In Situ

Fall 2019

News and Events of the Harvard Standing Committee on Archaeology

Ayn Sokhna camp on the Red Sea coast; see page 19

In this issue: Projects focusing on China, Egypt, Fenno-Scandinavia, Israel, Peru, Spain, Sudan, and USA

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News and Events of the Harvard Standing Committee on Archaeology
Fall Semester 2019

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Note from the Chair

After a publication hiatus in 2018–2019, this new issue of *In Situ* provides an informal newsletter describing some of the diverse activities and achievements by archaeologists across the Harvard community and beyond. The following pages briefly summarize eleven different projects, some taking place right here on the Harvard campus, others as far away as China. We are particularly happy to highlight graduate student work, and I encourage you to explore the wide range of technologies they are applying to their research questions.

In addition, we list the many events related to the Standing Committee on Archaeology's mission on campus this past semester, even as we look ahead to a busy and no doubt productive spring 2020.

For fundamental support, both logistical and moral, we thank the Dean of Social Sciences, Prof. Lawrence Bobo, and the Dean of Humanities, Prof. Robin Kelsey. Their encouragement allows us to sponsor archaeological activities over the course of the entire academic year, as well as to bring you these biannual *In Situ* newsletters. We are also indebted to this year's SCA Student Coordinator, Sara Zaia, who keeps us up to date on all the happenings on campus.

For upcoming events please check our website, https://archaeology.harvard.edu, including our calendar. And questions may be sent to us at sca@fas.harvard.edu. We are now collecting articles for the spring 2020 issue—so don't be shy, tell us your news!

Peter Der Manuelian
SCA Chair
Barabara Bell Professor of Egyptology
Director, Harvard Semitic Museum

In Situ Fall 2019: Edited, typeset, designed, and produced by Peter Der Manuelian.

Cover image: The AMeRS Association Mer Rouge-Sinaï project dig camp, January 14, 2019. Photo by Peter Der Manuelian.

Archaeological heritage in Pre-Hispanic Cajamarca "El pasado importa"

Solsire Cusicanqui

Cajamarca is located in northern Perú. It is a flat and beautiful plateau in the middle of the Andes that includes a strategic location within Andean geography as an enclave of the natural points of access to different ecological zones, such as the coastal valleys, Amazonian rainforest, southern highlands to Peru, northern highlands to Ecuador.

This environmental factor promoted the movement of people and goods from early times to the present. The explosion of this movement, a drastic internal change in Cajamarca society, occurs at the same time that a new ethnic identity is forged that created what we know as the Cajamarca archaeological culture (cal. 50 BC–1400 AD). Cajamarca stands out in the Andes as a ceramic technological style that hardly changes in 1500 years. This style is characterized by its unique and distinctive white pottery—a result of the use of kaolinitic clay found in the mountains surrounding the valley.

The purpose of my project over the last three years was to investigate the relationship between environmental factors and cultural dynamics as manifested in the development of specialized pottery production as a symbol of ethnic identity in the valley of Cajamarca, Peru, during the Early and Middle Cajamarca Periods (cal. 50 BC–850 AD).

This year my project was sponsored by various local and foreign entities, including the Municipality of Cajamarca, Ministry of Culture, the Spanish Agency for International Cooperation for Development, Rust Family Foundation, David Rockefeller Center for Latin American Studies, and the Anthropology Department of Harvard University. This support allowed us to work until December in the city of Cajamarca analyzing our material. This project impacts not only the archeology of Cajamarca but also the citizens of Cajamarca who visit the site every day and look at the reports on the discoveries that come out regularly. My team and I are also working with local universities and currently we are training twenty-four technicians in archaeology to excavate and analyze the archaeological material, and also

Figure 1. Excavation of the archaeological site of Iscoconga, season 2019. Photo by the author.

Figure 2. Cajamarca pottery, Early and Middle Periods (350–550 AD) from Iscoconga. Photo by the author.

Figure 3. Cajamarca Archaeological Project team and professors Gary Urton and Jeff Quilter.

to safeguard and preserve their heritage. I hope our work has influenced modern Cajamarca society in a positive way by contributing to the preservation and protection of its archaeological heritage.

This year we worked for six weeks on the excavations at the Iscoconga archaeological site (figure 1). Iscoconga is a Cajamarca settlement (50 BC–850 AD) with several functional areas of production, housing, and, probably, an area dedicated to ceremonial or ritual acts that included the sacrifice of vicuñas, wild camelids. In these spaces we have registered stone architecture with kaolinite clay plasters that demonstrate the society's close relationship with this material used mainly to produce its ceramics. Pottery is the most frequently recorded cultural material on this site, specifically in the Iscoconga decorative style of the Early and Middle Cajamarca. We found more than 10,000 sherds (figure 2)! Approximately 80% are dishes and bowls made of kaolin with a fine finish, while we record other broad styles such as pots, crocks with appliques, potters' plates and strainers. This has added to the discovery of an open potter's oven for the Early Cajamarca period that contained pigments, ground stone tools with traces of use, and ceramic fragments.

Furthermore, highlights of the registration include a large number of bones of camelids, deer and guinea pigs. In November, we had the pleasure of having the support of Sadie Weber in the analysis of animal bone materials. Plant material was also identified, including corn kernels and cornstalks, beans, and other unidentified seeds. Foreign elements have also been recorded on floors and stuffed like coastal crab and fish bones. Also, a burial of an adult man with marine offerings as a coastal crab has been discovered. This individual has a cranial modification that already has a precedent in the Cajamarca Valley. Among the exotic materials encountered is the discovery of obsidian that could originate in southern Peru—800 km away!

We also had "exotic" guests: professors from the Department, Gary Urton and Jeff Quilter visited the excavations in Cajamarca (figure 3). We were invited by the Cajamarca government to excavate the emblematic site of the "Ramson Room of Atahualpa," which witnessed what was probably the most important meeting in South American history: the November 16th, 1531 encounter between the Inca armies of Atahualpa on the one hand and the Spanish armies of Pizarro, on the other.

As we finished our field work during November and December we focused on laboratory work and analysis of the cultural remains. Thanks to our supporters, including the Department of Anthropology, over the past three years this project has evolved into a program that trains archaeologists, archaeology students, and technicians and impacts to the local population in a positive way, preserving the past for the future. In an archaeological country such as Peru, archaeology can no longer be carried out without including a relationship with the local communities. Archaeology should be a tool to strengthen local identity and promote respect for the preservation of national and local heritage.

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The Tao River Archaeology Project—2019

SU Xin

The "Tao River Archaeological Project" (TRAP) was initiated in 2012 to investigate technological changes in Northwest China during the late third and early second millennia B.C. Fieldwork in the summer of 2019 constituted its seventh year of activity.

Our work this season was divided into two main parts. The first was laboratory analysis of artifacts collected in fieldwork of the past few years. This work also involved writing a summary of the first phase of the entire project. In addition to routine lab work, such as measuring and photographing, 3D scanning has been introduced into our work for analysis of artifacts. With the help of 3D scanning, we can observe objects in more detail, which will enhance our understanding of individual artifact and enable a deeper understanding of behaviors and techniques in ancient contexts. One particular focus of our scanning this year consisted of collecting data to examine standardization of decorative motifs on ceramics; we also focused on scanning lithic tools and associated debris.

The second task undertaken involved survey focused on geological resources and opportunistic archaeological survey. The area of this survey was the Dabi River Valley, which is a tributary of Tao River. Maxian Mountain to the north of the river contains a jade mine, which is considered by some scholars to be a main source of jade material during the Qijia culture period (2200–1600 B.C). One of the goals of our survey was to investigate whether there are any archaeological remains in this area which may be related to jade production and transportation in the past. Fortunately, over the course of this short survey season, we found more than a dozen small

Figure 1. Janice Ngiam, Jie Shen, Fabian Toro, Dammer Evgenia, and Shengpeng Jiang analyzing artifacts in the laboratory at the Gansu Provincial Institute of Archaeology in Lanzhou on June 20, 2019. Photo by Rowan Flad.

Figure 2. Jada Ko and Yulai Chen in the survery at Dabi River Valley on May 29, 2019. Photo by Xin Su.

sites along Dabi River. Among these, a ten-hectare site was also found in a valley of a tributary of the Dabi River. A large number of Neolithic sherds and bones was found at this site. This tributary directly connects the jade mine with the Dabi River, so the significance of this site is very important. The discovery of these sites will not only help us reevaluate the whole area, but also provide us with an opportunity to understand jade production in the past. Another goal was to investigate natural resources along the Dabi River Valley, especially clay and other sediment sources and stone material. We hope that the analysis of sediments and stones will help us explore problems related to pottery and lithic production in ancient society. To this end, we sampled in this valley systematically and, after the end of field work, also selected some samples for sectioning. These samples will provide the basis for the next step in the analysis of microstructure of ceramic and lithic materials.

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Modeling Royal Nubian Landscapes: Bringing the "Drone Revolution" to Northern Sudan

Katherine Rose

The relatively recent incorporation of Unmanned Aerial Vehicles (UAVs, or drones) in archaeological fieldwork and methodology is an ever-advancing technological endeavor. The uses of drones have implications for many aspects of archaeology including the study of space and landscape, visualization, and heritage management projects such as site monitoring. Drones provide an efficient means of gathering spatial data on a much greater landscape scale than traditional forms of mapping and photography.

Figure 1. View from a UAV of the upper pyramid field at the site of Jebel Barkal in Northern Sudan.

Furthermore, drone photography can form the basis of photogrammetric models of landscapes, which allow for studying architectural and natural features within a broader regional and environmental context. This is crucial for many archaeological sites, especially those of the Nile Valley region which were excavated and mapped in the early 20th century, with those maps often lacking context and high-resolution detail. My recent project in Sudan aims to apply drone mapping, recording, and visualization technology to address these pertinent issues.

This project, conducted as my dissertation research, explores the dynamic nature of mortuary landscapes of ancient Napata, a state-level polity which once flourished in Northern Sudan and produced the rulers of the 25th Dynasty of Egypt and Nubia. This dynasty and its ancestors were once considered foreign invaders, imitating Egyptian culture through practices like the construction of royal pyramids, statuary and other royal art, and use of hieroglyphs. These ideas originated in early 20th century anthropological narratives of race and culture, and became embedded in early scholarly discussions through the concept of "Egyptianization." However, recent studies have turned to identifying agency, hybridity, and the cultural mosaic of the rulers of Napata. The discipline has turned to challenging conceptualizations of interactions between cultures and identities as uniform processes of assimilation enacted by colonial powers.

From a landscape perspective, the strategic nature of Napatan royal identity formation will be reflected in patterns in the mortuary landscapes. Are Napatan royals deliberately appropriating aspects of the landscape in the designs of cemeteries? And are there changes in patterns over time? To explore these questions, I conducted drone flights and surveys over several seasons in Northern Sudan near the

Fourth Cataract of the Nile from 2017 to 2019 at the Napatan royal cemetery sites of el-Kurru, Nuri, and Jebel Barkal. With drone photography, maps, and GPS data I created 3D models of the cemeteries to aid in understanding the spatial organization of the sites and their integration with the greater landscape. This work was conducted in collaboration with Geoff Emberling, the University of Michigan, and the International Kurru Archaeological Project.

Nuri is a cemetery located on the southeastern bank of the Nile, which is strange for Egyptian and Napatan cemeteries, which are usually located on the west bank due to ancient Egyptian cosmological notions of the west as the space and place for the dead. Nuri is an interesting case because burial began at the site before other royal burial sites were abandoned. It contains over 80 tombs as well as structures dating to the Christian period. Taharqo, one of kings of the 25th Dynasty, selected this new royal cemetery location. The pyramids here, as at other Napatan cemeteries in the region, are oriented towards the direction of the Nile, to the northwest. After the construction of Taharqo's pyramid, royal burial projects were temporarily moved back to the earlier burial site of el-Kurru. Nuri was then again in use from the end of the 25th Dynasty in 656 BC until around 560 BC. It's interesting to think of the landscape at Nuri dominated by an enormous pyramid, the largest one ever constructed in Sudan, and not much else initially for a few generations.

When considering landscape features of the site, visible in photogrammetric models, the topography and geology of Nuri is distinct. Nuri can be generally characterized by the presence of small sand dunes that compromise clear site lines between tombs. Several areas of drainage can be identified to the North and South of the site, which appear to connect to larger wadi systems out to the east. There is also some interesting topography to the east of the site, which is now under the investigation of a new excavation project led by Pearce Paul Creasman from the University of Arizona. In the future this team

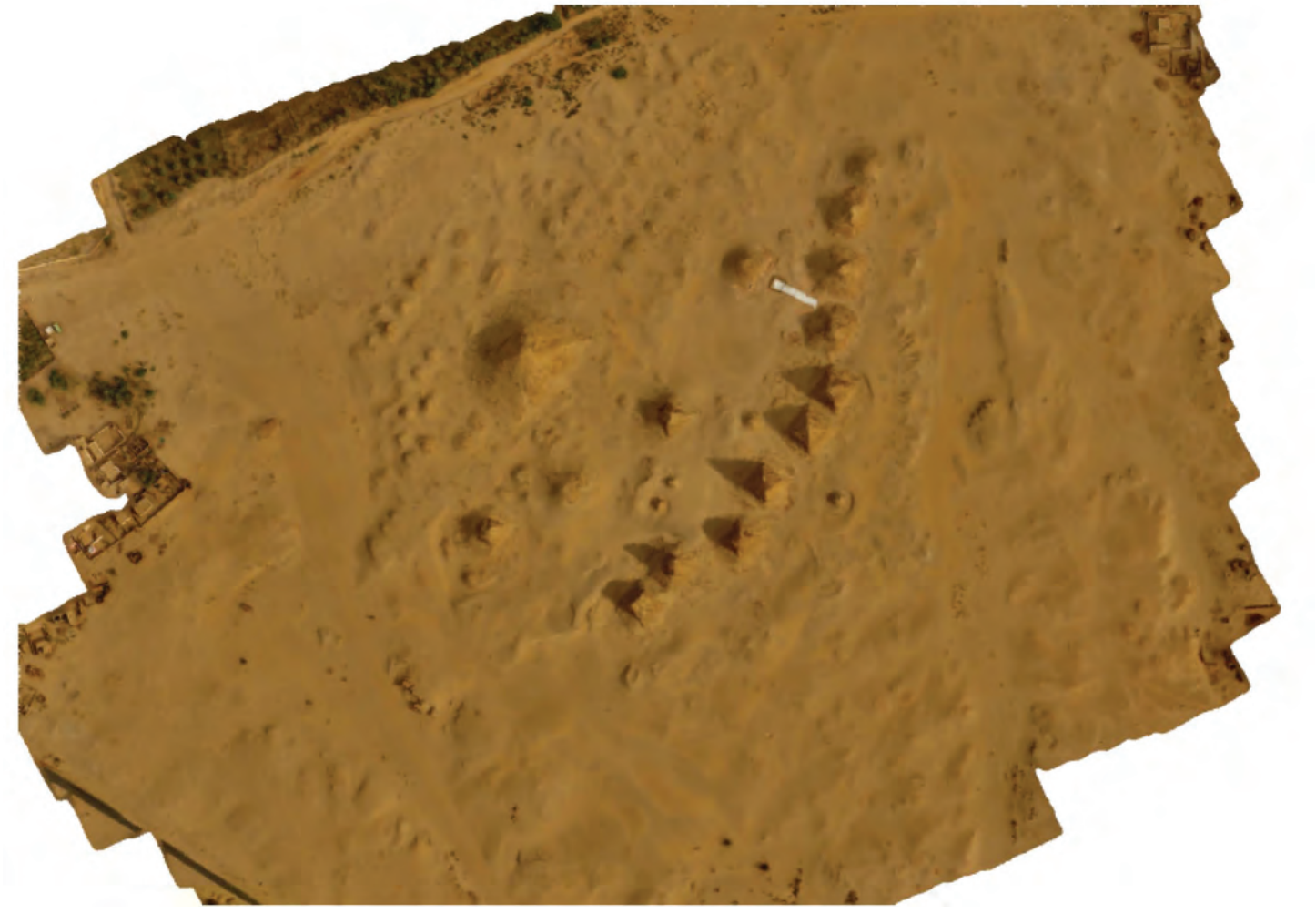

Figure 2. Photogrammetric 3D model of Nuri, facing southwest, displaying topographic features including sand dunes and drainage systems to the left and right of the pyramid field.

will surely be able to elucidate the nature of this area further.

When burial activities were transferred to the nearby cemetery of Nuri, kings and queens were no longer spatially segregated, as they had been in earlier royal cemeteries. Instead, queens were clustered around the pyramid of King Taharqo initially, who ruled during political and economic prosperity following successful military campaigns. Compared to earlier Napatan royal cemeteries, we don't see an appropriation of landscape features at Nuri to separate groups of tombs that appear to correspond to gender and status, even though there does appear to be a kind of spatial code to the site. It's possible that similar landscape features at Nuri were not appropriated in the same way or for the same reasons in the period following the end of the 25th Dynasty. Sites may have been deliberately selected for the presence or lack of specific natural features. This combined with clear patterns of increased proximity between the tombs of kings and queens at Nuri, suggests a shift in cemetery design and organization following the 25th dynasty.

As archaeologists, we must consider Napatan mortuary landscapes as products of the strategic and deliberately constructed and maintained nature of Napatan royal identity. Drones and other methodologies such as photogrammetry and 3D modeling provide increasingly accessible, accurate, and reliable means of gathering spatial data on multiple scales. These technologies are undoubtedly invaluable to the pursuit of better understanding the development and histories of archaeological sites and landscapes.

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Figure 3. Photogrammetric 3D model of Nuri, facing northeast, displaying another view of the topography and wadi systems as well as the tomb architecture.

Sámi Collections at the Smithsonian Institution

Matthew Magnani

Each year the Smithsonian Institution hosts the Summer Institute in Museum Anthropology (SIMA). The intensive program, funded by the National Science Foundation, brings together graduate students interested in museum anthropology. In June and July, I joined this small group to conduct individual research and learn about best practices in the vast collections of the National Museum of Natural History (NMNH).

Led by curator Joshua Bell, the program consisted of topical lectures in the mornings—ranging from discussions on object analysis, to ancient DNA—followed by individual research in the afternoons. Students analyzed material culture from communities from New Caledonia to the Arctic, Australia and the Americas.

The research I conducted examined the origins of the Sámi collection at the NMNH, and articulates with long-term ethnographic work I have conducted in Fenno-Scandinavia. The Sámi are an Indigenous community who live in the northernmost areas of Norway, Sweden, Finland and Russia. With approximately fifty objects in the Smithsonian collection, a month provided time for serious consideration of each piece, and the accompanying accession histories.

This work is significant at a time when Sámi artisans actively seek out museum collections. They do so to inform the production of contemporary material culture, asserting self-determination through materiality. Considering this trend, I conducted my project as a first step towards bringing the objects held at the Smithsonian back into dialogue with Sámi artisans.

Though a small collection, important moments in Sámi history are represented. One carving of a reindeer and sled was made by Lars Hætta—a Sámi historical figure of extreme importance—while imprisoned by the Norwegian State for participating in a revolt. Another object—the ládjogahpir, a type of women's hat—is today rare in the Sámi home territory but the subject of immense interest. The ládjogahpir is currently being brought back into production, after over a century-long hiatus.

At the conclusion of the program, participants delivered lectures at the NMNH on their preliminary findings. In my talk "Sámi at the Smithsonian: The Importance of Small Collections for Indigenous Communities," I argued it is critical to consider even the smallest assemblages as important for their communities of origin. In the near future, funding will be sought to bring Sámi artisans over to the collections at the Smithsonian to initiate interaction.

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Figure 1. The author examining a model reindeer sled in the Smithsonian collections. Photo courtesy SIMA Program at the Smithsonian.

Together at Last: Ankh-khonsu Regains his (3D-printed) Head

Peter Der Manuelian

The great Egyptologist Bernard V. Bothmer (1912–1993) initiated a series of articles called "Membra Dispersa," where he reassembled on paper and in photographs fragments of statues in museum collections around the world. Ankh-khonsu, an Egyptian priest of the god Montu and scribe of royal correspondence, is represented by a fine greywacke temple statue dating to about 655–645 BC, or the first years of the reign of King Psametik I of Dynasty 26. Crouching in the form of a typical Egyptian "block statue," Ankh-khonsu folds his arms over his drawn-up knees and wears a tight-fitting garment that provides an excellent platform for hieroglyphic inscriptions listing his name, titles, family members, and offering formulae. Originally set up in the great Temple of Karnak (modern Luxor, east bank of the Nile), Ankh-khonsu later lost his head. Museum of Fine Arts, Boston, Egyptian Department curator and former Harvard student and instructor Albert Lythgoe (1868–1934) purchased the head for the

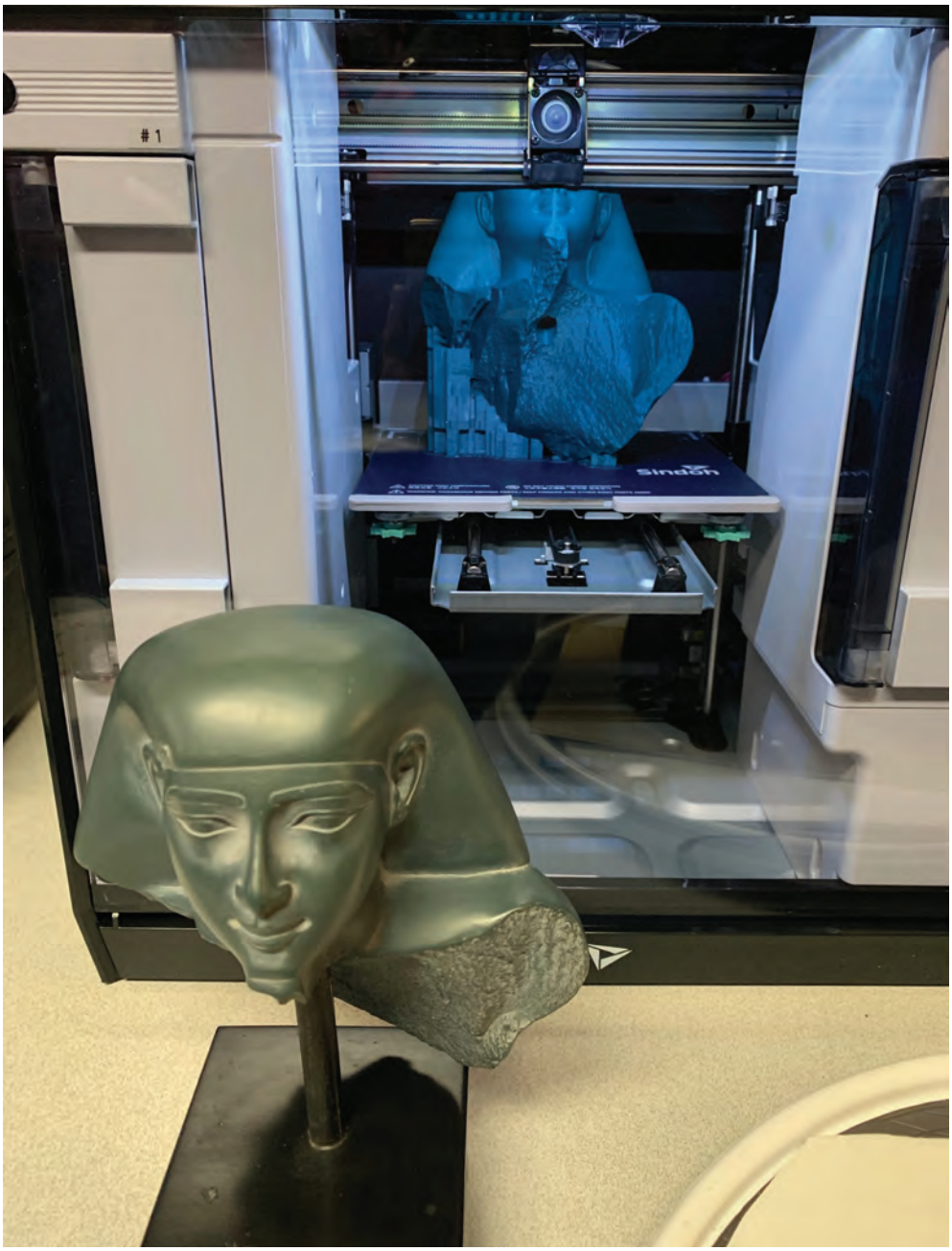

Figure 1. 3D-printing the head of Ankh-khonsu on a Sindoh 3DWOX 2X printer in the Harvard Semitic Museum. Photo by the author.

MFA in 1903; the body turned up later in the famous "Karnak Cachette" in 1905. Bothmer first made the join in 1979.

As an experiment in applying new technologies to "membra dispersa" antiquities, I decided to take advantage of some recent equipment acquired by the Harvard Semitic Museum. First, Harvard senior Andrea Martinez 3D-scanned a replica of the MFA head (MFA 04.1841; see https://bit.ly/2Y7Eqgx) using our Artec Space Spider portable 3D scanner, generously provided by the Dean of Undergraduate Education (see the article by Joseph Greene in this issue, figure 3). Next, thanks to the kind donation of several Sindoh 3DWOX 2X printers by Sindoh Co., we 3D-printed a series of Ankh-khonsu heads using PLA (polylactic acid) filament material in a variety of colors (figure 1). I thank Dr. Changyu Diao, visiting scholar with the Giza Project (http://giza.fas.harvard.edu) from Zhejiang University, who mastered the G-code printing software to produce for us the best results. 3D Printing can be a challenge, since printing angles, amount of PLA "fill" material, object size, and support platforms can all make or break a successful print job. In our case (ancient Near Eastern artifacts), we are always looking to simulate authenticity, from the accuracy of Egyptian hieroglyphs that are readable in classroom instruction, to ancient statue faces suitable for art historical analysis. 3D-printed objects can come to the classroom and be handled, an advantage that fragile antiquities, either inaccessible in storage or displayed within vitrines, cannot match.

After printing a gray, a white, and a somewhat garish green version of Ankh-khonsu's head (figure 2), I prepared to fly to Cairo to test the technology and see how ancient (greywacke) and modern (PLA filament) materials might interact with each other. I contacted Dr. Sabah Abdel-Razek, director of the Egyptian Museum, Cairo, to ask if I might bring Ankh-khonsu's "new" head to her Museum, to try for a join with the rest of the body housed in her collection (Egyptian Museum, Cairo, Journal d'Entrée 37997). She kindly informed me that the headless block statue body had already moved west to the Grand Egyptian Museum, Egypt's most ambitious museum construction project yet, set to open in late 2020 just north of the famous Giza Pyramids (http://gem.gov.eg). I thus rerouted my plans and made the same request of Dr. Tarek Tawfik, then director of the Grand Egyptian Museum, or GEM. Heading off to Cairo in January 2019, I opted to take the garish green Ankh-khonsu head with me, in the

Figure 2. PLA filament-printed results in two colors. Photo by the author.

Figure 3. The author with Dr. Tarek Tawfik. Photo by Marleen De Meyer.

Figure 4. Fitting the head to the body. Photo by Marleen De Meyer.

Figure 5. Ankh-khonsu restored, front. Photo by the author.

Figure 6. Ankh-khonsu restored, back. Photo by the author.

hopes of avoiding any accusations that I was either entering, or later leaving, the country with an actual antiquity!

On January 16, 2019, I had the good fortune to join the class being taught by my Belgian Egyptologist friend and colleague, Dr. Marleen De Meyer of KU Leuven, at the Netherlands-Flemish Institute in Cairo (https://www.universiteitleiden.nl/en/nvic). This group was heading to the GEM, and I tagged along, hoping to treat the students to a bit of technological razzle-dazzle. At the GEM's Conservation Center, while the vast Museum complex itself was slowly rising nearby, and in a fierce and blinding sandstorm as it happened that day, Dr. Tawfik very kindly produced the rest of the greywacke block statue of Ankh-khonsu (figure 3). With about eighteen students and colleagues gathered round, among them Dr. Wouter Claes (Brussels) and Dr. Miriam Müller (Leiden), Dr. Tawfik and Dr. De Meyer, an Egyptian Conservation assistant gently lowered our green head onto the ancient body, and…it was a tight fit! As everyone snapped iPhone photos and movies, Ankh-khonsu proudly stood reunited once more; not only did the MFA head grow a Cairo body (figure 5), but the three-column hieroglyphic inscription on the back-pillar finally stood complete as well (figure 6). A few millimeters here or there were slightly off, most likely due to the derivative nature of the scanning and printing process, not to mention the heating and cooling temperatures of the PLA filament. But on the whole, it was mission accomplished, over 5,413 miles between the two fragments.

It remained only to donate my green 3D-printed head to Dr. Tawfik and the GEM, primarily to thank them for their time and generosity, but also, I confess, to spare me any awkward explanations at Cairo Airport upon my departure. We had proved that 3D printing absolutely has a role to play in the reconstruction of archaeological artifacts spread round the world, and we are already looking forward to our next experiment, this time with a Boston/Europe connection. I thanked our Egyptian colleagues and our group headed over to the GEM construction site for a private tour… in the raging sandstorm.

Peter Der Manuelian is Barbara Bell Professor of Egyptology, Director of the Harvard Semitic Museum, and Chair of the Standing Committee on Archaeology.

Historic Shell Beads in New Jersey: Appropriation between Craft and Industry

Eric D. Johnson

Three bleach-white objects poke up from the soil in a backyard garden in suburban Montvale, New Jersey. A closer look reveals the knobbed spiral of a shell. Framed by yellow daisies and a flagstone wall, these shells seem like artfully placed souvenirs from a family trip to the Caribbean (figure 1). As it turns out, that's only about half correct.

Wampum Factories

Between April and August 2019, a team of archaeologists led by Eric Johnson, a fifth-year Anthropology PhD candidate at Harvard University, surveyed the Pascack Valley of northern New Jersey to investigate locations of 19th century Euro-American "wampum factories." Shell beads such as wampum have been made by Indigenous Nations of the Northeast since before colonization (and into the present). By the mid-18th century, however, Euro-Americans appropriated the traditional craft. This began as a cottage industry, employing many different independent producers. By 1850, the famous Campbell Wampum Factory cornered the market, producing new bead styles as late as 1900. These included *wampum* but also styles iconic of the Plains, such as *hair pipes* and *moons*.

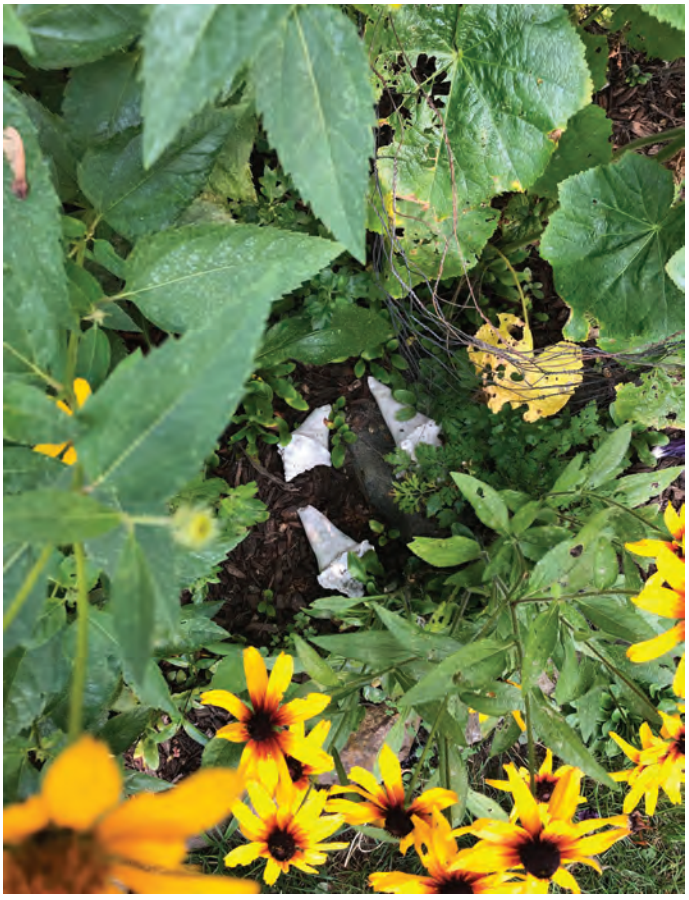

Figure 1. *Lobatus gigas* shells on the surface of the David Campbell House in Montvale, NJ. Photo by the author.

Originally the land of Ramapough Lunaape (Lenape) Indigenous peoples who spoke the Munsee dialect, the Pascack Valley was eventually settled by Europeans and the people they had enslaved, largely of African descent. During the late 18th and 19th century, Euro-American bead-makers are well documented in the historical record. However, Indigenous and African-descendant workers played a role as well. The region continued to be home to Ramapough Lunaape residents in the 19th century, and given the region's history, Bergen Country, NJ, was also home to a significant African American community at the time, both enslaved and free.

Factory owners such as the Campbells sold their products to New York merchants who then traded with Native Americans everywhere from the Great Lakes, to the Southern Plains of Oklahoma, to the Northern Plains of North Dakota. Wampum had been used by Europeans as money in the cash-strapped colonies, but these beads went beyond "currency" or "fashion" for Native peoples. Wampum, today and in the past, is a powerful sacred object used for making peace and declaring treaty rights. Hair pipes are worn at pow wows, ceremonies, and other important events. These uses continue for Native people, including the Ramapough Lunaape Nation.

Caribbean Connections at the David Campbell House

The shell found in Montvale was indeed from the Caribbean. It made the long journey to New Jersey about 200 years ago. In fact, it was the former biomineralized home of a mollusk known as *Lobatus gigas,* or Queen Conch. This large sea snail's thick, heavy shell protects it from its many predators, and Euro-Americans used it as ballast on ships between

Figure 2. Archaeology graduate student Gary Ellis of the University of Massachusetts Boston excavates a trench feature from Excavation Unit 4 at the David Campbell House. Photo by the author.

Figure 3. Assemblage of worked conch shell and mid-19th century artifacts from excavations at the David Campbell House. Photo by the author.

the Caribbean and New York. This durable shell also made it a useful raw material for manufacturing beads. New York merchants sold conch shell to shopkeepers in the Pascack Valley who sold it to local beadmakers. One of those beadmakers was David Campbell, who moved to present-day Montvale in 1812. David Campbell's nephews eventually became the famous "Campbell Brothers" who owned the wampum factory in neighboring Park Ridge.

Following the trail of *Lobatus gigas* along with historic maps and deed records, Eric identified the location of David Campbell's house. With the gracious permission and support of local landowners, Eric conducted a survey of the property along with archaeology graduate student Gary Ellis of the University of Massachusetts Boston (figure 2). Together they excavated four units with significant quantities of worked conch shell. Combined with datable ceramics (figure 3), these deposits suggest the presence of a "wampum workshop" on the property between 1810 and 1850. Artifacts are currently being processed at the Peabody Museum of Archaeology and Ethnology in Cambridge, MA.

Industrializing the Materiality of Indigeneity

Eric hopes to identify subtle variations in how shell beads were made over time, the effects of industrialization, and the lived experience of Indigenous and African American laborers in the industry. Excavation data will be uploaded to a Historic Shell Bead Production Database and compared to previously excavated collections from different time periods. In particular, the 2019 excavations date to the crucial "proto-industrial" period before the Campbell Wampum Factory. By reconstructing the sequences of production, tracking changes in bead styles, degrees of standardization, and efficiencies of production, the David Campbell House data suggests the ways that Native American consumers influenced production in the Pascack Valley.

Previous literature characterized Euro-Americans as the "inventors" of the hair pipe bead. This narrative has neglected the ways that Native nations drove demand and shaped commodity aesthetics, pushing the limits of labor and capital, mollusks and machines, and circulations of shell-bead value. Jersey-made beads adorned Indigenous counterinsurgents and delegations to Washington. In this political economy of adornment, beads (and their producers) were conscripted into projects of Native sovereignty and defense of land rights.

Funding for this project is provided by a grant from the National Science Foundation and the Wenner-Gren Foundation for Anthropological Research. Eric has been partnering with fellow historical archaeologist Dr. Chris Matthews at Montclair State University as well as local stakeholders. These include the Ramapough Lunaape Nation, the Park Ridge Borough Administration, the Pascack Historical Society, and the Bergen County Historical Society.

Eric plans to continue the project next summer, with follow-up excavations in the Pascack Valley as well as Paramus, NJ.

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3-D Imaging and Printing of Bullae from Nuzi, Iraq

Joseph Greene

The archaeological site of ancient Nuzi (Yorghan Tepe near Kirkuk in Modern Iraq) was excavated by Robert Pfeiffer on behalf of Harvard University from 1929 to 1931 (figures 1–2). The excavations revealed an exceptional combination of a large corpus of well-provenanced cuneiform texts (written in clay tablets many with impressed sealings), broad horizontal exposures of architecture (both palatial and residential) and a rich variety of artifacts and ecofacts from late second millennium B.C. Mesopotamia. At the close of the excavations, finds from the site were divided between the Iraq Museum and the American expedition. The American division came primarily to Harvard to be shared out among the Semitic, Peabody and Fogg Museums.

From the 1930s, of all the finds from the site, the cuneiform tablets and the sealings received the most consistent and concerted scholarly attention, the tablets as bearers of information and the sealings as miniature works of art depicting gods, humans and animals in elaborate compositions. Other objects

Figure 1. Aerial view of Nuzi. Photo by RAF.

from the site, so-called bullae, also bore sealings, but these have received rather less attention because most were in fragmentary condition. Only recently has there been renewed attention of the Nuzi bullae, both as objets d'art and as evidence for a sophisticated system of administration at Late Bronze Age Nuzi.

The bullae, actually merely lumps of unfired clay, were applied to baskets, boxes, bags and door latches then sealed by rolling a cylinder seal across the wet clay. After the clay dried, the container or door was secured and could only be opened by breaking the bulla, making it obvious that the sealed had been broken, an early form of tamper-evident packaging. Once broken, such single-use bullae were discarded. The bullae found at Nuzi in the 1930s, though obviously of significance, were at first set aside while attention focused on the cuneiform texts. Now, with the help of 3-D scanning and printing, the bullae are being restudied in a new light (figures 3–4).

The attractive side of the bullae bear elaborate sealings. The backs—the unattractive sides—bear the image in reverse of that part of the basket, box, bag or door to which they were attached. By scanning the *backs* of the bullae and then reversing the scan digitally, it is possible to view and then print in

Figure 2. Robert Pfeiffer at Nuzi, 1928–29. Harvard Excavations at Nuzi Archive.

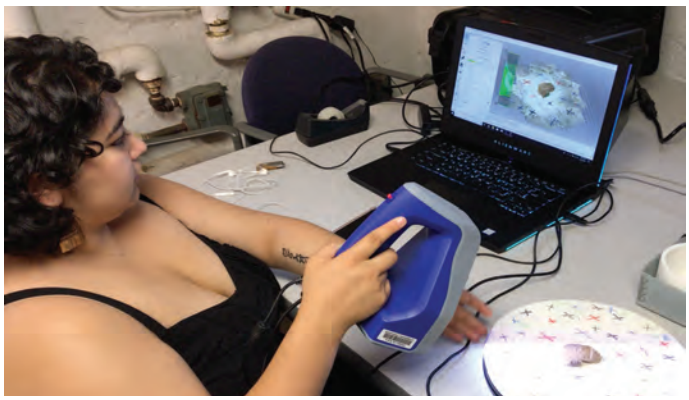

Figure 3. Andrea Martinez scanning bullae in the Harvard Semitic Museum. Photo by Peter Der Manuelian.

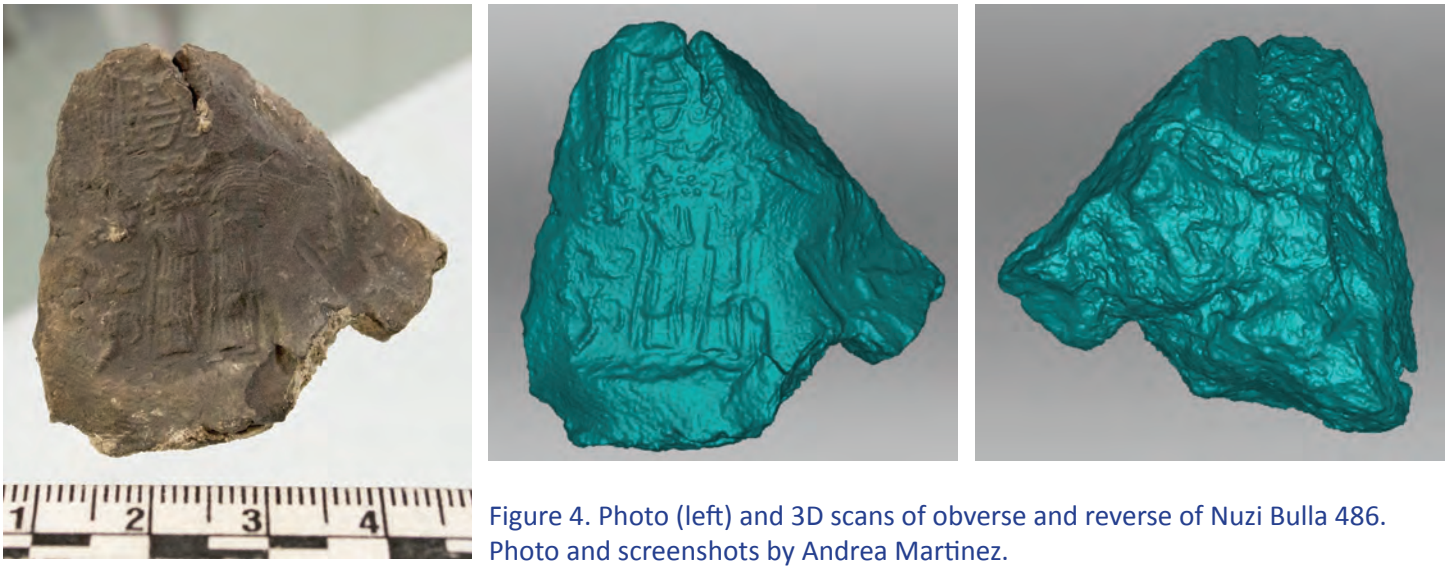

Figure 4. Photo (left) and 3D scans of obverse and reverse of Nuzi Bulla 486. Photo and screenshots by Andrea Martinez.

3-D, the surfaces to which the bullae were applied. Using this information, the careful compilation of the types of objects sealed, and their location within the site, along with our considerations of variations and/or repetitions of the seal designs, give fresh clues to the economy and society of this late Bronze Age Mesopotamian town.

Joseph Greene is Deputy Director of the Harvard Semitic Museum.

On the Red Sea Coast: AMeRS Association Mer Rouge-Sinaï Archaeological Project—Field season 2019

Sara Zaia

Last winter I joined for the first time the French Mission of the Sorbonne University as they excavated the site of Ayn Sokhna. This fascinating ancient Egyptian harbor is located 70 km south of Suez, in the northern part of the Egyptian Red Sea coast, across from the Sinai Peninsula.

The site has been investigated for more than twenty years and many structures related to different activities have been uncovered. The harbor was regularly occupied in antiquity, during the reign of Khufu and Khafre of the Egyptian Old Kingdom, and later on during the Middle and New Kingdoms as well. It was a logistics center connecting the quarries in the Sinai Peninsula with the Nile Valley. Ancient Egyptians undertook expeditions to the Sinai to exploit the copper and turquoise mines there. Structures uncovered at the site confirm that the copper collected from the mine areas was transported to the site and processed into "bricks" that could easily be transported to the Nile Valley, where Egyptian craftsmen converted them into objects.

Previous fieldwork had uncovered galleries dating from the Fourth to Fifth dynasties. Other structures located between the mountain and the sea are made of dry-stone and likewise date to the Old Kingdom. Some of these might have been used for the assemblage of the ships in which the Egyptians crossed the sea.

During my first field season, I oversaw the area in the northern part of the site, excavating a Middle Kingdom kiln for copper smelting. The study of the metallurgic workshops is crucial to our

Figure 1. One of several excavation sites at Ayn Sokhna, January 14, 2019. Photo by Peter Der Manuelian.

Figure 2. One of the beautiful shells of the Red Sea. Photo by the author.

Figure 3. The author's team of workmen. Photo by the author.

Figure 4. The archaeologists at the dinner table. Photo by AMeRS Association staff.

understanding of the *chaine operatoire* for the exploitation of malachite minerals, from which copper was obtained, during the Middle Kingdom. Before excavating the kiln itself, we focused on the excavation and study of the charcoal and copper debris deposited around it. The furnace must have been in use for many years because the deposit was extensive. The analysis of the debris confirmed the presence of copper residue, and botanical analysis will provide information on the fuel source, which was brought from afar since the local fauna was not a suitable source of fuel for smelting work.

On a different area of the site we excavated an Old Kingdom deposit, revealing further information regarding the organization of the Egyptian community living there. There is an enigmatic and very interesting structure here that was excavated during the previous seasons. Some have interpreted it as a water distribution structure, but nothing similar was ever found in any other site in Egypt.

Working at Ayn Sokhna was a great opportunity for me, as the material there may help me answer some of my research questions. My PhD research focuses on the organization of ancient Egyptian long-distance trade and the rise of the early Egyptian state, through the study of the ancient and modern landscape. The site of Ayn Sokhna, with its workshops and galleries that once stored boats and other sailing equipment, represents a perfect case study to include in my research about ancient Egyptian trade.

Sara Zaia is a PhD candidate, Archaeology Program, Department of Anthropology, Harvard University.

Digging Deeper with MHAAM and SoHP

Michael McCormick and Jake Ransohoff

After last summer's test trenches with the Harvard and Alcalá student team in the suburbs of the royal Visigothic town Reccopolis, Professor Michael McCormick (Initiative for the Science of the Human Past at Harvard), along with collaborator Lauro Olmo Enciso (Universidad de Alcalá de Henares, Spain), worked last September with Dr. Knut Rassmann of the German Archaeological Institute's

Römisch-Germanische Kommission (Deutsches Archäologisches Institut, Frankfurt) and his team, testing new motor-drawn geomagnetic prospecting devices in and around Reccopolis. McCormick gave talks on ongoing archaeological work at MHAAM's (Max Planck–Harvard Research Center for the Archaeoscience of the Ancient Mediterranean) sister program at the Max Planck Institute for the Science of Human History (Jena), Leyden, the Académie des Inscriptions et Belles-Lettres (Paris), the European Molecular Biology Laboratory (Heidelberg), the archaeological site of Maguelone (France), and the Deutsches Archäologisches Institut (Istanbul). He published with colleagues a synthesis of the remote prospection and excavations at a newly identified fortified settlement in Roman northern Gaul (*Journal of Late Antiquity* 11.1 [2018]: pp. 129–165); evidence from the Historical Ice Core Project for mining and the shift from the Roman gold monetary standard to the medieval silver standard (*Antiquity* 92.336 [2018]: pp. 1571–85); the first geomagnetic prospection of a major Visigothic site, establishing the urban character of the royal foundation of Reccopolis (*Antiquity* 93.369 [2019]: pp. 735–51); newly identified burials of victims bearing aDNA of 6th-C. bubonic plague in Britain, Spain, France and Bavaria (*PNAS* 116.25 [2019]: pp. 12363–72); and on the value of intensive Carbon-14 dating of late antique landfills to detecting the demise of Roman towns in the Negev Desert (*PNAS* 116.17 [2019]: pp. 8096–98). He taught a new Harvard "Foundations" undergraduate course in History this fall (Hist.1056: The New Science of the Human Past) on how archaeoscience is revolutionizing our knowledge of the human past.

Michael McCormick is the Francis Goelet Professor of Medieval History, and Chair, the Initiative for the Science of the Human Past at Harvard. Jake Ransohoff is a PhD candidate in the Department of History, Harvard University.

Figure 1. Reccopolis Team: Lauro Olmo Enciso, Michael McCormick, and Harvard GSAS Students. Photo by Henry Gruber.

Figure 1. The Sphinx of King Khafre and the Dream Stela of King Thutmose IV at Giza, June 14, 2017. Photo by Marleen De Meyer.

Dreaming the Sphinx: An Egyptian Augmented Reality App in the Harvard Semitic Museum

Peter Der Manuelian

Between the front legs of the Great Sphinx of King Khafre at Giza (Old Kingdom, about 2520–2494 BC) stands a royal granite stela inscribed in hieroglyphs that dates to more than 1,000 years later than the Sphinx itself (New Kingdom, about 1400 to 1390 BC; figure 1, and for a rotating panorama of this area, see: http://bit.ly/2k1O92Y). At the top, the stela shows carved scenes of King Thutmose IV presenting offerings to images of the Sphinx. The inscription below is a unique one; a young prince Thutmose IV falls asleep by the Sphinx, which then appears to him in a dream, offering him the throne if he will only liberate the Sphinx from all the sand covering it body. A selection from the hieroglyphic text reads:

"Look at me, see me, my son Thutmose. I am your father, Harmakhis-Khepri-Atum, and I shall give you the kingship on earth, in front of all the living ones. … my (current) condition is like one that is in need, all my limbs (as if they were) dismembered as the sands of the desert upon which I lie have reached me. So run to me, to have that done which I desire, knowing that you are my son and my protector…."

Figure 2. Aiming the "Dreaming the Sphinx" app at the Dream Stela in the Harvard Semitic Museum. Photo by HMSC staff.

The Harvard Semitic Museum (HSM) continues its process of renewal and revitalization, and may even change its name soon in favor of a more inclusive and descriptive designation. After HSM staff learned that a mold from the Sphinx stela at Giza had been made in the 1860s, and that a plaster cast existed at the KU University in Leuven, Belgium, Museum assistant curator Adam Aja flew to Belgium to make a new silicon mold. Back in Cambridge, we poured and colored liquid resin into this new mold to produce a new, full-sized reproduction of the Dream Stela (short video here: https://bit.ly/2qY3Y3V). A second video illustrating the replication process is available here: https://bit.ly/33HmsCP.

Since we cannot reproduce the Sphinx—even photographically—at full scale in the HSM gallery's limited space, we created an "augmented reality" app to reproduce some of the experience at Giza for Museum visitors (figure 2). As part of the permanent Dream Stela display, this app serves Harvard students, museum visitors, and even the world community with an "at-home" component. Generous grants from the Elson Family and Barajas Deans Funds made these achievements possible. The stela exhibit presents the only extensive narrative text in ancient Egyptian hieroglyphs on the Harvard

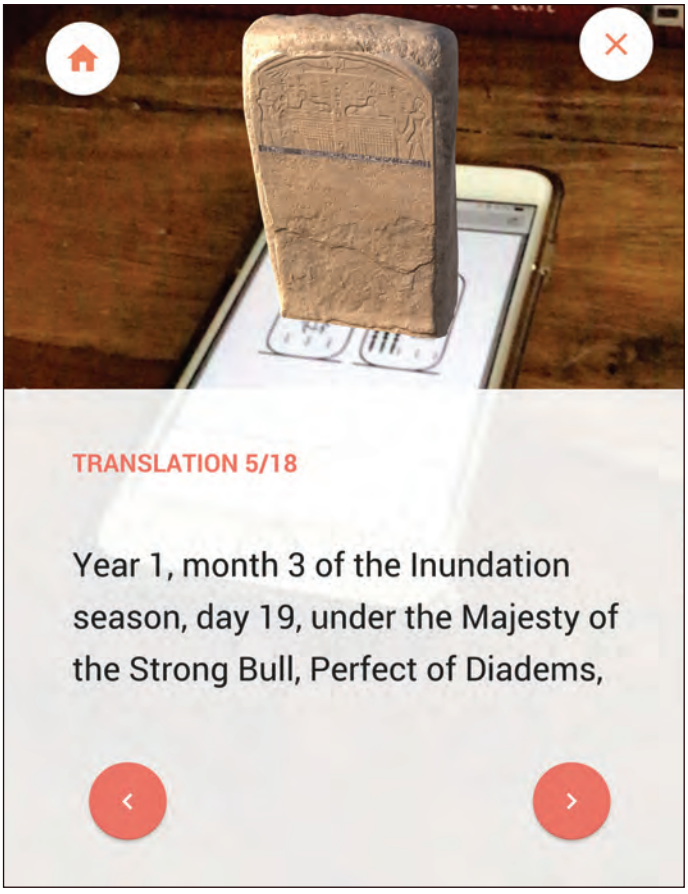

Figure 3. Line-by-line English translation of the Dream Stela, appearing in augmented reality on a phone.

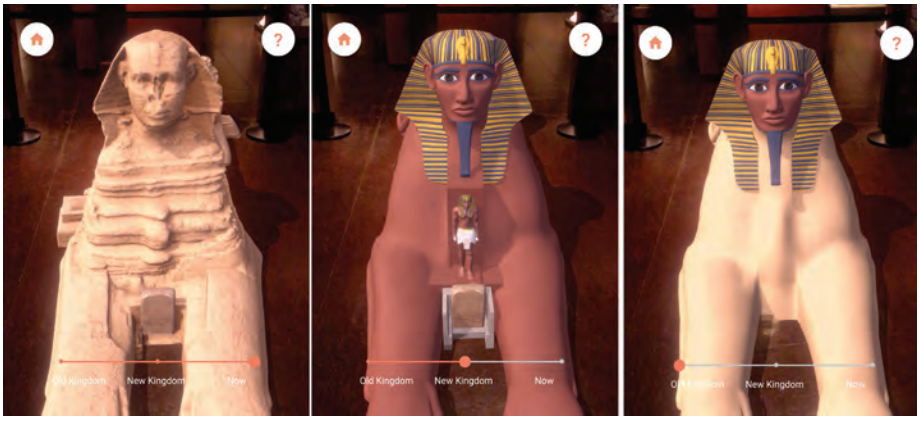

Figure 4. Three different time periods for viewing the Sphinx: present-day, New Kingdom Dynasty 18 (1400 BC), and Old Kingdom Dynasty 4 (2500 BC).

campus. It is useful for everyone, from freshman seminar students to Gen Ed classes, to advanced Egyptology graduate students in Egyptian text-reading courses, not to mention the general public.

"Dreaming the Sphinx," a free download from either the Apple or Google Play app stores, does three main things: using a phone or tablet, users can 1) project an overlay the drawing onto the stela and "read" the hieroglyphs in English translation line by line (figure 3); 2) stand virtually before the Sphinx and view the stela and surrounding environment in a 360-degree panorama that changes over time, from 2500 BC, to 1400 BC, to the present day (figure 4); 3) aim their device at a floor target that produces a virtual model of the entire Sphinx, again changing over three distinct periods in time (figure 5). All of these features are also available from home; users simply aim their device at a printout (included in the app) with hieroglyphs on it that behave like a QR code.

We learned much about the pedagogy and the technology involved in creating such a useful educational tool. We now feel well-positioned to create version 2.0, not only smoothing out the user interface further, but adding a fourth chronological layer to the different viewpoints available to the user. The Sphinx (Dynasty 4) is 1,000 years older than the Dream Stela (Dynasty 18). We aim to add more ancient alterations to the area in Dynasty 19, when King Ramesses II (1303–1213 BC) added two new stelae to the shrine between the Sphinx's legs. These stelae are now in the Louvre Museum. In addition, animations recounting the young Prince Thutmose's dream with the Sphinx are in preparation. We look forward one day to providing translations of the Dream Stela in languages other than English.

An important aspect of this project is the bridge it builds building between Harvard's Giza Project

Figure 5. Using their phones, Harvard students project the present-day Sphinx in augmented reality onto the floor of the Harvard Semitic Museum gallery. Photo by the author.

(http://giza.fas.harvard.edu), the Harvard Semitic Museum and the Department of Near Eastern Languages and Civilizations (NELC). It makes good sense that the Museum collections enhance the NELC Department's pedagogical mission, while NELC provides academic support for the Museum's new exhibition strategy. In addition to providing a critical text for Egyptology students of hieroglyphs and epigraphy (drawing facsimiles of the scenes and inscriptions), the "Dreaming the Sphinx" project also draws undergraduates into the Museum and allows them to interact directly with Museum staff. This fosters a sense of intellectual community between museum, faculty and students. We thus hope to provide students with a sense of belonging to a Harvard museum through sensory engagement with the deep past.

Peter Der Manuelian is Barbara Bell Professor of Egyptology, Director of the Harvard Semitic Museum, and Chair of the Standing Committee on Archaeology.

Greater Megiddo Not Seen Before

Jeff Howry

The traditional methods of terrestrial archaeological survey are limited by what is seen on the ground, when visible, and limited surface collection and periodic testing. The discussion which follows presents several case studies from historic sites around Megiddo in northern Israel which span known occupations from late Roman through Late Ottoman and Mandate eras. The advent of remote sensing technology has radically enhanced the capabilities of field survey to locate both surface and subsurface features dating from the present to many millennia in the past. Specific focus was directed at validating LiDAR imagery compared to what had previously been recorded on site locations and the prevailing ground conditions of the current landscape. The fieldwork was conducted as part of the Jezreel Valley Regional Project (JVRP) directed by Matt Adams, Director of the Albright Institute of Archaeological Research in Jerusalem (AIAR). The LiDAR and current terrain images are those of the author, while others are from the sources noted.

The geographic location of Megiddo and surrounding sites place them at a strategic crossroads between the eastern Mediterranean coast and inland Jezreel valley (figure 1). For millennia this was a thoroughfare for trade and war from the Mediterranean coast to Mesopotamia.

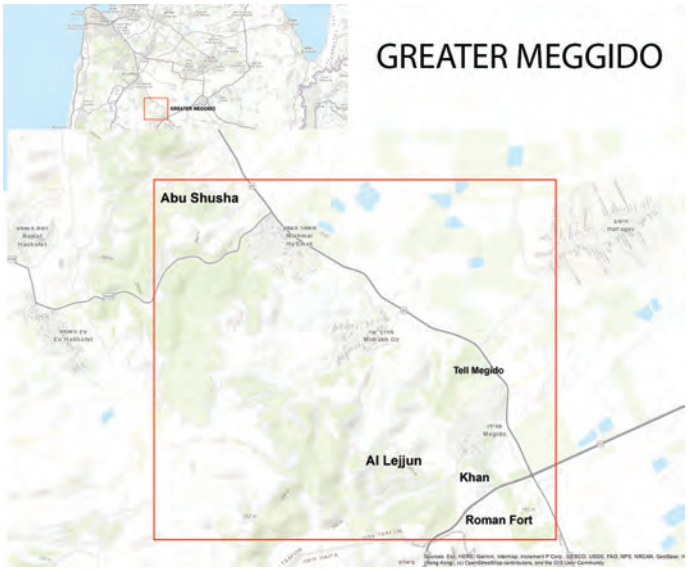

Figure 1. General project location (from *Ground Penetrating Radar … at the Roman Legionary Camp at Legio, Israel,* Pincus, Smet, Tepper & Adams 2013).

Caravanserais or Khan

A caravanserais or Khan (a Near East term) was an enclosed courtyard where travelers and traders with their pack animals could rest, get water and be protected *en route* to their destination. They were also places where imported or exported goods were taxed by local authorities. Typically they were walled enclosures square in shape. Figure 2 presents a view of a Khan from the top of a rampart, clearly revealing the outline of the structure. Also disclosed is the significantly damaged northwest corner of the Khan's rampart, which is completely obscured on the ground. The historic road, no longer evident from

ground observation, also is displayed leaving the main gate on the north side of the structure.

Roman Hill Fort

Above the four millennia-old trade route (now Israel Route 65) that passes through the Central Hills, just before entering the Jezreel Valley from the west, is a hilltop overlooking the route. Approaching the hilltop from the west, a forested area (some of it planted fifty or more years ago) is a heavily vegetated terrain with only a few discernable features that include small limestone caves and concrete remnants of a Mandate Era observation post. Prior survey work conducted more than 100 years ago suggests a Roman era occupation of the hilltop. As control of who passed along the route was often critical, the hilltop affords a commanding view of trade routes from both the east and west, direct line of sight for communication with the camp of the Roman 6th Legion to the north. The LiDAR imagery in figure 3 clearly delineates multiple platform areas both bounding the steepest slopes and crossing the highest portions of the hill. These are the foundations and terraced areas for the buildings that occupied this most visible location, affording views not only on the trade route from the east but also the Jezreel valley to the west. The rectilinear platforms and structures are clearly defined, and the general layout of the hilltop and its fortifications become evident with the LiDAR imagery, which is not possible from ground survey alone.

Al Lejjun

Roman legion camps (*Castra*) required a substantial number of workers for logistical support and general labor. Some soldiers sometimes had families who lived outside of the camp. As a result, villages became associated with individual camps. To the west and south of Legio, the nearby camp of the 6th Roman Legion, the village of al Lejjun (the Arabic equivalent of 'Legion') became established with the arrival of the legion ca. 192 CE. There were at least two, and possibly three, areas which comprised the village. Al Lejjun West (Lajjun Gharbia) was located on a basalt mound flanked by fields to the north, east and south. Aerial imagery from 2012 suggested there may have been extensive boundary walls constructed throughout the settlement and within the fields; see figure 4, upper left panel.

Figure 2. Khan. Top photo from Wikipedia; bottom photo by the author).

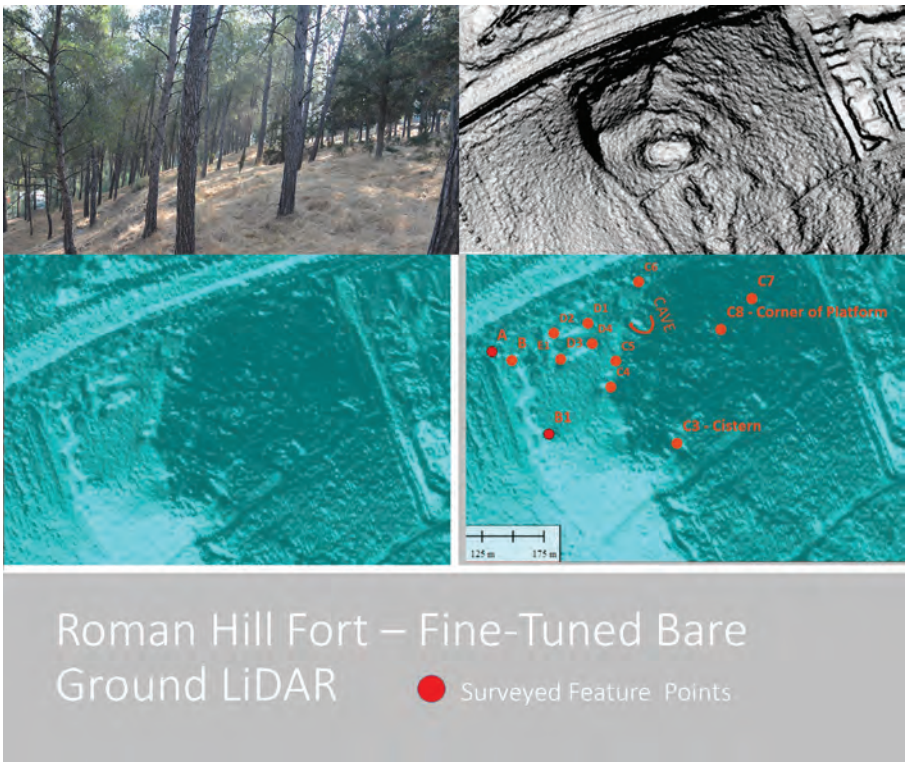

Figure 3. Existing ground terrain vs. LiDAR image of Roman fort site.

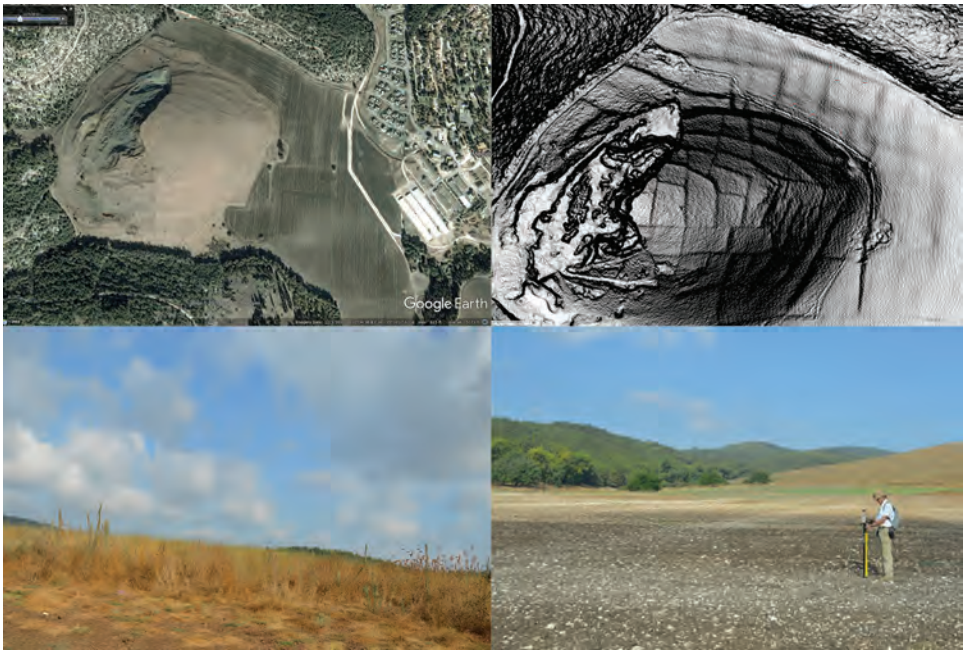

Figure 4. Al Lejjun field patterns.

The LiDAR imagery (figure 4, upper right) dramatically highlights the extensive rectilinear pattern that characterized the walls surrounding the domestic structures, as well as those walls that defined the field boundaries. The dense vegetation of the dome area prevents any ground inspection. However, the LiDAR highlighted the field pattern surrounding the dome that at first proved elusive to identify, as the rectilinear pattern is very clear in the imagery, but not so visible when standing on the ground. What became apparent when carefully examining the open field soil surface was that the scattering of white limestone rock chips spread to a width of several meters represented the prior limestone walls that were shattered by the deep gang plows pulled by tractors of the neighboring kibbutz in their field preparations. Under certain daylight conditions, the scattering of the rock walls becomes evident, as shown in the lower right panel of figure 4.

Abu Shusha

Approximately 5 km north of Megiddo is the much smaller Tel Abu Shusha, which also faces east across the Jezreel Valley (figure 5). On the west side of the Tel and extending across the ridge is the site of the Palestinian village of Abu Shusha.

This Palestinian village was occupied until 1948, after which it was abandoned. The village was selected for study in part because of the foundations of previous buildings and structures are still evident from terrestrial survey. In addition, the much earlier occupied area of the tell is directly adjacent to the east. Together this landscape provides a diversity of features which LiDAR could disclose.

Terrestrial survey confirmed that not only were building foundations well represented in the LiDAR imagery, but even cisterns and ancillary village structures. On the highest terrain of the tell, successive platforms which could serve as building areas were evident in LiDAR and confirmed by field survey. Surface indications suggest that these platforms may be related to a possible Roman-era or Late Ottoman/Mandate era use by the village, as well as much earlier by occupants of the tell.

Future Directions

These case studies highlight the significantly different conditions in which LiDAR imagery can provide essential data on the context and structure of archaeological sites which span millennia of occupation. Future analysis will include comparison of aerial imagery from 1946 with what was found from the LiDAR. There are areas of Abu Shusha which were subject to intensive terrestrial archaeological survey several years ago which may support what the LiDAR imagery discloses. Clearly, the LiDAR imagery, together with known sites, provides a context for the historic landscape which was previously unavailable.

Jeff Howry is a Research Associate at the Harvard Semitic Museum.

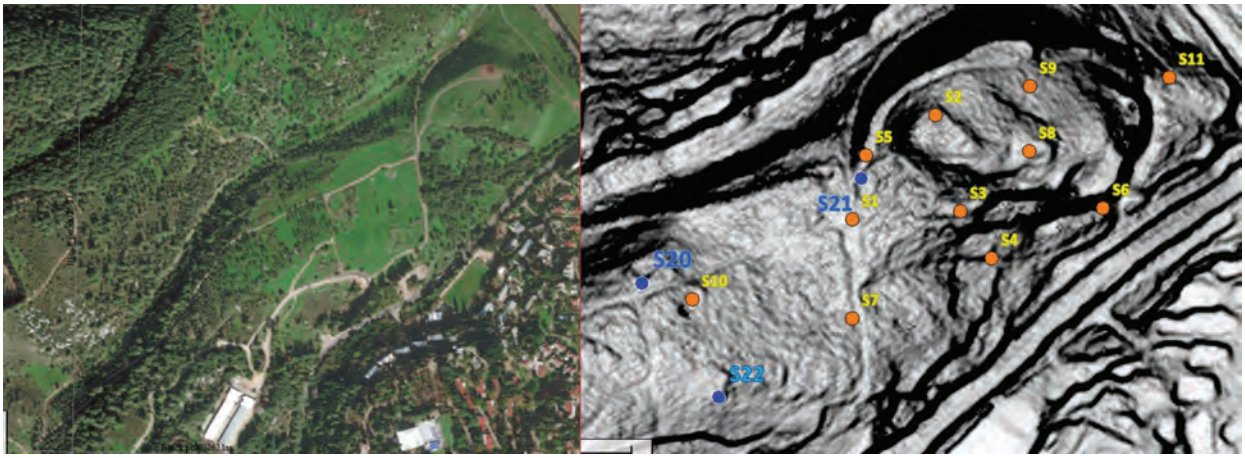

Figure 5. Aerial imagery (Bing) displaying the terrain of Abu Shusha village (left) and the bare ground LiDAR (right).

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Katherine Paglione
Laura Taronas
Ani Tchorbajian
Jonathan Thumas

Fall 2019 Events

Monday, September 16, 2019
12:00 pm, WCC 1019, ClassroomWasserstein 1019, HLS campus
Collecting War Crimes Evidence during Cultural Rescue in Iraq
Corine Wegener, Director, Smithsonian Cultural Rescue Initiative

Tuesday, September 17, 2019
6:00 pm, Geological Lecture Hall, 24 Oxford Street
Assembling the Dinosaur
Lukas Rieppell, David and Michelle Ebersman Assistant Professor of History, Brown University

Friday, September 20, 2019
1:00–5:00 PM, Tozzer 203: Anthropology Day

Tuesday, September 24, 2019
12:00 pm, Room 203, Tozzer Anthropology Building,
Wittfogel Revisited: Was Ancient Shan-Shan a Hydraulic State?
Kasper Hanus, Institute of Mediterranean and Oriental Culture, Polish Academy of Sciences Visiting Fellow at Harvard University

Tuesday, September 24, 2019
5:30 pm, S020, Belfer Case Study Room, CGIS South 1730 Cambridge St.
Presentation of the book "The Soul of Care" by Arthur Kleinman

Wednesday, September 25, 2019
12:00 pm, Room 203, Tozzer Anthropology Building
Camelids, Caravans, and the Spread of Chavín
Sadie Weber, Harvard University

Thursday, September 26, 2019
6:00 pm, Geological Lecture Hall, 24 Oxford Street
Breaking of the Noses of the Egyptian Statues
Edward Bleiberg Senior curator, Egyptian, Classical and Near Eastern Art/Brooklyn Museum

Wednesday, October 2, 2019
12:00 pm, Room 203, Tozzer Anthropology Building
The Archaeology of mysterious gigantic structures: the "Desert Kytes"
Rémy Cassard, CNRS

Friday, October 4, 2019
12:00 pm, S250, Porté Room, CGIS South, 1730 Cambridge St.
The Hainan Boat Builder of Pangkor: A Malaysian Digital Heritage Case Study
Harold Thwaites, Professor of Creative Digital Media and Head of the Centre for Research-Creation in Digital Media, Sunway University

Wednesday, October 9, 2019
12:00 pm, Room 203, Tozzer Anthropology Building
Isolation in a Connected World: Sierra Madre Communities in the Mesoamerican-Southwest Borderlands
Matthew Pailes, University of Oklahoma

Wednesday, October 9, 2019
1:00 pm, CGIS South Building, Room S250, 1730 Cambridge Street
The Circulation of Medicine and Notions of Healing in Early 20th Century Chinese Turkestan via Network Analysis
Arienne Dwyer, Professor of Linguistic Anthropology, University of Kansas

Thursday, October 10, 2019
3:00 pm, Peabody Museum Education Room
Molinillos and Chocolate in Contemporary Mexico
Ana Rita García-Lascuráin, Founder and Director, MUCHO-Chocolate Museum, Mexico City

Thursday, October 10, 2019
6:00 pm, Geological Lecture Hall, 24 Oxford St
An Evolutionary Journey through Domestication
Barbara Schaal, Washington University in St. Louis

Friday, October 11, 2019
12:00 pm. Barker Center, room133, 12 Quincy St
Experimental reconstruction of "Boxer" and "Terme Ruler:" Narration versus Aesthetics
Vinzenz Brinkmann, Liebighaus Skulpturensammlung Frankfurt a.M

Saturday–Monday, Oct 12 to Oct 14, 2019
9:00 am - 5:00 pm, Peabody Museum of Archaeology & Ethnology
Native American Poets Playlist: Poems in the Gallery

Monday, October 14, 2019
9:00 am–5:00 pm, Peabody Museum of Archaeology & Ethnology
Native American Poets Playlist: Poems in the Gallery

Tuesday, October 15, 2019
5:00 pm, CGIS South: S020 Belfer Case Study Room, 1730 Cambridge Street
Marriage, mobility, and households in Bronze Age Germany: integrating ancient DNA, isotopes, and archaeology
Dr. Alissa Mittnik, Department of Genetics (Reich Lab) at Harvard Medical School

Wednesday, October 16, 2019
6:00 pm, Sever Hall, Room 210 Harvard University
The Mystery of the White Walls: New Discoveries at Memphis
Dr. Galina Belova, Supervisor of the Center for Egyptological Studies, Russian Academy of Science.

Thursday, October 17, 2019
6:00 pm, Geological Lecture Hall
Life and Death in Ancient Egypt
Dr. Frank Rühli, Professor, Founding Chair, and Director of the Institute of Evolutionary Medicine, University of Zurich

Friday, October 18, 2019
12:15 pm, Room 203, Tozzer Anthropology Building
Specialized Ceramic Technology in the Bronze-Casting Industries of Ancient China
Dr. Matthew Chastain, Center for Materials Research and Ethnology, MIT

Sunday, October 20, 2019
12:00 pm to 3:00 pm, Peabody Museum of Archaeology & Ethnology
Augmented Reality Maya Chocolate Plate

Sunday, October 20, 2019
12:00 pm to 3:00 pm, Harvard Semitic Museum
Virtual Reality Expedition to Ancient Israel

Wednesday, October 23, 2019
12:00 PM, Tozzer 203, Anthropology Building
Story telling places: Jicarilla Apache History in Rio Grande Valley
Lindsay M. Montgomery, University of Arizona

Wednesday, October 23, 2019
6:00 PM, Geological Lecture Hall
Creating the National Museum of African American History and Culture

Henry Louis Gates, Jr., Alphonse Fletcher University Professor and Director, Hutchins Center for African & African American Research, Harvard University
Lonnie G. Bunch III
Secretary, Smithsonian Institution

Tuesday, October 29, 2019
6:00 pm, Geological Lecture Hall
Anthropology, Colonialism, and the Exploration of Indigenous Australia
Philip Jones, Senior Curator in Anthropology, South Australian Museum, and Affiliated Lecturer, Department of History, University of Adelaide

Friday, November 1, 2019
1:00 pm to 5:00 pm, CGIS South: Tsai Auditorium 1730 Cambridge Street
From Homer to History with the Max Planck–Harvard Research Center. Recent results from Bronze Age Investigations
German and U.S. team members from the Max Planck-Harvard Research Center for the Archaeoscience of the Ancient Mediterranean (MHAAM)

Friday, November 1, 2019
4:00 pm to 8:00 pm, Peabody Museum of Archaeology & Ethnology
Day of the Dead Celebración Nocturna/Evening Celebration 2019

Saturday, November 2, 2019
12:00 pm to 4:00 pm, Peabody Museum of Archaeology & Ethnology
Day of the Dead Celebración Familiar/Family Celebration 2019

Wednesday, November 6, 2019
12:00 pm, Room 203, Tozzer Anthropology Building
Spikes, Wiggles, and Calibration: new tools for better radiocarbon dates
Greg Hodgins (University of Arizona)

Wednesday, November 6, 2019
5:30 pm, Haller Hall, room 102
The "Old Way" is the New Way! Hunter-Gatherers and the Origins of Modern Human Behavior
Andrea Migliano (Universität Zurich)

Wednesday, November 6, 2019
6:15 pm, Boston University College of Arts and Sciences Building, Room 313, 685-725 Commonwealth Ave., Boston
Dancing for Hathor: Nubian Women as Priestesses
Solange Ashby (Catholic University's Institute of Christian Oriental Research)

Wednesday, November 13, 2019
6:00 pm, Geological Lecture Hall
Paleovirology: Ghosts and Gifts of Ancient Viruses
Harmit Malik, Principal Investigator, Fred Hutchinson Cancer Research Center

Friday–Saturday, November 15, 2019
9:45 am to 5:00 pm, Arthur M. Sackler Building, Room 427 485 Broadway, Cambridge
Site and Sight: Chinese Pagoda
Conference organized by Harvard CAMLAb

Tuesday, November 19, 2019
6:00 pm, Geological Lecture Hall
Human Sacrifice and Power in the Kerma Kingdom
Elizabeth Minor, Visiting Assistant Professor in Anthropology, Wellesley College

Wednesday, November 20, 2019
12:00 pm, Tozzer Anthropology Building
Hester and Swag: searching for Pleistocene Archaeological sites in the Savannah and Tombigbee river valleys
Shane Miller (Mississippi State University)

Monday, November 25, 2019
4.15 pm, Peabody 12, Peabody Museum of Archaeology & Ethnology
Jade in Liangzhu Society
Prof. ZHAO Ye, Zhejiang Provincial Institute of Cultural Relics and Archaeology

Monday, November 25, 2019
4:45 pm, Peabody 12, Peabody Museum of Archaeology & Ethnology
Economy of the Liangzhu Complex
Dr. CHEN Minghui, Zhejiang Provincial Institute of Cultural Relics and Archaeology

Monday, November 25, 2019
5:15 pm, Peabody 12, Peabody Museum of Archaeology & Ethnology
Liangzhu and 'Primitive China
Prof. LI Xinwei, Institute of Archaeology, Chinese Academy of Social Sciences

Friday, November 29, 2019
12:00 pm to 2:00 pm, Harvard Semitic Museum
Dreaming the Sphinx in Augmented Reality

Wednesday, December 4, 2019
12:00 pm, Tozzer 203, Tozzer Anthropology Building
From airplanes, drones, and our own two feet: multi-scalar visions of Ancient Maya Landscapes in Chiapas
Charles Golden (Brandeis University)

Wednesday, December 4, 2019
1:15 pm, S250, Porté Room, CGIS South, 1730 Cambridge St., Cambridge
Why Pots (Don't) Matter: Complexity in Bronze Age Eurasia
IAAS Lecture Paula Dupuy, Assistant Professor of Anthropology, Nazarbayev University, Kazakhstan

Wednesday, December 4, 2019
7:00 pm, Hunnewell Building, Arnold Arboretum, 125 Arborway, Jamaica Plain, MA
Fruit from the Sands: The Silk Road Origins of the Foods We Eat
Robert Spengler III, Ph.D., Director of the Paleoethnobotany Laboratories, Max Planck Institute for the Science of Human History, Jena, Germany

December 4, 2019
1:00 pm, Museum of Fine Arts, Remis Auditorium
Decoding the Arts of Ancient Meroe
Janice Yellin, professor of Art History, Babson College, member of the Qatari Mission for the Pyramids of Sudan

December 6, 2019
12:00–1:00 pm, Tozzer Auditorium
Anthro Debates

December 8, 2019
1:00–3:00 pm, Museum of Fine Arts, Remis Auditorium
Ancient Nubia. New Ideas, New Discoveries
Kathryn E. Howley, Lila Acheson Wallace Assistant Professor of Ancient Egyptian Art, Institute of Fine Arts, New York University
Jeremy W. Pope, College of William and Mary
Stuart Tyson Smith, University of California
Pawel Wolf, director, Hamadab Archaeological Project, and researcher, Orient Department, Deutsches Archäologisches Institut

December 10, 2019
5:00 pm, Emerson 101
The Royal Pyramids of Meroe in Archaeological Focus
Pawel Wolf, Director, Hamadab Archaeological Project, Researcher, Orient Department, Deutsches Archäologisches Institut

The Standing Committee on Archaeology

The Standing Committee on Archaeology is a multidisciplinary group of scholars appointed to promote the teaching of archaeology at Harvard. We seek to advance knowledge of archaeological activity, research, fieldwork, and techniques in the many and varied fields where archaeology is employed as an approach to past cultures and histories around the world. Archaeology can be seen as the study of past human societies through the recovery, analysis, and interpretation of material remains. Those who practice archaeology employ a wide range of methods, techniques, and theoretical orientations drawn from across the spectrum of academic disciplines to further their specific intellectual goals. Likewise, scholars of many disciplines who do not consider themselves to be practicing archaeologists nevertheless use the results of archaeological work in their teaching and research. Our members and students work with and in a wide range of the museums and departments on Harvard's campus.

https://archaeology.harvard.edu

Excavations in 2018 at the site of Dayatou, Lintao County, Gansu, China as part of the Tao River Archaeological Project. Photo by Rowan Flad. See page 6.

View from a UAV of the pyramid field and holy mountain of Jebel Barkal, Northern Sudan. Photo by Katherine Rose. *See page 7.*