



AIA *News from the* NEW YORK SOCIETY

WINTER – ARCHAEOLOGICAL EXPLORATION

The forecast: cold with snow expected; busy year-end activities; and the resumption of activities in the new year. Amidst the winter chill and all, the hustle of archaeological exploration continues. It simply transforms in important ways.

Archaeological exploration means not only warm/hot and dusty fieldwork but also the evaluation and explanation of what was found during previous seasons. It is often colloquially said that for every year in the field it takes three to understand what was uncovered. “Study Seasons” are a permanent fixture of archaeological discovery. I remember well participating in such a “Study Season” in the southwest of the Peloponnese in Greece, working on Mycenaean pottery from 1350 B.C. The bags of catalogued sherds from previous seasons’ digs were opened, sorted, preliminarily analyzed and entered into a computerized information system. Alongside ceramic analysis other archaeologists added their specialized knowledge, e.g., archaeobotanists analyzing carbonized seeds. Yes, this was the summer but archaeological study continues even during the coldest and darkest days of winter.

How? As archaeologists return to their classrooms and archaeological volunteers return to their varied pursuits, thought continues about the fieldwork experience and what was uncovered. Looking for relationships and explanations doesn’t stop amidst other activities but rather the opposite. Serendipity in science is a well-known phenomenon. A researcher “noodles” a problem for a while and then, quite often and unexpectedly, a hypothesis and clarity comes to the fore. It often happens at the most unlikely times—not only at 3:00 am but also, for example, while walking or driving somewhere on an errand, or when a student asks a question that kicks off a line of illuminating thought, or

when a colleague makes a point about a topic, perhaps even one not directly related to the material record uncovered in past fieldwork. Another aspect of this “winter work” relates to the material record in storerooms across the US and internationally. I recall well a past national AIA President whose President’s Letter in *Archaeology* magazine commented on the value of undiscovered jewels in storerooms. So, in sum, archaeological discovery and explanation continues year round, even during the winter, although the form of exploration changes.

The AIA-New York Society continues to provide you, its members, with your own exploration through our lecture program. In January you can travel to ancient Rome with Dr. Francesco de Angelis who will present significant new findings about Hadrian’s Villa. In February you can depart for ancient Greece with Dr. Nathan Arrington who will discuss his work on a trading port in Aegean Thrace. Then in March, switching geographical frontiers, Dr. John Kantner will compare the evolution of Chaco Canyon in southwest New Mexico and the Nasca region of the coast of Peru as a way to understand how and why influential ceremonial centers emerged in the ancient human past. In early May we stay in the Americas as Dr. Laurie Rush examines the numerous Native American sites she uncovered around Lake Ontario, at the time much larger than the lake is today, demonstrating that the region was a crossroads going north and south. In short, please join your fellow NYS members and others for winter and spring exploration. Please see further details in this Newsletter.

-*Jeffrey Lamia*
President, AIA New York Society

AIA NEW YORK SOCIETY SPRING 2018 LECTURE SERIES

Behind the Scenes of the Imperial Court: Columbia's Excavations at Hadrian's Villa

Francesco de Angelis

Chair, Classical Studies Graduate Program, Columbia University

Columbia University's archaeological project at the UNESCO World Heritage site of Hadrian's Villa in Tivoli, near Rome, investigates the largest and richest of Roman imperial villas—an architectural complex that has exerted a profound influence on Western culture ever since its rediscovery in the 15th century. The project is the first to programmatically explore the life of the villa both under Hadrian and afterwards, down to the early modern period; it is also unique in its joint focus on the high and the low, the ceremonial and the everyday.

The talk will present the exciting results of the first four fieldwork seasons (2014–17). In particular, it will focus on the new buildings that have come to light in the area of the so-called *Macchiosso*. These buildings belong to a large and hitherto unknown architectural compound located in the very core of the villa, in close proximity to some of its main ceremonial and leisure spaces. Their rich decoration (mosaic floors, wall- and ceiling-paintings) as well as fixtures like room-heating systems and courtyard fountains testify to the elevated, though non-imperial, living standards characterizing this quarter. Together with the many artifacts coming from the archaeological layers, these findings provide a unique insight in the life of the higher-ranking members of the personnel employed at the villa.



January 26 at 6:30 pm (Refreshments to precede lecture at 6:00)
The Dalton School, 108 East 89th Street, Goldman Library

Greeks in the North: The Excavation and Survey of a Trading Port in Aegean Thrace

Nathan Arrington

Associate Professor, Classical Archaeology, Princeton University

Ancient Thrace was a land of opportunity, adventure, and trouble. This talk presents the results of a Greek-American archaeological expedition that has explored a large trading port on the Thracian sea, south of modern Komotini. Established by Greek colonists in the 7th or 6th century BC, the settlement participated in a north Aegean trade network. The talk will present the history of occupation at the site; the evidence for daily life in the Classical and Roman periods; and the site's contributions to economic, political, and social history. Excavation and survey have uncovered important information on the settlement and its changing relationship to the wider landscape and to the environment.

(Co-sponsored by the Institute for the Study of the Ancient World)



February 8 at 6:00 pm (Reception to follow)
Institute for the Study of the Ancient World, 15 East 84th Street



RSVP is required to attend Dr. Arrington's lecture. Details of the RSVP will be posted on our website (<http://aia-nysociety.org/events>) and sent via email to AIA-New York Society members.

A Tale of Two Pilgrimage Centers: Chaco and Nasca

John Kantner

Associate Vice President for Research and Dean of the Graduate School, University of North Florida

One-thousand years ago, a monumental religious center emerged in Chaco Canyon that soon grew to dominate the cultural landscape of the northern American Southwest. A millennium earlier, in the Nasca region on the south coast of Peru, another stunning ceremonial center developed with remarkable similarities to Chaco. In both cases, most scholars believe that pilgrims traveled from many miles around to experience the majesty of these extraordinary desert centers, and many of the ceremonial activities they engaged in were quite similar despite their development in quite different times and places. In this multimedia presentation, archaeologist John Kantner compares the evolution of Chaco and Nasca as a way to understand how and why influential ceremonial centers emerged in the ancient human past.

(Brush National Lecture)



March 6 at 6:30 pm (Refreshments to precede lecture at 6:00)
The Dalton School, 108 East 89th Street, Goldman Library

Ancient Pathways Across New York; The Indigenous People of the Eastern Great Lakes

Laurie Rush

Cultural Resources Manager and Army Archaeologist Stationed at Fort Drum

As soon as northern New York emerged from under the glaciers, people began to arrive. Archaeological evidence increasingly supports use of boats, and since that time, the lakes, rivers, and streams have served as highways. The opportunity to intensively study the land connecting these waterways offers a new perspective for considering indigenous occupation of the region.

(Co-sponsored by the M.A. Program in Liberal Studies)



May 7 at 6:30 pm (Reception to follow)
The Graduate Center, CUNY, 365 Fifth Avenue, Room C197

*As always, please check your email or consult our website
(<http://aia-nysociety.org/events>) for any last-minute changes in venue.*



FRIENDS OF THE NEW YORK SOCIETY

The Friends of the New York Society is a group of professionals and lay archaeological enthusiasts who support all the work of the New York Society. For their crucial support, the Friends benefit from special private programs at which they can mix with professionals and those of similar interests.

The Friends enjoyed two interesting events this fall. We started off with a lecture by New York Society Board Member Dr. Celia Bergoffen, who gave us a delightful lecture about the history of a German Brewery in Brooklyn, entitled *A German Bierkeller in Williamsburg: The Discovery and Documentation of Sebastian Schnaderbeck's Brewery*. The event enjoyed the warmth of the hospitality of the home of Friends co-chair, Elizabeth Macaulay-Lewis. The audience loved hearing how beer was brewed while enjoying tasting some German beer. There are possible plans to visit the storerooms next fall to see some of the finds.

In December the Friends visited the Institute for the Study of the Ancient World (ISAW) for a private tour of the exhibition *Restoring the Minoans*, which examined Sir Arthur Evans' excavations at Knossos and his reconstructions of figurines and paintings. This exhibition also included *A Restoration*, a video installation by Elizabeth Prince, a Turner-Prize winning British Artist, based on the Evans archive at the Ashmolean Museum in Oxford (UK). The installation examines the connections between past and present and how Evans interpreted the architecture and art of Knossos with considerable artistic license.

In the winter and spring, we have two tours scheduled: the *Soulful Animals* exhibition of mummified animals at the Brooklyn Museum and the *Dangerous Beauty: Medusa in Classical Art* exhibition at the Metropolitan Museum of Art in May. So it should be an exciting and eventful year.

Patron

Joyce & Ira Haupt, Caroline Howard Hyman, Jeffrey Lamia

Explorer

Ronald & Lorna Greenberg, Whitney & Fred Keen, Peter Lincoln, John Yarmick

Supporter

*Elie Abemayor, Heidi James, Jane Majeski, Dorinda Oliver,
Lynn Quigley, George & Joan Schiele, plus two anonymous donors*

Friends

*Clyde Adams III, Elizabeth Bartman, Diane C. Brandt, Myrna Coffino, Linda Getter,
Brian Heidtke, Julie Herzig & Robert Desnick, Dana Ivey, George Lewis & Elizabeth Macaulay-Lewis,
Robert & Joan Rothberg, Karen Rubinson, Ethel Scully, plus two anonymous donors*

*To inquire about joining the Friends please email
Elizabeth Macaulay-Lewis (emacaulay_lewis@gc.cuny.edu)
or Heidi James Fisher (hjames@studiolxiv.com).*



AIA-NEW YORK SOCIETY ARCHAEOLOGICAL FIELDWORK SCHOLARSHIP FOR NEW YORK CITY STUDENTS

The New York Society is pleased to announce its 2018 Archaeological Fieldwork Scholarship, the second time for this opportunity. The scholarship is \$1,000 to cover some of the costs for a student, matriculating at an accredited college or university within the five boroughs of New York City, to participate in an archaeological fieldwork school. Students majoring in archaeology or related disciplines are especially encouraged to apply. The scholarship is for junior and senior undergraduates and first-year graduate students only. Applicants must be at least 18 years old and must not have previously participated in archaeological fieldwork of any kind.

The scholarship committee considers both academic achievement and financial need in its deliberations. The scholarship is open to students from all backgrounds.

The New York Society Field Work Scholarship follows the guidelines and requirements of the AIA national’s Waldbaum Scholarship except that eligibility is only for students matriculated at NY City accredited colleges and universities. The Jane C. Waldbaum Archaeological Field Work Scholarship was established several years ago to honor Past President Jane C. Waldbaum.

For more information, requirements and forms, please consult the national AIA’s website (www.archaeological.org) and select “Field School Scholarships” from the “Fieldwork” menu.



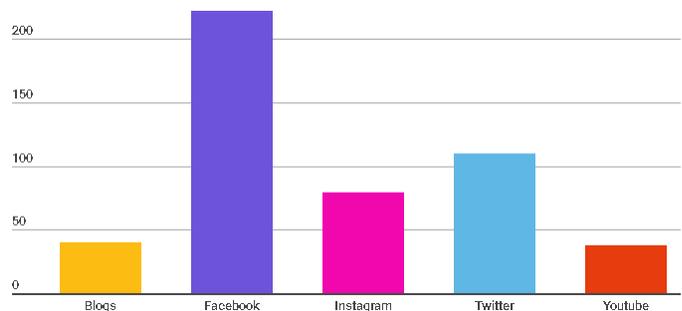
Spotlight on...

*Finding North American Artifacts
on Social Media*

US and Canadian archaeologists are very active on social media, so Archaeological Analytics is creating the first digital platform featuring their social media posts. Since its inception, the *American Artifacts Blog* has featured over 200 artifacts and drawn in over 3000 views a month. As we continue to grow as a professional social community, our goal is to create the most comprehensive, digital artifact resource using professionally authored content.

Professionals are using social media to share their research, reports, journal articles and annual conference papers. Though the presence of archaeologists is still relatively low compared to other professional communities, many are very active on Facebook, Twitter and Instagram. Moreover, there are patterns between the industry type and preference for social network. For example, universities and museums tend to post more frequently on In-

stagram than archaeological societies and state preservation offices. Public outreach programs heavily rely on Twitter and blogs to connect to their followers, while most cultural resource management firms choose to post on Facebook.



Hundreds of professional archaeology accounts already exist on social media.

Despite their differences, every industry uses social media to create rich, informative digital content. Universities are featuring student research on blogs; preservationists and scholars post behind-the-scenes footage of their work in museums; and CRM firms and repositories are starting to share more about recently-excavated artifacts. But few

people realize that professionals are publicly sharing the same research. For example, a CRM firm in Louisville, Kentucky posted about their discovery of uranium glass in September 2017. Two months later, a university blog featured research about the same type of glass recovered in Michigan. One institution posted their work on Facebook, the other a blog. Because this content lives on different social platforms, neither group would have necessarily known about the other. Similar patterns are also evident with other object types such as smoking pipes, prehistoric pottery and historic dishware.



Uranium Glass from Facebook post by Corn Island Archaeology, September 2017.

A third trend among social archaeologists is crowdsourcing. In the past, archaeologists have crowdsourced data entry, funding and, most recently, artifact identification. Oftentimes, professional posters will ask their followers for any information that might help identify and date an object. These requests are seen by colleagues, enthusiasts, students and the general public. Not only is it a new

form of public outreach, but it can also cut research time dramatically.



Jadite from a post on the MSU Campus Archaeology Blog, November 2017.

Increasing numbers of archaeologists are using social media to publish their research and crowdsource for information because few channels of communication exist beyond annual conferences. *American Artifacts Blog* was built to close the gap between archaeological scholarship. Every featured artifact is linked to similar research related by type, material, and State or Province. As we continue to feature artifact-related content, our site will become the most comprehensive resource for material culture on the web.

Archaeological Analytics is also interested in expediting the processes of identifying artifacts. To do so, we will transform social media content into an analytic tool. This new platform, known as *The Catalogue*, will make it easier to search for commonly excavated objects on different social platforms, and in different media formats. In addition, artifacts will be linked to their institutions to encourage direct contact between the public and professionals.

- *Acacia Berry*
Archaeological Analytics



#ArchaeoTech

Contemporary Applications of Radiocarbon Dating in Archaeology

Perhaps the most widely asked question in all of archaeology is “How old is it?” “It” may refer to a site, an artifact, a landscape, or any combination of archaeological manifestations that point to ancient human activities and the places in which they occurred. Age is paramount in sequencing cultural events. It provides the broader perspective of time, the common denominator for ordering developments in our understanding of the human career. Everywhere in the world cultural sequences or chronologies are determined either by *relative* or *absolute* dating. At archaeological sites, relative dating orders the ages of events by using a common item, for example pottery, to establish a timeline. Thus, older pottery will occur in the lower layers of a site while younger pottery will displace that pottery in upper layers. Absolute dating is a scientific measure of the actual age of a site or artifact. An absolute measure of age is critical not only because it affixes a clear point in time for an archaeological manifestation, but also because it provides a time range for relative dating sequences that would otherwise be speculative across time and space.

The cornerstone of absolute dating in archaeology has been and remains the radiocarbon technique, professionally referred to as ^{14}C dating method. Its origins go back only as far as the 1950’s, when it was invented by Willard Libby of the University of Chicago. The significance of the discovery was such that Libby won the 1960 Nobel Prize in chemistry.

The fundamentals of the baseline model derive from principles of radioactive decay. The earth’s carbon cycles contain three naturally occurring isotopes, two of which are stable (^{12}C and ^{13}C) and a third (^{14}C) of which is radioactive. ^{14}C decays with a half-life of 5700 years and it is the half-life that fixes the dated object in time. The production, distribution and decay of ^{14}C is related to a cycle of cosmic ray interactions with nuclei of atmospheric gas molecules. The half-life of 5700 years means that the concentration of an organic specimen will

decrease by half during every 5700 years after the death of an organism. Because of the consistency of the decay rate, it is possible to measure the age of a carbon sample.

Samples submitted for radiocarbon dating can include any burnt or decayed organic matter. The lower limit for ^{14}C dating is about 300 years and the upper limit is about 50,000 years. Accordingly, the age range of this dating method corresponds to the entirety of behaviorally modern humans (i.e., *Homo sapiens sapiens*). The implications for archaeology are multi-faceted. They are grounded on the hypothesis that the antiquity of nearly any site containing organic remains from modern human activity is potentially dateable.

However, organic remains at archaeological sites come in many forms. Ideally, radiocarbon dating is performed on organic specimens that are the product of single events. Thus, the most reliable age determinations are produced at sites where burning or other decay has occurred; charred remains are collected by the archaeologist and submitted for dating to one of several dozen radiocarbon laboratories in the world. Examples of such contexts include hearths for food preparation, which can be found at later prehistoric sites, as well as at more complex early urban sites where houses and ceremonial centers preserve a broad range of burnt locations in their various strata or layers. In this way, the entire chronology of a complex site can be affixed in absolute time. More importantly, distinct artifact sets, for example carbonized plant remains associated with individual layers can be tied to well-dated radiocarbon timelines. It follows that artifact sets and their layers can serve as baselines for absolute chronologies at sites where radiocarbon dates are either not prolific or even completely absent.

Since the 1950’s the technology of radiocarbon dating has advanced exponentially. The earlier work was independently developed, but a check on the accuracy of the science emerged in the 1960’s and 1970’s. At that time a second absolute dating technology, the bristlecone pine dendrochronological method (more commonly known as tree-ring dating) emerged. Taken together, both techniques allowed scientists to calibrate dating curves to one

another, allowing for accommodation of various oscillations in the earth's environment due to irregularities in the carbon cycle. The calibration curves corrected determinations that fell within the cycles for which irregularities were registered. Increased accuracy and precision in radiocarbon calibration is referred to as the "second radiocarbon revolution."

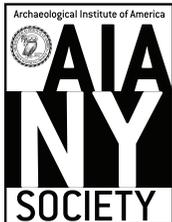
A third revolution occurred in the 1980's with the introduction of Accelerator Mass Spectrometry (AMS). At the core of this advance was the ability to date carbon materials that weighed as little as a milligram. AMS permits dating of very sensitive artifacts, such as the Dead Sea Scrolls and the Shroud of Turin, since the sampling of the necessary specimen minimizes damage to the source material. Moreover, different forms of organic matter could be dated that had never been subjected to chronometric testing before. Thus, at many prehistoric sites with minimal to no preservation of discrete cultural features, such components as organic soils could be dated to provide approximate ages of ancient surfaces that were associated with artifact

types whose chronologies were otherwise uncertain. Bulk organic dating is a technique that produces ages for organic matter in various states of decomposition. Ages in such sediment complexes are neither precise nor accurate—because stages of degradation as well as decomposition are in flux—but determinations are nevertheless helpful in providing "order of magnitude" dates.

Finally, a variety of different types of materials that are not organic, but which contain carbon components, such as marine shells, fresh water shells, and bone, contain carbon that can be isolated to provide enough materials for dating. The accuracy of dating these source materials remains problematic, but given the advanced understanding of carbon mobilization and disaggregation, it is just a matter of time before the radiocarbon method will be reliably applied to date specimens and source bodies using techniques that are just on the horizon.

-*Joseph Schuldenrein*

Geoarcheology Research Associates (GRA)



M. Whitney Keen, Secretary
AIA New York Society
64 Oak Avenue
Tenafly, NJ 07670