

SPECIAL ISSUE: COLLABORATIVE RESEARCH IN EAST AND SOUTHEAST ASIA

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the SAA Archaeological record

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The site of Prasat Thma Dap, Angkor Period. Located on Phnom Kulen mountain, Siem Reap province, Cambodia (Photo Alison Carter).



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EDITOR'S CORNER

Andrew Duff

Andrew Duff is an Associate Professor of anthropology at Washington State University.

This thematic issue, "Collaborative Research in East and Southeast Asia," includes a group of papers that were solicited and also edited by Christian Peterson and Ben Marwick. The numerous authors of this group of papers reveal the richness and diversity of archaeological research being conducted in East and Southeast Asia, with examples spanning all periods. This issue addresses and builds on a theme developed in a few earlier issues of *The SAA Archaeological Record* related to cooperative international research. The papers highlight the collaborative nature of current research in several different countries, providing personal examples and describing exciting research. Importantly, many of the authors are in the process of competing doctoral projects, suggesting that they have and are continuing to form the long-term collaborations that a few of the more senior authors' papers demonstrate are central to continued success and future opportunities. I would like to again extend my thanks to Christian and Ben for responding to my request to organize this issue, for soliciting a spatially and temporally diverse series of examples, and for their legwork gathering, editing, and getting these submitted.

By the time you receive this issue (a bit late due to the timing of the SAA meeting in Atlanta), those of you working in academic settings will likely be thinking of fieldwork, writing projects, or vacations. For many others, summer becomes the busy season coordinating and executing research that has long been planned. While you are involved in research or writing projects, I would ask that you consider writing an article on your research for publication in *The SAA Archaeological Record*. Papers are ideally briefer than journal articles—1500–2500 words with a few figures, illustrations, and references cited. If you (or your company, agency, or institution) are involved in interesting research this summer, *The SAA Archaeological Record* is an ideal outlet for communicating some of your project's central findings to a broad audience. Write one for *The SAA Archaeological Record* first, and then write the longer, more detailed treatment for submission to one of our premier archaeological journals.

If you have ideas for an article, a small group of papers on a common topic or theme, or thoughts about a special issue, please contact me (duff@wsu.edu) or one of the Associate Editors, and we would be happy to discuss or plan it with you. If you have an idea for an article, just write it and send it in (duff@wsu.edu), though I am also happy to talk with you about it. We can only publish material that makes its way to the editors, so consider this your invitation to contribute.

NSF Announcement

Archaeologists may be interested in the "Dear Colleague" letter recently published by NSF's Assistant Director for Social Behavioral and Economic Sciences. The letter (reproduced below) describes new funding opportunities for which archaeologists may wish to apply. The Archaeology Program is included within this directorate and thus proposals submitted to its "senior" and archaeometry competitions would be eligible for consideration. The Archaeology Program has two submission target dates a year, December 1 and July 1, for senior and one target date, October 31, for archaeometry proposals. Thus, the December 9 letter, and this news announcement is too late to generate dedicated proposals for Spring round competitions. ("Spring proposals," however, which include elements noted below will be eligible for funding from this new source.) Potential applicants should consider focused submissions for future cycles. The letter describes three focal areas all relevant for archaeological research. Archaeology Program Director John Yellen would welcome calls (703-292-8759) or emails (jyellen@nsf.gov) from potential applicants to discuss possible submissions.

—John Yellen

December 9, 2008

Directorate for Social, Behavioral, and Economic Sciences NSF 09-019

Dear Colleague:

Following the innovations of the recently ended Human and Social Dynamics (HSD) priority area, the Directorate for Social, Behavioral & Economic Sciences (SBE) now encourages submission of research proposals to the regular SBE programs covering three areas. There will be new funds available in the Divisions to support these activities where they differ in scope or scale from the traditional core of the programs.

1. **Complexity Science.** We recognize that the concept of complex systems means different things in different areas, and we encourage work on

- *complex systems* incorporating analyses of the interaction of simpler systems to explain observed complexity;

- *the dynamics of complex systems*, for example "tipping points," where many things change dramatically at one time, and "emergent phenomena," such as phase transitions in which complex phenomena emerge despite being underdetermined by ambient conditioning factors.

2. **Large-scale Interdisciplinary Research.** We also invite the submission to our programs of large-scale interdisciplinary projects that advance the understanding of the dynamics of human systems. We expect to make a small number of awards of up to \$1.2 million.

HSD funded interdisciplinary research teams using methods from different fields to understand the dynamics of human action and development, as well as knowledge about organizational, cultural, and societal adaptation and change. We encourage proposals that address such matters with an integrated approach drawing on more than one discipline. The PI must be from a discipline appropriate for the host program but collaborators may be from any area of science, not just the SBE sciences.

Investigators should contact the most appropriate SBE Program Officer to determine if their ideas respond to this activity's goals. If it is deemed responsive, the program officer will ask for a two-page description of the proposed project in advance of submission of a full proposal to facilitate the processes of joint review and/or funding. The review process will follow standard NSF practices agreed upon by the programs participating in a proposal's review, with awards determined in a directorate-wide process.

3. **Infrastructure.** We now encourage proposals for infrastructure development to our programs after discussion with the most relevant SBE Program Officer. This includes but is not limited to cyberinfrastructure, instrumentation, shared data bases, repositories, consortia, etc. SBE will consider both free-standing proposals for infrastructure and requests for research resources not typically available within the context of SBE research proposals.

There are no special competitions or new programs for these three areas. Relevant proposals will be submitted to an existing SBE program according to the program's regular target or deadline dates.

One of the key topics of HSD-funded work in each of these three areas concerns the relation between human activities and environmental change. We will continue to accept and encourage proposals on this topic both through the SBE programs and through cross-cutting competitions going beyond the Directorate.

Links to SBE's programs and target dates, including Program Officer information, are available at:

For the Division of Behavioral and Cognitive Sciences: <http://www.nsf.gov/div/index.jsp?div=BCS>

For the Division of Social and Economic Sciences: <http://www.nsf.gov/div/index.jsp?div=SES>

Sincerely,

David Lightfoot
Assistant Director
Directorate for Social, Behavioral, and Economic Sciences

Master's in Applied Archaeology

I want to commend Sarah Neusius and the Committee on Curriculum for creating a model for an applied graduate training program, as presented in *The SAA Archaeological Record* Vol. 9(1). The issue of preparing students for their likely careers is an often-discussed frustration for employers and employees, and the committee has done a good job of tackling the core issues. However, I read the very practical model curriculum as the minimum requirement for graduate education in an applied career. The vision for these graduate programs should be to teach students how to conduct *research* within a cultural resource management framework. To this end, I think that the Master's thesis should be required. The model also underemphasizes the Ph.D. role in applied archaeology. Applied archaeology curricula should not be uniformly conceived of as terminal Master's programs, they should allow students to continue into doctoral programs. Teaching research skills is critical at both levels.

Although some commentaries (by Afinson, and Sandweiss and Delcourt) deem the Master's thesis too expensive for students, faculty, and institutions, the thesis is a critical means of gaining research experience. Any archaeologist with a M.A. degree should have implemented a research design in which they have a vested interest. If they work in the private sector, they may have the opportunity to compete for government contracts based on a research design. In the government or not-for-profit sector they will write grants. Furthermore, government archaeologists need to be smart consumers of archaeological services, as they will be in a position to evaluate the work of consultants. They must ensure that projects on the lands they manage meet legal, ethical, and scientific standards. Creating M.A. programs that supply the profession with technicians whose main qualification for the job is

that they meet the Secretary of the Interior's Standards is not enough.

An underlying assumption in this *The SAA Archaeological Record* is that applied archaeology needs only to be supplied with students with Master's degrees. My personal experience in applied archaeology has shown that a Ph.D. can be a valuable degree, and prompts two observations: (1) earning a Ph.D. provides a person with more career options, as students cannot predict the job opportunities that will be available when they graduate, and (2) large, well-funded projects are unprecedented opportunities for research at the Ph.D. level.

There *are* jobs for students with Ph.D.s in applied archaeology. Applied archaeology is a fast-growing field, and employees with doctoral degrees can provide companies with a competitive edge. Within companies, the doctoral degree can be important for attaining a position as project director, the position that often oversees and implements research. Departments developing curricula should recognize that there is a role for Ph.D.s, as well as M.A.s, in applied archaeology. As such, the applied Master's track should not be so narrowly defined that it precludes students from being admitted into, or qualified for, doctoral programs.

A career in applied archaeology affords the opportunity to do research that is funded by public money. In this environment, neither the client, the discipline, nor the public is served by treating projects as transactions in a compliance process. Project findings must be well communicated to stakeholders at all levels. Successful communication comes from engaging people with questions about the human experience, and that kind of understanding comes from archaeologists with research backgrounds, regardless of the institution in which they hold their jobs.

In addition to having core knowledge of method, theory, and the pragmatics of archaeological practice, the student graduating from an applied program should demonstrate good critical thinking, communication skills, and a commitment to bettering the profession. The enthusiasm for sharing new research brings students and professionals to regional and national archaeology meetings, where their interests will continue to grow. Envisioning graduates such as these will help to raise the bar on the quality of applied research, and professional archaeology in general.

*Sarah Herr, Project Director
Desert Archaeology, Inc., Tucson*

INTERNATIONAL COLLABORATIVE RESEARCH IN EAST ASIAN PALEOANTHROPOLOGY

PERSONAL PERSPECTIVES

Christopher J. Norton

Christopher Norton is an Assistant Professor of Anthropology at the University of Hawai'i at Mānoa.

I am a paleoanthropologist who has been working in East Asia on a variety of topics related to the reconstruction of East Asian prehistory. I am currently involved in several collaborative paleoanthropological research projects in the region, primarily in China (see Figures 1–3 and captions for descriptions of my current projects). Our multidisciplinary research projects' ultimate goals are to develop a deeper understanding of hominin lifeways in Pleistocene East Asia. What follows is a personal perspective on the development of my international collaborations in East Asia. I have what many would consider an atypical background, which in most cases serves as a strength. This atypical background includes living and working in Korea (~5 years), China (~3 years), and Japan (~1 year).

I was originally born in South Korea, but around the age of one I ended up living in an orphanage outside the city of Seoul. After about six months, I was adopted by an American family, and subsequently raised and educated in the United States. Although I was raised as a Caucasian-American, in fact my phenotype indicated that no matter how hard I tried to assimilate I would never fully be considered a typical American. For instance, during my first semester in graduate school, after speaking with me for ten minutes one of the professors in the anthropology department asked me: "Why is your English so good?" Despite speaking English in American fashion and having a typical American name, questions like that were always being raised. At least partially because of this I became interested in learning more about my ethnic background (i.e., what is it truly like to be Korean, or at the minimum, Asian). The opportunity to find out finally presented itself when I was accepted to attend Yonsei University in Seoul, South Korea as part of an undergraduate exchange program.

While at Yonsei University I had the opportunity of meeting Drs. Bae Kidong¹ and Kim Byungmo, who were professors of archaeology at Hanyang University.² In particular, Bae gave me the opportunity to spend time working as an exca-

vator at a diversity of archaeology sites ranging from the Early Paleolithic (Chongokni, Naechon) to Neolithic-Bronze Age (Konam-ri) to the Three Kingdoms Period (Chayouro), and as a laboratory technician in the Hanyang University Museum. This opportunity, particularly spending four months each working at Paleolithic sites like Chongokni and Naechon, solidified my desire to specialize in the East Asian Paleolithic. At the same time, spending so much time with the Hanyang University faculty and students facilitated my learning about the Korean language and culture. Because the Hanyang University community understood my circumstances, they took it upon themselves to teach me how to be "Korean." These experiences taught me how to understand and work well with other Korean scholars and students.

After spending so much time living and researching in Korea, I realized that in order to truly understand the development of East Asian prehistory that I would have to conduct some research in Japan and China as well. This is particularly pertinent because most of my research involves human evolution during the Pleistocene and well precedes the formation of distinct Chinese, Korean, and Japanese civilizations. Having established my collaborations in Korea, I then began spending time in Japan, with an initial invitation to visit the "sensational" Early Paleolithic site of Kami-Takamori in Miyagi Prefecture, where purported Early Paleolithic handaxe caches were found.³ Although I had questions about the handaxes, this initial interaction led to my introduction to Dr. Tomida Yukimitsu at the National Science Museum in Tokyo, who is the chief curator of vertebrate paleontology. Tomida and I hit it off and we began collaborating soon after, studying the Hanaizumi faunal assemblage which is housed in his museum.⁴ Tomida also introduced me to the researchers from the Nojiriko Museum, who are in charge of excavating and curating the vertebrate fossils and lithic remains from Tategahana, a Paleolithic kill site of elephant (*Palaeoloxodon naumanni*) and giant deer (*Sinomegaceros yabei*), and one of the oldest archaeological sites in Japan.



Figure 1. An official visit by the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP) to the Early Paleolithic Xujiayao site in northern China. Pictured from left to right: Norton, Wei Qi (IVPP), Gao Xing (IVPP), Wang Yiren (Institute of Archaeology, Shanxi Province).

One of the advantages of graduate school is the opportunity to meet scholars and students from other countries, particularly places where one is interested in working. In this regard, during my first semester in graduate school I became close friends with Dr. Gao Xing who was from China and was in the U.S. studying Paleolithic archaeology. After completing his Ph.D., Gao returned to China, and subsequently became the vice-director of the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP), Chinese Academy of Sciences, in Beijing, China. Gao is currently a leading figure in the field of Paleolithic archaeology in China. Because of our close relationship, Gao invited me to be involved with a number of his research projects in China. Furthermore, once I completed my Ph.D., Gao invited me to spend a couple of years in the IVPP as a postdoctoral research fellow, where we would be able to further collaborate and I would be able to help his students learn vertebrate taphonomy. While in the IVPP I also had the opportunity of interacting a great deal with paleoanthropologists (Drs. Wu Xinzhi, Liu Wu) and Quaternary vertebrate paleontologists (Dr. Jin Changzhu). These interactions not only led to a more in-depth understanding of the Chinese prehistoric record, but it facilitated more collaborative research.

What These Experiences Mean for the Development of International Collaborations

As noted by Boivin et al. (2008), trust, respect, and reciprocity are critical for the success of any international collaborative research project that involves scholars from different countries and cultural backgrounds. Understanding these traits is particularly important when an American is trying to set up a collaborative research project in East Asia. It is somewhat tricky in East Asia because, in general, China, Korea, and Japan are relatively rigid stratified societies and



Figure 2. Norton (center) carrying out an experimental bone breakage study of pig femora in collaboration with Wu Xianzhu (left) from Chongqing Normal University and Pei Shuwen (right) from the Institute of Vertebrate Paleontology and Paleoanthropology. These taphonomic experiments were conducted in front of the Yunxi County Museum and near the Huanglongdong site, in Hubei Province, central China.

there is a distinct pecking order. Much of how Boivin et al. (2008) describe trust, respect, and reciprocity for collaborating in India is clearly applicable to working in East Asia.

Trust. It is impossible to collaborate with someone if there is no trust. This is particularly relevant in East Asia, where cultural and linguistic barriers often lead to many miscommunications and misunderstandings. Even if communication is a problem, if there is a sense of trust, then it is still possible to collaborate.

Respect. In addition to trust, collaborators need to respect each other and understand what each offers to the collaboration. If there is no respect, then it is difficult asking the other to do anything toward resolving any issues or problems that may arise. Any collaboration where there is a lack of respect will be short-lived.

Reciprocity. This is perhaps the most important feature to successful collaborative research in East Asia. Although in many cases indigenous scientists initially help the foreign scholar get set up, eventually there has to be some form of payback. The closeness of relationships will determine whether immediate or delayed reciprocity are in effect. Immediate reciprocity usually involves a quicker payment of services and indicates a relationship that is not so close. This can be in the form of money or gifts, and is given at the beginning of collaboration. Delayed reciprocity involves the delayed repayment of services offered. This form of reciprocity is usually between scientists who respect and trust each other. These relationships usually develop as the result of long-term collaborations that eventually become personal



Figure 3. Working with the local villagers in Pingyi County, Shandong Province, eastern China. As in most regions of the world, the local villagers are usually valuable sources for information regarding presence/absence of archaeological sites and materials in the vicinity. In this particular photo, the research team is examining a set of fossilized bones that the local villager had collected over the years, with the villager's grandchildren observing intently.

friendships (i.e., the collaborators actually enjoy working with each other).

Because I have spent close to nine years living and working in Korea, China, and Japan, fortunately or unfortunately, I have seen the good, the bad, and the ugly. In general, East Asian scholars are generally nice people and relatively open-minded when interacting with foreigners. Much of the bad and the ugly are due to miscommunications and misunderstandings, particularly when the ultimate goals of either side are different. This seems to happen most often when there is a lack of trust between the different parties. Problems also arise when competing research teams actively interfere with progress.

For all of my successful collaborative research projects, probably twice as many initiatives have failed to get off the ground. Without going into too much detail, some roadblocks I have encountered relate specifically to the trust, respect, and reciprocity factors mentioned above. In some cases, there was a lack of trust and respect, while in other cases, one side wanted immediate reciprocity, while the other side was expecting long-term delayed reciprocity.

Overall, I think the key to successful collaborations (i.e., as seen through the coauthored papers that are usually the end result of such collaborations) is the trust and respect that develops from spending a great amount of time working with each other. For example, in general foreign researchers usually give first authorship to East Asian scholars on peer-reviewed journal articles in order to gain their trust. In my particular case, because of my close relations with my col-

laborators, they rarely ask for first authorship on our papers. Rather, I work to help them in other ways. A good example of this is during my two year postdoctoral stint in the IVPP, I spent almost every day editing papers and abstracts that IVPP researchers and students were trying to publish in English. Although it was not part of my required duties as a foreign postdoctoral researcher, I found it to be a rewarding experience, particularly when I could see how happy it made them to have their research published in English.

Moving Forward

The research that I am involved with is multidisciplinary in nature and involves biological anthropologists, Paleolithic archaeologists, vertebrate paleontologists, geologists, and dating specialists. Most of the research has involved the analysis of previously excavated material that is stored in museums and research institutes. However, we are currently expanding this to include field survey and excavations in places like China, where abundant Pleistocene limestone cave deposits and open-air localities exist (Norton 2009). Preliminary field survey results in China have identified a number of regions that have great potential for large-scale multidisciplinary research involving foreigners and Chinese. Ongoing and developing research in Korea and Japan are multidisciplinary as well.

My interactions with East Asian scholars have resulted in a number of good learning experiences for both sides. The one primary conclusion that I can draw from these experiences is that the future potential for international cooperative paleoanthropological research in East Asia is great, as long as trust and respect continue to exist between research teams.

Notes

1. Following East Asian standard procedure, the family name is listed first, followed by the given name.
2. Kim has since retired, but Bae is still there.
3. All of the Paleolithic finds from Miyagi Prefecture were later exposed as a hoax.
4. Also included Drs. Hasegawa Yoshikazu (Gunma Museum of Natural History) and Kohno Naoki (National Science Museum).

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2009 Central-East China—A Plio-Pleistocene Migration Corridor: The Current State of Evidence for Hominin Occupations. In *Asian Paleoanthropology: From Africa to China and Beyond*, edited by C.J. Norton and D. Braun. Springer, Dordrecht, The Netherlands, in press.

HOW LONG CAN “LONG-TERM” COLLABORATION BE IN CHINA?

A PERSONAL EXPERIENCE IN PALAEOLITHIC RESEARCH

Chen Shen

Chen Shen is a Bishop White Curator at the Royal Ontario Museum, and a Professor of Anthropology and East Asian Studies at the University of Toronto.

I began working on the Chinese Palaeolithic in 1997; I feel, however, that my collaborative research has only just started to unfold. In saying that, I stress that during the past decade I have been able to participate in field surveys and excavations in northern China almost every year, supported by grants from the Social Sciences and Humanities Research Council of Canada (SSHRC), the Wenner-Gren International Collaborative Research program, the Australian Research Council, and the Royal Ontario Museum (ROM) Peer-review Research fund. Yet it was only when I received a prestigious fellowship and a multiple-year research grant from the Chinese Academy of Sciences, through the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP) in 2005, and again in 2008, that I realized that a truly meaningful long-term collaboration between myself and the IVPP had begun. For me at least, ten years proved to be just about the right amount of time to fully initiate a long-term project that now has a very exciting future.

Everyone who applies for a major research grant, especially one involving field investigations, would likely claim that the proposed program of research is a long-term one. Yet, only a few of us are aware that field research in China usually takes longer than the “long-term” period anticipated. The common three-year project is still an important component of research, as it allows North American archaeologists, through permitted surveys, to dig into the paleo-soil in China, and to observe the landscape of the legendary Loess plateau. Three years should be long enough for some to learn what they need to learn, and at the end to get out a few peer-review publications to help them secure a job or tenure. In some circumstances, those who suffer frustrations with the bureaucratic processes, and/or experience obstacles in their working relationships with Chinese colleagues, may shift their research to other geographic regions. But, of course, the projects that stay in China train Northern American students in a way that students could never experience in field schools elsewhere. Some of them fall in love with China, and are determined to work there. These young

researchers must then apply for another three-year grant to establish their careers and give them a reputation as specialists in Chinese archaeology. Three or four years later—mission accomplished, they pass their research agendas on to another group of students who would like to experience similar adventures and challenges in China. Most likely the objectives of these next long-term projects will be much different than those originally set forth ten years ago by their professors, and their professors’ professors. As a museum curator, I do not often have the opportunity to include students in my research. I have not been able to pass the lessons I have learned onto many students, leaving me alone to “dance with the wolf.”

My doctoral studies at the University of Toronto focused on lithic analysis of Middle-to-Late Woodland materials in southern Ontario. In China ten years ago it seemed that only Palaeolithic archaeologists cared about lithic artifacts (things have changed now somewhat), which led to my collaborations with Palaeolithic archaeologists there. In 1997, three months after I landed a job at the ROM, my college friend from Wuhan University, Wang Shejiang, invited me to participate in a project he was running in the Luonan Basin. At the time I was able to secure only CND \$3,000 in emergency funding from the ROM. A year later, I came back to Shaanxi with sufficient funding for a full-scale collaborative project, only to discover that Shejiang was departing for Australia’s La Trobe University to begin doctoral studies (he received his Ph.D. in 2002). At the same time, my old friend, Chen Chun of Fudan University (a 1992 McGill University Ph.D.), was asked to direct the 1998 field season at Xiaochangliang in the Nihewan Basin, as the two original IVPP principal investigators had fallen ill. Chen was required to find his own funding for the operation, however. So an interesting opportunity presented itself; I had ample funding but no project, while Chen had an excellent project but no funding. What a match! So we headed for the Nihewan Basin together to complete the last season of excavations at Xiaochangliang, deposits later dated to 1.36 MYA.

At the time this fortuitous turn of events did not convince me that my work in the Nihewan Basin would continue or amount to very much, and thus I persisted in designing my own "long-term" project. Given my background, I intended to research the Upper Palaeolithic lithic microblade industry. In 1999, with the Shandong University and the Institute of Archaeology of Chinese Academy of Social Sciences, I put together a grant proposal for SSHRC funding to work in Shandong. The application was successful, but SSHRC cut the proposed budget in half, leaving me unable to bring students to the field. Once again I was alone in the field.

I am sure every junior scholar—as I was ten years ago—has a backup plan in event that their current funding applications are unsuccessful. My backup plan was in place. During our fieldwork in the Nihewan in 1998, I met a wonderful scholar, Wei Qi, a senior archaeologist at the IVPP, who appreciated my talent and enthusiasm. More specifically, he understood the importance and potential application of the lithic use-wear analysis that I was trained to do, so in 2000 and again 2001 I was invited to join him in excavating at Donggutuo, 1.5 km away from Xiaochangliang. I would have been an idiot to have turned down such an offer. So it was that in 2001 I found myself digging in both Shandong and Hebei for more than three months. That same year the Nihewan project discovered Guodi (or Majuanguo III), later made famous as the oldest hominid occupation in East Asia (1.7 MYA). At that time I became more deeply involved in the project. Five years later, Gao Xing (a 2000 University of Arizona Ph.D.) and I would cooperate on a Wenner-Gren funded project in the same region exploring Early Pleistocene palaeoenvironment and lithic technology.

In the middle of my commitment to the Shandong project, Shejiang returned from Australia with a newly minted Ph.D. degree. He was determined to continue what we had left unfinished in the Luonan Basin (268 open-air sites had been identified and over 200 handaxes collected during our previous surveys). This time around, however, he secured Australian Research Council funding for a three-year research project that is still ongoing.

Today, I am running not one but three long-term projects. This is possible because they integrate well with one another. The first focuses on the Early Pleistocene palaeoenvironment, lithic technology, and hominid behavior in the Nihewan Basin. The second is investigating Middle Pleistocene Palaeolithic settlement in the Luonan Basin and the third is addressing questions of microlithic technology and Upper Palaeolithic cultural interactions at the end of Late Pleistocene in the Shandong Peninsula. Together, these three projects aim to refine the Paleolithic chronological framework in central-northern China, and to assess regional technological variability in three different geographic areas. This suite of projects was not what I had in mind when I began

my career, and certainly, no single North American funding agency would approve such an ambitious program of research. But the Chinese Academy of Sciences (CAS) saw the potential of this research to improve our understanding of the Chinese Palaeolithic record and of human evolution. CAS offered me multiple-year research grant to collaborate with the IVPP that I could not turn down. Today, heading a large team of colleagues and students from North America and China, I am beginning to think of this as something really long-term.

My good fortune could be attributed to pure luck, but looking back I think there was more to it than that. During the running of these projects I learned how to listen: listen to the opinions of Chinese Palaeolithic archaeologists, about why they put stock in geochronological and biostratigraphic dating; listen to them about the need for developing the discipline in China in a way they envision; listen to their side of the story regarding international collaborations, and about misunderstandings with foreign collaborators. Were I to adopt a Western stance, I might dismiss some of these comments purely as nationalistic, but the truth is that Chinese archaeologists enjoy as much academic freedom as we in the West. Our differing perspectives have nothing to do with pride, prejudice, or politics. The last decade has been witness to tremendous change in international collaboration. Open dialogues between Chinese and Western scholars have strongly influenced Chinese Palaeolithic studies that adopted research designs prevailing in Western scholarship (such as the successful Panxian-Dadong project).

Understanding the needs and desires of our Chinese colleagues is critical to making one's "long-term" project truly long. Many years ago, Chinese scholars participating in collaborations played minor roles and expressed difficulties relating to their projects' Western leaders. Today, they wait in China for us to see what we can bring to our mutual interests in testing a model, building a theory, or developing an analytic methodology. I feel that our Chinese colleagues should have an important role in evaluating whether our SSHRC or NSF proposals for field research in China should be funded or renewed. Part of my success relies on the fact that I am able to work closely with my IVPP colleagues (Dr. Gao Xing in particular) to develop needed lithic use-wear analysis programs through instructional workshops and lectures, and to help build laboratories for lithic analysis at Chinese archaeological institutes and universities. The impacts of these activities have been enormous, but in most cases SSHRC and NSF will not provide funding for such training activities or capital improvements, at least to the degree that our Chinese colleagues often anticipate. The ROM should be given a credit for giving me the resources and flexibility of time to engage in these activities that have helped pave the way to successful long-term collaborations.

Of course, I have been frustrated too, as many of us are from time to time. I have to be sensitive as to what to publish, where to publish, and when to publish, because the first-rights for publication of reports in Chinese is always one of the top concerns in collaborating with Chinese scholars. This was a restriction in the written agreement for the very first international collaboration between Swiss archaeologist Johan Gunnar Andersson and Chinese academician Ding Wenjiang in the 1920s (Fiskesjo and Chen 2004). When Davidson Black signed an agreement on the behalf of the Rockefeller Foundation with the "Cenozonic Research Laboratory of the Geological Survey of China" (a previous incarnation of the IVPP) for the official excavation at Zhoukoudian Locality 1, it was clearly stated in two clauses that "All materials collected belong to [the] Geological Survey of China; nothing [was to be] exported out of China," and "All geological papers and publication [were] to be published in [a] series of Geological Survey or Geological Society of China; Black's anthropological studies can be published elsewhere with [the] Director's consent, but the same paper should be published in *Palaenologica Sinica*" (Cormack 2003:15). Such conditions have not changed today. If Anderson and Black could live with that, so can we. In my case, I agreed not to publish anything on our Luonan Basin investigations in English (although I did in Chinese), because Shejiang was incorporating those materials into his doctoral dissertation. A two-volume Chinese report was published in 2008.

Another frustration has come from delays in analysis. I cannot take artifacts out of China for microscopic examination in my lab back in Toronto, and until recently there was no suitable equipment available for use in doing so at the IVPP. As strange as it seems, I have had to hold off publishing the results of my field investigations in Western peer-reviewed journals until things are properly prepared and ready. This is a difficult situation for those of us who must work within the tenure system and/or the peer-review proposal system; without peer-reviewed publications from such collaborations we can not easily climb the professional ladder. But sometimes, if we publish something without fully understanding how our colleagues in China may react, our collaborations could be short-lived. Such an example can be seen in the collaborative work at Zhoukoudian from the turn of the century. Recent reports in Western academic journals questioned the capability of Peking Man to control fire at Zhoukoudian Locality 1. Although this work was rigorous and scientific, the high profile of Zhoukoudian warranted a more sensitive disclosure of preliminary results to Chinese colleagues, and perhaps opportunities for alternative interpretations to be voiced. To me, the debates over evidence for the controlled use of fire at Zhoukoudian are exciting and merit further discussion and research. We need to continue applying all possible techniques, and to examine all aspects of the supporting evidence. But sadly the project, once supported by major

grants, has been discontinued. Things could have turned out differently if Western colleagues had been a little more sensitive, and presented their findings to the concerned archaeology community in China before publishing any results in English, effectively broad-siding their Chinese colleagues. Maybe the best way to deal with these controversies would be to discuss them openly in Chinese publications or at workshops in China. Potentially even more damaging to collaborations is prestigious Western media treating comments and criticisms from Chinese archaeologists as nationalistic reactions, while championing Western collaborators' interpretations. True long-term collaborations do not, and should not, work in that way.

If my experiences have amused some readers, I point out that I am not alone in them. My mentor in the field of Chinese Palaeolithic archaeology, University of Arizona's John Olsen, has had similar experiences. As a graduate student in the 1980s, before China was fully open to Western scholars, Olsen learned from and listened to Chinese scientists at the IVPP. He patiently helped Chinese colleagues to establish the programs they wanted and needed, and to build understandings that Western academics would appreciate, so that Chinese academics could present their findings to the rest of the world. Olsen understood that changes in Chinese Palaeolithic archaeology would not take place overnight, and thus passed his passion and inspiration onto his students who now bridge two once very distant worlds. Not without sacrifices, Olsen successfully made a second career for himself in China, becoming a pillar of Chinese Palaeolithic archaeology. His example shows just how long a long-term collaboration can be in China.

One day last summer, Gao Xing opened the IVPP vault and presented me with lithic artifacts from Zhoukoudian Locality 1 for microscopic analysis. A set of microscopes (worth USD \$100,000) is to be installed in our new lithic analysis lab there. It was then I knew I'd finally made it, and at the same time realized that this was just the beginning.

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FROM PRASATS TO PHNOMS

INTERNATIONAL COLLABORATIVE RESEARCH IN CAMBODIA

Alison Carter

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Cambodia has long been a source of fascination for Western scholars and researchers. With magnificent temples nestled in the jungle, Cambodia seemed to embody the romantic ideal of a lost civilization that was ripe for study. The French undertook the earliest archaeological research in Cambodia, and primarily focused on the dramatic, yet crumbling, monuments of the Angkorian period. Like many archaeological programs in colonial settings, this research was undertaken with minimal input from the Cambodians themselves and with an underlying goal of serving the colonial French government in legitimizing their rule during the years 1863—1953 (Glover 2003). Following Independence in 1953, Cambodian arts and culture were reinvented. In 1965 the Royal University of Fine Arts (RUFA) was established in Phnom Penh as the first truly Cambodian university, and it included a Faculty of Archaeology staffed by Cambodian instructors that had studied and trained in France. Archaeology in Cambodia all but ceased during the civil war and Khmer Rouge periods; however, since the Paris Peace Agreement of 1991, the amount and scale of archaeological research in Cambodia has increased.

I have been fortunate enough to travel and do research in Cambodia since 2005, focusing on sites that pre-date the Angkor civilization by almost one thousand years. Most recently I was in Cambodia for 10 months, with support from the Fulbright Foundation and the Center for Khmer Studies, while collecting data for my doctoral thesis. As a result, I have had opportunities to discuss the current state of archaeology in Cambodia with many Cambodian students and researchers. Many of the challenges of doing research in Cambodia are reminiscent of other postcolonial countries establishing their own voices in archaeological scholarship, and as such it is beneficial for all archaeologists to be aware of these issues. In a country that is in the process of rebuilding its archaeology program, collaborative projects between foreign and Cambodian archaeologists are an excellent way to move beyond the country's recent traumatic past while simultaneously filling in gaps in the archaeological record. I hope that by outlining my experiences and discussing other

successful collaborative projects, I can assist those interested in collaborative research in Cambodia and Southeast Asia.

Post-Khmer Rouge Era Collaborative Archaeology in Cambodia

The civil war and Khmer Rouge periods had serious consequences for Cambodia and its people. Only three Cambodian archaeologists survived the Khmer Rouge period (Griffin et al. 1999). It is for this reason that many of the collaborative projects following the Khmer Rouge period have focused on rejuvenating the archaeology program through education and training. In 1994, the East-West Center and the University of Hawai'i began a project to train Southeast Asian students in archaeology in collaboration with the newly reformed RUFA and the then vice-rector Professor Chuch Phoeurn. Several students were selected for English-language training and coursework in cultural anthropology and archaeology at the University of Hawai'i (Griffin et al. 1999). One of these students, Bong Sovath, completed his Ph.D. at the University of Hawai'i in 2003 and has since returned to work in the Ministry of Culture and Fine Arts. The initial project grew into an expanded training program at the request of the then Minister of Culture and Fine Arts, the Honorable Nouth Narang. This archaeological research and training program was known as the Lower Mekong Archaeological Project (LOMAP) and has been focused on the site of Angkor Borei in Takeo Province (see Griffin et al. 1999; Stark 2006).¹ It was my good fortune to be invited by Director Dr. Miriam Stark to join the LOMAP project in 2005 (Figure 1). This was my first introduction to archaeological work in Cambodia, and I was able to participate in field survey in the area around the site of Angkor Borei in Takeo province. The project is codirected by H.E. Chuch Phoeurn, and was primarily composed of recent RUFA graduates and current RUFA students. Many of the RUFA graduates had considerable fieldwork experience and had worked on the project in years past. Research and fieldwork for LOMAP are ongoing, and one of my colleagues on this project, Piphall Heng, is now a graduate student at the University of Hawai'i.



Figure 1. Group photo of 2005 LOMAP team in front of the Angkor Borei Museum (Photo by Alison Carter).

Another noteworthy ongoing collaborative project is the Memot Centre for Archaeology (MCA), which was founded in 1999 by HE Chuch Phoeurn and Dr. Gerd Albrecht, DAAD (German Academic Exchange Service) in cooperation with RUFA in Phnom Penh and the German Embassy.² Like LOMAP, this project has conducted several years of fieldwork, research and training. The MCA has also opened a small museum in the town of Memot, Kampong Cham Province, in order to better educate the public about their research and has produced several publications in both Khmer and English (see Heng 2003). Cambodian researchers, such as project director Sophady Heng, have taken an active leadership in all aspects of the project including fieldwork, publication, and educational outreach.

Not all successful collaborative projects in Cambodia are focused on fieldwork and excavation, as can be seen in the creation of the Ceramics Conservation Laboratory in 2002. Noted ceramics conservator Bonnie Baskin began a three-year program in ceramics conservation at RUFA and intensively trained three students. Since graduating from the program, they have continued conserving ceramics and have recently begun restoring ceramics full-time at the National Museum of Cambodia in a laboratory funded by the Smithsonian Institute, and hope to begin training a new group of RUFA students in ceramics conservation.

Recently, the active role that Cambodian archaeologists are making in developing their own archaeology program has taken an exciting step forward with the launch of one of the first Cambodian directed, managed, and implemented projects—the Sre Ampil Archaeological Project (Figure 2). This project, which began in 2006 with funding help from

the Center for Khmer Studies, is a multicomponent endeavor that includes excavation, training, cultural resource management, and the construction of a site museum at the prehistoric site of Sre Ampil.³ Participants include both archaeology students and more established Cambodian researchers. The project director, Kaseka Phon, was trained by foreign archaeologists and sees the Sre Ampil project as an opportunity for Cambodian scholars to begin putting their knowledge and training into action. The Sre Ampil Project is still in its early phase, but promises to be an exciting foundation for a stronger Cambodian led archaeology program in the future.

Contemporary Collaborative Archaeology: Current Challenges and Suggestions for the Future

Despite the success of the archaeological projects discussed above, there are still considerable challenges facing both foreign and Cambodian researchers doing archaeology in Cambodia. After discussing this issue with Cambodian colleagues, and reflecting on my own personal experiences in Cambodia, three specific challenges have been identified.

Funding. Archaeologists all over the world are in a constant battle for adequate funding and this situation is no different in Cambodia. Unfortunately, Cambodian archaeologists are entirely reliant on external funding sources for all aspects of their research from survey and excavation, to artifact analysis, artifact storage, and publication. Cambodian researchers may be unaware of possible funding sources or have difficulty understanding or completing an application because of language barriers, unfamiliarity with the grant proposal writing process, and limited internet access. The difficulty in gaining access to their own funding makes many Cambodian researchers beholden to foreign archaeologists and their research projects. Foreigners working in Cambodia can help their Cambodian colleagues by keeping them abreast of various funding opportunities and assisting with the application processes.

Training and Education. While the number of archaeology programs has grown in Cambodia, training and education is still needed for a new generation of archaeology students or for current researchers looking to expand their skills. Additionally, there is almost no laboratory space or equipment for artifact analysis and students wishing to study archaeological science must go abroad in order to learn these techniques. Foreign scholars who come to work in Cambodia should consider taking on university students in order to give them an opportunity to learn and gain experience. Furthermore, those scholars who are doing artifact analysis in the laboratory are encouraged to find a way to allow their Cambodian colleagues to take part in this process and to share information on their research.



Figure 2. Members of the Sre Ampil workshop discuss the ongoing research at Phnom Kulen in Siem Reap with archaeologist Jean-Baptiste Chevance (Photo by Alison Carter).

Education should also expand beyond the classroom to the public at large. There are now several provincial museums and site museums, as well as the National Museum in Phnom Penh, which provide a space for sharing information on archaeological projects. Researchers are also encouraged to interact with the members of the community in which they are working. Heritage education for the broader public is crucial to helping curb the persistent problem of looting.

My Cambodian colleagues also expressed a desire for their style of education and research to be respected by their foreign collaborators. Many Cambodian researchers have undergone years of education and training both in Cambodia and abroad, but may have a different approach to doing archaeology than their foreign colleagues. Foreign and Cambodian collaborators should keep their lines of communication open and should strive for a mutual understanding and respect of the background of their collaborators.

Sharing the Results of Research. In conjunction with training and education is the equally important topic of sharing and disseminating the results of research. Several of my Cambodian colleagues felt that all too often foreign researchers come to Cambodia to conduct research, but then leave without presenting their research locally. This may be unintentional

in some cases when foreign researchers must leave the country in order to conduct analyses or write-up the results of a report. Nevertheless, foreign researchers must make every effort to make the results of their research available to their Cambodian colleagues and archaeology students. Written copies should be submitted to government agencies or the libraries of local universities. This extends to presenting research at local conferences or venues, since many Cambodian scholars do not have the funds to attend international conferences. Organizations like Reyum in Phnom Penh or the Center for Khmer Studies in Siem Reap are ideal locations for giving a presentation or lecture on one's research. Additionally, the organization Heritage Watch publishes a free bimonthly, bilingual (English and Khmer) magazine on culture and heritage issues that is widely distributed; an article in this publication would be an excellent way to reach a broad audience. Language barriers can complicate the dissemination of research, and this is an important issue to keep in mind. While most advanced Cambodian researchers and students speak English or another foreign language, many younger scholars cannot access reports that are submitted in English or another foreign language. This problem can be overcome by having the paper or research report translated for a small fee or, at the very least, having a thorough abstract written in Khmer. Khmer is a challenging language to speak, read, and write, but anyone

seriously considering long-term research in Cambodia would greatly benefit from language training.

Keep Collaborating!

There is still a growing desire among Cambodian archaeologists for a more independently managed archaeological program and archaeologist Ian Glover (2003) has predicted that the role of Western researchers in Southeast Asian archaeology would be limited in the future. Cambodians did not have an independently run archaeology program for more than a few years before their country was devastated by war and genocide. It has taken many years to rebuild the infrastructure, and Cambodian scholars and students are eager to take an active role in researching and understanding their own history and prehistory. However, I believe that there is no reason that a more independent Cambodian archaeology program could not also be successfully paired with international collaborative research with foreign scholars. Cambodia has over 4,000 documented archaeological sites with new ones being discovered everyday. Looting of archaeological sites is a serious problem that threatens to erase large swaths of Cambodian prehistory. Proper study of these sites cannot be done by Cambodian archaeologists alone. The Ministry of Culture and Fine Arts encourages collaboration between foreign and Cambodian archaeologists and is currently streamlining their application process for permission to do research in the country.


Although I have only been working in Cambodia for five years, I have found it to be an exciting, challenging, and friendly place to do research. Plenty of opportunities for research exist and there are many gaps in the archaeological record waiting to be filled. Foreign archaeologists should consider doing collaborative research in Cambodia in order to strengthen the archaeology program and preserve archaeology as a viable field of study for the future.

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Notes

1. For more information please visit: <http://www.anthropology.hawaii.edu/Projects/LOMAP/index.html>
2. For more information please visit: <http://www.memotcentre.org/>
3. For more information please visit: <http://www.khmerstudies.org/programs/prosreampil.htm>

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LIFE AND DEATH IN OLD INDOCHINE

DISCOVERY, CAMARADERIE AND PREHISTORY IN VIETNAM

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A Day in the Life

It is 9 P.M. as I sit down for dinner on another in a seemingly endless series of foggy, drizzly, cold days in Ninh Binh City, northern Vietnam. My research assistant, Mr. Nghia (who speaks almost no English but is expert with a camera and has uncanny knowledge of the human skeleton), always sits across from me as we eat, and I do my best to keep the conversation going. We touch on topics ranging from cooking methods of the “peasant” food we are eating, to when the fog will lift, to the ever important task of organizing work affairs for the next day, when we will return to the small Ninh Binh museum so that we may continue collecting skeletal data for my dissertation. Should all go according to plan, our efforts will greatly add to our understanding of daily life, labor, social organization, and migration at a time of marked change in socioeconomic and social practices during the prehistory of the region encompassing today’s northern Vietnam and southwestern China; namely, the Neolithic period (ca. 6,000–3,500 B.P.). In this essay I share some of my experiences working in Vietnam, within the context of my participation on a collaborative project.

Finding Prehistory in North Vietnam

Why did I first come to Vietnam? I entered graduate school at the Australian National University intent on pursuing Pacific Island archaeology, and was well underway in training toward that goal by the one-year mark. With a planned thesis project going nowhere fast, however, and little time to settle on a new one, I happened to attend a special lecture by Dr. Marc Oxenham, also of the ANU. He described plans for an upcoming excavation season (during the winter of 2004/05) at the late Neolithic, but pre-agricultural, site of Man Bac, in Ninh Binh province, two hours south of Hanoi. As I sat there enthralled, I knew immediately that I could find a niche on this project, put undergraduate osteological training to use, learn something new every day, and enjoy myself immensely.

Excavation at Man Bac has, from the beginning, been a col-

laborative effort, initially uniting Japanese and Vietnamese colleagues (at that time led by Drs. Nguyen Kim Dung, Nguyen Lan Cuong, Trinh Hoang Hiep, and Masanari Nishimura), a representative of the Ninh Binh museum (Mr. Tan), and with the cooperation of provincial officials. Over the course of two seasons of excavation, approximately 12 m² were opened, revealing 13 skeletons. The limestone karst mountains sheltering the burial ground, slowly dissolving over millennia, leached CaCO₂ into the soil, effectively neutralizing acidity (Figure 1). This lucky coincidence resulted in excellent preservation, allowing for detailed in situ recording and analysis of burial condition and distribution. To reach the cemetery required excavation through a thick stratum of darker soil with a much higher organic content, which corresponded to the later deposition of a thick shell and refuse midden overlaying most of the burials (with the exception of the latest burials, interred within the base of the midden itself). From these strata came not only examples of a diverse array of locally produced, domestic material culture (ceramics and ceramic-making implements, and nephrite adzes, axes, and jewelry), but also a robust assemblage of macro- and microfauna from forested terrestrial, near-shore marine, and estuarine environments. Domestic and mortuary ceramics with exotic motifs (primarily matching those found at Phung Nguyen sites further inland up the Red River), as well as initial tantalizing evidence for some type of domestic or mortuary structure on top of the cemetery, all combined to attest to the potentially phenomenal significance of the site. To our amazement, later discoveries dwarfed everyone’s expectations.

The Fruits of Our Labor: Recent and Ongoing Investigations at Man Bac

I arrived in Hanoi for the first time in early December 2004 and went directly to Tam Diep, the small town closest to our excavations. Until the arrival of Dr. Oxenham and other Western and Japanese colleagues (Drs. Kate Dommett, Hirofumi Matsumura, Junmei Sawada, Ken’ichi Shinoda, Minoru Yoneda, Mariko Yamagata, and other ANU students), I was



Figure 1. View towards Man Bac excavation from the northeast, with karst mountains and modern ossuary cemetery in foreground and background.

very much a stranger in a strange land, doing my best to make myself useful while trying to adapt to local excavation conditions. If not for the cordial friendship of my Vietnamese colleagues, crossing language barriers as much as possible, I would have felt very alienated indeed, despite the excitement of new experiences. Osseous preservation in the excavation grid remained high, as did domestic material cultural discoveries, including further evidence for trade and exchange. The discovery of an adult/child double burial, a second flexed adult male burial (after that of an older man from the 1999 season, both of which form a link with the burial customs of the early Neolithic Da But period ca. 6,000–5,000 B.P.), and an overall mortuary system much more substantial than originally revealed, all combined to really put Man Bac on the map. It was the discovery of an individual from a completely different genetic and phenotypic population that truly demonstrated Man Bac's significance. With a substantial enough skeletal sequence at hand, I conducted an initial mortuary analysis for my Masters thesis (Huffer 2005), while other members of the team initiated study of everything from ceramic typologies to palaeopathology, metric population affinities, and DNA.

Producing a monograph for the Japanese Science Foundation and Toyota Foundation (our primary funding sources) secured us the resources to reunite at Man Bac in 2007 for two consecutive excavations. From March to May, an additional 54 m² were opened, once again revealing the same stratigraphy, the same thick layer of domestic refuse, the first two unambiguous, clay-lined postholes, rare items such as worked elephant tusk, a possible weaving implement, clay net sinkers, all kinds of ceramic vessels and implements, and a continued wide array of faunal remains. Furthermore, and as important, the burial assemblage expanded to 95 individuals, making Man Bac the largest well-documented and

well-recorded cemetery site in Vietnam. Real surprises include concrete evidence for severe, but likely accidental, trauma (an adult male with a broken and off-set radius), as well as Southeast Asia's, and indeed the world's, oldest example of paraplegia and associated complications (see Oxenham et al. in press), as well as several examples of unique grave goods (ceramics and beads primarily) from nonlocal sources. On a larger scale, not only has this substantial increase in burial numbers allowed for a better and more accurate understanding of fertility, mortality, and large-scale population history, but the ongoing analysis of mortuary patterns will bring us ever closer to understanding the "rules" that influenced interaction between the living and the dead. This will provide a solid foundation against which bioarchaeological research (on topics ranging from kinship to migration, activity patterns to weaning, health, and health-care) can be examined specifically to assess their influence on social organization (Matsumura et al. 2008; Oxenham et al. 2008).

Future International Collaborative Research in Vietnam

Results so far have been exciting and more importantly, collaborative beyond just translation and funding assistance. We have encountered some methodological and theoretical differences within our team; for example, typology-based research grounded in cultural history paradigms are favored in the Vietnamese academy, compared to the processual and post-processual paradigms that underlie the Western archaeological contributions. These differences are not insurmountable, but rather are diminishing rapidly. Indeed, our continued sharing of data, ideas, esoteric literature and site reports, and all-around enthusiasm has been vital to making in-depth research on this little-known time period possible. When in the field, the advice and suggestions of Vietnamese colleagues and, importantly, local villagers often facilitate the discovery of new sites. This includes Man Bac, which first came to the attention of Ninh Binh museum officials due to the accidental discovery of artifacts brought up from the midden stratum when plowing fields. A key benefit of the increase in collaborative excavations occurring in Vietnam, and across Southeast Asia, is the rise of an ethos of "participatory learning" in which local villagers are employed at decent wages, taught excavation methods alongside local students, and through this, come to appreciate and understand what stands to be lost if new sites are looted or disturbed too extensively before they can be excavated. Although effective communication of discoveries and results back to the general public is still a work in progress, the operational procedures implemented above were crucial to ensuring Man Bac was excavated accurately, with everyone on the same page. The fact that the permitting process for archaeological research in Vietnam requires demonstrable collaboration, let alone justifiable expectations of coauthorship of all major



Figure 2. Work in progress and collaboration in action; 2007 excavation season, Man Bac, Ninh Binh Province, Vietnam.

papers to come out of new research, guarantees this will continue. When on site, I strongly felt that this collaboration helped cement us as a team, even as bad days and moods came and went (Figure 2).

Beyond the day-to-day tidbits of wisdom acquired while working in urban and rural Vietnam (e.g., the prudence of having a spare pair of clean dress clothes handy for those unexpected visits by dignitaries and officials), my own personal efforts at collaboration have been greatly bolstered by my ongoing efforts to learn Vietnamese. In my opinion, I was fortunate enough to begin this strenuously uphill process in-country, and in a heavily monolingual context, a real sink-or-swim experience. Although progress still comes in fits and starts, I take pride at being the only Westerner on our team to date who can serve as an intermediary to some degree. As might be expected, my Vietnamese colleagues make their best efforts, frequently successful, to speak to the entire team in English, but in the spirit of truly mutual collaboration, I will continue to study diligently to meet them half way. Although future fluency will never eliminate all stumbling blocks, as a foreign student still early in his career, I see nothing more important than mutual respect, and learning the language as a key avenue to gaining it. To all of my friends and colleagues who have opened doors for me, my small contribution to our shared goal is, I hope, enough to allow me to step through them.

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WORKING WITH JAPANESE COLLEAGUES

EXCAVATION OF A JOMON PIT-DWELLING AND STORAGE PITS AT GOSHIZAWA MATSUMORI

Junko Habu

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Japanese archaeology is an exciting and emerging regional field for several reasons. First, rapid economic growth after the 1960s has resulted in a large number of rescue excavations throughout the country (e.g., Barnes and Okita 1999). Unlike the case in America, all the archaeological sites in Japan are protected by the Law for the Protection and Conservation of Cultural Property. This means that sites on both public and private property need to be excavated prior to any construction projects. Many of these rescue excavations are large in scale, and cover an area of tens of thousands of square meters. Results of these excavations not only enrich our understanding of the Japanese past, but they also provide exciting opportunities to test cutting-edge archaeological theories with a large body of data. This is particularly important given that Japanese archaeologists are quite good in publishing their excavation data. Results of these rescue excavations usually become available within a couple of years in the form of thick, published site reports. Several hundred copies are printed, and they are distributed to major university libraries as well as archaeological centers and prefectural and municipal boards of education. Thus, students of archaeology in Japan can conduct original research by using these published data.

Second, the prehistory and early history of the Japanese archipelago show a highly unique trajectory, which is quite different from many other parts of the world. Specifically, the Japanese prehistoric sequence is characterized by one of the world's earliest pottery traditions. This marked the beginning of the Jomon period (ca. 14,500–500 B.C.), a prehistoric hunter-gatherer culture that lasted for over 10,000 years. Despite the sophistication of their material culture and their interactions with Neolithic agriculturalists in China, the people of the Jomon period subsisted primarily by hunting, gathering, and fishing until the last millennium B.C. (Habu 2004; Imamura 1996; Kobayashi 2005). The Jomon period was followed by the agricultural Yayoi period (ca. 500 B.C.–A.D. 250), the time of a rapid development of social stratification, which eventually led to the rise of the early state during the Kofun period (ca. A.D. 250–800).

Third, sociopolitical contexts of Japanese archaeology provide an interesting case to examine the relationship between archaeology and contemporary society. Interests in archaeology among the Japanese public and media are high. Archaeological discoveries are commonly front-page news and featured in television specials. In addition, many Japanese people strongly feel that archaeology is the study of their own direct ancestors. Under these circumstances, interpretations of archaeological data can easily be used to support or refute particular ideological perspectives, and such interpretations may spread rapidly through the media. Thus, archaeology is not merely the study of the past, and the examination of the relationship between archaeology and contemporary society is a relevant topic for anthropological studies (e.g., Fawcett 1995; Hudson 2003; Mizoguchi 2006).

Lack of Full-Scale Collaboration between Japan and North America

Despite these exciting aspects, there have been only a few attempts to develop a full-scale international collaborative research projects. This is partially due to the fact that archaeology in Japan is considered to be a subdiscipline of history, not anthropology. Theoretical approaches that are commonly accepted in anthropological archaeology in North America, including gender and feminist archaeology, evolutionary ecology and historical ecology, have received little interest in Japanese archaeology. An emphasis on historical uniqueness by Japanese archaeologists has also led them to believe that each site needs to be excavated as completely as possible. The concept of sampling is not necessarily welcomed, and full-coverage excavations are preferred.

An important characteristic of contemporary Japanese archaeology is an abundance of so-called “administrative” archaeologists. Unlike the CRM work in North America, the majority of rescue excavations in Japan are conducted by officers of national, prefectural, and municipal governments or staff members of prefectural or city archaeological centers. Many of them have BA or MA degrees in archaeology or his-

tory, and are well trained in field methods. By the 1990s, the total number of these “administrative” archaeologists reached over 7,000—over 90 percent of the archaeologists in Japan. Since their job descriptions typically fall in the realm of social education and community services, opportunities for research-oriented activities, let alone international collaborative research, are limited.

The scarcity of international collaboration does not mean that Japanese archaeology has always been isolated from the rest of the world. To begin with, scientific archaeology in Japan was initiated by the American zoologist Edward Morse, who excavated the Omori shell-midden in Tokyo in 1877. Limited but influential interaction with the West, mainly with Europe, continued through the late nineteenth and early twentieth centuries until it was interrupted by the Second World War. However, research and fieldwork in post-war Japanese archaeology have been dominated by native Japanese perspectives. Influences of North American anthropology and archaeology during the 1950s and 1960s can be seen in the works of such scholars as Sugao Yamanouchi, but it did not become the mainstream. A few dozen Japanese scholars and students have studied in North America over the past several decades, but their contributions comprise only a small portion of the archaeological research conducted in Japan today.

Attempts to Develop Collaborative Research

I was born in Japan, studied at Keio University in Tokyo, and received a Ph.D. at McGill in Canada. Given this background, I have always been interested in developing collaborative research with participants from both North America and Japan. While differences in the history, methods, and goals between the two academic traditions create certain obstacles, it is clear to me that the two academic traditions can benefit greatly by learning the other’s perspectives (Habu 2004:16–25).

One of my attempts to work with Japanese colleagues took place at the Sannai Maruyama site in Aomori Prefecture. It is the largest Jomon settlement in Japan, and is a National Historic Park. From 1997 to 2006, my students and I visited the site every summer, collected soil samples from the test excavation areas opened by archaeologists from the Preservation Office of the Sannai Maruyama Site (a branch office of the Board of Education of Aomori Prefecture), analyzed macro and micro faunal and floral remains in the soil samples, and examined previous excavation records to understand settlement changes over time. Three of our field seasons, in 2004, 2006, and 2007, were run in conjunction with the Berkeley archaeological field school. The results of this work have been fruitful (e.g., Habu 2004, 2008; Habu and Fawcett 2008; Habu et al. 2003). Since the Sannai Maruyama site is designated as the National Historic Park, however,



Figure 1. Junko Habu taking soil samples at Sannai Maruyama, 2006.

there were a number of restrictions placed on our research, including on the timing of fieldwork and on the selection of soil sampling locations.

During our 2007 field season at Sannai Maruyama, I started making inquiries about the possibility of excavating a new site without such restrictions. The site needed to meet several conditions. First, the date of the site had to be contemporary with Sannai Maruyama (ca. 3900–2300 B.C.) so that it fits into the context of my current research on long-term culture change through the Early to Middle Jomon periods. Second, there should be one or more features (preferably pit-dwellings) from which I could obtain quantitative data, artifacts and macro-floral remains dated to a specific phase. Third, the stratigraphy of the site should be simple enough so that it could be excavated with a group of field school students. Members of the Archaeological Center of Aomori Prefecture helped me identify several potential sites. After some consideration, I chose to work at Goshizawa Matsumori, which is approximately 10 km from Sannai Maruyama. An academic excavation permit was obtained with an assistance of the Board of Education of Aomori City for the summer 2008 field season.

Working in the Field with Japanese Colleagues and Graduate Students

Located on Aomori City land that is leased to the Aomori Horse Riding Club, Goshizawa Matsumori is a residential



Figure 2. Soil sampling of a flask-shaped storage pit at Goshizawa Matsumori, 2008.

site dated to the beginning of the Middle Jomon period (ca. 3000 B.C.). The site, discovered by a member of the Riding Club during construction of a small kitchen garden, consists of at least one Middle Jomon pit-dwelling.

My work at Goshizawa Matsumori is an international collaboration in several different respects. First, a number of collaborators from Japan, North America, and Britain are working on various analyses of excavated materials. These include studies of macro-floral remains, charred wood, pollen, phytoliths, diatoms, and parasite eggs, as well as micromorphology, residue analysis, and radiocarbon dating. Contributions of Japanese collaborators are especially important in the fields in which an extensive collection of comparative specimens from Japan are required. Equally important is the way excavations were conducted in the field. In addition to 12 field school students, our summer 2008 team had six Japanese and five American staff members, who worked for me for either part, or all of the field season. The Japanese and North American staff members brought with them different kinds of expertise. Japanese archaeologists and graduate students displayed considerable skill in distinguishing subtle differences in soil texture, and in mapping. In addition, their knowledge of the local archaeological chronology was indispensable. North American staff members (graduate students and undergraduate research assistants) made good use of their strengths in the theory and method of anthropological archaeology, including deductive reasoning and systematic sampling.

The excavation area of the summer 2008 field season measured a total of 42 m². Our efforts focused on a pit-dwelling and two flask-shaped storage pits, all of which were dated to the Middle Jomon period. One half of each of these features was excavated, and soil samples were collected for flotation

from 25-x-25-x-5-cm units. For most North American participants, identifying the walls of features on the basis of subtle differences in soil texture turned out to be extremely challenging. After some experimentation, most of my students had to admit that the gardening trowel preferred by Japanese excavators is more suitable for this purpose than the Marshalltown trowel. This was because the latter's tip is so sharp that it penetrates the walls. For most Japanese staff members, collecting soil samples by artificial intervals was entirely new. Some of them questioned why soil sampling and flotation were necessary, as flotation and water-screening in Japanese archaeology have largely been restricted to shell-middens and water-logged deposits. Our efforts were rewarded by the recovery of a number of charred seeds and nut shells.

Logistical help and moral support from local archaeologists were key to the success of our 2008 field season. They helped me to obtain the excavation permit, and to negotiate with the land owner and the leaser to make the excavation possible. Although constantly joking about differences in the excavation methods between East and West, many of the local Japanese archaeologists were curious as to what kinds of new information could be obtained from excavations like ours, and how these could contribute to the development of Jomon archaeology. To facilitate active interaction with local archaeologists, we conducted our excavations from Tuesday through Saturday, not Monday through Friday, so that they could visit us on Saturdays when their own excavations were on hold for the weekend.

Concluding Remarks

In my 1989 article, I predicted that the isolation of Japanese archaeology from world archaeology would not change in the near future (Habu 1989:42). Twenty years have passed, and there are still barriers between Japanese and North American archaeology. The situation might be slowly changing, however. The collapse of the "bubble" economy in Japan in the early 1990s and other economic and social changes have slowed down the pace of rescue excavations in the country. On the positive side, there is now less need to destroy a large number of sites to build new buildings and freeways. On the other hand, this means less funding is available for excavations and fewer new jobs in archaeology. Under these new circumstances, Japanese archaeologists, especially those of younger generations, have begun to explore new directions in their research and field practice. The questions and support we received from Japanese archaeologists this past summer reflected their curiosity and openness to new, non-Japanese approaches. In this regard, working with Japanese colleagues at Goshizawa Matsumori has made me feel more optimistic about future interactions between the two academic traditions.



Figure 3. Excavation of a pit-dwelling (center) and storage pits at Goshizawa Matsumori, 2008 (the scale at the center measures 1 meter).

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TAKING SMALL STEPPES

CONDUCTING GRADUATE-LEVEL COLLABORATIVE RESEARCH IN MONGOLIA

Jean-Luc Houle and Diimaajav Erdenebaatar

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Our contribution discusses some of the challenges and achievements of a dissertation research project codirected by the first author, the doctoral candidate, and his Mongolian counterpart, a professor at Ulaanbaatar University (Figure 1). Such codirected projects between students and professors are rare and not fully integrated into the idea of what collaborative research is supposed to encompass in this region of the world. Prior to the groundbreaking work of William Honeychurch (2004) and Joshua Wright (2006)—to whom the first author and an increasing number of graduate students are greatly indebted—the idea of a student codirector was simply unimaginable, especially in a world region where academic standing and the reputation of individual archaeologists (not to say funding) are most often linked to collaborations between well-established professionals and institutions. The fact that the research project is concerned with the more “mundane” aspects of culture—the “invisible” habitation sites of mobile pastoralist monumental mound-builders—has also added to the challenge.

The Khanuy Valley Archaeology Project: Revealing the “Invisible Culture”

Born out of the *Khanuy Valley Project on Early Nomadic Pastoralism in Mongolia* (Allard and Erdenebaatar 2005; Allard et al. 2006), our ongoing *Khanuy Valley Archaeology Project* (Houle 2009; Houle and Erdenebaatar 2009) is an international collaborative endeavor that aims to provide a better understanding of the social and economic organization of Late Bronze Age societies in central Mongolia, a region usually thought to have been occupied at that time by mobile pastoralists.

Located to the north of the Khangai (*Hangai*) mountain range in Arkhangai *aimag*, the Khanuy River Valley research area is part of the extensive non-urbanized grasslands of present-day north-central Mongolia—a region that continues to be inhabited by horse-riding nomadic pastoralists who move their camps and herds seasonally. Archaeologically, the

Khanuy Valley is dotted with numerous monumental mortuary and ritual sites dating between the mid-second and mid-first millennia B.C. Some of these surpass, in terms of aboveground elaboration, anything of similar nature in the Bronze Age steppe, and are often taken to indicate the presence of early complex societies. Until recently, attention has focused especially on deer stones (stelae whose surfaces display numerous carved designs, including the archetypal deer with flowing antlers) and *khirigsuurs*, a Mongolian version of the kurgans known from farther west. The latter consists of massive central mounds of stones surrounded by satellite features with complex deposits of horse remains and other domesticated animals. Impressive as these ritualistic expressions are, however, studying them without studying the general context of the society that produced them has resulted in an incomplete understanding of the Late Bronze Age groups who inhabited this region. Our research project seeks to fill this gap and provide a more comprehensive understanding of the nature of Late Bronze Age economic and social organization. Through systematic regional survey and excavations of settlement sites (or occupation areas), our project is now reconstructing the domestic component of the Late Bronze Age groups in the Khanuy River Valley. The use of systematic survey is a relatively recent phenomenon in Mongolia, and its explicit use for locating habitation sites is still very rare. While burial and ritual structures have been and continue to be fairly well-documented, the locations of settlements, specifically Bronze Age settlements, remain relatively unknown.

A major challenge we are faced with in studying the settlement archaeology of sparse, mobile populations is that habitation remains may be extremely ephemeral and the areas that must be studied very large. Intensive methods are thus needed for studying (or even locating) such ephemeral habitation remains, but extensive methods are also required to determine the numbers and densities of sites and their distributions with regard to environmental and other variables. The solution to this dilemma is a multistage strategy that



Figure 1. Staff and crew of the 2008 Khanuy Valley Archaeology Project; including co-directors Jean-Luc Houle and Diimaajav Erdenebaatar in the front row (in red and fuchsia sweaters respectively).



Figure 2. Systematic shovel-probing survey in the Khanuy River Valley. A large khirigsuur is visible in the background.

combines both extensive and intensive methods, and which, due to low surface visibility, also includes a very intensive shovel testing component (Figure 2). We mention this in particular because shovel probes are not only considered an inefficient means of research in many regions of Eurasia (where large-scale Soviet-style excavation still defines what constitutes “real” and “effective” research), but it is often not permissible to excavate them (e.g., in Russia). Where shovel probes have been used they have been successful in detecting low-density activity areas and occupation areas that were not visible on the surface. The approach to settlement survey employed by the *Khanuy Valley Archaeology Project* incorporated shovel testing (Honeychurch 2004; Wright 2006). We not only succeeded in identifying occupation areas of various sizes, but are convinced that this was the only practical means of doing so; over 99 percent of habitation sites were discovered this way, sites that would have been completely overlooked otherwise. The apparent invisibility of settlements in this region (as in other areas of the Eurasian steppes) has usually been interpreted as necessarily reflecting extensive nomadic pastoralism (or long-range mobility). The results of our survey, however, suggest a very restricted mobility pattern and even some form of demographic centralization, even though there is no evidence of permanent structures at habitation sites. Without a doubt, beyond the logistics of organizing a project in a remote area of Mongolia, the implementation of “settlement archaeology” as a research program has been one of the most challenging, yet in the end highly rewarding, aspects of our collaborative endeavor.

Collaborating in Mongolia: The Great Divide or Reconcilable Agendas?

Collaborative research projects in Mongolia have broadened in number and in scope over the last decade. To be sure, since the early twenty-first century the number of collaborative projects has grown threefold while the number of research topics continues to develop exponentially. It would

be naïve, however, to believe that *collaboration* necessarily means *common agendas*. For one, there are ever-widening gaps between archaeological method and interpretation in Eurasian archaeology. Furthermore, since the fall of the USSR, and especially in the present economic situation, Mongolian archaeologists who once had the resources to conduct their own research must now often rely on foreign funds and “suffer the supervision of Western [co-]directors” (Wright 1999, addition and emphasis ours). The goodwill of collaborators aside, the research proposals submitted to Western funding agencies are often at odds with the research agendas of foreign collaborators: if one codirector wants to excavate burials, but another wants to study the habitation sites of the people buried, what are we going to do? This is especially difficult when the project is a dissertation and time and money are limited.

We are not lamenting the state of international collaborative research in Mongolia: quite the opposite in fact—it is going through an unprecedented period of expansion and development. One has only to have attended one of the last few SAA Annual Meetings to see that it has never been better! Many parts of Eurasia, however, have only recently been opened to foreign scholars, and archaeological research in Eurasia presents numerous challenges to international scholarly collaboration. For example, in addition to the normal funding and language issues, students of Eurasian archaeology face an important theory-method gap with respect to their international colleagues. While this may not be a unique set of problems, the latter is especially difficult to overcome when the collaborative endeavor is between a foreign student and a professional local archaeologist. It is not surprising that it was recently found necessary to hold a workshop on these particular issues (i.e., *The First Annual Graduate Student Eurasian Archaeology Workshop* entitled “Taking Small Steppes: Conducting Archaeological Research in Eurasia,” University of Pittsburgh—January 24–25, 2009).

We have no magic solution to the challenges that graduate students face in codirecting projects in Mongolia, or in any

other world region for that matter. We have been working together for the past eight years, and while our history speaks to the overall success of our collaboration, the challenges (logistical, methodological, and theoretical) that beset the early stages of our current project have not entirely disappeared. The suggestions offered by Boivin, Korisettar, and Petraglia (2008) are worth taking to heart. Although joint research designs may not always be possible when engaging in graduate research, we agree that expectations (at least long-term expectations) should be clearly discussed. Shared goals may not always be possible in the short term, yet through mutual respect and communication both sides should benefit from the collaboration. In our case, although our agendas differ, we agree that our complementary research interests have begun to produce a more comprehensive picture of both early mobile pastoralism and early social complexity in Mongolia.

Regardless of the potential pitfalls to collaborative research in Mongolia, specifically at the graduate level, it has undeniably produced many positive outcomes. Since 2004 three Ph.D. dissertations have resulted from collaborations between North American-based scholars and Mongolian researchers (Amartuvshin 2004; Honeychurch 2004; Wright 2006), and several more are in the works (including the first author's). These collaborative projects have introduced novel methodological and theoretical approaches, and provided training in archaeological fieldwork to hundreds of Mongolian and foreign students—many of whom have since produced honors theses, papers and poster presentations resulting from their participation in these projects. Only time will tell if current collaborations will develop further, but we are optimistic that the positive trend will continue.

Finally, while we are on the topic of students, we would like to mention that our project has always insisted on bringing female Mongolian students to the field. It is unfortunate that although archaeology classes in Mongolia are filled with female students, there are still no professional female field archaeologists in Mongolia. Female Mongolian students do not often have the opportunity to participate in fieldwork beyond their initial undergraduate training, much less work with international teams. Although it was initially met with surprise on the part of some, we have found that simply including at least one or two Mongolian female students every year has established the practice within our project—so much so that for the first time this year one of our returning female Mongolian students, Bolortuya Zolzaya, was trained and given the opportunity to oversee some of our excavations. She also worked with us on post-fieldwork materials analysis. She managed all this, of course, with great professionalism and with great capability! We thus encourage other projects working in Mongolia to follow our example in this regard. In so doing, we can start building more fully collaborative research projects.

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THE MIDDLE MEKONG ARCHAEOLOGY PROJECT AND INTERNATIONAL COLLABORATION IN LUANG PRABANG, LAOS

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In this contribution we describe the nature and impact of our collaborative work as members of the Middle Mekong Archaeology Project (MMAP). We also summarize some of the substantive results of the project and reflect on progress and improvements we hope to make in the future. The MMAP is collaborative research program of Lao, Western, and Thai scholars, students, and heritage management officials codirected by Joyce White and Bounheuang Bouasisengpaseuth. The project has two aims. The first is to investigate the prehistory of the middle reaches of the Mekong Basin, with particular attention to the Middle Holocene (6000–2000 B.C.) during which agricultural societies and later metallurgy came into the region (White and Bouasisengpaseuth 2008). The second aim is to provide archaeological training for Lao, Thai, and Westerners working on mainland Southeast Asian archaeology.

Collaborative Archaeology in Laos

Much of the literature on archaeology and collaboration focuses on fourth-world populations such as indigenous Americans and Australians or with countries that have a relatively long tradition of academic archaeology such as China, India and South Africa. In Laos we find ourselves in a third category, where there is no tertiary-level training in archaeology (though a program will start this year) and a heritage management profession emerging in response to the Lao government's interest in developing tourism. Although most officials involved in Lao museums and archaeology are appointed by the Communist Party, we have observed that the appointments involve people skilled in related disciplines such as history, sculpture, fine arts, and architecture. These skills are present partly out of necessity to manage the most prominent items of Lao cultural heritage—the temples and statuary—and partly as a legacy of French colonial activity that promoted a focus on the art-historical component of Laos' past. Our Lao colleagues also bring to the collaborations legal knowledge, social and governmental networks, and interpersonal skills necessary for effectively conducting

complex projects in one of Asia's poorest and most isolated nations.

One of our collaboration strategies has been to work with these skills to establish basic standards of archaeological research. This would be relatively straightforward if MMAP was concerned with monumental ruins and Buddhist relics since these skills are obviously useful to document those remains, and this kind of work is common in the course of the official work of our Lao colleagues. But MMAP is concerned with Middle Holocene deposits and our archaeological training started with adapting artistic skills for use on stones, potsherds, and dirt. In 2006 we developed a technical vocabulary in Lao, Thai (which is closely related) and English for flaked stone artifacts, photography, and database work. We pioneered new words in Lao and Thai for attributes such as “bulb of percussion” and “feather termination.” Then we engaged with the skills of our Lao colleagues by studying techniques of artifact illustration and photography. The items used for these training exercises were stone artifacts and ceramic pieces collected during our 2005 survey of the three tributaries of the Mekong. This survey was conducted over four weeks with funding from the National Geographic Society, the National Science Foundation, and the Penn Museum. The survey crew consisted of a small team including representatives from the Vientiane Department of Museums and Archaeology, Ministry of Information and Culture; representatives from the Luang Prabang Department of Information and Culture; a Thai archaeologist from the Sirindhorn Anthropology Center; and students and scholars from the University of Pennsylvania, The Australia National University, and University of Leeds.

The illustration and photography exercise was successful at working with existing skills and interests to explain basic details about important artifact attributes. As an act of interpretation, the drawing of artifacts allows the illustrator to attract the viewer's attention to specific details. In the course of explaining what we considered to be important details for



Figure 1. Members of MMAP cleaning, sorting and analyzing archaeological material. Ben Marwick is at the far left and Bounheuang Bouasengpaseuth is second from the left.

artifact illustration, we were also identifying the basic attributes that we later used for data collection and analysis. Our 2005 survey recovered material from 58 sites spanning the last 10,000 years, so the task of drawing and photographing the collected samples was useful for demonstrating the wide variety of material and speculating on how to interpret this variety. In addition, by using these stone and ceramic artifacts as part of the training, we were able to communicate their values as a scientific resource, despite them having few of the traditional aesthetic qualities that define the popular objects of mainland Southeast Asian culture history (Figure 1).

In addition to extending and repurposing existing skills for archaeological purposes, we have introduced entirely new technologies to the project. Our surveys are aided by the use of a mobile geographic information system. These systems, which usually consist of a small rugged portable computer such as a PDA running GIS software such as ESRI ArcPad and connected to a GPS are common in archaeological survey. Although we enjoyed technical advantages including the elimination of paperwork, reduction of data-entry errors and rapid data analysis and map-making, we also found that the learning how to use the mobile GIS—the first time for all of the project participants except one—was a significant bonding experience (Given and Hyla 2006). Most of our Lao colleagues have limited access to and familiarity with computers of any kind. For them, learning how to use the mobile GIS was an unusual challenge and made a strong impression of how technology can assist the organization and analysis of data.

Although the survey was aided by this mobile GIS technology we faced three challenges that made a statistically informed sampling method impractical. First is that Laos still contains unexploded ordnance from the more than two

million tons of bombs dropped by the United States over 1964–1973 and other parties in earlier conflicts. A second reason is that the landscape in Northern Laos is extremely rugged, making systematic walking difficult and hazardous. Third, there is great local sensitivity about corporate ownership of lands by individual villages, and visiting remote locations usually involves attaining a sequence of permissions from the national down to the village level. To address these challenges we conducted an “ask the villager” survey. We visited villages, showed them examples of what we were looking for, and asked them to show us anything similar that they knew about. The mobile GIS equipment also became a focal point that engaged the interest and curiosity of villagers in our activities. It provided opportunities for our Lao colleagues to explain to the villagers what we were doing, what our motives were, and how our work is relevant to the villagers. Members of the project remain divided about whether the mobile GIS provided substantial gains in efficiency, given the relatively small number of sites recorded, but we all agree that it was most valuable for facilitating technology training and building relationships of trust between Western and Lao team members and between the team and the villagers that we met with.

Substantive Results of Recent Research

With funding from the Luce Foundation, another training season was conducted over six weeks in early 2009 and further survey conducted at that time increased the total number of sites in the MMAP database to 69. These sites contained archaeological material from Hoabinhian periods (Early Holocene–Late Pleistocene) through to historical times. There are two interesting results suggested by the survey data. The first is that a wide range of prehistoric ceramic technologies and styles were documented. This includes incised and infilled designs similar to those found in the lowest levels of Ban Chiang and other early Bronze Age sites in the Sakhon Nakon Basin in Thailand. This indicates that people were active on the landscape in this part of Laos during the major transitions, such as the shift from foraging to farming and the introduction of bronze metallurgy, and these transitions may have occurred as part of changes in the wider region. The second result is a pattern in the distribution of flaked and stone tools. In our sample, sites dominated by flaked stone artifacts tend to be further from rivers and in areas where topographic wetness is lower. Topographic wetness is an index calculated from the upslope area and local slope of a site’s location and gives a summary measure of the likely soil moisture content and a proxy for vegetation species richness. Sites dominated by polished stone artifacts, such as adzes, tend to be closer to rivers and in locations with higher topographic wetness. Although our sample of sites is small, these associations are suggestive of a transition from upland foraging to lowland horticulture during the Middle or Late Holocene.



Figure 2. Excavation at PPKR in 2007. Joyce White is at the front center and Bounheuang Bouasisengpaseuth stands in front of her on the other side of the excavation.

We have excavated test pits at two locations identified during the 2005 survey, Phou Phaa Khao Rockshelter (PPKR) in 2007, and at Tham Vang Ta Leow (TVTL) Rockshelter in 2008. Four radiocarbon dates have been obtained from these sites (White et al. 2009). The dates confirm the survey findings that northern Laos was occupied from the terminal Pleistocene on, with clear evidence for occupation by users of Hoabinhian lithic technology. The dates from TVTL are comparable to previously excavated sites in Laos (Sayavongkhamdy et al. 2000) and compare well with Hoabinhian material from similar latitudes in north Thailand and Vietnam. The Iron Age burials at PPKR are interesting in relation to Iron Age occupation on the Plain of Jars plateau, located further up the same tributary at PPKR. These initial results suggest that further work in the Lao PDR will contribute to substantive topics in Southeast Asian archaeology such as the region's development of early agriculture or hunter-gather impact on subtropical landscapes.

The Future of MMAP

Our initial strategy of combining collaborative research with training in a gradual way has proven successful in developing and maintaining productive relationships among Lao, Thai, and Western team members. The challenge we now face is to continue research while increasing the number of activities that all members of the team are equally capable of. This includes both involving Westerners in heritage policy development (requiring Lao language skills) and involving Laos in more complex archaeological analyses. Helping Lao team members receive formal archaeological education, not just training, is also part of our long-term strategy.

Practical and technical training produces relatively rapid and tangible rewards for the Lao team members and their superiors, but is only part of our collaborative objective. The second part is engaging our Lao colleagues in the conventions and culture of international academia by creating substantial opportunities to contribute to publications and participate in conferences. Great effort is made to support Lao participation in recent Indo-Pacific Prehistory Association congresses, including seeking financial assistance and help drafting presentations. This is unfamiliar territory even for university-educated Laos since many of them have degrees from China, Russia, and other communist and formerly communist countries. The importance of English as the main language of international academia adds to the challenge of this process of cultivating intellectual engagement.

To conclude, while the MMAP is still taking its first steps toward making major scientific contributions, we consider that we have made substantial progress in two areas. First, our training activities have been successful in establishing mutually agreeable protocols for conducting archaeology in Laos, a country with very little previous modern archaeology. Second, our collaborative activities have made substantial progress in cultivating productive relationships between the Lao and Western team members. Our hope is to continue to work on the collaborative foundations that we have established, improve archaeological training within Laos, and continue to ask new questions of the archaeology of Laos and search for new ways to answer them.

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HARVESTS FOR THE HUNTERS

THE ORIGINS OF FOOD PRODUCTION IN ARID NORTHERN CHINA

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The study of agricultural origins in northern China is complicated by the absence of archaeological evidence for the hunter-gatherers who invented agriculture and a poor record of plant or animal domestication. Recent work at the Dadiwan site provides important data for both. The product of many years collaboration between Chinese and American scholars, this work casts the evolution of agricultural life in a new light, and helps distinguish the process here from other parts of the world.

Mind the Gap

In northern China, the independent origin of agriculture is marked by the sudden appearance of ceramics, ground stone, and semi-permanent domestic architecture in several different areas between 8500 and 7000 cal B.P. (Figure 1). Until quite recently, however, the archaeology of this period produced little direct evidence for agricultural subsistence. Equally problematic is a “gap” in the archaeological record of early Holocene China (~11,500–8500 cal B.P.), immediately prior to the Neolithic Revolution (Bettinger et al. 2007). While there are a few sites from this period near the Taihang Mountains that contain small amounts of pottery, milling equipment, and microblades (Zhang 1999), all are 300–1000 km from the earliest evidence of food production and none contain direct evidence for agriculture (e.g. plant remains, sickle blades, isotopic signatures, etc.). Where the earliest evidence for food production does exist, there is no clear evidence for a hunting and gathering antecedent. Together these facts suggest that North China’s agricultural Neolithic did not emerge in the areas where it eventually flourished.

Off the Desert Road to Turkestan

In the late 1980s, a group of American and Chinese scholars began studying the surface archaeology of the Alashan Plateau using interpretive models developed for the American Great Basin (Bettinger et al. 1990). This collaborative survey project quickly led to new hypotheses about the con-

nections between arid-lands adaptive strategies and the evolution of agriculture (Bettinger et al. 1994; Madsen et al. 1996). Ultimately, the Pigeon Mountain site on the eastern slope of the Helan Mountains produced some of the earliest evidence for intensive plant processing, and a record of cultural change across the Pleistocene-Holocene boundary (Elston et al. 1997; Madsen et al. 1998). Of note, milling equipment appeared during the Bølling-Ållerød warm phase (~14.7–13.7 kcal B.P.), and microlithic technology became increasingly important through the Younger Dryas and into the earliest Holocene (~13.7–11.3 kcal B.P.). This desert record, however, is silent regarding the period immediately before the appearance of agriculture. As with other early Neolithic sites, terminal Pleistocene-early Holocene (TPEH) sites from the “Tengger Period” (Bettinger et al. 2007) in the northern deserts are also hundreds of kilometers away from the eventual North China agricultural core.

Connecting Dots in the Western Loess Plateau

In 2002 we began a survey with Lanzhou University and the Gansu Provincial Institute of Cultural Relics and Archaeology to evaluate potential connections between TPEH desert foragers and the agriculturalists of the western Loess Plateau, best known from the Dadiwan archaeological site, the type site of the Laoguantai complex, the westernmost expression of early millet agriculture in north China (Figure 2). Following cursory explorations along the northern fringe of the known distribution of Neolithic sites, we started looking at some of the oldest Neolithic sites themselves for evidence of possible hunter-gatherer predecessors. Though these initial surveys produced almost nothing relevant to the story of hunter-gatherer intensification and the evolution of agriculture, we did identify a 60,000-year record of late Pleistocene forager strategies, particularly during marine isotope stage 3 and the Last Glacial Maximum (LGM) (Barton et al. 2007; Ji et al. 2005). Our 2002 survey was admittedly somewhat scattershot, but its results beg the question: if Paleolithic sites from the LGM were so easy to find, why was it

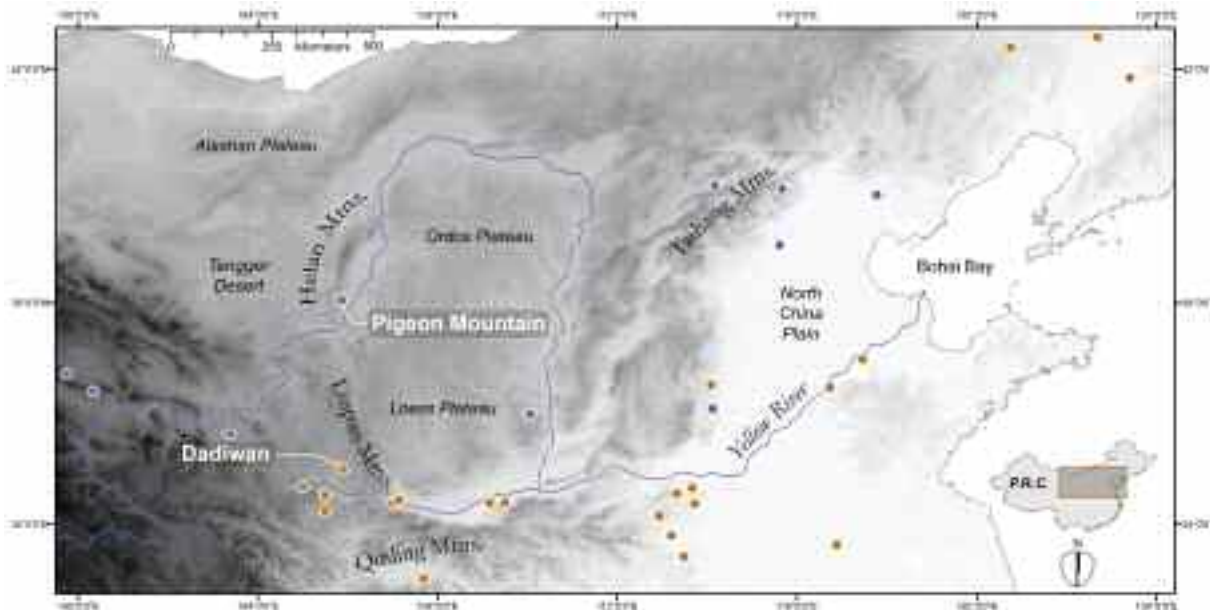


Figure 1. The theater of agricultural origins in North China. Blue dots represent dated terminal Pleistocene–early Holocene Microlithic or Early Neolithic pre-agricultural sites; orange dots Middle Neolithic, early agricultural sites of the Laoguantai, Baijia, Peiligang, Cishan, Houli, and Xinglongwa culture areas (from west to east). Not all known sites are represented.

so difficult to find Early Neolithic sites dating to the early Holocene, or for that matter, Middle Neolithic Laoguantai agricultural sites?

Pre-agricultural Evidence at Dadiwan

In 2004, the Gansu Provincial Institute of Cultural Relics and Archaeology, Lanzhou University, The Dadiwan Museum, and the University of California conducted limited testing at Dadiwan, the oldest Neolithic site known from the western Loess Plateau. A single unit revealed a cryptic chipped-stone component beneath Neolithic cultural deposits, in strata previously considered sterile (Bettinger et al. 2005). In 2006, we returned to the site to expand and date this chipped-stone assemblage. Excavations in three adjacent 1-x-2-m units produced a stratified, 7.1 m-deep cultural sequence recording 60,000 years of human activity. Artifact types and frequencies justify division of this sequence into six cultural components, with age estimates based on a combination of absolute dates, stratigraphy, seriation, and climatic events (Barton 2009). That Dadiwan was occupied for so long surely attests to its locational advantages for both farming and hunting: proximity to water, good drainage, and for hunters especially its panoramic view of the surrounding landscape and strategic positioning relative to game, game trails, and seasonal migration routes between mountains to the north and river valleys to the south. The connection between hunting and the origin of agriculture is demonstrated by our discovery of a previously undocumented

microlithic assemblage first appearing after the LGM, proliferating during the Younger Dryas, and persisting through the Laoguantai Neolithic. When the site is reoccupied a thousand years later by sedentary Late Neolithic farmers, the microlithic industry all but disappears. The Dadiwan microlithic is made entirely from exotic raw materials. Microlithic blades and blade cores are extremely small (Figure 3), smaller than anywhere reported in northern China. Both suggest the materials were transported over great distances and used to the point of exhaustion. The assemblage is morphologically consistent with the widespread and well-documented North China Microlithic (e.g., Chen 1984), of which Pigeon Mountain is the nearest well-dated example, 340 km to the north. These similarities suggest a connection between the Dadiwan microlithic and the hunting adaptations of the Tengger Desert and Helan Mountains.

The Isotopic Identity of Domestication

There is little direct evidence for the earliest experiments with food production, and therefore little is known about plant or animal domestication in northern China. While historical and archaeobotanical evidence suggest that North China's agricultural complex was rooted in two different kinds of millet (*Setaria italica* and *Panicum miliaceum*), there are few data directly attesting to this. Since both of the proposed domesticates are C₄ plants, isotopically distinguishable from wild, mostly C₃ plants, millet consumption in northern China is visible in skeletal biochemistry just as



Figure 2. Shao Dian village and the Qingshui Valley of the eastern Longxi Basin. The Dadiwan site is in the trees on the east (right) edge of the village (Photo by C.T. Morgan).

maize is in many parts of the New World. Together with an isotopic index of meat/protein consumption ($\delta^{15}\text{N}$), stable isotope biochemistry of human and animal bone reveals the strength of the domestic relationship between humans, plants, and animals (Barton et al. 2009). At Dadiwan, the earliest evidence for a persistent, year-round focus on millet comes from high $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values in dogs at about 7500 cal B.P. ("Phase 1" in Figure 4). These dogs are distinct from wild-foraging animals like red deer and sika ("browsers/grazers" in Figure 4), as well as Phase 1 pigs and other canids. Animals living close enough to humans to consume millet regularly throughout the year consistently ate more meat (likely table scraps, offal, and human waste) than animals living on wild forage, producing a positive correlation between $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$. The positive correlation between millet and meat, which signifies the strength of the domestic relationship, also applies to the transition to intensive agriculture during the Late Neolithic ("Phase 2" in Figure 4). Here, both dogs and millet are fully incorporated into the domestic farming sphere while pig diets vary from fully wild to fully domestic. This illustrates the plasticity of pig husbandry during the Late Neolithic, and suggests that dogs and millet were both critical to the domestication of the pig in northwest China (Barton 2009; Barton et al. 2009).

An Emerging Picture of Agricultural Origins in Northern China

Dadiwan provides the first compelling link between late Pleistocene hunter-gatherer intensification and the transition to agriculture. Artifact similarities and long distance transport of exotic toolstone illustrate connections between the early Holocene hunting adaptations at Dadiwan and those of the northern deserts. That dogs show the earliest evidence for year-round millet consumption (at ~7500 kcal B.P.), attests both to the long-standing importance of dogs and to the increasing importance of storable plant products in the North China hunting economy.

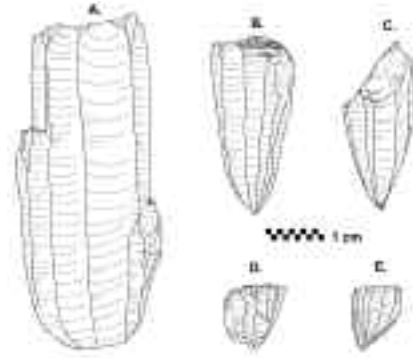


Figure 3. A comparison of microblade cores from northwest China. A, B and C are from the Toll Booth site, northwest of the Helan Mountains; D and E are from the 2006 excavations at Dadiwan.

We contend that the earliest forays into food production in arid northern China were to support an increasingly fragile hunting pattern. The intensive harvest, storage, and perhaps cultivation of quick-growing annual grasses reduced local variations in resource abundance connected with animal migrations, and thus the risk of hunting in marginal environments. Both the hunting pattern and the intensive use of plants were introduced to Dadiwan by hunters from the arid regions between the Yellow River, the Tengger Desert, and the Helan Mountains, who moved south during periodic TPEH cold-dry climatic reversals. The use of both dogs and millet intensified with this southern movement: dogs became more useful for flushing game from the riparian gallery forests of the western Loess Plateau and greater precipitation produced better harvests in floodplain valleys like those near Dadiwan. Better harvests reduced conflicts with the hunting calendar, and enabled hunters at Dadiwan to devote more time to accessing game—a pursuit for which the site had always been well-positioned. This promoted longer stays, leading to more regular consumption of semi-domesticated foods otherwise reserved for occasional short-falls. This in turn amplified their dependence upon storable, predictable resources, likely maintaining the selective pressures necessary for changing the morphological and molecular composition of plant and animal populations. We suspect that this same basic pattern holds throughout much of north China. Hunters on the southern fringe of the North China Microlithic frequently experimented with millet cultivation to support their traditional hunting economy as they periodically expanded south into new and unfamiliar territory to escape climatic downturns. These scattered experiments represent the origins of early millet agriculture in northern China.

Acknowledgments. The collaborative, multidisciplinary agenda of modern archaeology owes much to the mid-twentieth-century pursuit of agricultural origins. Our work in northern

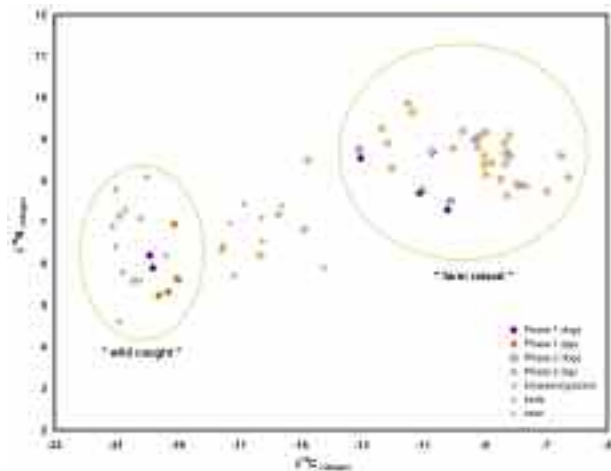


Figure 4. Stable isotope chemistry of Dadiwan fauna. "Phase 1" denotes the Middle Neolithic at Dadiwan; "Phase 2" the Late Neolithic seen throughout the Wei and Yellow River Valleys. The strength of the domestic relationship increases dramatically from Phase 1 to Phase 2.

China follows in this tradition and represents a truly collaborative effort, from start-to-finish, between laboratories at the Center for Arid Environment and Paleoclimate Research at Lanzhou University, the Carnegie Institution of Washington, D.C., the Center for Accelerator Mass Spectrometry at the Lawrence-Livermore National Laboratories in California, the Gansu Provincial Institute of Cultural Relics and Archaeology, and the Department of Anthropology at the University of California, Davis. Major contributions come from: Chen Fahu, Ji Duxue, An Chengbang, Wang Hui, Rao Zhiguo, Zhao Jian Long, Zhang Dongju, Wei Heitao, Lü Yanbin, Zhao Hui, Zhang Pingyu, Wang Zongli, Jin Ming, Seth Newsome, Tom Guilderson, Bob Elston, Jeff Brantingham, David Madsen, David Rhode, John Olsen and Jack Oviatt. Visit us at <http://www.anthro.ucdavis.edu/card/usprc>.

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LOWER XIAJIADIAN PERIOD DEMOGRAPHY AND SOCIOPOLITICAL ORGANIZATION

SOME RESULTS OF COLLABORATIVE REGIONAL SETTLEMENT PATTERNS RESEARCH IN NE CHINA

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The Chifeng International Collaborative Archeological Research Project (CICARP) has been a 10-year cooperative endeavor between archaeologists from the Institute of Archeology at the Chinese Academy of Social Sciences, the Inner Mongolian Institute of Archeology, Jilin University, Hebrew University, the University of Pittsburgh, and the University of Hawai'i at Manoa (Chifeng 2003; Linduff et al. 2004; Peterson 2006; Zhong-Mei 2002). Our primary research questions concern the emergence and development of complex sociopolitical organization in the Chifeng region of NE China, and our principal research activity has been systematic regional-scale settlement survey. Regional-scale settlement analysis is about how, and in what numbers, people distributed themselves across the regional landscape at different times. Estimates of changing regional population and population densities, together with analysis of changing patterns of settlement distribution, provide the larger contexts within which more detailed information from archaeological excavations can be placed, and different sites can be related to each other in terms of the human activities and organization they represent. Regional settlement analysis is an essential component of any study of complex societies since their organizational patterns are regional in nature—they cannot be studied comprehensively except at the regional scale.

Here we describe a pattern of small Lower Xiajiadian polities that crystallized in the Chifeng region during the late 3rd millennium B.C. The Lower Xiajiadian period archaeological record preserves evidence of an agrarian economy, residential and mortuary differentiation, social competition, intergroup conflict, labor mobilization, and centripetal settlement patterning indicative of social hierarchy and complex sociopolitical organization. These reconstructions rest upon decades of excavation of Lower Xiajiadian contexts as well as

the distributional analysis of settlement data collected over the course of six CICARP field seasons from 1998 to 2007.

Lower Xiajiadian farmers in the Chifeng region subsisted primarily on the dryland cultivation of millet, and pig, sheep/goat, and cattle husbandry, supplemented by hunting and gathering (Guo 1995:160; Li and Gao 1985:157). Settlements tended to be located on the bluffs overlooking major rivers and their tributaries, although some were also located in more upland areas. These settlements range from less than a hectare to some 25 hectares in size. Among the most well studied aspects of Lower Xiajiadian settlements are their associated cemeteries, where social differentiation is clearly visible in mortuary treatment. At Dadianzi, for example, most Lower Xiajiadian burials are shallow stone slab pit graves containing few or no offerings, while others are deep shaft tombs containing wooden coffins, the remains of sacrificial pigs and dogs, and numerous specialist-produced or imported items displayed in separate artifact niches (Zhong-guo 1996). Among the latter offerings are polychrome pottery; stone, bone, and jade ornaments; cowrie shells; stone axes; and bronze arrowheads. Differences in grave size, depth and elaboration, and in the number and quality of different kinds of offerings, suggest the operation of sumptuary rules and a gradation of social statuses from high to low (Shelach 2002).

These differences in social ranking also find expression in Lower Xiajiadian residential architecture. Circular stone-walled or mud brick residences of various sizes and degrees of elaboration are among the common features of Lower Xiajiadian sites (Guo 1995; Liaoning 1976; Shelach 1999:96–101; Neimenggu 2007; Xu 1986). The majority of Lower Xiajiadian houses are less than 4 m in diameter, but some are as large as 25 m or more in diameter. The largest



Figure 1. Plan of the fortified Lower Xiajiadian central place town of Sanzuodian. Walls indicated by solid hatching. Redrawn from Neimenggu (2007, color plate 1).

are double-walled and occupy prominent locations within Lower Xiajiadian sites. They are sometimes found in association with stone-faced earthen platforms, from which more elite residents may have addressed others within their communities. These differences in the size, elaboration, and intra-site location of Lower Xiajiadian houses presumably reflect differences in the relative socioeconomic standing of their inhabitants.

Some Lower Xiajiadian settlements also exhibit considerable investment in public architecture. Examples include defensive ditches, and massive stone or rammed earth walls replete with guardhouses and gated entries (Guo 1995; Shelach 1999:91–96; Xu 1986). The recently excavated site of Sanzuodian (Neimenggu 2007) is typical of such fortified settlements (Figure 1). Situated atop a low rise with a commanding view of the surrounding valley floor, Sanzuodian was a small town with a residential density of some 100–200 persons per ha. It was subdivided into two parts and enclosed by thick stone walls 3.5 to 4 m high that were capped by watchtowers (Figure 2). Smaller internal walls surrounded individual houses and their associated storage pits and animal pens, creating narrow passages between dwellings and inhibiting access to some portions of the site. Elsewhere in the Chifeng region, small heavily fortified hilltops may have been only sporadically occupied, possibly as places where the inhabitants of small undefended villages took refuge from attack. Given such conspicuous archaeological evidence for conflict, it seems reasonable to connect higher social status (and perhaps leadership) in Lower Xiajiadian society to the ability to mobilize labor and other resources for the construction and maintenance of defensive architecture, and/or for the purposes of raiding neighboring settlements.

Figure 3 shows the distribution of 416 Lower Xiajiadian local communities spread throughout the 1,234 km² CICARP survey area, representing some 40,000–80,000 inhabitants (for a



Figure 2. Detail of external walls at Sanzuodian (photo by R. D. Drennan).

density of 30–60 persons per km²). In Chifeng we followed a fairly standard program of systematic pedestrian survey and surface artifact collection (Drennan et al. 2003a) from which we were able to develop an artifact density-area index that is our basis for population estimation (Drennan et al. 2003b). GIS analysis of the regional distribution of estimated population was used to delineate local communities—clusters of non-continuous settlement (villages, hamlets, and farmsteads) that interacted much more intensely with each other than with any of those outside the cluster (Peterson and Drennan 2005). We take these to represent the smallest “meaningful human communities” of the Lower Xiajiadian period in the Chifeng region. Some of these Lower Xiajiadian local communities are quite small (with populations estimated at less than 100–200 inhabitants), but others were substantially larger. More than half the region’s population lived in local communities of 500–1,000 or more, while others incorporated 2,500–5,000 inhabitants. The emergence of these towns was entirely new, since no earlier period in Chifeng had local communities containing this many people. Many of these towns were very densely packed heavily fortified settlements like Sanzuodian. Ceramic, lithic, and metal craft goods manufactured in Lower Xiajiadian towns and villages (Li and Gao 1985; Liaoning 1976:201) suggest economic specialization and interdependence was especially well developed in Chifeng at this time.

In the Chifeng survey area 21 Lower Xiajiadian supra-local communities or polities can also be delineated. Mathematically smoothing the Lower Xiajiadian population distribution GIS surface enables yet larger-scale sociospatial structure to come into focus, by grouping small local communities together into supra-local communities or regional-scale polities (Peterson and Drennan 2005). This approach to clustering relies not just on separation distance between small local communities, but also reflects higher levels of interaction produced by larger population concentrations. Multiple

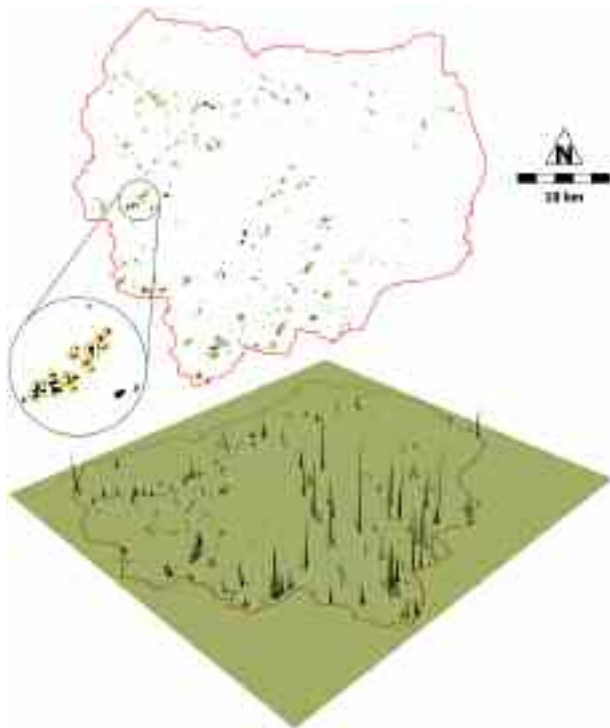


Figure 3. Distribution of Lower Xiajiadian period occupation in the CICARP survey area (top). Small local communities (see inset for examples) were delineated from an unsmoothed surface of this occupation (bottom) following Peterson and Drennan (2005).

polities of roughly similar size show clearly in a smoothed surface of Lower Xiajiadian occupation (Figure 4). The overall pattern, with a fair number of roughly similar sized tall peaks, does not suggest political centralization but rather separate small co-equal polities. This interpretation receives considerable support from their rank-size pattern, which is very strongly and significantly convex. The well-defined districts are heavily concentrated toward the southwest of the survey area, where they are usually centered on a compact high-density town as central place. A few districts are more spread out without such a readily visible or compact central community. The districts outlined toward the north in the survey area are less distinct and represent lower populations and population densities. These higher-order communities group together sets of small local communities, which appear to have played important roles as sociopolitical sub-units. Each supra-local community is less than 5 km across, with estimated populations ranging from 1,000 to 7,000. Although similar in spatial scale to “chiefdom”-like supra-local communities that emerged earlier in the Chifeng sequence (Drennan and Peterson 2005, 2006, 2008; Peterson and Drennan 2005; Peterson 2006), their populations were an order of magnitude larger, and their political organization

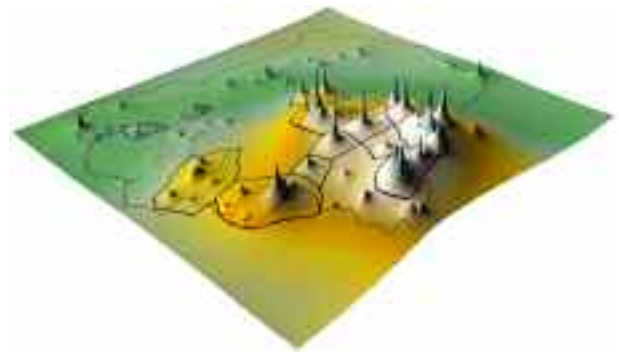


Figure 4. A mathematically-smoothed surface of Lower Xiajiadian period occupation in the CICARP survey area. Supra-local communities or polities are delineated with dark blue lines (following Peterson and Drennan 2005).

considerably more state-like (Shelach 1999). Population densities within these small polities were often above 300 persons per km² and ranged up to nearly 600 persons per km². Each is very strongly centralized, with a primate rank-size distribution. The larger local communities and/or fortified towns around which Lower Xiajiadian districts were focused were large, dense, and heterogeneous, but they were not quite large enough, dense enough, or heterogeneous enough to cross the threshold to urban status by most definitions.

Chifeng during Lower Xiajiadian times, then, sustained a multiplicity of roughly comparable small-sized higher-order communities with large populations and complex internal organization. The tight packing of polities within the region, coupled with high internal population densities and a relatively extensive form of agriculture, raise the possibility that resource scarcity and competition were a fact of life in Lower Xiajiadian times—conditions that could generate inter-polity conflict, escalate growth, and contribute to intra-polity demographic centralization. Heavily fortified central place towns provide ample evidence that the Lower Xiajiadian polities in Chifeng were in a more or less constant state of hostilities with each other. There is no indication, however, that any polity was able to subjugate any others and so transcend the uniformly small spatial scale common to all. Some Lower Xiajiadian polities may have faced more severe resource pressure than their counterparts causing them to fission as some residents moved away to found new polities in increasingly scarce unoccupied territory. The leaders of supra-local communities would likely have furthered their political ambitions simply by raiding neighboring polities, rather than by seeking the growth of their own polities, whether through internal demographic increase or forcible incorporation of their neighbors. The result would have been cycles of conflict with each other leading to a stalemate among a

growing number of densely packed competitive Lower Xiajiadian polities. It would not be until the end of the first millennium B.C. that the Chifeng region was incorporated into a single political entity, in this case one originating from outside.

Although there is still much to learn about the Lower Xiajiadian period, the CICARP has contributed to the discussion of Lower Xiajiadian social dynamics by weaving together complementary archaeological information, methods, scales of analysis, and theoretical perspectives into a more comprehensive picture than previously existed. This more comprehensive view of Lower Xiajiadian society could only have been created through international collaborative research. The concepts and methodology of regional settlement analysis emerged in the context of North American anthropological archaeology, but such an approach would have produced little meaningful knowledge of Lower Xiajiadian society without the understandings of Lower Xiajiadian culture and settlements gleaned from decades of painstaking and extensive stratigraphic excavation, begun during a period when Chinese archaeology had little contact with the practice of archaeology in other countries. As a result of this collaborative effort, Lower Xiajiadian society (and the entire trajectory from Neolithic beginnings in the 7th millennium B.C. to the Qin and Han polities of the late 1st millennium B.C.) are better understood and can be more fruitfully compared to the developmental trajectories of early complex societies in other parts of the world.

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RECONSTRUCTING BEHAVIOR IN ANCIENT CHINA FROM HUMAN SKELETAL REMAINS

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As attested by this paper's long list of coauthors, bioarchaeological research in China involves a substantial collaborative network linking institutions and specialists in zooarchaeology, mortuary analysis, ceramic analysis, as well as physical anthropology. Although the majority of bioarchaeological projects carried out in China over the past decade have focused on changes in community health over time (e.g., Eng 2007; Pechenkina et al. 2007), we would like to underscore the capacity of human skeletal remains to provide evidence that allows for reconstructing many aspects of behavior and for tracking the effects of sociocultural change.

A human skeleton recovered from an archaeological context is an invaluable source of information about the past. While still an integral component of a living person, bone tissue responds to a wide range of external influences, recording many of the events of life. Changes in bones and teeth can be provoked by a variety of experiences, including accidents, display and identity-related practices, acts of cruelty or mercy, certain kinds of occupational-related physical activity—or the lack thereof—as well as by childbirth, aging, the effects of climatic shifts, pathogen invasion, and/or the specifics of food composition, caloric intake, and cooking techniques, among other things. Inevitably modified by the individual's behavior during life, a human skeleton recovered from an archaeological context is, in a manner of speaking, an artifact.

In ancient China, many cultural practices were aimed specifically at artificial modification of bones and teeth. The most renowned such practice was footbinding, which appeared rather late in the full temporal span of Chinese civilization, apparently during the time of the Southern Tang Dynasty toward the end of the first millennium A.D. Footbinding profoundly affected the shape of the toe bones, resulting in their thinning and a loss of bone density. Bioarchaeological research has yet to address the full specifics of the timing, introduction, and expansion of this practice among the different social strata and ethnic groups enmeshed in the world of imperial China during the second millennium A.D.

Artificial body modification in China was not limited to foot-binding. Artificial cranial deformation (Han 1980), extraction or ablation of the lateral incisors (Han and Nakahashi 1996; Han and Pan 1982), and trephination (Han and Chen 1999) all were of much greater antiquity. Each of these practices seems to have originated in a different part of China during the Late Neolithic. As one result of skeletal and archaeological analysis being carried out across much of modern China, the distribution of each such modification within specific regional populations, whether between the sexes and/or among age groups, is fairly well understood. The earliest evidence of intentional tooth ablation dates to around 6,500 years ago from Shandong and the northern Jiangsu region; this practice later became commonplace during the Dawenkou (6,000 to 4,600 years ago) period (Han and Nakahashi 1996). Wherever tooth ablation was practiced, both sexes were affected in roughly equal proportions, although evidence of ablation is far less common in cranial series from archaeological sites distant from the apparent centers of origin. Most evidence of ancient Chinese body modification has been documented through study of skeletal collections for which little information was recorded on the specific context of individual burials, making it difficult to assess the possible role of such practices in demarcating social and/or cultural boundaries.

In other parts of the world, contrasting techniques of body modification often typified geographically defined communities or cultural entities (DeBoer, 1990; Hoshower et al. 1995; Hrdlicka 1914; Torres-Rouff 2002). A cranial series examined by us from the Xishan site in eastern Henan is particularly interesting as a case study for the interpretation of ancient Chinese body modification. Based on specific components of the pottery assemblage at Xishan, it is estimated that the site was occupied during the Middle and Late phases of the Yangshao period (ca. 6,000–5,000 years ago). Xishan is located near the eastern edge of the region of documented Yangshao influence and is also very near to the Dahecun site, which contained some Dawenkou cultural elements. Interpreting the human remains from Xishan helps



Figure 1. Human cranium from Xishan showing signs of artificial cranial deformation, likely of the annular type, with a small flattening device attached to the occiput. Notice the post-bregmatic, saddle-like concavity and flattening of the occipital bone.

us better appreciate the possible role of body modification for identity negotiation in a situation of cultural contact.

A juvenile cranium, M178 (Figure 1), and an upper dentition with intentionally removed lateral teeth (Figure 2), illustrate the types of alterations found in the Xishan series. The cranium (M178) exhibits the unambiguous markings of artificial and intentional deformation, particularly with respect to a post-bregmatic saddle-shaped depression, demarcated by a low bulge of the frontal bone. Coupled with a pronounced flattening and slant of the occipital bone, this peculiarity suggests use of a head-shaping device attached with ligatures to the cranium during childhood. A wide ligature was probably passed behind the bregma to affix the device to the occiput. While no other skull recovered from Xishan evidences unequivocal evidence of artificial cranial deformation, at least six other skulls have structural peculiarities suggesting it. They display a pronounced occipital flattening but little specific evidence of a device attached to the frontal bone to apply pressure. In another case, pressure apparently was applied continuously to the top of the head, resulting in reduced cranial height and an increase in cranial breadth, which suggests deployment of a very different appliance.

Evidence of intentional tooth removal was fairly infrequent in the Xishan cranial series and there is little consistency or obvious patterning in its distribution relative to sex or other

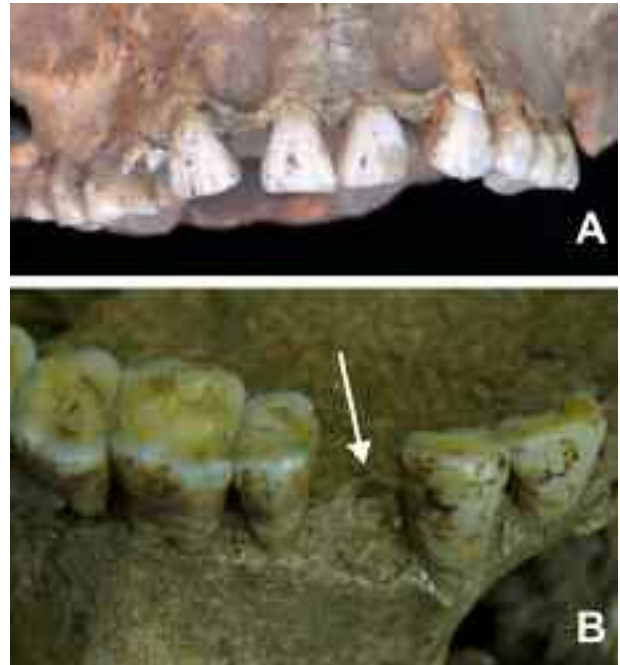


Figure 2. Ablation of upper lateral teeth from Xishan. (A) represents a classical "Dawenkou" type tooth ablation of an adolescent. (B) is an atypical case: the arrow points toward the root of the upper left first premolar.

differentiating characteristics. In the typical mode of Dawenkou tooth removal, the upper lateral incisors were ablated at around the beginning of adolescence (Han and Nakahashi 1996). Of 43 largely intact dentitions examined from Xishan, only two individuals would seem to have had their lateral incisors intentionally removed (Figure 2a). Two more cases were atypical. In one instance, the upper first premolar on the left side was intentionally broken off at the root, in addition to removal of the upper right lateral incisor (Figure 2b). One cranium (T5033) showed evidence of both deformation and tooth extraction. Roots were still present in the dental sockets and little bone remodeling had taken place, suggesting that tooth removal occurred close to the time of death. Considering that we estimated this individual to have died during the mid-30s to late 40s, a tooth extraction ritual took place at a much later age than was typical for Dawenkou, if such was even the case.

Relatively low frequencies of evidence for intentional body modification at Xishan, along with inconsistency in the means of carrying them out, might suggest imitation of foreign practices, rather than well established traditions, perhaps reflecting the precarious position of a community at the fringes of Yangshao influence. A detailed analysis of the corresponding funerary contexts would help test whether body modifications marked either immigrants and/or a particular occupational or social group.

The influence of human behavior on skeletal and dental tissues is certainly not limited to the results of intentional modification. Occupation-related activities may lead to unusual modes of dental wear or a patterned distribution of traumatic injuries all over the skeleton. Although generally present at low frequencies, several peculiar forms of dental wear are found consistently in Neolithic cranial series from the Yellow River Valley and its environs. Recognized effects include: disproportionately severe wear of the lower anterior teeth with labial rounding, a pattern best known to students of bioarchaeology from the classic study by Merbs (1983); matching grooves in adjacent interproximal surfaces of the rear teeth; lingual surface attrition of the anterior maxillary teeth; and uneven wear affecting only a single tooth in the whole dental set, as well as enamel chipping and tooth fractures. As considerable disagreement exists as to whether some or all of these unusual forms of wear are reliable indicators of non-dietary tooth use (e.g., Lukacs and Pastor 1988), we examined casts of affected dental surfaces under a scanning electron microscope, looking for markings that could not have been caused by ordinary chewing of food.

Severe wear of the lower incisors and canines (Figure 3a) was found at a low frequency in all cranial series from Henan that we examined. Examples included one case from Jiahu, an Early Neolithic Peiligang site, three cases from the Middle Yangshao site of Xipo, and two cases from Xishan. Such a pattern of wear is usually attributed to use of the anterior teeth in processing animal or plant material. Indeed, microscopic analysis of the lingual surface of affected upper incisors revealed deep parallel scratches running toward the edge of the tooth, which probably indicates that some hard fibrous material was pulled between the clenched teeth using a forceful anterior thrust (Figure 3b).

Examination of dental microwear, coupled with stable isotope analysis, also holds considerable potential for helping to reconstruct foodwebs created by ancient Chinese communities. Stable isotope analysis of a limited sample of human and animal bone from Yangshao sites (Pechenkina et al. 2005) has demonstrated that millets were an important source of calories for both humans and monogastric domesticated animals, including pigs and dogs. It seems almost certain that people consumed millet directly, perhaps in a variety of forms. It also seems nearly certain that people were secondary recipients of additional millet-derived calories as a result of consuming the flesh of cereal-fed domesticated animals. Pigs could have been fed millet directly and/or acquired millet calories through consumption of household refuse or even human excrement. Further dental microwear analysis will help reconstruct the respective positions on the food chain occupied by Yangshao farmers and their domesticated animals. In addition, we hope that this approach can help elucidate changes in cooking practices, as well as in the selection of weaning foods, both of which would add to our

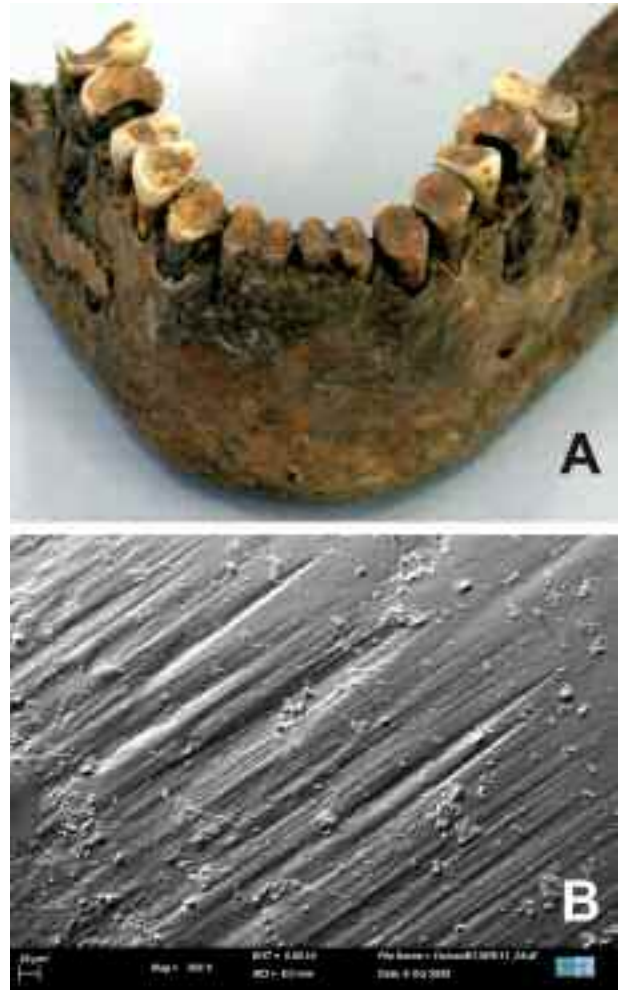


Figure 3. A: Mandible from Jiahu burial M363. Notice the severe wear of the anterior teeth, with labial rounding. B: Microwear on right upper central incisor (labial surface), distal aspect of tooth. Xishan burial M136.

understanding of Neolithic demographics and the distribution of diet-related diseases.

Analysis of the postcranial skeleton also carries considerable potential for the reconstruction of habitual postures and occupation-related physical activities. Instances of rare postcranial pathologies that tend to be linked to specific habitual postures were found on the remains of some individuals in skeletal series from Xipo, Xishan, and Chenjiagou. From Xishan, there were two identified cases of complete spondylolysis, as well as one case of partial spondylolysis that affected the lumbar segment of the vertebral column, resulting in separation of the neural arch from the vertebral body. As previously documented by Merbs (1989) for an Inuit skeletal series, lumbar spondylolysis is associated with hyperflexion of the body, possibly from habitually working while bent for-

ward, or lifting heavy loads. From the Xipo and Chenjiagou series, several instances of the dorsal expansion of distal articular facets on the metatarsals most likely constitute evidence of habitual squatting.

In addition to specific activity markers found on human skeletons recovered at Yangshao sites, there were marked changes in the distribution of fractures across the Yangshao skeleton over time (Pechenkina et al. 2007). Examination of Early Yangshao skeletons from the Jiangzhai and Shijia sites rewarded our efforts with evidence of a high frequency of cranial fractures, as well as cutmarks. Some of these occurred around the time of death, suggesting a fairly high rate of interpersonal violence, which corroborates the observations of Mary Jackes (2004). On the other hand, Middle and Late Yangshao skeletons from Xipo, Xishan, and Guanjia yielded virtually no evidence of cranial trauma. A majority of the traumatic injuries recognized on the remains of individuals from those sites might be attributable to simple accidents associated with daily life; most appear to have been well healed. One exception is found in the Xipo series, where healed fractures of the ulnae in male individuals may have been caused by the parrying of blows. When considered together with a lack of cranial injuries, these forearm fractures tentatively suggest a form of face-to-face combat following established rules, without annihilation of the opponent as a goal. Xipo is thought to have functioned as a regional center (Ma 2003) and may have served as a locus for community gatherings where displays of ritualized violence took place.

In this brief survey of the objectives and results of some recent collaborative bioarchaeological projects being carried out in China, we have attempted to emphasize the potential contribution that analysis of the human skeleton can make toward reconstructing human behavior in the past. Collectively, these projects represent the nexus of multiple efforts at cooperation among an international cast of investigators. In closing, we would like to suggest that more systematic collection of all available skeletal elements from archaeological contexts is as vital for understanding past human societies, as is the meticulous collection of artifacts. Missing elements or the effects of selective curation of skeletal parts—which unfortunately was standard practice during the previous century—represent considerable impediments to successful bioarchaeological analysis. Furthermore, targeted analysis of excavated human remains has the capacity for becoming considerably more informative when and if more detailed attention is paid to funerary contexts. In a 1961 paper, Yan Yan discussed the potential utility of skeletal analysis as a component of archaeological interpretation, specifically as a means for establishing the relationship between social institutions and human daily life. Nevertheless, to date, the overwhelming majority of bioarchaeological studies carried out in China have been performed with little reference to funerary

ary context, except for the specific purpose of refining sex assessment. As one consequence, interpretation of particular activity and health markers is generally restricted to comparisons either of the frequencies at which these markers are found to occur in skeletal series recovered from multiple archaeological sites or between sex and age groups. Conceptually putting human skeletons back into their graves would add a great deal of depth to our understanding and interpretation of many skeletal indicators, as well as allowing us to address the possible effects of social stratification, gender or age related divisions of labor, ethnic heterogeneities, and long-distance contact, on both individual and collective life experience during the ancient Chinese past.

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↳ PECHENKINA, continued on page 14

THE ARCHAEOLOGY OF BAN NON WAT, NORTHEAST THAILAND

A VIEW OF THE COLLABORATIVE PROCESS

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In this article I reflect on the importance of collaboration in all its forms to ongoing research at the site of Ban Non Wat in Northeast Thailand (Figure 1). Academically, collaboration crosses international and disciplinary boundaries. However, the level of collaboration goes much deeper than that, including close and ongoing relationships with those who still call Ban Non Wat their home, with the wider local community and, in a very real way, with all the past and present spirits of the “place.”

Ban Non Wat: An Archaeological Site

The archaeological site of Ban Non Wat, located in the upper reaches of the Mun River basin of Northeast Thailand, has been the location of significant research efforts from January 2002 to the present. Due principally to the efforts of the original team leaders, the site is becoming well known to the general archaeological audience (e.g., Scarre 2005). The site is also increasingly well known in Thailand through features on national and regional television and in regional newspapers.

Archaeologically, the site is significant for three reasons. First, it is one of just a few excavated Neolithic period sites in Thailand. Second, it is unusual in that Neolithic, Bronze Age, and Iron Age cemeteries have been discovered in the same place; a clear sequence can be excavated and transitions from one period to another explored. Finally, the scale and duration of continuous excavation effort is unusual in mainland Southeast Asia. The key outcome for researchers here is that during each of the nine field seasons at the site new discoveries have been made that significantly change interpretations of life in the past. Some important findings have emerged thus far. The first is a possible major reassessment of our understanding of the level of social complexity during the Bronze Age in Northeast Thailand. It may be that greater levels of social complexity and hierarchy were evident during this period (Higham and Higham 2008) than has been otherwise suggested (e.g., White 1995). Second, it may

also be that new dating procedures being tested at this site will prompt a similar reassessment of the dating of the general sequence in Mainland Southeast Asia (Higham and Higham 2008).

Collaboration

The fact that this project was even able to begin is a result of a long history of collaboration between, in particular, Professor Charles Higham of Otago University in New Zealand and his contacts in the Fine Arts Department of Thailand (FAD). A third, and very important, institutional partner here has been the National Research Council of Thailand (NRCT). After seven seasons of fieldwork under the leadership of Prof. Higham, Dr. Rachanie Thosarat (FAD) and Dr. Amphan Kijngam (FAD), a new research team has taken on the excavation of Ban Non Wat with a renewed enthusiasm for investigating how past communities integrated with their changing social and climatic environment. This represents a subtle shift in emphasis from a focus on ‘the rise’ of complex society in the region to understanding individual communities and their inter-relationships as entities in their own right. In the same way that Crawford (2006:85) has emphasised that, “low-level food-resource-producing societies ... ought to be considered stable adaptations and should be studied in their own right rather than being considered on their way to agriculture or from hunting and gathering,” we would claim that Bronze and Iron Age communities in Southeast Asia similarly deserve to be understood in their own right and not simply as staging posts on the way to Angkor.

The current project is led by a five-person team including Amphan Kijngam (archaeologist, FAD, Thailand), Nigel Chang (archaeologist, JCU, Australia), Kate Domett (biological anthropologist, JCU, Australia), Warrachai Wiriyaromp (archaeologist, Kasetsart University, Thailand), and Bill Boyd (geographer, Southern Cross University, Australia). A multi-disciplinary approach has been important from the planning



Figure 1. Excavation in progress, Ban Non Wat, January 2009. We are here for just a short time; Ban Non Wat as a community is longstanding.

stage such that even our initial research questions resulted from the collaborative process. With this in mind it may be important that the first presentation of our developing ideas was at a geography meeting, not an archaeology conference. Building on an initial interest in climate change and the human response to it, we stumbled upon an approach based on resilience theory. Such approaches are most common in environmental science programs where the “hard” sciences strive to incorporate social science approaches into their work (Adger et al. 2005; Redman 2005). Its application to our aims was obvious and it has provided a useful theme around which to build our collaborative research project.

“Community” Archaeology

Collaboration at Ban Non Wat, however, is more than academic. The fieldwork itself brings together a diverse team (Figure 2). In the mix we include academics and their students, the people of Ban Non Wat (constituting some of the most experienced and skilled archaeological excavators on the site), and paying volunteers recruited through the Earthwatch Institute. This is best imagined as an exchange of resources, knowledge, and skills. Much of the financial base of the fieldwork project is supplied by the Earthwatch volunteers themselves—many of whom return year after year to the project thus developing and applying real skills to the team. Part of the reason volunteers return seems to be the close relationship with the local community. Despite huge gulfs in terms of life experience, language, and culture, it would be hard not to get to know people when you are in the bottom of a muddy hole working together day after day. The excavation is a fascinating point of cultural exchange.

The people of Ban Non Wat have also developed real skills as archaeologists on site, with some having now accumulated the equivalent of three years or more of continuous field



Figure 2. One version of the ever-changing fieldwork team at Ban Non Wat. December, 2008.

experience. They fulfill an important teaching role for new volunteers and students. Beyond archaeology, without the practical skills of the local community employed in building roofs, constructing drying tables, building fences around excavation pits, and other such jobs, the practical business of running an archaeological excavation would be much harder.

For the academics and graduate students, the presence of volunteers on site challenges us to explain and to justify what we do on a day-to-day basis. This is a fantastic grounding device. Almost all archaeology is funded from public sources and our responsibility is to maintain communication with this wider public. This applies even more directly to the current community at and around Ban Non Wat itself, with increasing interest and requests to provide information on our work and its significance. It can even be claimed that the project makes a contribution to the contemporary resilience of this small community. Our funding not only allows the fieldwork to go ahead, but it also provides a useful income for a sector of the community during the traditionally difficult dry season between the rice harvest and when they begin to prepare the fields for the next planting.

At Ban Non Wat we not only seek permission of the living community, represented particularly by the village headman and council and the individual landowners, but also of the spirits of the ancestors and spirits of the place. As each new excavation begins it is important that a brief ceremony is held during which food, drink, and such things as tobacco and betel nut are provided to the local spirits. Incense sticks burn while the spirits have their fill, during which time nominated elders have a “conversation” with the spirits asking that the project will be successful and that no harm should come to the participants (Figure 3).

Summing Up

Archaeological investigations at Ban Non Wat continue a long-standing pattern of collaboration between foreign and



Figure 3. Yai Voi (right) and Yai Juang conducting the conversation with the spirits before excavation proceeds. November, 2008. Yai is a Thai personal pronoun that can be translated as 'elder.'

Thai researchers who work together to understand Thai prehistory and its place in our understanding of the human past. Continuing to collaborate internationally and across academic discipline borders will remain important into the future. It is important also to acknowledge all the actors in the collaborative process (and I am sure we have left out some in this discussion). Local communities, and the spirits, are as much a part of the process as the academics and professional archaeologists who might otherwise see themselves as at the center of the enterprise.

Acknowledgments. The Earthwatch Institute is the current major source of funds for work at Ban Non Wat. Other financial and important in-kind contributions are made by James Cook University, Southern Cross University, Kasetsart University and the Fine Arts Department of Thailand. The project would be impossible without the ongoing institutional support of the Fine Arts Department of Thailand and the National Research Council of Thailand. In particular, in January 2009, the NRCT generously funded and organized a three-day public seminar to help to make the aims and results of the current project better known to the wider regional public. Individuals are too numerous to mention, save Professor Charles Higham and Dr. Rachanie Thosarat. Without their efforts very few of the current team would have ever been introduced to the archaeology of Ban Non Wat. Of course, the most important thanks go to the people (past and present) of Ban Non Wat.

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RETIRING TO MAINE

Karen Vitelli

In spring, 2000, we found a little house in Maine, only 10 miles from my parents' home in the woods, and near my two sisters. It fit my husband's requirements of water views (a tidal river), big windows and good heat, and had sunny acres for potential gardens. We bought it, thinking we might sell after my sabbatical the following year. Instead we fell in love with the house, the place, the eagles that fly up and down the river, the fascinating people hidden in the Maine woods. My husband, a decade older than I, had been seriously ill. My parents were elderly and not well. It was time to make them the focus of my attention before it was too late. It took three years of to-ing and fro-ing between Maine and Indiana University before we made the decision for me to take early retirement and move here permanently.

I do miss students—although, happily, many visit. It's been surprisingly hard to let go of a lifetime of living with a long list of things that needed doing by yesterday. It took a couple of years to get the revised edition of *Archaeological Ethics* (2006) and my final volume on pottery (*The Neolithic Pottery from Lerna*) done, and to finish the last of the articles and chapters I'd promised, but all my publication obligations have now been met. I still direct the Franchthi Cave Excavation Project and work with colleagues to finish the remaining volumes in that important series on all aspects of early prehistory in Greece. I still work with a couple of Ph.D. students. I dragooned some local kids last summer to help dig clay from our riverbed and haul it up the steep slope so I could build myself a small kiln for ongoing experimental ceramics work. This spring I'll be the "visiting artist" in ceramics at the local elementary school. As luck would have it, the oldest archaeological site in Maine, on the banks of the mighty Kennebec River, is located in our town, on land that recently changed hands and is now owned by a guy who wants to develop and build. We're living out one of the scenarios from my first ethics class (1993)—and learning how much more complicated small town politics are than I had ever imagined. But as far as

my archaeological life goes, I mostly sit back and enjoy the terrific work that former students are doing.

Slowly but surely, I've discovered a whole new life outside of academe. I have time to work on political campaigns, local and

national. I have turned the vast fields of green grass around this old farmstead into gardens, and have become a pretty decent organic farmer, able to fill our freezer and cupboards with home grown produce that gets us through the long winter, and now, to help teach others through the community garden program I helped start. Work with our town Conservation Commission has introduced me to some wonderful, creative, and dedicated people, taught me about watersheds and water supplies, about organizing in a town whose population has wildly diverse interests and incomes, and no large indoor public meeting space. I write a monthly nature column for the town newsletter, and love the early morning calls reporting a huge owl that tried "to make off with one of my full grown turkeys," or a red-bellied woodpecker (making its way this far north for the first time). I worked one summer in a local greenhouse—what a great job.

I've shoveled more snow this winter than I saw in several decades in Bloomington, and occasionally get out the snowshoes and skis (free, from the town swap shop).

My parents have both moved on to a better place, and my husband is suffering through the brutal treatments still associated with cancer and that keep us from traveling. The sun doesn't shine every day, metaphorically or otherwise, but I wouldn't trade the time I've had here with my family for anything. This is (another) great way to live and a great place to be living it.



NATHALIE F. S. WOODBURY

1918–2008

Nathalie Woodbury died at the age of 90 on December 22, 2008 at her home in Shutesbury, MA, after a long illness. Her husband of 60 years, Dick Woodbury, was with her.

Nat was not your ordinary archaeologist/anthropologist—actually, not your ordinary anything. Although born in Humboldt, Arizona, she entered Barnard College, graduating in 1939. She then began graduate work in anthropology at Columbia University. In the mid-1940s she attended Emil Haurly's field school at Point of Pines, where Dick Woodbury was a supervisor. They were married in 1948, and began a shared life which included several moves and lots of archaeology—in Guatemala, New Mexico, and Arizona, and museum work in Arizona, New York and at the Smithsonian Institution. She taught at Barnard and held the position of Assistant Dean there; she also taught at Eastern New Mexico College, Brooklyn College, and the Universities of Arizona and Kentucky. She realized, however, that her skills were in studying anthropologists and how they organized themselves. She enjoyed creating networks; she had a business card that read: Facilitator. One of her most lasting contributions was to convince the American Anthropological Association (AAA) that it needed to become a “real” professional organization. She insisted that they needed a professional director, and she recruited Edward J. Lehman. Nat served the AAA in many ways: in the 1970s she was secretary, she edited the newsletter, and eventually edited the obituaries section, and she wrote a historical column, “Past is Present,” for *Anthropology News*.

Nathalie assisted SAA with editing *American Antiquity*, and served as Treasurer from 1965–69. I remember that when giving her report to the SAA Business Meeting, she first announced a Stamp Theme award (I'm not sure it had that name) to someone who had combined different denominations of stamps in a clever way when paying their dues, making the work of Treasurer less boring. At the end of her term, Nat continued to serve SAA on various finance committees, including the one for the 50th Annual Meeting in 1985. In

1988, she, along with Dick, received the SAA's Distinguished Service Award (see *American Antiquity* 53[4]:676–677 for more details).

Nat is remembered by many as a mentor, ready at all times to listen, advise, and encourage. In other obituaries, one friend, now an archaeologist and professor, says: “Nathalie was an independent thinker, a remarkable intellect, a powerful woman with an extraordinary sense of humor, and an anthropologist who managed her passion in the context of her spouse” (Anabel Ford, *Teocentli* #112, January 2009:47). Another recalled: “After helping launch [Dena Ferran Dincauze, Ann Stofer Johnson, and Alice Beck Kehoe] into professional careers, Nat kept up with them, making suggestions at turning points in their careers and generally keeping up with their progress” (Elizabeth Morris, *Teocentli* #112 January 2009:46).



After Dick retired from his last academic post at the University of Massachusetts in Amherst, Dick and Nat built a house in the woods in the small old New England town of Shutesbury about 10 miles from Amherst. Much to Nat's enjoyment, birds (and less happily, perhaps, squirrels and chipmunks) flocked to their deck in great numbers and deer wandered nearby. Both Nat and Dick launched into town business and politics, where Nat served as town select person and honorary dog officer, dogs being one of her special loves. This title came because of her work in the creation of the Dakin Animal Shelter, where she served on the board. Both Dick and Nat were active members of the Shutesbury Historical Society, helping maintain and organize the town's archives. The town of Shutesbury presented them both with a commemorative plaque for their service.

Look also for her obituary in the April 2009 issue of *Anthropology News*.

She is already missed by her many friends and colleagues, but especially by Hester A. Davis.

WILLIAM TIMOTHY SANDERS

1926–2008

William Sanders died at age 82 on July 2, 2008 in State College, Pennsylvania, after a brief hospitalization resulting from a fall. He is survived by his wife Lili, three daughters, nine grandchildren, and three great-grandchildren. His distinguished career began in the 1950s and continued until his death. He was responsible for the compilation of a huge body of archaeological information, most notably, the comparative record of settlement patterns over the entire culture history of the Valley of Mexico. His work was always informed by his anthropological perspective, the explanatory framework that made all of his archaeological endeavors meaningful. He leaves a rich published legacy and, more importantly, innumerable students and colleagues in many countries that were inspired by his energy, dedication, and insights. He did fieldwork in Canada, the United States, Mexico, Guatemala, Honduras, and Peru, and received many professional honors, including the A.V. Kidder Medal for Achievement in Mesoamerican Archaeology (1980) and membership in the National Academy of Science (1985).

Born the eldest in a large Long Island family on April 19, 1926, he became an avid reader and autodidact. Navy service entitled him to a GI Bill-funded education and he selected Harvard (Phi Beta Kappa B.A. 1949, M.A. 1951, Ph.D. 1957) because, in high school, he had read books by Ernest Hooton and wanted to study anthropology. There he was influenced by famous anthropologists such as Hooton, Alfred Tozzer, and especially Carleton Coon, to whom Bill credited his life-long fascination with comparative ethnography. Bill's university career coincided with the resurgence of cultural evolution, the development of cultural ecology, and archaeology's reinvention as the full partner of ethnology and physical anthropology. Bill's identity as a cultural ecologist and cultural materialist, which he maintained for life, had its roots in this intellectual ferment. Gordon Willey exposed Bill to the methods of regional settlement survey that later dominated his career and he experienced his first fieldwork at Kilarney Bay, Ontario, and Xochicalco and Tabasco, Mexico. He attended the Escuela Nacional de Antropología e Historia in Mexico City in 1951, forging relationships with archaeologists that he maintained for life.

Most think of Bill Sanders as an archaeologist, but he was a comparative anthropologist first and an archaeologist second, a relationship he saw as inseparable. He was also an avid ethnohistorian, most evident in his 1957 dissertation, *Tierra y Agua: A Study of Ecological Factors in the Development and Personality of Mesoamerican Civilizations*, based on fieldwork

among peasant farmers. He joined the University of Mississippi in 1956 and, while there, excavated at Etowah, Georgia, followed by work with the New World Archaeological Foundation in Chiapas. He joined Penn State University in 1959, where he spent the rest of his career and was Evan Pugh Professor Emeritus of Anthropology at the time of his death. In 1960, Eric Wolf invited Bill to a conference at the University of Chicago. Participants were charged with developing a program of research focused on the Basin of Mexico, home to successive urban civilizations about which surprisingly little was known. Bill's component of the resulting work included survey of the Teotihuacan Valley (1960–64), where he refined



or invented many basic methods for regional settlement survey. These were then applied to as much of the Valley of Mexico as could feasibly be surveyed. Products of this research include: *The Cultural Ecology of the Teotihuacan Valley* (1965); *Ancient Mesoamerica: the Evolution of a Civilization* (1968, coauthored with Barbara Price); and *The Basin of Mexico: Ecological Processes in the Evolution of a Civilization* (1979, coauthored with Jeffrey Parsons and Robert Santley), a classic analysis of the evolution of one of the world's great preindustrial traditions. He then directed

work at Kaminiljuyu (1968–73, codirected by Joseph Michels), and was a visiting professor at the Instituto Nacional de Antropología e Historia, the Universidad Nacional Autónoma de México, and the Escuela Nacional de Antropología e Historia. Bill is fondly remembered as a mentor by many Mexican students who later became distinguished professionals. He later organized excavations at Tlajinga 33 at Teotihuacan. The Honduran government asked him to head up a project at Copan, one of the most famous of all Classic Maya centers, work he began in 1980 (David Webster, co-director). He finally retired in 1994, but remained active.

Bill was always receptive to new ideas and always free with whatever he knew. He was never mean-spirited in the fractious and sometimes vituperative arena of Mesoamerican archaeology, and he was therefore universally respected. His concern was always issues rather than personalities, and to the day he died he retained the touching faith that if only other people listened to him long enough—preferably over beers—they would agree with him.

—David Webster and Susan Toby Evans

For a more in-depth chronicle of Bill Sander's career, see *Ancient Mesoamerica* 19(2):157–163 (2008).



REPORT FROM THE SAA BOARD OF DIRECTORS

Barbara J. Mills

Barbara J. Mills is the Secretary for the Society for American Archaeology.

The SAA Board of Directors met twice at the 74th Annual Meeting, on the 22nd and 25th of April. The first meeting included outgoing Director Dorothy Lippert, Director Scott Simmons, and Secretary Michael Glassow; the second meeting included new Directors Patricia Crown and Karen Hartgen, along with Treasurer-elect Chris Dore. The two-day meeting began with reports from the officers and the Society's Executive Director. After these reports the Board considered a number of items stemming from committee and interest group reports, our annual meeting and publications, and the current budget situation. Board liaisons to different committees were selected. On the second day, the representatives of many of the SAA's committees made presentations to the Board. The Board also selected their nominees to the Nominations Committee (two are elected and two appointed by the Board). The minutes of this two-day Board meeting will be published on the SAA website after their approval at the Board's fall meeting.

President Snow highlighted many of the SAA's actions and activities over the past year. Poster sessions at the Annual Meeting have been shortened from four hours to two hours. The meeting in Atlanta was smaller than the one in Vancouver (which was a peak year for the Society) but future venues are expected to see a rebound in submissions and attendance. Plans for the 75th Anniversary meeting next year in St. Louis are in full swing with both a 75th Anniversary Task Force and a 75th Annual Meeting Program Committee actively working toward the goal of a memorable event. Alison Rautman has been appointed Editor of *American Antiquity*, who replaces Steve Plog. A replacement for Andrew Duff, Editor of *The SAA Archaeological Record*, needs to be sought as his term ends next year. The Board approved the implementation of an online journal manuscript system, Editorial Manager⁽¹⁾. The bylaws of the Society were revised at the suggestion of legal counsel and voted on by the membership. Fundraising is moving ahead through the 3.5 years long 75th Anniversary Campaign, although the goal of \$500,000 may need a closeout campaign to fully realize. The President was the contact person for many issues that came to the Society. One of them was a request for support by the National Center for Science Education in their effort to convince the Texas Board of Education that creationism should not be part of science education. Another was continued monitoring of the proposed regulations for culturally unaffiliated human remains.

The Executive Director, Tobi Brimsek, presented a Society update on finance and administration, fund development, government affairs, information services, leadership and governance, marketing, meetings, membership, publications, public education and outreach, and public relations/media relations/communications. One of the highlights that is most visible to the membership is the launch of the new SAA website, which was rolled out in February. An electronic voting system, now in its second year, was successful and seems to have taken root among the membership. SAA continues to expand its base of advertisers and exhibitors, but as a result of the wider recession, we are already beginning to see a downturn. Hawaii was contracted as the site for the 2013 Annual Meeting, which is anticipated to be a draw like the Puerto Rico meeting. Membership was at a high of 7,646 in 2008, which was the third consecutive record-setting year. Renewals are beginning to decline, however, and the Executive Director has been engaged in extra planning for budget savings in the Washington office. Streamlining of banking services has resulted in significant cost-effectiveness. Government Affairs was extremely active with the change in administration and continues to help monitor the effects of developments in the cultural resources arena. The Publications Program continues to grow and journal mailings have been on time. The SAA Press title list is expanding and there are new pages for the publications on SAAweb. The Manager for Education and Outreach worked closely with the Public Education Committee to make the transition to SAAweb.

The Secretary, Michael Glassow, reported the results of the SAA elections. Christopher Dore is Treasurer-elect, with Patricia Crown and Karen Hartgen elected as Directors and Heather Lapham and Kitty Emery as members of the Nominating Committee. The total number of ballots sent was 8,051 and 1,709 were returned (21.2%).

Paul Welch, Treasurer, reported that the Society is fiscally sound but that it faces an extremely tight year ahead. The operating budget for FY 2008 was very strong because of membership dues and revenues from the Vancouver meeting. But, the combination of the recession and a relatively smaller meeting in Atlanta are cause for concern. Investments (endowments and the Reserve Fund) had a bad year and are down 19.4–21.1 percent of their value. But, compared to the stock market, this is



The SAA Board of Directors: Front row, left to right: Margaret Conkey, Tobi A. Brimsek, Kathryn Kamp, Patricia Crown, Karen Hartgen; Back Row, left to right: Jonathan Driver, Barbara Arroyo, Barbara J. Mills, Paul D. Welch, Cory Breternitz, Christopher Dore

not as great a loss as it could be. To keep reserves up and to avoid selling low, the Treasurer recommended putting much of the FY 2008 operating surplus in a ready reserve fund toward 2009 operations, should it be required. The 2010 anniversary meeting in St. Louis is expected to be a bigger draw than Atlanta.

A large amount of time was spent by the Board discussing informational and action items of the various committees, interest groups, and task forces. The Native American Scholarships Proposal was approved and a new call should go out soon. Earnings from the General Endowment were allocated to a number of different funds, including the Native American Scholarship Fund and a new Legal Consultation Fund. The latter fund was established to provide counsel on issues such as participation in other social networking sites, which the Board regards as inevitable in the future. New committee chairs were appointed. The Board also adopted a new listserv policy that will better allow committees and interest groups to communicate with their members. The 2009 Program Committee Chair, Michael Smith, met with the Board and was thanked for all of his efforts, including his suggestions for improving the Society's annual meeting software. The Board spent considerable time discussing the Publications program and meeting with the Society's editors: Andrew Duff (Editor of *The SAA Archaeological Record*), Alison Rautman (Editor of *American Antiquity*), Luis Jaime Castillo Butters and Helaine Silverman (Coeditors of *Latin American Antiquity*), Paul Minnis (Editor of *The SAA Press*), and the Chair of the Publications Committee (Katharina Schreiber). A task force for the selection of the next Editor of *The SAA Archaeological Record* was established, with Katharina Schreiber as Chair. The Publications Committee was charged

with developing a brief procedures manual for the selection of new editors.

Other visitors to the Board meeting included the Public Education Committee (Joelle Clark), the Student Affairs Committee (Kim Christenson), the Fund Raising Committee (William Doelle), the Committee on Repatriation (Susan Bruning), the Committee on Government Archaeology (Laurie Rush), the Government Affairs Committee (David Cushman), and the co-Chairs of the 75th Anniversary Task Force (Jeremy Sabloff and James Snead).

SAA 2010 CALL FOR NOMINATIONS

The 2010 Nominating Committee of the Society for American Archaeology requests nominations for the following positions:

President-elect (2010) to succeed to the office of President for 2011-2013

Secretary-elect (2010) to succeed to the office of Secretary for 2011-2013

Board of Directors member, Position #1 (2010-2013), replacement for current member Jonathan Driver

Board of Directors member, Position #2 (2010-2013), replacement for current member Kathryn Kamp

Nominating Committee Member, Member #1 (2011)

Nominating Committee Member, Member #2 (2011)

If SAA is to have effective officers and a representative Board, the membership must be involved in the nomination of candidates. Members are urged to submit nominations and, if they so desire, to discuss possible candidates with the 2010 Nominating Committee Chair Kenneth M. Ames (email: amesk@pdx.edu).

Please send all nominations, along with an address and phone number for the nominated individual, to:

Chair, 2010 Nominating Committee
c/o SAA Executive Director
900 Second St., NE #12
Washington DC 20003-3560

or fax to 202 789-0284

or email to tobi_brimsek@saa.org

Please note that nominees must be current members of SAA. Nominations should be received no later than September 3, 2009.



SOCIETY FOR AMERICAN ARCHAEOLOGY

74TH ANNUAL BUSINESS MEETING

MINUTES OF THE MEETING

Michael Glassow, RPA

(Completed his term as Secretary at the Annual Business Meeting)

President Snow called the 74th Society for American Archaeology Annual Business Meeting to order at 5:10 PM, the Secretary having determined that a quorum was present. He then asked for a motion to approve the minutes of the 73rd Annual Business Meeting held in Vancouver, British Columbia, on 28 March 2008 (published in *The SAA Archaeological Record*, volume 8, number 3). The motion was moved and seconded, and the membership approved the minutes.

In his report, President Snow expressed his continued amazement over the alacrity and efficiency with which the Society functions, which he acknowledged was due to efforts of both the membership and the Washington office staff. He indicated that the Society continues to improve its efficiency and effectiveness despite diminishing resources related to the current recession. He noted that this year would be fiscally difficult for the Society, this being partly reflected in the annual meeting attendance of only 3025, much lower than last year's. As a result, no funding is available for new initiatives. Nonetheless, the allocatable surplus from last year will balance shortfalls during 2009. He said that reserves are still healthy, and he expects that the Society can continue at current levels of operation through the recession. He predicted that 2010 may be another difficult year, but he felt that the Society can weather the difficult economic times.

He mentioned that he has written about a letter a week on behalf of the Society to people or organizations, reminding them of their obligations to preserve and protect the archaeological record. When necessary, he said he had consulted with the Board and committees. He was particularly gratified by the membership's response to his email regarding actions taken by the Texas State Board of Education regarding teaching of evolution, after which he wrote a letter concerning its unreasonable position. He expressed concern over future issues that would be difficult for the Society to address given their complexity and

potential to polarize the membership, but he noted that efforts are underway to address this prospect.

President Snow reported that Alison Rautman was appointed Editor-elect of *American Antiquity*, replacing Stephen Plog, who is stepping down. He thanked Plog for his tireless efforts. He indicated that the journal editors are now using the new software, Editorial Manager®, which has made the journals' operations easier and quicker. He also thanked members of the Nominating Committee for an outstanding slate of candidates, and he also thanked the candidates who agreed to run for office. Thanks also were offered to outgoing Board members, Michael Glassow, Dorothy Lippert, and Scott Simmons. In addition, he thanked Program Chair Michael Smith and his committee, and Local Arrangements Chair Terry Powis and his committee for their efforts in organizing the meeting. He also acknowledged the Society's Executive Director, Tobi Brimsek and each of the Washington office staff members.

In concluding his report, President Snow said that he could not imagine doing his job without the support and assistance of Tobi Brimsek and her staff. He also acknowledged the help of past Boards and Presidents. He said he also depended on the advice of many committees, the hard work of task forces, and dedication of the Society's officers and staff. He said he regards the Society as the finest organization of its kind anywhere, and he felt that he is leaving office confident that it is in good hands.

Treasurer Paul Welch reported that the society remains fiscally sound despite an extremely tight budget environment. He said that FY 2008 was a good year, in large part due to the largest membership ever and the largest meeting attendance ever. As a result, the end-of-year surplus was \$249,685. However, the rest of the financial picture is problematic. Unrealized losses on investments (endowments and the Reserve Fund) actually resulted in a bottom-line deficit. Losses were not as severe as the stock market's because 70% of the Society's investments are in bond funds, which did not lose as much value as stocks did. He emphasized that the unrealized losses are on paper and would become "realized" only if investments were sold. He said, how-

ever, that the Reserve Fund contains a cushion of money that could be spent, but that it would be best to avoid selling these assets at their current low value.

Treasurer Welch indicated that it is too early to tell how FY 2009 will turn out. So far, membership and meeting revenues are lower than expected; nonetheless, the surplus from last year should allow the Society to avoid having to sell assets in the Reserves. He was optimistic that membership and meeting attendance numbers in FY 2010 should be better than this year. However, he thought that balancing next year's budget will be difficult, and doing so will require omitting or reducing expenses or activities. In his overall assessment, he felt that the current fiscal challenges are manageable and that the Society is not in financial crisis. The reserves will not have to be drawn upon this year. Nonetheless, the Society will have to become more thrifty than it has been in recent years.

In his report Secretary Michael Glassow presented the results of the election held in December. Christopher Dore was elected Treasurer-elect, Patricia Crown and Karen Hartgen were elected Directors, and Heather Lapham and Kitty Emery were elected to the Nominating Committee. He said that 8,051 ballots were sent and 1,709 were returned, for a return rate of 21.2%, which is typical of the last decade or so. He indicated that 117 of the returned ballots were invalid. Secretary Glassow thanked all candidates who ran for office.

Executive Director Tobi Brimsek said in her report that 2008 was a roller-coaster year, but throughout the turmoil the Society has remained on a steady course. She said that the 2008 membership was the largest ever, with over 7,600 members, and that the annual meeting was the largest, with an attendance of over 4,000. She acknowledged Treasurer Welch's report that the value of investments had declined, but she noted that in March 2009 there was some rebound. She emphasized that the Society must keep the long view in mind. She said that the Society's leadership dealt with major initiatives and growth challenges over the past year.

Regarding the Washington office staff activities since the last annual meeting, Executive Director Brimsek first highlighted the development of the Society's new website, replacing the one that had existed for the last 14 years. This was accomplished with help of the Board-appointed Web Task Force. She reported that advertising and exhibit goals were met or exceeded and that the membership was served effectively. In the realm of government affairs, she said that the Government Affairs manager worked with the Government Affairs Committee in addressing the transition of the administration Washington DC, ratification of the Hague Convention, reauthorization of preservation programs in the Farm Bill, approval of the bilateral agreement with China, and the NPS nationwide programmatic agreement. She



Christopher Dore



Patricia Crown



Karen Hartgen

also reported that the Society worked to strengthen relationships with a broad range of preservation organizations. Regarding publications, she mentioned that the manager of publications guided implementation of the new online submission system for the Society's journals, Editorial Manager®, and that the delay for posting journal articles on JSTOR has been shortened to two years. She mentioned that staff members concerned with education and outreach, as well as financial and administrative services, also have been working effectively in support of Society activities.

Consistent with the statements by the President and Treasurer, Executive Director Brimsek noted that the past year was successful in operating terms and that the deficit is solely the result of unrealized losses in the Society's investments. She emphasized, however, that the Society will eventually recover these losses and that the Society is fundamentally healthy and sound and that budget shortfalls can be faced and managed.

In closing, Executive Director Brimsek said that she hopes all will be attending the 75th Anniversary meeting in St. Louis next year, and she mentioned that the Call for Submissions was mailed on April 1st. She expressed confidence that the Society's nimbleness as an organization and its vibrancy will see it through the current difficult year.

The next report was that of the Editor of *The SAA Archaeological Record*, Andrew Duff. He thanked all those who contributed to *Record* over the past year, particularly the contributors to several themed issues and the members who solicited and compiled the papers for these issues. He also acknowledged the efforts of several Assistant Editors and the publications manager in the Washington office. Finally, he thanked those who have submitted materials still in the queue and encouraged those who were thinking of writing something for the *Record* to do so and submit it to one of the Assistant Editors. He concluded by noting that several special topics are slated for the upcoming year, and he encouraged members to contribute new material for publication in the *Record*.

The Editor of *American Antiquity*, Stephen Plog, reported that his office received 113 manuscripts over the course of the year, a significant increase over the previous year. The average processing time from receipt to decision was 16 weeks, and the acceptance rate was 31%. He said that the transition to the Editorial Manager^(t) software, begun last September, had gone smoothly thanks to John Neikirk, manager of publications in the Washington office; his editorial assistant; and a company representative. He mentioned that use of the software a major improvement in the editorial process. He indicated that the transition to the new editor has proceeded smoothly. He concluded by thanking his editorial assistants and John Neikirk.

Latin American Antiquity Coeditor, Helaine Silverman, indicated that she and coeditor Luis Jaime Castillo began their terms of office at the last annual meeting. Since that time, she said that they received 65 new submissions, accepted 14 of these, and rejected 41 (31 accepted papers had been inherited from the previous coeditors); five papers were the subject of revise-and-resubmit decisions, and five papers are currently out for review. She mentioned that they have been able to keep within an eight-week turn-around time, and the time from manuscript acceptance to publication is under 14 months. She said that a future issue will have a theme concerning recent research in the Lake Titicaca Basin. She indicated that the new submission software has worked very well for both authors and editors despite a few glitches. Regarding topics of submissions, she said that the Maya dominate and that Mesoamerica as a whole accounts two-thirds. She reported that the book reviews editor is instituting book review essays covering three or more books. In concluding her report, Silverman said that she and her coeditor thank members of the journal's editorial board and her editorial assistant, as well as John Neikirk in the Washington office.

Paul Minnis, Editor of the SAA Press, thanked the previous Editor, David Anderson, for facilitating a smooth transition of the editorship. He reported that two volumes were published this year, concerning lithics and chronometrics. He said that the production tempo should increase next year and that he expects publication of two new readers, one on tribal societies and another on hunter-gatherers. He also said that the first volume in the Contemporary Perspectives series should be available for the annual meeting in St. Louis and that he anticipates at least one other volume.

Upon conclusion of the reports, President Snow presented the Society's awards for outstanding achievements and special contributions to the health of the Society. (These awards are listed in the meeting program.)

President Snow presented the Lifetime Achievement award to Linda Cordell. In her remarks upon receiving the award Cordell said that the award meant a lot to her as it came from the mem-

bership of the Society for American Archaeology. She noted that this award used to be called the Distinguished Service Award, and although she is the first woman to receive the award under its current name, four other women had received the award under its earlier name. She remarked that archaeology by its nature is concerned with the full biological and cultural diversity of humankind and that tools for learning about the human past are constantly being developed and refined. She said that archaeologists are beginning to reflect diversity in our society in general and that this is the way that excellence will be ensured. She concluded by saying that if receiving the award inspires and encourages some who might otherwise not fully participate, her gratitude and happiness would be even greater.

President Snow then asked whether there was any new business. Patricia Lyon asked that the hotel be made aware of inadequacies in their compliance with the Americans with Disabilities Act, which she experienced while staying at the hotel. Executive Director Brimsek indicated that she would attend to this. No other new business was brought forward, so President Snow asked Jon Muller to present this year's Ceremonial Resolutions. Recognized were outgoing officers Dean Snow and Michael Glassow, outgoing directors Dorothy Lippert and Scott Simmons, the Washington office staff and particularly Tobi Brimsek, and the meeting's Program Committee and Local Advisory Committee. Also recognized were committee chairs and members who had completed their service and others who had served the Society in other ways. Muller also asked that wishes be extended to members of the armed services and that sympathy be extended to families and friends of members who had died since the last annual meeting.

In his closing remarks, President Snow said that it has been an honor to serve the society as President, and he thanked Tobi Brimsek and her Washington office staff and all who provided advice. He also thanked the outgoing board members. After these remarks, he introduced Margaret Conkey, the incoming President of the Society. President Conkey thanked outgoing President Snow and Tobi Brimsek for their service. She emphasized that the Society needed to remain fiscally sound, and she said the membership should look forward to enjoying the 75th anniversary of the Society next year. She then asked for a motion to adjourn. It was so moved and seconded, and the membership voted to adjourn at 6:27 PM.

REPORT OF THE PRESIDENT

Dean Snow, RPA

The months since we met in Vancouver have flown by, even faster than my first 12 months as your president. I continue to be amazed by the alacrity and efficiency with which this, a vol-

unteer membership organization, is able to function. No small part of this is the result of hard work in our Washington office, but much also comes from the dedication of you, the members of the SAA, particularly those of you that are involved in committees, task forces, interest groups, and elected offices.

The Society continues to work to improve both its efficiency and effectiveness serving both the membership and the broader discipline, even as the current recession pinches our resources. These activities are often nearly invisible but they are vitally important to the mission of the SAA.

There are fewer of us here in Atlanta than there were in Vancouver. That might be true even without the economic recession. It is a difficult year, but I get the impression that many of us are husbanding our resources so that next year's 75th anniversary meeting in St. Louis will be an event to long remember.

As I said last year, the Society is financially strong, but this year it is with a caveat. This year we do not have funding for new initiatives, and things like deferred maintenance have been unavoidable. However, we again ended the year with an allocatable surplus, which will largely balance anticipated shortfalls in 2009. Our current reserves are healthy and as I predicted a year ago we can continue at current levels of operation through the recession. Right now we expect 2010 to be another difficult year, but we are ready to weather the storm however long it lasts.

There have been the usual problems to which the president must respond by sending letters to people or organizations, reminding them of their obligations to preserve and protect the archaeological record. These *opportunities* come at a rate of about one a week. Sometimes, when the issue has not been controversial within the membership, I have spoken or written quickly without consultation. At other times I have consulted with the Board and appropriate committees first, and I have invariably found their responses to be swift and wise.

I was particularly gratified by your collective response to my email regarding the actions of the Texas State Board of Education. The SAA has long observed a policy of commenting only on issues that are directly relevant to archaeology, and this policy has served us well. At the time I worried that my own passion on the issue of the teaching of evolution might lead me and the Board to presumptuous action, so I took the very unusual step of contacting the entire membership directly. The Board was unanimous and the membership virtually so in response; I am very pleased that the SAA joined a larger effort to deflect this latest assault on reason.

On the other hand, I fear that there are storms unseen beyond our horizon that could do the SAA great damage if we go for-

ward unprepared. The current case involving the proper disposition of early Holocene human remains at the University of California at San Diego is a very complex one that has the potential to polarize our membership. It is imperative that we find a process for amicable resolution of cases like this before passion overtakes reason, rather than after some new controversy damages the fabric of the SAA. We have begun that effort but we have a long way to go.

You will hear from our editors shortly. Alison Rautman has been appointed Editor-elect of *American Antiquity*. She replaces Stephen Plog, who I thank for his tireless efforts as he steps down. Steve and other current and future editors use our new Editorial Manager® software, which is making things easier and quicker for *everyone* involved in our publications.

The Society, with the leadership of Bill Doelle, chair of the fundraising committee, continues the major fund-raising campaign built around the coming 75th Anniversary meeting in 2010. The goal of the campaign is to increase the size of our endowments which in turn will produce larger payouts. "Give the SAA a Gift on its 75th" is designed to enlarge our endowments. Our campaign target is a half million US dollars to benefit the SAA's three endowment funds. As of this month we have received almost \$330,000 in gifts and pledge payments. You will remember from last year that I have identified sources for all the remaining funds we need to meet our goal; they are in your pockets. As I pointed out last year that's a mere half a latte a month. Please give what you can (dollars, not lattes); our goal is within reach.

I want to thank the Nominating Committee, chaired by Susan Chandler, for an outstanding slate of candidates, and to thank all the candidates, both those who were elected and those who were not, for their exemplary willingness to serve the Society. I also want to acknowledge and thank our outgoing officers and Board members, Michael Glassow, Secretary; Dorothy Lippert, Board of Directors, and Scott Simmons, Board of Directors. They brought their passion, their hard work, and their special qualities to the board and we thank them.

The meeting's success is the result of many people's hard work. We need to thank Program Chair Michael Smith and his committee and Local Arrangements Chair Terry Powis and his committee for their efforts in putting this meeting together. We must also acknowledge the work of SAA's executive director, Tobi Brimsek, and the SAA Staff in this meeting. Will the staff please stand as I call your names: Kevin Fahey, David Lindsay, Maureen Malloy, John Neikirk, Keisan Griffith-Roberts, Meghan Tyler and of course Tobi Brimsek.

Reflecting upon my two years as President of the SAA, I still have to say again that I cannot imagine doing this job without

74TH ANNUAL MEETING

the daily support and assistance of Tobi Brimsek and her staff in Washington. Moreover, the continuing contributions of past boards and past presidents sustain the Society as we face challenges both predicted and unexpected. I have depended upon the wise advice of our many committees, the hard work of our task forces, the dedication of our officers and staff, and the continuing counsel of past officers. All of this is in the context of an organizational structure created by the wise decisions made by our predecessors. I regard the SAA as the finest organization of its kind anywhere, and I will leave office confident that it is in good hands.

In closing, I want to say that it has been an honor and privilege to serve as SAA President these past two years. I want to thank you all for your advice. I want to again extend a very special thanks to Tobi Brimsek and the SAA Staff without whom this job would be impossible. Our staff is very professional and we are extremely lucky to have them. They do much that is at once indispensable and for the most part invisible to the membership.

I also want to say thank you to the three outgoing Board members, Mike Glassow, Dorothy Lippert, and Scott Simmons for their contributions and hard work. It has been a pleasure to serve with them, and I know you all appreciate their excellent service to the Society for American Archaeology.

And now it is now my great pleasure to introduce Margaret Conkey, your new president who will say a few words before adjourning the meeting.

REPORT OF THE INCOMING PRESIDENT

Margaret W. Conkey, RPA

I begin my remarks with many thanks to Dean for his three years of service in what I have come to see—not unexpectedly—as a very time-consuming job, involving incredible amounts of email, ongoing dialogues with many colleagues on important and prickly issues, and juggling many issues at the same time. Many good things were implemented on your watch, Dean, from the launch of a new SAA website, a historically high level of membership, to setting in motion substantive plans for the 75th anniversary meeting next year in St Louis. I personally deeply appreciate those who structured our officer process to have a year of apprenticeship for the incoming President. And, while it should go without saying, it can never be said enough—thank goodness for Tobi Brimsek and the superb staff without whom we would all be flailing about!

This will be an excellent Board to do what we need to do in the next few years—remain fiscally sound in a tectonic environment;

attend with vigor to the issues of diversity and inclusivity, thoughtfully and yet joyously celebrate our 75th anniversary in 2010; and be proactive in our relations with a new Secretary of the Interior as part of being ever-vigilant and ethically engaged in many arenas, with the state of archaeological and cultural resources. While this is indeed an excellent Board, I wish we could keep Dorothy (Lippert), Scott (Simmons), and Mike (Glassow), who have just gone off the Board, but we know they will still be contributing (or, as was made famous by the Eagles' song, *Hotel California*, "You can check out but you can never leave!").

The leadership style that I prefer is fully dependent upon open communication and collaboration, so this is an explicit call for you to be forthcoming with any and all concerns and with any and all creative ideas. We are thoroughly dependent upon our members—that is, on you—for so much that is integral to the future and vitality of the SAA. We prefer that you join in and help solve problems, rather than silent grumblings. We encourage everyone with any kind of interest to contact us about serving on a committee, and welcome your inquiries. This is a dynamic, albeit volunteer organization, where new colleagues are made, and all sorts of issues need to be tackled with smart and thoughtful archaeologists at the helm. The new website offers you opportunities to see the large committee structure and where you might want to serve. Lastly, as you leave the room tonight (and as you finish reading this), do make a contribution to our Dig Deep Campaign for the 75th. We are as interested in the percentage of members who give, at any level, as in the amounts given, without, of course, giving up on our final target!

I will see you in St Louis—for dancing, videos, retrospectives, another Ethics Bowl, poster contest, and other great events of an SAA meeting.

THE FOLLOWING REPORTS FROM THE ANNUAL BUSINESS MEETING CAN BE VIEWED ON SAAWEB UNDER ABOUT THE SOCIETY

- REPORT OF THE TREASURER
- REPORT OF THE EXECUTIVE DIRECTOR
- REPORT OF THE EDITOR, *THE SAA ARCHAEOLOGICAL RECORD*
- REPORT OF THE EDITOR, *AMERICAN ANTIQUITY*
- REPORT OF THE COEDITORS, *LATIN AMERICAN ANTIQUITY*
- REPORT OF THE EDITOR, *THE SAA PRESS*



2009 AWARD RECIPIENTS

SAA award recipients are selected by individual committees of SAA members—one for each award. The Board of Directors wishes to thank the award committees for their hard work and excellent selections, and to encourage any members who have an interest in a particular award to volunteer to serve on a future committee.



Presidential Recognition Award

PHILLIP L. WALKER

[Kathy Schreiber accepted award]

Phillip L. Walker served continuously as a member and of the Society's Committee on Repatriation since 1998 until his untimely death in early February of this year. He cochaired the committee from 2000 to 2002. In 1991 and 1992, before the committee was established, he chaired SAA's Task Force on Repatriation. As a bioarchaeologist and physical anthropologist, he played a major role on the committee in drafting or editing SAA position statements. He brought to the committee his considerable expertise in the analysis of human skeletal remains and his experience interacting effectively with Native American groups in California. Further, he served as an informal liaison between SAA and the American Association of Physical Anthropologists. Phil also was a member of the Department of Interior's NAGPRA Review Committee during the first five years of its existence, and more recently he served on the Smithsonian Institution's analogous Review Committee.



Gene Stuart Award

ANDREW LAWLER

Andrew Lawler, a senior writer for *Science Magazine*, has earned the 2009 Gene S. Stuart Award for his thoughtful, informative, understandable, and sensitive articles about archaeological research. He writes with great clarity about the science of archaeology; important research questions; and the various forces, manmade and otherwise, that jeopardize the archaeological record. His articles about the Indus Civilization sensitively address modern geopolitics as they impact current archae-

ological research and discuss how archaeologists deal with local heritage issues and really talk with descendant communities. His articles inform the reader about the archaeologists themselves and engage the reader in exploring a long-term perspective on archaeological research. Andrew Lawler's articles successfully bring the reader up-to-date on an archaeological culture, show how concerted research efforts bring understanding of the past, and give insights into the difficulties of preservation in rapidly developing areas.



Student Poster Award

SUSAN M. MENTZER

This year's Student Poster Award goes to Susan M. Mentzer for her poster "Micromorphology and geochemistry of the mountaintop sanctuary of Zeus on Mt. Lykaion, Greece."



State Archaeology Week Poster Award

Each year the State Archaeology Week Poster Contest is held at the Annual Meeting, sponsored by the Public Education Committee and the Council of

Affiliated Societies. Winners are decided by a vote of those viewing the posters and turning in a ballot included with their registration packets. The winners are:

First Prize: GEORGIA

Second Prize: SOUTH CAROLINA

Third Prize: MINNESOTA



Ethics Bowl

WINNER: TEXAS A&M

Team members (left to right): Jessi Halligan, Laura Gongaware, Marilyn Cassidy, Christopher Bartek, and Laura Short. Their faculty mentor is Suzanne Eckert.

Dienje Kenyon Fellowship

KAYLA L. PETITT

The SAA is proud to present the 2009 Dienje Kenyon Fellowship to Kayla L. Pettitt for her proposed research on interactions between prehistoric peoples and vertebrate faunas, with a focus on mammals.



Fred Plog Memorial Fellowship

SAMUEL DUWE

The SAA is proud to present the 2009 Fred Plog Memorial Fellowship to Samuel Duwe of the University of Arizona.

Douglas C. Kellogg Award

BENJAMIN R. VINING

The SAA is proud to present the 2009 Douglas C. Kellogg Award to Benjamin R. Vining for his proposed dissertation research on paleoenvironmental changes and human adaptive strategies surrounding bofedales in the Lake Suches basin of highland Peru.

Arthur C. Parker Scholarship for Archaeological Training for Native Americans and Native Hawaiians

TRAVIS MAKI (LAC DU FLAMBEAU BAND OF LAKE SUPERIOR CHIPPEWA INDIANS)

NSF Scholarships for Archaeological Training for Native Americans and Native Hawaiians

SHIANNE SEBASTIAN (EASTERN PEQUOT INDIANS OF CONNECTICUT)

IRA K. MATT (CONFEDERATED SALISH AND KOOTENAI TRIBES)

WESLEY D. MILES (NAVAJO NATION)



Student Paper Award

MICHAEL MATHIOWETZ

This year's SAA Student Paper Award is presented to Michael Mathiowetz of the University of California at Riverside for his paper titled "The Son of God Who is in the Sun: Political Authority and the Personified Sun God in Ancient West and Northwest Mexico". His multidisciplinary research weaves together evidence from artistic symbolism, archaeology, ethnohistory, ethnography, and indigenous oral traditions to argue that solar worship, centered on the young sun god Xochipilli, was introduced to Paquimé, in northern Mexico, by a high status ritual leader and his supporters from the Azatlán culture of western Mexico. From there, the ideology and symbolism spread into the American Southwest. Mathiowetz's paper contributes to both theoretical and regional issues in Mesoamerican and Southwestern archaeology and demonstrates the importance of using multiple lines of evidence to address prehistoric social, political, and ideological developments.



Dissertation Award

TIMOTHY C. MESSNER

Dr. Timothy C. Messner has written an outstanding dissertation ("Woodland Period People and Plant Interactions: New Insights from Starch Grain Analysis") in which he investigates Woodland Period wild plant-use practices for the Middle Atlantic region, with particular emphasis on the Delaware River Watershed, using a recent methodological innovation called

starch grain analysis. Microscopic starch grain analysis is carried out on residue found on lithic and ceramic artifacts, allowing identified plants to be linked directly to artifact use. As he was the first to apply this methodology to temperate North America, Dr. Messner's study included the creation of a comparative database of starch grains, selected through an exhaustive search of ethnohistoric and archaeological studies of regional ethnobotany. Based on his results he argues that Woodland populations continued to employ myriad wild plants long after the shift to food production for both subsistence and medicinal purposes. This study brings a new methodology to classic archaeological questions with inspiringly rich and nuanced results.

Award For Excellence In Public Education



THE CENTER FOR AMERICAN ARCHEOLOGY (CAA)

[Jane Buikstra accepted award on behalf of CAA]

The Center for American Archeology (CAA) has earned the SAA Excellence in Public Education Award for its commitment to provide quality education about archaeology and the environment to the public. For more than half a century, the CAA has been a leader in allowing the public to experience the process of doing archaeology and is a model of a "hands-on, minds-on approach" to archaeological education. The CAA has evolved through the years, embracing and applying changes in the field of archaeology, using new technologies in the field and in outreach, and in meeting the changing needs of the publics that it serves. The CAA is dedicated to serving increasingly diverse audiences while maintaining a tradition of excellence and innovation, and promoting careful stewardship of the fragile resources it studies. CAA is known worldwide for its long, influential and able commitment to engaging the public in the study of the past.

BOOK AWARDS

The Society for American Archaeology annually awards a prize honoring a recently published book that has had, or is expected to have, a major impact on the direction and character of archaeological research, and/or is expected to make a substantial contribution to the archaeology of an area. The Society for American Archaeology also annually recognizes a book that has made, or is expected to make, a substantial contribution to the presentation of the goals, methods, and results of archaeological research to a more general public.



Book Award

LOTHAR VON FALKENHAUSEN FOR CHINESE SOCIETY IN THE AGE OF CONFUCIUS

Chinese Society in the Age of Confucius makes a lasting contribution to anthropological archaeology through its comprehensive treatment of a pivotal period in the development of one of the world's primary civilizations. The book presents a wealth of archaeological data, making available to the larger scholarly community considerable information that heretofore was not published outside China. The synthesis of archaeological material with texts presents a clear argument on the nature of ideological and political changes in first millennium B.C. China. The book places into social context these important processes, providing a comprehensive view of this time of cultural evolution. It is an eloquent and erudite, simply a masterful review of the social archaeology of Late Bronze Age China: data-rich, but informed by up-to-date archaeological theory.



Public Audience Book Award

JACK BRINK FOR IMAGINING HEAD-SMASHED-IN

Entertaining and informative, with wonderful visual imagery, *Imagining Head-Smashed-In* brings alive the past as well as the archaeological process. Brink's engaging description of how archaeology really happens—including the errors, personalities, and accidental discoveries as well as purposeful research—complements his command of the data. The book offers an excellent view of bison jump sites, providing the reader with a strong understanding of this type of archaeological feature and a great appreciation of the achievement this represented for the lives of the ancient American Indians. His interpretations of this World Heritage site are informed by his wide engagement of sub-specialties from landscape archaeology to zooarchaeology to ethnoarchaeology. The book reveals a deep appreciation for indigenous voices and perspectives, ancient and contemporary. The tone, content, and visual organization are exemplary.



Award for Excellence in Archaeological Analysis

JUDITH HABICHT-MAUCHE

The Award for Excellence in Archaeological Analysis goes to Judith Habicht-Mauche. She has earned the Award for her contributions to the study of archaeological ceramics. Dr. Habicht-Mauche's research represents the highest standards of scholarship. It also highlights the importance of placing archaeometric data in context through models of economy and society. Her methodological contributions include technical work in petrographic analysis and her pioneering use of lead isotope analysis to source ceramic glazes. She has produced outstanding publications on Plains-Pueblo interaction and Southwestern ceramic production. She has excelled as a teacher and trainer of ceramicists, including the generous mentoring of many students from institutions other than her own. Throughout her career, she has employed multiple scientific methods to highlight, contextualize and engender the lives of those who made and used the pottery archaeologists study. SAA is proud to present the 2009 Award for Excellence in Archaeological Analysis to Judith Habicht-Mauche.



Award for Excellence in Cultural Resource Management

MIKE BECKES

Mike Beckes has earned the SAA's Excellence in Cultural Resource Management Award for his long and exemplary record of extraordinary efforts to preserve and protect historic properties. Mike has been a consummate professional cultural resource manager and a role model for federal agency archeologists. He has effectively balanced research, stewardship, and protection throughout his career in public service. The net result of Mike's quality work has been the discovery, investigation, publication, restoration, interpretation and public use of innumerable cultural resources on National Forest system lands across the country. The future of cultural resource management in the Forest Service rest on a solid foundation because of Mike's many fine and lasting achievements.



Crabtree Award

PAUL TANNER

[D. Clark Wernecke accepted the award on behalf of Paul Tanner]

Paul Tanner, winner of the SAA Crabtree Award is responsible for the systematic documentation and analysis of collections from the McFaddin Beach site (41JF50), Jefferson County, Texas. A self-educated authority on stone tools, late Pleistocene geology, and on the natural environmental processes that have affected the site, Mr. Tanner organized local collectors, gave them base maps, and instruction in how to properly collect and document their finds from the site. Almost all information we have on the McFaddin Beach site including artifact forms, professional-quality artifact drawings (done by Mr. Tanner) and other documentation was given to the University of Texas Archaeological Research Laboratory. This past year, Mr. Tanner donated his own collection of artifacts from McFaddin Beach to TARL. Thanks to Paul's exceptionally careful and well documented efforts they comprise an invaluable source of information for the study of southeast Texas prehistory, as well as general Paleoindian research.



The Fryxell Award for Interdisciplinary Research

MICHAEL D. GLASCOCK

Michael D. Glascock has spent the major part of his career (since 1988) directing the Archaeometry Lab at the Research Reactor Center, University of Missouri – Columbia (MURR). Under Dr. Glascock, the MURR program has become world-renowned for supplying exceptionally reliable instrumental neutron activation analysis (INAA) data for provenance studies of obsidian, pottery, chert, and other archaeological materials, in almost every part of the world. Other analytical techniques, such as x-ray fluorescence (XRF), portable XRF, and ICP-MS, have been added to MURR's analytical capabilities more recently. By working closely with archaeologists in the development of research designs and sampling strategies, MURR projects have resolved long-standing debates and dramatically sharpened archaeological understanding of prehistoric interaction and population movement. The 2008 Fryxell Award is presented in recognition of Michael D. Glascock's tireless and extremely fruitful efforts to bring physical-science techniques to bear on archaeological questions.



Lifetime Achievement Award

LINDA CORDELL

Linda Cordell merits the SAA Lifetime Achievement Award for her exemplary combination of innovative scholarship and professional service. Dr. Cordell is renowned for pioneering processual theory in Southwest archaeology. Among her many major works, her *Archaeology of the Southwest* is a fundamental text. She led program advances at the University of New Mexico, California Academy of Sciences, and Museum of Natural History at the University of Colorado. She has served the SAA on its Executive Board and as SAA Secretary. Throughout, she has been committed to mentoring diverse students and younger colleagues. Her accomplishments won her the A. V. Kidder Award from the Archaeological Division of the AAA, the Byron S. Cummings Award from the Arizona Archaeological and Historical Society, and induction to both the National Academy of Sciences and the American Academy of Arts and Sciences. Linda S. Cordell's career is an estimable model for lifetime achievement in archaeology.

CEREMONIAL RESOLUTIONS

The Resolutions Committee offers the following resolutions:

Be it resolved that the appreciation and congratulations on a job well done be tendered to the

Retiring OFFICERS

President: Dean R. Snow

Secretary: Michael A. Glassow

and the retiring BOARD MEMBERS

Dorothy T. Lippert

Scott E. Simmons

To the Staff, and especially Tobi A. Brimsek, the Executive Director, who planned the meeting, and to all the volunteers who worked at Registration and other tasks;

To the **Program Committee**, chaired by

Michael E. Smith

and to the **Committee Members of the Program Committee**

Jane E. Buikstra

Adrian L. Burke

Marcello A. Canuto

L. A. Curet

Thomas Foster
 Lisa Frink
 Michael Kolb
 Steven L. Kuhn
 Barbara L. Stark
 Sander E. Van der Leeuw
 Mark D. Varien
 Kevin J. Vaughn

AND

To the Annual Meeting Local Advisory Committee, chaired by

Terry G. Powis

And to Committee Member

Bobbi M. Hohmann

And to other committee chairs and members completing their service and to the many members who have served the Society on its committees and in other ways;

And sincere wishes that those members of the society who are now serving in the armed forces return safely.

Will the membership please signal approval of these motions by a general round of applause.

And be it further resolved that thanks again be given to those who inform us of the deaths of colleagues, and finally,

A resolution of sympathy to the families and friends of

William T. Sanders
 Philip L. Walker
 Nathalie F. S. Woodbury
 J. Joseph Bauxar
 Melvin (Mike) Fowler
 Reed Hallock
 Thomas Kehoe
 Alejandro Martínez Muriel
 Alanah Woody

Will the members please rise for a moment of silence in honor of our departed colleagues.

Respectfully submitted,

Jon Muller

on behalf of the Resolutions Committee



NEWS & NOTES

This years **American Cultural Resource Association** conference will be held at the Renaissance Hotel in Providence, Rhode Island, from September 17-20, 2009. We will be offering a day-long CRM workshop, a day and a half of sessions, awards ceremony, and tours that highlight local archaeology and history. Sessions will focus on how to keep your business strong in the recession and how to respond to the economic stimulus package. For more information and updates, please visit <http://acra-crm.org/> and look for "Events."

The **2009 Midwest Archaeological Conference (MAC)** Annual Meeting will be held October 15-18th in Iowa City, Iowa jointly sponsored by the University of Iowa Office of the State Archaeologist (OSA) and Museum of Natural History (MNH). Papers, Symposia, and Poster Abstracts due by September 4, 2009. All presenters must register for the conference and be 2009 MAC members. Forms and instructions for submitting presentations and registration are available at: <http://www.midwestarchaeology.org/> For further information or to discuss symposia or panel ideas, please contact John Doershuk: 319-384-0751, john-doershuk@uiowa.edu.

The **16th annual symposium of the Pre-Columbian Society of Washington, D.C.** will be held on Saturday, September 19, 2009 at the U.S. Navy Memorial and Naval Heritage Center, Washington, D.C. The symposium will focus on the archaeology of the Caribbean basin before Columbus. For program details and registration information, please visit www.pcswdc.org.

National Register and National Landmark Listings. The following archeological properties were listed in the National Register of Historic Places during the first quarter of 2009. For a full list of National Register listings every week, check "Weekly List" at <http://www.nps.gov/nr/>.

- Guam, Guam County. *Umang Dam*.

Listed 2/06/09.

- Iowa, Hardin County. *Folkert Mound Group*. Listed 3/17/09.
- Louisiana, Iberia Parish. *NEW IBERIA (Shipwreck)*. Listed 12/24/08.
- Maryland, Anne Arundel County. *Quaker Sites in the West River Meeting, Anne Arundel County, Maryland c. 1650-1785 MPS*. Cover Documentation Accepted 12/22/08.
- Maryland, Anne Arundel County. *Skipworth's Addition (Quaker Sites in the West River Meeting, Anne Arundel County, Maryland c. 1650-1785 MPS)*. Listed 12/22/08.
- Maryland, Washington County. *Antietam National Battlefield*. Additional Documentation Approved 2/27/09.
- Massachusetts, Essex County. *JOF-FRE (Shipwreck) (Eastern Rig Dragger Fishing Vessel Shipwrecks in the Stellwagen Bank National Marine Sanctuary MPS)*. Listed 1/16/09.
- Nebraska, Douglas County. *Parker, Frank, Archeological Site*. Listed 3/04/09.
- North Carolina, Mecklenburg County. *Robinson Rock House Ruin and Plantation Site*. Listed 1/22/09.
- North Dakota, Richland County. *Fort Abercrombie*. Listed 1/22/09.
- Pennsylvania, York County. *Leibhart, Byrd Site (36YO170)*. Listed 1/14/09.
- Tennessee, Montgomery County. *RiverView Mounds Archeological Site (40MT44)*. Listed 3/04/09.
- Wisconsin, Ashland County. *BIG BAY SLOOP (Shipwreck; sloop) (Great Lakes Shipwreck Sites of Wisconsin MPS)*. Listed 1/14/09.
- Wisconsin, Manitowoc County. *CONTINENTAL (Shipwreck; bulk carrier) (Great Lakes Shipwreck Sites of Wisconsin MPS)*. Listed 1/14/09.
- Wisconsin, Milwaukee County. *LUMBERMAN (Shipwreck; schooner) (Great Lakes Shipwreck Sites of Wisconsin MPS)*. Listed 1/14/09.

In addition, the following archeological properties were designated as National Historic Landmarks by the Secretary of

the Interior:

- Colorado, Las Animas County. *Ludlow Tent Colony Site*. Designated 1/16/09.
- Florida, Dade County. *Miami Circle at Brickell Point Site*. Designated 1/16/09.
- Illinois, Pike County. *New Philadelphia Town Site*. Designated 1/16/09.

Committee on the Americas Offers Symposium Sponsorship The SAA's Committee on the Americas (COA) traditionally grants honorary sponsorship to one or two symposia at the Annual Meeting, on topics of broad interest to Americanist archaeology (sessions covering multiple regions). If you are planning a session that fits the COA mission, we invite you to send your session abstract and list of presentations to COA Chair Mario Rivera (myxriviera@att.net) with a request to be considered for COA sponsorship. Please send your request no later than September 15, 2009. For the 75th Anniversary Meeting next year (2010 in St. Louis), the Society wishes to acknowledge our past and anticipate the future, and sessions that also address this broad theme will be given special consideration. COA sponsorship does not carry any financial support but sponsored sessions do have special recognition in the program.

El Comité de las Américas Ofrece Patrocinio de Simposios El Comité de las Américas (COA) de la SAA tradicionalmente otorga patrocinio honorario a uno o dos simposios en la Reunión Anual, acerca de temas de interés amplio a la arqueología americana (sesiones que cubren múltiples regiones). Si Ud. está preparando una sesión que se ajusta a la misión del COA, le invitamos a que envía el resumen de su sesión y la lista de presentaciones al Director del COA Mario Rivera (myxriviera@att.net) con una solicitud para ser considerado para el patrocinio del COA. Favor de mandar su

↳ NEWS & NOTES, continued on page 59



POSITIONS OPEN

POSITION: STAFF GEOLOGIST

LOCATION: PHOENIX, ARIZONA

EPG, a leader in the energy permitting field, seeks resumes for a Staff Geologist for its Earth Sciences Department. Qualified candidates will have: BS/BA Degree in Geology or Soil Science (MS/MA preferred); 1 to 2 years relevant experience (Soil Science/Sedimentary Geology); Excellent verbal, written, interpersonal skills; Proficiency in computer applications, especially MS Office (Word, Excel, etc.); and strong work ethic, intense drive. Salary BOE. Send or email a cover letter, your resume, three professional references to: Kristie James, Environmental Planning Group (EPG, Inc.), 4141 North 32nd Street, Phoenix, Arizona 85018, www.epgaz.com, KJames@epgaz.com.

POSITION: TECHNICAL EDITOR

LOCATION: JONESVILLE, FL

SEARCH seeks an experienced editor to edit and format technical reports, popular reports and publications. Minimum qualifications include Master's degree in Anthropology, B.A. in English, technical writing, communications, journalism or related field; five years experience in technical or scholarly writing, editing and publishing; and demonstrated publishing and formatting proficiency in MS Word, Office Pro suite, Access, Adobe Photoshop and Adobe Acrobat. Applicants must have a highly developed capacity for attention to detail, work well as part of a team, and be able to meet deadlines. Expertise with cultural resources reporting for the DoD is preferred. Please send cover letter, resume and writing sample to: christine@searchinc.com.

POSITION: HISTORIC SITES LABORATORY TECHNICIAN

LOCATION: JONESVILLE, FL

SEARCH seeks a Historic Sites Laboratory Technician to support multiple Phase I, II, and III projects for Federal and State government agencies. Applicants should have an M.A. in Anthropology or related field, completion of a historic site field school, specialized training in historic artifact identification and analysis, five years laboratory experience on historic sites, superior technical writing ability, experience preparing collections to Federal curation standards, and ability to work well in a team environment under the direction of a Laboratory Director and/or Principal Investigators. Please send cover letter, resume and writing sample to: christine@searchinc.com

POSITION: NAGPRA / NATIVE AMERICAN TRIBAL SPECIALIST,

LOCATION: FLORIDA, NORTH CAROLINA OR VIRGINIA

SEARCH seeks a NAGPRA / Native American Tribal Specialist with experience on Aleutian Islands and Native Alaskan cultural material and consultation. Applicants should have: MA in Anthropology or related field, completion of NAGPRA training, specialized training in artifact identification and analysis, five years experience with Tribal consultation, superior technical writing ability, experience working with museum-based collections, staff, and protocol, experience preparing collections to Federal curation standards, and ability to work well in a team environment. Applicants with Oceana-based collections and Native Hawaiian consultation experience also will be considered. Please send cover letter, resume and writing sample to: christine@searchinc.com

POSITION: MARKETING SPECIALIST

LOCATION: ORLANDO, FL

SEARCH seeks a specialist to prepare marketing material, proposals, and presentations; attend conferences and trade shows, provide client management and some office management. Minimum qualifications include M.A. degree; strong graphic design and technical writing ability; five years experience preparing successful proposals for Federal agencies; strong editorial review skills and demonstrated proficiency in MS Word publishing and document formatting, Office, PowerPoint, Adobe Photoshop and Acrobat. The successful applicant must have strong attention to detail, be able to work well as part of a team, and be able to meet deadlines. Expertise with cultural resources management for the DoD and DOT is preferred. Please send cover letter and resume to: christine@searchinc.com.

NEWS & NOTES, from page 58 ↩

solicitud antes del 15 de Setiembre de 2009. Para la 75a. Reunión Anual (2010 en St. Louis, EEUU), la Sociedad quiere reconocer nuestro pasado y anticipar el futuro, y los simposios que tartan de este tema recibirán una consideración especial. El patrocinio del COA no implica ningún tipo de financiamiento pero las sesiones escogidas para su patrocinio serán reconocidas en el programa.



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CALENDAR

2009

SEPTEMBER 17–20

The American Cultural Resource Association conference will be held in Providence, Rhode Island. For more information, please visit <http://acra-crm.org/> and look for "Events."

SEPTEMBER 19

The 16th annual symposium of the Pre-Columbian Society of Washington, D.C. will be held in Washington, D.C. For program details and registration information, please visit www.pcswdc.org.

OCTOBER 15–18

MAC (Midwest Archaeological Conference) Annual Meeting will be held in Iowa City, Iowa. Please visit <http://www.midwestarchaeology.org> for details.

DECEMBER 2–6

The 108th Annual Meeting of the American Anthropological Association will be held in Philadelphia, Pennsylvania. This year's theme is "The End/s of Anthropology." For more information, please visit <http://www.aaanet.org/meetings/index.cfm>.

2010

APRIL 14–18

75th Anniversary Meeting of The Society for American Archaeology For detailed information and the call for submissions, please visit www.saa.org.



PHOTO CREDIT: BENJAMIN K. MAULIS

The End Is Near! Prepare Yourself

Not the end of the world. Hopefully, the end of the economic downturn. And definitely, the end of the campaign to add \$500,000 to the SAA's endowment funds.

How can you prepare for this imminent event? What can a mere mortal member of the SAA do?

At the recent 74th Annual Meeting of the SAA in Atlanta, 100 new donors stepped up and made a contribution to the endowment fund of their choice. These 100 new gifts have pushed the total number of campaign donors to 650. But we need hundreds more donors—both large and small. We must reach 750, but let's keep going and get beyond 1,000.

The September issue of *The SAA Archaeological Record* will announce a series of matching donors whose generous commitments will enable every gift received after September 1, 2009, to be at least doubled.

So, plan your donation now. And help us bring this campaign to "Give the SAA a Gift on its 75th" to a successful end.



The SAA Endowment Campaign

In 2005, the SAA Board approved a five-year campaign to add \$500,000 to our endowments.

Give to one of these endowments:

- Public Education**
- Native American Scholarships**
- SAA General Endowment**

How to Give

Make your donation on-line at www.saa.org. A multi-year pledge is also an option. Every gift will make a difference for the SAA and for American archaeology in the 75 years to come! If you have any questions, please contact Tobi Brimsek at 202-789-8200.

FROM THE COEDITORS OF *LATIN AMERICAN ANTIQUITY*

The Coeditors of *Latin American Antiquity* have decided to change two aspects of editorial policy that we had recently announced. Therefore:

1) Authors may be allowed to publish without restriction of frequency. If you submit an article and it passes review and you or any of your co-authors have published recently in *Latin American Antiquity*, we will publish it as soon as a place in the queue opens up.

and

2) Membership is not a requirement for authorship in the journal. Of course, we encourage everyone to join the SAA but recognize this can be a burden on some so even if you are not a SAA member, we will publish your paper if it passes review.

Helaine Silverman, Coeditor

Luis Jaime Castillo-Butters, Coeditor