COUNCIL ON

Archaeological Studies



at YALE UNIVERSITY

Newsletter



Northeast Andean Conference at Yale p. 2

Student Updates p. 4

Yale Center for the Study of Ancient Pyro-Technology p. 7

Issue 2 Spring, 2014



Welcome Note

Welcome to the second edition of the Yale University's Council on Archaeological Studies Newsletter, covering happenings in the department from the summer of 2013 to the spring of 2014. The goal of this publication is to connect diverse scholars from within the Yale archaeology community by cultivating relations with past students, current department members and others with an interest in Yale University archaeology. This edition will include information on recent conferences and events held in the department, as well as highlights from the research being conducted by students, faculty and associated scholars across the world. While this is just a sample of the research being carried out, we welcome additional contributions for the next issue. Please feel free to contact either the department or the editors with any news or article ideas. We hope you enjoy this new issue and please stay tuned for future editions, there is sure to be many more exceptional developments in the next twelve months.

-Andrew Womack & Daniela Wolin



Cover: Angkor Wat (Photograph by Andrew Womack)

Inside This Issue

- 1. Welcome Note
- 2. Department Highlight:

Northeast Andean Conference at Yale

- 3. Graduate Student Research
- 4. Student Updates

New MA and PhD Students

Recent Graduates

Undergraduate Research

5. Summer Workshops in Peru

Ground Penetrating Radar

Faunal Analysis

- 6. New Director for CAS Center
- 7. New Yale Center Formed

Contact

Yale University Department of Anthropology P.O. Box 208277 New Haven, CT 06520-8277

anthropology@yale.edu

Editors

Daniela Wolin Andrew Womack

Contributors

Prof. Richard Burger Dr. Lucy Salazar

<u>Department Highlight</u>

he 32nd Northeast Conference on Andean Archaeology and Ethnohistory was held at Yale University on October 16th and 17th. This conference shifts venues each year and has been held as far north as Trent University in Canada and as far south as Washington, D.C. Yale has hosted it twice before, once in 1989 and again in 2004. This year's NCAAE conference drew an unusually large response, both in terms of the number of proposed talks and the number of registered participants (138). The conference featured 23 talks, with several speakers coming from Peru and Ecuador as well as regions in the US outside the Northeast (e.g., Texas, Illinois, Georgia). The speakers included archaeologists, anthropologists, art historians, geographers, historians and engineers and they covered subjects as diverse as the production of ancient Paracas textiles and hydrological issues relevant to the conservation of the great Inca complex of Sacsahuaman. While most talks focused on the coast and highlands of Peru, others treated Peru's poorly known ceja de selva (cloud forest) and the western and eastern slopes of Ecuador. Several of the presentations utilized osteological analysis to shed light on warfare, health, and patterns of production. The keynote talk was presented by Dr. Santiago Uceda, Professor at the University of Trujillo on Peru's north coast. Uceda, who is the Director of the long-term program of archaeological investigations at the Huaca de la Luna, presented an overview of twenty-two years of research at the site with special attention to the sociopolitical implications of the

The 32nd Northeast Conference on Andean Archaeology and Ethnohistory

changing organization of ceremonial architecture and ritual activities. The intellectual excitement of the conference was reflected in the enthusiastic question and answer segments after the presentations. The conference took place at Linsly-Chittenden Hall, where the restored Tiffany stained windows made a considerable impact on our visitors. The event was then capped by a reception at Luce Hall where delicious appetizers and drinks were served to the sounds of

a trio playing Andean music. The success of the conference was made possible by volunteers from the Anthropology graduate program and by support provided by the Kempf Fund, the Anthropology Department, the Council on Archaeological Studies and the Council of Latin American and Iberian Studies.

-Prof. Richard Burger



Yale and visiting graduate students attend the reception following a day of presentations at the 32nd Northeast Conference on Andean Archaeology and Ethnohistory. (Photo by Gabriel Prieto)

Graduate Student Research

Annie Raath Antonites

I am currently in the final phase of writing my dissertation on pre-state societies in northern South Africa. My research examines the continuities and changes in foodways at a 10th-11th century AD settlement in the Limpopo Valley during major shifts in regional economic and political dynamics. In addition to my dissertation work, I am also part of the 'Mapungubwe Organics Bone and Ivory Preservation Project' (supported by the US Ambassador's Fund for Cultural Preservation). The aim of this project is to record and interpret the technological and functional aspects of worked bone objects from the Mapungubwe World Heritage Site in South Africa.

Xander Antonites

I currently hold the position of Associate Professor in the Department of Anthropology and Archaeology at the University of Pretoria, South Africa. I teach undergraduate courses on South African and world archaeology and a graduate class on advanced field methods. My research continues to investigate the political economy of hinterland settlements associated with the 13th century AD center of Mapungubwe (Limpopo Valley, South Africa). Recent excavations at one of these hinterland settlements suggest a similar degree of agentive power in shaping long distance trade participation to those settlements investigated for my dissertation research. I am also in the process of publishing a series of articles on my dissertation research.

Michelle Young

My research interests lie in understanding the nature of interregional interaction during the Early Horizon period (c.900BC-200BC) in the Central Andes. In particular, I am interested in exploring the role of religious ideology in stimulating the unprecedented intensity of economic exchange and contact between distant regions of the Andes during this period. This research will help to illuminate the processes involved in the emergence of complex societies in the Andes. I plan to conduct preliminary research for my dissertation at the ceremonial site

of Atalla, located in the south-central highlands of Peru, during the summer of 2014. Research goals for the summer include pedestrian survey of the site and surrounding areas, as well as mapping and test-pitting of the site itself.

William Gardner

I am currently a PhD candidate in my fifth year of study with a specific focus on archaeological research of mobile peoples. Currently, I am co-directing a full scale archaeological investigation of mobile pastoralists in the forest-steppe environment of north central Mongolia with fellow Yale Anthropology PhD candidate Jargalan Burentogtokh. My primary research emphasis is on understanding the inception and operationalization of social complexity at local and regional levels. In addition to archaeological research in Mongolia, I am also co-directing an archaeological research program in Paradox, Colorado. This project is a collaborative effort with Jargalan Burentogtokh (acting as a representative of the Mongolia Academy of Sciences, Archaeological Institute), University of Pretoria Professor (and Yale University Alumnus) Alexander Antonites, Andrew Blanshard of the New Zealand Department of Conservation, and the Colorado Bureau of Land Management. In addition to broadening our understanding of mobile peoples, the Paradox Valley Project also intends to provide a U.S. based training ground for foreign archaeological students and scholars.

Kristina Guild Douglass

My research is a multi-site study of human-environment interaction in coastal southwest Madagascar. Abundant remains of extinct ratite eggshell allow the project to use human-ratite interaction as a primary lens through which to understand this landscape through time. Eggshell beads lend insight into regional economies and eggshell geochemistry answers questions about subsistence, seasonality and palaeoclimate. In addition, my project integrates archaeological research with marine conservation and sustainable development initiatives through cooperation with a local fisheries association and conservationists. Archaeological data on subsistence contributes an historical ecological perspective that will help guide efforts to diversify livelihoods and develop new strategies for sustainable management of marine resources.



Kristina gives a tour to a group visiting one of her sites.

New Graduate Student Research

Tanambelo Vassili Reinaldo Rasolondrainy (PhD student)

After having completed a site-based study of the first rock art site discovered in Madagascar for my M.A. dissertation in 2011, I want to develop a PhD project on the study of prehistoric rock art sites in Southwestern Madagascar. This will focus on Rock art recording, dating, pigment analysis, meaning, and authorship. The intended project will not only contribute to the ancient history of Madagascar which is known not to have rock art sites before, but will also review the distribution and diversity of African rock art.

Rong Fan (PhD student)

I am interested in exploring social complexity through the bioarchaeological analysis of human remains in China's Middle to Late Neolithic period. Specifically, I would like to analyze the diet, health, and nutrition of ancient people which can indicate status or gender differences along with biodistance studies, activity patterns, and workloads which can help us to understand cultural dissemination and the formation of multiple centers of authority in early China.

Lingyi Zeng (PhD student)

My research interest is focused on ceramics from all periods of Chinese history and the interaction and exchange of artifacts and craftsmen at China's borders. I am currently focusing on different possible ways of analyzing production, consumption and trade during each period. I try to use approaches in anthropological archaeology, art history and history.

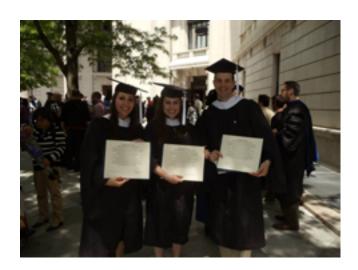
Yahui He (MA student)

My study interest, at present, mainly focuses on the interaction and exchange between the southeast part of mainland China and Taiwan in Neolithic period, maritime archaeology and analysis on pottery. Based on the archaeological remains, it is strongly indicated that there existed interaction in the Neolithic period between southeast part of mainland China and Taiwan. My research interest is to explore the possible types of exchange between these two regions by analyzing on the archaeological remains.

Recent Graduate Update

Benjamin King (M.A. 2013)

Benjamin King is currently working at Phoenix Pictures in Hollywood as an executive assistant to the VP and Creative Director. Very much like an apprenticeship, Ben hopes the experience gained from this position will help him score a position in the creative realm dealing with science in the media.



Recent Archaeological Studies MA graduates (L-R) Charolette Green, Jane Skinner, and Benjamin King.

Recent Undergraduate Research

Ariana Fernandez

(Archaeological Studies Major)

As part of my undergraduate curriculum for Yale's Archaeological Studies Major, I attended field school at the Gabii Project this past summer. Located on the outskirts of Rome, the Gabii Project centered its field efforts on uncovering portions of the ancient city-state of Gabii. While at Gabii, I spent my time unearthing a large building, which, through further inspection, is one of the earliest examples of monumental architecture near Rome. Through lab time and field work combined, I obtained valuable skills that compliment what I have learned in classes here at Yale.

I plan on continuing my research in the field of archaeology on both long-term and short-term levels. This semester, I will assist Professor McIntosh in Yale's Archaeomagnetism Lab. In learning the methodology and science behind archaeomagnetism, I hope to spend my summer collecting samples in Peru that I will analyze during my senior year.

Yale Summer Archaeological Workshops in Cusco Peru

In February 2011, Yale University signed a Memorandum of Understanding (MOU) with the Universidad Nacional San Antonio de Abad, Cuzco (UNSAAC), Cuzco's preeminent university, as part of a comprehensive agreement with the government of Peru. This agreement envisions a long-term collaboration between the two universities that will involve educational exchange and joint research. It also commits Yale to the permanent display of the Bingham Machu Picchu Collections in the Casa Concha, a recently restored Colonial residence built on Inca foundations in the center of the city of Cuzco, administered by UNSAAC with joint oversight by Yale.

An important goal of the partnership is to help the Archaeology Program at UN-SAAC and to further its effort to become a major center for archaeological training and research for Perú and all of Latin America. Given the three-century history of UNSAAC and the unique cultural importance and resources of Cuzco, they believe that this objective is both reasonable and realistic. With the financial support of the Cartago Foundation and the Yale Provost's Office, the first step towards academic collaboration was begun



A professor practicing with the GPR. (Photo by Andrew Womack)



Dr. Tim Horsley instructs faculty and students in the use of G.P.R. in Cusco. (Photo by Andrew Womack)

this past summer with the organization by Lucy Salazar and Richard Burger of two archaeology courses at the Casa Concha. In coordination with UNSAAC President's office and Gladys Lagos, coordinator of the Archaeology Program, these courses were held during a six-week period in the July and August of 2013. The courses were designed for specialized archaeology faculty and advanced archaeology students at UNSAAC. Andrew Womack and Michelle Young, graduate students from the Archaeology program at Yale, and Tom Hardy, a Yale graduate currently in the doctoral program at the University of Pennsylvania also participated. In addition, a group of archaeologists from the Ministry of Culture, Cuzco took part in the courses.

The first course "Introduction to the Use of the Ground Penetration Radar in Archaeology: Techniques and Analysis "was taught by Dr.Timothy John Horsley, Scientific Research Associate

in Yale's Department of Anthropology. The simultaneous translation of Horsley's presentations was provided by Lucy Salazar. The sub-surface mapping of archaeological sites has become an important technique in archaeological research over the last decade, but it has rarely been used in Cuzco. It is crucial in defining the extent and nature of sites, as well as in strategic decisions concerning where excavations should be carried out. The classroom component of this course was complemented by GPR survery of local archaeological sites and the processing under Horsley's supervision of the data recovered. The GPR survey focused on the sub-surface mapping of the Inca remains beneath the patios and garden area of the Casa Concha, with an eye to excavating one or more of these zones in the future. These efforts were followed by the mapping of the Early Horizon site of Marcavalle in the City of Cuzco. The efforts in both sites were highly suc-

(Story continues on p7.)

Yale Center for the Study of Ancient Pyro-Technology

Mastery of the effects of fire on the materials that ancient peoples had on hand was one of the signal transformative skills of prehistory. Ancient smiths, potters, glass-makers, etc. were not only economically useful but were often feared for the occult grounding of their knowledge. Faculty and students of Yale's Council on Archaeological Studies currently conduct field and laboratory research on how the mastery of metals, ceramics, glass, and fire itself (through food preparation, cremations, accidentally or purposefully fired locations, etc.) became a critical stimulus to the emergence of complexity around the world. Thermally-induced remnant magnetism is the basis for the high precision dating provided by Yale's Archaeomagnetism Laboratory. The Council on Archaeological Studies has a growing reputation worldwide for innovative research in emerging complex society, and as such the Council has identified a critical need for an enhanced laboratory competence and field training in Pyro-Technology as an integrated science.

Pyro-Technological science can be thought of as a bit of materials science, a bit of geology, and a large measure of anthropological archaeology – yet the science as a whole will be much more than the sum of those parts. Recognition of the Council's need for a dedicated specialist (Thomas Fenn) in this emergent science comes at a critical juncture in the training of our undergraduates and graduate students and for the functioning of the seven integrated Yale University Archaeological Laboratories (YUALs). The Center will serve to focus and unify the functioning of these laboratories and serve as an umbrella organization for the many research projects of the Council faculty and students, currently taking place on five continents.



Archaeo-mag specialist Karol Stoker instructs students in collecting samples. (Photo by Prof. McIntosh)

Workshop Continued

Director for New CAS Center Appointed

cessful. In the case of the Casa Concha, deeply buried Inca walls were identified and in the case of the Marcavalle, possible circular house structures and an area of public architecture were documented. Although Marcavalle has been known for half a century, these are the first prehistoric structures located on the site.

The second course was devoted to the study of animal bone. The course "Laboratory Analysis of Faunal Remains was taught by Dr. George Miller, a former visiting professor at Yale and currently a Professor of Anthropology at California State University, Eastbay. This intensive course allowed participants to develop practical skills of faunal identification as well as familiarize them will the broader issues of zooarchaeological analysis. Study of faunal analysis has proved to be among the most powerful tools developed in the archaeological laboratory over the last two decades and it offers insights into the economy, diet, exchange patterns and cultural concepts of ancient peoples. Since animal bone is recovered in virtually all excavations, the ability to extract meaningful information from these materials is extremely valuable; despite this, faunal analysis is rarely employed in Cusco. Through this course the students were able to acquired generalized considerations of vertebrate anatomy and identification of major Andean fauna; analytical techniques of extracting relevant cultural information from animal bones; use of a microcomputer database for zooarchaeological analysis; and the identification, coding and analysis of a small sample of animal bone materials from the archaeological site of Batan Urgo.

Both courses were a great success, and the general satisfaction with these efforts was celebrated at a final banquet made even more enjoyable by folkloric dances from the different regions of the Peruvian coast and highlands. ${f T}$ homas (Tom) Fenn will be joining the Council on Archaeological Studies (CAS) at Yale University as the Director of the newly established Center for the Study of Ancient Py-Tom has diverse ro-Technology. educational, laboratory, and field backgrounds in scientific and anthropological (archaeological) training and research, which include extensive analytical skills in a variety of archaeological materials. His recent and current researches cover a wide range of materials, regions and time periods with common threads of examining socio-economic and technological aspects of pyro-technology and the derivative products. His research themes include long-distance trade, provenance studies, invention and innovation in ancient technologies, and the development and transfer of technological knowledge. In his new role at CAS, Tom will develop the Center for the Study of Ancient Pyro-Technology, while also working to improve existing laboratory facilities within CAS and the Department of Anthropology. He also will be collaborating with CAS and Department of Anthropology faculty as well as assisting students, in both field and laboratory settings, on the development, execution and publication of research relating to ancient pyro-technology.



Tom Fenn, New Director of the Yale Center for the Study of Ancient Pyro-Technology.

He also will be teaching courses, such as Introduction to Archaeological Laboratory Sciences (ARCG 316), which support the goals of the Council and Department.

Acknowledgements

We would like to thank all of the contributors for their help and patience while we put this issue together. We are very greatful for all of the suggestions and guidence the faculty and fellow students provided. Also, we must express our gratitude to the entire Council on Archaeological Studies staff, whose constant hard work and support help to make our department what it is.

-Andrew Womack & Daniela Wolin

-Dr. Lucy Salazar