

COUNCIL ON

Archaeological Studies

at YALE UNIVERSITY

Newsletter



Issue III
Fall, 2016



WELCOME NOTE

Welcome to the third edition of Yale University's Council on Archaeological Studies Newsletter, covering happenings in the program from 2015 to 2016. The goal of this publication is to connect diverse scholars within Yale's archaeology community by cultivating relations with past students, current department members and others with an interest in archaeology. This edition includes information on recent fieldwork and lab work conducted by our graduate students and faculty members, as well as progress on Archaeomagnetism research.

We sincerely hope that you enjoy reading this newsletter. Please feel free to let us know if you would like to share your archaeology experience with us in future editions.

---Anthropology Subfield Archaeology Doctoral Students:
Rong, Nado, and Lingyi



Cover: Cotzumalhuapa, Guatemala (Photograph by Prof. Oswaldo Chinchilla)

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FIELDWORK

On January 3-13th, 2015, a ground-penetrating radar workshop was organized by Dr. Tom Fenn and Prof. Oswaldo Chinchilla from Yale University, and Gilberto Cruz from the Cozumalhuapa Archaeological Project. Andrew Womack, Jacob Welch, Ashley Krauss, Bree Mathiason, and David McCormick participated in this workshop.



The team conducted GPR surveys at two locations. One of them was next to a location where a very large sculpture was found accidentally (El Baúl Monument 81), which is visible in some of the pictures. At another location, they wanted to test the presence of a stone-paved causeway, which would help continue documenting the urban layout of Cotzumalhuapa (a major city from the Late Classic period, AD 650-950). The workshop was quite successful, and it provided training for the group on GPR methods.



Gilberto Cruz and Oswaldo Chinchilla conducted excavations at the monument 81 location, uncovering part of one of the causeways, and documenting ancient engineering and landscaping features that were associated with the causeway.

(Text and photos by Prof. Oswaldo Chinchilla)

Ground-Penetrating Radar Workshop at Cotzumalhuapa, Guatemala

Delegerkhangai Mountains Survey at Delgerkhaan Uul, Mongolia



From July to August, 2016, Prof. William Honeychurch directed a survey project in Sukhbaatar Province, Mongolia. Together with a group of 9 individuals, they conducted surface survey, sketched and photographed all the collected artifacts in the GER lab, and typed survey information into a customized GIS system. With enough data, this system will simulate the long-term process of the relocation of steppe human habitats in response to environmental changes. It will also help explain the interaction and division of cultures that developed in western and eastern Mongolia on a half-millennium basis.

During their survey, they found that a variety of stone piles were arranged into several recognizable types of period-specific patterns, such as khirigsuur (or stone mound, ca. 1600 BCE-300 BCE) and its satellite stone circles, Ulaanzuukh burials (ca. 1500



(Text and photos by Dewei Shen)

GRADUATE STUDENTS RESEARCH



In the fall 2016, Michelle returned from directing the third season of the Atalla Archaeological Investigation Project, located in the region of Huancavelica in the south-central highlands of Peru. This year, the project conducted excavations on the temple platforms and the SW edge of the domestic sector to understand the Early Horizon period (c. 800-200BC) occupation of the site. Some exciting finds from the season included personal adornments such as a green stone ear spool fragment, a large bone bead, and a bone pendant, carved in elaborate Chavin iconography. The project also uncovered large quantities of ceramic fragments with cinnabar residue on the interior, indicating they had served as receptacles for cinnabar pigment. Results suggest that the site's residents engaged in the distribution of cinnabar pigment and had strong ties with the Chavin sphere of interaction during the Early Horizon period.



(Text and photos by Michelle Young)

MICHELLE YOUNG

is currently a Ph.D. candidate, finishing her 4th year of study. Michelle's research interests lie in understanding the relationship between interregional interaction and the development of more complex forms of social organization in the Central Andean region. Her dissertation research focuses on Atalla, located in the south-central highlands of Peru and explores the role of economic exchange in the increase in social complexity at the site. After two successful field and lab seasons in 2014 and 2015, Michelle will return to Atalla for a final season to conclude her dissertation field work. Research goals for the summer include excavations of domestic and public architecture to understand the early sequence of the site. Microbotanical, osteological, faunal, radiocarbon, geochemical, ceramic and lithic analyses will be conducted on materials uncovered in excavation.



Tanambelo Rasolondrainy (Nado)

is a fourth year Ph.D. Candidate in the Department of Anthropology (specializing in Archaeology) at Yale University. He received his License es lettres (BA) and Maîtrise es lettres (~MA) in History from the University of Toliara (Madagascar), and his MA in Archaeology from the University of Dar es Salaam (Tanzania). He participated in archaeological research projects conducted in different countries including the Comoros islands, Kenya, Madagascar, Peru and Tanzania. His research interests include human-environment interactions, landscape transformation, ethnic knowledge systems, rock art, and regional interactions in the southwestern Indian Ocean basin.



Nado is currently conducting his Ph.D. dissertation research project on the historical ecology of southern Isalo in southwestern Madagascar, looking at processes through which social and economic dynamics - such as population growth, settlement expansion, intensification of subsistence strategies, and increase in labor-intensive technologies - affect the environment through time; and how ancient communities build resilience vis-à-vis climate variability and natural hazards. Nado is using multifaceted data sets including cultural materials from surveys and excavations, paleo-precipitation proxies from archaeomagnetic analysis of soils from excavation layers, instrumental weather data from nearby meteorological stations, paleoecological data from previous works, and ethnohistorical records.



(Text and photos by Tanambelo Rasolondrainy)

Andrew Womack is currently on a Fulbright Fellowship in Jinan, China where he is undertaking dissertation research in the Ceramic Analysis Laboratory at Shandong University. His research is focused on using household and mortuary ceramics to better understand social change during the Late Neolithic and Early Bronze Age in the Tao River Valley of northwest China's Gansu Province. By analyzing forming techniques, materials, and use-wear patterns these ceramics are providing information on the dynamic nature of social interaction during this time period.

This past summer Andrew conducted excavations with the Tao River Archaeological Project (TRAP) in northwestern China's Gansu Province. This multinational collaboration has spent the last four years undertaking surface survey, detailed digital mapping, and geophysical remote sensing at a series of late Neolithic and early Bronze Age sites in the region. Based on their mapping they were able to relocate geophysical anomalies detected more than two years ago at the site of Qijiaping and carry out targeted excavations. In less than five days of excavation they uncovered multiple trash pits containing hundreds of sherds and animal bones including several "oracle bone" fragments as well as a largely intact kiln. He is currently using petrography to analyze the recovered ceramics as part of his dissertation research into craft production and social networks.



Chelsea Kaufman is a M.A. student in archaeology. She is currently in the process of writing her dissertation on ceramic remains from a Lower Nubian site bordering the eastern bank of the Nile River, Catfish Cave. The site was excavated in 1965 as part of the UNESCO salvage program although the ceramic remains were never published. The site is currently submerged beneath Lake Nasser. Chelsea believes the cave represents the Late Neolithic conversion of the culture groups that are responsible for the formation of dynastic Egypt. Since little is known about the cave, she is attempting to place it in the context of the nearby desert sites as a means to determine if the data from the cave in any way mirrors larger sites near or further away. Chelsea's primary research interests include supernatural belief systems, ritual, and mortuary practices as they reflect or are affected by societal structure, all of which have the potential to present themselves within the ceramic record.

Outstanding Undergraduate Archaeological Research 2016

María de las Mercedes Martínez (Trumbull College '16), an Archaeological Studies major, demonstrated how advances in virtual archaeology can create three-dimensional representations of ruined sites. Her display in the Exhibition Corridor focuses on three major monuments in Palmyra, Syria, which were recently destroyed by the Islamic State. Martínez seeks to explore how technology can help preserve cultural heritage by virtually replicating structures that have experienced deterioration or destruction as a result of conflicts and disasters, natural or otherwise. Throughout her research process, She has made extensive use of physical artifacts and archaeological books and periodicals available through the Yale Babylonian Collection.

Recent Graduate Updates

Kristina Douglass (Ph. D. 2016)

Kristina is currently a Buck Postdoctoral Fellow at the Smithsonian's National Museum of Natural History, where she works with Dr. Torben Rick in the Department of Anthropology and with Dr. Helen James in the Division of Birds. Her research investigates human-environment interaction, the development of social complexity and ethnogenesis in southwest Madagascar. One of Kristina's research priorities continues to be the relationship between human communities and faunal populations, with a special interest in the extinction of Madagascar's elephant birds. As a postdoctoral fellow at the Smithsonian, Kristina works on a large assemblage of elephant bird eggshell that she excavated in Madagascar, as well as on elephant bird material within the Smithsonian's collections. Kristina feels that the Smithsonian postdoctoral fellowship is a wonderful opportunity to further dissertation research, begin new projects and forge exiting collaborations. She encourages other graduate students to consider applying to the SI Fellowship Program!

Iván Ghezzi (Ph.D. 2016)

Ivan's geographic focus is the Andean region, specifically northern coastal Peru. He is mostly interested in the development of early complex societies, and his dissertation research has led him to study the role of warfare in that general process. Ivan concentrated his work in the coastal Casma valley, one of the notable loci of early cultural development in Peru, particularly a single site, Chankillo, where he used a variety of methods, from excavation to dendrochronology, to understand the function and history of the site and its role in the onset of warfare in the region. For this project, dendrochronology was applied for the first time in Peru to archaeological contexts, and the positive results have led him to a new project, broader in spatial and chronological scope, to build tree ring series in northern Peru.

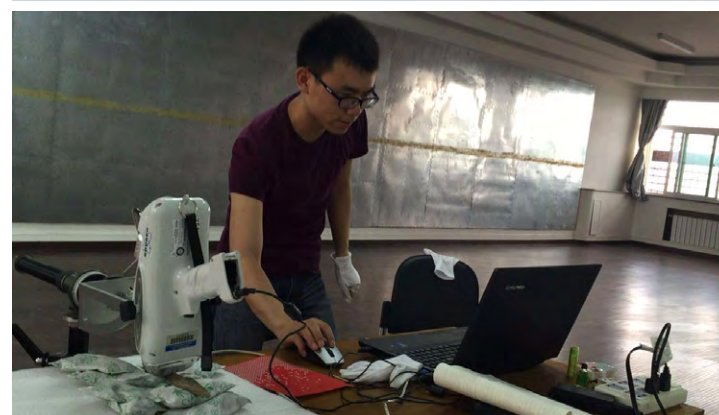
Ashley Krauss (M.A. 2016)

Ashley's research examines the application of remote sensing and geophysical techniques to identify, document, and monitor archaeological sites and the objects found at those sites. During her graduate studies at Yale, Ashley completed fieldwork collecting, processing, and interpreting magnetometry, ground penetrating radar, and electrical resistivity survey, in Belize, Mexico, and Guatemala. Following the completion of the masters program in archaeological studies, she will be working as a geophysical archaeologist at New South Associates.

Rong Fan is a Ph.D. candidate in Anthropology department, specializing in archaeology. Her research interest is understanding the relationship between human health, labor and social complexity in early prehistoric China. By comparing the development stages of activity-induced skeletal and dental changes, nutrition and food consumption related pathological changes from human skeletal remains, She expects to see the food and workload distribution within and among communities. In the summer of 2016, Rong conducted her pilot research projects on several sites where she collected for further investigation.



LAB
WORK

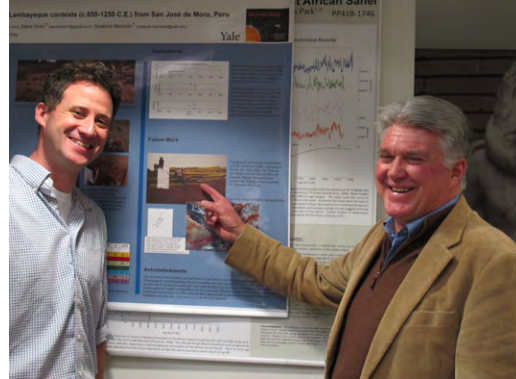


Qingzhu Wang is a Ph.D. student in Anthropology department, specializing in archaeology. His Research interest lies in the production, distribution, and consumption of bronze objects, one of the most important categories of material remains during the Bronze Age of China. He will use both stylistic and chemical analysis to identify the places where the objects were produced, and the people who consumed them. The research will allow Qingzhu to reassess the nature of interaction between the central power and the surrounding areas during the Bronze Age of China, especially the Shang Period (1600-1046 BC).

Archaeomagnetism

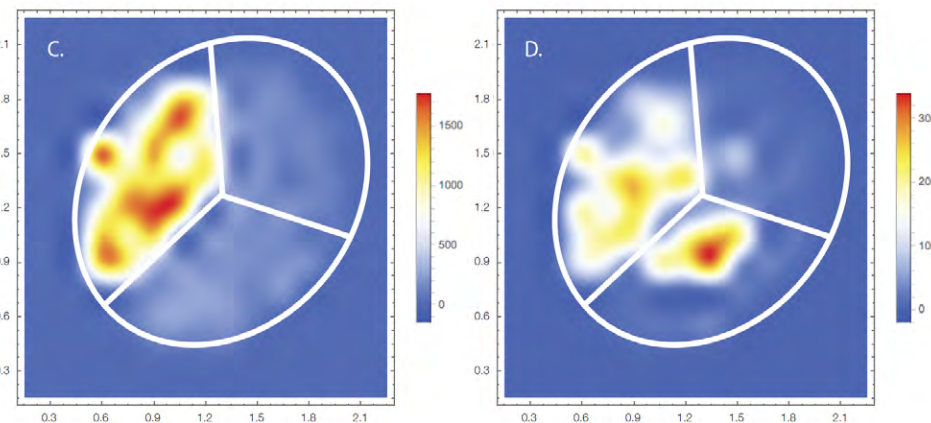
Dr. Josh F. Feinberg

Associate Director of the National Institute for Rock Magnetism, is collaborating with Yale Council on Archaeological Studies' Archaeomagnetism Laboratory on projects in Peru, Egypt, Senegal, and South Africa.



In 2016, Dr. Feinberg presented a lecture titled *"New Magnetic Tools for Archaeology and Anthropology"*, as part of the Archaeology Brown Bag Lecture Series. In his talk, he introduced how the magnetic community has moved far beyond standard site surveys to develop decadal-scale archaeomagnetic dating, material provenance studies, paleoprecipitation proxies, paleoenvironmental magnetic analyses, and more.

During his visit, Yale archaeologists conducted an experimental burn over organic-rich soil mixed with magnetite, hematite, and a control. The burn lasted for around 5 hours, reached a peak temperature of 1252 °C.



The magnetic susceptibility of the pre- and post-burn fire ring.

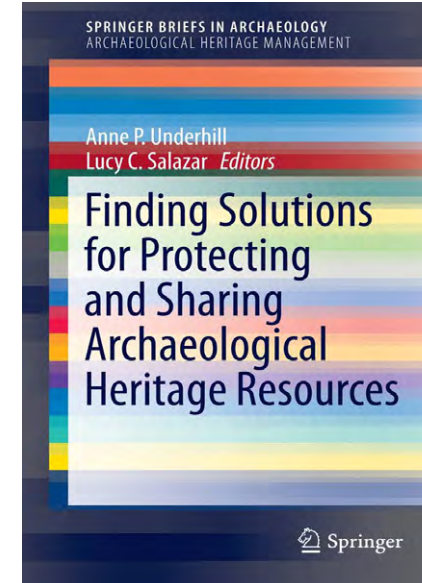


(Text and photos by Prof. Roderick McIntosh)

Selected Recent Publications

Finding Solutions for Protecting and Sharing Archaeological Heritage Resources

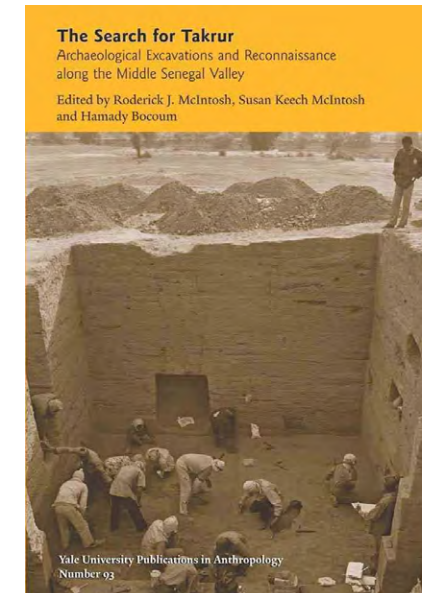
Edited by Underhill, A.P., and Slazar, L.C., (2015)



This volume provides case studies about successful strategies employed in diverse world areas for the protection of archaeological heritage resources. Some chapters focus on a search for solutions arrived at by diverse groups of people working in specific areas rather than simply describing loss of cultural heritage. Other chapters provide a long-term view of intensified efforts at protection of archaeological resources. The authors describe challenges and solutions derived by concerned people in eastern Asia (China, Japan, Thailand), West Africa, Easter Island, Jordan, Honduras and more than one area of Peru. All of the authors draw upon deep, personal involvement with the protection of cultural heritage in each area. This volume is a timely addition to a growing number of conferences and publications about the management of cultural heritage—both archaeological and historical.

The Search for Takrur: Archaeological Excavations and Reconnaissance along the Middle Senegal Valley

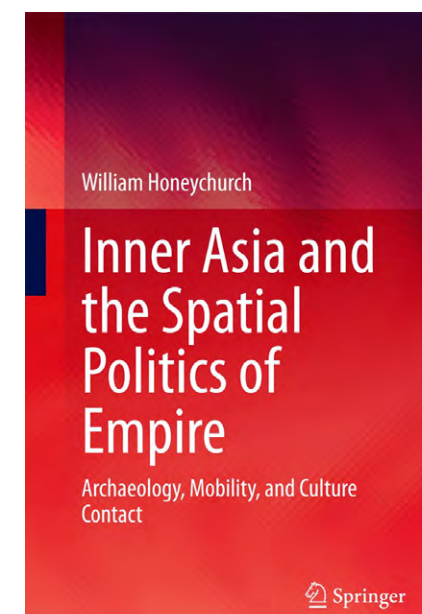
Edited by McIntosh, R.J., McIntosh, S. K., and Bocoum, H., (2016)



A summary of archaeological discoveries in the middle Senegal River valley, this authoritative volume presents new data on iron production, population settlement, and environmental change on the site of the ancient West African empire of Takrur, the first kingdom south of the Sahara mentioned by medieval Arab chroniclers. This authoritative volume should prove of great value to students of archaeology, anthropology, and African history, as well as to climatologists, geomorphologists, and ecologists.

Inner Asia and the Spatial Politics of Empire Archaeology, Mobility, and Culture Contact

Honeychurch, W. (2014)



This monograph uses the latest archaeological results from Mongolia and the surrounding areas of Inner Asia to propose a novel understanding of nomadic statehood, political economy, and the nature of interaction with ancient China. In contrast to the common view of the Eurasian steppe as a dependent periphery of Old World centers, this work views Inner Asia as a locus of enormous influence on neighboring civilizations, primarily through the development and transmission of diverse organizational models, technologies, and socio-political traditions.

Selected Published articles in 2015

- Landscapes: Deep-time palaeoclimatic memory among the Mande. Roderick McIntosh. In (eds.) Jessica Barnes and Michael Dove. *Anthropological Approaches to Climate Change*. New Haven: Yale University Press: 273-288.
- Flor de Mayo: A Formative U-shaped center in the Peruvian Ceja de Selva? Richard Burger, Lucy C. Salazar and Jorge Elías T. Silva. *Nawpa Pacha* 35 (1): 91-116. Berkeley California.
- La cerámica de Coscopunta, un sitio del Intermedio Tardío en la provincia de Carhuaz, Callejón de Huaylas. Richard Burger and Lucy Salazar. *Bulletin de l'Institut Français d'Etudes Andines* 44(1):23-52. Lima.
- Myth, Ritual, and Human Sacrifice at Tikal, Guatemala. Chinchilla Mazariegos, Oswaldo, Vera Tiesler, Oswaldo Gómez, and T. Douglas Price. *Cambridge Archaeological Journal* 25:187-210.
- Coring Lake Fati and Settlement Archaeology of the Middle Niger Lakes Region. Peter R. Coutros, and Peter M. J. Douglas. *African Archaeological Review*, 2015, Volume 32, Issue 2: 249–266.
- Forging Ahead By Land and By Sea: Archaeology and Paleoclimate Reconstruction in Madagascar. Kristina Douglass, and Jens Zinke. *African Archaeological Review*, 2015, Volume 32, Issue 2: 267-299.

Selected Published Articles in 2016

- The Source, Processing and Use of Red Pigment Based on Hematite and Cinnabar at Gramalote, an Early Initial Period (1500-1200 cal. B.C. Maritime Community, North Coast of Peru. Richard Burger, Gabriel Prieto, Veronique Wright, Colin A. Cook, Elvira L. Zavallos-Velasquez, Aldo Watanabe, Matthew R. Suchomel, and Leopoldo Suescun. *Journal of Archaeological Science: Reports* 5 45-60.
- Ecuadorian Cinnabar and the Pre-Hispanic Trade in Vermilion Pigment: Viable Hypothesis or Red Herring? Richard Burger, Kevin E. Lane and Colin Cooke. *Latin American Antiquity* 27(1): 22-35.
- Just and Patriotic: Creating a National Museum in Guatemala (1831-1930). Chinchilla Mazariegos, Oswaldo. *Museum History Journal* 9:60-76.
- The Archaeology of Pastoral Nomadism. Honeychurch, W. and C. Makarewicz. *Annual Review of Anthropology*, vol. 45.



Acknowledgment

Here we would like to thank our fellow students, faculty members and staff who contributed to this newsletter, and who make our community the warm and welcoming collegial place that it is.

Rong, Nado and Lingyi