measure of spatial relationship. Perhaps unsurprisingly, elite households consistently had a lower distance to nearest service than non-elite households. But in every case there are exceptions: for example, at the low-density city of Tikal, several elite households were located in outlying neighborhoods and thus had quite poor access due to large absolute distance to services.

In these three cities, we also measured the number and percentage of elites in each neighborhood and examined correlations between neighborhood status and its RAS to see whether the presence of elites in some way explained a neighborhood’s access to services. One of the most interesting and somewhat unexpected results was the lack of a strong correlation between neighborhood status and RAS. To be sure, in many cases the neighborhoods with a greater percentage of elites had better (or even the best) access to services. In the case of Teotihuacan, those residences identified as high-status by surveyors are clustered in the central precinct, close to the monumental structures that we identified as relevant service facilities. However, not far from these neighborhoods, and sometimes directly adjacent to them, were neighborhoods with very low percentages of elites but similar RASs. It is these neighborhoods that contributed to the weak correlation between neighborhood “eliteness” and RAS. These neighborhoods might be analogous to today’s middle-class suburbs, where non-wealthy residents nevertheless occupied positions near important civil services.

Although our small pilot study cannot yet draw firm conclusions, it does provide enticing hints of larger patterns. For example, our finding that elites enjoyed favorable access to religious and assembly spaces suggests that these facilities were important venues for elite reproduction of social status, both ideologically and materially. It is also clear that residents of far-flung neighborhoods did not have equal access to centers of power and commerce, and thus may have had greater levels of economic insecurity. If these outer neighborhoods can also be shown to have a distinct ethnic identity, as posited for certain groups at Teotihuacan (Cowgill 2008), their greater distance to services may also point to higher political insecurity as well. As stated earlier, many neighborhoods lie beyond the 400-m “walkability” threshold known from urban studies to be an important predictor of neighborhood service access. On one hand, pedestrian trans-
port was much more important in premodern than modern cities, and thus a 400-m (or greater) walk may not have been as much of a hardship. Yet if journeying to a service facility required a significant commitment in terms of time, energy, and lost productivity, distance from these places would serve as another source of insecurity. Given the unpredictability of the premodern food supply, a future calculation of calories required to travel from outlying to central districts might underline the stark choices residents of distant neighborhoods had to make between journeying downtown and staying at home to take care of the household.

Central marketplaces provide another interesting pattern. In almost all of the cities examined, widespread, distributed market facilities were lacking. In the three historic cases, major commercial spaces are located around a single street or intersection, which often threaded through the center of town, while religious or gathering spaces are distributed more widely throughout the neighborhoods. In the archaeological cases, a large central marketplace can be found in all three, while smaller shops are identified at Empuries and probable marketplaces have been suggested at Teotihuacan. This concentration of markets suggests that the distance and time involved in journeying to a central marketplace was more worthwhile for residents of far-flung neighborhoods. Because these places of commerce may have allowed urban craft specialists to balance food insecurity against economic security, they may have exerted greater pull despite their higher travel cost.

Our project is just beginning its second phase, seeking answers to the questions posed by this pilot study. As I continue to investigate social inequality as an academic topic, I also try to remember its human face. I remember Michael, a guest at our soup kitchen who always bore a shy smile—except for the day his face bore bruises, cuts, and scrapes instead. As he ate his meal with downcast eyes, he spoke of a scuffle he was in while defending his spot to sleep in an abandoned lot—a space he referred to as “fighting ground.” Somewhat ironically, the lot in question was the soup kitchen’s previous location on Fordham road, which had been vacated when the agency expanded and moved to a larger space on Webster Avenue. Thus, a place once dedicated to providing securities had been abandoned to become an arena of insecurity and conflict. To me, this juxtaposition epitomizes the failure of so many systems—civic, religious, non-profit, commercial—to provide even the most basic human securities to the most vulnerable members of our society. Michael’s struggles for simple security—and the struggles of so many like him—continue to motivate me in the search for answers to the mysterious persistence of systemic inequality.

References Cited
Cowgill, George L.
Hill, T. P.
Millon René, Robert B. Drewitt, and George L. Cowgill
Robertson, Ian G.
Smith, Michael E.
United Nations Development Programme (UNDP)
York, Abigail M., Michael E. Smith, Benjamin W. Stanley, Barbara L. Stark, Juliana Novic, Sharon L. Harlan, George L. Cowgill and Christopher G. Boone
What is it like to live in a world with a growing population and declining arable land? How do people deal with land shortages, and how do these strategies affect their lives? These questions are especially relevant today, with population expected to increase nearly 30 percent in the next fifty years—reaching an unprecedented nine billion people—on a planet where almost all available land is already being farmed. How can food production be increased to feed two billion more people? Intensification is one answer, but it often has consequences that—while maybe not felt in the short-term—are manifest in the long-term visible to archaeologists. Our work focuses on these types of problems and specifically asks the question: What are the long-term effects of intensified food production on human well-being? The past, known to us through the archaeological and ethnohistoric record, is the only source of data on the long-term (centuries and millennia-long) relationships of population increase, agricultural intensification, and human well-being.

To answer these questions, we developed a meta-analysis of Polynesian island systems, specifically using archaeological, bioarchaeological, paleoecological, and ethnohistoric data from the islands of the Hawaiian archipelago: Tikopia, Mangaia, and Mangareva. These data, collected by Kirch and colleagues (see Kirch 2007; Vitousek et al. 2004), are available for a 2,000 year period, from colonization to contact, offering us a rare opportunity to understand the long-term changes in the human experience in situations where arable land became scarce as a result of population growth and changes in soil fertility.

How We Came to This Research

Our interest in the archaeology of the human experience began with our exposure to Hegmon’s work on the subject and involvement in a collaborative project with graduate students and researchers in the School of Sustainability at Arizona State University (ASU). Working together, we developed a research question that allowed us to explore the human experience in the past with applications for the sustainability of the future. While neither of us specializes in Polynesian archaeology, we immediately saw the potential in the breadth of available data and analyses—for example, the work done on human–environment interactions and the development of socio-political systems on each of the islands, not to mention the detailed ethnographic and historical records from the period of European contact. After putting together our ideas, we contacted Patrick V. Kirch to determine the potential and the applicability of this study; he steered us in the direction of the work done by the Hawaii Biocomplexity Project group and suggested we look beyond our narrow original idea of the effects that changes in soil fertility had on people’s experience. It would be dishonest to say that we did not struggle with both unfamiliar data and methodology, not to mention steering our research and archaeological thinking into unfamiliar sustainability territory; but in the end, the struggle has been worth it—we believe our research has relevance to today’s world, and we hope others will see the potential in projects such as this.

Developing a Comparison of Agricultural Intensification across Polynesia

Each of the island systems we investigated is relatively small, with limited arable land; and all were settled by small populations that increased quickly. These growing populations exploited resources and caused changes to the environment that in turn led the descendent populations to adopt various methods of agricultural intensification. These different methods, combined with geologic differences among the islands, resulted in quite different kinds of impact on the soils and their resilience to nutrient depletion and erosion. These inter-island similarities and differences create an ideal context for a controlled comparison, which was the goal of our analysis.
To assess changes in well-being associated with population increase and agricultural intensification on each of these island systems, we adopted and condensed the United Nations Development Program’s human securities framework (explained by Hegmon in her introduction to this special issue) into three general categories: Environmental, socio-political, and subsistence security. We assessed each category for each island system through time—from initial colonization to the contact period—where possible considering both the population as a whole and the differing experiences of elites and non-elites.

We define environmental security to be the ability of the ecosystem to continue to produce food resources, and we assess it using three variables that would affect people’s ability to grow or obtain food in the ecosystem. These variables include evidence of phosphorus depletion in soils, soil erosion, and depression of marine resources. Over time, people would have experienced declining or increasing food yields as a result of changes in the nutrient levels and depths of their soils as well as changes in the amount and kinds of marine food resources available.

We use several lines of evidence to gain insight into socio-personal security. Ethnographic and historical accounts provide information on land-holding rights and political regime changes, and there is archaeological evidence of warfare and inter-personal conflict. Over time, some people were forced to give up ownership of their land, becoming tenant farmers and paying tribute to rulers. Political regime changes had uneven effects; some people were moved to less productive agricultural land, while others who supported the new regime were granted more productive land. These enforced changes often led to warfare between the advantaged and disadvantaged factions. In our analysis, all of these changes are interpreted as decreases in socio-personal security.

Finally, subsistence security means access to adequate amounts of food. We assessed subsistence security indirectly, using population estimates, based on the assumption that populations will stagnate or decrease if there is an inadequate amount of food. Population growth or growth with a slight oscillation is interpreted as an increase in subsistence security. If a population grows quickly and then declines, we assume that it has equalized and interpret no overall change in subsistence security. A steady decrease in population is indicative of food insecurity.

Our meta-analysis indicates that over time, people on all four Polynesian island systems experienced trade-offs across the human securities as their populations grew and the pressure to produce more food on the available arable land increased (Table 1). We drew three general conclusions from our analysis:

1. There is a trade-off between food security and socio-personal security in situations of intensified food production. For example, when the amount and quality of arable land and food yields declined on Mangaia and Mangareva, people began fighting over the resources that were still available. The victors were (temporarily) food secure because they had gained access to arable land; however, they were threatened by violence from people who had been forced off their land.

2. Intensified food production may create unintended trade-offs between short-term gains in subsistence security and long-term declines in environmental security. For example, people living on Hawaii initially reaped large yields by farming intensively, but over time the intensification led to decreases in soil fertility and increases in erosion; as a result, people produced less and less food every year.

3. Reductions in human securities—whether environmental, socio-personal, and/or subsistence—are usually experienced by all members of a community, but the impact is strongest on the non-elites. For example, non-elite people living in the leeward areas of the Hawaiian archipelago just before European contact were experiencing declining environmental and subsistence security due to declines in soil fertility and dwindling amounts of arable land per family. Even while farmers’ ability to produce food declined, tribute demands remained constant, thus, exacerbating the increasingly difficult situation.

Our Hopes for This Study

We believe our work demonstrates that the long-term perspective afforded by archaeology can provide insight into questions applicable to the future; this has implications for both the study of the past and archaeology’s relevance in today’s changing world. We are not omniscient, and we cannot begin to imagine the long-term consequences of our decisions on future generations without some frame of reference. Past human societies that faced similar challenges can provide us with the information we need on the long-term consequences of our own decisions. While we are not (at least, not yet) pro-
viding specific policy recommendations, we can offer insight into the types of problems and compromises that today’s policy makers must face to make informed decisions.

More generally, we believe that conveying the human experience of people in the past, particularly to young people, can make a positive impact on the way the archaeological research is understood and used by the public. Working with children often offers an opportunity to see the world in a very different way, making it both a rewarding and challenging experience. As a teacher at an archaeological summer camp, a visiting archaeologist in elementary school classrooms, and a member of the educational outreach group working on the Mediterranean Landscape Dynamics Project at Arizona State University, I (Swantek) have been put in many situations in which children ask me simple questions I cannot answer: How did children in the past play? What kinds of toys did they have? Was their life harder than mine? I should be able to answer these questions, but they often leave me stuttering. It is these inquisitive children and their inadvertently complex questions that led to my initial interest in the archaeology of the human experience. We archaeologists often forget the importance of understanding what it was actually like to live in the past that we study; we need to remember and to communicate it in a way that connects with people in the present.

Young students understand that their choices can have both positive and negative impact on their experiences, and that they make better decisions when they are well informed. Introducing young people to this type of decision making through the archaeology of the human experience will help ensure that the policy makers of the future understand that archaeological research about the past can contribute to sustainability in the future.

References Cited
Kirch, Patrick V.
Vitousek, Peter M., Thegn N. Ladefoged, Patrick V. Kirch, Anthony S. Hartshorn, Michael W. Graves, Sara C. Hotchkiss, Shripad Tuljapurkar, and Oliver A. Chadwick.
One reason I believe the Archaeology of the Human Experience (AHE) is important derives from my own experiences of working with American Indians. For several years now I have been going on field trips with Pueblo people to ancestral sites in Colorado and New Mexico, where we share our diverse knowledge—archaeological data, place-names, traditional culture, stories, landscape features, etc.—and discuss ways in which these various bits of evidence fit together in narratives of Pueblo history. A theme that continues to emerge from these discussions is that, over time, Pueblo people have learned better ways of living together. Although contemporary Pueblo people are inspired by ancestral places, the people I work with also recognize that their society has had a long history of becoming, and that their ancestors had to invent new institutions to solve social problems at various points.

There is a dissonance between this perspective and a central tenet of my anthropological training. Early anthropologists fought against prejudicial views of American Indians in nineteenth-century America, and one way of doing this was to adopt the relativist views of Franz Boas and others who proposed that, just as every human language is equally effective at communicating, every culture is equally effective at providing for human needs. A powerful and enduring legacy of this commitment is the idea that anthropologists should not evaluate the effectiveness of other peoples’ beliefs, social norms, and practices. Even if they seem strange at first, with sufficient understanding they usually make sense. So it’s safer to err on the side of caution and assume that every culture works well and that any appearance of inadequacy is due to limitations in our understanding, not theirs.

This is not what my collaborators (Figure 1) have been telling me—in fact, they have been saying just the opposite. They believe that there were times and places in the past where societies didn’t work so well and that their ancestors struggled to understand and solve these problems. In other words, societies actually do vary in their ability to meet human needs, and this variation does not derive from technology and the environment as much as social norms and institutions themselves. This should not be controversial. All of us who pay attention to contemporary issues develop opinions about them, and we generally have no trouble recognizing that some nations do a better job of educating their children or rehabilitating criminals than ours does. Pueblo people also perceive issues with their communities today and have no trouble imagining ways they could work better.

Such perspectives are reasonable for an active participant in a living society, but archaeologists are often wary of such perspectives as applied to the past. To uncover past behavior that we find unpalatable today is to insult descendant peoples; to celebrate past achievements is to idealize the past; and to claim that Pueblo people have learned how to live better together over time is to claim that their ancestors were misguided. One response to these critiques is to retreat to the realm of “scientific” objectivity—the “dispassionate description” in Hegmon’s (this issue) Figure 2. From this perspective, our goal is simply to learn what happened in the past and why, but not to focus on the lessons this has to teach us, as this implies judgment. This perspective is nonsensical to most other social scientists. Indeed, the whole point of economics is to figure out what causes material well-being so that policy-makers can encourage more of it; a primary goal of sociology is to understand why outcomes vary by class, gender, ethnicity, etc., so that policy-makers can encourage greater equality of opportunity. The archaeological record contains thousands of long-term experiments in human social organization—shouldn’t we also have a goal of learning what works and what doesn’t, for the benefit of all?

The Archaeology of the Human Experience provides a conceptual framework for this type of research to proceed in a sensitive and productive way. It recognizes that, although we are remarkably adaptable, humans everywhere have the
same basic needs, and we can improve contemporary society by studying how different social formations provided (or failed to provide) for these needs. It also emphasizes that the goal is not to pass judgment on peoples’ ancestors and traditions, but to understand relationships between social norms, values, and institutions and the provisioning of human needs over the long-term. Finally, it approaches these questions with an interest in actually measuring the provisioning of human needs to facilitate direct comparisons.

Recently, I’ve been working on an application of the AHE approach to an important episode in Pueblo history—the formation of Tewa Pueblo Indian society following the collapse of Mesa Verde society and the movement of a large portion of its people to the Northern Rio Grande in the thirteenth century CE. I’ve found the United Nations Development Program’s (UNDP) Human Security approach, as discussed by Hegmon in her introduction, to be a useful way of organizing the various lines of evidence other archaeologists and I have compiled (Ortmann 2012; Kohler and Varien 2012; Kohler et al. 2010) and of thinking through the links between the archaeological evidence and human needs. What I’ve found, in a nutshell, is that ancestral Tewa society did in fact provide for basic human needs better than Mesa Verde society had done previously. One can see this by comparing quantitative measures related to the UNDP’s dimensions of human security from the two areas, the pre-migration thirteenth-century Mesa Verde region and the post-migration fourteenth- and fifteenth-century Tewa Basin. Below I discuss the five dimensions that show clear evidence of change.

**Food Security.** Good population estimates are available for large study areas within each region, and when one divides the population of each area by the amount of arable land, it turns out that the overall population density of the Tewa Basin during the fourteenth and fifteenth centuries was about one-third that of the central Mesa Verde region in the thirteenth century. Comparisons of historic crop yields from the two areas indicate that the agricultural potential of the two areas were similar, so land pressure, and thus food security, was likely less intense in ancestral Tewa society than it had been in the past.

**Health Security.** Skeletal indicators related to health and fertility compiled by Stodder and Martin (1992) and Kohler and others (2008) show that the health of the average person improved in the centuries following migration. Rates of dental caries and childhood anemia declined by about 30 percent, and the proportion of juveniles in skeletal populations declined about 10 percent. In light of recent research on the Neolithic Demographic Transition, the reduced proportion of juveniles, combined with the changing health indicators, suggests the average woman had fewer and healthier children post-migration. Thus, both demographic and economic conditions were more stable and secure in the Tewa Basin.

**Personal Security.** Ancestral Tewa society was more peaceful than Mesa Verde society had ever been. This is apparent from rates of premortem and perimortem skeletal trauma on the remains of individuals found in the two areas. These data show that Mesa Verde society had been quite violent during its final decades, and that ancestral Tewa people experienced about a four-fold reduction in violence rates in the centuries following migration.

**Community Security.** The distribution of people on the landscape was more stable. Specifically, the number of new settlements constructed per person, per year, declined by several orders of magnitude in the centuries following migration from the Mesa Verde region. This meant that far fewer people experienced the stresses of community fissioning or new community formation in ancestral Tewa society.

**Economic Security.** Research in economics suggests agglomeration is associated with economic growth through increases in specialization and decreases in transport costs. To see whether this was true of ancestral Tewa society, I have been experimenting with archaeological measures of economic output that combine ideas from accumulations research with ideas from economics about elasticity of demand. In eco-
nomics, some goods are “necessary”—meaning that people need them, but they generally don’t want more as they get richer, whereas others are “normal”—meaning that people tend to want more as their wealth increases. Good examples of the former are salt, hammers, and can-openers, whereas examples of the latter include clothing, household space, and artwork. A long tradition of research on artifact accumulations in archaeology suggests that cooking pots and other food preparation tools can be classified as “necessary” goods, and decorated pots as “normal” goods. If so, one would expect the ratio of chipped-stone debris to cooking potsherds to be relatively consistent across contexts in a given archaeological sequence. In contrast, the ratio of decorated sherds to cooking potsherds would reflect changes in the discard rates of decorated pottery vessels, and thus, the number of such vessels maintained in the average household; thus, the decorated:cooking potsherd ratio can be used as a non-monetary measure of average household wealth. The data I’ve compiled thus far are preliminary, but they appear to be consistent with the idea that cooking pots are necessary goods, and decorated pots, normal goods. They also show that the ratio of decorated potsherds to cooking potsherds increased to unprecedented levels in ancestral Tewa society to nearly double the peak ratio in Mesa Verde society. So it appears that the average household was economically more secure in ancestral Tewa society than it been in Mesa Verde society.

The series of changes just discussed make a strong case that ancestral Tewa people eventually created a much more secure society than their Mesa Verde ancestors had ever experienced. The identification of such differences is an important part of the Archaeology of Human Experience. But if archaeology is to make a difference in our world, identifying long-term outcomes in human security isn’t enough. We also need to ask, and answer, how people created better-functioning societies. Lately, I’ve been exploring how Tewa ancestors transformed their society, and although there is still much work to do, one thing that is clear is that the basic social charter of ancestral Tewa society was defined during the migration period, and the benefits it enabled emerged as this new system played out over time.

To perceive these changes, I have used material culture as a sort of running commentary on the relationship between the older Mesa Verde society and the newer, ancestral Tewa society from the perspective of the people who lived through the transformation. From this vantage, the pattern of change in material culture associated with Tewa origins suggests the dominant discourse involved was one of transforming a society that had been organized around competitive kin groups into one organized around cooperative, place-based communities. This new style of imagining the community combined existing traditions of the Rio Grande with re-invented Mesa Verde traditions in a new, hybrid ensemble.

The new discourse is most apparent in architecture. Thirteenth-century homeland villages such as Sand Canyon Pueblo (Figure 2, left) were collections of unit pueblos inhabited by groups of relatives, each with its own ceremonial structure, living space, and storage space. In contrast, destination area settlements such as Arroyo Hondo Pueblo (Figure 2 right) contain apartment-style houses that were built as a unit, surrounding central plazas, and sharing a single ceremonial structure. All traces of lineage-based distinction had been erased. These new “community houses” had precursors in the Mesa Verde region and elsewhere. These structures, some of which were still in use at the time of migration, consisted of banks of rooms surrounding a central kiva; but in Mesa Verde society, these had been the homes of prestigious families, whereas in ancestral Tewa society, they became homes for entire communities.

The same pattern is apparent in other areas. For example, thirteenth-century Mesa Verde unit pueblos contained surprisingly elaborate kivas and towers, but these elaborations were stripped away from ancestral Tewa domestic architecture in favor of the simpler architectural forms and symbolic expressions of the Rio Grande tradition. The relatively baroque pottery assemblages of Mesa Verde households were also simplified dramatically, with many functionally specialized vessel forms essentially dropping out of the record. Most important, there is archaeo-linguistic evidence that Tewa ancestors began to imagine their communities differently at this time. When Tewa ancestors lived in the Mesa Verde region, one of the ways they imagined the community was as a group of relatives who ate from a communal bowl. This is seen in the architecture of thirteenth century Mesa Verde region villages and in the semantic history of a term for “village,” and in the lyrics of songs composed for community ceremonies. Several lines of evidence suggest this newer style of imagining the community replaced the older container-based and kin-based imagery during the migration period. As examples, present-day Tewas maintain knowledge of a number of Owingehe that were constructed in the late thirteenth century, and the only Mesa Verde region site for which a Tewa name was remembered in the early twentieth century is Yucca House, a site at which a plaza-focused structure, a harbinger of the post-migration community pattern, is present.
All of this suggests that the basic philosophical ideas that governed ancestral Tewa society were put in place during the period of collapse, migration, and social transformation associated with Tewa origins. Also, it would seem that these social innovations were the primary force behind the unprecedented human security that emerged in the following centuries. Thus, it would seem that, in this case, discourse led the way toward a more secure society. This is important because it illustrates a fundamental aspect of the human experience of social transformation; namely, that the people involved don’t know that things will work out better in the long run, but they must believe that they will if they are to cope with more difficult near-term conditions and give the new social charter a chance.

Archaeologists who have spent their careers working on Mesa Verde Pueblo society may be disappointed to see it compared so unfavorably to one of the societies that took shape following its collapse. Indeed, many of us would prefer to study past successes, to focus on successful aspects when the situation is checkered, or to find the perspective from which every society is a success. Yet, when applied to contemporary societies, this perspective makes little sense. How can one learn from the successes and failures of other societies if all societies are equally effective? The task of measuring effectiveness is complex, and the human securities approach is just one approach one might take. But I think it is important to accept that human societies do, and have, varied with respect to their provisioning of human needs, regardless of how we choose to measure and evaluate them. My take on the Archaeology of Human Experience is that it proposes that we engage with this process of determining what we value in society and measuring how well past societies provided what we value. I think there is great potential for archaeology to contribute to the public discourse if we are willing to take these steps. And I think the case of Tewa origins might eventually provide a few lessons for us.

References Cited
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### LIABILITIES AND NET ASSETS

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**SOCIETY FOR AMERICAN ARCHAEOLOGY**

**STATEMENTS OF ACTIVITIES AND CHANGE IN NET ASSETS**

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<td></td>
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<td>578,491</td>
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<tr>
<td>Publications</td>
<td>264,789</td>
<td></td>
<td>264,789</td>
<td>279,738</td>
<td>279,738</td>
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</tr>
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<td>Public Programs and Services</td>
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<td></td>
<td>3,108</td>
<td>4,064</td>
<td>4,064</td>
<td></td>
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</tr>
<tr>
<td>Organization and Administration</td>
<td>266,530</td>
<td>117,488</td>
<td>24,645</td>
<td>408,683</td>
<td>312,793</td>
<td>22,331</td>
<td>316,088</td>
<td>196,732</td>
</tr>
<tr>
<td>Member Programs and Services</td>
<td>5,001</td>
<td></td>
<td>5,001</td>
<td>5,474</td>
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<td></td>
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<tr>
<td>Awards</td>
<td>12,134</td>
<td></td>
<td>12,134</td>
<td>14,756</td>
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<td></td>
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</tr>
<tr>
<td>Net Assets Released from Restriction - Public Programs and Services</td>
<td>35,152</td>
<td>(32,162)</td>
<td>(3,000)</td>
<td>51,261</td>
<td>(51,261)</td>
<td></td>
<td>(51,261)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Revenue and Support</strong></td>
<td>1,957,103</td>
<td>65,326</td>
<td>21,645</td>
<td>2,064,074</td>
<td>1,780,315</td>
<td>(28,930)</td>
<td>31,608</td>
<td>1,782,993</td>
</tr>
</tbody>
</table>

**EXPENSES**

| Program Services | Membership | 66,113 | 66,113 | 69,095 | 69,095 |
| Annual Meeting   | 377,424 | 377,424 | 359,910 | 359,910 |
| Publications     | 305,977 | 305,977 | 283,302 | 283,302 |
| Public Programs and Services | 232,053 | 232,053 | 223,970 | 223,970 |
| Member Programs and Services | 74,990 | 74,990 | 78,185 | 78,185 |
| Awards           | 14,798 | 14,798 | 22,210 | 22,210 |
| **Total Expenses** | 1,071,355 |                 | 1,036,688 |         | 1,036,688 |

| Supporting Services | Management and General | 550,360 | 550,360 | 578,302 | 578,302 |
| Member Programs and Services | 19,098 | 19,098 | 23,886 | 23,886 |
| Total Expenses | 559,446 | 559,446 | 601,166 | 601,166 |

| **CHANGE IN NET ASSETS** | 316,502 | 85,326 | 21,645 | 423,273 | 141,665 | (28,930) | 31,608 | 144,337 |
| **NET ASSETS, Beginning of Year** | 2,781,133 | 232,535 | 787,302 | 3,800,670 | 2,639,474 | 261,466 | 755,694 | 3,855,633 |
| **NET ASSETS, End of Year** | $3,097,436 | $317,881 | $808,947 | $4,224,243 | $2,781,133 | $232,535 | $787,302 | $3,800,970 |
Position: Executive Director  
Location: Amerind Foundation, southeastern Arizona  
The Amerind Foundation, a nonprofit anthropological museum and research center in southeastern Arizona, invites applications for Executive Director. The successful candidate will have a Ph.D. in anthropology or a related field and at least five years of relevant management experience. Salary is competitive. Evaluation of applications started January 1, 2013 and continues thereafter until the position is filled. The new director is expected to begin work on September 1, 2014. Visit Amerind’s website for a complete job description and application details, or send email to amerind@amerind.org with “Director Search” in the subject line.

Position: Assistant Professor/Archaeology  
Location: California State University, Chico, Chico, California  
Minimum Qualifications: The minimum education requirement for appointment to this position is a Ph.D. in anthropology with a specialization in archaeology. Concentration in California/Western United States and the capability to contribute to the Cultural Resource Management program is required. Ability to teach courses for the Anthropology Major and Graduate Programs, and a strong record of professional and scholarly activities complementing those of current faculty are necessary.

Preferred Qualifications: Preference will be given to candidates with expertise and teaching experience in areas that complement the background of current faculty. These concentrations may include but are not limited to evolutionary ecology, zooarchaeology, or other relevant topical areas. Ability to teach and conduct research involving archaeological fieldwork is highly desirable as is the potential to work with and/or direct research engaging M.A. level graduate students in archaeology. In addition, candidate should demonstrate potential for successful grant and contract activity that supports scholarly and/or applied research.

Responsibilities: This tenure-track position carries responsibilities in the areas of teaching, scholarship, research, and service. The successful candidate is expected to teach general education and majors courses in anthropology at the undergraduate level as well as to teach graduate-level seminars and serve on M.A. thesis committees.

Salary: Salary commensurate with education and experience.

For additional information concerning the Anthropology Department, as well as this vacancy announcement in its entirety, see http://www.csuchico.edu/anth/.

Closing Date: Review of applications will begin on October 15, 2013 and continue until the position is filled.

How to Apply: All applicants must complete the Application for Academic Employment Form, which is available on-line at http://www.csuchico.edu/faaf/facultyrecruit/facultyapplication.docx to be submitted with curriculum vitae or resume, complete set of transcripts, three letters of recommendation to:
Chair, Archaeology Search Committee Department of Anthropology California State University, Chico Chico, CA 95929-0400 Phone: 530.898-6192; e-mail: anth@csuchico.edu

Position: Director of Archaeological Services  
Location: Indiana University of Pennsylvania  
The Department of Anthropology at Indiana University of Pennsylvania invites applications for a full-time tenure-track appointment as Director of Archaeological Services beginning August 2014. Archaeological Services is an applied research center within the Department of Anthropology. The successful applicant will demonstrate a record of overseeing archaeological projects and administering grants and contracts. He or she will also have enthusiasm for mentoring students and strong teaching skills. For further information and to apply, please visit www.iup.edu/employment.

Position: Project Archaeologist (PA)  
Location: PAL, New England  
PAL, a leading cultural resource management and historic preservation-planning consulting firm in New England, seeks an experienced Project Archaeologist (PA) to be responsible for the technical and logistical aspects of CRM projects. The PA will be responsible for on-site management and quality control of field excavation and personnel. M.A. in archaeology, anthropology, or a related field required along with three to five years of experience supervising field excavation projects. Strong research, field, and cultural material identification skills in the eastern United States required, preferably in the Northeast. Position will remain open until filled. Send resume to Donna Callahan at dcallahan@palinc.com
December 10

January 28

January 15
Call for Applications. The University of Southern California is offering a training program in Reflectance Transformation Imaging (RTI) for documenting ancient texts and artifacts, including the loan of imaging equipment for a pilot project. See http://www.usc.edu/dept/LAS/warp/Training_Program.pdf or contact Marilyn Lundberg (mlundber@usc.edu).

February 21

April 23–27
SAA’s 79th Annual Meeting will be held on April 23–27, 2014 in Austin, Texas. Annual Meeting information is available on SAAweb, www.saa.org.

May 19–23
The National Park Service’s 2014 workshop on archaeological prospection techniques titled Current Archaeological Prospection Advances for Non-Destructive Investigations in the 21st Century will be held May 19–23, 2014, at Aztecan State Park in Jefferson County, Wisconsin. Lodging and lectures will be at the Comfort Suites in Johnson Creek, Wisconsin. The field exercises will take place at Aztecan State Park. Aztecan State Park is a National Historic Landmark and contains one of Wisconsin’s most important archaeological sites. It showcases an ancient Middle-Mississippian village that thrived between A.D. 1000 and 1300. The people who settled Aztecan built large, flat-topped pyramidal mounds and a stockade around their village. Portions of the stockade and two mounds have been reconstructed in the park. Co-sponsors for the workshop include the National Park Service’s Midwest Archeological Center, the Aztecan State Park, and the Wisconsin Department of Natural Resources. This will be the 24th year of the workshop dedicated to the use of geophysical, aerial photography, and other remote sensing methods as they apply to the identification, evaluation, conservation, and protection of archaeological resources across this Nation. The workshop will present lectures on the theory of operation, methodology, processing, and interpretation with on-hands use of the equipment in the field. There is a registration charge of $475.00. Application forms are available on the Midwest Archeological Center’s web page at http://www.cr.nps.gov/mwac/. For further information, please contact Steven L. DeVore, Archeologist, National Park Service, Midwest Archeological Center, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873: tel: (402) 437-5392, ext. 141; fax: (402) 437-5098; email: steve_de_vore@nps.gov.

August 8–10
SAA’s Conferencia Intercontinental will be held on August 8–10, 2014 in Lima, Perú. For information on the conference, visit SAAweb, www.saa.org.
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www.radiocarbon.com
¡La SAA regresa a América Latina!
Lima, Perú
8-10 de agosto de 2014

¡La SAA regresa a América Latina! La Sociedad para la Arqueología Americana (Society for American Archaeology) se complace en anunciar la segunda Conferencia Intercontinental para reunir a los especialistas de la arqueología de América y el Caribe en América Latina a realizarse del 8 al 10 de agosto del 2014 la cual será coordinada por Bárbara Arroyo y Luis Jaime Castillo como el coordinador local.

La Conferencia empezará la tarde del 8 de agosto, 2014 con la primera sesión plenaria de charlas. Esa noche, un invitado especial presentará la ponencia distinguida. Las ponencias generales seguirán en sesiones plenarias consecutivas el sábado 9 y la mañana del domingo 10 del 2014.

Temas de la Conferencia
- Orígenes del Estado
- Historiografía en Arqueología
- Arqueología y Turismo

Fechas Importantes
- 15 febrero 2014 — Fecha límite para proponer una ponencia
- Fin de marzo de 2014 — Notificación de decisiones
- 1 abril 2014 — Apertura del inscripciones
- 30 mayo 2014 — Fecha límite para la inscripción de ponentes
- 6 mayo 2014 — Fecha límite para la solicitud/renovación de afiliación para 2014
- 1 julio 2014 — Fecha límite para la inscripción de asistentes (no presentadores)

Para más información visite SAAweb en www.saa.org
¡Nos vemos en Lima!

No se olvide de anotar en su calendario la 79ª Reunión Anual de la SAA, 23-27 abril, 2014, Austin, Texas, USA
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*Advances in Archaeological Practice* is a brand new, quarterly, peer-reviewed, digital journal addressing the techniques, methods, technology, and business of archaeology. The journal publishes original articles that present creative solutions to the challenges archaeologists face in the ways that they approach the archaeological record to learn about the past and manage archaeological resources.

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